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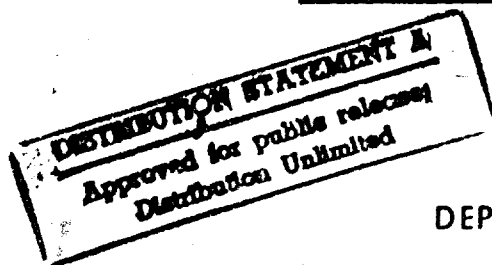


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THE FUTURE SBSS:
MIGRATION OF SBSS FUNCTIONS
FROM A MAINFRAME ENVIRONMENT TO
A DISTRIBUTED PC-BASED LAN ENVIRONMENT

THESIS

William D. Rath, Captain, USAF
Scott A. Vesper, Captain, USAF
AFIT/GLM/LAR/93S-35



DEPARTMENT OF THE AIR FORCE
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THESIS

Presented to the Faculty of the School of
Logistics and Aquisition Management of the
Air Force Institute of Technology

Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management

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September 1993

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William D. Rath

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Abstract

The purpose of this research was to determine the technical feasibility of a PC-based Standard Base Supply System (SBSS). The SBSS currently runs in a mainframe environment; however, the current hardware contract will be reviewed in 1997. At that time, a decision as to what hardware implementation best serves Base Supply needs must be made. This document evaluates PC-based SBSS Local Area Network (LAN) architectures, and provides an initial direction for SBSS LAN implementation.

The current mainframe-based Regional SBSS implementation serves multiple bases via long haul networks and may not effectively satisfy Air Force/base level requirements. In writing this thesis, information on a typical SBSS was gathered and summarized. Also, information on standard LAN architectures was gathered and evaluated. Simulations of various architectures were used for evaluating the various possibilities. The study showed that a single file server could handle the entire workload, but future expansion considerations and a slightly lower expected user response time indicate that fully distributing the processes, while using a file server to maintain the SBSS database, might be more appropriate.

**THE FUTURE SBSS:
MIGRATION OF SBSS FUNCTIONS
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I. INTRODUCTION

The Standard Base Supply System (SBSS) is an information system used by base supply organizations to track and maintain parts inventories. The SBSS is part of the Standard Base Level Computing (SBLC) System, which supports mission essential base-level functions for the Air Force. The SBLC system executes on base mainframes. By 1995, under the SBLC regionalization plan, five Regional Processing Centers (RPCs) serving the Air Force installations in their geographical region will be implemented to replace SBLC mainframes (1:A-8).

RPC and SBLC computers are, in general, UNISYS mainframes (1:A-6). In 1997, the UNISYS mainframe contract will expire, and RPC systems will move to open systems architectures (1:A-8). At this time, the UNISYS mainframe platforms may be replaced with other platforms (1:A-30). The Standard Systems Center (SSC) is currently evaluating SBLC/RPC mainframe requirements for the transition to open systems.

The current SBSS resides on SBLC/RPC mainframe equipment. An alternative is to implement the SBSS on a PC-based system within the base supply squadrons. This alternative is consistent with developments in the private sector throughout the past decade.

Ten years ago, IBM produced its first personal computer (PC), which began to transform the work place (2:6). At first, executives used the PC to reduce their work by using spreadsheets, sending electronic mail, generating reports, and publishing news letters. Since then, PCs have steadily increased in capability and decreased in cost. This led to PC usage in applications traditionally reserved for the larger computers in the data processing departments. The increase in PC employment is impacting mainframe utilization. Stevens gives an explanation, "The reasoning is simple. In the '80s, an agency requiring 10 MIPS (million instructions per second) of processing power would have to invest \$5 million in a mainframe. In the '90s, that agency would invest \$5,000 in a desktop computer" (2:6). The affordability of powerful PCs led to a proliferation of PCs in the work place.

The power of the PC is transforming the information systems (IS) of the business world:

In the 1990's, PCs will do more than their creators ever dreamed...The next generation of computer chips will have about five times as many semiconductor devices per chip as today's models...Parallel

processing, in which several processors work simultaneously, will allow geometric bounds in speed. Thus, desktop computers in 1999 could be nearly as powerful as today's supercomputers. (2:6)

The new IS's take advantage of these more powerful PCs, and decentralized systems are becoming more common. Large corporations are beginning to downsize their IS functions. "IS downsizing is rapidly emerging as one of the most significant phenomenon in information resource management in the 1990's" (3:123). One example of downsizing and the cost savings which can be realized occurred when CBS/FOX Video, "... reported the largest reduction in IS budget (from \$5.2 million to \$800,000) and staff (from 58 to 5)" (3:125). Downsizing is proving to be an effective method of reducing costs while maintaining computer processing power.

1.0 Problem Statement

The purpose of this thesis is to determine the technical feasibility of a distributed PC-based SBSS, and provide appropriate recommendations for the development of the proposed alternatives.

2.0 Assumptions

This thesis effort made three basic assumptions. First, it was assumed that the PC-based architectures must

meet the criteria outlined in the Interim Service Level Agreement (ISLA) detailed for the RPC-based architecture (4). Second, a useable base-wide backbone exists for data traffic flow. Finally, the software for the SBSS must be rewritten regardless of what architecture is implemented in 1997. Therefore, it was assumed that software modification and maintenance costs of various alternatives are equivalent and were not addressed.

3.0 Scope

This research was limited to the evaluation of the performance of PC-based SBSS LAN architectures which could be implemented at bases Air Force-wide. SBSS functions and data were considered for both distributed and non-distributed architectures, however, writing actual SBSS software programs for the PC-based implementations was beyond the scope of this thesis. Also, cost comparisons between the mainframe and the PC-based LANs were not addressed.

4.0 Investigative Questions

To determine the technical feasibility of a distributed PC-based SBSS, the following questions were examined:

- 1) What are the SBSS processes and data?
- 2) How should SBSS processes and data be mapped to a distributed PC-based architecture?
- 3) Would a distributed PC-based SBSS meet the minimum performance criteria levied by SSC on the RPC mainframe?

II. Literature Review

1.0 Introduction

The major tasks of this thesis effort were to research and document the SBSS processes and data requirements, evaluate various LAN implementations, and determine how best to distribute the SBSS processes/data on the network nodes. A review of applicable literature is presented in this Chapter.

Prior to documenting the existing SBSS, software systems analysis techniques were researched. The findings are discussed in section 2.0. Also, a viable PC-based SBSS LAN architecture had to be defined. The definition of this LAN involved the review of a wide variety of literature. In order to realistically simulate communication between nodes on the network, basic LAN characteristics were reviewed. Basic LAN characteristics are summarized in section 3.0. Section 4.0 reviews the criteria used to measure LAN performance, and section 5.0 investigates the amount of control information added to the data by network protocols. Finally, section 6.0 provides an overview of performance analysis techniques.

2.0 Systems Analysis/Design Techniques

Phases of a systems development project include analysis, design, and implementation. According to Yourdon, analysis is the process of documenting, in a structured specification, what the system must do in order to satisfy user's requirements (5:323). The design process (in the case of a distributed system) allocates requirements defined in the specification to appropriate processors (5:91). Implementation translates the design documents into actual code. Section 2.1 reviews the two most important analysis methods, Functional Analysis and Object Oriented Analysis, and compares them from the perspective of documenting existing software versus restructuring or conducting analysis for new software. Section 2.2 describes techniques for distributing processes and data on a network (network design). Network design can be performed using analytic models or simulation.

2.1 Systems Analysis Techniques. The most widely-used software engineering analysis methodologies are functional oriented approaches based on data flow diagrams (6:266). Data flow diagrams (DFDs) model the way data is transformed by the functions the system is required to perform. Yourdon's version of the DFD consists of data flows between processes, stores, and terminators. Processes

are the functions the system performs on data (5:142). They correspond to procedures or functions the system performs such as *Calculate Item Balance*. Stores model collections of data at rest (5:149), and will correspond to files or databases when implemented (5:149). Terminators represent external entities the system communicates with such as *Accounting and Finance* (5:155).

Functional oriented methods may produce other documents to add flexibility and clarity to the DFD. Yourden's Structured Analysis approach includes State Transition Diagrams, Entity-Relationship Diagrams, and a Data Dictionary. State Transition Diagrams (STDs) model time dependent behavior of the system (5:233). STDs consist of states which are modified by events. The Entity-Relationship Diagram (ERD) highlights relationships between data stores which must be remembered by the system (5:237). The data dictionary completes the analysis of a system by defining the stores (entities), relationships, flows, processes, and terminators shown in the DFD, STD, and ERD (5:189).

Another analysis approach which has gained popularity in recent years is Object Oriented Analysis (OOA). OOA, as described by Rumbaugh, is similar to Structured Analysis in that OOA includes DFDs and STDs (Rumbaugh's functional and dynamic models). OOA also includes a data dictionary.

Rumbaugh's object model is really an enhanced form of ERD (6:267). The object model shows the relationships between entities, however, these relationships are drawn between objects which encompass both the entities (Rumbaugh's attributes) and functions (Rumbaugh's operations). The difference between Structured Analysis and OOA is primarily a matter of emphasis. In Structured Analysis, the DFD dominates in importance, followed by the STD, then the ERD. OOA regards the object model as most important, followed by the STD, and finally the DFD (6:267). In other words, Structured Analysis organizes the system around procedures, while OOA organizes around real-world or conceptual objects as viewed by the user.

This shift of emphasis gives OOA several advantages over Structured Analysis if performing a new analysis or restructuring existing code. The correlation between OOA and objects the user can identify with makes the analysis (and resulting design and code) more intuitive (6:269). Code that is easier to understand is more maintainable. Maintainability is also enhanced over code produced by Structured Analysis/Design when requirements changes result in the modification of operations within an object. An object is implemented as a self-contained module or package so that as long as the external view of that object hasn't changed, operations can be modified with no change to other

objects. OOA also results in more reusable design and code. Because the functional decomposition process used in Structured Analysis is arbitrary, systems analysts will tend to produce very different decompositions. Analysts using OOA will tend to discover similar objects, making the object structures more reusable (6:268). Finally, OOA effectively organizes data by encapsulating attributes with the operations that use them in objects. This encapsulation is clearly shown in the object diagram. Structured Analysis is more awkward in dealing with complex data requirements such as would be encountered when using large amounts of persistent data which cannot be stored in short term memory (data files or a database) (6:268,325).

However, if the purpose of the analysis process is to document the existing processes and data structures, Structured Analysis is more flexible. It will probably not be possible to use the object-oriented approach without restructuring a program if objects were not used in the original analysis. On the other hand, the functions the software performs may be more clear-cut. In some cases, the functions may be so spread out among the program modules that even the functions are not clear. In this case, constructing documents of any kind will be difficult.

This thesis requires documenting the existing program so that the processes and data can be distributed among

network nodes. The determination of whether to use Structured Analysis or Object Oriented Analysis to create this documentation should be based on whether the current program more easily maps to a Structured Analysis or an Object Oriented one. Since the purpose of the analysis is not to restructure the program, unless the program is already designed using objects, the analysis should be attempted using the structured approach.

2.2 Systems Design Techniques. The task of allocating processes and data to processors should be performed to improve or optimize parameters associated with the distributed system. One such parameter may be dollar cost. In the case of data or file allocation, cost typically consists of storage, query, or file update costs (7:291). For LANs, these costs would probably be the same for a given network configuration no matter how the data was distributed. More useful parameters to base file/process allocation on would be performance parameters such as throughput or response time (discussed in section 4.0). The parameter most noticeable to the user is response time.

Analytic models have been devised which optimize file placement for minimum response time. Chen proposed a model applicable to central server networks, while Klei's model was applicable to general network topologies (7:305). Both models assume each file placed on the node will have the

same mean request rate, so they cannot be used for processes which request files at different rates. No analytic models for optimizing process placement based on response time were found in the literature, however it is probable that the same problem of requiring each process on a node to be called at the same rate would have been encountered.

Analytic models which were adequate for modeling complex networks and their interaction were not found in the literature. It was therefore necessary to review simulation techniques. Simulation techniques do not find the optimal solution, however, several alternatives can be tested and compared. Systematic techniques should be used to more efficiently search for a better solution (8:767). One such technique may be to remove bottlenecks at nodes revealed by the program by distributing processes/data until response time is reduced to a desired target (9:178).

3.0 LAN Characteristics

There are four key characteristics which have a major impact on LAN development and performance: transmission medium, transmission technique, network topology, and access control method. Each choice in a particular characteristic is dictated by the purpose of the LAN, future expansion requirements, end-user requirements, and physical

limitations. Due to the complexity of the SBSS, documented implementations of similar problems were not available.

Therefore, the details of each key characteristic were examined for applicability.

3.1 Transmission Medium. The first characteristic, transmission medium, is the actual physical link the LAN uses to transmit data between nodes. There are three common types of media commonly used in LAN implementation (10:11). The least expensive is twisted-wire pair, which is two insulated copper wires braided together. This is the wire used by most telephone companies. The driving factor in the use of this media lies in costs. It is either already installed, or is relatively inexpensive to install. The main draw back in using twisted-pair wires or cables lies in its slow data transmission rates. Some LANs use telephone lines and get a transfer rate of 10 million bits per second (Mbps), which is still an order of magnitude slower than the other two media (10:12).

The next most commonly used medium is coaxial cable, which consists of a copper core encapsulated in insulation. This, in turn, is enveloped by a wire mesh or solid conductive coat, which is then protected by a non-conductive outer coating. This is fairly expensive to install, but can support data transfer rates of up to 100 Mbps (10:13).

The last medium to be discussed is fiber-optics, which is the most expensive, but also supports the highest transfer rates, typically 565 Mbps, and rates of up to 200,000 Mbps have been reported (10:13). The fiber-optic cable consists of a clear core which is encapsulated by cladding, which, in turn, is covered by a protective sheath. The cladding reflects the light back into the clear core insuring the light travels in the cable.

3.2 Transmission Technique. Transmission technique is the actual technique used to transmit data signal over the chosen medium. There are two techniques which can be used, baseband and broadband. Baseband is the transmission of digital pulses over the medium. Broadband, on the other hand, employs analog signals to send data to its destination.

3.3 Network Topology. Network topology refers to the physical connection and layout of the nodes and peripherals. The two most common topologies for a LAN are Bus and Ring.

A Bus Topology normally utilizes a broadcast transmission media shared by all nodes. This topology is generally the foundation for high-speed, distributed LANs. They are extremely popular in implementation of high-speed LANs that use either token passing or CSMA/CD access control methods (10:33).

A Ring Topology is formed when two ends of a bus topology meet. The ring topology is very common in LAN architectures (10:33).

3.4 Access Control Method. The basic access control methods can be defined by considering where in the network the transmission control function is performed. There are three important access control methods: CSMA/CD, Token Bus, and Token Ring.

The CSMA/CD protocol is defined in IEEE standard 802.3. Using the CSMA/CD access control method, a station waiting to transmit a frame listens to see if the medium is idle. Once the medium is free, the station transmits after a fixed interframe spacing time (11:415). If no collision is detected for one slot time after the transmission begins, the transmission is assumed to be successful. If a collision is detected, the station sends a jamming signal, then the station backs off for a random number of slot times. The number of slot times is chosen as a uniformly distributed random integer r in the range of

$$0 \leq r \leq 2^k$$

where $k = \min(\text{number of attempts}, 10)$. The back off process is typically referred to as binary exponential back off (10:88).

Token bus is described by IEEE 802.4. According to the Token Bus protocol, a token granting the right to transmit a

frame is passed from station to station in a logical ring. When a station wishing to transmit a frame obtains the token, it transmits the data frame and waits for a response frame from the destination station. After reception of the response frame, the station transmits a token frame to the next station on the logical ring (11:415).

Token ring is specified by IEEE 802.5. Using the Token Ring protocol, each station repeats the bits it receives from the previous station on the ring. As with the token bus protocol, a token is passed from station to station. When a station wants to transmit, it waits for a token, changes the token to a start of frame sequence and transmits (11:416). After transmission begins, the frame travels around the ring, and the sending station waits for its address to be returned. If the frame has been sent, and the sending station has not received its address yet, the station transmits "fill" until its address is received (11:416). Then the station transmits a token to the next station on the ring. Fiber Distributed Data Interface is a high capacity (100 Mb/s) LAN which utilizes a variation of the IEEE 802.5 standard token ring protocol. FDDI is generally used for high speed office networks using image and graphics processing devices, or for backbone networks, interconnecting other subnetworks (10:128).

4.0 LAN Performance Metrics

To compare the performance of LANs, a set of metrics must be chosen. According to Jain, the quality of service of any information system can be measured by its productivity, responsiveness, and utilization. Productivity is the rate at which a service is performed, and responsiveness is the time taken to perform the service. Utilization is the fraction of time the system is busy. In some cases, it makes more sense to say the fraction of the resource which is used (12:33,39). For LANs, productivity is given by network throughput (measured in bits per second). Throughput measures the rate of data transfer between network nodes. Responsiveness is given in terms of response time, access delay, or station delay (13:17). Responsiveness measures the time to communicate between network nodes. Utilization is sometimes referred to as network efficiency, and provides a measure of the fraction of data transmission capacity being used (14:29).

There is a relationship between network throughput and load. Initially throughput increases as the load on the system increases. At a certain load, throughput reaches a maximum. The key throughput to consider is the maximum obtainable throughput under heavy load. This throughput rate indicates the usable capacity of the system (12:38).

The nominal capacity is data rate the network transmission media is capable of supporting. Usable capacity divided by nominal capacity is the network efficiency (12:39). The knee capacity is the point beyond which the increase in throughput for increase in load is small (12:39).

Response time, access delay, and station delay have all been proposed to measure network responsiveness. Each metric focuses on a different aspect of the total delay in sending a data frame to another node and receiving a response frame. Total delay consists of:

- 1) Time to transmit the data
- 2) Time for the data to propagate to the destination node
- 3) Queuing delay while the data waits to be processed at the destination node
- 4) Time for the reply to gain access to the network
- 5) Time to transmit the reply
- 6) Time for reply to propagate to original node

Response time is usually defined as the time between the transmission of last character of a frame and reception of the first character of the reply frame (15:12). Response time includes queuing delay experienced by the data frame while it is waiting at the node to be processed. For

network loads at or above capacity, where throughput has reached a maximum, queuing delays approach infinity. At these loads, a more meaningful measure is access delay (13:17). Access delay is defined as the interval between the time a node wishes to gain access to the network and the time access is obtained. A parameter related to access delay is station delay. Station delay represents the average time taken to successfully send a data frame, and includes access delay and transmission time (11:414).

One method of determining what metrics to use is to examine the metrics for measuring an equivalent system. The performance criteria used by SSC to evaluate the RPC is outlined in the Interim Service Level Agreement (ISLA), produced by Tinker AFB, Ok in accordance with Program Management Directive (PMD) 2208 (4). According to the ISLA, the SBSS must have an average availability of 22 hours per day, have at least 95% of all on-line transactions processed in less than five seconds, and be capable of processing 16,419 transactions per day. If the number of transactions per day for the SBSS is divided into the total number of transactions per day for the SBLC, the SBSS represents 31.5% of all SBLC transactions.

5.0 Network Architectures

Networks are usually designed in a series of layers to reduce their design complexity. The purpose of each layer is to offer certain services to higher layers, while hiding the details of how those services are implemented (16:9). The OSI (Open Systems Interconnection) Reference Model was developed by the International Standards Organization (ISO) to standardize the network layers. It was necessary to review the OSI model to determine the number of control bits required in each layer. Control bits add to the total amount of data transferred across the network, and must be included in the SBSS simulations.

When data is to be transmitted, it travels from the application layer down to the physical layer of the sending node. As the data passes through each layer, additional bits may be added to provide control over the data. For example, the application layer may add control bits which aid the network in file transfers (16:594). Application control bits are grouped into an application header in front of the actual data (16:20). The application header and data combine to form an application protocol data unit (16:45). Additional headers are added at other levels (the data link layer adds control information at the head and tail) (16:46).

Estimates for the number of control bits required by each level of the OSI model is shown below:

The Physical Layer - No control bit information, assuming the IEEE 802 media access control sublayer is part of the OSI data link layer.

The Data Link Layer - IEEE 802.3 CSMA/CD protocol requires 208 bits of control information (16:144). IEEE 802.5 token ring protocol requires 168 bits (10:119). IEEE 802.2 requires 32 bits (16:265).

The Network Layer - The header length is not constant, but must be at least 160 bits (16:359,363).

The Transport Layer - The header length is not constant, but must be at least 40 bits using the TP4 variant protocol (16:432).

The Session Layer - The header is also of variable length (16:467).

The Presentation Layer - No control bit information since no protocol has been specified other than to convert to ascii or binary data format (10:148).

The Application Layer - No control bit information unless the file transfer access/management (FTAM) service is used (10:149).

Based on review of OSI control bit requirements, it is important to model control information in the data link layer. For messages with small amounts of data, the data

link layer control bits can account for over half of the message length. For messages containing more data, the control bits are less significant, but for accuracy still should to be accounted for. Control information in higher ISO layers is more difficult to model since it is of variable length. For this reason only data link layer control information was modeled in the simulations.

6.0 LAN Performance Analysis Techniques

Three techniques for performance analysis are analytic modeling, simulation, and benchmarking. Analytic models are equations for network metrics defined as functions of parameters such number of active stations, media transmission capacity, and data frame size. These equations can be used to predict the performance of LAN topologies, transmission media, and access control protocols. Analytic models of complete network systems have not been developed due to the complexities involved and the variety of network configurations possible (17:1014). Simulation can incorporate more details of a LAN system than analytic modeling, and can be used to predict LAN response time under certain loads for particular applications. Benchmarking is used to evaluate an existing LAN.

Benchmarking is least useful for network comparison studies. Because many parameters are unique to an existing system and cannot be changed, metric measurements are generally not comparable with other existing LANs (12:31). Both analytic modeling and simulation allow insights into the effects of various parameters on performance metrics. Analytic performance modeling can be used to analyze throughput, access delay, and efficiency under heavy load. Response time depends on the application workload, which is usually simulated due to its complexity.

In general, analytic performance models have been used to provide a general comparison between different LAN protocols, and can be used as a starting point in selecting a LAN implementation. Analytic models are discussed further in section 6.1. For more detailed information about a particular network implementation, simulation is required. An overview of simulation techniques and languages along with the simulation package chosen for this thesis effort is provided in section 6.2.

6.1 Analytic Models. There have been several analytical studies published comparing CSMA/CD, token bus, and IEEE standard token ring networks. Two such studies were published by Stallings (1984) and Henry (1990) (11,14). No studies were found in the literature comparing the performance of the FDDI standard token ring network to other

networks. However, Jain (1991) analyzed the performance of FDDI individually (13).

Henry derives equations for station delay, network throughput, and efficiency as functions of the number of active stations, data frame size, medium data rate, and medium length for each of the IEEE 802 standard media access protocols (11:414). Stallings derives network utilization (efficiency) for CSMA/CD, token bus, and token ring, as a function of the number of active stations (N), and the ratio of propagation time to transmission time (a) (14:27). Jain derives equations for efficiency and access delay as functions of the number of active stations (n), ring latency (D) and a parameter called the target token rotation time (TTRT) for an FDDI standard token ring network (13:16). Ring latency is the delay associated with traveling on the ring. It includes media propagation delay and the time a station takes to repeat a frame for the next station on the ring (13:19).

The results of the models agreed fairly well. Stallings confirms Henry's result that the CSMA/CD performance degrades as the number of active stations increases, while all three models agree that the token passing schemes have a constant to slightly higher efficiency as the number active stations increases. Stallings and Henry agree that the efficiency of the models

tested show decreases in efficiency as frame size decreases. However, Jain adds that this decrease is slight for token rings and can be ignored. Other than the huge load FDDI is capable of handling due to its transmission capacity, FDDI performance characteristics are similar to IEEE 802.5 token rings. Jain reports a slight decrease in efficiency and a slight increase in access delay as media length is increased. These relationships were not discussed for the other models and so cannot be compared.

The above results seem to be in agreement with other models discussed in the literature (14,18). However, the above models fail to note three useful relationships discussed elsewhere. Sachs, Kan, and Silvester point out that for a large number of active stations, station delay may be significantly higher for token bus, than token rings. This difference is due, in part, to the use of the logical ring on the token bus in which a station may not be physically adjacent to its logical neighbor (18:55). Second, the models focused on the behavior of the different networks at maximum throughput. Behavior of the networks at low throughput was not discussed. Although token passing is more efficient than CSMA/CD at high throughput rates because CSMA/CD suffers from collisions, token passing efficiency is lower at low throughput due to overhead associated with the token passing methods (14:34). Finally, a study sponsored

by the IEEE 802 standards committee reported that although maximum throughput decreases for token passing and CSMA/CD as frame size decreases (which is consistent with Henry and Stalling's results), maximum throughput decreases more rapidly for CSMA/CD (14:32).

6.2 Simulation. Shanmugan, Frost, and LaRue sum up the advantages of simulation nicely.

Simulation offers a flexible approach to performance evaluation that requires few assumptions and approximations. Detailed models of a network can be simulated and hence the design space can be finely explored. Simulations can be used to predict changes in the performance of existing networks and for evaluating the comparative performance of alternate designs for new systems. It is easy to combine simulation with analytical as well as empirical models, and measured data to create a rapid prototyping environment for communication networks. (19:83)

The following sections review simulation languages, techniques, and the simulation package chosen for this thesis.

6.2.1 Simulation Languages. The analyst must choose between three alternatives for developing the simulation model. These choices are: a general purpose language, a simulation language, or a simulation package. Each alternative has advantages and disadvantages.

A general purpose language, such as C, is the most flexible, but also takes the most amount of time for model development. This is due to the necessity of developing every aspect of the model. Any random number generation

which must fit a particular distribution must be programmed into the model. General purpose languages are generally chosen due to the analyst's familiarity, and the language availability.

Simulation languages, such as GPSS, are relatively less flexible, less portable, and less efficient than the general purpose languages (12:31). Some companies are trying to overcome some of these pitfalls. GPSS allows for FORTRAN function calls so that an analyst can define a function or process in FORTRAN and import the specialized process into the GPSS modeling environment. GPSS has also has been rewritten to allow for greater portability. Today, most GPSS models can be executed on PC or mainframe platforms of various brands. Even without the recent enhancements, simulation languages still offer some advantages over general purpose languages. These advantages include ease of use, and reduction in model development time. This is due to the fact that most of the functions that are common to simulation problems are already defined and only require simple function calls.

A simulation package is the least flexible of the alternatives. However, a simulation package is also the easiest and fastest to implement. The inflexibility stems from the fact that any variation to the model must have been foreseen and allowed for by the developer.

6.2.2 Simulation Techniques. There are many different simulation types throughout academia and industry. The types that are of interest to computer analysts include Emulation, Monte Carlo Simulation, Trace-Driven Simulation, and Discrete-Event Simulation (12:403).

Emulation is the use of hardware or firmware to simulate a system (12:403). An example of emulation would be the programming of a VAX to run as if it were a PDP-11. A second common example is the emulation of VT-100 terminals when a PC is connected to a mainframe. Emulation is almost exclusively used for resolving hardware design issues (12:403).

Monte Carlo simulation is a static simulation. This means that events are not time driven. These simulations are used to model probabilistic events whose characteristics do not change over time. Monte Carlo Simulations are also used to evaluate discrete expressions using probabilistic methods (12:404).

A Trace-Driven Simulation involves the use of a time-ordered record of events on a real system. This method is commonly used in computer system analysis, and is generally used to fine tune or analyze resource management algorithms. Trace-Driven Simulations have been used to optimize CPU scheduling algorithms, develop deadlock prevention algorithms, and in cache analysis. The trace should be kept

independent of the system under study when this method is employed.

A Discrete-Event Simulation uses a discrete-state model of the system being simulated. When used to simulate computer systems, the system state is described by the number of jobs at different devices in the system. A discrete-event model simulation does not have to use discrete-time values. The model refers to discrete events and the time value can be either discrete or continuous (12:406).

6.2.3 L*NET. One simulation package reviewed was L*NET, a simulation package developed by CACI products. L*NET allows processes and data to be allocated to network nodes in user-defined configurations. The package also includes pre-defined parameter settings for IEEE standard and FDDI standard LANs. With L*NET, the user can set up LAN configurations rapidly and with relative ease. The package allows discrete event and Monte Carlo simulation. For more information on L*NET, contact CACI products (9).

III. METHODOLOGY

1.0 Introduction

To develop and evaluate a PC-based SBSS, details on hardware, processes, data requirements, traffic flow patterns, and user demographics first had to be identified and/or defined. In this chapter we describe the hardware configurations of both the base-level SBSS and the regional design. This chapter also explains how SBSS process/data requirements were documented using DFDs, and how traffic flow and user demographics information was constructed using the Wright-Patterson Air Force Base (WPAFB) SBSS as a source of data. Finally, the PC-based SBSS simulations and the performance criteria used to evaluate them are discussed.

2.0 Hardware Configuration

2.1 Base-Level SBSS. The hardware configuration for the Base-level SBSS was already defined since this system has been operational since 1985. The actual configuration was determined through interviewing personnel at WPAFB\LGSPC (Msgt Steve Tyson), and reviewing the specifications provided by SSC\LGSPX, Maxwell AFB, Gunter Annex (SSC) (see Fig. 1 at for hardware design of Base-level SBSS).

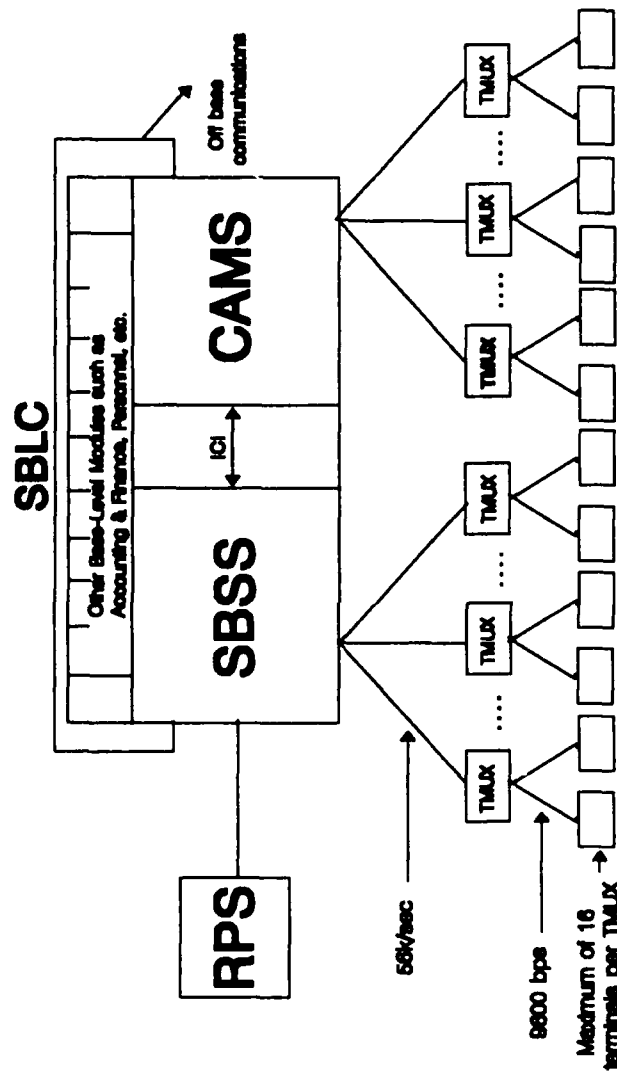


Fig. 1 Physical Configuration of SBSS-SBLC Implementation

2.2 Regional SBSS. The regional SBSS has been operational at Maxwell AFB, Gunter Annex since October of 1991. The actual hardware configuration was determined using the specifications provided by SSC\LGSXX, Maxwell AFB, Gunter Annex (see Fig. 2). At base-level (SSC), the logical configuration of the RPC does not significantly differ from the Base-level SBLC configuration (see Fig. 3).

3.0 Demographics

3.1 Transaction Processing. After the hardware configurations were understood, it was then necessary to determine the user demographics and the traffic flow for the SBSS business process. After reviewing the 1985 and 1990 functional analyses, it was determined that the individual Transaction Identification Codes (TRICs) could model supply's business processes. (A TRIC is a three digit code used to call respective modules within the SBSS. The modules carry out various functions such as update the quantity on hand, or place an order for more stock.) Following interviews with MSgt Steve Tyson, NCOIC of the Remote Processing Station at WPAFB, OH, it was determined that, in January 1993, the supply account at WPAFB represented a typical base supply account. The WPAFB Supply Account Transaction History for the month of January 1993

RPC

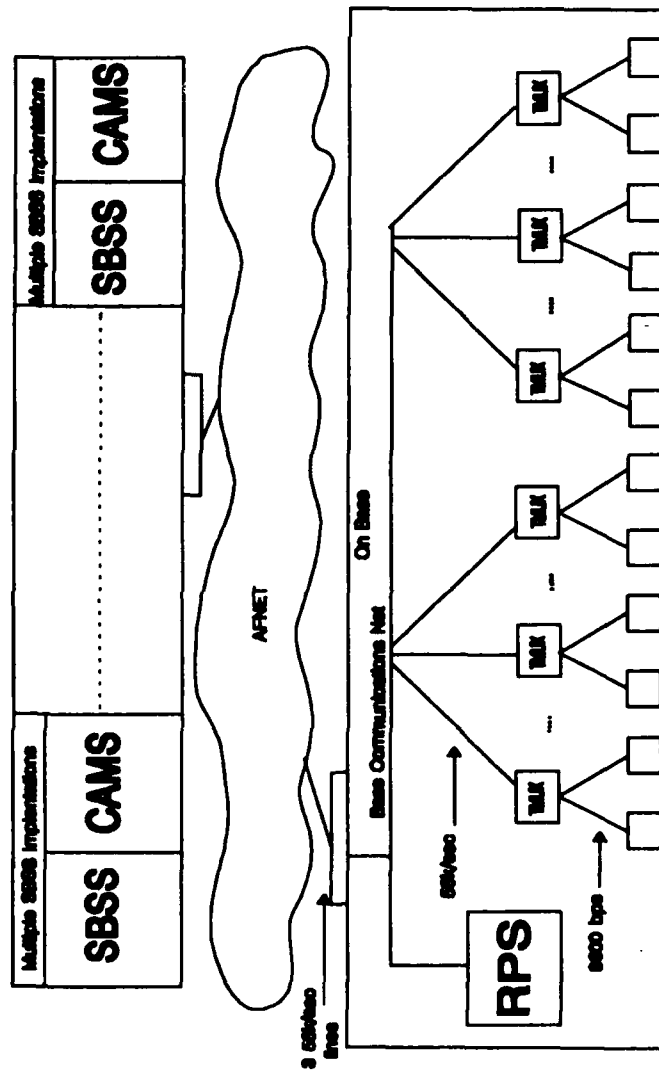


Fig. 2 Physical Implementation of SBSS at RPC

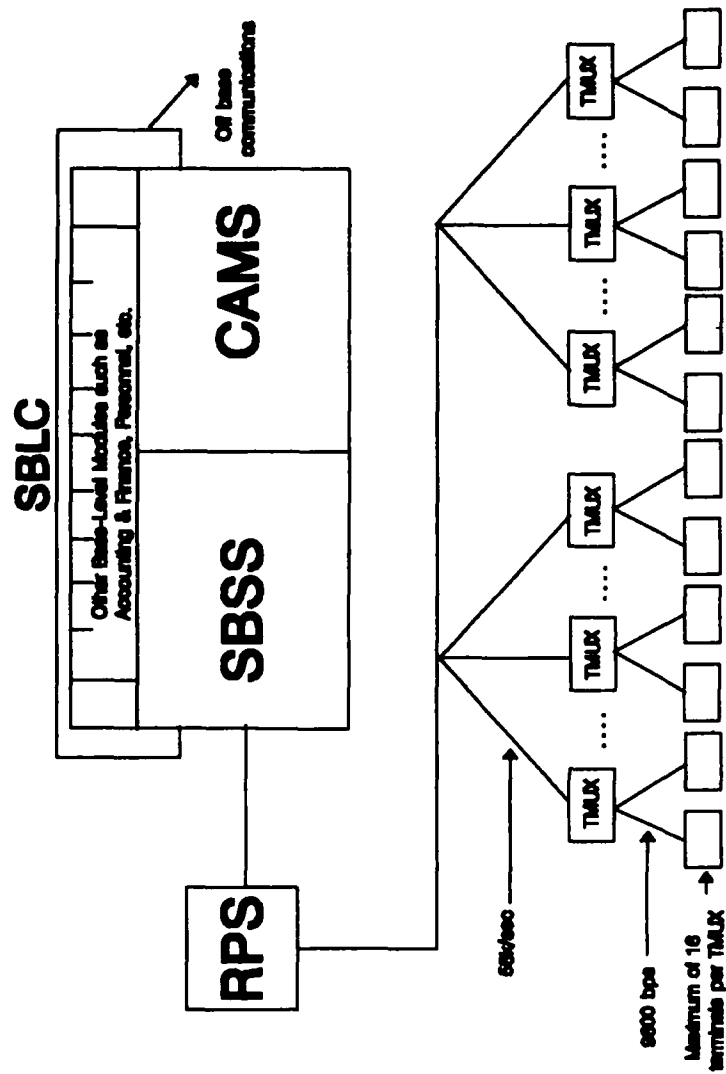


Fig. 3 Logical Configuration of SBSS Implementation

was downloaded for use in determining traffic flow, and user demographics. The data from this file was analyzed and collated (see Appendix A). After reviewing the data, it was determined that the top 22 TRICs representing 90% of the transactions would be used in modeling SBSS traffic flow, and user demographics. This conclusion was reached by comparing the relative percent of traffic flow of the individual TRICs and determining that the percent of workload represented by the remaining TRICs was insignificant. Chapter 4 explains this determination more fully. The results of the data analysis were forwarded to SSC/LGS at Gunter AFB, AL for verification/validation. The results of this review are discussed in chapter 4.

Also, a worst case scenario was required so the results could be applied to all Air Force Bases. Even though the workload percentages were correct for the user demographics, the total number of transactions processed was low. Rather than use the actual 120,195 transactions per month generated at WPAFB, SSC/LGSP at Gunter suggested 500,000 transactions per month would be a realistic worst case scenario.

3.2 Data Flow Diagrams. Once the demographics were completed, a valid traffic/data flow required development. This was accomplished using a Consolidated Transaction History (CTH) for each TRIC identified as having a significant impact on SBSS traffic patterns. The

description of the program modules identified in the CTH were consulted in AFM 177-206 and AFM 67-1. From these descriptions the records accessed by individual TRICs were identified and a Data Flow Diagram (DFD) developed. To further develop the DFDs, real-time traces were run and the descriptions of the program modules during executions were again consulted in AFM 177-206 and AFM 67-1. After the DFDs were as complete as possible they were forwarded to the actual SBSS programmers in charge of the code for the respective TRICs for correction/validation. The DFDs were then used to determine the message length produced by individual TRICs. This information was necessary to obtain valid simulation results. DFDs are located in Appendix B.

3.3 Representative TRIC. Message length was determined by modeling a *representative transaction*. Again, a worst case scenario was deemed most appropriate for a representative transaction. A worst case scenario was defined as the TRIC which produced the longest message. A message was defined as the sum of the length of the maximum number of records accessed by a TRIC in a single supply transaction. The 22 TRICs for which data was collected were reviewed, and it was determined that a combination of REC (Receipt) and DOR (Due Out Release) transactions would represent a valid worst case scenario. The reason for the combination lies in the fact that a DOR cannot occur unless

a REC is processed. This effectively doubles the amount of data needed to process an entire iteration.

After choosing a TRIC, the type of transaction actually processed had to be chosen. The various alternatives were measured, and it was determined that the receipt (REC) and subsequent Due Out Release (DOR) of a repairable item represented the worst case scenario for a REC/DOR combination. The records for this transaction were identified on the DFDs, and then the record length determined by referencing AFM 67-1, Vol II, Chapter 5, Appendix B. The record length was given in 32 bit words. By multiplying each record length by 32 and then adding all the record lengths together the worst case message length was obtained.

4.0 LAN-Based SBSS Simulation

4.1 Evaluation Criteria. After reviewing various evaluation methodologies and characteristics, it was determined that the best method of measuring the PC-based LAN performance was to use the same metrics currently in use for evaluating the RPC-based SBSS performance. The RPC must meet the performance criteria outlined in the Interim Service Level Agreement (ISLA). After reviewing the ISLA, two criteria were found to have a major impact on a LAN

based system; response time: less than five seconds, and down time (reliability): available at least 22 hours per day. It was determined that a valid LAN implementation of the SBSS must, at a minimum, meet these two basic criteria. With only an SBSS model to work with, availability proved too difficult to test quantitatively. However, according to the market research firm, Infonetics Research Inc, the average availability of current LANs is 94% (20:103). This translates to less than 2 hours of down time per day. If the assumption is made that any competitive LAN implementation will not differ significantly from this figure, the criteria for reliability is met. This assumption only applies to the LAN itself and is not necessarily a composite availability rate of the system components. A true composite reliability figure would require identification of actual hardware components which is beyond the scope of this thesis. Simulation was used to determine the expected response time for a PC-based SBSS.

4.2 Simulation. The objective of the simulations was to develop a LAN-Based SBSS configuration with less than a five second simulated response time. The methodology followed was first to develop a basic distributed model with one file server responsible for executing all SBSS processes and storing and retrieving all SBSS data. This model focused exclusively on the activity at the file server. If

a bottleneck occurred at the server, causing a greater than five second user response time, it would be necessary to pull the processes off the server to reduce the response time. If the response time was still too high, data would be partitioned and placed on multiple file servers.

After the basic simulation model was developed, more complex models were constructed to accurately reflect the traffic patterns of the SBSS at other nodes besides the file server. Both centralized and distributed models were developed using the traffic pattern and user demographic information collected.

4.2.1 Basic Model. The basic SBSS simulation model was designed to identify bottlenecks at the file server and help determine the best file distribution. The basic model used a 4 Megabyte/sec token ring with one node representing SBSS traffic, a server, and two nodes simulating other base traffic not related to the SBSS. The arrival of transactions was modeled using an exponential distribution with a mean time between arrivals of 1.2672 seconds, a lower bound of 0 seconds, and an upper bound of 3.8016 seconds. An exponential distribution was chosen due to its suitability and extensive use in modeling both queuing models and time between successive request arrivals to a device (12:488). The node initiated traffic by sending a 200 bit request to the server. Through review of the DFDs

the file server's tasks were defined. The server performed 50 separate disk operations, 24 reads and 26 writes. A 20k read simulated loading the module for the requested TRIC. Then ten 2,582 bit files were read to simulate the loading of required records. To simulate record updates, the server performed 12 separate writes. The first ten write operations updated the 2,582 bit records (this number was derived by taking the total number of bits read and dividing by the total number of records read by the REC operation - $25820/10$). The eleventh write was a 3,456 bit historical record update, and the twelfth write was a 1,044 bit control record update. The next action was another 20k disk read to load the second program module. The final 12 read operations loaded 957 (this number was derived by taking the total number of bits read and dividing by the total number of records read by the DOR operation - $11488/12$) bits per read from disk to simulate loading more required records. The records were then updated for a final time. The records associated with the transaction were updated with twelve 957 bit writes to disk. The historical record was again updated with a 3,456 bit write. The control record was updated with a 1,044 bit disk write operation. After all disk operations were complete the server sent a 200 bit reply back to the node. Since processing time is measured in, at most, microseconds, and disk access time is measured in

milliseconds, processing time was considered negligible and was not modeled. Disk access modeled a typical hard drive whose access time was a standard 15 ms, with a constant sector transfer speed of 10 Megabytes per second. The token ring was assumed to be the backbone of a base-wide network; therefore other data traffic was simulated. The other two nodes pass 200 bit messages having an arrival rate matching an exponential distribution with a mean of .10873 seconds, a lower bound of 0 seconds, and an upper bound of .326190 seconds.

All arrival rates were calculated using a 22 workday month and an 8 hour workday. A mean time between arrivals was calculated as follows:

$$22 \text{ days} * 8 \text{ hours} * 60 \text{ min} * 60 \text{ sec} = 633600 \text{ sec}$$

$$\frac{633600 \text{ sec/mon}}{500000 \text{ trans/mon}} = 1.2672 \text{ sec between trans}$$

The arrival rate for base traffic was calculated using the same logic. The ISLA showed that supply transactions represent 31.5% of all transactions on the SBLC. A mean time between arrivals for base traffic was calculated as follows:

$$\frac{50000}{.3158} - 500000 = 1087302 \text{ Transactions}$$

$$\frac{633600 \text{ sec}}{1087302 \text{ transactions}} = .5827268 \text{ sec between trans}$$

Assuming a standard exponential distribution, a 95% confidence interval was calculated by setting the interval to $\bar{X} \pm 2\sigma$, where sigma equals the mean.

A token ring was chosen because of the feasibility of implementation. Obviously, a backbone for a base-wide LAN will have to connect geographically separated areas, and token rings/FDDI lend themselves well to this type of environment. The assumption was made that there will be a base-wide backbone available for the LAN-based SBSS to pass data. Other models expand on this assumption.

4.2.2 Other Models. The specific details of the other simulation models are included in the simulation reports included in Appendix C. After the basic simulation model was completed, other more complex models were developed to accurately reflect SBSS traffic patterns at other nodes besides the file server. The basic model was expanded to show the activity within the functional areas, as well as traffic generated from off base. This was accomplished by modeling a hierarchical network. The basic token ring was retained, but each functional area within

supply was put on its own IEEE 802.3 Ethernet 10Base5 LAN and given individual nodes. This type of LAN was chosen due to its popularity and high degree of application compatibility. The mean arrival times were calculated by using the empirical data collected for user demographics, and an exponential arrival time was then defined. The workload was divided by the percent usage yielded in appendix A. One model divided the workload evenly between nodes within a functional area, while another modeled the actual activity of individual nodes.

Different processing methods were also examined. One included fully distributed processing. Each individual node processed the data provided by the file server. A second model placed all processes and files on a single server and treated the nodes as dumb terminals. The final and most complex model used the empirical workload calculated for the individual nodes, and modeled the actual traffic patterns for each of the 22 TRICs. The results are discussed in chapter four.

IV. Data Analysis

1.0 Introduction

Analysis of data collected for this thesis produced three major items:

1) An identification of the most frequently used SBSS transactions along with the relative percentage those transactions were processed from each node on the current SBSS system. This analysis covers 90% of total SBSS activity from 95% of the total users on the SBSS, and is based on one month's transaction data taken from the WPAFB Supply Squadron. This data is discussed in Section 2.0. The complete analysis is in Appendix A.

2) A top level DFD of the SBSS system, and lower level DFDs for the most frequently used transactions. The DFD's are located in Appendix B, while Section 3.0 summarizes the results.

3) Results of simulating a worst case transaction to occur on a base wide LAN with a frequency also found to be a worst case scenario for the SBSS. The construction of the worst case transaction was previously discussed in Methodology section 4.2.1.

In total, four simulation models were constructed. The first model was basic, and was intended to accurately

represent SBSS performance only at the file server. The results of this simulation gave an expected user response time for a single file server handling all SBSS workload (this is the mainframe case mapped to a LAN). Since this was the most inefficient LAN configuration for the SBSS, and since both the transaction selected and the frequency of the transaction was worst case, the results implied an upper bound on user response time using any SBSS configuration. The next three models simulated a centralized and distributed PC-based LAN for the SBSS. These models were used to confirm the results of the simple model, and to analyze performance at the functional nodes, as well as the file server. The simulation results are discussed in Section 4.0.

2.0 Most Frequently Used SBSS Transactions

Appendix A tabulates transaction and user statistics for the WPAFB SBSS. The first page ranks the Transaction Identification Codes (TRICs) in terms of frequency of execution over the period of one month. For example, out of a total of 120,195 transactions processed by the SBSS during the month sampled, 18.56% were Receipt (REC) transactions. It was interesting to find that 22 transactions accounted for 90% of the activity on the SBSS. The remaining TRICs

were insignificant the 23rd TRIC (LCC) only represented .61% of all transactions processed on the SBSS, and an increase of 5% to include 95% of the workload would have required the inclusion of an additional ten TRICs, of which each of the last five only represented approximately .3% of the total SBSS workload. Also, four TRICs accounted for 52% of the transaction activity. Since 147 different transactions were actually executed during the month, this greatly simplified the task of modeling the SBSS.

After the TRIC listing on page 63, we show SBSS users rank ordered by frequency in processing a transaction. The initials of the users which account for the first 91% of total SBSS usage are listed. User 000 represents automatically generated transactions (AGT). It can be seen that transactions are frequently automatically generated for various purposes (generally referred to as leveling). This is done to automatically adjust stock levels. The data shows that the majority of the transactions are being initiated by a very small number of users. Out of 213 users (counting 000 as a user), 51% of the SBSS processing is initiated by three users. Further, it can be seen that 000 and *MEN* generate SBSS transactions far more than anyone else.

Besides simplifying the task of modeling the SBSS for simulation, the above results indicate two important considerations when designing a PC-based SBSS LAN:

1) If a bottleneck should occur at the file server, removing the data associated with the transactions occurring the most often (ie. REC, ISU, and DOR) and placing it on a second file server might have the greatest effect in eliminating the bottleneck. (This consideration will be expanded on when discussing the DFD results in the next section.)

2) The AGTs on the SBSS represent the largest workload. If a bottleneck occurs due to heavy traffic on the LAN, traffic may be reduced significantly by requiring SBSS computer generated transactions to be processed directly on the file server. Also, if there is a single user, such as MEN, who clearly processes transactions more often than the rest, that user could input his transactions via the file server's keyboard rather than over the network.

Beginning on page 64, we show the users ranked again by each of the 22 TRICs. This information was necessary to realistically model transactions originating at nodes within the functional areas of the supply squadron. Determining percentages of each transaction generated by each user showed that eleven of the twenty two transactions analyzed were AGTs the majority of the time. Greater than 50% of

ISU, LPS, FK1, BKA, AOA, FIC, FID, AE1, FCU, FTR, and BPA transactions were generated by 000. This agrees with a previous observation that the largest user on the SBSS are AGTs, and that the single most effective way to reduce traffic on an SBSS LAN would be to generate computer initiated transactions directly on the file server.

A consideration for distributing processes on an SBSS LAN gleaned from the user percentage breakouts is that since several of the transactions are initiated by the computer 80% or more of the time and a few are computer-generated over 90% of the time, at least some of these processes should occur directly on the node responsible for the computer generated transactions. Also, if process replication was used in the design, it would not be necessary to replicate these processes on other nodes since they would go relatively unused.

Next, the user's initials were mapped to functional areas, as shown beginning on page 82. The first item shown is the TRIC. The functional areas are listed below the TRIC name. The functional areas are LGSD, LGSM, LGSC, LGSP, DOMR, and a *miscellaneous* functional area for users not residing in the other five departments. Note that a functional area is listed only if it contains a user who ranked in the top 95% of all users processing that transaction. As an example, LGSD has 15 users ranked in the

top 95% of users processing a REC transaction. Using the assumption that each user has his or her own computer, the detailed simulation model mapped the percentages of the top five users in each functional area to five nodes, and then assigned the remaining users into the sixth node. This was possible since the majority of the transactions were generated by the top one or two users.

Finally, a listing of the percentage of all transactions accounted for by each functional area is listed on page 105. Computer generated transactions were grouped into LGSP, since LGSP is responsible for the maintenance of the SBSS. If AGTs were placed on the file server, LGSP LAN traffic would be effectively reduced to zero.

The results of the demographic analysis were forwarded to SSC/LGS at Gunter AFB for verification/validation. The only abnormality noted by SSC in the data involved the high percentage of LPS's (local purchases) at WPAFB. After further analysis it was determined that this abnormality would not affect the research results. This is because the LPS TRIC only represents 8.2% of all SBSS transactions, the actual data flow patterns do not differ significantly from other transactions, and the amount of data produced is similar to a typical TRIC. To summarize, Appendix A describes, in detail, the percentage of the top 90% of transactions processed by the top 95% of SBSS users. This

information was used to accurately model the SBSS as it currently exists at WPAFB. Expert opinion obtained from Gunter AFB confirmed that, with the exception of the LPS transaction, which has little effect, this information is applicable to other bases as well. The actual data included a total of 120,000 transactions for the month analyzed. The experts felt that for a worst case scenario, 120,000 total monthly transactions was light, and that 500,000 transactions was more appropriate. This information provided the framework for a detailed worst case PC-based SBSS model. In addition to the user/transaction statistics, documentation describing what processes and data each transaction consists of was needed. DFDs are discussed in the next section.

3.0 Data Flow Diagrams

Data flow diagrams for the SBSS model are shown in Appendix B. The Top Level diagram is followed by DFDs for each TRIC, ordered alphabetically. The Top Level diagram shows processes common to all TRICs. First, the input is analyzed for correct spelling and format, then the transaction is processed. Another process which belongs on the Top Level DFD is Reject Data. Although input data may be in the correct format, the input may still be rejected

for other reasons. For example, the document number provided by the input may not match any on the data base. For certain transactions, this would cause the input to be rejected.

Some form of output is always processed. Each transaction process outputs a transaction history. Certain transactions output a report document, while others do not. This is clarified on the lower level DFDs. For instance, The Receipt transaction outputs REC out data which goes to process output. Process output generates the REC report. Local Purchase (BKA) does not generate any output documents.

Processing is different for each transaction, so it is this bubble which is broken out on the lower level DFDs. Data stores are also different. Except for the Daily Reject Suspense and Special Control stores, the data stores on the Top Level DFD correspond to categories or families of records on the SBSS. (The categories of the Daily Reject Suspense and Special Control records are shown in parentheses.) In general, stores corresponding to individual records are shown on the lower tier DFDs. Complete descriptions of all records and record categories can be found in AFM 67-1, Volume II, Part 4.

The DFDs confirm that eliminating a bottleneck at a file server by removing the data files required by the most used transactions and placing them on the another file

server, would be effective. It can be seen from reviewing the DFDs of the REC, ISU, DOR, and LPS transactions that the number of data records these transactions must access is relatively large compared to other transactions. Therefore, moving the transaction data files to another server would reduce the bottleneck.

It can also be seen that there is much overlap in the records each transaction accesses. For example, most transactions must access the item record. This makes it impossible to isolate a process and all its files together on a node. So, unless one file server is used to both process SBSS transactions and access records, communication will inevitably occur on the LAN between the transaction process and the file server to update SBSS records.

Another characteristic of the SBSS which should be noted from the DFDs is that some transactions can generate other transactions. It can be seen on the DFD for REC that the Receipt transaction can generate a New Item or a Due Out Release transaction. The Receipt, Issue, and Turn-in transactions can do this. When determining a worst case transaction, these processes should be reviewed, since they result in the most stores being accessed.

It is not apparent from the DFDs, but important to realize that the stores on the DFDs provide a complete list of records which may be accessed by a transaction process.

The records accessed during a transaction depends on the supply item. For this reason, a representative or worst case transaction had to be constructed before it was possible to model an occurrence of a transaction. This was discussed in Methodology section 4.2.1. The results of simulating the worst case transaction are discussed in the next section.

4.0 Simulation Results

4.1 Basic Simulation Model. The results of simulating the worst case scenario were surprising. The maximum response time executing the worst case transaction was only .8731 seconds, which meets the response time criteria of 5 seconds outlined in the ISLA. The minimum response time was .8730 seconds. According to the utilization rate, traffic on the LAN was negligible (only .107%). Using this configuration, though, LAN traffic was expected to be low since all processing was done internally on the server node. Two important observations can be made of the simulation results. The bottleneck on the SBSS is clearly in accessing data records on the file server. However, this bottleneck is not sufficiently large to cause an unacceptable response time on the system. Therefore, it is not necessary to distribute data files on multiple file servers.

The other important observation is that only a minimal bandwidth LAN is required to transfer SBSS data over the LAN. Traffic over the LAN is not heavy enough to require a high performance LAN. Certainly FDDI is not required. It seems a low bandwidth token ring, such as the 4mb used in the simulation, should suffice. A token ring may be required if the distance between the furthest nodes on the network is greater than the 2500 meter limit imposed on CSMA/CD LANs (10:94).

4.2 Hierarchical Models. More complex models were needed to measure response time at each node as well as verify the results of the Basic Model simulation. Also, a variety of simulations provided insight as to what configuration would improve performance and allow greater flexibility for future expansion and how these configurations affected performance.

4.2.1 Central Processing Workload Evenly Distributed. This simulation was used to verify the results of the Basic SBSS Model. The only changes involved the addition of individual nodes mapped to Ethernet LANs representing the functional areas. As expected, the results were not significantly different from the Basic SBSS model. The maximum user response time was .81 seconds, and the token ring was busy .023% of the time. These results were

consistent with what was expected and helped verify the Basic Model.

4.2.2 Distributed Processing Workload Evenly

Distributed. A second configuration involving the distribution of all processes among the nodes was expected to lower the response time, and increase traffic on the network. As expected, the percent of time the token ring was busy increased to .204%, and maximum response time fell almost three tenths of a second to .589 seconds. Even though this is not a significant amount of time from a users view point, the simulation showed that response time for the SBSS can be improved almost 33% if the processes are distributed. The results imply that a significant improvement in response time can be realized if the network can handle the increased traffic associated with the distribution of processes.

4.2.3 Distributed Processing Workload Empirically

Distributed. To create an accurate model of the SBSS, at least twenty distinct processes must run at different rates, accessing multiple files in a complex manner. This simulation was used to model SBSS arrival distributions as realistically as possible. It was anticipated that response time and token network utilization would be similar to the results of the Distributed Processing Workload Evenly Distributed simulation. As expected, the response time for

this simulation was .531 seconds, and the token network utilization was .229%.

The distributed processing models were also compared for utilization at each functional node. In the Empirically Distributed model, some nodes in a functional area executed transactions with greater frequency than others, while the Workload Evenly Distributed simulation modeled each node in a functional area to generate traffic with the same frequency. It was expected that nodes executing transactions with the largest frequency (and therefore having the greatest utilization) would be in the functional areas LGSP and LGSD. The two largest users from the empirical data were 000 (AGT), in LGSP, and MEN in LGSD. The Empirically Distributed model showed that the 000's utilization was 4.8%, and MEN's was 1.7%. These results were significantly higher than the average utilization rates calculated for LGSP and LGSD in the previous model, .787% and .612%, respectively. This illustrates the importance of collecting demographic information, such as user demographics, prior to LAN implementation. In certain cases, extreme utilization rates can cause bottlenecks, resulting in unacceptable response times at high use nodes. This problem was not encountered in the SBSS simulations, as is obvious, since utilization rates at all functional nodes were negligible.

V. Conclusions and Recommendations

1.0 Introduction

This chapter summarizes the objectives of this research and how they were met in the course of the study. It also provides some conclusions and considerations for implementing a PC-based SBSS LAN. Finally, the chapter recommends areas for further study. The recommendations are based on research, observations, and opinions of the authors.

2.0 Summary of Research

The Standard Systems Center (SSC) is in the process of evaluating various new platforms to handle base level computing functions. One alternative is to use a PC-based system for part or all of these functions. One of the largest requirements for base level computing is the Standard Base Supply System. The purpose of this thesis was to investigate the technical feasibility of a PC-based SBSS.

A central theme of the research was determining whether performance requirements could be met by a LAN-based implementation, and if so, if the processes should be distributed. The ability of PC networks to distribute

processes and/or data throughout the network nodes can potentially improve performance by reducing the load at the file server.

SBSS simulation models were constructed to determine, in terms of performance, the feasibility and need for a distributed PC-based SBSS LAN. In order to construct the models, the SBSS functions and data requirements first had to be understood. The requirements were researched and documented using DFDs. It was also important to determine who generated the SBSS functions. To investigate this, the transaction history for the WPAFB SBSS was correlated with the SBSS user list to create a demographic profile showing what transactions were generated by each SBSS user. Finally, it was necessary to measure the load associated with transaction execution, both in terms of traffic between nodes, and data transferred to and from the database. Load was estimated using a worst case scenario; the worst case transaction was executed with a worst case frequency. The DFDs, demographics, and load information provided the necessary details to create accurate representations of the SBSS in both distributed and non-distributed configurations. The SBSS models were simulated and their performance was evaluated against the same criteria used by SSC to evaluate the RPC mainframe discussed in Chapter 1.

Two important observations were made of the simulation results. The first was that the bottleneck created by using a single file server to handle all of the SBSS workload is not sufficiently large to cause an unacceptable user response time. The other important observation is that only a minimal bandwidth LAN is required. Traffic is not heavy enough to require a high performance LAN.

3.0 Conclusion

Advancements in both PC and LAN technology have made a PC-based SBSS not only feasible, but also allows for implementation using almost any type of LAN and process/data configuration. From the perspective of performance, there is no need to partition the database and create multiple file servers (except some form of database backup should be implemented for reliability). It is also not necessary to distribute the processes on user nodes to reduce response time, although this might be done anyway for future expandability, reliability, and survivability considerations. Removing the processes reduces file server utilization, allowing for additional non-SBSS applications to be added. Using network versions of word processing/spreadsheet software, etc. has the usual LAN

benefits of increased standardization and reduced software costs over purchasing single user versions.

According to the simulation results, bottlenecks will simply not be a problem. If, however, the LAN implementer still wishes to reduce either server or LAN workload, the study provided three useful considerations:

- 1) One way to reduce the workload at the file server is to replicate the processes on the user nodes. According to the simulations, this may reduce response time by over 30%.

- 2) Another way to reduce the workload at the file server is to remove the data associated with the most frequently used TRICs, and place that data on a second file server. For the WPAFB SBSS, the top four transaction types accounted for more than 50% of SBSS activity. The true reduction in the utilization of the first file server cannot be accurately estimated without simulation, however, since the DFDs showed significant overlap in data accessed by each transaction.

- 3) Reducing the amount of traffic on the LAN is, of course, a tradeoff with reducing the workload of the file server. Distributing the processes and adding a second file server reduces the workload of the first server at the expense of adding network traffic. If the LAN implementer believes fully replicating the processes on each node

increases LAN traffic by too much, an effective way to reduce LAN traffic is to execute all computer generated transactions on the file server. WPAFB SBSS transaction data analysis showed these transactions accounted for 37% of total SBSS activity, and of all transactions, computer generated TRICs can most easily be executed on the file server, since no human input is required.

4.0 Recommendations

This study showed that a PC-based SBSS can easily meet the performance requirements imposed by the SSC on the RPC mainframe. The results of this thesis effort should be incorporated into a comprehensive cost/benefit analysis of the PC versus regional mainframe architectures. After other issues are addressed, including policy from higher headquarters, the most cost effective solution should be implemented.

5.0 Recommendations for Future Research

It is the opinion of the authors that a PC-based system should be considered for other base level applications, such as Accounting & Finance and Computer Automated Maintenance System, as well. The relative ease with which the data was

collected to accurately model the SBSS suggests that a similar modeling technique can be used for other SBLC/RPC modules. One reason to consider a PC-based system for all base level applications is that it may be the only way to ensure a LAN backbone is in place at each base. Even without a thorough cost analysis, it is clear that the major hardware expense is the backbone. Unless a backbone already exists, it may be difficult to justify the co-existence of both a PC-based SBSS and an RPC mainframe.

Appendix A - Demographics Data

There are 120195 transactions

Different trics : 147

Number of users : 213

TRIC	#	%	cum %
REC	22319	18.5690	18.5690
ISU	17890	14.8841	33.4531
DOR	12726	10.5878	44.0409
LPS	9856	8.2000	52.2409
FK1	5513	4.5867	56.8277
BKA	4688	3.9003	60.7280
DUO	4656	3.8737	64.6017
A0A	3899	3.2439	67.8456
1RF	3817	3.1757	71.0213
FCS	3415	2.8412	73.8625
FIC	3104	2.5825	76.4450
TIN	2938	2.4444	78.8893
FID	1899	1.5799	80.4692
FIL	1843	1.5333	82.0026
SPR	1775	1.4768	83.4794
AE1	1608	1.3378	84.8172
FCU	1449	1.2055	86.0227
SHP	1122	0.9335	86.9562
FTR	1065	0.8861	87.8423
FET	1038	0.8636	88.7059
BPA	1017	0.8461	89.5520
TRM	925	0.7696	90.3216

user	#	%	cum %
000	44202	36.7752	36.7752
MEN	13545	11.2692	48.0444
FCL	3819	3.1773	51.2218
CRW	3368	2.8021	54.0239
SYL	3339	2.7780	56.8019
KAM	3153	2.6232	59.4251
THB	3037	2.5267	61.9518
CAM	2619	2.1790	64.1308
CR	2474	2.0583	66.1891
JGA	1361	1.1323	67.3214
SWS	1340	1.1149	68.4363
JHW	1105	0.9193	69.3556
GWG	1101	0.9160	70.2716
MP1	1031	0.8578	71.1294
MRF	1012	0.8420	71.9714
LRM	996	0.8287	72.8000
DLK	947	0.7879	73.5879

JAW	936	0.7787	74.3666
RJF	935	0.7779	75.1445
WAT	887	0.7380	75.8825
JCH	873	0.7263	76.6088
PRR	864	0.7188	77.3277
ROS	789	0.6564	77.9841
MJG	766	0.6373	78.6214
MLP	719	0.5982	79.2196
GWK	698	0.5807	79.8003
LDD	663	0.5516	80.3519
YDB	622	0.5175	80.8694
WDV	610	0.5075	81.3769
	602	0.5009	81.8778
TER	561	0.4667	82.3445
SLS	559	0.4651	82.8096
LDO	507	0.4218	83.2314
IOE	490	0.4077	83.6391
PRW	490	0.4077	84.0468
MG	488	0.4060	84.4528
BJB	483	0.4018	84.8546
CG	465	0.3869	85.2415
PLM	442	0.3677	86.6092
GNO	423	0.3519	86.9611
JK	412	0.3428	86.3039
SRM	404	0.3361	86.6400
JMC	394	0.3278	86.9670
EG	387	0.3220	87.2898
REN	363	0.3020	87.5918
LL2	347	0.2887	87.8805
JAH	341	0.2837	88.1642
DEH	334	0.2779	88.4421
LDS	329	0.2737	88.7158
DRJ	322	0.2679	88.9837
MCR	322	0.2679	89.2516
WW	316	0.2629	89.5145
WMB	298	0.2479	89.7624
RJP	293	0.2438	90.0062
EJS	287	0.2388	90.2450
LRK	286	0.2379	90.4829
DVR	256	0.2130	90.6959
CAB	250	0.2080	90.9039
TMD	239	0.1988	91.1027

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for
TRIC						

REC						
	MEN	8281	8281	6.8896	37.1029	37.1029
	SYL	2223	10504	1.8495	9.9601	47.0630

CRW	2145	12649	1.7846	9.6106	56.6737
CR	1529	14178	1.2721	6.8507	63.5244
THB	1363	15541	1.1340	6.1069	69.6313
JGA	657	16198	0.5466	2.9437	72.5749
FCL	626	16824	0.5208	2.8048	75.3797
JHW	611	17435	0.5083	2.7376	78.1173
000	504	17939	0.4193	2.2582	80.3755
MRF	474	18413	0.3944	2.1238	82.4992
MLP	461	18874	0.3835	2.0655	84.5647
JCH	426	19300	0.3544	1.9087	86.4734
ROS	416	19716	0.3461	1.8639	88.3373
GNO	274	19990	0.2280	1.2277	89.5649
SLS	265	20255	0.2205	1.1873	90.7523
TER	250	20505	0.2080	1.1201	91.8724
PRW	241	20746	0.2005	1.0798	92.9522
EG	239	20985	0.1988	1.0708	94.0230
DRJ	174	21159	0.1448	0.7796	94.8026
DVR	131	21290	0.1090	0.5869	95.3896
RC2	96	21386	0.0799	0.4301	95.8197
PDU	86	21472	0.0716	0.3853	96.2050
BJB	85	21557	0.0707	0.3808	96.5859
KAM	72	21629	0.0599	0.3226	96.9085
ADS	61	21690	0.0508	0.2733	97.1818
LKL	58	21748	0.0483	0.2599	97.4416
JAW	56	21804	0.0466	0.2509	97.6926
CAB	53	21857	0.0441	0.2375	97.9300
LM	45	21902	0.0374	0.2016	98.1316
RC1	43	21945	0.0358	0.1927	98.3243
TMD	38	21983	0.0316	0.1703	98.4946
WDV	34	22017	0.0283	0.1523	98.6469
KAL	28	22045	0.0233	0.1255	98.7723
WJ	28	22073	0.0233	0.1255	98.8978
FJC	26	22099	0.0216	0.1165	99.0143
JAH	25	22124	0.0208	0.1120	99.1263
BG	23	22147	0.0191	0.1031	99.2294
MAS	21	22168	0.0175	0.0941	99.3234
TTH	17	22185	0.0141	0.0762	99.3996
PN1	16	22201	0.0133	0.0717	99.4713
CWC	13	22214	0.0108	0.0582	99.5295
RJP	12	22226	0.0100	0.0538	99.5833
RLB	12	22238	0.0100	0.0538	99.6371
MG	11	22249	0.0092	0.0493	99.6864
RLS	11	22260	0.0092	0.0493	99.7356
KAS	10	22270	0.0083	0.0448	99.7805
FDL	8	22278	0.0067	0.0358	99.8163
SRM	7	22285	0.0058	0.0314	99.8477
RGN	7	22292	0.0058	0.0314	99.8790
BS2	5	22297	0.0042	0.0224	99.9014
RBE	4	22301	0.0033	0.0179	99.9193
MP1	3	22304	0.0025	0.0134	99.9328

	3	22310	0.0025	0.0134	99.9597
GS1	3	22313	0.0025	0.0134	99.9597
JAC	3	22316	0.0025	0.0134	99.9731
DEH	2	22318	0.0017	0.0090	99.9821
JEH	2	22320	0.0017	0.0090	99.9911
JC1	2	22322	0.0017	0.0090	100.0000

TRIC INIT TRIC ISU	#	cum	% of tot	% for TRIC	Cum % for
000	9166	9166	7.6259	51.2353	51.2353
FCL	2038	11204	1.6956	11.3918	62.6272
CAM	1587	12791	1.3204	8.8709	71.4980
LRM	858	13649	0.7138	4.7960	76.2940
DLK	430	14079	0.3578	2.4036	78.6976
GWK	415	14494	0.3453	2.3197	81.0173
JGA	287	14781	0.2388	1.6042	82.6216
WW	272	15053	0.2263	1.5204	84.1420
SWS	267	15320	0.2221	1.4925	85.6344
MJG	247	15567	0.2055	1.3807	87.0151
YDB	191	15758	0.1589	1.0676	88.0827
BJB	181	15939	0.1506	1.0117	89.0945
LDO	159	16098	0.1323	0.8888	89.9832
JK	130	16228	0.1082	0.7267	90.7099
KAM	124	16352	0.1032	0.6931	91.4030
DEH	112	16464	0.0932	0.6260	92.0291
TAP	107	16571	0.0890	0.5981	92.6272
PLB	104	16675	0.0865	0.5813	93.2085
MJH	87	16762	0.0724	0.4863	93.6948
RLB	68	16830	0.0566	0.3801	94.0749
JSM	68	16898	0.0566	0.3801	94.4550
KAL	66	16964	0.0549	0.3689	94.8239
GRS	59	17023	0.0491	0.3298	95.1537
JAW	56	17079	0.0466	0.3130	95.4667
JAH	49	17128	0.0408	0.2739	95.7406
SRM	45	17173	0.0374	0.2515	95.9922
1F3	39	17212	0.0324	0.2180	96.2102
KEC	38	17250	0.0316	0.2124	96.4226
SLS	36	17286	0.0300	0.2012	96.6238
TTH	36	17322	0.0300	0.2012	96.8250
RDL	35	17357	0.0291	0.1956	97.0207
PLM	28	17385	0.0233	0.1565	97.1772
CFB	28	17413	0.0233	0.1565	97.3337
TER	26	17439	0.0216	0.1453	97.4790
MCR	26	17465	0.0216	0.1453	97.6244
BS2	25	17490	0.0208	0.1397	97.7641
WMB	25	17515	0.0208	0.1397	97.9039
TMD	24	17539	0.0200	0.1342	98.0380
GAH	24	17563	0.0200	0.1342	98.1722

WAT	23	17586	0.0191	0.1286	98.3007
PRR	21	17607	0.0175	0.1174	98.4181
BLM	21	17628	0.0175	0.1174	98.5355
MP1	20	17648	0.0166	0.1118	98.6473
MG	19	17667	0.0158	0.1062	98.7535
KM	19	17686	0.0158	0.1062	98.8597
MDP	19	17705	0.0158	0.1062	98.9659
PT1	15	17720	0.0125	0.0838	99.0498
ROS	14	17734	0.0116	0.0783	99.1280
HFJ	13	17747	0.0108	0.0727	99.2007
RC2	12	17759	0.0100	0.0671	99.2677
JHW	11	17770	0.0092	0.0615	99.3292
DVR	11	17781	0.0092	0.0615	99.3907
KC	10	17791	0.0083	0.0559	99.4466
TMB	9	17800	0.0075	0.0503	99.4969
BG	8	17808	0.0067	0.0447	99.5416
EJS	8	17816	0.0067	0.0447	99.5864
IRS	6	17822	0.0050	0.0335	99.6199
KKL	6	17828	0.0050	0.0335	99.6534
FMN	5	17833	0.0042	0.0279	99.6814
THB	4	17837	0.0033	0.0224	99.7037

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for

DOR

MEN	5024	5024	4.1799	39.4782	39.4782
CRW	1149	6173	0.9559	9.0288	48.5070
SYL	1059	7232	0.8811	8.3215	56.8285
CR	905	8137	0.7529	7.1114	63.9400
THB	821	8958	0.6831	6.4514	70.3913
JHW	327	9285	0.2721	2.5695	72.9609
JCH	307	9592	0.2554	2.4124	75.3733
MLP	250	9842	0.2080	1.9645	77.3377
FCL	249	10091	0.2072	1.9566	79.2944
MRF	220	10311	0.1830	1.7287	81.0231
ROS	214	10525	0.1780	1.6816	82.7047
000	184	10709	0.1531	1.4459	84.1506
PRW	184	10893	0.1531	1.4459	85.5964
SLS	165	11058	0.1373	1.2966	86.8930
TER	153	11211	0.1273	1.2023	88.0952
GNO	148	11359	0.1231	1.1630	89.2582
EG	148	11507	0.1231	1.1630	90.4212
DVR	102	11609	0.0849	0.8015	91.2227
DRJ	100	11709	0.0832	0.7858	92.0085
WAT	94	11803	0.0782	0.7386	92.7471
TMD	84	11887	0.0699	0.6601	93.4072
JGA	48	11935	0.0399	0.3772	93.7844
BJB	47	11982	0.0391	0.3693	94.1537

CAB	46	12028	0.0383	0.3615	94.5152
JAW	38	12066	0.0316	0.2986	94.8138
KC	38	12104	0.0316	0.2986	95.1124
SP	38	12142	0.0316	0.2986	95.4110
WMB	31	12173	0.0258	0.2436	95.6546
IOE	31	12204	0.0258	0.2436	95.8982
RC1	30	12234	0.0250	0.2357	96.1339
BG	29	12263	0.0241	0.2279	96.3618
PDU	26	12289	0.0216	0.2043	96.5661
LM	24	12313	0.0200	0.1886	96.7547
PN1	23	12336	0.0191	0.1807	96.9354
GS1	23	12359	0.0191	0.1807	97.1161
RJF	22	12381	0.0183	0.1729	97.2890
EJS	21	12402	0.0175	0.1650	97.4540
IRS	21	12423	0.0175	0.1650	97.6190
DDK	21	12444	0.0175	0.1650	97.7841
WDV	20	12464	0.0166	0.1572	97.9412
WB	20	12484	0.0166	0.1572	98.0984
MG	18	12502	0.0150	0.1414	98.2398
CWC	16	12518	0.0133	0.1257	98.3655
FJC	15	12533	0.0125	0.1179	98.4834
LL2	15	12548	0.0125	0.1179	98.6013
RJP	12	12560	0.0100	0.0943	98.6956
CGC	12	12572	0.0100	0.0943	98.7899
LKL	12	12584	0.0100	0.0943	98.8842
FDL	12	12596	0.0100	0.0943	98.9785
DS	10	12606	0.0083	0.0786	99.0570
JLT	9	12615	0.0075	0.0707	99.1278
RLS	8	12623	0.0067	0.0629	99.1906
KAS	8	12631	0.0067	0.0629	99.2535
RGN	8	12639	0.0067	0.0629	99.3164
JEH	8	12647	0.0067	0.0629	99.3792
RBE	7	12654	0.0058	0.0550	99.4342
WDL	7	12661	0.0058	0.0550	99.4892
CGJ	7	12668	0.0058	0.0550	99.5442
MCR	6	12674	0.0050	0.0471	99.5914
SK1	6	12680	0.0050	0.0471	99.6385

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for

LPS						
000	8769	8769	7.2956	88.9712	88.9712	
FCL	307	9076	0.2554	3.1149	92.0860	
MG	209	9285	0.1739	2.1205	94.2066	
JGA	203	9488	0.1689	2.0597	96.2662	
JAW	114	9602	0.0948	1.1567	97.4229	
DEH	90	9692	0.0749	0.9131	98.3360	
TMB	78	9770	0.0649	0.7914	99.1274	

RC2	34	9804	0.0283	0.3450	99.4724
VAC	27	9831	0.0225	0.2739	99.7463
LKL	7	9838	0.0058	0.0710	99.8174
CKP	5	9843	0.0042	0.0507	99.8681
RDV	4	9847	0.0033	0.0406	99.9087
QFJ	3	9850	0.0025	0.0304	99.9391
IED	2	9852	0.0017	0.0203	99.9594
1F3	2	9854	0.0017	0.0203	99.9797
TLW	2	9856	0.0017	0.0203	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

FK1					
000	5377	5377	4.4736	97.5331	97.5331
LDD	123	5500	0.1023	2.2311	99.7642
GWG	13	5513	0.0108	0.2358	%100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

BJA					
000	4180	4180	3.4777	89.1638	89.1638
GWG	430	4610	0.3578	9.1724	98.3362
LDD	78	4688	0.0649	1.6638	%100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

DUO					
000	752	752	0.6256	16.1512	16.1512
CAM	645	1397	0.5366	13.8531	30.0043
MJG	311	1708	0.2587	6.6796	36.6838
SWS	267	1975	0.2221	5.7345	42.4184
YDB	251	2226	0.2088	5.3909	47.8093
LDO	188	2414	0.1564	4.0378	51.8471
FCL	170	2584	0.1414	3.6512	55.4983
JK	146	2730	0.1215	3.1357	58.6340
CFB	120	2850	0.0998	2.5773	61.2113
PLM	116	2966	0.0965	2.4914	63.7027
WMB	111	3077	0.0923	2.3840	66.0868
JAW	99	3176	0.0824	2.1263	68.2131
BJB	88	3264	0.0732	1.8900	70.1031
JSM	71	3335	0.0591	1.5249	71.6280
MJH	59	3394	0.0491	1.2672	72.8952
TLW	58	3452	0.0483	1.2457	74.1409
LRK	58	3510	0.0483	1.2457	75.3866

MG	51	3561	0.0424	1.0954	76.4820
LRM	51	3612	0.0424	1.0954	77.5773
JEH	48	3660	0.0399	1.0309	78.6082
KC	47	3707	0.0391	1.0095	79.6177
MS1	46	3753	0.0383	0.9880	80.6057
WW	44	3797	0.0366	0.9450	81.5507
RDL	42	3839	0.0349	0.9021	82.4528
FMN	40	3879	0.0333	0.8591	83.3119
BG	35	3914	0.0291	0.7517	84.0636
AG3	35	3949	0.0291	0.7517	84.8153
DLK	34	3983	0.0283	0.7302	85.5455
IOE	33	4016	0.0275	0.7088	86.2543
KM	33	4049	0.0275	0.7088	86.9631
WAT	31	4080	0.0258	0.6658	87.6289
DEH	28	4108	0.0233	0.6014	88.2302
LAH	28	4136	0.0233	0.6014	88.8316
GWK	22	4158	0.0183	0.4725	89.3041
PRR	22	4180	0.0183	0.4725	89.7766
RGN	20	4200	0.0166	0.4296	90.2062
KKL	20	4220	0.0166	0.4296	90.6357
CAB	19	4239	0.0158	0.4081	91.0438
MDP	19	4258	0.0158	0.4081	91.4519
PLB	18	4276	0.0150	0.3866	91.8385
VAL	17	4293	0.0141	0.3651	92.2036
JGA	16	4309	0.0133	0.3436	92.5472
KC1	16	4325	0.0133	0.3436	92.8909
TMD	15	4340	0.0125	0.3222	93.2131
TAP	15	4355	0.0125	0.3222	93.5352
IRS	14	4369	0.0116	0.3007	93.8359
GRS	13	4382	0.0108	0.2792	94.1151
1F3	12	4394	0.0100	0.2577	94.3728
MCR	12	4406	0.0100	0.2577	94.6306
PT1	12	4418	0.0100	0.2577	94.8883
TMB	11	4429	0.0092	0.2363	95.1246
RJF	10	4439	0.0083	0.2148	95.3393
WDW	10	4449	0.0083	0.2148	95.5541
JT2	10	4459	0.0083	0.2148	95.7689
ROS	9	4468	0.0075	0.1933	95.9622
PN1	9	4477	0.0075	0.1933	96.1555
EJS	9	4486	0.0075	0.1933	96.3488
CG	9	4495	0.0075	0.1933	96.5421
NP	9	4504	0.0075	0.1933	96.7354
WJM	9	4513	0.0075	0.1933	96.9287

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for
A0A	000	2651	2651	2.2056	67.9918	67.9918

CAM	197	2848	0.1639	5.0526	73.0444
MJG	129	2977	0.1073	3.3085	76.3529
YDB	117	3094	0.0973	3.0008	79.3537
WMB	93	3187	0.0774	2.3852	81.7389
LDO	83	3270	0.0691	2.1288	83.8677
MJH	56	3326	0.0466	1.4363	85.3039
JK	54	3380	0.0449	1.3850	86.6889
SWS	46	3426	0.0383	1.1798	87.8687
LRK	34	3460	0.0283	0.8720	88.7407
KC	30	3490	0.0250	0.7694	89.5101
FCL	29	3519	0.0241	0.7438	90.2539
LRM	25	3544	0.0208	0.6412	90.8951
PLM	23	3567	0.0191	0.5899	91.4850
JAW	23	3590	0.0191	0.5899	92.0749
JSM	23	3613	0.0191	0.5899	92.6648
JR1	23	3636	0.0191	0.5899	93.2547
PRR	20	3656	0.0166	0.5130	93.7676
CFB	19	3675	0.0158	0.4873	94.2549
KM	18	3693	0.0150	0.4617	94.7166
IOE	17	3710	0.0141	0.4360	95.1526
AG3	13	3723	0.0108	0.3334	95.4860
MDP	13	3736	0.0108	0.3334	95.8194
LAH	11	3747	0.0092	0.2821	96.1016
GWK	10	3757	0.0083	0.2565	96.3580
IRS	10	3767	0.0083	0.2565	96.6145
WDW	8	3775	0.0067	0.2052	96.8197
GAH	8	3783	0.0067	0.2052	97.0249
BG	7	3790	0.0058	0.1795	97.2044
KKL	7	3797	0.0058	0.1795	97.3839
TMD	7	3804	0.0058	0.1795	97.5635
KC1	6	3810	0.0050	0.1539	97.7174
JEH	5	3815	0.0042	0.1282	97.8456
RDL	5	3820	0.0042	0.1282	97.9738
NP	5	3825	0.0042	0.1282	98.1021
BLM	5	3830	0.0042	0.1282	98.2303
VAL	4	3834	0.0033	0.1026	98.3329
MCR	4	3838	0.0033	0.1026	98.4355
TER	4	3842	0.0033	0.1026	98.5381
SK1	4	3846	0.0033	0.1026	98.6407
MG	3	3849	0.0025	0.0769	98.7176
MS1	3	3852	0.0025	0.0769	98.7946
DEH	3	3855	0.0025	0.0769	98.8715
CAB	3	3858	0.0025	0.0769	98.9484
TMB	3	3861	0.0025	0.0769	99.0254
RJF	3	3864	0.0025	0.0769	99.1023
CWC	3	3867	0.0025	0.0769	99.1793
FMN	2	3869	0.0017	0.0513	99.2306
DLK	2	3871	0.0017	0.0513	99.2819
PT1	2	3873	0.0017	0.0513	99.3332
CG	2	3875	0.0017	0.0513	99.3845

CGC	2	3877	0.0017	0.0513	99.4358
MW	2	3879	0.0017	0.0513	99.4870
EH	2	3881	0.0017	0.0513	99.5383
CR	2	3883	0.0017	0.0513	99.5896
CAD	2	3885	0.0017	0.0513	99.6409
MCS	2	3887	0.0017	0.0513	99.6922
JEL	2	3889	0.0017	0.0513	99.7435
RGN	1	3890	0.0008	0.0256	99.7692
JGA	1	3891	0.0008	0.0256	99.7948

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

1RF					
KAM	2757	2757	2.2938	72.2295	72.2295
MP1	822	3579	0.6839	21.5352	93.7647
REN	238	3817	0.1980	6.2353	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

FCS					
THB	809	809	0.6731	23.6896	23.6896
PRR	800	1609	0.6656	23.4261	47.1157
000	319	1928	0.2654	9.3411	56.4568
GWK	232	2160	0.1930	6.7936	63.2504
MCR	209	2369	0.1739	6.1201	69.3704
JMC	208	2577	0.1731	6.0908	75.4612
RLN	164	2741	0.1364	4.8023	80.2635
FMN	110	2851	0.0915	3.2211	83.4846
REC	97	2948	0.0807	2.8404	86.3250
JAP	94	3042	0.0782	2.7526	89.0776
SRM	53	3095	0.0441	1.5520	90.6296
WJM	47	3142	0.0391	1.3763	92.0059
CJO	41	3183	0.0341	1.2006	93.2064
RLB	35	3218	0.0291	1.0249	94.2313
1F3	30	3248	0.0250	0.8785	95.1098
FDL	28	3276	0.0233	0.8199	95.9297
CB2	28	3304	0.0233	0.8199	96.7496
LRM	27	3331	0.0225	0.7906	97.5403
WAT	17	3348	0.0141	0.4978	98.0381
FAL	12	3360	0.0100	0.3514	98.3895
RJF	10	3370	0.0083	0.2928	98.6823
TTH	10	3380	0.0083	0.2928	98.9751
TMD	5	3385	0.0042	0.1464	99.1215
CGJ	5	3390	0.0042	0.1464	99.2679
BS2	5	3395	0.0042	0.1464	99.4143
WMB	3	3398	0.0025	0.0878	99.5022

TMB	2	3400	0.0017	0.0586	99.5608
JGA	2	3402	0.0017	0.0586	99.6193
EJS	2	3404	0.0017	0.0586	99.6779
TWD	2	3406	0.0017	0.0586	99.7365
RPL	2	3408	0.0017	0.0586	99.7950
FCL	1	3409	0.0008	0.0293	99.8243
JAW	1	3410	0.0008	0.0293	99.8536
EH	1	3411	0.0008	0.0293	99.8829
WDL	1	3412	0.0008	0.0293	99.9122
JHW	1	3413	0.0008	0.0293	99.9414
DDN	1	3414	0.0008	0.0293	99.9707
MAT	1	3415	0.0008	0.0293	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

FIC					
000	2340	2340	1.9468	75.3866	75.3866
RJF	534	2874	0.4443	17.2036	92.5902
HA	80	2954	0.0666	2.5773	95.1675
PL	76	3030	0.0632	2.4485	97.6160
PLM	30	3060	0.0250	0.9665	98.5825
FCL	18	3078	0.0150	0.5799	99.1624
JGA	10	3088	0.0083	0.3222	99.4845
EJL	8	3096	0.0067	0.2577	99.7423
MCR	4	3100	0.0033	0.1289	99.8711
KJS	4	3104	0.0033	0.1289	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

TIN					
WAT	502	502	0.4177	17.0865	17.0865
WDV	394	896	0.3278	13.4105	30.4969
MRF	245	1141	0.2038	8.3390	38.8359
LL2	235	1376	0.1955	7.9986	46.8346
EJS	189	1565	0.1572	6.4329	53.2675
DM	166	1731	0.1381	5.6501	58.9176
JLT	129	1860	0.1073	4.3907	63.3084
SRM	103	1963	0.0857	3.5058	66.8142
ROS	84	2047	0.0699	2.8591	69.6732
JHW	80	2127	0.0666	2.7229	72.3962
JAW	77	2204	0.0641	2.6208	75.0170
BJB	75	2279	0.0624	2.5528	77.5698
000	68	2347	0.0566	2.3145	79.8843
SLS	57	2404	0.0474	1.9401	81.8244
TMD	40	2444	0.0333	1.3615	83.1858
MCR	38	2482	0.0316	1.2934	84.4792

JJH	37	2519	0.0308	1.2594	85.7386
FDL	34	2553	0.0283	1.1572	86.8959
RJF	32	2585	0.0266	1.0892	87.9859
JAH	30	2615	0.0250	1.0211	89.0061
DRJ	24	2639	0.0200	0.8169	89.8230
1F3	23	2662	0.0191	0.7828	90.6059
WMB	22	2684	0.0183	0.7488	91.3547
RC1	20	2704	0.0166	0.6807	92.0354
KAL	20	2724	0.0166	0.6807	92.7161
CGJ	19	2743	0.0158	0.6467	93.3628
WJ	19	2762	0.0158	0.6467	94.0095
FCL	16	2778	0.0133	0.5446	94.5541
THB	13	2791	0.0108	0.4425	94.9966
LRM	13	2804	0.0108	0.4425	95.4391
VAC	13	2817	0.0108	0.4425	95.8816
IXG	12	2829	0.0100	0.4084	96.2900
PRM	11	2840	0.0092	0.3744	96.6644
NSW	11	2851	0.0092	0.3744	97.0388
CAM	8	2859	0.0067	0.2723	97.3111
GWK	7	2866	0.0058	0.2383	97.5494
WDL	6	2872	0.0050	0.2042	97.7536
CWB	6	2878	0.0050	0.2042	97.9578
TTH	5	2883	0.0042	0.1702	98.1280
TMB	5	2888	0.0042	0.1702	98.2982
IRS	5	2893	0.0042	0.1702	98.4683
TER	5	2898	0.0042	0.1702	98.6385
DVR	5	2903	0.0042	0.1702	98.8087
LGT	5	2908	0.0042	0.1702	98.9789
EH	4	2912	0.0033	0.1361	99.1150
SK1	4	2916	0.0033	0.1361	99.2512
DLK	4	2920	0.0033	0.1361	99.3873
SYL	4	2924	0.0033	0.1361	99.5235
JGA	2	2926	0.0017	0.0681	99.5916
JEH	2	2928	0.0017	0.0681	99.6596
DAL	2	2930	0.0017	0.0681	99.7277
MLP	2	2932	0.0017	0.0681	99.7958
JAC	2	2934	0.0017	0.0681	99.8639
FHS	2	2936	0.0017	0.0681	99.9319
CGC	1	2937	0.0008	0.0340	99.9660
RJP	1	2938	0.0008	0.0340	100.0000

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for

FID						
000	1574	1574	1.3095	82.8857	82.8857	
RJF	155	1729	0.1290	8.1622	91.0479	
HA	89	1818	0.0740	4.6867	95.7346	
PLM	46	1864	0.0383	2.4223	98.1569	

FCL	21	1885	0.0175	1.1058	99.2628
JEL	5	1890	0.0042	0.2633	99.5261
PL	2	1892	0.0017	0.1053	99.6314
YDB	2	1894	0.0017	0.1053	99.7367
MAS	2	1896	0.0017	0.1053	99.8420
RM	1	1897	0.0008	0.0527	99.8947
	1	1898	0.0008	0.0527	99.9473
RJK	1	1900	0.0008	0.0527	100.0000

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for

FIL

LDS	329	329	0.2737	17.8513	17.8513
RM	218	547	0.1814	11.8285	29.6799
JMC	186	733	0.1547	10.0922	39.7721
JEL	144	877	0.1198	7.8133	47.5855
RJK	140	1017	0.1165	7.5963	55.1818
KJS	140	1157	0.1165	7.5963	62.7781
JMK	130	1287	0.1082	7.0537	69.8318
PLM	119	1406	0.0990	6.4569	76.2887
SWS	116	1522	0.0965	6.2941	82.5827
000	70	1592	0.0582	3.7982	86.3809
CAD	70	1662	0.0582	3.7982	90.1791
	65	1727	0.0541	3.5269	93.7059
LRK	31	1823	0.0258	1.6820	95.3879
JK	22	1845	0.0183	1.1937	96.5816
RJF	10	1855	0.0083	0.5426	97.1242
SLS	8	1863	0.0067	0.4341	97.5583
JSM	8	1871	0.0067	0.4341	97.9924
MCR	6	1877	0.0050	0.3256	98.3180
YDB	5	1882	0.0042	0.2713	98.5893
1F3	3	1885	0.0025	0.1628	98.7521
MJG	3	1888	0.0025	0.1628	98.9149
LDO	3	1891	0.0025	0.1628	99.0777
FCL	2	1893	0.0017	0.1085	99.1862
DEH	2	1895	0.0017	0.1085	99.2947
PL	1	1896	0.0008	0.0543	99.3490
SRM	1	1897	0.0008	0.0543	99.4033
JHW	1	1898	0.0008	0.0543	99.4576
BJB	1	1899	0.0008	0.0543	99.5119
JGA	1	1900	0.0008	0.0543	99.5662
BG	1	1901	0.0008	0.0543	99.6205
CWC	1	1902	0.0008	0.0543	99.6748
CR	1	1903	0.0008	0.0543	99.7291
RWL	1	1904	0.0008	0.0543	99.7834
TLW	1	1905	0.0008	0.0543	99.8377
HM	1	1906	0.0008	0.0543	99.8920
WHF	1	1907	0.0008	0.0543	99.9463

CLA	1	1908	0.0008	0.0543	100.0000
TRIC					
INIT	#	cum	% of tot	# for TRIC	Cum % for
TRIC					
SPR					
JAW	310	310	0.2579	17.4648	17.4648
IOE	168	478	0.1398	9.4648	26.9296
MG	123	601	0.1023	6.9296	33.8592
000	117	718	0.0973	6.5915	40.4507
RDV	116	834	0.0965	6.5352	46.9859
RPJ	91	925	0.0757	5.1268	52.1127
JR1	90	1015	0.0749	5.0704	57.1831
DS	82	1097	0.0682	4.6197	61.8028
ADS	81	1178	0.0674	4.5634	66.3662
JGA	79	1257	0.0657	4.4507	70.8169
IED	56	1313	0.0466	3.1549	73.9718
JCH	56	1369	0.0466	3.1549	77.1268
LEP	52	1421	0.0433	2.9296	80.0563
DEH	37	1458	0.0308	2.0845	82.1408
TLW	32	1490	0.0266	1.8028	83.9437
RGN	25	1515	0.0208	1.4085	85.3521
SRM	23	1538	0.0191	1.2958	86.6479
WDL	22	1560	0.0183	1.2394	87.8873
TMB	20	1580	0.0166	1.1268	89.0141
PN1	18	1598	0.0150	1.0141	90.0282
RC2	18	1616	0.0150	1.0141	91.0423
CAB	17	1633	0.0141	0.9577	92.0000
RWL	15	1648	0.0125	0.8451	92.8451
WHF	14	1662	0.0116	0.7887	93.6338
RJP	13	1675	0.0108	0.7324	94.3662
JAH	12	1687	0.0100	0.6761	95.0423
SLS	10	1697	0.0083	0.5634	95.6056
VAC	10	1707	0.0083	0.5634	96.1690
LKL	10	1717	0.0083	0.5634	96.7324
DDM	10	1727	0.0083	0.5634	97.2958
FCL	8	1735	0.0067	0.4507	97.7465
	4	1739	0.0033	0.2254	97.9718
1F3	4	1747	0.0033	0.2254	98.1972
BG	4	1751	0.0033	0.2254	98.4226
TMD	4	1755	0.0033	0.2254	98.6480
THB	4	1759	0.0033	0.2254	98.8734
TTH	4	1763	0.0033	0.2254	99.0988
CWC	2	1765	0.0017	0.1127	99.2115
HM	2	1767	0.0017	0.1127	99.3242
ROS	2	1769	0.0017	0.1127	99.4369
JEH	2	1771	0.0017	0.1127	99.5496
CGC	2	1773	0.0017	0.1127	99.6623
CLL	2	1775	0.0017	0.1127	99.7750

MAS	1	1776	0.0008	0.0563	99.8313
TER	1	1777	0.0008	0.0563	99.8876
CKP	1	1778	0.0008	0.0563	99.9439
QFJ	1	1779	0.0008	0.0563	100.0000

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for
TRIC						

AE1

000	1148	1148	0.9551	71.3930	71.3930
JAW	88	1236	0.0732	5.4726	76.8657
ADS	60	1296	0.0499	3.7313	80.5970
RPJ	55	1351	0.0458	3.4204	84.0174
IOE	31	1382	0.0258	1.9279	85.9453
LEP	25	1407	0.0208	1.5547	87.5000
RDV	24	1431	0.0200	1.4925	88.9925
JR1	21	1452	0.0175	1.3060	90.2985
MG	19	1471	0.0158	1.1816	91.4801
WHF	18	1489	0.0150	1.1194	92.5995
JCH	13	1502	0.0108	0.8085	93.4080
TMB	13	1515	0.0108	0.8085	94.2164
JGA	11	1526	0.0092	0.6841	94.9005
IED	10	1536	0.0083	0.6219	95.5224
TLW	8	1544	0.0067	0.4975	96.0199
LKL	8	1552	0.0067	0.4975	96.5174
DS	7	1559	0.0058	0.4353	96.9527
WDL	5	1564	0.0042	0.3109	97.2637
CAB	5	1569	0.0042	0.3109	97.5746
CGC	5	1574	0.0042	0.3109	97.8856
DEH	4	1578	0.0033	0.2488	98.1343
BG	4	1582	0.0033	0.2488	98.3831
JEH	4	1586	0.0033	0.2488	98.6318
RGN	3	1589	0.0025	0.1866	98.8184
DDM	3	1592	0.0025	0.1866	99.0050
DL1	3	1595	0.0025	0.1866	99.1915
FCL	2	1597	0.0017	0.1244	99.3159
1F3	2	1599	0.0017	0.1244	99.4403
TTH	2	1601	0.0017	0.1244	99.5647
CWC	2	1603	0.0017	0.1244	99.6891
LRK	2	1605	0.0017	0.1244	99.8134
PN1	1	1606	0.0008	0.0622	99.8756
SLS	1	1607	0.0008	0.0622	99.9378
CGJ	1	1608	0.0008	0.0622	100.0000

TRIC	INIT	#	cum	% of tot	% for TRIC	Cum % for
TRIC						

FCU

000	1227	1227	1.0208	84.6791	84.6791
RJF	122	1349	0.1015	8.4196	93.0987
PL	26	1375	0.0216	1.7943	94.8930
PLM	17	1392	0.0141	1.1732	96.0663
FCL	16	1408	0.0133	1.1042	97.1705
HA	15	1423	0.0125	1.0352	98.2057
CAD	11	1434	0.0092	0.7591	98.9648
JGA	8	1442	0.0067	0.5521	99.5169
EJL	3	1445	0.0025	0.2070	99.7239
SLS	2	1447	0.0017	0.1380	99.8620
VAC	1	1448	0.0008	0.0690	99.9310
KJS	1	1449	0.0008	0.0690	%100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for
SHP					
DLK	470	470	0.3910	41.8895	41.8895
WAT	115	585	0.0957	10.2496	52.1390
LL2	63	648	0.0524	5.6150	57.7540
JLT	51	699	0.0424	4.5455	62.2995
RJP	46	745	0.0383	4.0998	66.3993
EJS	44	789	0.0366	3.9216	70.3209
CAB	39	828	0.0324	3.4759	73.7968
BG	32	860	0.0266	2.8520	76.6488
PN1	27	887	0.0225	2.4064	79.0553
RDL	26	913	0.0216	2.3173	81.3726
ROS	21	934	0.0175	1.8717	83.2442
TMB	20	954	0.0166	1.7825	85.0267
JEH	17	971	0.0141	1.5152	86.5419
JHW	16	987	0.0133	1.4260	87.9679
RWL	12	999	0.0100	1.0695	89.0374
HM	12	1011	0.0100	1.0695	90.1069
RGN	11	1022	0.0092	0.9804	91.0873
JJH	10	1032	0.0083	0.8913	91.9786
CGJ	8	1040	0.0067	0.7130	92.6916
PLM	7	1047	0.0058	0.6239	93.3155
JSV	7	1054	0.0058	0.6239	93.9394
RPJ	6	1060	0.0050	0.5348	94.4742
CLL	6	1066	0.0050	0.5348	95.0089
JHM	6	1072	0.0050	0.5348	95.5437
CAD	5	1077	0.0042	0.4456	95.9893
WDL	5	1082	0.0042	0.4456	96.4349
CWC	5	1087	0.0042	0.4456	96.8806
TMD	5	1092	0.0042	0.4456	97.3262
MCR	5	1097	0.0042	0.4456	97.7718
FNJ	4	1101	0.0033	0.3565	98.1283
LKL	3	1104	0.0025	0.2674	98.3957
TTH	3	1107	0.0025	0.2674	98.6631
DRJ	3	1110	0.0025	0.2674	98.9305
CGC	2	1112	0.0017	0.1783	99.1087
JAH	2	1114	0.0017	0.1783	99.2870
THB	2	1116	0.0017	0.1783	99.4652
PRM	2	1118	0.0017	0.1783	99.6435
JAW	1	1119	0.0008	0.0891	99.7326
DEH	1	1120	0.0008	0.0891	99.8217
1F3	1	1121	0.0008	0.0891	99.9109
SRM	1	1122	0.0008	0.0891	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

FTR

000	1036	1036	0.8619	97.2770	97.2770
LKL	23	1059	0.0191	2.1596	99.4366
FNJ	2	1061	0.0017	0.1878	99.6244
RDL	1	1062	0.0008	0.0939	99.7183
JGA	1	1063	0.0008	0.0939	99.8122
SP	1	1064	0.0008	0.0939	99.9061
KAS	1	1065	0.0008	0.0939	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

FET

JAH	208	208	0.1731	20.0385	20.0385
VAL	165	373	0.1373	15.8960	35.9345
MW	144	517	0.1198	13.8728	49.8073
LRK	100	617	0.0832	9.6339	59.4412
JH	82	699	0.0682	7.8998	67.3410
AG3	70	769	0.0416	4.8170	72.1580
DAL	48	817	0.0399	4.6243	76.7823
MS1	45	862	0.0374	4.3353	81.1175
KC1	40	902	0.0333	3.8536	84.9711
IXG	36	938	0.0300	3.4682	88.4393
VAW	26	964	0.0216	2.5048	90.9441
CG	22	986	0.0183	2.1195	93.0636
TER	18	1004	0.0150	1.7341	94.7977
NP	17	1021	0.0141	1.6378	96.4355
JEL	13	1034	0.0108	1.2524	97.6879
DB2	11	1045	0.0092	1.0597	98.7476
SEG	8	1053	0.0067	0.7707	99.5183
SB	5	1058	0.0042	0.4817	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

BPA

000	1015	1015	0.8445	99.8033	99.8033
RJF	2	1017	0.0017	0.1967	100.0000

TRIC INIT TRIC	#	cum	% of tot	% for TRIC	Cum % for

TRM

000	306	306	0.2546	33.0811	33.0811
WDV	160	466	0.1331	17.2973	50.3784
FNJ	71	537	0.0591	7.6757	58.0541
MRF	67	604	0.0557	7.2432	65.2973
DM	60	664	0.0499	6.4865	71.7838
WAT	37	701	0.0308	4.0000	75.7838
FHS	37	738	0.0308	4.0000	79.7838
1F3	23	761	0.0191	2.4865	82.2703
NSW	20	781	0.0166	2.1622	84.4324
HM	18	799	0.0150	1.9459	86.3784
JHW	16	815	0.0133	1.7297	88.1081
LL2	14	829	0.0116	1.5135	89.6216
RDL	11	840	0.0092	1.1392	90.8108
VAC	9	849	0.0075	0.9730	91.7838
CAM	8	857	0.0067	0.8649	92.6487
IXG	6	863	0.0050	0.6486	93.2973
JLT	5	868	0.0042	0.5405	93.8378
TMB	5	873	0.0042	0.5405	94.3784
RC1	5	878	0.0042	0.5405	94.9189
LGT	5	883	0.0042	0.5405	95.4595
JAH	4	887	0.0033	0.4324	95.8919
SLS	4	891	0.0033	0.4324	96.3243
MCR	3	894	0.0025	0.3243	96.6487
BJB	3	897	0.0025	0.3243	96.9730
TER	2	899	0.0017	0.2162	97.1892
JGA	2	901	0.0017	0.2162	97.4054
EJS	2	903	0.0017	0.2162	97.6216
TMD	2	905	0.0017	0.2162	97.8378
JAW	2	907	0.0017	0.2162	98.0541
SRM	2	909	0.0017	0.2162	98.2703
GWK	2	911	0.0017	0.2162	98.4865
EH	2	913	0.0017	0.2162	98.7027
DAL	1	914	0.0008	0.1081	98.8108
LKL	1	915	0.0008	0.1081	98.9189
DLK	1	916	0.0008	0.1081	99.0270
RJP	1	917	0.0008	0.1081	99.1351
ROS	1	918	0.0008	0.1081	99.2432
JJH	1	919	0.0008	0.1081	99.3513
DRJ	1	920	0.0008	0.1081	99.4595
THB	1	921	0.0008	0.1081	99.5676
PRM	1	922	0.0008	0.1081	99.6757
FCL	1	923	0.0008	0.1081	99.7838
MEN	1	924	0.0008	0.1081	99.8919
RBE	1	925	0.0008	0.1081	100.0000

Demographics by TRIC and Functional Area

TRIC: REC

Comprises 18.5690% of all SBSS transactions.

Functional Area: LGSD

Number of users accessing SBSS: 15

Usage:

<u>user</u>	<u>% of total</u>	<u>% of REC transactions</u>
1	6.8896	37.1021
2	1.8495	9.9601
3	1.7846	9.6106
4	1.2721	6.8507
5	1.1340	6.1069
6	.5083	2.7376
7	.3944	2.1238
8	.3835	2.0655
9	.3544	1.9087
10	.2280	1.2277
11	.2080	1.1201
12	.2005	1.0798
13	.1988	1.0708
14	.1448	.7796
15	.1090	.5869

Functional Area: LGSM

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of REC transactions</u>
1	.5208	2.8048
2	.5466	2.9437

Functional Area: LGSC

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of REC transactions</u>
1	.3461	1.8639

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of REC transactions</u>
1(000)	.4193	2.2582

Functional Area: DOMR

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of REC transactions</u>
1	.2205	1.1873

TRIC: ISU

Comprises 14.8841% of all SBSS transactions.

Functional Area: LGSM

Number of users accessing SBSS: 5

Usage:

<u>user</u>	<u>% of total</u>	<u>% of ISU transactions</u>
1	1.6956	11.3918
2	.7138	4.7960
3	.3453	2.3197
4	.2388	1.6042
5	.0932	.6260

Functional Area: LGSP

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of ISU transactions</u>
1(000)	7.6259	51.2353
2	.3578	2.4036

Functional Area: LGSC

Number of users accessing SBSS: 8

Usage:

<u>user</u>	<u>% of total</u>	<u>% of ISU transactions</u>
1	1.3204	8.8709
2	.2221	1.4925
3	.2055	1.3807
4	.1589	1.0676
5	.1323	.8888
6	.0566	.3801
7	.0549	.3689
8	.0498	.3298

Functional Area: LGSD

Number of users accessing SBSS: 6

Usage:

<u>user</u>	<u>% of total</u>	<u>% of ISU transactions</u>
1	.2263	1.5204
2	.1506	1.0117
3	.1082	.7267
4	.0890	.5981
5	.0865	.5813
6	.0566	.3801

Functional Area: MISCELLANEOUS

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of ISU transactions</u>
LGSF	.1032	.6931
RMSS	.0724	.4863

TRIC: DOR

Comprises 10.5878% of all SBSS transactions.

Functional Area: LGSD

Number of users accessing SBSS: 12

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DOR transactions</u>
1	4.1799	39.4782
2	.9559	9.0288
3	.8811	8.3215
4	.7529	7.1114
5	.6831	6.4514
6	.2721	2.5695
7	.2554	2.4124
8	.2080	1.9645
9	.1830	1.7287
10	.1531	1.4459
11	.1273	1.2023
12	.1231	1.1630
13	.1231	1.1630
14	.0849	.8015
15	.0832	.7858
16	.0399	.3772
17	.0391	.3693

Functional Area: LGSM

Number of users accessing SBSS: 3

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DOR transactions</u>
1	.2072	1.9566
2	.0316	.2986
3	.0316	.2986

Functional Area: LGSC

Number of users accessing SBSS: 4

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DOR transactions</u>
1	.1780	1.6816
2	.0782	.7386
3	.0699	.6601
4	.0383	.3615

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DOR transactions</u>
1(000)	.1531	1.4459

Functional Area: DOMR

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DOR transactions</u>
1	.1373	1.2966

TRIC: LPS

Comprises 8.2000% of all SBSS transactions.

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of LPS transactions</u>
1(000)	7.2956	88.9712

Functional Area: LGSM

Number of users accessing SBSS: 3

Usage:

<u>user</u>	<u>% of total</u>	<u>% of LPS transactions</u>
1	.2554	3.1149
2	.1739	2.1205
3	.1639	2.0597

TRIC: FK1

Comprises 4.5867% of all SBSS transactions.

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FK1 transactions</u>
1(000)	4.4736	97.5331

Functional Area: FMFS

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FK1 transactions</u>
1	.3578	2.2311
2	.0108	.2358

TRIC: BKA

Comprises 3.9003% of all SBSS transactions.

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of BKA transactions</u>
1(000)	3.4777	89.1638

Functional Area: FMFS

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of BKA transactions</u>
1	.3578	9.1724
2	.0649	1.6638

TRIC: DUO

Comprises 3.8737% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 16

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
1	.5366	13.8531
2	.2221	5.7345
3	.2088	5.3909
4	.1564	4.0378
5	.1215	3.1357
6	.0965	2.4914
7	.0591	1.5249
8	.0258	.6658
9	.0158	.4081
10	.0291	.7517
11	.0166	.4296
12	.0158	.4081
13	.0125	.3222
14	.0100	.2577
15	.0075	.1933
16	.0923	2.3840

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
1(000)	.6256	16.1512

Functional Area: LGSD

Number of users accessing SBSS: 8

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
1	.2587	6.6796
2	.0591	1.5249
3	.0399	1.0309
4	.0366	.9450
5	.0183	.4725
6	.0150	.3866
7	.0125	.3222
8	.0108	.2792

Functional Area: LGSM

Number of users accessing SBSS: 19

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
1	.1414	3.6512
2	.0824	2.1263
3	.0483	1.2451
4	.0483	1.2451
5	.0424	1.0954
6	.0424	1.0954
7	.0391	.9880
8	.0333	.8591
9	.0291	.7517
10	.0275	.7088
11	.0233	.6014
12	.0183	.4725
13	.0141	.3651
14	.0133	.3436
15	.0133	.3436
16	.0116	.3007
17	.0100	.2577
18	.0092	.2363
19	.0083	.2148

Functional Area: DOMR

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
1	.0998	2.5773
2	.0349	.9021

Functional Area: MISCELLANEOUS

Number of users accessing SBSS: 6

Usage:

<u>user</u>	<u>% of total</u>	<u>% of DUO transactions</u>
RMSS	.0491	1.2672
AFIT	.0275	.7302
FAST	.0233	.6014
FAST	.0166	.4296
OL-DONL	.0100	.2577
AFIT	.0083	.2148

TRIC: A0A

Comprises 3.2439% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 9

Usage:

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
1	.1639	5.0526
2	.1073	3.3085
3	.0973	3.0008
4	.0774	2.3852
5	.0691	2.2188
6	.0449	1.3850
7	.0383	1.1798
8	.0191	.5899
9	.0191	.5899

Functional Area: LGSM

Number of users accessing SBSS: 6

Usage:

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
1	.0283	.8720
2	.0250	.7694
3	.0208	.6412
4	.0191	.5899
5	.0191	.5899
6	.0141	.4360

Functional Area: LGSD

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
1	.0166	.5130

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
1(000)	2.2056	67.9918

Functional Area: DOMR

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
1	.0158	.4873

Functional Area: MISCELLANEOUS

Number of users accessing SBSS: 2

<u>user</u>	<u>% of total</u>	<u>% of A0A transactions</u>
RMSS	.0466	1.4363
AFIT	.0150	.4617

TRIC: 1RF

Comprises 3.1757% of all SBSS transactions.

Functional Area: LGSF

Number of users accessing SBSS: 3 (BATCH)

Usage:

<u>user</u>	<u>% of total</u>	<u>% of 1RF transactions</u>
1	2.2938	72.2295
2	.6839	21.5352
3	.1980	6.2353

TRIC: FCS

Comprises 2.8412% of all SBSS transactions.

Functional Area: LGSD

Number of users accessing SBSS: 7

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCS transactions</u>
1	.6731	23.6896
2	.6656	23.4261
3	.1364	4.8023
4	.0807	2.8404
5	.0782	2.7526
6	.0341	1.2006
7	.0291	1.0249

Functional Area: LGSM

Number of users accessing SBSS: 5

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCS transactions</u>
1	.1930	6.7936
2	.0915	3.2211
3	.0441	1.5520
4	.0391	1.3763
5	.0250	.8785

Functional Area: LGSC

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCS transactions</u>
1	.1739	6.1201
2	.1731	6.0908

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCS transactions</u>
1(000)	.2654	9.3411

TRIC: FIC

Comprises 2.5825% of all SBSS transactions.

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIC transactions</u>
1(000)	1.9468	75.3866

Functional Area: LGSD

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIC transactions</u>
1	.4443	17.2036
2	.0666	2.5773

TRIC: TIN

Comprises 2.4444% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 12

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>
1	.4177	17.0865
2	.1955	7.9986
3	.1572	6.4329
4	.1073	4.3907
5	.0699	2.8591
6	.0333	1.3615
7	.0316	1.2934
8	.0308	1.2594
9	.0283	1.1572
10	.0266	1.0892
11	.0183	.7488
12	.0158	.6467

Functional Area: LGSD

Number of users accessing SBSS: 9

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>
1	.3278	13.4105

2	.2038	8.3390
3	.1381	5.6501
4	.0666	2.7229
5	.0624	2.5528
6	.0200	.8169
7	.0166	.6807
8	.0166	.6807
9	.0108	.4425

Functional Area: LGSM

Number of users accessing SBSS: 6

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>
1	.0857	3.5058
2	.0641	2.6208
3	.0250	1.0211
4	.0191	.7828
5	.0133	.5446
6	.0108	.4425

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>
1 (000)	.0566	2.3145

Functional Area: DOMR

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>
1	.0474	1.9401

Functional Area: MISCELLANEOUS

Number of users accessing SBSS: 1

<u>user</u>	<u>% of total</u>	<u>% of TIN transactions</u>

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TRIC: FID

Comprises 1.5799% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FID transactions</u>
1	.1290	8.1622
2	.0740	4.6867

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FID transactions</u>
1(000)	1.3095	82.8857

TRIC: FIL

Comprises 1.5333% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 9

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIL transactions</u>
1	.2737	17.8513
2	.1547	10.0922
3	.1198	7.8133
4	.1165	7.5963
5	.1165	7.5963
6	.1082	7.0537
7	.0990	6.4569
8	.0965	6.2941
9	.0582	3.7982

Functional Area: LGSM

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIL transactions</u>
1	.0258	1.6820

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIL transactions</u>
1(000)	.0582	3.7982

Functional Area: CEOLM

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FIL transactions</u>
1	.1814	11.8285

TRIC: SPR

Comprises 1.4768% of all SBSS transactions.

Functional Area: LGSM

Number of users accessing SBSS: 21

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SPR transactions</u>
1	.2579	17.4648
2	.1398	9.4648
3	.1023	6.9296
4	.0965	6.5352
5	.0757	5.1268
6	.0749	5.0704
7	.0682	4.6197
8	.0674	4.5634
9	.0657	4.5634
10	.0466	3.1549
11	.0433	2.9296

12	.0308	2.0845
13	.0266	1.8028
14	.0208	1.4085
15	.0191	1.2958
16	.0166	1.1268
17	.0150	1.0141
18	.0150	1.0141
19	.0116	.7887
20	.0108	.7324
21	.0100	.6761

Functional Area: LGSC

Number of users accessing SBSS: 5

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SPR transactions</u>
1	.0208	1.4085
2	.0183	1.2394
3	.0150	1.0141
4	.0141	.9577
5	.0125	.8451

Functional Area: LGSD

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SPR transactions</u>
1	.0466	3.1549

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SPR transactions</u>
1(000)	.0973	6.5915

Functional Area: DMSMS

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SPR transactions</u>
1	.0150	1.0141

TRIC: AE1

Comprises 1.3378% of all SBSS transactions.

Functional Area: LGSM

Number of users accessing SBSS: 12

Usage:

<u>user</u>	<u>% of total</u>	<u>% of AE1 transactions</u>
1	.0732	5.4726
2	.0499	3.7313
3	.0458	3.4204
4	.0258	1.9279
5	.0208	1.5547
6	.0200	1.4925
7	.0175	1.3060
8	.0158	1.1816
9	.0150	1.1194
10	.0108	.8085
11	.0092	.6841
12	.0083	.6219

Functional Area: LGSD

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of AE1 transactions</u>
1	.0108	.8085

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of AE1 transactions</u>
1(000)	.9551	71.3930

TRIC: FCU

Comprises 1.2055% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 3

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCU transactions</u>
1	.1015	8.4196
2	.0216	1.7943
3	.0141	1.1732

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FCU transactions</u>
1(000)	1.0208	84.6791

TRIC: SHP

Comprises .9335% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 16

Usage:

<u>user</u>	<u>% of total</u>	<u>% of AOA transactions</u>
1	.0957	10.2496
2	.0524	5.6150
3	.0424	4.5455
4	.0383	4.0988
5	.0366	3.9216
6	.0324	3.4759
7	.0266	2.8520
8	.0225	2.4064
9	.0175	1.8717

10	.0141	1.5152
11	.0100	1.0695
12	.0083	.8913
13	.0067	.7130
14	.0058	.6239
15	.0058	.6239
16	.0050	.5348

Functional Area: LGSM

Number of users accessing SBSS: 3

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SHP transactions</u>
1	.0216	2.3173
2	.0166	1.7825
3	.0050	.5348

Functional Area: LGSD

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SHP transactions</u>
1	.0100	1.0695

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SHP transactions</u>
1(000)	.3910	41.8895

Functional Area: DMSM

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of SHP transactions</u>
1	.0092	.9804

TRIC: FTR

Comprises .8861% of all SBSS transactions.

Functional Area: LGSM

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FTR transactions</u>
1	.0191	2.1596
2	.0017	.1878

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FTR transactions</u>
1(000)	.8619	97.2770

TRIC: FET

Comprises .8636% of all SBSS transactions.

Functional Area: LGSM

Number of users accessing SBSS: 13

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FET transactions</u>
1	.1731	20.0385
2	.1373	15.8960
3	.1198	13.8728
4	.0832	9.6339
5	.0682	7.8998
6	.0416	4.8170
7	.0399	4.6243
8	.0374	4.3353
9	.0333	3.8536
10	.0300	3.4682
11	.0216	2.5048
12	.0183	2.1195
13	.0141	1.6378

Functional Area: LGSD

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of FET transactions</u>
1	.0150	1.7341

TRIC: BPA

Comprises .8461% of all SBSS transactions.

Functional Area: LGSC

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of BPA transactions</u>
1	.0017	.1967

Functional Area: LGSP

Number of users accessing SBSS: 1

Usage:

<u>user</u>	<u>% of total</u>	<u>% of BPA transactions</u>
1(000)	.8445	99.8033

TRIC: TRM

Comprises .7696% of all SBSS transactions.

Functional Area: LGSD

Number of users accessing SBSS: 8

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TRM transactions</u>
1	.1331	17.2973
2	.0557	7.2432
3	.0499	6.4865

4	.0308	4.0000
5	.0166	2.1662
6	.0133	1.7297
7	.0042	.5405
8	.0042	.5405

Functional Area: LGSM

Number of users accessing SBSS: 4

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TRM transactions</u>
1	.0591	7.6757
2	.0092	171892
3	.0050	.6486
4	.0042	.5405

Functional Area: LGSC

Number of users accessing SBSS: 4

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TRM transactions</u>
1	.0308	4.0000
2	.0116	1.5135
3	.0067	.8649
4	.0042	.5405

Functional Area: LGSP

Number of users accessing SBSS: 2

Usage:

<u>user</u>	<u>% of total</u>	<u>% of TRM transactions</u>
1(000)	.2546	33.0811
2	.0075	.9730

Functional Area: DMSMR

Number of users accessing SBSS: 1

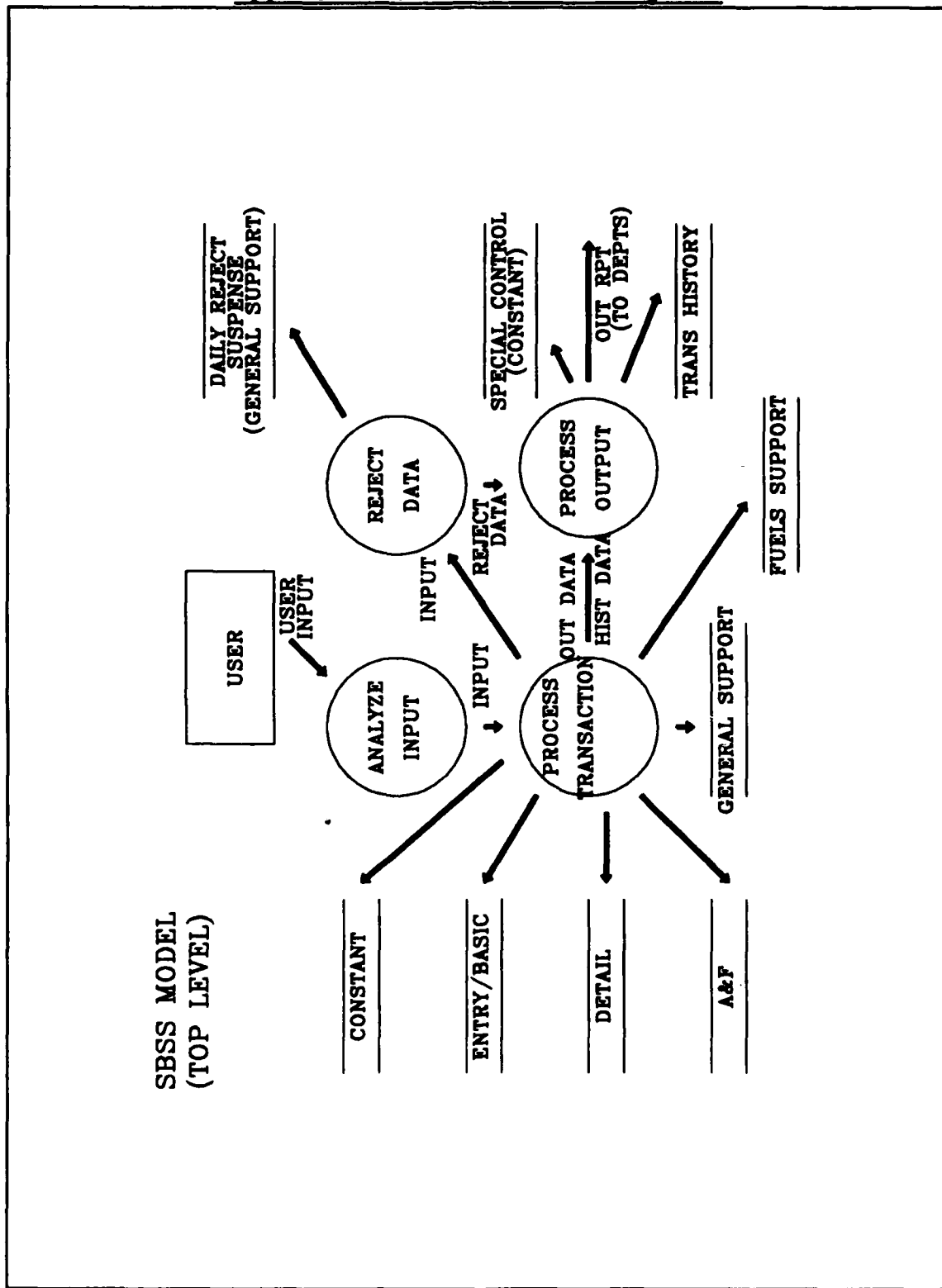
Usage:

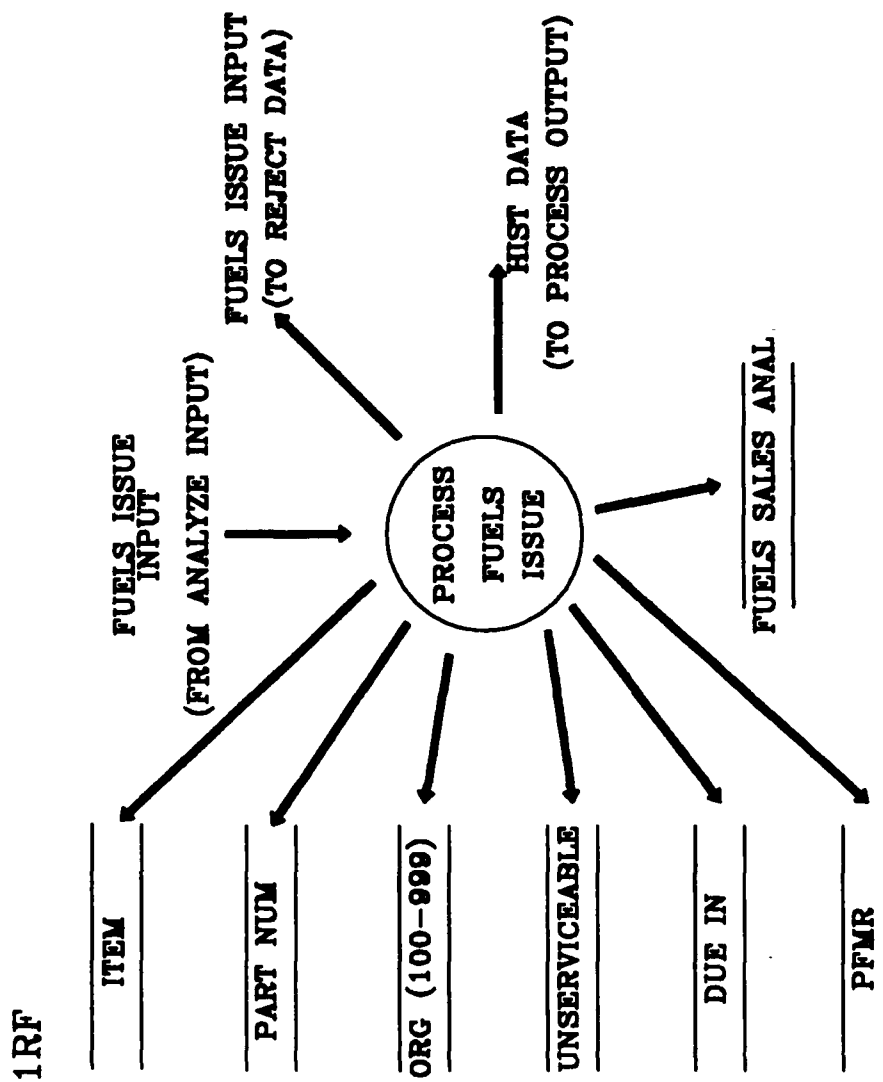
<u>user</u>	<u>% of total</u>	<u>% of TRM transactions</u>
1	.0150	1.9459

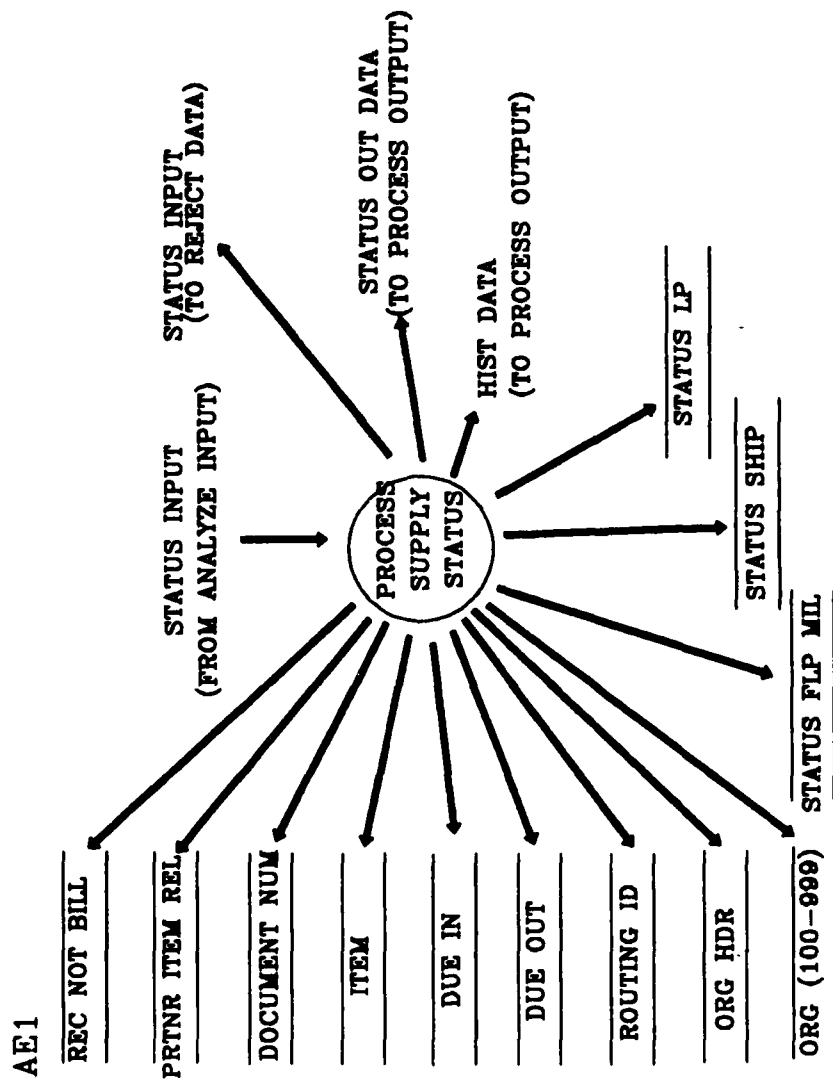
Overall Demographics by Functional Area

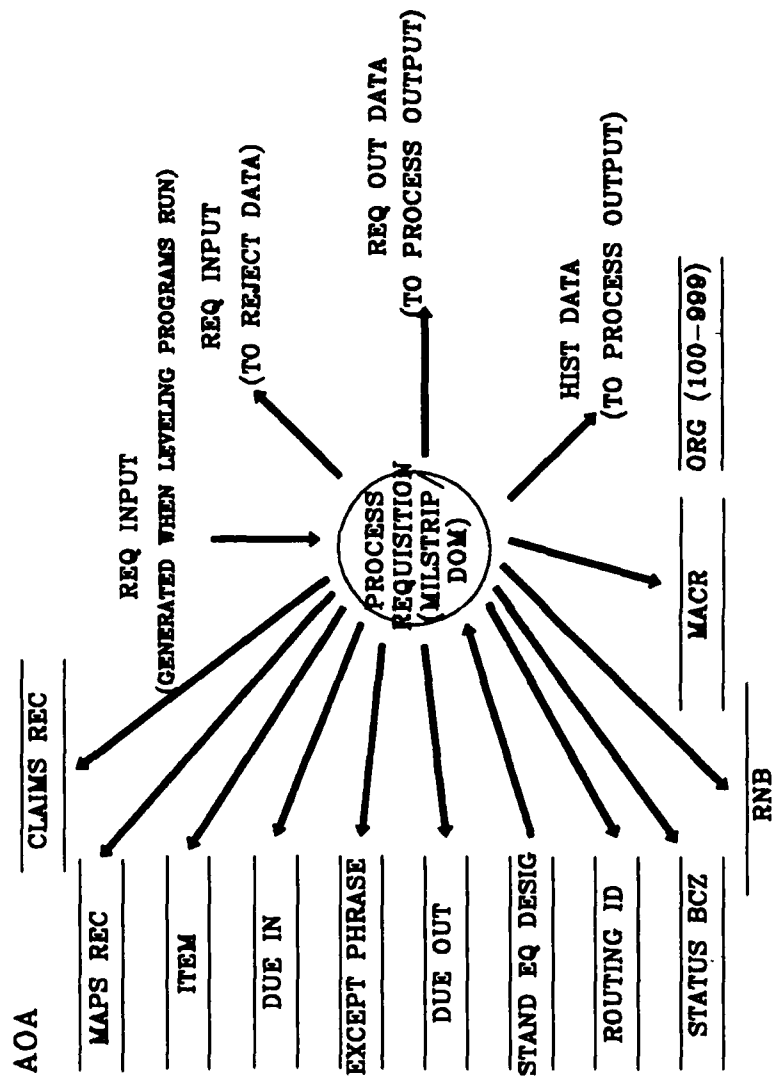
FUNCTIONAL AREA	PERCENT
LGSP (000)	36.8%
LGSD	28.5
LGSC	9.7
LGSM	8.8
LGSF	3.5
LGSP	1.3
FMFS	1.5
DOMR	.5
MISC	.5

Appendix B: Data Flow Diagrams

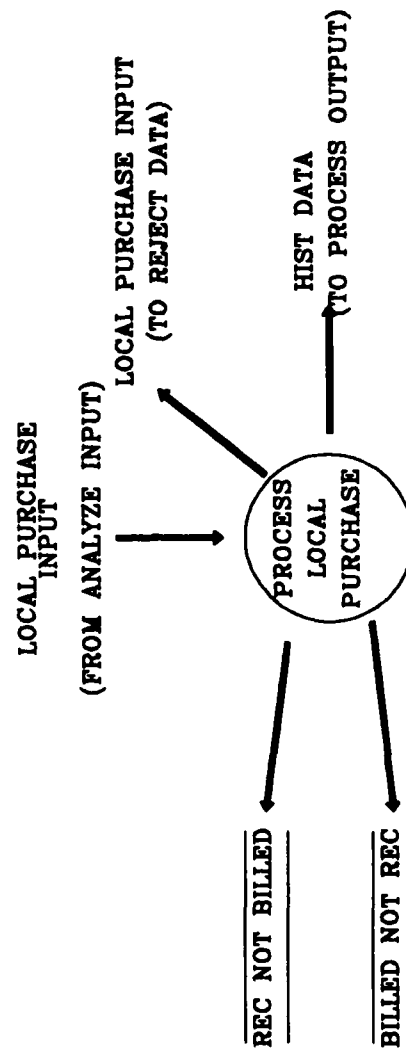


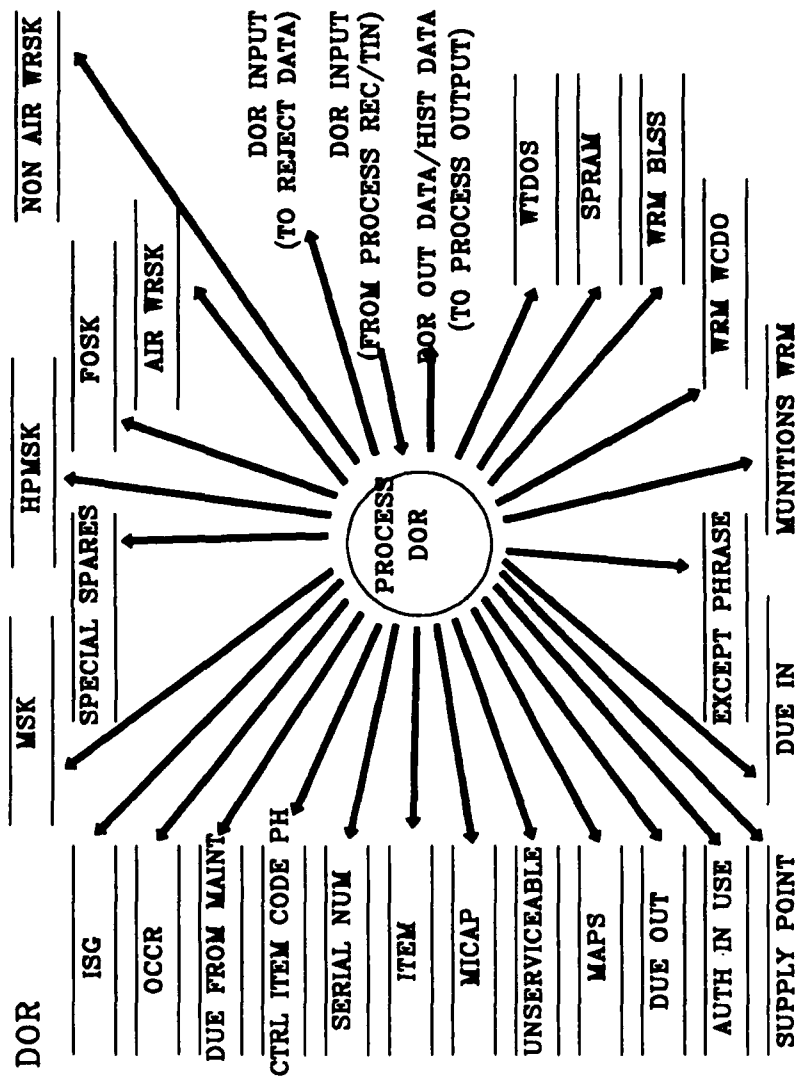


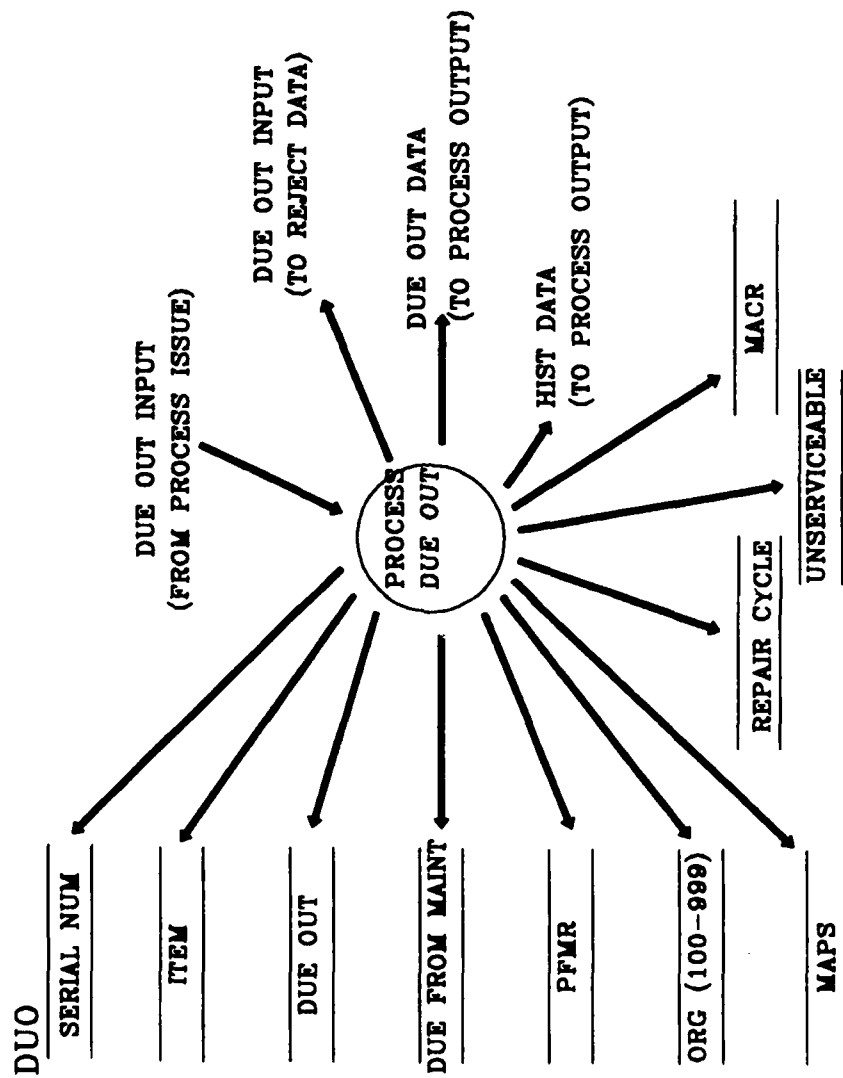




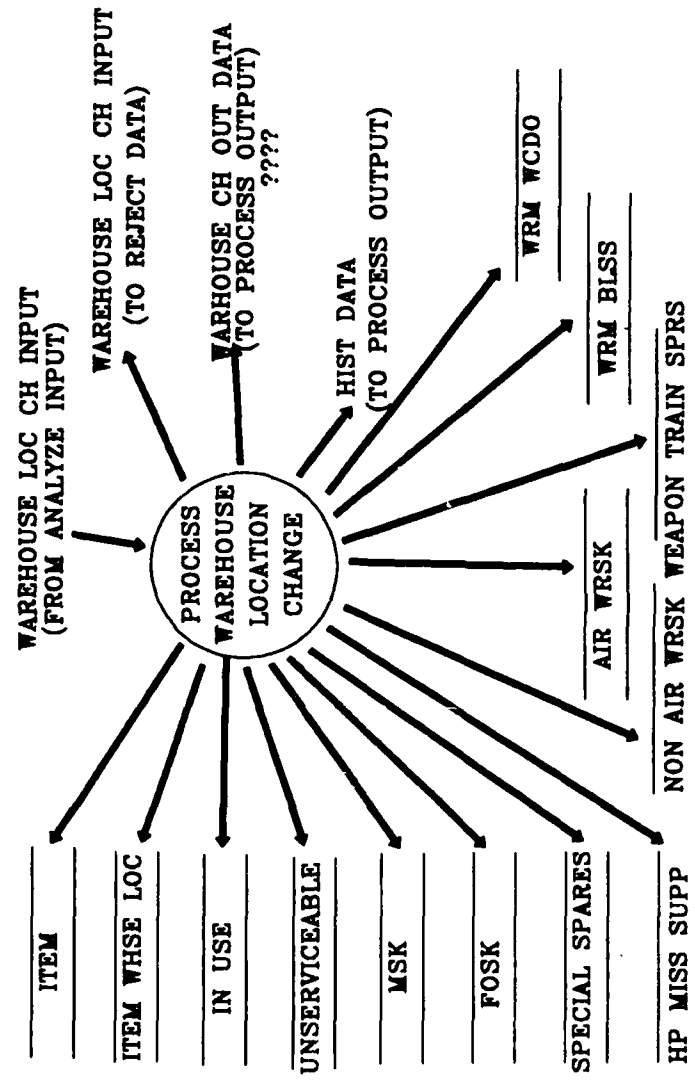
BKA



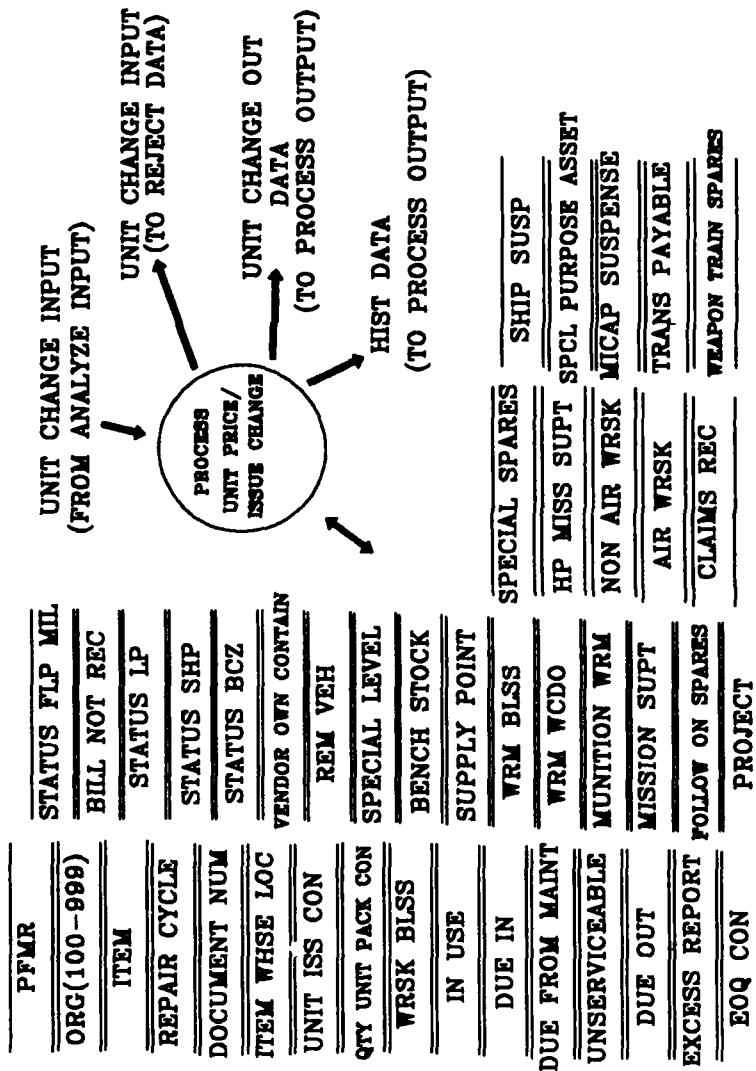




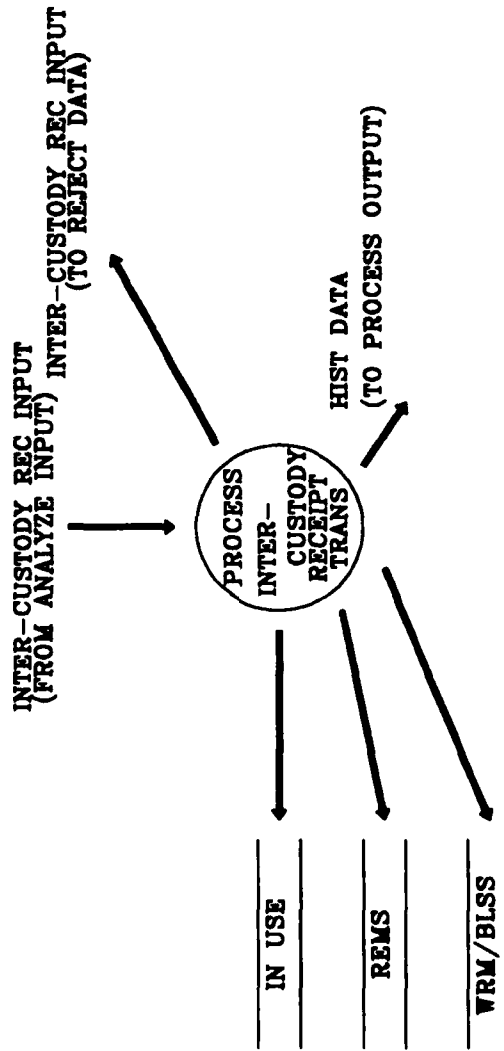
FCS



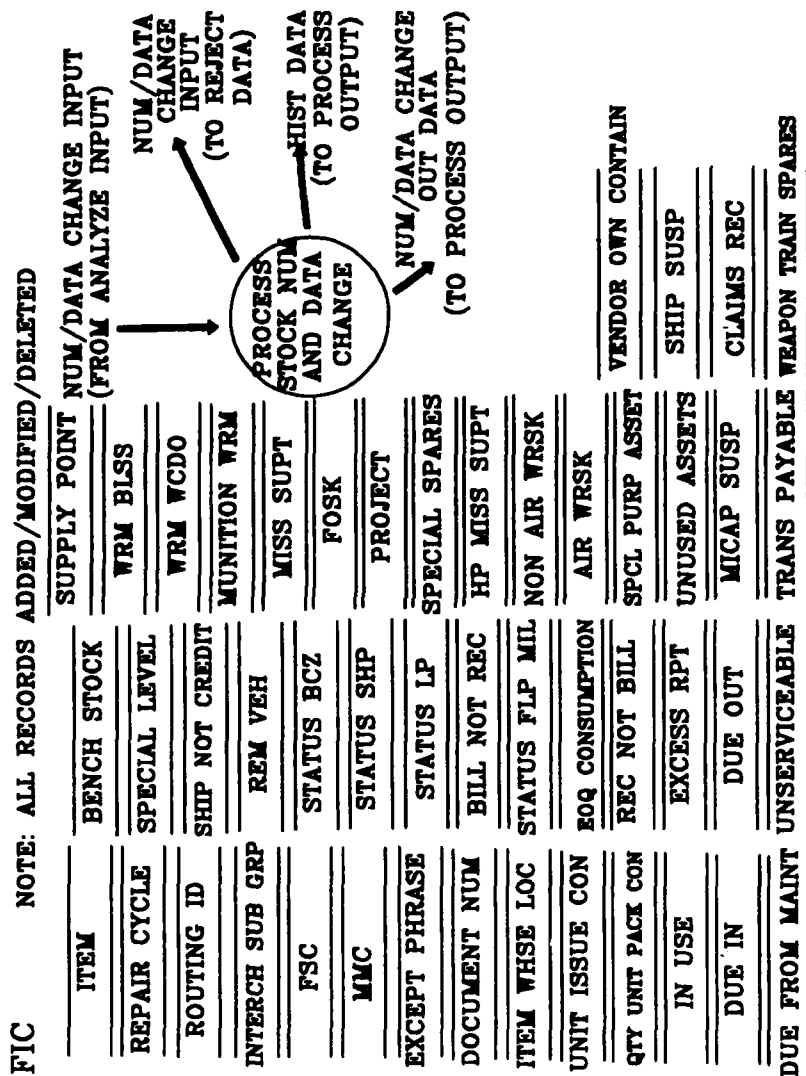
FCU NOTE: ALL RECORDS ADDED/MODIFIED/DELETED



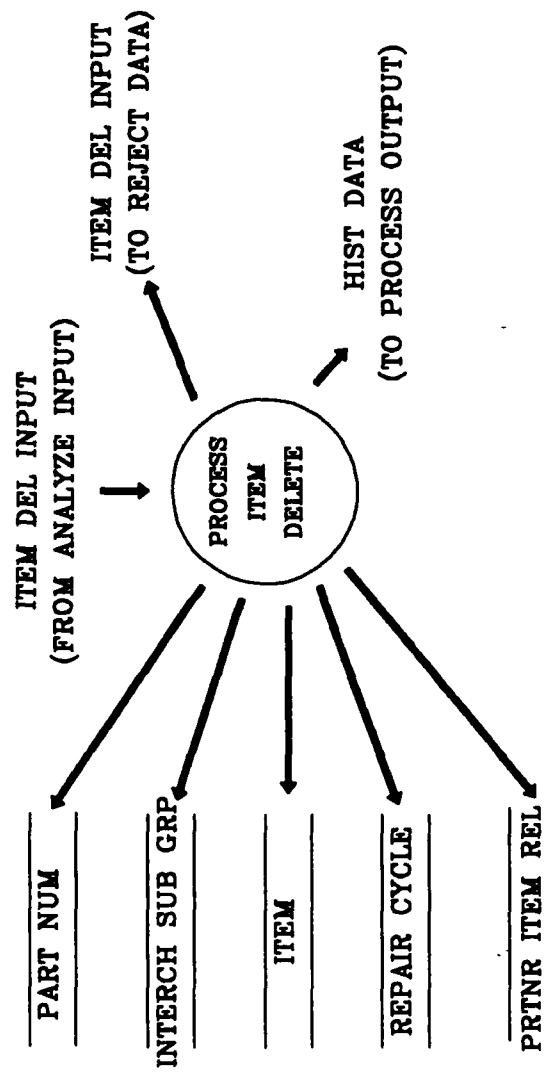
FET

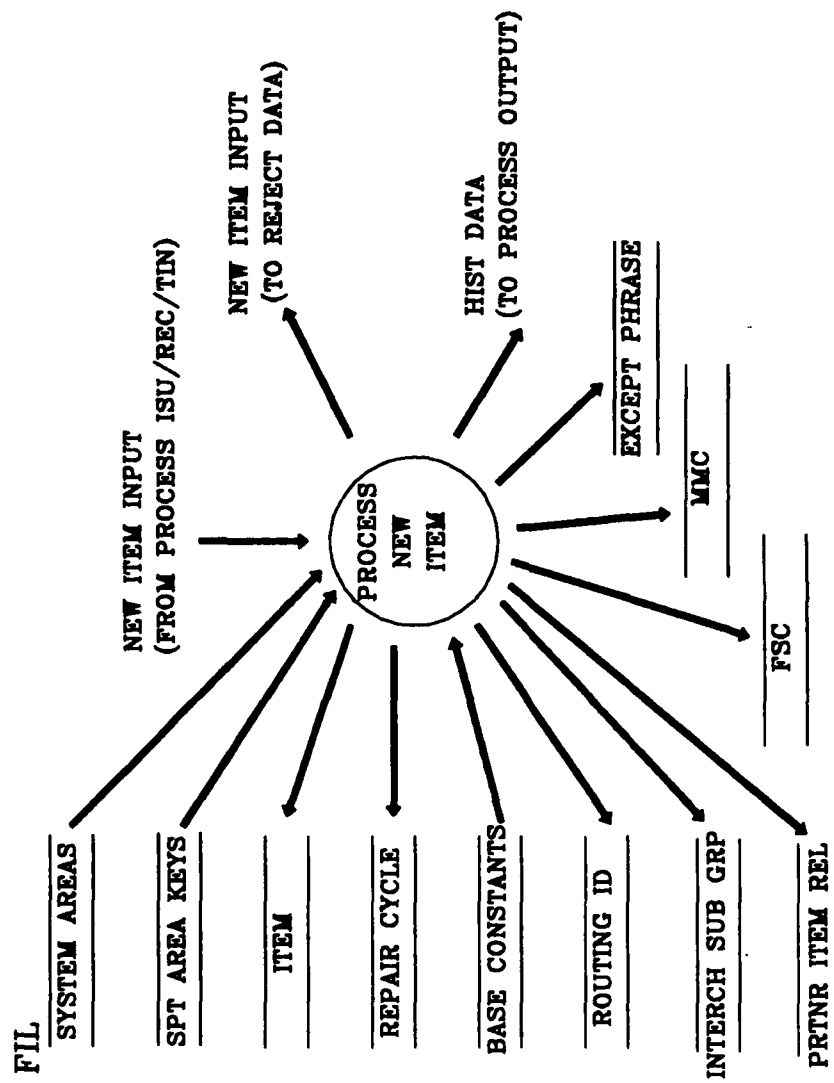


NOTE: WEAPONS/COMSEC SERIES NUMBER RECORDS
UPDATED OFFLINE

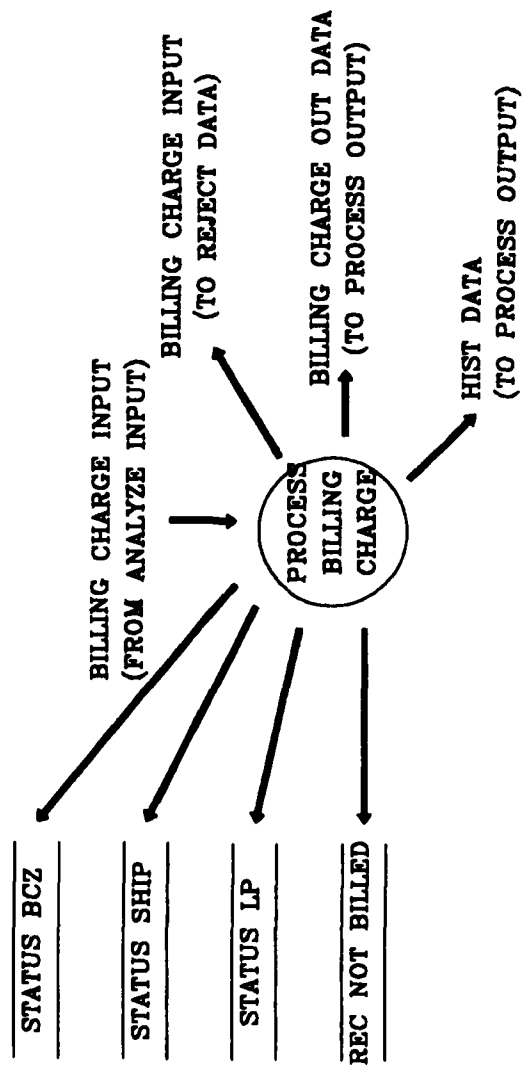


FID

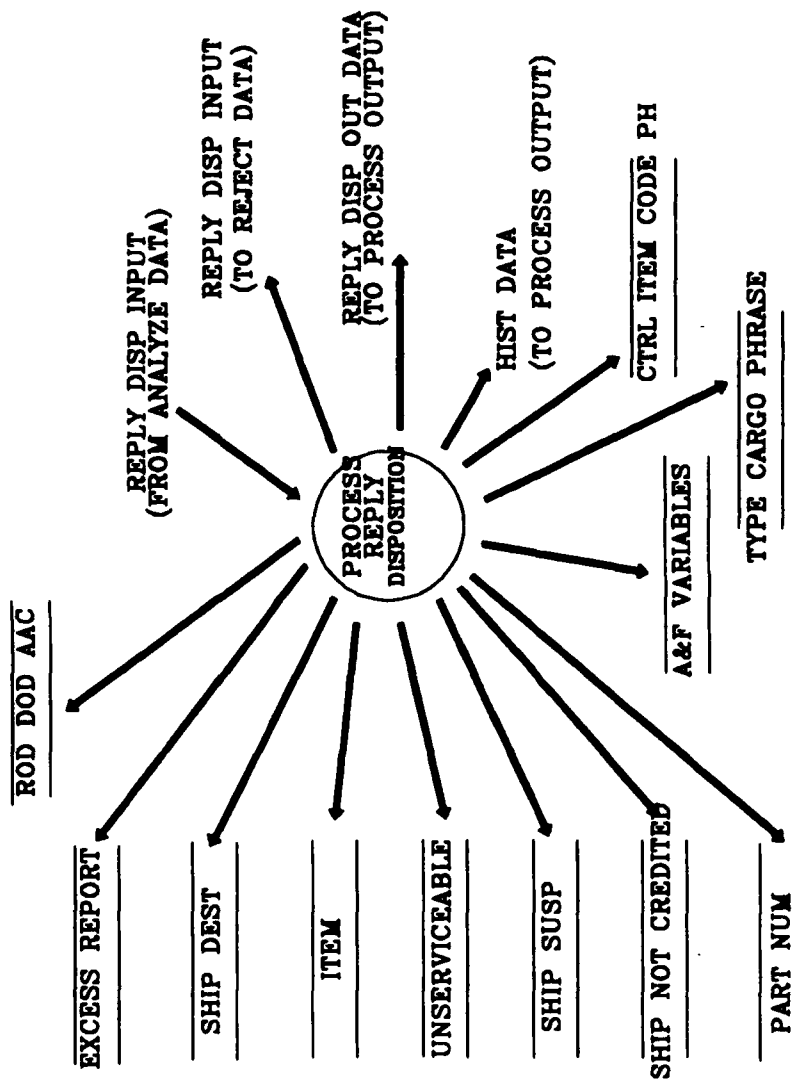




FK1

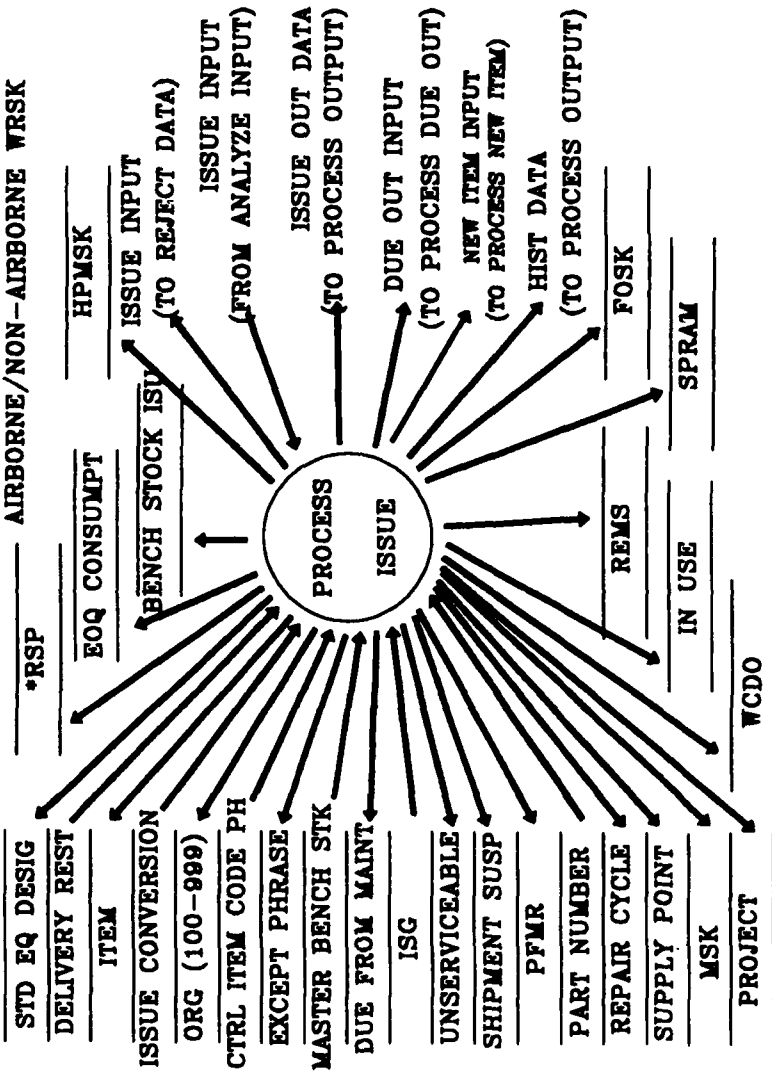


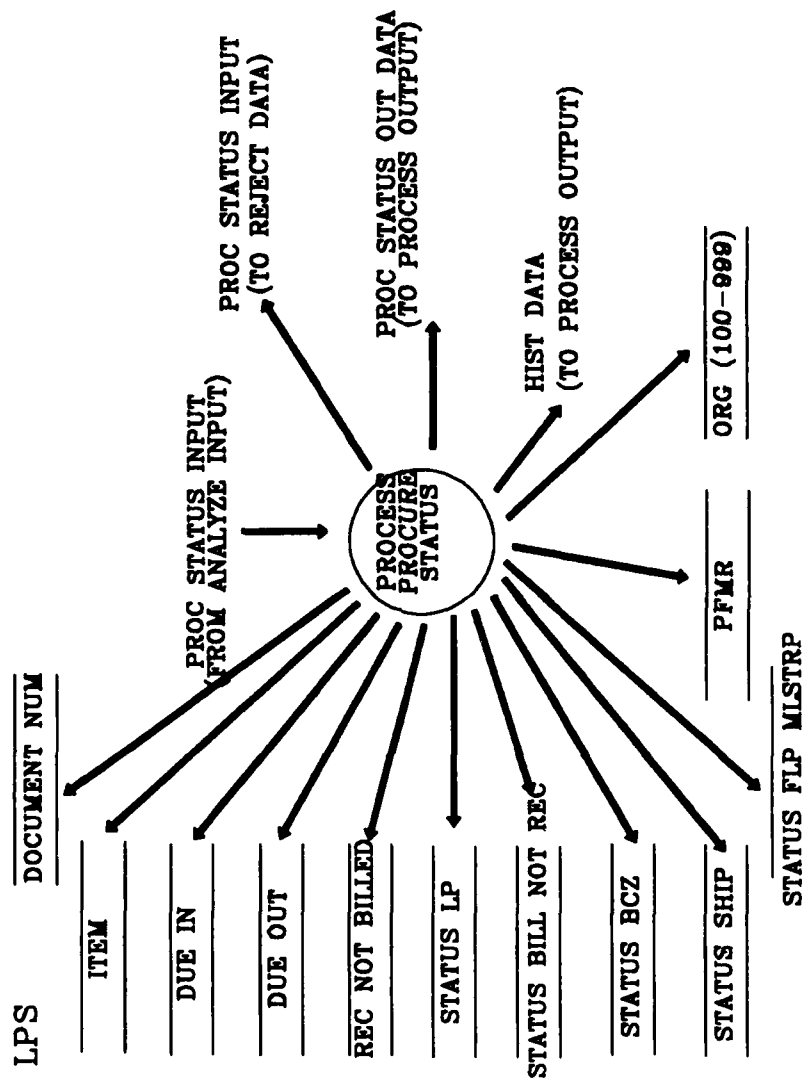
FTR

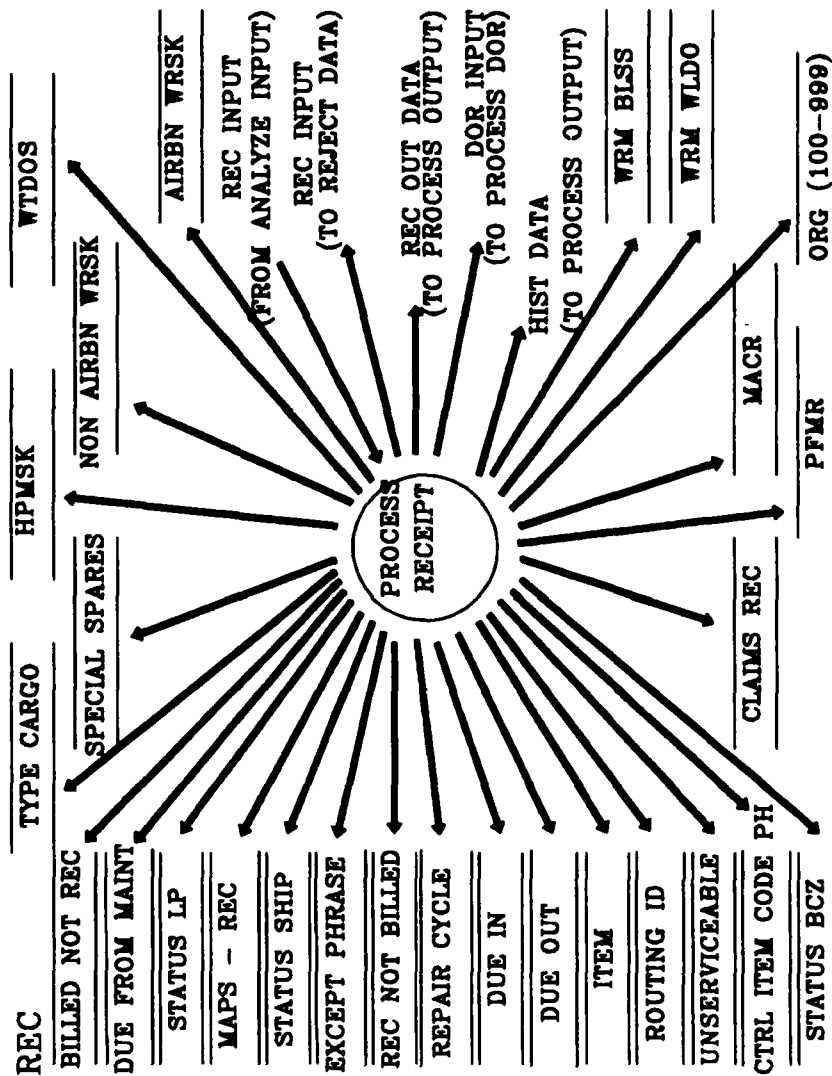


ISU *RSP=WRM BLSS,MUNITIONS WRM/SPECIAL/WEAPONS TRAIN SPARES.

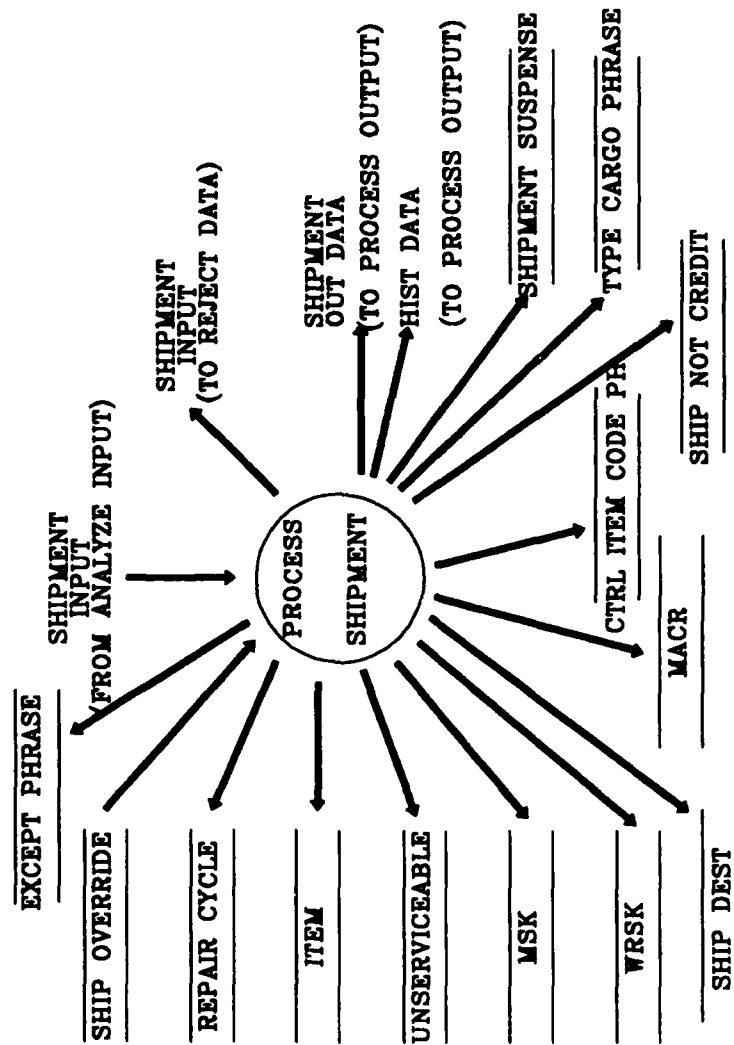
*RSP AIRBORNE/NON-AIRBORNE WRSK

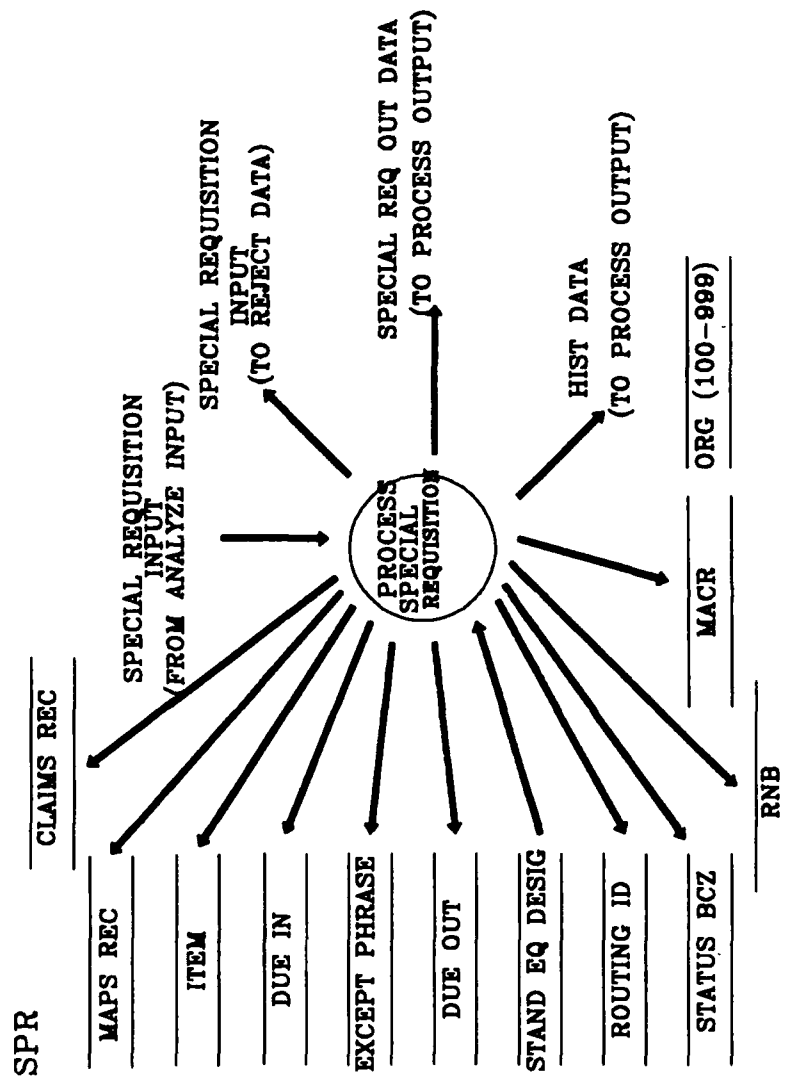


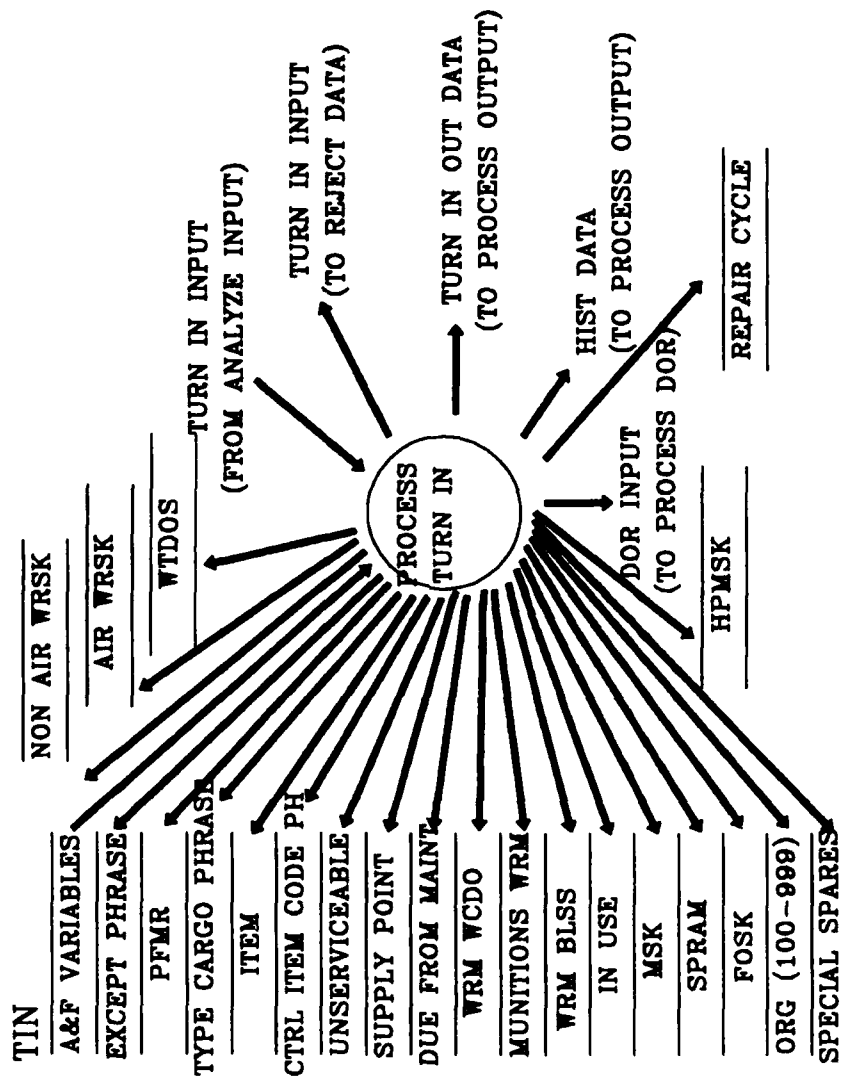




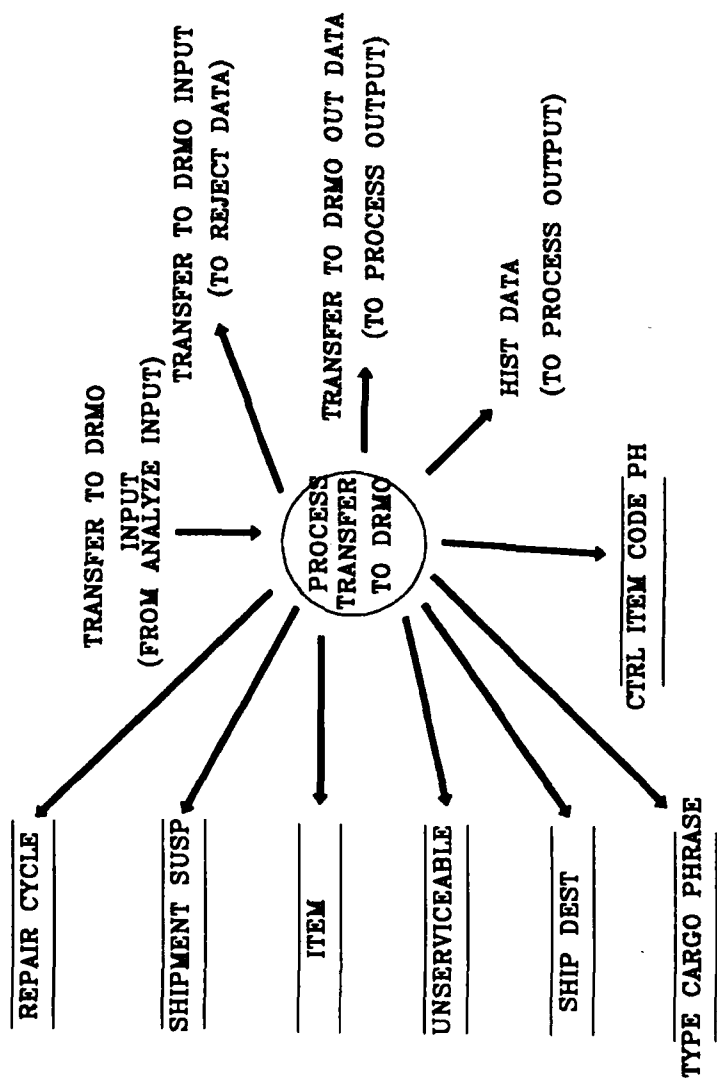
SHIP







TRM



Appendix C: Simulation Programs and Reports

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SBSS Basic Simulation Model

```
1 * SBSS Basic Simulation Model
2 ***** LANGEN RELEASE 4.01 FILE SAVED 07/26/1993 01:57:41
3
4 ***** GLOBAL VARIABLES
5 GLOBAL FLAGS =
6 TEXT SCALE FACTOR = 4 24 0111110
7 DIAGRAM BOUNDARIES = 0. 266.667 80.000 0.
8 MINIMIZE RANDOM SEED ARRAY = YES
9 ANTITHETIC VARIATE = NO
10 RANDOMIZER = 0
11 CLOCK = YES
12 CLOCK INCREMENT = 4320.000000 SEC
13 BATCH = YES
14 INPUT LISTING = YES
15 LENGTH = +2.1600E+005 SEC
16
17 ***** STATISTICAL DISTRIBUTION FUNCTIONS
18 STATISTICAL DISTRIBUTIONS =
19 NAME = SECTOR DIST
20 TYPE = NORMAL
21 MEAN = 15000.000
22 STANDARD.DEVIATION = .100
23 NAME = NOISE DIST
24 TYPE = EXPONENTIAL
25 MEAN = 108370.000
26 UPPER.BOUND = 326190.000
27 NAME = TRANS DIST
28 TYPE = EXPONENTIAL
29 MEAN = +1.27E+006
30 UPPER.BOUND = +3.80E+006
31
32 ***** LAN RING1 DEFINITION BEGINS
33 HARDWARE TYPE = DATA TRANSFER
34 * LAN SUBTYPE IS IEEE 802.5 4mb
35 NAME = RING1
36 DRAW TYPE = RING
37 NAME/MSG LOCATION = 140.520 26.224 100.520 26.224
38 STYLE/WIDTH = 1 60
39 SEGMENTS = 7
40 90.520 26.224
41 100.520 24.224
42 150.520 24.224
43 160.520 26.224
44 150.520 28.224
45 100.520 28.224
46 90.520 26.224
47 PROTOCOL = TOKEN RING
48 CYCLE TIME = .25 MIC
49 BITS PER CYCLE = 1 BITS
50 CYCLES PER WORD = 8 CYCLES
```

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```
51 WORDS PER BLOCK = 4438 WORDS
52 MINIMUM DATA BITS PER TRANSFER = 0 BITS
53 WORD OVERHEAD TIME = 0. MIC
54 BLOCK OVERHEAD TIME = 50.0 MIC
55 BUS CONNECTIONS =
56 S1/NOIS
57 SEGMENTS = 100.570 28.224 88.566 33.874
58 S1/STN2
59 SEGMENTS = 115.645 28.224 114.250 33.874
60 S1/NODE
```

```

61     SEGMENTS =      137.979      28.224      140.212      33.536
62     S1/SERVER
63     SEGMENTS =      151.937      27.940      167.571      33.424
64
65     ***** STATION NOIS #    1
66     * INDIVIDUAL    1.500  -1.500  15
67     HARDWARE TYPE = PROCESSING
68     NAME = S1/NOIS
69     LOCATION =      81.308      33.874
70     STYLE/COLOR =    1    3
71     BASIC CYCLE TIME = 0.    MICROSEC
72     INPUT CONTROLLER = YES
73     INSTRUCTION REPERTOIRE =
74     INSTRUCTION TYPE = PROCESSING
75     NAME ; NO/OP
76     TIME ; 0 CYCLES
77     INSTRUCTION TYPE = MESSAGE
78     NAME ; SEND NOISE ACTION
79     MESSAGE ; SEND NOISE ACTION
80     LENGTH ; 200 BITS
81     INHIBIT MESSAGE TO SELF ; YES
82     DESTINATION PROCESSOR ; S1/STN2
83     QUEUE FLAG ; YES
84
85     HARDWARE TYPE = STORAGE
86     NAME = S1/SD/NOIS
87     CAPACITY =      1006632960. BITS
88     BITS PER WORD =      4000. BITS
89     WORD ACCESS TIME = 48.83 MICROSEC
90     OVERHEAD TIME PER BLOCK ACCESS = SECTOR DIST
91     NUMBER OF PORTS = 1
92
93     HARDWARE TYPE = DATA TRANSFER
94     NAME = S1/TD/NOIS
95     BITS PER CYCLE = 1 BITS
96     BUS CONNECTIONS =
97     S1/NOIS
98     S1/SD/NOIS
99
100    SOFTWARE TYPE = MODULE
CADI LNET  RELEASE 4.01    07/26/1993    01:57:56    PAGE    3

```

SBSS Basic Simulation Model

```

101    * NOIS
102    NAME = SEND NOISE
103    CONCURRENT EXECUTION = YES
104    ITERATION PERIOD = NOISE DIST
105    RESIDENT PROCESSORS =
106    S1/NOIS
107    INSTRUCTION LIST =
108    EXECUTE A TOTAL OF ; 1 SEND NOISE ACTION
109
110    ***** STATION STN2 #    1
111    * INDIVIDUAL    1.500  -1.500  15
112    HARDWARE TYPE = PROCESSING
113    NAME = S1/STN2
114    LOCATION =      105.595      33.761
115    STYLE/COLOR =    1    4
116    BASIC CYCLE TIME = 0.    MICROSEC
117    INPUT CONTROLLER = YES
118    INSTRUCTION REPERTOIRE =
119    INSTRUCTION TYPE = PROCESSING
120    NAME ; NO/OP
121    TIME ; 0 CYCLES
122
123    HARDWARE TYPE = STORAGE
124    NAME = S1/SD/STN2

```

```

125     CAPACITY =      1006632960. BITS
126     BITS PER WORD =      4000. BITS
127     WORD ACCESS TIME =  48.83 MICROSEC
128     OVERHEAD TIME PER BLOCK ACCESS = SECTOR DIST
129     NUMBER OF PORTS = 1
130
131     HARDWARE TYPE = DATA TRANSFER
132     NAME = S1/TD/STN2
133     BITS PER CYCLE = 1 BITS
134     BUS CONNECTIONS =
135         S1/STN2
136         S1/SD/STN2
137
138     ***** STATION NODE #      1
139     * INDIVIDUAL  1.500  -1.500  15
140     HARDWARE TYPE = PROCESSING
141     NAME = S1/NODE
142     LOCATION =      131.558      33.536
143     STYLE/COLOR =  1      5
144     BASIC CYCLE TIME = 0.      MICROSEC
145     INPUT CONTROLLER = YES
146     INSTRUCTION REPERTOIRE =
147     INSTRUCTION TYPE = PROCESSING
148     NAME ; NO/OP
149     TIME ; 0 CYCLES
150     INSTRUCTION TYPE = MESSAGE

```

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SBSS Basic Simulation Model

```

151     NAME ; SEND REQUESTS ACTION
152     MESSAGE ; SEND REQUESTS ACTION
153     LENGTH ; 300 BITS
154     INHIBIT MESSAGE TO SELF ; YES
155     DESTINATION PROCESSOR ; S1/SERVER
156     QUEUE FLAG ; YES
157
158     HARDWARE TYPE = STORAGE
159     NAME = S1/SD/NODE
160     CAPACITY =      1006632960. BITS
161     BITS PER WORD =      4000. BITS
162     WORD ACCESS TIME =  48.83 MICROSEC
163     OVERHEAD TIME PER BLOCK ACCESS = SECTOR DIST
164     NUMBER OF PORTS = 1
165
166     HARDWARE TYPE = DATA TRANSFER
167     NAME = S1/TD/NODE
168     BITS PER CYCLE = 1 BITS
169     BUS CONNECTIONS =
170         S1/NODE
171         S1/SD/NODE
172
173     SOFTWARE TYPE = MODULE
174     * NODE
175     NAME = SEND RECORD REQUESTS
176     CONCURRENT EXECUTION = YES
177     ITERATION PERIOD = TRANS DIST
178     RESIDENT PROCESSORS =
179         S1/NODE
180     INSTRUCTION LIST =
181     EXECUTE A TOTAL OF ; 1 SEND REQUESTS ACTION
182
183     ***** STATION SERVER #      1
184     * INDIVIDUAL  1.500  -1.500  15
185     HARDWARE TYPE = PROCESSING
186     NAME = S1/SERVER

```

```

187 LOCATION = 159.475 33.311
188 STYLE/COLOR = 1 6
189 BASIC CYCLE TIME = 0. MICROSEC
190 INPUT CONTROLLER = YES
191 INSTRUCTION REPERTOIRE =
192 INSTRUCTION TYPE = PROCESSING
193 NAME ; NO/OP
194 TIME ; 0 CYCLES
195 INSTRUCTION TYPE = READ
196 NAME ; READ RECORDS
197 STORAGE DEVICE TO ACCESS ; S1/SD/SERVER
198 FILE ACCESSED ; GENERAL STORAGE
199 NUMBER OF BITS TO TRANSMIT ; 2000 BITS
200 ALLOWABLE BUSSES ;

```

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SBSS Basic Simulation Model

```

201 S1/TD/SERVER
202 NAME ; READ PROGRAM
203 STORAGE DEVICE TO ACCESS ; S1/SD/SERVER
204 FILE ACCESSED ; GENERAL STORAGE
205 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
206 ALLOWABLE BUSSES ;
207 S1/TD/SERVER
208 INSTRUCTION TYPE = WRITE
209 NAME ; WRITE RECORDS ACTION
210 STORAGE DEVICE TO ACCESS ; S1/SD/SERVER
211 FILE ACCESSED ; GENERAL STORAGE
212 NUMBER OF BITS TO TRANSMIT ; 2000 BITS
213 REPLACE FLAG ; YES
214 PARTIAL FLAG ; YES
215 ALLOWABLE BUSSES ;
216 S1/TD/SERVER
217 NAME ; WRITE HISTORY ACTION
218 STORAGE DEVICE TO ACCESS ; S1/SD/SERVER
219 FILE ACCESSED ; GENERAL STORAGE
220 NUMBER OF BITS TO TRANSMIT ; 3456 BITS
221 ALLOWABLE BUSSES ;
222 S1/TD/SERVER
223 NAME ; WRITE SPECIAL CONTROL
224 STORAGE DEVICE TO ACCESS ; S1/SD/SERVER
225 FILE ACCESSED ; GENERAL STORAGE
226 NUMBER OF BITS TO TRANSMIT ; 928 BITS
227 ALLOWABLE BUSSES ;
228 S1/TD/SERVER
229
230 HARDWARE TYPE = STORAGE
231 NAME = S1/SD/SERVER
232 CAPACITY = 8388608000. BITS
233 BITS PER WORD = 4000. BITS
234 WORD ACCESS TIME = 48.83 MICROSEC
235 OVERHEAD TIME PER BLOCK ACCESS = SECTOR DIST
236 NUMBER OF PORTS = 1
237
238 HARDWARE TYPE = DATA TRANSFER
239 NAME = S1/TD/SERVER
240 BITS PER CYCLE = 1 BITS
241 BUS CONNECTIONS =
242 S1/SERVER
243 S1/SD/SERVER
244
245 SOFTWARE TYPE = MODULE
246 * SERVER
247 NAME = READ AND SEND RECORDS
248 CONCURRENT EXECUTION = YES

```


249 ALLOWED PROCESSORS =
250 S1/SERVER
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SBSS Basic Simulation Model

251 REQUIRED MESSAGES =
252 SEND REQUESTS ACTION
253 INSTRUCTION LIST =
254 EXECUTE A TOTAL OF ; 1 READ PROGRAM
255 EXECUTE A TOTAL OF ; 10 READ RECORDS
256 EXECUTE A TOTAL OF ; 10 WRITE RECORDS ACTION
257 EXECUTE A TOTAL OF ; 1 WRITE HISTORY ACTION
258 EXECUTE A TOTAL OF ; 1 READ PROGRAM
259 EXECUTE A TOTAL OF ; 12 READ RECORDS
260 EXECUTE A TOTAL OF ; 12 WRITE RECORDS ACTION
261 EXECUTE A TOTAL OF ; 1 WRITE HISTORY ACTION
262 EXECUTE A TOTAL OF ; 2 WRITE SPECIAL CONTROL
263

264 * MESSAGE REMOVAL MODULES
265 SOFTWARE TYPE = MODULE
266 NAME = MR/SEND NOISE ACTION
267 CONCURRENT EXECUTION = YES
268 ALLOWED PROCESSORS =
269 S1/STN2
270 REQUIRED MESSAGES =
271 SEND NOISE ACTION
272 INSTRUCTION LIST =
273 EXECUTE A TOTAL OF ; 1 NO/OP
274

275 ***** FILES
276 SOFTWARE TYPE = FILE
277 NAME = GENERAL STORAGE
278 NUMBER OF BITS = 500000.000 BITS
279 READ ONLY FLAG = NO
280 INITIAL RESIDENCY =
281 S1/SD/NOIS
282 NAME = GENERAL STORAGE
283 NUMBER OF BITS = 500000.000 BITS
284 READ ONLY FLAG = NO
285 INITIAL RESIDENCY =
286 S1/SD/STN2
287 NAME = GENERAL STORAGE
288 NUMBER OF BITS = 500000.000 BITS
289 READ ONLY FLAG = NO
290 INITIAL RESIDENCY =
291 S1/SD/NODE
292 NAME = GENERAL STORAGE
293 NUMBER OF BITS = 500000.000 BITS
294 READ ONLY FLAG = NO
295 INITIAL RESIDENCY =
296 S1/SD/SERVER

SBSS Basic Simulation Model

TOKEN LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME

RING1

LAN REQUESTS GRANTED	2275774
AVG REQUEST DELAY	.010
MAX REQUEST DELAY	125.000
STD DEV REQUEST DELAY	.889

COMPLETED TRANSFERS	2275774
AVG USAGE TIME	101.972
MAX USAGE TIME	125.000
STD DEV USAGE TIME	6.739

AVG QUEUE SIZE	.000
MAX QUEUE SIZE	2.000
STD DEV QUEUE SIZE	.000

PER CENT OF TIME BUSY	.107

SBSS Basic Simulation Model

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	SEND NOISE	SEND RECORD REQUESTS	READ AND SEND RECORDS
HOST STATION	NOIS	NODE	SERVER
COMPLETED EXECUTIONS	2096236	179538	179537
AVG EXECUTION TIME	100.006	125.056	872833.381
MAX EXECUTION TIME	225.000	224.645	872837.572
MIN EXECUTION TIME	100.000	125.000	872829.342
STD DEV EXECUTION TIME	.718	2.003	.956

SBSS Basic Simulation Model

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	NOIS	STN2	NODE
LAN REQUESTS GRANTED	2096236	0	179538
AVERAGE WAIT TIME	.006	0.	.056
MAXIMUM WAIT TIME	125.000	0.	99.645
STD DEV WAIT TIME	.718	0.	2.003
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	500000.000	500000.000	500000.000
MAXIMUM BITS USED	500000.	500000.	500000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.097	0.	.010

STATION NAME	SERVER

LAN REQUESTS GRANTED	0
AVERAGE WAIT TIME	0.
MAXIMUM WAIT TIME	0.
STD DEV WAIT TIME	0.
DISK REQUESTS GRANTED	8976862
AVERAGE BITS USED	785777164.599
MAXIMUM BITS USED	1574680416.
STD DEV BITS USED	453793014.053
STATION UTILIZATION	72.549

SBSS Basic Simulation Model

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
STN2	2096236	SEND NOISE ACTION
SERVER	179538	SEND REQUESTS ACTION

SBSS Basic Simulation Model

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND NOISE ACTION	SEND REQUESTS ACTION
SOURCE STATION	NOIS	NODE
DESTINATION STATION	STN2	SERVER
NUMBER SENT	2096236	179538
AVG DELIVERY TIME	100.006	125.056
MAX DELIVERY TIME	225.000	224.645
MIN DELIVERY TIME	100.000	125.000
STD DEV DELIVERY TIME	.718	2.003

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```
1 * SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED
2 ***** LANGEN RELEASE 4.01 FILE SAVED 07/20/1993 12:06:53
3 ***** LNET RELEASE 4.01 FILE SAVED 06/21/1993 13:46:21
4
5 ***** GLOBAL VARIABLES
6 GLOBAL FLAGS =
7 TEXT SCALE FACTOR = 3 24 0111110
8 DIAGRAM BOUNDARIES = 0. 400.000 120.000 0.
9 MINIMIZE RANDOM SEED ARRAY = YES
10 ANTITHETIC VARIATE = NO
11 RANDOMIZER = 0
12 CLOCK = YES
13 CLOCK INCREMENT = 4320.000000 SEC
14 BATCH = YES
15 INPUT LISTING = YES
16 LENGTH = +2.1600E+005 SEC
17
18 ***** STATISTICAL DISTRIBUTION FUNCTIONS
19 STATISTICAL DISTRIBUTIONS =
20 NAME = DISK ACCESS
21 TYPE = NORMAL
22 MEAN = 15000.000
23 STANDARD.DEVIATION = .100
24 NAME = LGSD
25 TYPE = EXPONENTIAL
26 MEAN = +2.67E+007
27 UPPER.BOUND = +8.00E+007
28 NAME = LGSP
29 TYPE = EXPONENTIAL
30 MEAN = +2.07E+007
31 UPPER.BOUND = +6.20E+007
32 NAME = LGSC
33 TYPE = EXPONENTIAL
34 MEAN = +1.01E+008
35 UPPER.BOUND = +3.04E+008
36 NAME = LGSM
37 TYPE = EXPONENTIAL
38 MEAN = +1.04E+008
39 UPPER.BOUND = +3.12E+008
40 NAME = FMFS
41 TYPE = EXPONENTIAL
42 MEAN = +8.45E+007
43 UPPER.BOUND = +2.53E+008
44 NAME = DOMR
45 TYPE = EXPONENTIAL
46 MEAN = +2.53E+008
47 UPPER.BOUND = +7.60E+008
48 NAME = BASE TRAFFIC
49 TYPE = EXPONENTIAL
50 MEAN = 582726.800
```

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```
51 UPPER.BOUND = +1.75E+006
52 NAME = LGSD ENTIRE
53 TYPE = EXPONENTIAL
54 MEAN = +4.45E+006
55 UPPER.BOUND = +1.33E+007
56 NAME = LGSP ENTIRE
57 TYPE = EXPONENTIAL
```

```

58     MEAN = +3.44E+006
59     UPPER.BOUND = +1.03E+007
60     NAME = LGSM ENTIRE
61     TYPE = EXPONENTIAL
62     MEAN = +1.74E+007
63     UPPER.BOUND = +5.21E+007
64     NAME = LGSC ENTIRE
65     TYPE = EXPONENTIAL
66     MEAN = +1.69E+007
67     UPPER.BOUND = +5.07E+008
68     NAME = SDF1/FILE SERVER
69     TYPE = MESSAGE.LINEAR
70     A = 1.000
71     B = 7000.000
72     NAME = I/LGSM RETRY SDF
73     TYPE = IEEE.BACKOFF
74     SLOT.TIME = 51.200
75     RETRY.LIMIT = 16.000
76     LIMIT.DELAY = 51.200
77     NAME = I/LGSD RETRY SDF
78     TYPE = IEEE.BACKOFF
79     SLOT.TIME = 51.200
80     RETRY.LIMIT = 16.000
81     LIMIT.DELAY = 51.200
82     NAME = I/LGSC RETRY SDF
83     TYPE = IEEE.BACKOFF
84     SLOT.TIME = 51.200
85     RETRY.LIMIT = 16.000
86     LIMIT.DELAY = 51.200
87     NAME = I/LGSP RETRY SDF
88     TYPE = IEEE.BACKOFF
89     SLOT.TIME = 51.200
90     RETRY.LIMIT = 16.000
91     LIMIT.DELAY = 51.200
92     NAME = I/AFNET RETRY SDF
93     TYPE = IEEE.BACKOFF
94     SLOT.TIME = 51.200
95     RETRY.LIMIT = 16.000
96     LIMIT.DELAY = 51.200
97
98     ***** LAN RING1 DEFINITION BEGINS
99     HARDWARE TYPE = DATA TRANSFER
100    * LAN SUBTYPE IS IEEE 802.5 16Mb
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

101    NAME = RING1
102    DRAW TYPE = RING
103    NAME/MSG LOCATION = 249.431    41.361    209.431    41.361
104    STYLE/WIDTH = 1    60
105    SEGMENTS = 7
106    199.431    41.361
107    209.431    39.361
108    259.431    39.361
109    269.431    41.361
110    259.431    43.361
111    209.431    43.361
112    199.431    41.361
113    PROTOCOL = TOKEN RING
114    SEPARATE BLOCKS = YES
115    CYCLE TIME = .0625 MIC
116    BITS PER CYCLE = 1 BITS
117    CYCLES PER WORD = 8 CYCLES
118    WORDS PER BLOCK = 17942 WORDS
119    MINIMUM DATA BITS PER TRANSFER = 0 BITS
120    WORD OVERHEAD TIME = 0. MIC

```



```

121 BLOCK OVERHEAD TIME = 12.5 MIC
122 BUS CONNECTIONS =
123 G1/GW6
124 SEGMENTS = 199.989 41.249 79.528 40.460
125 G2/GW6
126 SEGMENTS = 199.989 41.249 79.528 40.460
127 G1/GW1
128 SEGMENTS = 217.018 39.361 178.354 28.254
129 G2/GW1
130 SEGMENTS = 217.018 39.361 178.354 28.254
131 G1/GATE TO LGSP
132 SEGMENTS = 253.031 39.361 259.732 27.579
133 G2/GATE TO LGSP
134 SEGMENTS = 253.031 39.361 259.732 27.579
135 G1/GW4
136 SEGMENTS = 251.914 43.361 284.578 55.929
137 G2/GW4
138 SEGMENTS = 251.914 43.361 284.578 55.929
139 G1/GW3
140 SEGMENTS = 218.414 43.361 185.891 57.842
141 G2/GW3
142 SEGMENTS = 218.414 43.361 185.891 57.842
143 S1/BASE TRAFFIC1
144 SEGMENTS = 236.281 39.361 221.206 13.347
145 S1/BASE TRAFFIC2
146 SEGMENTS = 244.656 43.361 240.887 65.492
147
148 ***** LAN LGSM DEFINITION BEGINS
149 HARDWARE TYPE = DATA TRANSFER
150 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5

```

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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

151 NAME = LGSM
152 DRAW TYPE = BUS
153 NAME/MSG LOCATION = 142.230 82.212 92.230 82.212
154 STYLE/WIDTH = 1 60
155 SEGMENTS = 2
156 92.230 83.212
157 162.230 83.212
158 PROTOCOL = COLLISION
159 SEPARATE BLOCKS = YES
160 CYCLE TIME = .1 MIC
161 RETRY INTERVAL = I/LGSM RETRY SDF
162 COLLISION WINDOW = 4.33 MIC
163 INTERFRAME GAP = 9.6 MIC
164 JAM TIME = 3.2 MIC
165 BITS PER CYCLE = 1 BITS
166 CYCLES PER WORD = 8 CYCLES
167 WORDS PER BLOCK = 1500 WORDS
168 MINIMUM DATA BITS PER TRANSFER = 304 BITS
169 WORD OVERHEAD TIME = 0. MIC
170 BLOCK OVERHEAD TIME = 20.8 MIC
171 BUS CONNECTIONS =
172 G1/GW3
173 SEGMENTS = 157.834 83.212 180.866 62.455
174 G2/GW3
175 SEGMENTS = 157.834 83.212 180.866 62.455
176 S1/LGSM1
177 SEGMENTS = 106.468 83.212 76.736 95.868
178 S1/LGSM 2
179 SEGMENTS = 115.762 83.212 96.736 95.868
180 S1/LGSM 3
181 SEGMENTS = 125.055 83.212 116.736 95.868
182 S1/LGSM 4

```

```

183     SEGMENTS =      134.349      83.212      136.736      95.868
184     S1/LGSM 5
185     SEGMENTS =      143.643      83.212      156.736      95.868
186     S1/LGSM 6
187     SEGMENTS =      152.936      83.212      176.736      95.868
188
189 ***** LAN LGSD DEFINITION BEGINS
190 HARDWARE TYPE = DATA TRANSFER
191 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
192     NAME = LGSD
193     DRAW TYPE = BUS
194     NAME/MSG LOCATION =      126.736      18.254      76.736      18.254
195     STYLE/WIDTH = 1 60
196     SEGMENTS = 2
197         76.736      19.254
198         146.736      19.254
199     PROTOCOL = COLLISION
200     SEPARATE BLOCKS = YES
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

201     CYCLE TIME = .1 MIC
202     RETRY INTERVAL = I/LGSD RETRY SDF
203     COLLISION WINDOW = 4.33 MIC
204     INTERFRAME GAP = 9.6 MIC
205     JAM TIME = 3.2 MIC
206     BITS PER CYCLE = 1 BITS
207     CYCLES PER WORD = 8 CYCLES
208     WORDS PER BLOCK = 1500 WORDS
209     MINIMUM DATA BITS PER TRANSFER = 304 BITS
210     WORD OVERHEAD TIME = 0. MIC
211     BLOCK OVERHEAD TIME = 20.8 MIC
212     BUS CONNECTIONS =
213         G1/GW1
214             SEGMENTS =      142.899      19.254      181.145      24.992
215         G2/GW1
216             SEGMENTS =      142.899      19.254      181.145      24.992
217         S1/LGSD1
218             SEGMENTS =      82.040      19.254      82.878      13.179
219         S1/LGSD 2
220             SEGMENTS =      92.823      19.254      102.878      13.179
221         S1/LGSD 3
222             SEGMENTS =      103.605      19.254      122.878      13.179
223         S1/LGSD 4
224             SEGMENTS =      114.388      19.254      142.878      13.179
225         S1/LGSD 5
226             SEGMENTS =      125.171      19.254      162.878      13.179
227         S1/LGSD 6
228             SEGMENTS =      135.953      19.254      182.878      13.179
229
230 ***** LAN LGSC DEFINITION BEGINS
231 HARDWARE TYPE = DATA TRANSFER
232 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
233     NAME = LGSC
234     DRAW TYPE = BUS
235     NAME/MSG LOCATION =      343.231      80.355      293.231      80.355
236     STYLE/WIDTH = 1 60
237     SEGMENTS = 2
238         293.231      81.355
239         363.231      81.355
240     PROTOCOL = COLLISION
241     SEPARATE BLOCKS = YES
242     CYCLE TIME = .1 MIC
243     RETRY INTERVAL = I/LGSC RETRY SDF
244     COLLISION WINDOW = 4.33 MIC
245     INTERFRAME GAP = 9.6 MIC

```

246 JAM TIME = 3.2 MIC
 247 BITS PER CYCLE = 1 BITS
 248 CYCLES PER WORD = 8 CYCLES
 249 WORDS PER BLOCK = 1500 WORDS
 250 MINIMUM DATA BITS PER TRANSFER = 304 BITS
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

251 WORD OVERHEAD TIME = 0. MIC
 252 BLOCK OVERHEAD TIME = 20.8 MIC
 253 BUS CONNECTIONS =
 254 G1/GW4
 255 SEGMENTS = 296.022 81.355 291.836 58.630
 256 G2/GW4
 257 SEGMENTS = 296.022 81.355 291.836 58.630
 258 S1/LGSC1
 259 SEGMENTS = 303.700 81.355 288.206 95.868
 260 S1/LGSC 2
 261 SEGMENTS = 313.622 81.355 308.206 95.868
 262 S1/LGSC 3
 263 SEGMENTS = 323.544 81.355 328.206 95.868
 264 S1/LGSC 4
 265 SEGMENTS = 333.466 81.355 348.206 95.868
 266 S1/LGSC 5
 267 SEGMENTS = 343.387 81.355 368.206 95.868
 268 S1/LGSC 6
 269 SEGMENTS = 353.309 81.355 388.206 95.868
 270
 271 ***** LAN LGSP DEFINITION BEGINS
 272 HARDWARE TYPE = DATA TRANSFER
 273 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
 274 NAME = LGSP
 275 DRAW TYPE = BUS
 276 NAME/MSG LOCATION = 324.387 14.035 274.387 14.035
 277 STYLE/WIDTH = 1 60
 278 SEGMENTS = 2
 279 274.387 15.035
 280 344.387 15.035
 281 PROTOCOL = COLLISION
 282 SEPARATE BLOCKS = YES
 283 CYCLE TIME = .1 MIC
 284 RETRY INTERVAL = I/LGSP RETRY SDF
 285 COLLISION WINDOW = 4.33 MIC
 286 INTERFRAME GAP = 9.6 MIC
 287 JAM TIME = 3.2 MIC
 288 BITS PER CYCLE = 1 BITS
 289 CYCLES PER WORD = 8 CYCLES
 290 WORDS PER BLOCK = 1500 WORDS
 291 MINIMUM DATA BITS PER TRANSFER = 304 BITS
 292 WORD OVERHEAD TIME = 0. MIC
 293 BLOCK OVERHEAD TIME = 20.8 MIC
 294 BUS CONNECTIONS =
 295 G1/GATE TO LGSP
 296 SEGMENTS = 278.016 15.035 255.544 24.316
 297 G2/GATE TO LGSP
 298 SEGMENTS = 278.016 15.035 255.544 24.316
 299 S1/FILE SERVER
 300 SEGMENTS = 277.737 15.035 314.588 30.729
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

301 S1/LGSP1
 302 SEGMENTS = 285.694 15.035 269.362 7.272
 303 S1/LGSP 2

```

304     SEGMENTS =          295.476          15.035          289.362          7.272
305     S1/LGSP 3
306     SEGMENTS =          305.258          15.035          309.362          7.272
307     S1/LGSP 4
308     SEGMENTS =          315.040          15.035          329.362          7.272
309     S1/LGSP 5
310     SEGMENTS =          324.823          15.035          349.362          7.272
311     S1/LGSP 6
312     SEGMENTS =          334.605          15.035          369.362          7.272
313
314 ***** LAN AFNET DEFINITION BEGINS
315 HARDWARE TYPE = DATA TRANSFER
316 * LAN SUBTYPE IS USER DEFINED COLLISION LAN
317 NAME = AFNET
318 DRAW TYPE = STAR
319 NAME/MSG LOCATION =          66.261          52.855          50.261          52.855
320 STYLE/WIDTH =    1    60
321 SEGMENTS =    5
322     48.261          54.355
323     48.261          50.355
324     88.261          50.355
325     88.261          54.355
326     48.261          54.355
327 PROTOCOL = COLLISION
328 SEPARATE BLOCKS = YES
329 CYCLE TIME = .05952381 MICROSEC
330 BITS PER CYCLE =    1
331 CYCLES PER WORD =    8
332 WORDS PER BLOCK =    1496
333 WORD OVERHEAD TIME = 0. MICROSEC
334 BLOCK OVERHEAD TIME = 14.286 MICROSEC
335 RETRY INTERVAL = I/AFNET RETRY SDF
336 COLLISION WINDOW = 4.33 MICROSEC
337 INTERFRAME GAP = 9.6 MICROSEC
338 JAM TIME = 3.2 MICROSEC
339 BUS CONNECTIONS =
340     S1/FMFS
341     SEGMENTS =          55.799          53.173          41.561          66.674
342     S1/DOMR
343     SEGMENTS =          76.318          50.355          88.880          67.349
344     G1/GW6
345     SEGMENTS =          71.711          50.355          68.361          42.542
346     G2/GW6
347     SEGMENTS =          71.711          50.355          68.361          42.542
348
349 ***** STATION LGSD1 #    1
350 * INDIVIDUAL    1.500    -1.500    15
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

351 HARDWARE TYPE = PROCESSING
352 NAME = S1/LGSD1
353 LOCATION =          73.386          9.354
354 STYLE/COLOR =    1    3
355 BASIC CYCLE TIME = 0. MICROSEC
356 INPUT CONTROLLER = YES
357 INSTRUCTION REPERTOIRE =
358 INSTRUCTION TYPE = PROCESSING
359     NAME ; NO/OP
360     TIME ; 0 CYCLES
361 INSTRUCTION TYPE = MESSAGE
362     NAME ; MESSAGE
363     MESSAGE ; REQUEST FROM SERVER
364     LENGTH ; 200 BITS
365     INHIBIT MESSAGE TO SELF ; YES
366     DESTINATION PROCESSOR ; R1/FILE SERVER

```

```

367             QUEUE FLAG ; YES
368
369     HARDWARE TYPE = STORAGE
370     NAME = S1/SD/LGSD1
371     CAPACITY = 1090519040. BITS
372     BITS PER WORD = 4000. BITS
373     WORD ACCESS TIME = 48.83 MICROSEC
374     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
375     NUMBER OF PORTS = 1
376
377     HARDWARE TYPE = DATA TRANSFER
378     NAME = S1/TD/LGSD1
379     BITS PER CYCLE = 1 BITS
380     BUS CONNECTIONS =
381         S1/LGSD1
382         S1/SD/LGSD1
383
384     SOFTWARE TYPE = MODULE
385     * LGSD1
386     NAME = LGSD ACTIVITY 1
387     CONCURRENT EXECUTION = YES
388     ITERATION PERIOD = LGSD
389     RESIDENT PROCESSORS =
390         S1/LGSD1
391     INSTRUCTION LIST =
392         EXECUTE A TOTAL OF ; 1 MESSAGE
393
394     ***** STATION BASE TRAFFIC1 # 1
395     * INDIVIDUAL 1.500 -1.500 15
396     HARDWARE TYPE = PROCESSING
397     NAME = S1/BASE TRAFFIC1
398     LOCATION = 211.575 8.791
399     STYLE/COLOR = 1 2
400     BASIC CYCLE TIME = 0. MICROSEC
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

401     INPUT CONTROLLER = YES
402     INSTRUCTION REPERTOIRE =
403     INSTRUCTION TYPE = PROCESSING
404     NAME ; NO/OP
405     TIME ; 0 CYCLES
406     INSTRUCTION TYPE = MESSAGE
407     NAME ; NOISE
408     MESSAGE ; NOISE
409     LENGTH ; 200 BITS
410     INHIBIT MESSAGE TO SELF ; YES
411     DESTINATION PROCESSOR ; S1/BASE TRAFFIC2
412     QUEUE FLAG ; YES
413
414     SOFTWARE TYPE = MODULE
415     * BASE TRAFFIC1
416     NAME = BASE TRAFFIC
417     CONCURRENT EXECUTION = YES
418     ITERATION PERIOD = BASE TRAFFIC
419     RESIDENT PROCESSORS =
420         S1/BASE TRAFFIC1
421     INSTRUCTION LIST =
422         EXECUTE A TOTAL OF ; 1 NOISE
423
424     ***** STATION BASE TRAFFIC2 # 1
425     * INDIVIDUAL 1.500 -1.500 15
426     HARDWARE TYPE = PROCESSING
427     NAME = S1/BASE TRAFFIC2
428     LOCATION = 231.675 65.155
429     STYLE/COLOR = 1 3

```

```

430     BASIC CYCLE TIME = 0.      MICROSEC
431     INPUT CONTROLLER = YES
432     INSTRUCTION REPERTOIRE =
433     INSTRUCTION TYPE = PROCESSING
434     NAME ; NO/OP
435     TIME ; 0 CYCLES
436
437     ***** STATION FILE SERVER # 1
438     * INDIVIDUAL 1.500 -1.500 15
439     HARDWARE TYPE = PROCESSING
440     NAME = S1/FILE SERVER
441     LOCATION = 306.213 28.704
442     STYLE/COLOR = 1 4
443     BASIC CYCLE TIME = 0.      MICROSEC
444     INPUT CONTROLLER = YES
445     INSTRUCTION REPERTOIRE =
446     INSTRUCTION TYPE = PROCESSING
447     NAME ; NO/OP
448     TIME ; 0 CYCLES
449     INSTRUCTION TYPE = MESSAGE
450     NAME ; SEND REPLY
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

451     MESSAGE ; SEND REPLY TO NODE
452     LENGTH ; SDF1/FILE SERVER
453     INHIBIT MESSAGE TO SELF ; YES
454     DESTINATION PROCESSOR ; ECHO
455     QUEUE FLAG ; YES
456     INSTRUCTION TYPE = READ
457     NAME ; REPLY
458     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
459     FILE ACCESSED ; GENERAL STORAGE
460     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
461     ALLOWABLE BUSSES ;
462     S1/TD/FILE SERVER
463     NAME ; READ FOURTH RECORD
464     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
465     FILE ACCESSED ; GENERAL STORAGE
466     NUMBER OF BITS TO TRANSMIT ; 957 BITS
467     ALLOWABLE BUSSES ;
468     S1/TD/FILE SERVER
469     NAME ; READ THIRD RECORD
470     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
471     FILE ACCESSED ; GENERAL STORAGE
472     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
473     ALLOWABLE BUSSES ;
474     S1/TD/FILE SERVER
475     NAME ; READ SECOND RECORD
476     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
477     FILE ACCESSED ; GENERAL STORAGE
478     NUMBER OF BITS TO TRANSMIT ; 2582 BITS
479     ALLOWABLE BUSSES ;
480     S1/TD/FILE SERVER
481     NAME ; READ HIST
482     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
483     FILE ACCESSED ; GENERAL STORAGE
484     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
485     ALLOWABLE BUSSES ;
486     S1/TD/FILE SERVER
487     NAME ; READ CONTROL
488     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
489     FILE ACCESSED ; GENERAL STORAGE
490     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
491     ALLOWABLE BUSSES ;
492     S1/TD/FILE SERVER

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493     INSTRUCTION TYPE = WRITE
494     NAME ; WRITE1
495     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
496     FILE ACCESSED ; GENERAL STORAGE
497     NUMBER OF BITS TO TRANSMIT ; 2582 BITS
498     REPLACE FLAG ; YES
499     PARTIAL FLAG ; YES
500     ALLOWABLE BUSSES ;
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501     S1/TD/FILE SERVER
502     NAME ; WRITE2
503     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
504     FILE ACCESSED ; GENERAL STORAGE
505     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
506     REPLACE FLAG ; YES
507     PARTIAL FLAG ; YES
508     ALLOWABLE BUSSES ;
509     S1/TD/FILE SERVER
510     NAME ; WRITE3
511     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
512     FILE ACCESSED ; GENERAL STORAGE
513     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
514     REPLACE FLAG ; YES
515     PARTIAL FLAG ; YES
516     ALLOWABLE BUSSES ;
517     S1/TD/FILE SERVER
518     NAME ; WRITE4
519     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
520     FILE ACCESSED ; GENERAL STORAGE
521     NUMBER OF BITS TO TRANSMIT ; 957 BITS
522     REPLACE FLAG ; YES
523     PARTIAL FLAG ; YES
524     ALLOWABLE BUSSES ;
525     S1/TD/FILE SERVER
526     NAME ; WRITE6
527     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
528     FILE ACCESSED ; GENERAL STORAGE
529     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
530     REPLACE FLAG ; YES
531     PARTIAL FLAG ; YES
532     ALLOWABLE BUSSES ;
533     S1/TD/FILE SERVER
534     NAME ; WRITE5
535     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
536     FILE ACCESSED ; GENERAL STORAGE
537     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
538     REPLACE FLAG ; YES
539     PARTIAL FLAG ; YES
540     ALLOWABLE BUSSES ;
541     S1/TD/FILE SERVER
542

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HARDWARE TYPE = STORAGE

```

544     NAME = S1/SD/FILE SERVER
545     CAPACITY = 12582912000. BITS
546     BITS PER WORD = 512000. BITS
547     WORD ACCESS TIME = 48.83 MICROSEC
548     OVERHEAD TIME PER BLOCK ACCESS = 15000.0 MICROSEC
549     NUMBER OF PORTS = 1
550

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551  HARDWARE TYPE = DATA TRANSFER
552  NAME = S1/TD/FILE SERVER
553  BITS PER CYCLE = 1 BITS
554  BUS CONNECTIONS =
555  S1/FILE SERVER
556  S1/SD/FILE SERVER
557
558  SOFTWARE TYPE = MODULE
559  * FILE SERVER
560  NAME = MESSAGE REPLY
561  CONCURRENT EXECUTION = YES
562  ALLOWED PROCESSORS =
563  S1/FILE SERVER
564  REQUIRED MESSAGES =
565  REQUEST FROM SERVER
566  INSTRUCTION LIST =
567  EXECUTE A TOTAL OF ; 1 REPLY
568  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
569  EXECUTE A TOTAL OF ; 1 READ CONTROL
570  EXECUTE A TOTAL OF ; 1 READ HIST
571  EXECUTE A TOTAL OF ; 1 WRITE1
572  EXECUTE A TOTAL OF ; 1 WRITE2
573  EXECUTE A TOTAL OF ; 1 WRITE3
574  EXECUTE A TOTAL OF ; 1 READ THIRD RECORD
575  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
576  EXECUTE A TOTAL OF ; 1 READ HIST
577  EXECUTE A TOTAL OF ; 1 READ CONTROL
578  EXECUTE A TOTAL OF ; 1 WRITE4
579  EXECUTE A TOTAL OF ; 1 WRITE5
580  EXECUTE A TOTAL OF ; 1 WRITE6
581  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
582  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
583  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
584  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
585  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
586  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
587  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
588  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
589  EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
590  EXECUTE A TOTAL OF ; 1 WRITE1
591  EXECUTE A TOTAL OF ; 1 WRITE1
592  EXECUTE A TOTAL OF ; 1 WRITE1
593  EXECUTE A TOTAL OF ; 1 WRITE1
594  EXECUTE A TOTAL OF ; 1 WRITE1
595  EXECUTE A TOTAL OF ; 1 WRITE1
596  EXECUTE A TOTAL OF ; 1 WRITE1
597  EXECUTE A TOTAL OF ; 1 WRITE1
598  EXECUTE A TOTAL OF ; 1 WRITE1
599  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
600  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD

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601  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
602  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
603  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
604  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
605  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
606  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
607  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
608  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
609  EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
610  EXECUTE A TOTAL OF ; 1 WRITE4
611  EXECUTE A TOTAL OF ; 1 WRITE4
612  EXECUTE A TOTAL OF ; 1 WRITE4
613  EXECUTE A TOTAL OF ; 1 WRITE4

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614     EXECUTE A TOTAL OF ; 1 WRITE4
615     EXECUTE A TOTAL OF ; 1 WRITE4
616     EXECUTE A TOTAL OF ; 1 WRITE4
617     EXECUTE A TOTAL OF ; 1 WRITE4
618     EXECUTE A TOTAL OF ; 1 WRITE4
619     EXECUTE A TOTAL OF ; 1 WRITE4
620     EXECUTE A TOTAL OF ; 1 WRITE4
621     EXECUTE A TOTAL OF ; 1 SEND REPLY
622
623     ***** STATION LGSP1 # 1
624     * INDIVIDUAL 1.500 -1.500 15
625     HARDWARE TYPE = PROCESSING
626     NAME = S1/LGSP1
627     LOCATION = 260.150 3.053
628     STYLE/COLOR = 1 3
629     BASIC CYCLE TIME = 0. MICROSEC
630     INPUT CONTROLLER = YES
631     INSTRUCTION REPERTOIRE =
632     INSTRUCTION TYPE = PROCESSING
633     NAME ; NO/OP
634     TIME ; 0 CYCLES
635     INSTRUCTION TYPE = MESSAGE
636     NAME ; MESSAGE
637     MESSAGE ; REQUEST FROM SERVER
638     LENGTH ; 200 BITS
639     INHIBIT MESSAGE TO SELF ; YES
640     DESTINATION PROCESSOR ; S1/FILE SERVER
641     QUEUE FLAG ; YES
642
643     HARDWARE TYPE = STORAGE
644     NAME = S1/SD/LGSP1
645     CAPACITY = 1090519040. BITS
646     BITS PER WORD = 4000. BITS
647     WORD ACCESS TIME = 48.83 MICROSEC
648     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
649     NUMBER OF PORTS = 1
650
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651     HARDWARE TYPE = DATA TRANSFER
652     NAME = S1/TD/LGSP1
653     BITS PER CYCLE = 1 BITS
654     BUS CONNECTIONS =
655     S1/LGSP1
656     S1/SD/LGSP1
657
658     SOFTWARE TYPE = MODULE
659     * LGSP1
660     NAME = LGSP ACTIVITY 1
661     CONCURRENT EXECUTION = YES
662     ITERATION PERIOD = LGSP
663     RESIDENT PROCESSORS =
664     S1/LGSP1
665     INSTRUCTION LIST =
666     EXECUTE A TOTAL OF ; 1 MESSAGE
667
668     ***** STATION LGSM1 # 1
669     * INDIVIDUAL 1.500 -1.500 15
670     HARDWARE TYPE = PROCESSING
671     NAME = S1/LGSM1
672     LOCATION = 70.036 94.349
673     STYLE/COLOR = 1 3
674     BASIC CYCLE TIME = 0. MICROSEC
675     INPUT CONTROLLER = YES
676     INSTRUCTION REPERTOIRE =

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677     INSTRUCTION TYPE = PROCESSING
678     NAME ; NO/OP
679     TIME ; 0 CYCLES
680     INSTRUCTION TYPE = MESSAGE
681     NAME ; MESSAGE
682     MESSAGE ; REQUEST FROM SERVER
683     LENGTH ; 200 BITS
684     INHIBIT MESSAGE TO SELF ; YES
685     DESTINATION PROCESSOR ; R6/FILE SERVER
686     QUEUE FLAG ; YES
687
688     HARDWARE TYPE = STORAGE
689     NAME = S1/SD/LGSM1
690     CAPACITY = 1090519040. BITS
691     BITS PER WORD = 4000. BITS
692     WORD ACCESS TIME = 48.83 MICROSEC
693     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
694     NUMBER OF PORTS = 1
695
696     HARDWARE TYPE = DATA TRANSFER
697     NAME = S1/TD/LGSM1
698     BITS PER CYCLE = 1 BITS
699     BUS CONNECTIONS =
700     S1/LGSM1
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701     S1/SD/LGSM1
702
703     SOFTWARE TYPE = MODULE
704     * LGSM1
705     NAME = LGSM ACTIVITY 1
706     CONCURRENT EXECUTION = YES
707     ITERATION PERIOD = LGSM
708     RESIDENT PROCESSORS =
709     S1/LGSM1
710     INSTRUCTION LIST =
711     EXECUTE A TOTAL OF ; 1 MESSAGE
712
713     ***** STATION LGSC1 # 1
714     * INDIVIDUAL 1.500 -1.500 15
715     HARDWARE TYPE = PROCESSING
716     NAME = S1/LGSC1
717     LOCATION = 277.319 93.843
718     STYLE/COLOR = 1 3
719     BASIC CYCLE TIME = 0. MICROSEC
720     INPUT CONTROLLER = YES
721     INSTRUCTION REPERTOIRE =
722     INSTRUCTION TYPE = PROCESSING
723     NAME ; NO/OP
724     TIME ; 0 CYCLES
725     INSTRUCTION TYPE = MESSAGE
726     NAME ; MESSAGE
727     MESSAGE ; REQUEST FROM SERVER
728     LENGTH ; 200 BITS
729     INHIBIT MESSAGE TO SELF ; YES
730     DESTINATION PROCESSOR ; R7/FILE SERVER
731     QUEUE FLAG ; YES
732
733     HARDWARE TYPE = STORAGE
734     NAME = S1/SD/LGSC1
735     CAPACITY = 1090519040. BITS
736     BITS PER WORD = 4000. BITS
737     WORD ACCESS TIME = 48.83 MICROSEC
738     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
739     NUMBER OF PORTS = 1

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740
741  HARDWARE TYPE = DATA TRANSFER
742    NAME = S1/TD/LGSC1
743    BITS PER CYCLE = 1 BITS
744    BUS CONNECTIONS =
745      S1/LGSC1
746      S1/SD/LGSC1
747
748  SOFTWARE TYPE = MODULE
749  * LGSC1
750    NAME = LGSC ACTIVITY 1
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751    CONCURRENT EXECUTION = YES
752    ITERATION PERIOD = LGSC
753    RESIDENT PROCESSORS =
754      S1/LGSC1
755    INSTRUCTION LIST =
756      EXECUTE A TOTAL OF ; 1 MESSAGE
757
758  ***** STATION FMFS # 1
759  * INDIVIDUAL 1.500 -1.500 15
760  HARDWARE TYPE = PROCESSING
761    NAME = S1/FMFS
762      LOCATION = 34.442 64.311
763      STYLE/COLOR = 1 5
764      ICON = MAINFRA2.ICN
765      BASIC CYCLE TIME = 0. MICROSEC
766      INPUT CONTROLLER = YES
767      INSTRUCTION REPERTOIRE =
768        INSTRUCTION TYPE = PROCESSING
769        NAME ; NO/OP
770        TIME ; 0 CYCLES
771      INSTRUCTION TYPE = MESSAGE
772      NAME ; MESSAGE
773      MESSAGE ; REQUEST FROM SERVER
774      LENGTH ; 1200 BITS
775      INHIBIT MESSAGE TO SELF ; YES
776      DESTINATION PROCESSOR ; R8/FILE SERVER
777      QUEUE FLAG ; YES
778
779  HARDWARE TYPE = STORAGE
780    NAME = S1/SD/FMFS
781      CAPACITY = 1090519040. BITS
782      BITS PER WORD = 4000. BITS
783      WORD ACCESS TIME = 48.83 MICROSEC
784      OVERHEAD TIME PER BLOCK ACCESS = 15000.0 MICROSEC
785      NUMBER OF PORTS = 1
786
787  HARDWARE TYPE = DATA TRANSFER
788    NAME = S1/TD/FMFS
789    BITS PER CYCLE = 1 BITS
790    BUS CONNECTIONS =
791      S1/FMFS
792      S1/SD/FMFS
793
794  SOFTWARE TYPE = MODULE
795  * FMFS
796    NAME = FMFS ACTIVITY
797    CONCURRENT EXECUTION = YES
798    ITERATION PERIOD = FMFS
799    RESIDENT PROCESSORS =
800      S1/FMFS
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801     INSTRUCTION LIST =
802     EXECUTE A TOTAL OF ; 1 MESSAGE
803
804     ***** STATION DOMR # 1
805     * INDIVIDUAL 1.500 -1.500 15
806     HARDWARE TYPE = PROCESSING
807     NAME = S1/DOMR
808     LOCATION = 76.736 64.142
809     STYLE/COLOR = 1 5
810     ICON = MAINFRA2.ICN
811     BASIC CYCLE TIME = 0. MICROSEC
812     INPUT CONTROLLER = YES
813     INSTRUCTION REPERTOIRE =
814     INSTRUCTION TYPE = PROCESSING
815     NAME ; NO/OP
816     TIME ; 0 CYCLES
817     INSTRUCTION TYPE = MESSAGE
818     NAME ; MESSAGE
819     MESSAGE ; REQUEST FROM SERVER
820     LENGTH ; 1200 BITS
821     INHIBIT MESSAGE TO SELF ; YES
822     DESTINATION PROCESSOR ; R9/FILE SERVER
823     QUEUE FLAG ; YES
824
825     HARDWARE TYPE = STORAGE
826     NAME = S1/SD/DOMR
827     CAPACITY = 1090519040. BITS
828     BITS PER WORD = 4000. BITS
829     WORD ACCESS TIME = 48.83 MICROSEC
830     OVERHEAD TIME PER BLOCK ACCESS = 15000.0 MICROSEC
831     NUMBER OF PORTS = 1
832
833     HARDWARE TYPE = DATA TRANSFER
834     NAME = S1/TD/DOMR
835     BITS PER CYCLE = 1 BITS
836     BUS CONNECTIONS =
837     S1/DOMR
838     S1/SD/DOMR
839
840     SOFTWARE TYPE = MODULE
841     * DOMR
842     NAME = DOMR ACTIVITY
843     CONCURRENT EXECUTION = YES
844     ITERATION PERIOD = DOMR
845     RESIDENT PROCESSORS =
846     S1/DOMR
847     INSTRUCTION LIST =
848     EXECUTE A TOTAL OF ; 1 MESSAGE
849
850     ***** STATION LGSD 2 # 1

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851     * INDIVIDUAL 1.500 -1.500 15
852     HARDWARE TYPE = PROCESSING
853     NAME = S1/LGSD 2
854     LOCATION = 93.386 9.354
855     STYLE/COLOR = 1 3
856     BASIC CYCLE TIME = 0. MICROSEC
857     INPUT CONTROLLER = YES
858     INSTRUCTION REPERTOIRE =
859     INSTRUCTION TYPE = PROCESSING
860     NAME ; NO/OP

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861         TIME ; 0 CYCLES
862     INSTRUCTION TYPE = MESSAGE
863     NAME ; MESSAGE
864     MESSAGE ; REQUEST FROM SERVER
865     LENGTH ; 200 BITS
866     INHIBIT MESSAGE TO SELF ; YES
867     DESTINATION PROCESSOR ; R10/FILE SERVER
868     QUEUE FLAG ; YES
869
870     HARDWARE TYPE = STORAGE
871     NAME = S1/SD/LGSD 2
872     CAPACITY = 1090519040. BITS
873     BITS PER WORD = 4000. BITS
874     WORD ACCESS TIME = 48.83 MICROSEC
875     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
876     NUMBER OF PORTS = 1
877
878     HARDWARE TYPE = DATA TRANSFER
879     NAME = S1/TD/LGSD 2
880     BITS PER CYCLE = 1 BITS
881     BUS CONNECTIONS =
882         S1/LGSD 2
883         S1/SD/LGSD 2
884
885     SOFTWARE TYPE = MODULE
886     * LGSD 2
887     NAME = LGSD ACTIVITY 2
888     CONCURRENT EXECUTION = YES
889     ITERATION PERIOD = LGSD
890     RESIDENT PROCESSORS =
891         S1/LGSD 2
892     INSTRUCTION LIST =
893     EXECUTE A TOTAL OF ; 1 MESSAGE
894
895     ***** STATION LGSD 3 # 1
896     * INDIVIDUAL 1.500 -1.500 15
897     HARDWARE TYPE = PROCESSING
898     NAME = S1/LGSD 3
899     LOCATION = 113.386 9.354
900     STYLE/COLOR = 1 3
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```

901     BASIC CYCLE TIME = 0. MICROSEC
902     INPUT CONTROLLER = YES
903     INSTRUCTION REPERTOIRE =
904     INSTRUCTION TYPE = PROCESSING
905     NAME ; NO/OP
906     TIME ; 0 CYCLES
907     INSTRUCTION TYPE = MESSAGE
908     NAME ; MESSAGE
909     MESSAGE ; REQUEST FROM SERVER
910     LENGTH ; 200 BITS
911     INHIBIT MESSAGE TO SELF ; YES
912     DESTINATION PROCESSOR ; R11/FILE SERVER
913     QUEUE FLAG ; YES
914
915     HARDWARE TYPE = STORAGE
916     NAME = S1/SD/LGSD 3
917     CAPACITY = 1090519040. BITS
918     BITS PER WORD = 4000. BITS
919     WORD ACCESS TIME = 48.83 MICROSEC
920     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
921     NUMBER OF PORTS = 1
922
923     HARDWARE TYPE = DATA TRANSFER

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924 NAME = S1/TD/LGSD 3
925 BITS PER CYCLE = 1 BITS
926 BUS CONNECTIONS =
927 S1/LGSD 3
928 S1/SD/LGSD 3
929
930 SOFTWARE TYPE = MODULE
931 * LGSD 3
932 NAME = LGSD ACTIVITY 3
933 CONCURRENT EXECUTION = YES
934 ITERATION PERIOD = LGSD
935 RESIDENT PROCESSORS =
936 S1/LGSD 3
937 INSTRUCTION LIST =
938 EXECUTE A TOTAL OF ; 1 MESSAGE
939
940 ***** STATION LGSD 4 # 1
941 * INDIVIDUAL 1.500 -1.500 15
942 HARDWARE TYPE = PROCESSING
943 NAME = S1/LGSD 4
944 LOCATION = 133.386 9.354
945 STYLE/COLOR = 1 3
946 BASIC CYCLE TIME = 0. MICROSEC
947 INPUT CONTROLLER = YES
948 INSTRUCTION REPERTOIRE =
949 INSTRUCTION TYPE = PROCESSING
950 NAME ; NO/OP
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951 TIME ; 0 CYCLES
952 INSTRUCTION TYPE = MESSAGE
953 NAME ; MESSAGE
954 MESSAGE ; REQUEST FROM SERVER
955 LENGTH ; 200 BITS
956 INHIBIT MESSAGE TO SELF ; YES
957 DESTINATION PROCESSOR ; R12/FILE SERVER
958 QUEUE FLAG ; YES
959
960 HARDWARE TYPE = STORAGE
961 NAME = S1/SD/LGSD 4
962 CAPACITY = 1090519040. BITS
963 BITS PER WORD = 4000. BITS
964 WORD ACCESS TIME = 48.83 MICROSEC
965 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
966 NUMBER OF PORTS = 1
967
968 HARDWARE TYPE = DATA TRANSFER
969 NAME = S1/TD/LGSD 4
970 BITS PER CYCLE = 1 BITS
971 BUS CONNECTIONS =
972 S1/LGSD 4
973 S1/SD/LGSD 4
974
975 SOFTWARE TYPE = MODULE
976 * LGSD 4
977 NAME = LGSD ACTIVITY 4
978 CONCURRENT EXECUTION = YES
979 ITERATION PERIOD = LGSD
980 RESIDENT PROCESSORS =
981 S1/LGSD 4
982 INSTRUCTION LIST =
983 EXECUTE A TOTAL OF ; 1 MESSAGE
984
985 ***** STATION LGSD 5 # 1
986 * INDIVIDUAL 1.500 -1.500 15

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```

987  HARDWARE TYPE = PROCESSING
988  NAME = S1/LGSD 5
989  LOCATION = 153.386 9.354
990  STYLE/COLOR = 1 3
991  BASIC CYCLE TIME = 0. MICROSEC
992  INPUT CONTROLLER = YES
993  INSTRUCTION REPERTOIRE =
994  INSTRUCTION TYPE = PROCESSING
995  NAME ; NO/OP
996  TIME ; 0 CYCLES
997  INSTRUCTION TYPE = MESSAGE
998  NAME ; MESSAGE
999  MESSAGE ; REQUEST FROM SERVER
1000 LENGTH ; 200 BITS
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1001      INHIBIT MESSAGE TO SELF ; YES
1002      DESTINATION PROCESSOR ; R13/FILE SERVER
1003      QUEUE FLAG ; YES
1004
1005  HARDWARE TYPE = STORAGE
1006  NAME = S1/SD/LGSD 5
1007  CAPACITY = 1090519040. BITS
1008  BITS PER WORD = 4000. BITS
1009  WORD ACCESS TIME = 48.83 MICROSEC
1010  OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1011  NUMBER OF PORTS = 1
1012
1013  HARDWARE TYPE = DATA TRANSFER
1014  NAME = S1/TD/LGSD 5
1015  BITS PER CYCLE = 1 BITS
1016  BUS CONNECTIONS =
1017  S1/LGSD 5
1018  S1/SD/LGSD 5
1019
1020  SOFTWARE TYPE = MODULE
1021  * LGSD 5
1022  NAME = LGSD ACTIVITY 5
1023  CONCURRENT EXECUTION = YES
1024  ITERATION PERIOD = LGSD
1025  RESIDENT PROCESSORS =
1026  S1/LGSD 5
1027  INSTRUCTION LIST =
1028  EXECUTE A TOTAL OF ; 1 MESSAGE
1029
1030  ***** STATION LGSD 6 # 1
1031  * INDIVIDUAL 1.500 -1.500 15
1032  HARDWARE TYPE = PROCESSING
1033  NAME = S1/LGSD 6
1034  LOCATION = 173.386 9.354
1035  STYLE/COLOR = 1 3
1036  BASIC CYCLE TIME = 0. MICROSEC
1037  INPUT CONTROLLER = YES
1038  INSTRUCTION REPERTOIRE =
1039  INSTRUCTION TYPE = PROCESSING
1040  NAME ; NO/OP
1041  TIME ; 0 CYCLES
1042  INSTRUCTION TYPE = MESSAGE
1043  NAME ; MESSAGE
1044  MESSAGE ; REQUEST FROM SERVER
1045  LENGTH ; 200 BITS
1046  INHIBIT MESSAGE TO SELF ; YES
1047  DESTINATION PROCESSOR ; R14/FILE SERVER
1048  QUEUE FLAG ; YES
1049

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1051 NAME = S1/SD/LGSD 6
1052 CAPACITY = 1090519040. BITS
1053 BITS PER WORD = 4000. BITS
1054 WORD ACCESS TIME = 48.83 MICROSEC
1055 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1056 NUMBER OF PORTS = 1
1057
1058 HARDWARE TYPE = DATA TRANSFER
1059 NAME = S1/TD/LGSD 6
1060 BITS PER CYCLE = 1 BITS
1061 BUS CONNECTIONS =
1062 S1/LGSD 6
1063 S1/SD/LGSD 6
1064
1065 SOFTWARE TYPE = MODULE
1066 * LGSD 6
1067 NAME = LSGD ACTIVITY 6
1068 CONCURRENT EXECUTION = YES
1069 ITERATION PERIOD = LGSD
1070 RESIDENT PROCESSORS =
1071 S1/LGSD 6
1072 INSTRUCTION LIST =
1073 EXECUTE A TOTAL OF ; 1 MESSAGE
1074
1075 ***** STATION LGSP 2 # 1
1076 * INDIVIDUAL 1.500 -1.500 15
1077 HARDWARE TYPE = PROCESSING
1078 NAME = S1/LGSP 2
1079 LOCATION = 280.150 3.053
1080 STYLE/COLOR = 1 3
1081 BASIC CYCLE TIME = 0. MICROSEC
1082 INPUT CONTROLLER = YES
1083 INSTRUCTION REPERTOIRE =
1084 INSTRUCTION TYPE = PROCESSING
1085 NAME ; NO/OP
1086 TIME ; 0 CYCLES
1087 INSTRUCTION TYPE = MESSAGE
1088 NAME ; MESSAGE
1089 MESSAGE ; REQUEST FROM SERVER
1090 LENGTH ; 200 BITS
1091 INHIBIT MESSAGE TO SELF ; YES
1092 DESTINATION PROCESSOR ; S1/FILE SERVER
1093 QUEUE FLAG ; YES
1094
1095 HARDWARE TYPE = STORAGE
1096 NAME = S1/SD/LGSP 2
1097 CAPACITY = 1090519040. BITS
1098 BITS PER WORD = 4000. BITS
1099 WORD ACCESS TIME = 48.83 MICROSEC
1100 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

1101 NUMBER OF PORTS = 1
1102
1103 HARDWARE TYPE = DATA TRANSFER
1104 NAME = S1/TD/LGSP 2
1105 BITS PER CYCLE = 1 BITS
1106 BUS CONNECTIONS =
1107 S1/LGSP 2


```

1108      S1/SD/LGSP 2
1109
1110  SOFTWARE TYPE = MODULE
1111  * LGSP 2
1112    NAME = LGSP ACTIVITY 2
1113    CONCURRENT EXECUTION = YES
1114    ITERATION PERIOD = LGSP
1115    RESIDENT PROCESSORS =
1116      S1/LGSP 2
1117    INSTRUCTION LIST =
1118      EXECUTE A TOTAL OF ; 1 MESSAGE
1119
1120  ***** STATION LGSP 3 # 1
1121  * INDIVIDUAL 1.500 -1.500 15
1122  HARDWARE TYPE = PROCESSING
1123    NAME = S1/LGSP 3
1124      LOCATION = 300.150 3.053
1125      STYLE/COLOR = 1 3
1126      BASIC CYCLE TIME = 0. MICROSEC
1127      INPUT CONTROLLER = YES
1128      INSTRUCTION REPERTOIRE =
1129      INSTRUCTION TYPE = PROCESSING
1130      NAME ; NO/OP
1131      TIME ; 0 CYCLES
1132      INSTRUCTION TYPE = MESSAGE
1133      NAME ; MESSAGE
1134      MESSAGE ; REQUEST FROM SERVER
1135      LENGTH ; 200 BITS
1136      INHIBIT MESSAGE TO SELF ; YES
1137      DESTINATION PROCESSOR ; S1/FILE SERVER
1138      QUEUE FLAG ; YES
1139
1140  HARDWARE TYPE = STORAGE
1141    NAME = S1/SD/LGSP 3
1142      CAPACITY = 1090519040. BITS
1143      BITS PER WORD = 4000. BITS
1144      WORD ACCESS TIME = 48.83 MICROSEC
1145      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1146      NUMBER OF PORTS = 1
1147
1148  HARDWARE TYPE = DATA TRANSFER
1149    NAME = S1/TD/LGSP 3
1150      BITS PER CYCLE = 1 BITS
1151
1152  CACI LNET RELEASE 4.01 07/28/1993 07:22:55 PAGE 24

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```

1151      BUS CONNECTIONS =
1152      S1/LGSP 3
1153      S1/SD/LGSP 3
1154
1155  SOFTWARE TYPE = MODULE
1156  * LGSP 3
1157    NAME = LGSP ACTIVITY 3
1158    CONCURRENT EXECUTION = YES
1159    ITERATION PERIOD = LGSP
1160    RESIDENT PROCESSORS =
1161      S1/LGSP 3
1162    INSTRUCTION LIST =
1163      EXECUTE A TOTAL OF ; 1 MESSAGE
1164
1165  ***** STATION LGSP 4 # 1
1166  * INDIVIDUAL 1.500 -1.500 15
1167  HARDWARE TYPE = PROCESSING
1168    NAME = S1/LGSP 4
1169      LOCATION = 320.150 3.053
1170      STYLE/COLOR = 1 3

```

```

1171 BASIC CYCLE TIME = 0. MICROSEC
1172 INPUT CONTROLLER = YES
1173 INSTRUCTION REPERTOIRE =
1174 INSTRUCTION TYPE = PROCESSING
1175 NAME ; NO/OP
1176 TIME ; 0 CYCLES
1177 INSTRUCTION TYPE = MESSAGE
1178 NAME ; MESSAGE
1179 MESSAGE ; REQUEST FROM SERVER
1180 LENGTH ; 200 BITS
1181 INHIBIT MESSAGE TO SELF ; YES
1182 DESTINATION PROCESSOR ; S1/FILE SERVER
1183 QUEUE FLAG ; YES
1184
1185 HARDWARE TYPE = STORAGE
1186 NAME = S1/SD/LGSP 4
1187 CAPACITY = 1090519040. BITS
1188 BITS PER WORD = 4000. BITS
1189 WORD ACCESS TIME = 48.83 MICROSEC
1190 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1191 NUMBER OF PORTS = 1
1192
1193 HARDWARE TYPE = DATA TRANSFER
1194 NAME = S1/TD/LGSP 4
1195 BITS PER CYCLE = 1 BITS
1196 BUS CONNECTIONS =
1197 S1/LGSP 4
1198 S1/SD/LGSP 4
1199
1200 SOFTWARE TYPE = MODULE
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```

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1201 * LGSP 4
1202 NAME = LGSP ACTIVITY 4
1203 CONCURRENT EXECUTION = YES
1204 ITERATION PERIOD = LGSP
1205 RESIDENT PROCESSORS =
1206 S1/LGSP 4
1207 INSTRUCTION LIST =
1208 EXECUTE A TOTAL OF ; 1 MESSAGE
1209
1210 ***** STATION LGSP 5 # 1
1211 * INDIVIDUAL 1.500 -1.500 15
1212 HARDWARE TYPE = PROCESSING
1213 NAME = S1/LGSP 5
1214 LOCATION = 340.150 3.053
1215 STYLE/COLOR = 1 3
1216 BASIC CYCLE TIME = 0. MICROSEC
1217 INPUT CONTROLLER = YES
1218 INSTRUCTION REPERTOIRE =
1219 INSTRUCTION TYPE = PROCESSING
1220 NAME ; NO/OP
1221 TIME ; 0 CYCLES
1222 INSTRUCTION TYPE = MESSAGE
1223 NAME ; MESSAGE
1224 MESSAGE ; REQUEST FROM SERVER
1225 LENGTH ; 200 BITS
1226 INHIBIT MESSAGE TO SELF ; YES
1227 DESTINATION PROCESSOR ; S1/FILE SERVER
1228 QUEUE FLAG ; YES
1229
1230 HARDWARE TYPE = STORAGE
1231 NAME = S1/SD/LGSP 5
1232 CAPACITY = 1090519040. BITS
1233 BITS PER WORD = 4000. BITS

```

```

1234     WORD ACCESS TIME = 48.83 MICROSEC
1235     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1236     NUMBER OF PORTS = 1
1237
1238     HARDWARE TYPE = DATA TRANSFER
1239     NAME = S1/TD/LGSP 5
1240     BITS PER CYCLE = 1 BITS
1241     BUS CONNECTIONS =
1242     S1/LGSP 5
1243     S1/SD/LGSP 5
1244
1245     SOFTWARE TYPE = MODULE
1246     * LGSP 5
1247     NAME = LGSP ACTIVITY 5
1248     CONCURRENT EXECUTION = YES
1249     ITERATION PERIOD = LGSP
1250     RESIDENT PROCESSORS =
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```

1251     S1/LGSP 5
1252     INSTRUCTION LIST =
1253     EXECUTE A TOTAL OF ; 1 MESSAGE
1254
1255     ***** STATION LGSP 6 # 1
1256     * INDIVIDUAL 1.500 -1.500 15
1257     HARDWARE TYPE = PROCESSING
1258     NAME = S1/LGSP 6
1259     LOCATION = 360.150 3.053
1260     STYLE/COLOR = 1 3
1261     BASIC CYCLE TIME = 0. MICROSEC
1262     INPUT CONTROLLER = YES
1263     INSTRUCTION REPERTOIRE =
1264     INSTRUCTION TYPE = PROCESSING
1265     NAME ; NO/OP
1266     TIME ; 0 CYCLES
1267     INSTRUCTION TYPE = MESSAGE
1268     NAME ; MESSAGE
1269     MESSAGE ; REQUEST FROM SERVER
1270     LENGTH ; 200 BITS
1271     INHIBIT MESSAGE TO SELF ; YES
1272     DESTINATION PROCESSOR ; S1/FILE SERVER
1273     QUEUE FLAG ; YES
1274
1275     HARDWARE TYPE = STORAGE
1276     NAME = S1/SD/LGSP 6
1277     CAPACITY = 1090519040. BITS
1278     BITS PER WORD = 4000. BITS
1279     WORD ACCESS TIME = 48.83 MICROSEC
1280     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1281     NUMBER OF PORTS = 1
1282
1283     HARDWARE TYPE = DATA TRANSFER
1284     NAME = S1/TD/LGSP 6
1285     BITS PER CYCLE = 1 BITS
1286     BUS CONNECTIONS =
1287     S1/LGSP 6
1288     S1/SD/LGSP 6
1289
1290     SOFTWARE TYPE = MODULE
1291     * LGSP 6
1292     NAME = LGSP ACTIVITY 6
1293     CONCURRENT EXECUTION = YES
1294     ITERATION PERIOD = LGSP
1295     RESIDENT PROCESSORS =
1296     S1/LGSP 6

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1297 INSTRUCTION LIST =
1298 EXECUTE A TOTAL OF ; 1 MESSAGE
1299
1300 ***** STATION LGSM 2 # 1
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

1301 * INDIVIDUAL 1.500 -1.500 15
1302 HARDWARE TYPE = PROCESSING
1303 NAME = S1/LGSM 2
1304 LOCATION = 90.036 94.349
1305 STYLE/COLOR = 1 3
1306 BASIC CYCLE TIME = 0. MICROSEC
1307 INPUT CONTROLLER = YES
1308 INSTRUCTION REPERTOIRE =
1309 INSTRUCTION TYPE = PROCESSING
1310 NAME ; NO/OP
1311 TIME ; 0 CYCLES
1312 INSTRUCTION TYPE = MESSAGE
1313 NAME ; MESSAGE
1314 MESSAGE ; REQUEST FROM SERVER
1315 LENGTH ; 200 BITS
1316 INHIBIT MESSAGE TO SELF ; YES
1317 DESTINATION PROCESSOR ; R20/FILE SERVER
1318 QUEUE FLAG ; YES
1319
1320 HARDWARE TYPE = STORAGE
1321 NAME = S1/SD/LGSM 2
1322 CAPACITY = 1090519040. BITS
1323 BITS PER WORD = 4000. BITS
1324 WORD ACCESS TIME = 48.83 MICROSEC
1325 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1326 NUMBER OF PORTS = 1
1327
1328 HARDWARE TYPE = DATA TRANSFER
1329 NAME = S1/TD/LGSM 2
1330 BITS PER CYCLE = 1 BITS
1331 BUS CONNECTIONS =
1332 S1/LGSM 2
1333 S1/SD/LGSM 2
1334
1335 SOFTWARE TYPE = MODULE
1336 * LGSM 2
1337 NAME = LGSM ACTIVITY 2
1338 CONCURRENT EXECUTION = YES
1339 ITERATION PERIOD = LGSM
1340 RESIDENT PROCESSORS =
1341 S1/LGSM 2
1342 INSTRUCTION LIST =
1343 EXECUTE A TOTAL OF ; 1 MESSAGE
1344
1345 ***** STATION LGSM 3 # 1
1346 * INDIVIDUAL 1.500 -1.500 15
1347 HARDWARE TYPE = PROCESSING
1348 NAME = S1/LGSM 3
1349 LOCATION = 110.036 94.349
1350 STYLE/COLOR = 1 3
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

1351 BASIC CYCLE TIME = 0. MICROSEC
1352 INPUT CONTROLLER = YES
1353 INSTRUCTION REPERTOIRE =
1354 INSTRUCTION TYPE = PROCESSING

```

1355     NAME ; NO/OP
1356     TIME ; 0 CYCLES
1357     INSTRUCTION TYPE = MESSAGE
1358     NAME ; MESSAGE
1359     MESSAGE ; REQUEST FROM SERVER
1360     LENGTH ; 200 BITS
1361     INHIBIT MESSAGE TO SELF ; YES
1362     DESTINATION PROCESSOR ; R21/FILE SERVER
1363     QUEUE FLAG ; YES
1364
1365     HARDWARE TYPE = STORAGE
1366     NAME = S1/SD/LGSM 3
1367     CAPACITY = 1090519040. BITS
1368     BITS PER WORD = 4000. BITS
1369     WORD ACCESS TIME = 48.83 MICROSEC
1370     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1371     NUMBER OF PORTS = 1
1372
1373     HARDWARE TYPE = DATA TRANSFER
1374     NAME = S1/TD/LGSM 3
1375     BITS PER CYCLE = 1 BITS
1376     BUS CONNECTIONS =
1377         S1/LGSM 3
1378         S1/SD/LGSM 3
1379
1380     SOFTWARE TYPE = MODULE
1381     * LGSM 3
1382     NAME = LGSM ACTIVITY 3
1383     CONCURRENT EXECUTION = YES
1384     ITERATION PERIOD = LGSM
1385     RESIDENT PROCESSORS =
1386         S1/LGSM 3
1387     INSTRUCTION LIST =
1388         EXECUTE A TOTAL OF ; 1 MESSAGE
1389
1390     ***** STATION LGSM 4 # 1
1391     * INDIVIDUAL 1.500 -1.500 15
1392     HARDWARE TYPE = PROCESSING
1393     NAME = S1/LGSM 4
1394     LOCATION = 130.036 94.349
1395     STYLE/COLOR = 1 3
1396     BASIC CYCLE TIME = 0. MICROSEC
1397     INPUT CONTROLLER = YES
1398     INSTRUCTION REPERTOIRE =
1399     INSTRUCTION TYPE = PROCESSING
1400     NAME ; NO/OP

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1401     TIME ; 0 CYCLES
1402     INSTRUCTION TYPE = MESSAGE
1403     NAME ; MESSAGE
1404     MESSAGE ; REQUEST FROM SERVER
1405     LENGTH ; 200 BITS
1406     INHIBIT MESSAGE TO SELF ; YES
1407     DESTINATION PROCESSOR ; R22/FILE SERVER
1408     QUEUE FLAG ; YES
1409
1410     HARDWARE TYPE = STORAGE
1411     NAME = S1/SD/LGSM 4
1412     CAPACITY = 1090519040. BITS
1413     BITS PER WORD = 4000. BITS
1414     WORD ACCESS TIME = 48.83 MICROSEC
1415     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1416     NUMBER OF PORTS = 1
1417

```

```

1418  HARDWARE TYPE = DATA TRANSFER
1419      NAME = S1/TD/LGSM 4
1420      BITS PER CYCLE = 1 BITS
1421      BUS CONNECTIONS =
1422          S1/LGSM 4
1423          S1/SD/LGSM 4
1424
1425  SOFTWARE TYPE = MODULE
1426  * LGSM 4
1427      NAME = LGSM ACTIVITY 4
1428      CONCURRENT EXECUTION = YES
1429      ITERATION PERIOD = LGSM
1430      RESIDENT PROCESSORS =
1431          S1/LGSM 4
1432      INSTRUCTION LIST =
1433          EXECUTE A TOTAL OF ; 1 MESSAGE
1434
1435  ***** STATION LGSM 5 # 1
1436  * INDIVIDUAL 1.500 -1.500 15
1437  HARDWARE TYPE = PROCESSING
1438      NAME = S1/LGSM 5
1439          LOCATION = 150.036 94.349
1440          STYLE/COLOF = 1 3
1441          BASIC CYCL; TIME = 0. MICROSEC
1442          INPUT CONTROLLER = YES
1443          INSTRUCTION REPERTOIRE =
1444              INSTRUCTION TYPE = PROCESSING
1445              NAME ; NO/OP
1446              TIME ; 0 CYCLES
1447              INSTRUCTION TYPE = MESSAGE
1448              NAME ; MESSAGE
1449              MESSAGE ; REQUEST FROM SERVER
1450              LENGTH ; 200 BITS
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```

1451      INHIBIT MESSAGE TO SELF ; YES
1452      DESTINATION PROCESSOR ; R23/FILE SERVER
1453      QUEUE FLAG ; YES
1454
1455  HARDWARE TYPE = STORAGE
1456      NAME = S1/SD/LGSM 5
1457          CAPACITY = 1090519040. BITS
1458          BITS PER WORD = 4000. BITS
1459          WORD ACCESS TIME = 48.83 MICROSEC
1460          OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1461          NUMBER OF PORTS = 1
1462
1463  HARDWARE TYPE = DATA TRANSFER
1464      NAME = S1/TD/LGSM 5
1465      BITS PER CYCLE = 1 BITS
1466      BUS CONNECTIONS =
1467          S1/LGSM 5
1468          S1/SD/LGSM 5
1469
1470  SOFTWARE TYPE = MODULE
1471  * LGSM 5
1472      NAME = LGSM ACTIVITY 5
1473      CONCURRENT EXECUTION = YES
1474      ITERATION PERIOD = LGSM
1475      RESIDENT PROCESSORS =
1476          S1/LGSM 5
1477      INSTRUCTION LIST =
1478          EXECUTE A TOTAL OF ; 1 MESSAGE
1479
1480  ***** STATION LGSM 6 # 1

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```

1481 * INDIVIDUAL 1.500 -1.500 15
1482 HARDWARE TYPE = PROCESSING
1483 NAME = S1/LGSM 6
1484 LOCATION = 170.036 94.349
1485 STYLE/COLOR = 1 3
1486 BASIC CYCLE TIME = 0. MICROSEC
1487 INPUT CONTROLLER = YES
1488 INSTRUCTION REPERTOIRE =
1489 INSTRUCTION TYPE = PROCESSING
1490 NAME ; NO/OP
1491 TIME ; 0 CYCLES
1492 INSTRUCTION TYPE = MESSAGE
1493 NAME ; MESSAGE
1494 MESSAGE ; REQUEST FROM SERVER
1495 LENGTH ; 200 BITS
1496 INHIBIT MESSAGE TO SELF ; YES
1497 DESTINATION PROCESSOR ; R24/FILE SERVER
1498 QUEUE FLAG ; YES
1499
1500 HARDWARE TYPE = STORAGE
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```

1501 NAME = S1/SD/LGSM 6
1502 CAPACITY = 1090519040. BITS
1503 BITS PER WORD = 4000. BITS
1504 WORD ACCESS TIME = 48.83 MICROSEC
1505 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1506 NUMBER OF PORTS = 1
1507
1508 HARDWARE TYPE = DATA TRANSFER
1509 NAME = S1/TD/LGSM 6
1510 BITS PER CYCLE = 1 BITS
1511 BUS CONNECTIONS =
1512 S1/LGSM 6
1513 S1/SD/LGSM 6
1514
1515 SOFTWARE TYPE = MODULE
1516 * LGSM 6
1517 NAME = LGSM ACTIVITY 6
1518 CONCURRENT EXECUTION = YES
1519 ITERATION PERIOD = LGSM
1520 RESIDENT PROCESSORS =
1521 S1/LGSM 6
1522 INSTRUCTION LIST =
1523 EXECUTE A TOTAL OF ; 1 MESSAGE
1524
1525 ***** STATION LGSC 2 # 1
1526 * INDIVIDUAL 1.500 -1.500 15
1527 HARDWARE TYPE = PROCESSING
1528 NAME = S1/LGSC 2
1529 LOCATION = 297.319 93.843
1530 STYLE/COLOR = 1 3
1531 BASIC CYCLE TIME = 0. MICROSEC
1532 INPUT CONTROLLER = YES
1533 INSTRUCTION REPERTOIRE =
1534 INSTRUCTION TYPE = PROCESSING
1535 NAME ; NO/OP
1536 TIME ; 0 CYCLES
1537 INSTRUCTION TYPE = MESSAGE
1538 NAME ; MESSAGE
1539 MESSAGE ; REQUEST FROM SERVER
1540 LENGTH ; 200 BITS
1541 INHIBIT MESSAGE TO SELF ; YES
1542 DESTINATION PROCESSOR ; R25/FILE SERVER
1543 QUEUE FLAG ; YES

```

1544
1545 HARDWARE TYPE = STORAGE
1546 NAME = S1/SD/LGSC 2
1547 CAPACITY = 1090519040. BITS
1548 BITS PER WORD = 4000. BITS
1549 WORD ACCESS TIME = 48.83 MICROSEC
1550 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

1551 NUMBER OF PORTS = 1
1552
1553 HARDWARE TYPE = DATA TRANSFER
1554 NAME = S1/TD/LGSC 2
1555 BITS PER CYCLE = 1 BITS
1556 BUS CONNECTIONS =
1557 S1/LGSC 2
1558 S1/SD/LGSC 2
1559
1560 SOFTWARE TYPE = MODULE
1561 * LGSC 2
1562 NAME = LGSC ACTIVITY 2
1563 CONCURRENT EXECUTION = YES
1564 ITERATION PERIOD = LGSC
1565 RESIDENT PROCESSORS =
1566 S1/LGSC 2
1567 INSTRUCTION LIST =
1568 EXECUTE A TOTAL OF ; 1 MESSAGE
1569
1570 ***** STATION LGSC 3 # 1
1571 * INDIVIDUAL 1.500 -1.500 15
1572 HARDWARE TYPE = PROCESSING
1573 NAME = S1/LGSC 3
1574 LOCATION = 317.319 93.843
1575 STYLE/COLOR = 1 3
1576 BASIC CYCLE TIME = 0. MICROSEC
1577 INPUT CONTROLLER = YES
1578 INSTRUCTION REPERTOIRE =
1579 INSTRUCTION TYPE = PROCESSING
1580 NAME ; NO/OP
1581 TIME ; 0 CYCLES
1582 INSTRUCTION TYPE = MESSAGE
1583 NAME ; MESSAGE
1584 MESSAGE ; REQUEST FROM SERVER
1585 LENGTH ; 200 BITS
1586 INHIBIT MESSAGE TO SELF ; YES
1587 DESTINATION PROCESSOR ; R26/FILE SERVER
1588 QUEUE FLAG ; YES
1589
1590 HARDWARE TYPE = STORAGE
1591 NAME = S1/SD/LGSC 3
1592 CAPACITY = 1090519040. BITS
1593 BITS PER WORD = 4000. BITS
1594 WORD ACCESS TIME = 48.83 MICROSEC
1595 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1596 NUMBER OF PORTS = 1
1597
1598 HARDWARE TYPE = DATA TRANSFER
1599 NAME = S1/TD/LGSC 3
1600 BITS PER CYCLE = 1 BITS
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1601 BUS CONNECTIONS =


```

1602      S1/LGSC 3
1603      S1/SD/LGSC 3
1604
1605 SOFTWARE TYPE = MODULE
1606 * LGSC 3
1607     NAME = LGSC ACTIVITY 3
1608     CONCURRENT EXECUTION = YES
1609     ITERATION PERIOD = LGSC
1610     RESIDENT PROCESSORS =
1611     S1/LGSC 3
1612     INSTRUCTION LIST =
1613     EXECUTE A TOTAL OF ; 1 MESSAGE
1614
1615 ***** STATION LGSC 4 # 1
1616 * INDIVIDUAL 1.500 -1.500 15
1617 HARDWARE TYPE = PROCESSING
1618     NAME = S1/LGSC 4
1619     LOCATION = 337.319 93.843
1620     STYLE/COLOR = 1 3
1621     BASIC CYCLE TIME = 0. MICROSEC
1622     INPUT CONTROLLER = YES
1623     INSTRUCTION REPERTOIRE =
1624     INSTRUCTION TYPE = PROCESSING
1625     NAME ; NO/OP
1626     TIME ; 0 CYCLES
1627     INSTRUCTION TYPE = MESSAGE
1628     NAME ; MESSAGE
1629     MESSAGE ; REQUEST FROM SERVER
1630     LENGTH ; 200 BITS
1631     INHIBIT MESSAGE TO SELF ; YES
1632     DESTINATION PROCESSOR ; R27/FILE SERVER
1633     QUEUE FLAG ; YES
1634
1635 HARDWARE TYPE = STORAGE
1636     NAME = S1/SD/LGSC 4
1637     CAPACITY = 1090519040. BITS
1638     BITS PER WORD = 4000. BITS
1639     WORD ACCESS TIME = 48.83 MICROSEC
1640     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1641     NUMBER OF PORTS = 1
1642
1643 HARDWARE TYPE = DATA TRANSFER
1644     NAME = S1/TD/LGSC 4
1645     BITS PER CYCLE = 1 BITS
1646     BUS CONNECTIONS =
1647     S1/LGSC 4
1648     S1/SD/LGSC 4
1649
1650 SOFTWARE TYPE = MODULE
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```

1651 * LGSC 4
1652     NAME = LGSC ACTIVITY 4
1653     CONCURRENT EXECUTION = YES
1654     ITERATION PERIOD = LGSC
1655     RESIDENT PROCESSORS =
1656     S1/LGSC 4
1657     INSTRUCTION LIST =
1658     EXECUTE A TOTAL OF ; 1 MESSAGE
1659
1660 ***** STATION LGSC 5 # 1
1661 * INDIVIDUAL 1.500 -1.500 15
1662 HARDWARE TYPE = PROCESSING
1663     NAME = S1/LGSC 5
1664     LOCATION = 357.319 93.843

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```

1665     STYLE/COLOR = 1 3
1666     BASIC CYCLE TIME = 0. MICROSEC
1667     INPUT CONTROLLER = YES
1668     INSTRUCTION REPERTOIRE =
1669         INSTRUCTION TYPE = PROCESSING
1670         NAME ; NO/OP
1671         TIME ; 0 CYCLES
1672     INSTRUCTION TYPE = MESSAGE
1673         NAME ; MESSAGE
1674         MESSAGE ; REQUEST FROM SERVER
1675         LENGTH ; 200 BITS
1676         INHIBIT MESSAGE TO SELF ; YES
1677         DESTINATION PROCESSOR ; R28/FILE SERVER
1678         QUEUE FLAG ; YES
1679
1680     HARDWARE TYPE = STORAGE
1681         NAME = S1/SD/LGSC 5
1682         CAPACITY = 1090519040. BITS
1683         BITS PER WORD = 4000. BITS
1684         WORD ACCESS TIME = 48.83 MICROSEC
1685         OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1686         NUMBER OF PORTS = 1
1687
1688     HARDWARE TYPE = DATA TRANSFER
1689         NAME = S1/TD/LGSC 5
1690         BITS PER CYCLE = 1 BITS
1691         BUS CONNECTIONS =
1692             S1/LGSC 5
1693             S1/SD/LGSC 5
1694
1695     SOFTWARE TYPE = MODULE
1696     * LGSC 5
1697         NAME = LGSC ACTIVITY 5
1698         CONCURRENT EXECUTION = YES
1699         ITERATION PERIOD = LGSC
1700         RESIDENT PROCESSORS =

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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

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1701     S1/LGSC 5
1702     INSTRUCTION LIST =
1703         EXECUTE A TOTAL OF ; 1 MESSAGE
1704
1705     ***** STATION LGSC 6 # 1
1706     * INDIVIDUAL 1.500 -1.500 15
1707     HARDWARE TYPE = PROCESSING
1708         NAME = S1/LGSC 6
1709         LOCATION = 377.319 93.843
1710         STYLE/COLOR = 1 3
1711         BASIC CYCLE TIME = 0. MICROSEC
1712         INPUT CONTROLLER = YES
1713         INSTRUCTION REPERTOIRE =
1714             INSTRUCTION TYPE = PROCESSING
1715             NAME ; NO/OP
1716             TIME ; 0 CYCLES
1717         INSTRUCTION TYPE = MESSAGE
1718             NAME ; MESSAGE
1719             MESSAGE ; REQUEST FROM SERVER
1720             LENGTH ; 200 BITS
1721             INHIBIT MESSAGE TO SELF ; YES
1722             DESTINATION PROCESSOR ; R29/FILE SERVER
1723             QUEUE FLAG ; YES
1724
1725     HARDWARE TYPE = STORAGE
1726         NAME = S1/SD/LGSC 6
1727         CAPACITY = 1090519040. BITS

```

```

1728     BITS PER WORD =          4000. BITS
1729     WORD ACCESS TIME =  48.83 MICROSEC
1730     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1731     NUMBER OF PORTS = 1
1732
1733     HARDWARE TYPE = DATA TRANSFER
1734     NAME = S1/TD/LGSC 6
1735     BITS PER CYCLE = 1 BITS
1736     BUS CONNECTIONS =
1737         S1/LGSC 6
1738         S1/SD/LGSC 6
1739
1740     SOFTWARE TYPE = MODULE
1741     * LGSC 6
1742     NAME = LGSC ACTIVITY 6
1743     CONCURRENT EXECUTION = YES
1744     ITERATION PERIOD = LGSC
1745     RESIDENT PROCESSORS =
1746         S1/LGSC 6
1747     INSTRUCTION LIST =
1748         EXECUTE A TOTAL OF ; 1 MESSAGE
1749
1750     * MESSAGE REMOVAL MODULES

```

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```

1751     SOFTWARE TYPE = MODULE
1752     NAME = MR/SEND REPLY TO NODE
1753     CONCURRENT EXECUTION = YES
1754     ALLOWED PROCESSORS =
1755         S1/LGSD1
1756         S1/LGSP1
1757         S1/LGSM1
1758         S1/LGSC1
1759         S1/FMFS
1760         S1/DOMR
1761         S1/LGSD 2
1762         S1/LGSD 3
1763         S1/LGSD 4
1764         S1/LGSD 5
1765         S1/LGSD 6
1766         S1/LGSP 2
1767         S1/LGSP 3
1768         S1/LGSP 4
1769         S1/LGSP 5
1770         S1/LGSP 6
1771         S1/LGSM 2
1772         S1/LGSM 3
1773         S1/LGSM 4
1774         S1/LGSM 5
1775         S1/LGSM 6
1776         S1/LGSC 2
1777         S1/LGSC 3
1778         S1/LGSC 4
1779         S1/LGSC 5
1780         S1/LGSC 6
1781     REQUIRED MESSAGES =
1782         SEND REPLY TO NODE
1783     INSTRUCTION LIST =
1784         EXECUTE A TOTAL OF ; 1 NO/OP
1785     NAME = MR/NOISE
1786     CONCURRENT EXECUTION = YES
1787     ALLOWED PROCESSORS =
1788         S1/BASE TRAFFIC2
1789     REQUIRED MESSAGES =
1790         NOISE

```

```

1791     INSTRUCTION LIST =
1792     EXECUTE A TOTAL OF ; 1 NO/OP
1793
1794     ***** GATEWAYS
1795     *** BEGIN GATEWAY DEFINITION
1796     STATISTICAL DISTRIBUTIONS =
1797     NAME = GPSDF/GW1
1798     TYPE = MESSAGE.LINEAR
1799     A = 0.
1800     B = 0.

```

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```

1801     NAME = GMSDF/GW1
1802     TYPE = MESSAGE.LINEAR
1803     A = 1.0
1804     B = 0.
1805     HARDWARE TYPE = PROCESSING
1806     NAME = G1/GW1
1807     LOCATION = 171.374 24.654
1808     STYLE/COLOR = 1 5
1809     BASIC CYCLE TIME = 1 MIC
1810     INPUT CONTROLLER = YES
1811     INSTRUCTION REPERTOIRE =
1812     INSTRUCTION TYPE = PROCESSING
1813     NAME ; GATEWAY PROCESSING
1814     TIME ; GPSDF/GW1
1815     INSTRUCTION TYPE = MESSAGE
1816     NAME ; RETRANSMIT ANYTHING
1817     MESSAGE ; *
1818     DESTINATION PROCESSOR ; NEXT
1819     ECHO PE LIST = GW1 CLUSTER
1820     LENGTH ; GMSDF/GW1
1821     QUEUE FLAG ; YES
1822     RESUME FLAG ; NO
1823     SOFTWARE TYPE = MODULE
1824     NAME = G1/GW1/RETRANSMIT
1825     PRIORITY = 0
1826     INTERRUPTABILITY FLAG = NO
1827     CONCURRENT EXECUTION = YES
1828     ALLOWED PROCESSORS =
1829     G1/GW1
1830     REQUIRED MESSAGES =
1831     *
1832     INSTRUCTION LIST =
1833     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
1834     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
1835     HARDWARE TYPE = PROCESSING
1836     NAME = G2/GW1
1837     BASIC CYCLE TIME = 1 MIC
1838     INPUT CONTROLLER = YES
1839     INSTRUCTION REPERTOIRE =
1840     INSTRUCTION TYPE = PROCESSING
1841     NAME ; GATEWAY PROCESSING
1842     TIME ; GPSDF/GW1
1843     INSTRUCTION TYPE = MESSAGE
1844     NAME ; RETRANSMIT ANYTHING
1845     MESSAGE ; *
1846     DESTINATION PROCESSOR ; NEXT
1847     ECHO PE LIST = GW1 CLUSTER
1848     LENGTH ; GMSDF/GW1
1849     QUEUE FLAG ; YES
1850     RESUME FLAG ; NO

```

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```

1851 SOFTWARE TYPE = MODULE
1852 NAME = G2/GW1/RETRANSMIT
1853 PRIORITY = 0
1854 INTERRUPTABILITY FLAG = NO
1855 CONCURRENT EXECUTION = YES
1856 ALLOWED PROCESSORS =
1857 G2/GW1
1858 REQUIRED MESSAGES =
1859 *
1860 INSTRUCTION LIST =
1861 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
1862 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
1863 HARDWARE TYPE = ECHO PE LIST
1864 NAME = GW1 CLUSTER
1865 TD = RING1
1866 ECHO PE = G1/GW1
1867 TD = LGSD
1868 ECHO PE = G2/GW1
1869 *** END GATEWAY DEFINITION
1870 *** BEGIN GATEWAY DEFINITION
1871 STATISTICAL DISTRIBUTIONS =
1872 NAME = GPSDF/GATE TO LGSP
1873 TYPE = MESSAGE.LINEAR
1874 A = 0.
1875 B = 0.
1876 NAME = GMSDF/GATE TO LGSP
1877 TYPE = MESSAGE.LINEAR
1878 A = 1.0
1879 B = 0.
1880 HARDWARE TYPE = PROCESSING
1881 NAME = G1/GATE TO LGSP
1882 LOCATION = 250.519 23.641
1883 STYLE/COLOR = 1 6
1884 ICON = PC2.ICN
1885 BASIC CYCLE TIME = 1 MIC
1886 INPUT CONTROLLER = YES
1887 INSTRUCTION REPERTOIRE =
1888 INSTRUCTION TYPE = PROCESSING
1889 NAME ; GATEWAY PROCESSING
1890 TIME ; GPSDF/GATE TO LGSP
1891 INSTRUCTION TYPE = MESSAGE
1892 NAME ; RETRANSMIT ANYTHING
1893 MESSAGE ; *
1894 DESTINATION PROCESSOR ; NEXT
1895 ECHO PE LIST = GATE TO LGSP CLUSTER
1896 LENGTH ; GMSDF/GATE TO LGSP
1897 QUEUE FLAG ; YES
1898 RESUME FLAG ; NO
1899 SOFTWARE TYPE = MODULE
1900 NAME = G1/GATE TO LGSP/RETRANSMIT
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```

1901 PRIORITY = 0
1902 INTERRUPTABILITY FLAG = NO
1903 CONCURRENT EXECUTION = YES
1904 ALLOWED PROCESSORS =
1905 G1/GATE TO LGSP
1906 REQUIRED MESSAGES =
1907 *
1908 INSTRUCTION LIST =
1909 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
1910 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
1911 HARDWARE TYPE = PROCESSING
1912 NAME = G2/GATE TO LGSP

```

```

1913 BASIC CYCLE TIME = 1 MIC
1914 INPUT CONTROLLER = YES
1915 INSTRUCTION REPERTOIRE =
1916 INSTRUCTION TYPE = PROCESSING
1917 NAME ; GATEWAY PROCESSING
1918 TIME ; GPSDF/GATE TO LGSP
1919 INSTRUCTION TYPE = MESSAGE
1920 NAME ; RETRANSMIT ANYTHING
1921 MESSAGE ; *
1922 DESTINATION PROCESSOR ; NEXT
1923 ECHO PE LIST = GATE TO LGSP CLUSTER
1924 LENGTH ; GMSDF/GATE TO LGSP
1925 QUEUE FLAG ; YES
1926 RESUME FLAG ; NO
1927 SOFTWARE TYPE = MODULE
1928 NAME = G2/GATE TO LGSP/RETRANSMIT
1929 PRIORITY = 0
1930 INTERRUPTABILITY FLAG = NO
1931 CONCURRENT EXECUTION = YES
1932 ALLOWED PROCESSORS =
1933 G2/GATE TO LGSP
1934 REQUIRED MESSAGES =
1935 *
1936 INSTRUCTION LIST =
1937 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
1938 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
1939 HARDWARE TYPE = ECHO PE LIST
1940 NAME = GATE TO LGSP CLUSTER
1941 TD = RING1
1942 ECHO PE = G1/GATE TO LGSP
1943 TD = LGSP
1944 ECHO PE = G2/GATE TO LGSP
1945 *** END GATEWAY DEFINITION
1946 *** BEGIN GATEWAY DEFINITION
1947 STATISTICAL DISTRIBUTIONS =
1948 NAME = GPSDF/GW3
1949 TYPE = MESSAGE.LINEAR
1950 A = 0.

```

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```

1951 B = 0.
1952 NAME = GMSDF/GW3
1953 TYPE = MESSAGE.LINEAR
1954 A = 1.0
1955 B = 0.
1956 HARDWARE TYPE = PROCESSING
1957 NAME = G1/GW3
1958 LOCATION = 178.074 57.730
1959 STYLE/COLOR = 1 7
1960 BASIC CYCLE TIME = 1 MIC
1961 INPUT CONTROLLER = YES
1962 INSTRUCTION REPERTOIRE =
1963 INSTRUCTION TYPE = PROCESSING
1964 NAME ; GATEWAY PROCESSING
1965 TIME ; GPSDF/GW3
1966 INSTRUCTION TYPE = MESSAGE
1967 NAME ; RETRANSMIT ANYTHING
1968 MESSAGE ; *
1969 DESTINATION PROCESSOR ; NEXT
1970 ECHO PE LIST = GW3 CLUSTER
1971 LENGTH ; GMSDF/GW3
1972 QUEUE FLAG ; YES
1973 RESUME FLAG ; NO
1974 SOFTWARE TYPE = MODULE
1975 NAME = G1/GW3/RETRANSMIT

```

1976 PRIORITY = 0
 1977 INTERRUPTABILITY FLAG = NO
 1978 CONCURRENT EXECUTION = YES
 1979 ALLOWED PROCESSORS =
 1980 G1/GW3
 1981 REQUIRED MESSAGES =
 1982 *
 1983 INSTRUCTION LIST =
 1984 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
 1985 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
 1986 HARDWARE TYPE = PROCESSING
 1987 NAME = G2/GW3
 1988 BASIC CYCLE TIME = 1 MIC
 1989 INPUT CONTROLLER = YES
 1990 INSTRUCTION REPERTOIRE =
 1991 INSTRUCTION TYPE = PROCESSING
 1992 NAME ; GATEWAY PROCESSING
 1993 TIME ; GPSDF/GW3
 1994 INSTRUCTION TYPE = MESSAGE
 1995 NAME ; RETRANSMIT ANYTHING
 1996 MESSAGE ; *
 1997 DESTINATION PROCESSOR ; NEXT
 1998 ECHO PE LIST = GW3 CLUSTER
 1999 LENGTH ; GMSDF/GW3
 2000 QUEUE FLAG ; YES
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

2001 RESUME FLAG ; NO
 2002 SOFTWARE TYPE = MODULE
 2003 NAME = G2/GW3/RETRANSMIT
 2004 PRIORITY = 0
 2005 INTERRUPTABILITY FLAG = NO
 2006 CONCURRENT EXECUTION = YES
 2007 ALLOWED PROCESSORS =
 2008 G2/GW3
 2009 REQUIRED MESSAGES =
 2010 *
 2011 INSTRUCTION LIST =
 2012 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
 2013 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
 2014 HARDWARE TYPE = ECHO PE LIST
 2015 NAME = GW3 CLUSTER
 2016 TD = RING1
 2017 ECHO PE = G1/GW3
 2018 TD = LGSM
 2019 ECHO PE = G2/GW3
 2020 *** END GATEWAY DEFINITION
 2021 *** BEGIN GATEWAY DEFINITION
 2022 STATISTICAL DISTRIBUTIONS =
 2023 NAME = GPSDF/GW4
 2024 TYPE = MESSAGE.LINEAR
 2025 A = 0.
 2026 B = 0.
 2027 NAME = GMSDF/GW4
 2028 TYPE = MESSAGE.LINEAR
 2029 A = 1.0
 2030 B = 0.
 2031 HARDWARE TYPE = PROCESSING
 2032 NAME = G1/GW4
 2033 LOCATION = 277.319 54.017
 2034 STYLE/COLOR = 1 10
 2035 BASIC CYCLE TIME = 1 MIC
 2036 INPUT CONTROLLER = YES
 2037 INSTRUCTION REPERTOIRE =
 2038 INSTRUCTION TYPE = PROCESSING

```

2039      NAME ; GATEWAY PROCESSING
2040      TIME ; GPSDF/GW4
2041      INSTRUCTION TYPE = MESSAGE
2042      NAME ; RETRANSMIT ANYTHING
2043      MESSAGE ; *
2044      DESTINATION PROCESSOR ; NEXT
2045      ECHO PE LIST = GW4 CLUSTER
2046      LENGTH ; GMSDF/GW4
2047      QUEUE FLAG ; YES
2048      RESUME FLAG ; NO
2049      SOFTWARE TYPE = MODULE
2050      NAME = G1/GW4/RETRANSMIT
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```

2051      PRIORITY = 0
2052      INTERRUPTABILITY FLAG = NO
2053      CONCURRENT EXECUTION = YES
2054      ALLOWED PROCESSORS =
2055      G1/GW4
2056      REQUIRED MESSAGES =
2057      *
2058      INSTRUCTION LIST =
2059      EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2060      EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2061      HARDWARE TYPE = PROCESSING
2062      NAME = G2/GW4
2063      BASIC CYCLE TIME = 1 MIC
2064      INPUT CONTROLLER = YES
2065      INSTRUCTION REPERTOIRE =
2066      INSTRUCTION TYPE = PROCESSING
2067      NAME ; GATEWAY PROCESSING
2068      TIME ; GPSDF/GW4
2069      INSTRUCTION TYPE = MESSAGE
2070      NAME ; RETRANSMIT ANYTHING
2071      MESSAGE ; *
2072      DESTINATION PROCESSOR ; NEXT
2073      ECHO PE LIST = GW4 CLUSTER
2074      LENGTH ; GMSDF/GW4
2075      QUEUE FLAG ; YES
2076      RESUME FLAG ; NO
2077      SOFTWARE TYPE = MODULE
2078      NAME = G2/GW4/RETRANSMIT
2079      PRIORITY = 0
2080      INTERRUPTABILITY FLAG = NO
2081      CONCURRENT EXECUTION = YES
2082      ALLOWED PROCESSORS =
2083      G2/GW4
2084      REQUIRED MESSAGES =
2085      *
2086      INSTRUCTION LIST =
2087      EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2088      EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2089      HARDWARE TYPE = ECHO PE LIST
2090      NAME = GW4 CLUSTER
2091      TD = RING1
2092      ECHO PE = G1/GW4
2093      TD = LGSC
2094      ECHO PE = G2/GW4
2095      *** END GATEWAY DEFINITION
2096      *** BEGIN GATEWAY DEFINITION
2097      STATISTICAL DISTRIBUTIONS =
2098      NAME = GPSDF/GW6
2099      TYPE = MESSAGE.LINEAR
2100      A = 0.
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```

2101      B = 0.
2102      NAME = GMSDF/GW6
2103      TYPE = MESSAGE.LINEAR
2104      A = 1.0
2105      B = 0.
2106      HARDWARE TYPE = PROCESSING
2107      NAME = G1/GW6
2108      LOCATION =      64.174      37.985
2109      STYLE/COLOR = 1 12
2110      BASIC CYCLE TIME = 1 MIC
2111      INPUT CONTROLLER = YES
2112      INSTRUCTION REPERTOIRE =
2113      INSTRUCTION TYPE = PROCESSING
2114      NAME ; GATEWAY PROCESSING
2115      TIME ; GPSDF/GW6
2116      INSTRUCTION TYPE = MESSAGE
2117      NAME ; RETRANSMIT ANYTHING
2118      MESSAGE ; *
2119      DESTINATION PROCESSOR ; NEXT
2120      ECHO PE LIST = GW6 CLUSTER
2121      LENGTH ; GMSDF/GW6
2122      QUEUE FLAG ; YES
2123      RESUME FLAG ; NO
2124      SOFTWARE TYPE = MODULE
2125      NAME = G1/GW6/RETRANSMIT
2126      PRIORITY = 0
2127      INTERRUPTABILITY FLAG = NO
2128      CONCURRENT EXECUTION = YES
2129      ALLOWED PROCESSORS =
2130      G1/GW6
2131      REQUIRED MESSAGES =
2132      *
2133      INSTRUCTION LIST =
2134      EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2135      EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2136      HARDWARE TYPE = PROCESSING
2137      NAME = G2/GW6
2138      BASIC CYCLE TIME = 1 MIC
2139      INPUT CONTROLLER = YES
2140      INSTRUCTION REPERTOIRE =
2141      INSTRUCTION TYPE = PROCESSING
2142      NAME ; GATEWAY PROCESSING
2143      TIME ; GPSDF/GW6
2144      INSTRUCTION TYPE = MESSAGE
2145      NAME ; RETRANSMIT ANYTHING
2146      MESSAGE ; *
2147      DESTINATION PROCESSOR ; NEXT
2148      ECHO PE LIST = GW6 CLUSTER
2149      LENGTH ; GMSDF/GW6
2150      QUEUE FLAG ; YES
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```

2151      RESUME FLAG ; NO
2152      SOFTWARE TYPE = MODULE
2153      NAME = G2/GW6/RETRANSMIT
2154      PRIORITY = 0
2155      INTERRUPTABILITY FLAG = NO
2156      CONCURRENT EXECUTION = YES
2157      ALLOWED PROCESSORS =
2158      G2/GW6
2159      REQUIRED MESSAGES =
2160      *

```

```

2161     INSTRUCTION LIST =
2162     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2163     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2164     HARDWARE TYPE = ECHO PE LIST
2165     NAME = GW6 CLUSTER
2166     TD = RING1
2167     ECHO PE = G1/GW6
2168     TD = AFNET
2169     ECHO PE = G2/GW6
2170     *** END GATEWAY DEFINITION
2171
2172     ***** ROUTES
2173     HARDWARE TYPE = ROUTE
2174     NAME = R1/FILE SERVER
2175     NEXT PE = G1/GW1
2176     ALLOWABLE BUSSES ;
2177     LGSD
2178     NEXT PE = G2/GATE TO LGSP
2179     ALLOWABLE BUSSES ;
2180     RING1
2181     NEXT PE = S1/FILE SERVER
2182     ALLOWABLE BUSSES ;
2183     LGSP
2184     NAME = R6/FILE SERVER
2185     NEXT PE = G1/GW3
2186     ALLOWABLE BUSSES ;
2187     LGSM
2188     NEXT PE = G2/GATE TO LGSP
2189     ALLOWABLE BUSSES ;
2190     RING1
2191     NEXT PE = S1/FILE SERVER
2192     ALLOWABLE BUSSES ;
2193     LGSP
2194     NAME = R7/FILE SERVER
2195     NEXT PE = G1/GW4
2196     ALLOWABLE BUSSES ;
2197     LGSC
2198     NEXT PE = G2/GATE TO LGSP
2199     ALLOWABLE BUSSES ;
2200     RING1

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```

2201     NEXT PE = S1/FILE SERVER
2202     ALLOWABLE BUSSES ;
2203     LGSP
2204     NAME = R8/FILE SERVER
2205     NEXT PE = G1/GW6
2206     ALLOWABLE BUSSES ;
2207     AFNET
2208     NEXT PE = G2/GATE TO LGSP
2209     ALLOWABLE BUSSES ;
2210     RING1
2211     NEXT PE = S1/FILE SERVER
2212     ALLOWABLE BUSSES ;
2213     LGSP
2214     NAME = R9/FILE SERVER
2215     NEXT PE = G1/GW6
2216     ALLOWABLE BUSSES ;
2217     AFNET
2218     NEXT PE = G2/GATE TO LGSP
2219     ALLOWABLE BUSSES ;
2220     RING1
2221     NEXT PE = S1/FILE SERVER
2222     ALLOWABLE BUSSES ;
2223     LGSP

```

2224 NAME = R10/FILE SERVER
 2225 NEXT PE = G1/GW1
 2226 ALLOWABLE BUSSES ;
 2227 LGSD
 2228 NEXT PE = G2/GATE TO LGSP
 2229 ALLOWABLE BUSSES ;
 2230 RING1
 2231 NEXT PE = S1/FILE SERVER
 2232 ALLOWABLE BUSSES ;
 2233 LGSP
 2234 NAME = R11/FILE SERVER
 2235 NEXT PE = G1/GW1
 2236 ALLOWABLE BUSSES ;
 2237 LGSD
 2238 NEXT PE = G2/GATE TO LGSP
 2239 ALLOWABLE BUSSES ;
 2240 RING1
 2241 NEXT PE = S1/FILE SERVER
 2242 ALLOWABLE BUSSES ;
 2243 LGSP
 2244 NAME = R12/FILE SERVER
 2245 NEXT PE = G1/GW1
 2246 ALLOWABLE BUSSES ;
 2247 LGSD
 2248 NEXT PE = G2/GATE TO LGSP
 2249 ALLOWABLE BUSSES ;
 2250 RING1
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2251 NEXT PE = S1/FILE SERVER
 2252 ALLOWABLE BUSSES ;
 2253 LGSP
 2254 NAME = R13/FILE SERVER
 2255 NEXT PE = G1/GW1
 2256 ALLOWABLE BUSSES ;
 2257 LGSD
 2258 NEXT PE = G2/GATE TO LGSP
 2259 ALLOWABLE BUSSES ;
 2260 RING1
 2261 NEXT PE = S1/FILE SERVER
 2262 ALLOWABLE BUSSES ;
 2263 LGSP
 2264 NAME = R14/FILE SERVER
 2265 NEXT PE = G1/GW1
 2266 ALLOWABLE BUSSES ;
 2267 LGSD
 2268 NEXT PE = G2/GATE TO LGSP
 2269 ALLOWABLE BUSSES ;
 2270 RING1
 2271 NEXT PE = S1/FILE SERVER
 2272 ALLOWABLE BUSSES ;
 2273 LGSP
 2274 NAME = R20/FILE SERVER
 2275 NEXT PE = G1/GW3
 2276 ALLOWABLE BUSSES ;
 2277 LGSM
 2278 NEXT PE = G2/GATE TO LGSP
 2279 ALLOWABLE BUSSES ;
 2280 RING1
 2281 NEXT PE = S1/FILE SERVER
 2282 ALLOWABLE BUSSES ;
 2283 LGSP
 2284 NAME = R21/FILE SERVER
 2285 NEXT PE = G1/GW3
 2286 ALLOWABLE BUSSES ;

2287 LGSM
 2288 NEXT PE = G2/GATE TO LGSP
 2289 ALLOWABLE BUSSES ;
 2290 RING1
 2291 NEXT PE = S1/FILE SERVER
 2292 ALLOWABLE BUSSES ;
 2293 LGSP
 2294 NAME = R22/FILE SERVER
 2295 NEXT PE = G1/GW3
 2296 ALLOWABLE BUSSES ;
 2297 LGSM
 2298 NEXT PE = G2/GATE TO LGSP
 2299 ALLOWABLE BUSSES ;
 2300 RING1
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2301 NEXT PE = S1/FILE SERVER
 2302 ALLOWABLE BUSSES ;
 2303 LGSP
 2304 NAME = R23/FILE SERVER
 2305 NEXT PE = G1/GW3
 2306 ALLOWABLE BUSSES ;
 2307 LGSM
 2308 NEXT PE = G2/GATE TO LGSP
 2309 ALLOWABLE BUSSES ;
 2310 RING1
 2311 NEXT PE = S1/FILE SERVER
 2312 ALLOWABLE BUSSES ;
 2313 LGSP
 2314 NAME = R24/FILE SERVER
 2315 NEXT PE = G1/GW3
 2316 ALLOWABLE BUSSES ;
 2317 LGSM
 2318 NEXT PE = G2/GATE TO LGSP
 2319 ALLOWABLE BUSSES ;
 2320 RING1
 2321 NEXT PE = S1/FILE SERVER
 2322 ALLOWABLE BUSSES ;
 2323 LGSP
 2324 NAME = R25/FILE SERVER
 2325 NEXT PE = G1/GW4
 2326 ALLOWABLE BUSSES ;
 2327 LGSC
 2328 NEXT PE = G2/GATE TO LGSP
 2329 ALLOWABLE BUSSES ;
 2330 RING1
 2331 NEXT PE = S1/FILE SERVER
 2332 ALLOWABLE BUSSES ;
 2333 LGSP
 2334 NAME = R26/FILE SERVER
 2335 NEXT PE = G1/GW4
 2336 ALLOWABLE BUSSES ;
 2337 LGSC
 2338 NEXT PE = G2/GATE TO LGSP
 2339 ALLOWABLE BUSSES ;
 2340 RING1
 2341 NEXT PE = S1/FILE SERVER
 2342 ALLOWABLE BUSSES ;
 2343 LGSP
 2344 NAME = R27/FILE SERVER
 2345 NEXT PE = G1/GW4
 2346 ALLOWABLE BUSSES ;
 2347 LGSC
 2348 NEXT PE = G2/GATE TO LGSP
 2349 ALLOWABLE BUSSES ;

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2351     NEXT PE = S1/FILE SERVER
2352     ALLOWABLE BUSSES ;
2353     LGSP
2354     NAME = R28/FILE SERVER
2355     NEXT PE = G1/GW4
2356     ALLOWABLE BUSSES ;
2357     LGSC
2358     NEXT PE = G2/GATE TO LGSP
2359     ALLOWABLE BUSSES ;
2360     RING1
2361     NEXT PE = S1/FILE SERVER
2362     ALLOWABLE BUSSES ;
2363     LGSP
2364     NAME = R29/FILE SERVER
2365     NEXT PE = G1/GW4
2366     ALLOWABLE BUSSES ;
2367     LGSC
2368     NEXT PE = G2/GATE TO LGSP
2369     ALLOWABLE BUSSES ;
2370     RING1
2371     NEXT PE = S1/FILE SERVER
2372     ALLOWABLE BUSSES ;
2373     LGSP
2374
2375     ***** FILES
2376     SOFTWARE TYPE = FILE
2377     NAME = GENERAL STORAGE
2378     NUMBER OF BITS = 15000000.000 BITS
2379     READ ONLY FLAG = NO
2380     INITIAL RESIDENCY =
2381     S1/SD/LGSD1
2382     NAME = GENERAL STORAGE
2383     NUMBER OF BITS = +1.50000000E+008 BITS
2384     READ ONLY FLAG = NO
2385     INITIAL RESIDENCY =
2386     S1/SD/FILE SERVER
2387     NAME = GENERAL STORAGE
2388     NUMBER OF BITS = 15000000.000 BITS
2389     READ ONLY FLAG = NO
2390     INITIAL RESIDENCY =
2391     S1/SD/LGSP1
2392     NAME = GENERAL STORAGE
2393     NUMBER OF BITS = 15000000.000 BITS
2394     READ ONLY FLAG = NO
2395     INITIAL RESIDENCY =
2396     S1/SD/LGSM1
2397     NAME = GENERAL STORAGE
2398     NUMBER OF BITS = 15000000.000 BITS
2399     READ ONLY FLAG = NO
2400     INITIAL RESIDENCY =

```

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2401     S1/SD/LGSC1
2402     NAME = GENERAL STORAGE
2403     NUMBER OF BITS = 0.      BITS
2404     READ ONLY FLAG = NO
2405     INITIAL RESIDENCY =
2406     S1/SD/FMFS
2407     NAME = GENERAL STORAGE

```

2408 NUMBER OF BITS = 0. BITS
 2409 READ ONLY FLAG = NO
 2410 INITIAL RESIDENCY =
 2411 S1/SD/DOMR
 2412 NAME = GENERAL STORAGE
 2413 NUMBER OF BITS = 15000000.000 BITS
 2414 READ ONLY FLAG = NO
 2415 INITIAL RESIDENCY =
 2416 S1/SD/LGSD 2
 2417 NAME = GENERAL STORAGE
 2418 NUMBER OF BITS = 15000000.000 BITS
 2419 READ ONLY FLAG = NO
 2420 INITIAL RESIDENCY =
 2421 S1/SD/LGSD 3
 2422 NAME = GENERAL STORAGE
 2423 NUMBER OF BITS = 15000000.000 BITS
 2424 READ ONLY FLAG = NO
 2425 INITIAL RESIDENCY =
 2426 S1/SD/LGSD 4
 2427 NAME = GENERAL STORAGE
 2428 NUMBER OF BITS = 15000000.000 BITS
 2429 READ ONLY FLAG = NO
 2430 INITIAL RESIDENCY =
 2431 S1/SD/LGSD 5
 2432 NAME = GENERAL STORAGE
 2433 NUMBER OF BITS = 15000000.000 BITS
 2434 READ ONLY FLAG = NO
 2435 INITIAL RESIDENCY =
 2436 S1/SD/LGSD 6
 2437 NAME = GENERAL STORAGE
 2438 NUMBER OF BITS = 15000000.000 BITS
 2439 READ ONLY FLAG = NO
 2440 INITIAL RESIDENCY =
 2441 S1/SD/LGSP 2
 2442 NAME = GENERAL STORAGE
 2443 NUMBER OF BITS = 15000000.000 BITS
 2444 READ ONLY FLAG = NO
 2445 INITIAL RESIDENCY =
 2446 S1/SD/LGSP 3
 2447 NAME = GENERAL STORAGE
 2448 NUMBER OF BITS = 15000000.000 BITS
 2449 READ ONLY FLAG = NO
 2450 INITIAL RESIDENCY =
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

2451 S1/SD/LGSP 4
 2452 NAME = GENERAL STORAGE
 2453 NUMBER OF BITS = 15000000.000 BITS
 2454 READ ONLY FLAG = NO
 2455 INITIAL RESIDENCY =
 2456 S1/SD/LGSP 5
 2457 NAME = GENERAL STORAGE
 2458 NUMBER OF BITS = 15000000.000 BITS
 2459 READ ONLY FLAG = NO
 2460 INITIAL RESIDENCY =
 2461 S1/SD/LGSP 6
 2462 NAME = GENERAL STORAGE
 2463 NUMBER OF BITS = 15000000.000 BITS
 2464 READ ONLY FLAG = NO
 2465 INITIAL RESIDENCY =
 2466 S1/SD/LGSM 2
 2467 NAME = GENERAL STORAGE
 2468 NUMBER OF BITS = 15000000.000 BITS
 2469 READ ONLY FLAG = NO
 2470 INITIAL RESIDENCY =

2471 S1/SD/LGSM 3
 2472 NAME = GENERAL STORAGE
 2473 NUMBER OF BITS = 15000000.000 BITS
 2474 READ ONLY FLAG = NO
 2475 INITIAL RESIDENCY =
 2476 S1/SD/LGSM 4
 2477 NAME = GENERAL STORAGE
 2478 NUMBER OF BITS = 15000000.000 BITS
 2479 READ ONLY FLAG = NO
 2480 INITIAL RESIDENCY =
 2481 S1/SD/LGSM 5
 2482 NAME = GENERAL STORAGE
 2483 NUMBER OF BITS = 15000000.000 BITS
 2484 READ ONLY FLAG = NO
 2485 INITIAL RESIDENCY =
 2486 S1/SD/LGSM 6
 2487 NAME = GENERAL STORAGE
 2488 NUMBER OF BITS = 15000000.000 BITS
 2489 READ ONLY FLAG = NO
 2490 INITIAL RESIDENCY =
 2491 S1/SD/LGSC 2
 2492 NAME = GENERAL STORAGE
 2493 NUMBER OF BITS = 15000000.000 BITS
 2494 READ ONLY FLAG = NO
 2495 INITIAL RESIDENCY =
 2496 S1/SD/LGSC 3
 2497 NAME = GENERAL STORAGE
 2498 NUMBER OF BITS = 15000000.000 BITS
 2499 READ ONLY FLAG = NO
 2500 INITIAL RESIDENCY =
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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

2501 S1/SD/LGSC 4
 2502 NAME = GENERAL STORAGE
 2503 NUMBER OF BITS = 15000000.000 BITS
 2504 READ ONLY FLAG = NO
 2505 INITIAL RESIDENCY =
 2506 S1/SD/LGSC 5
 2507 NAME = GENERAL STORAGE
 2508 NUMBER OF BITS = 15000000.000 BITS
 2509 READ ONLY FLAG = NO
 2510 INITIAL RESIDENCY =
 2511 S1/SD/LGSC 6

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSM	LGSD	LGSC
COLLISION EPISODES	0	0	0
COLLIDED TRANSFERS	0	0	0
AVG TO RESOLVE	0.	0.	0.
MAX TO RESOLVE	0	0	0
DEFERRALS	1	6	0
AVG DEFERRAL DELAY	8.588	437.125	0.
MAX DEFERRAL DELAY	8.588	709.349	0.
STD DEV DEFERRAL DELAY	0.	241.861	0.
AVG DEFERRAL QUEUE	.000	.000	0.
MAX QUEUE SIZE	1.000	1.000	0.
STD DEV QUEUE SIZE	.000	.000	0.
MULTIPLE COLLISIONS	0	0	0
AVG MULT COLLISIONS	0.	0.	0.
MAX MULT COLLISIONS	0	0	0
SUCCESSFUL TRANSFERS	26232	102031	26860
AVG USAGE TIME	396.000	395.997	396.000
MAX USAGE TIME	740.800	740.800	740.800
STD DEV USAGE TIME	344.800	344.800	344.800
PER CENT OF TIME BUSY	.005	.019	.005

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSP	AFNET
COLLISION EPISODES	0	0
COLLIDED TRANSFERS	0	0
AVG TO RESOLVE	0.	0.
MAX TO RESOLVE	0	0
DEFERRALS	67	0
AVG DEFERRAL DELAY	283.407	0.
MAX DEFERRAL DELAY	706.635	0.
STD DEV DEFERRAL DELAY	219.430	0.
AVG DEFERRAL QUEUE	.000	0.
MAX QUEUE SIZE	1.000	0.
STD DEV QUEUE SIZE	.000	0.
MULTIPLE COLLISIONS	0	0
AVG MULT COLLISIONS	0.	0.
MAX MULT COLLISIONS	0	0
SUCCESSFUL TRANSFERS	294256	7180
AVG USAGE TIME	398.311	294.048
MAX USAGE TIME	840.800	502.381
STD DEV USAGE TIME	345.238	208.333
PER CENT OF TIME BUSY	.054	.001

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

TOKEN LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME

RING1

LAN REQUESTS GRANTED	550964
AVG REQUEST DELAY	.026
MAX REQUEST DELAY	462.311
STD DEV REQUEST DELAY	2.780

COMPLETED TRANSFERS	550964
AVG USAGE TIME	90.253
MAX USAGE TIME	525.000
STD DEV USAGE TIME	156.017

AVG QUEUE SIZE	.000
MAX QUEUE SIZE	1.000
STD DEV QUEUE SIZE	.000

PER CENT OF TIME BUSY	.023

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LGSD ACTIVITY 1	BASE TRAFIC	MESSAGE REPLY

HOST STATION	LGSD1	BASE TRAFFIC1	FILE SERVER

COMPLETED EXECUTIONS	8537	388661	147127
AVG EXECUTION TIME	51.368	25.026	813380.061
MAX EXECUTION TIME	770.150	487.311	813477.620
MIN EXECUTION TIME	51.200	25.000	813377.619
STD DEV EXECUTION TIME	10.981	2.762	15.443

ACTIVITY NAME	LGSP ACTIVITY 1	LGSM ACTIVITY 1	LGSC ACTIVITY 1

HOST STATION	LGSP1	LGSM1	LGSC1

COMPLETED EXECUTIONS	10976	2099	2231
AVG EXECUTION TIME	51.371	51.200	51.200
MAX EXECUTION TIME	593.580	51.200	51.200
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	8.642	0.	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FMFS ACTIVITY	DOMR ACTIVITY	LGSD ACTIVITY 2

HOST STATION	FMFS	DOMR	LGSD 2

COMPLETED EXECUTIONS	2706	884	8447
AVG EXECUTION TIME	85.715	85.715	51.247
MAX EXECUTION TIME	85.715	85.715	449.674
MIN EXECUTION TIME	85.715	85.715	51.200
STD DEV EXECUTION TIME	0.	.000	4.335

ACTIVITY NAME	LGSD ACTIVITY 3	LGSD ACTIVITY 4	LGSD ACTIVITY 5

HOST STATION	LGSD 3	LGSD 4	LGSD 5

COMPLETED EXECUTIONS	8602	8629	8420
AVG EXECUTION TIME	51.225	51.200	51.200
MAX EXECUTION TIME	265.339	51.200	51.200
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	2.309	0.	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LSGD ACTIVITY 6	LGSP ACTIVITY 2	LGSP ACTIVITY 3

HOST STATION	LGSD 6	LGSP 2	LGSP 3

COMPLETED EXECUTIONS	8381	11125	10943

AVG EXECUTION TIME	51.275	51.309	51.318
MAX EXECUTION TIME	606.244	704.558	602.799
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	6.122	7.227	6.886

ACTIVITY NAME	LGSP ACTIVITY 4	LGSP ACTIVITY 5	LGSP ACTIVITY 6

HOST STATION	LGSP 4	LGSP 5	LGSP 6

COMPLETED EXECUTIONS	10942	10955	11036

AVG EXECUTION TIME	51.358	51.336	51.256
MAX EXECUTION TIME	595.780	509.151	549.912
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	7.969	7.019	4.815

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LGSM ACTIVITY 2	LGSM ACTIVITY 3	LGSM ACTIVITY 4
HOST STATION	LGSM 2	LGSM 3	LGSM 4
COMPLETED EXECUTIONS	2223	2256	2189
AVG EXECUTION TIME	51.200	51.200	51.200
MAX EXECUTION TIME	51.200	51.200	51.200
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	0.	0.	0.

ACTIVITY NAME	LGSM ACTIVITY 5	LGSM ACTIVITY 6	LGSC ACTIVITY 2
HOST STATION	LGSM 5	LGSM 6	LGSC 2
COMPLETED EXECUTIONS	2202	2147	2184
AVG EXECUTION TIME	51.200	51.200	51.200
MAX EXECUTION TIME	51.200	51.200	51.200
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	0.	0.	0.

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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LGSC ACTIVITY 3	LGSC ACTIVITY 4	LGSC ACTIVITY 5
HOST STATION	LGSC 3	LGSC 4	LGSC 5
COMPLETED EXECUTIONS	2276	2234	2270

AVG EXECUTION TIME	51.200	51.200	51.200
MAX EXECUTION TIME	51.200	51.200	51.200
MIN EXECUTION TIME	51.200	51.200	51.200
STD DEV EXECUTION TIME	0.	0.	0.

ACTIVITY NAME LGSC ACTIVITY 6

HOST STATION LGSC 6

COMPLETED EXECUTIONS 2235

AVG EXECUTION TIME	51.200
MAX EXECUTION TIME	51.200
MIN EXECUTION TIME	51.200
STD DEV EXECUTION TIME	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSD1	BASE TRAFFIC1	BASE TRAFFIC2
LAN REQUESTS GRANTED	8537	388661	0
AVERAGE WAIT TIME	.168	.026	0.
MAXIMUM WAIT TIME	718.950	462.311	0.
STD DEV WAIT TIME	10.981	2.762	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	0.	0.
MAXIMUM BITS USED	15000000.	0.	0.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.005	0.

STATION NAME	FILE SERVER	LGSP1	LGSM1
LAN REQUESTS GRANTED	147127	10976	2099
AVERAGE WAIT TIME	.001	.171	0.
MAXIMUM WAIT TIME	55.954	542.380	0.
STD DEV WAIT TIME	.221	8.642	0.
DISK REQUESTS GRANTED	7944875	0	0
AVERAGE BITS USED	150000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	150000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	55.403	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSC1	FMFS	DOMR
LAN REQUESTS GRANTED	2231	2706	884

AVERAGE WAIT TIME	0.	0.	0.
MAXIMUM WAIT TIME	0.	0.	0.
STD DEV WAIT TIME	0.	0.	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	0.	0.
MAXIMUM BITS USED	15000000.	0.	0.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

STATION NAME	LGSD 2	LGSD 3	LGSD 4
LAN REQUESTS GRANTED	8447	8602	8629
AVERAGE WAIT TIME	.047	.025	0.
MAXIMUM WAIT TIME	398.474	214.139	0.
STD DEV WAIT TIME	4.335	2.309	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSD 5	LGSD 6	LGSP 2
LAN REQUESTS GRANTED	8420	8381	11125
AVERAGE WAIT TIME	0.	.075	.109
MAXIMUM WAIT TIME	0.	555.044	653.358
STD DEV WAIT TIME	0.	6.122	7.227
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

STATION NAME	LGSP 3	LGSP 4	LGSP 5
LAN REQUESTS GRANTED	10943	10942	10955
AVERAGE WAIT TIME	.118	.158	.136
MAXIMUM WAIT TIME	551.599	544.580	457.951
STD DEV WAIT TIME	6.886	7.969	7.019
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

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SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSP 6	LGSM 2	LGSM 3
LAN REQUESTS GRANTED	11036	2223	2256

AVERAGE WAIT TIME	.056	0.	0.
MAXIMUM WAIT TIME	498.712	0.	0.
STD DEV WAIT TIME	4.815	0.	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

STATION NAME	LGSM 4	LGSM 5	LGSM 6
LAN REQUESTS GRANTED	2189	2202	2147
AVERAGE WAIT TIME	0.	0.	0.
MAXIMUM WAIT TIME	0.	0.	0.
STD DEV WAIT TIME	0.	0.	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSC 2	LGSC 3	LGSC 4
LAN REQUESTS GRANTED	2184	2276	2234
AVERAGE WAIT TIME	0.	0.	0.
MAXIMUM WAIT TIME	0.	0.	0.
STD DEV WAIT TIME	0.	0.	0.
DISK REQUESTS GRANTED	0	0	0
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.000	.000	.000

STATION NAME	LGSC 5	LGSC 6
LAN REQUESTS GRANTED	2270	2235
AVERAGE WAIT TIME	0.	0.
MAXIMUM WAIT TIME	0.	0.
STD DEV WAIT TIME	0.	0.
DISK REQUESTS GRANTED	0	0
AVERAGE BITS USED	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.
STD DEV BITS USED	0.	0.
STATION UTILIZATION	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW1	G2/GW1	G1/GATE TO LGSP
SERVING LAN	RING1	LGSD	RING1
LAN REQUESTS GRANTED	51016	51015	81151
AVERAGE WAIT TIME	.052	.000	.001
MAXIMUM WAIT TIME	450.526	2.187	22.142
STD DEV WAIT TIME	4.360	.010	.132
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	0.	0.	0.
STD DEV MESSAGE QUEUE	0.	0.	0.
GATEWAY UTILIZATION	.001	.017	.017

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G2/GATE TO LGSP	G1/GW3	G2/GW3
SERVING LAN	LGSP	RING1	LGSM
LAN REQUESTS GRANTED	81152	13116	13116
AVERAGE WAIT TIME	.139	.034	.001
MAXIMUM WAIT TIME	716.235	447.987	18.188
STD DEV WAIT TIME	8.276	3.912	.159
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	0.	0.
STD DEV MESSAGE QUEUE	.000	0.	0.
GATEWAY UTILIZATION	.002	.000	.004

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW4	G2/GW4	G1/GW6
SERVING LAN	RING1	LGSC	RING1
LAN REQUESTS GRANTED	13430	13430	3590
AVERAGE WAIT TIME	.044	0.	0.
MAXIMUM WAIT TIME	281.390	0.	0.
STD DEV WAIT TIME	3.017	0.	0.
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	0.	0.	0.
STD DEV MESSAGE QUEUE	0.	0.	0.
GATEWAY UTILIZATION	.000	.005	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME G2/GW6

SERVING LAN AFNET

LAN REQUESTS GRANTED 3590

AVERAGE WAIT TIME 0.

MAXIMUM WAIT TIME 0.

STD DEV WAIT TIME 0.

MAX MESSAGE QUEUE SIZE 1

AVG MESSAGE QUEUE SIZE 0.

STD DEV MESSAGE QUEUE 0.

GATEWAY UTILIZATION .001

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
LGSD1	8537	SEND REPLY TO NODE
BASE TRAFFIC2	388661	NOISE
FILE SERVER	147129	REQUEST FROM SERVER
LGSP1	10976	SEND REPLY TO NODE
LGSM1	2099	SEND REPLY TO NODE
LGSC1	2231	SEND REPLY TO NODE
FMFS	2706	SEND REPLY TO NODE
DOMR	884	SEND REPLY TO NODE
LGSD 2	8447	SEND REPLY TO NODE
LGSD 3	8602	SEND REPLY TO NODE
LGSD 4	8629	SEND REPLY TO NODE
LGSD 5	8420	SEND REPLY TO NODE
LGSD 6	8380	SEND REPLY TO NODE
LGSP 2	11124	SEND REPLY TO NODE
LGSP 3		

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
	10943	SEND REPLY TO NODE
LGSP 4	10942	SEND REPLY TO NODE
LGSP 5	10955	SEND REPLY TO NODE
LGSP 6	11036	SEND REPLY TO NODE
LGSM 2	2223	SEND REPLY TO NODE
LGSM 3	2256	SEND REPLY TO NODE
LGSM 4	2189	SEND REPLY TO NODE
LGSM 5	2202	SEND REPLY TO NODE
LGSM 6	2147	SEND REPLY TO NODE
LGSC 2	2184	SEND REPLY TO NODE
LGSC 3	2276	SEND REPLY TO NODE
LGSC 4	2234	SEND REPLY TO NODE
LGSC 5	2270	SEND REPLY TO NODE
LGSC 6	2235	SEND REPLY TO NODE

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 6	LGSM 6	LGSM 6
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2147	2147	2147
AVG DELIVERY TIME	51.200	76.409	127.609
MAX DELIVERY TIME	51.200	524.187	575.387
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	9.666	9.666

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 2	LGSD 2	LGSD 2
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8447	8447	8447
AVG DELIVERY TIME	51.247	76.312	127.730
MAX DELIVERY TIME	449.674	474.674	748.460
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	4.335	6.154	11.443

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSP 4	LGSD1	LGSD1
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10942	8537	8537
AVG DELIVERY TIME	51.358	51.368	76.467
MAX DELIVERY TIME	595.780	770.150	795.150
MIN DELIVERY TIME	51.200	51.200	76.200
STD DEV DELIVERY TIME	7.969	10.981	12.708

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD1	LGSD 5	LGSD 5
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	8537	8420	8420
AVG DELIVERY TIME	127.742	51.200	76.248
MAX DELIVERY TIME	846.349	51.200	472.164
MIN DELIVERY TIME	127.400	51.200	76.200
STD DEV DELIVERY TIME	13.866	0.	4.316

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 5	LGSP1	LGSC 2
DESTINATION STATION	FILE SERVER	FILE SERVER	GW4
NUMBER SENT	8420	10976	2184
AVG DELIVERY TIME	127.601	51.371	51.200
MAX DELIVERY TIME	791.893	593.580	51.200
MIN DELIVERY TIME	127.400	51.200	51.200
STD DEV DELIVERY TIME	10.838	8.642	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 2	LGSC 2	LGSP 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2184	2184	11125
AVG DELIVERY TIME	76.209	127.409	51.309
MAX DELIVERY TIME	89.037	140.237	704.558
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	.320	.320	7.227

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 2	LGSM 2	LGSM 2
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2223	2223	2223
AVG DELIVERY TIME	51.200	76.200	127.990
MAX DELIVERY TIME	51.200	76.200	790.959
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	0.	19.677

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 5	LGSM 5	LGSM 5
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2202	2202	2202
AVG DELIVERY TIME	51.200	76.200	127.548
MAX DELIVERY TIME	51.200	76.200	383.536
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	0.	5.652

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 3	LGSD 3	LGSD 3
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8602	8602	8602
AVG DELIVERY TIME	51.225	76.277	127.738
MAX DELIVERY TIME	265.339	526.726	796.431
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	2.309	5.378	13.451

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSP 3	LGSD 6	LGSD 6
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10943	8381	8381
AVG DELIVERY TIME	51.318	51.275	76.327
MAX DELIVERY TIME	602.799	606.244	631.244
MIN DELIVERY TIME	51.200	51.200	76.200
STD DEV DELIVERY TIME	6.886	6.122	7.022

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 6	LGSP 6	LGSD 4
DESTINATION STATION	FILE SERVER	FILE SERVER	GW1
NUMBER SENT	8381	11036	8629
AVG DELIVERY TIME	127.628	51.256	51.200
MAX DELIVERY TIME	706.730	549.912	51.200
MIN DELIVERY TIME	127.400	51.200	51.200
STD DEV DELIVERY TIME	9.761	4.815	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 4	LGSD 4	LGSC1
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	8629	8629	2231
AVG DELIVERY TIME	76.200	127.489	51.200
MAX DELIVERY TIME	76.200	415.591	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	0.	4.434	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC1	LGSC1	LGSC 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2231	2231	2234
AVG DELIVERY TIME	76.200	127.404	51.200
MAX DELIVERY TIME	76.200	135.459	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	0.	.171	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 4	LGSC 4	LGSM 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2234	2234	2189
AVG DELIVERY TIME	76.200	127.400	51.200
MAX DELIVERY TIME	76.200	127.400	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	0.	0.	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 4	LGSM 4	LGSC 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2189	2189	2270
AVG DELIVERY TIME	76.200	127.770	51.200
MAX DELIVERY TIME	76.200	843.635	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	0.	15.433	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 5	LGSC 5	LGSM 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2270	2270	2256
AVG DELIVERY TIME	76.215	127.640	51.200
MAX DELIVERY TIME	109.953	606.629	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	.708	10.101	0.

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 3	LGSM 3	LGSP 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2256	2256	10955
AVG DELIVERY TIME	76.200	127.623	51.336
MAX DELIVERY TIME	76.200	379.005	509.151
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	0.	7.048	7.019

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM1	LGSM1	LGSM1
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2099	2099	2099
AVG DELIVERY TIME	51.200	76.200	127.434
MAX DELIVERY TIME	51.200	76.200	180.316
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	0.	1.220

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 6	LGSC 6	LGSC 6
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2235	2235	2235
AVG DELIVERY TIME	51.200	76.414	127.614
MAX DELIVERY TIME	51.200	357.590	408.790
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	7.268	7.268

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 3	LGSC 3	LGSC 3
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2276	2276	2276
AVG DELIVERY TIME	51.200	76.223	127.423
MAX DELIVERY TIME	51.200	128.668	179.868
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	1.100	1.100

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	FMFS	FMFS	FMFS
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	2706	2706	2706
AVG DELIVERY TIME	85.715	173.215	314.072
MAX DELIVERY TIME	85.715	173.215	428.145
MIN DELIVERY TIME	85.715	173.215	314.015
STD DEV DELIVERY TIME	0.	0.	2.340

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	DOMR	DOMR	DOMR
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	884	884	884
AVG DELIVERY TIME	85.715	173.215	314.015
MAX DELIVERY TIME	85.715	173.215	314.015
MIN DELIVERY TIME	85.715	173.215	314.015
STD DEV DELIVERY TIME	.000	0.	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	NOISE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	BASE TRAFFIC1	FILE SERVER	FILE SERVER
DESTINATION STATION	BASE TRAFFIC2	GATE TO LGSP	GW3
NUMBER SENT	388661	81151	13116
AVG DELIVERY TIME	25.026	745.225	1203.304
MAX DELIVERY TIME	487.311	840.800	1219.921
MIN DELIVERY TIME	25.000	740.800	1203.300
STD DEV DELIVERY TIME	2.762	20.563	.243

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 6	GW1	LGSD 2
NUMBER SENT	2147	51015	8447
AVG DELIVERY TIME	1944.107	1203.302	1944.102
MAX DELIVERY TIME	1958.242	1259.254	1964.847
MIN DELIVERY TIME	1944.100	1203.300	1944.100
STD DEV DELIVERY TIME	.305	.282	.226

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP 4	LGSD1	LGSD 5
NUMBER SENT	10942	8537	8420
AVG DELIVERY TIME	740.808	1944.100	1944.103
MAX DELIVERY TIME	791.887	1944.100	1966.242
MIN DELIVERY TIME	740.800	1944.100	1944.100
STD DEV DELIVERY TIME	.586	.000	.241

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP1	GW4	LGSC 2
NUMBER SENT	10976	13430	2184
AVG DELIVERY TIME	740.800	1203.300	1944.100
MAX DELIVERY TIME	740.800	1203.300	1944.100
MIN DELIVERY TIME	740.800	1203.300	1944.100
STD DEV DELIVERY TIME	.000	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP 2	LGSM 2	LGSM 5
NUMBER SENT	11124	2223	2202
AVG DELIVERY TIME	740.800	1944.100	1944.100
MAX DELIVERY TIME	740.800	1944.100	1944.100
MIN DELIVERY TIME	740.800	1944.100	1944.100
STD DEV DELIVERY TIME	.000	.000	.000

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSD 3	LGSP 3	LGSD 6
NUMBER SENT	8602	10943	8380
AVG DELIVERY TIME	1944.106	740.800	1944.100
MAX DELIVERY TIME	2000.054	740.800	1944.100
MIN DELIVERY TIME	1944.100	740.800	1944.100
STD DEV DELIVERY TIME	.603	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP 6	LGSD 4	LGSC1
NUMBER SENT	11036	8629	2231
AVG DELIVERY TIME	740.800	1944.100	1944.100
MAX DELIVERY TIME	740.800	1946.287	1944.100
MIN DELIVERY TIME	740.800	1944.100	1944.100
STD DEV DELIVERY TIME	.000	.024	.000

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSC 4	LGSM 4	LGSC 5
NUMBER SENT	2234	2189	2270
AVG DELIVERY TIME	1944.100	1944.105	1944.100
MAX DELIVERY TIME	1944.100	1954.511	1944.100
MIN DELIVERY TIME	1944.100	1944.100	1944.100
STD DEV DELIVERY TIME	.000	.222	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 3	LGSP 5	LGSM1
NUMBER SENT	2256	10955	2099
AVG DELIVERY TIME	1944.100	740.800	1944.123
MAX DELIVERY TIME	1944.100	740.800	1962.288
MIN DELIVERY TIME	1944.100	740.800	1944.100
STD DEV DELIVERY TIME	.000	.000	.616

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSC 6	LGSC 3	GW6
NUMBER SENT	2235	2276	3590
AVG DELIVERY TIME	1944.100	1944.100	1365.800
MAX DELIVERY TIME	1944.100	1944.100	1365.800
MIN DELIVERY TIME	1944.100	1944.100	1365.800
STD DEV DELIVERY TIME	.000	.000	.000

SBSS SIMULATION - CENTRAL PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER
DESTINATION STATION	FMFS	DOMR
NUMBER SENT	2706	884
AVG DELIVERY TIME	1868.181	1868.181
MAX DELIVERY TIME	1868.181	1868.181
MIN DELIVERY TIME	1868.181	1868.181
STD DEV DELIVERY TIME	.000	0.

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

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1 * SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED
2 ***** LANGEN RELEASE 4.01 FILE SAVED 07/20/1993 12:09:02
3 ***** LNET RELEASE 4.01 FILE SAVED 06/21/1993 13:46:21
4
5 ***** GLOBAL VARIABLES
6 GLOBAL FLAGS =
7 TEXT SCALE FACTOR = 3 24 0111110
8 DIAGRAM BOUNDARIES = 0. 400.000 120.000 0.
9 MINIMIZE RANDOM SEED ARRAY = YES
10 ANTITHETIC VARIATE = NO
11 RANDOMIZER = 0
12 CLOCK = YES
13 CLOCK INCREMENT = 4320.000000 SEC
14 BATCH = YES
15 INPUT LISTING = YES
16 LENGTH = +2.1600E+005 SEC
17
18 ***** STATISTICAL DISTRIBUTION FUNCTIONS
19 STATISTICAL DISTRIBUTIONS =
20 NAME = DISK ACCESS
21 TYPE = NORMAL
22 MEAN = 15000.000
23 STANDARD.DEVIATION = .100
24 NAME = LGSD
25 TYPE = EXPONENTIAL
26 MEAN = +2.67E+007
27 UPPER.BOUND = +8.00E+007
28 NAME = LGSP
29 TYPE = EXPONENTIAL
30 MEAN = +2.07E+007
31 UPPER.BOUND = +6.20E+007
32 NAME = LGSC
33 TYPE = EXPONENTIAL
34 MEAN = +1.01E+008
35 UPPER.BOUND = +3.04E+008
36 NAME = LGSM
37 TYPE = EXPONENTIAL
38 MEAN = +1.04E+008
39 UPPER.BOUND = +3.12E+008
40 NAME = FMFS
41 TYPE = EXPONENTIAL
42 MEAN = +8.45E+007
43 UPPER.BOUND = +2.53E+008
44 NAME = DOMR
45 TYPE = EXPONENTIAL
46 MEAN = +2.53E+008
47 UPPER.BOUND = +7.60E+008
48 NAME = BASE TRAFFIC
49 TYPE = EXPONENTIAL
50 MEAN = 582726.800
```

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```
51 UPPER.BOUND = +1.75E+006
52 NAME = LGSD ENTIRE
53 TYPE = EXPONENTIAL
54 MEAN = +4.45E+006
55 UPPER.BOUND = +1.33E+007
56 NAME = LGSP ENTIRE
57 TYPE = EXPONENTIAL
58 MEAN = +3.44E+006
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59     UPPER.BOUND = +1.03E+007
60     NAME = LGSM ENTIRE
61     TYPE = EXPONENTIAL
62     MEAN = +1.74E+007
63     UPPER.BOUND = +5.21E+007
64     NAME = LGSC ENTIRE
65     TYPE = EXPONENTIAL
66     MEAN = +1.69E+007
67     UPPER.BOUND = +5.07E+008
68     NAME = SDF2/LGSD1
69     TYPE = MESSAGE.LINEAR
70     A = 1.000
71     NAME = SDF1/FILE SERVER
72     TYPE = MESSAGE.LINEAR
73     A = 1.000
74     B = 41812.000
75     NAME = SDF2/LGSP1
76     TYPE = MESSAGE.LINEAR
77     A = 1.000
78     NAME = SDF2/LGSM1
79     TYPE = MESSAGE.LINEAR
80     A = 1.000
81     NAME = SDF2/LGSC1
82     TYPE = MESSAGE.LINEAR
83     A = 1.000
84     NAME = SDF2/FMFS
85     TYPE = MESSAGE.LINEAR
86     A = 1.000
87     NAME = SDF2/DOMR
88     TYPE = MESSAGE.LINEAR
89     A = 1.000
90     NAME = SDF2/LGSD 2
91     TYPE = MESSAGE.LINEAR
92     A = 1.000
93     NAME = SDF2/LGSD 3
94     TYPE = MESSAGE.LINEAR
95     A = 1.000
96     NAME = SDF2/LGSD 4
97     TYPE = MESSAGE.LINEAR
98     A = 1.000
99     NAME = SDF2/LGSD 5
100    TYPE = MESSAGE.LINEAR

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11:42:19

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

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101    A = 1.000
102    NAME = SDF2/LGSD 6
103    TYPE = MESSAGE.LINEAR
104    A = 1.000
105    NAME = SDF2/LGSP 2
106    TYPE = MESSAGE.LINEAR
107    A = 1.000
108    NAME = SDF2/LGSP 3
109    TYPE = MESSAGE.LINEAR
110    A = 1.000
111    NAME = SDF2/LGSP 4
112    TYPE = MESSAGE.LINEAR
113    A = 1.000
114    NAME = SDF2/LGSP 5
115    TYPE = MESSAGE.LINEAR
116    A = 1.000
117    NAME = SDF2/LGSP 6
118    TYPE = MESSAGE.LINEAR
119    A = 1.000
120    NAME = SDF2/LGSM 2
121    TYPE = MESSAGE.LINEAR

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122      A =      1.000
123      NAME = SDF2/LGSM 3
124      TYPE = MESSAGE.LINEAR
125      A =      1.000
126      NAME = SDF2/LGSM 4
127      TYPE = MESSAGE.LINEAR
128      A =      1.000
129      NAME = SDF2/LGSM 5
130      TYPE = MESSAGE.LINEAR
131      A =      1.000
132      NAME = SDF2/LGSM 6
133      TYPE = MESSAGE.LINEAR
134      A =      1.000
135      NAME = SDF2/LGSC 2
136      TYPE = MESSAGE.LINEAR
137      A =      1.000
138      NAME = SDF2/LGSC 3
139      TYPE = MESSAGE.LINEAR
140      A =      1.000
141      NAME = SDF2/LGSC 4
142      TYPE = MESSAGE.LINEAR
143      A =      1.000
144      NAME = SDF2/LGSC 5
145      TYPE = MESSAGE.LINEAR
146      A =      1.000
147      NAME = SDF2/LGSC 6
148      TYPE = MESSAGE.LINEAR
149      A =      1.000
150      NAME = I/LGSM RETRY SDF
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

151      TYPE = IEEE.BACKOFF
152      SLOT.TIME =      51.200
153      RETRY.LIMIT =      16.000
154      LIMIT.DELAY =      51.200
155      NAME = I/LGSD RETRY SDF
156      TYPE = IEEE.BACKOFF
157      SLOT.TIME =      51.200
158      RETRY.LIMIT =      16.000
159      LIMIT.DELAY =      51.200
160      NAME = I/LGSC RETRY SDF
161      TYPE = IEEE.BACKOFF
162      SLOT.TIME =      51.200
163      RETRY.LIMIT =      16.000
164      LIMIT.DELAY =      51.200
165      NAME = I/LGSP RETRY SDF
166      TYPE = IEEE.BACKOFF
167      SLOT.TIME =      51.200
168      RETRY.LIMIT =      16.000
169      LIMIT.DELAY =      51.200
170      NAME = I/AFNET RETRY SDF
171      TYPE = IEEE.BACKOFF
172      SLOT.TIME =      51.200
173      RETRY.LIMIT =      16.000
174      LIMIT.DELAY =      51.200
175
176      ***** LAN RING1 DEFINITION BEGINS
177      HARDWARE TYPE = DATA TRANSFER
178      * LAN SUBTYPE IS IEEE 802.5 16Mb
179      NAME = RING1
180      DRAW TYPE = RING
181      NAME/MSG LOCATION =      249.431      41.361      209.431      41.361
182      STYLE/WIDTH =      1      60
183      SEGMENTS =      7
184      199.431      41.361

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185      209.431      39.361
186      259.431      39.361
187      269.431      41.361
188      259.431      43.361
189      209.431      43.361
190      199.431      41.361
191      PROTOCOL = TOKEN RING
192      SEPARATE BLOCKS = YES
193      CYCLE TIME = .0625 MIC
194      BITS PER CYCLE = 1 BITS
195      CYCLES PER WORD = 8 CYCLES
196      WORDS PER BLOCK = 17942 WORDS
197      MINIMUM DATA BITS PER TRANSFER = 0 BITS
198      WORD OVERHEAD TIME = 0. MIC
199      BLOCK OVERHEAD TIME = 12.5 MIC
200      BUS CONNECTIONS =
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201      G1/GW6
202      SEGMENTS =      199.989      41.249      79.528      40.460
203      G2/GW6
204      SEGMENTS =      199.989      41.249      79.528      40.460
205      G1/GW1
206      SEGMENTS =      217.018      39.361      178.354      28.254
207      G2/GW1
208      SEGMENTS =      217.018      39.361      178.354      28.254
209      G1/GATE TO LGSP
210      SEGMENTS =      253.031      39.361      259.732      27.579
211      G2/GATE TO LGSP
212      SEGMENTS =      253.031      39.361      259.732      27.579
213      G1/GW4
214      SEGMENTS =      251.914      43.361      284.578      55.929
215      G2/GW4
216      SEGMENTS =      251.914      43.361      284.578      55.929
217      G1/GW3
218      SEGMENTS =      218.414      43.361      185.891      57.842
219      G2/GW3
220      SEGMENTS =      218.414      43.361      185.891      57.842
221      S1/BASE TRAFFIC1
222      SEGMENTS =      236.281      39.361      221.206      13.347
223      S1/BASE TRAFFIC2
224      SEGMENTS =      244.656      43.361      240.887      65.492
225
226      ***** LAN LGSM DEFINITION BEGINS
227      HARDWARE TYPE = DATA TRANSFER
228      * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
229      NAME = LGSM
230      DRAW TYPE = BUS
231      NAME/MSG LOCATION =      142.230      82.212      92.230      82.212
232      STYLE/WIDTH =      1      60
233      SEGMENTS =      2
234      92.230      83.212
235      162.230      83.212
236      PROTOCOL = COLLISION
237      SEPARATE BLOCKS = YES
238      CYCLE TIME = .1 MIC
239      RETRY INTERVAL = 1/LGSM RETRY SDF
240      COLLISION WINDOW = 4.33 MIC
241      INTERFRAME GAP = 9.6 MIC
242      JAM TIME = 3.2 MIC
243      BITS PER CYCLE = 1 BITS
244      CYCLES PER WORD = 8 CYCLES
245      WORDS PER BLOCK = 1500 WORDS
246      MINIMUM DATA BITS PER TRANSFER = 304 BITS
247      WORD OVERHEAD TIME = 0. MIC

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248 BLOCK OVERHEAD TIME = 20.8 MIC
 249 BUS CONNECTIONS =
 250 G1/GW3
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251	SEGMENTS =	157.834	83.212	180.866	62.455
252	G2/GW3				
253	SEGMENTS =	157.834	83.212	180.866	62.455
254	S1/LGSM1				
255	SEGMENTS =	106.468	83.212	76.736	95.868
256	S1/LGSM 2				
257	SEGMENTS =	115.762	83.212	96.736	95.868
258	S1/LGSM 3				
259	SEGMENTS =	125.055	83.212	116.736	95.868
260	S1/LGSM 4				
261	SEGMENTS =	134.349	83.212	136.618	95.868
262	S1/LGSM 5				
263	SEGMENTS =	143.643	83.212	156.736	95.868
264	S1/LGSM 6				
265	SEGMENTS =	152.936	83.212	176.736	95.868

266
 267 ***** LAN LGSD DEFINITION BEGINS

268 HARDWARE TYPE = DATA TRANSFER

269 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5

270 NAME = LGSD

271 DRAW TYPE = BUS

272 NAME/MSG LOCATION = 126.736 18.254 76.736 18.254

273 STYLE/WIDTH = 1 60

274 SEGMENTS = 2

275 76.736 19.254

276 146.736 19.254

277 PROTOCOL = COLLISION

278 SEPARATE BLOCKS = YES

279 CYCLE TIME = .1 MIC

280 RETRY INTERVAL = I/LGSD RETRY SDF

281 COLLISION WINDOW = 4.33 MIC

282 INTERFRAME GAP = 9.6 MIC

283 JAM TIME = 3.2 MIC

284 BITS PER CYCLE = 1 BITS

285 CYCLES PER WORD = 8 CYCLES

286 WORDS PER BLOCK = 1500 WORDS

287 MINIMUM DATA BITS PER TRANSFER = 304 BITS

288 WORD OVERHEAD TIME = 0. MIC

289 BLOCK OVERHEAD TIME = 20.8 MIC

290 BUS CONNECTIONS =

291 G1/GW1

292 SEGMENTS = 142.899 19.254 181.145 24.992

293 G2/GW1

294 SEGMENTS = 142.899 19.254 181.145 24.992

295 S1/LGSD1

296 SEGMENTS = 82.040 19.254 67.384 8.735

297 S1/LGSD 2

298 SEGMENTS = 92.823 19.254 87.384 8.735

299 S1/LGSD 3

300 SEGMENTS = 103.605 19.254 107.384 8.735

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

301	S1/LGSD 4				
302	SEGMENTS =	114.388	19.254	127.384	8.735
303	S1/LGSD 5				
304	SEGMENTS =	125.171	19.254	147.384	8.735
305	S1/LGSD 6				


```

306         SEGMENTS =          135.953          19.254          167.384          8.735
307
308 ***** LAN LGSC DEFINITION BEGINS
309 HARDWARE TYPE = DATA TRANSFER
310 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
311 NAME = LGSC
312 DRAW TYPE = BUS
313 NAME/MSG LOCATION =          343.231          80.355          293.231          80.355
314 STYLE/WIDTH =    1    60
315 SEGMENTS =    2
316     293.231          81.355
317     363.231          81.355
318 PROTOCOL = COLLISION
319 SEPARATE BLOCKS = YES
320 CYCLE TIME = .1 MIC
321 RETRY INTERVAL = I/LGSC RETRY SDF
322 COLLISION WINDOW = 4.33 MIC
323 INTERFRAME GAP = 9.6 MIC
324 JAM TIME = 3.2 MIC
325 BITS PER CYCLE = 1 BITS
326 CYCLES PER WORD = 8 CYCLES
327 WORDS PER BLOCK = 1500 WORDS
328 MINIMUM DATA BITS PER TRANSFER = 304 BITS
329 WORD OVERHEAD TIME = 0. MIC
330 BLOCK OVERHEAD TIME = 20.8 MIC
331 BUS CONNECTIONS =
332     G1/GW4
333     SEGMENTS =          296.022          81.355          291.836          58.630
334     G2/GW4
335     SEGMENTS =          296.022          81.355          291.836          58.630
336     S1/LGSC1
337     SEGMENTS =          303.700          81.355          276.062          91.143
338     S1/LGSC 2
339     SEGMENTS =          313.622          81.355          296.062          91.143
340     S1/LGSC 3
341     SEGMENTS =          323.544          81.355          316.062          91.143
342     S1/LGSC 4
343     SEGMENTS =          333.466          81.355          336.062          91.143
344     S1/LGSC 5
345     SEGMENTS =          343.387          81.355          356.062          91.143
346     S1/LGSC 6
347     SEGMENTS =          353.309          81.355          376.062          91.143
348
349 ***** LAN LGSP DEFINITION BEGINS
350 HARDWARE TYPE = DATA TRANSFER
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

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351 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
352 NAME = LGSP
353 DRAW TYPE = BUS
354 NAME/MSG LOCATION =          324.387          14.035          274.387          14.035
355 STYLE/WIDTH =    1    60
356 SEGMENTS =    2
357     274.387          15.035
358     344.387          15.035
359 PROTOCOL = COLLISION
360 SEPARATE BLOCKS = YES
361 CYCLE TIME = .1 MIC
362 RETRY INTERVAL = I/LGSP RETRY SDF
363 COLLISION WINDOW = 4.33 MIC
364 INTERFRAME GAP = 9.6 MIC
365 JAM TIME = 3.2 MIC
366 BITS PER CYCLE = 1 BITS
367 CYCLES PER WORD = 8 CYCLES
368 WORDS PER BLOCK = 1500 WORDS

```

```

369 MINIMUM DATA BITS PER TRANSFER = 304 BITS
370 WORD OVERHEAD TIME = 0. MIC
371 BLOCK OVERHEAD TIME = 20.8 MIC
372 BUS CONNECTIONS =
373 G1/GATE TO LGSP
374 SEGMENTS = 278.016 15.035 255.544 24.316
375 G2/GATE TO LGSP
376 SEGMENTS = 278.016 15.035 255.544 24.316
377 S1/FILE SERVER
378 SEGMENTS = 277.737 15.035 314.588 30.729
379 S1/LGSP1
380 SEGMENTS = 285.694 15.035 272.756 4.372
381 S1/LGSP 2
382 SEGMENTS = 295.476 15.035 292.756 4.372
383 S1/LGSP 3
384 SEGMENTS = 305.258 15.035 312.756 4.372
385 S1/LGSP 4
386 SEGMENTS = 315.040 15.035 332.756 4.372
387 S1/LGSP 5
388 SEGMENTS = 324.823 15.035 352.756 4.372
389 S1/LGSP 6
390 SEGMENTS = 334.605 15.035 372.756 4.372
391
392 ***** LAN AFNET DEFINITION BEGINS
393 HARDWARE TYPE = DATA TRANSFER
394 * LAN SUBTYPE IS USER DEFINED COLLISION LAN
395 NAME = AFNET
396 DRAW TYPE = STAR
397 NAME/MSG LOCATION = 66.261 52.855 50.261 52.855
398 STYLE/WIDTH = 1 60
399 SEGMENTS = 5
400 48.261 54.355
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```

401 48.261 50.355
402 88.261 50.355
403 88.261 54.355
404 48.261 54.355
405 PROTOCOL = COLLISION
406 SEPARATE BLOCKS = YES
407 CYCLE TIME = .05952381 MICROSEC
408 BITS PER CYCLE = 1
409 CYCLES PER WORD = 8
410 WORDS PER BLOCK = 1496
411 WORD OVERHEAD TIME = 0. MICROSEC
412 BLOCK OVERHEAD TIME = 14.286 MICROSEC
413 RETRY INTERVAL = I/AFNET RETRY SDF
414 COLLISION WINDOW = 4.33 MICROSEC
415 INTERFRAME GAP = 9.6 MICROSEC
416 JAM TIME = 3.2 MICROSEC
417 BUS CONNECTIONS =
418 S1/FMFS
419 SEGMENTS = 55.799 53.173 41.561 66.674
420 S1/DOMR
421 SEGMENTS = 76.318 50.355 88.880 67.349
422 G1/GW6
423 SEGMENTS = 71.711 50.355 68.361 42.542
424 G2/GW6
425 SEGMENTS = 71.711 50.355 68.361 42.542
426
427 ***** STATION LGSD1 # 1
428 * INDIVIDUAL 1.500 -1.500 15
429 HARDWARE TYPE = PROCESSING
430 NAME = S1/LGSD1
431 LOCATION = 57.892 4.910

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432 STYLE/COLOR = 1 3
433 BASIC CYCLE TIME = 0. MICROSEC
434 INPUT CONTROLLER = YES
435 INSTRUCTION REPERTOIRE =
436 INSTRUCTION TYPE = PROCESSING
437 NAME ; NO/OP
438 TIME ; 0 CYCLES
439 INSTRUCTION TYPE = MESSAGE
440 NAME ; MESSAGE
441 MESSAGE ; REQUEST FROM SERVER
442 LENGTH ; 200 BITS
443 INHIBIT MESSAGE TO SELF ; YES
444 DESTINATION PROCESSOR ; R1/FILE SERVER
445 QUEUE FLAG ; YES
446 NAME ; UPDATE FILES
447 MESSAGE ; UPDATE FILES
448 LENGTH ; SDF2/LGSD1
449 INHIBIT MESSAGE TO SELF ; YES
450 DESTINATION PROCESSOR ; R1/FILE SERVER
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451 QUEUE FLAG ; YES
452 INSTRUCTION TYPE = READ
453 NAME ; GET TRANSACTION MODULE
454 STORAGE DEVICE TO ACCESS ; S1/SD/LGSD1
455 FILE ACCESSED ; GENERAL STORAGE
456 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
457 ALLOWABLE BUSSES ;
458 S1/TD/LGSD1
459
460 HARDWARE TYPE = STORAGE
461 NAME = S1/SD/LGSD1
462 CAPACITY = 1090519040. BITS
463 BITS PER WORD = 4000. BITS
464 WORD ACCESS TIME = 48.83 MICROSEC
465 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
466 NUMBER OF PORTS = 1
467
468 HARDWARE TYPE = DATA TRANSFER
469 NAME = S1/TD/LGSD1
470 BITS PER CYCLE = 1 BITS
471 BUS CONNECTIONS =
472 S1/LGSD1
473 S1/SD/LGSD1
474
475 SOFTWARE TYPE = MODULE
476 * LGSD1
477 NAME = LGSD
478 CONCURRENT EXECUTION = YES
479 ITERATION PERIOD = LGSD
480 RESIDENT PROCESSORS =
481 S1/LGSD1
482 INSTRUCTION LIST =
483 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
484 EXECUTE A TOTAL OF ; 1 MESSAGE
485 * LGSD1
486 NAME = UPDATE SERVER
487 CONCURRENT EXECUTION = YES
488 ALLOWED PROCESSORS =
489 S1/LGSD1
490 REQUIRED MESSAGES =
491 SEND REPLY TO NODE
492 INSTRUCTION LIST =
493 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
494 EXECUTE A TOTAL OF ; 1 UPDATE FILES

```

495
 496 ***** STATION BASE TRAFFIC1 # 1
 497 * INDIVIDUAL 1.500 -1.500 15
 498 HARDWARE TYPE = PROCESSING
 499 NAME = S1/BASE TRAFFIC1
 500 LOCATION = 211.575 8.791
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501 STYLE/COLOR = 1 2
 502 BASIC CYCLE TIME = 0. MICROSEC
 503 INPUT CONTROLLER = YES
 504 INSTRUCTION REPERTOIRE =
 505 INSTRUCTION TYPE = PROCESSING
 506 NAME ; NO/OP
 507 TIME ; 0 CYCLES
 508 INSTRUCTION TYPE = MESSAGE
 509 NAME ; NOISE
 510 MESSAGE ; NOISE
 511 LENGTH ; 200 BITS
 512 INHIBIT MESSAGE TO SELF ; YES
 513 DESTINATION PROCESSOR ; S1/BASE TRAFFIC2
 514 QUEUE FLAG ; YES
 515
 516 SOFTWARE TYPE = MODULE
 517 * BASE TRAFFIC1
 518 NAME = BASE TRAFFIC
 519 CONCURRENT EXECUTION = YES
 520 ITERATION PERIOD = BASE TRAFFIC
 521 RESIDENT PROCESSORS =
 522 S1/BASE TRAFFIC1
 523 INSTRUCTION LIST =
 524 EXECUTE A TOTAL OF ; 1 NOISE
 525
 526 ***** STATION BASE TRAFFIC2 # 1
 527 * INDIVIDUAL 1.500 -1.500 15
 528 HARDWARE TYPE = PROCESSING
 529 NAME = S1/BASE TRAFFIC2
 530 LOCATION = 231.675 65.155
 531 STYLE/COLOR = 1 3
 532 BASIC CYCLE TIME = 0. MICROSEC
 533 INPUT CONTROLLER = YES
 534 INSTRUCTION REPERTOIRE =
 535 INSTRUCTION TYPE = PROCESSING
 536 NAME ; NO/OP
 537 TIME ; 0 CYCLES
 538
 539 ***** STATION FILE SERVER # 1
 540 * INDIVIDUAL 1.500 -1.500 15
 541 HARDWARE TYPE = PROCESSING
 542 NAME = S1/FILE SERVER
 543 LOCATION = 306.213 28.704
 544 STYLE/COLOR = 1 4
 545 BASIC CYCLE TIME = 0. MICROSEC
 546 INPUT CONTROLLER = YES
 547 INSTRUCTION REPERTOIRE =
 548 INSTRUCTION TYPE = PROCESSING
 549 NAME ; NO/OP
 550 TIME ; 0 CYCLES
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

551 INSTRUCTION TYPE = MESSAGE
 552 NAME ; SEND REPLY

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553     MESSAGE ; SEND REPLY TO NODE
554     LENGTH ; SDF1/FILE SERVER
555     INHIBIT MESSAGE TO SELF ; YES
556     DESTINATION PROCESSOR ; ECHO
557     QUEUE FLAG ; YES
558 INSTRUCTION TYPE = READ
559     NAME ; READ FOURTH RECORD
560     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
561     FILE ACCESSED ; GENERAL STORAGE
562     NUMBER OF BITS TO TRANSMIT ; 957 BITS
563     ALLOWABLE BUSSES ;
564     S1/TD/FILE SERVER
565     NAME ; READ THIRD RECORD
566     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
567     FILE ACCESSED ; GENERAL STORAGE
568     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
569     ALLOWABLE BUSSES ;
570     S1/TD/FILE SERVER
571     NAME ; READ SECOND RECORD
572     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
573     FILE ACCESSED ; GENERAL STORAGE
574     NUMBER OF BITS TO TRANSMIT ; 2582 BITS
575     ALLOWABLE BUSSES ;
576     S1/TD/FILE SERVER
577     NAME ; READ CONTROL
578     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
579     FILE ACCESSED ; GENERAL STORAGE
580     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
581     ALLOWABLE BUSSES ;
582     S1/TD/FILE SERVER
583 INSTRUCTION TYPE = WRITE
584     NAME ; WRITE1
585     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
586     FILE ACCESSED ; GENERAL STORAGE
587     NUMBER OF BITS TO TRANSMIT ; 2582 BITS
588     REPLACE FLAG ; YES
589     PARTIAL FLAG ; YES
590     ALLOWABLE BUSSES ;
591     S1/TD/FILE SERVER
592     NAME ; WRITE2
593     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
594     FILE ACCESSED ; GENERAL STORAGE
595     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
596     REPLACE FLAG ; YES
597     PARTIAL FLAG ; YES
598     ALLOWABLE BUSSES ;
599     S1/TD/FILE SERVER
600     NAME ; WRITE3

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601     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
602     FILE ACCESSED ; GENERAL STORAGE
603     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
604     REPLACE FLAG ; YES
605     PARTIAL FLAG ; YES
606     ALLOWABLE BUSSES ;
607     S1/TD/FILE SERVER
608     NAME ; WRITE4
609     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
610     FILE ACCESSED ; GENERAL STORAGE
611     NUMBER OF BITS TO TRANSMIT ; 957 BITS
612     REPLACE FLAG ; YES
613     PARTIAL FLAG ; YES
614     ALLOWABLE BUSSES ;
615     S1/TD/FILE SERVER

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616     NAME ; WRITE6
617     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
618     FILE ACCESSED ; GENERAL STORAGE
619     NUMBER OF BITS TO TRANSMIT ; 1044 BITS
620     REPLACE FLAG ; YES
621     PARTIAL FLAG ; YES
622     ALLOWABLE BUSSES ;
623     S1/TD/FILE SERVER
624     NAME ; WRITE5
625     STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
626     FILE ACCESSED ; GENERAL STOPAGE
627     NUMBER OF BITS TO TRANSMIT ; 3456 BITS
628     REPLACE FLAG ; YES
629     PARTIAL FLAG ; YES
630     ALLOWABLE BUSSES ;
631     S1/TD/FILE SERVER
632
633     HARDWARE TYPE = STORAGE
634     NAME = S1/SD/FILE SERVER
635     CAPACITY = 12582912000. BITS
636     BITS PER WORD = 512000. BITS
637     WORD ACCESS TIME = 48.83 MICROSEC
638     OVERHEAD TIME PER BLOCK ACCESS = 15000.0 MICROSEC
639     NUMBER OF PORTS = 1
640
641     HARDWARE TYPE = DATA TRANSFER
642     NAME = S1/TD/FILE SERVER
643     BITS PER CYCLE = 1 BITS
644     BUS CONNECTIONS =
645     S1/FILE SERVER
646     S1/SD/FILE SERVER
647
648     SOFTWARE TYPE = MODULE
649     * FILE SERVER
650     NAME = MESSAGE REPLY

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651     CONCURRENT EXECUTION = YES
652     ALLOWED PROCESSORS =
653     S1/FILE SERVER
654     REQUIRED MESSAGES =
655     REQUEST FROM SERVER
656     INSTRUCTION LIST =
657     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
658     EXECUTE A TOTAL OF ; 1 READ THIRD RECORD
659     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
660     EXECUTE A TOTAL OF ; 1 READ CONTROL
661     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
662     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
663     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
664     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
665     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
666     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
667     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
668     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
669     EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
670     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
671     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
672     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
673     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
674     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
675     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
676     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
677     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
678     EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD

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679      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
680      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
681      EXECUTE A TOTAL OF ; 1 READ CONTROL
682      EXECUTE A TOTAL OF ; 1 READ THIRD RECORD
683      EXECUTE A TOTAL OF ; 1 SEND REPLY
684  * FILE SERVER
685      NAME = UPDATE RECORDS
686      CONCURRENT EXECUTION = YES
687      ALLOWED PROCESSORS =
688      S1/FILE SERVER
689      REQUIRED MESSAGES =
690      UPDATE FILES
691      INSTRUCTION LIST =
692      EXECUTE A TOTAL OF ; 1 WRITE1
693      EXECUTE A TOTAL OF ; 1 WRITE2
694      EXECUTE A TOTAL OF ; 1 WRITE3
695      EXECUTE A TOTAL OF ; 1 WRITE4
696      EXECUTE A TOTAL OF ; 1 WRITE5
697      EXECUTE A TOTAL OF ; 1 WRITE6
698      EXECUTE A TOTAL OF ; 1 WRITE1
699      EXECUTE A TOTAL OF ; 1 WRITE1
700      EXECUTE A TOTAL OF ; 1 WRITE1
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701      EXECUTE A TOTAL OF ; 1 WRITE1
702      EXECUTE A TOTAL OF ; 1 WRITE1
703      EXECUTE A TOTAL OF ; 1 WRITE1
704      EXECUTE A TOTAL OF ; 1 WRITE1
705      EXECUTE A TOTAL OF ; 1 WRITE1
706      EXECUTE A TOTAL OF ; 1 WRITE1
707      EXECUTE A TOTAL OF ; 1 WRITE4
708      EXECUTE A TOTAL OF ; 1 WRITE4
709      EXECUTE A TOTAL OF ; 1 WRITE4
710      EXECUTE A TOTAL OF ; 1 WRITE4
711      EXECUTE A TOTAL OF ; 1 WRITE4
712      EXECUTE A TOTAL OF ; 1 WRITE4
713      EXECUTE A TOTAL OF ; 1 WRITE4
714      EXECUTE A TOTAL OF ; 1 WRITE4
715      EXECUTE A TOTAL OF ; 1 WRITE4
716      EXECUTE A TOTAL OF ; 1 WRITE4
717      EXECUTE A TOTAL OF ; 1 WRITE4
718
719  ***** STATION LGSP1 # 1
720  * INDIVIDUAL 1.500 -1.500 15
721  HARDWARE TYPE = PROCESSING
722      NAME = S1/LGSP1
723      LOCATION = 264.756 1.872
724      STYLE/COLOR = 1 3
725      BASIC CYCLE TIME = 0. MICROSEC
726      INPUT CONTROLLER = YES
727      INSTRUCTION REPERTOIRE =
728      INSTRUCTION TYPE = PROCESSING
729      NAME ; NO/OP
730      TIME ; 0 CYCLES
731      INSTRUCTION TYPE = MESSAGE
732      NAME ; MESSAGE
733      MESSAGE ; REQUEST FROM SERVER
734      LENGTH ; 200 BITS
735      INHIBIT MESSAGE TO SELF ; YES
736      DESTINATION PROCESSOR ; S1/FILE SERVER
737      QUEUE FLAG ; YES
738      NAME ; UPDATE FILES
739      MESSAGE ; UPDATE FILES
740      LENGTH ; SDF2/LGSP1
741      INHIBIT MESSAGE TO SELF ; YES

```

```

742      DESTINATION PROCESSOR ; S1/FILE SERVER
743      QUEUE FLAG ; YES
744      INSTRUCTION TYPE = READ
745      NAME ; GET TRANSACTION MODULE
746      STORAGE DEVICE TO ACCESS ; S1/SD/LGSP1
747      FILE ACCESSED ; GENERAL STORAGE
748      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
749      ALLOWABLE BUSSES ;
750      S1/TD/LGSP1
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```

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

751
752  HARDWARE TYPE = STORAGE
753  NAME = S1/SD/LGSP1
754  CAPACITY = 1090519040. BITS
755  BITS PER WORD = 4000. BITS
756  WORD ACCESS TIME = 48.83 MICROSEC
757  OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
758  NUMBER OF PORTS = 1
759
760  HARDWARE TYPE = DATA TRANSFER
761  NAME = S1/TD/LGSP1
762  BITS PER CYCLE = 1 BITS
763  BUS CONNECTIONS =
764  S1/LGSP1
765  S1/SD/LGSP1
766
767  SOFTWARE TYPE = MODULE
768  * LGSP1
769  NAME = LGSP ACTIVITY 1
770  CONCURRENT EXECUTION = YES
771  ITERATION PERIOD = LGSP
772  RESIDENT PROCESSORS =
773  S1/LGSP1
774  INSTRUCTION LIST =
775  EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
776  EXECUTE A TOTAL OF ; 1 MESSAGE
777  * LGSP1
778  NAME = UPDATE FILES
779  CONCURRENT EXECUTION = YES
780  ALLOWED PROCESSORS =
781  S1/LGSP1
782  REQUIRED MESSAGES =
783  SEND REPLY TO NODE
784  INSTRUCTION LIST =
785  EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
786  EXECUTE A TOTAL OF ; 1 UPDATE FILES
787
788  ***** STATION LGSM1 # 1
789  * INDIVIDUAL 1.500 -1.500 15
790  HARDWARE TYPE = PROCESSING
791  NAME = S1/LGSM1
792  LOCATION = 70.036 94.349
793  STYLE/COLOR = 1 3
794  BASIC CYCLE TIME = 0. MICROSEC
795  INPUT CONTROLLER = YES
796  INSTRUCTION REPERTOIRE =
797  INSTRUCTION TYPE = PROCESSING
798  NAME ; NO/OP
799  TIME ; 0 CYCLES
800  INSTRUCTION TYPE = MESSAGE
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED


```

801      NAME ; MESSAGE
802      MESSAGE ; REQUEST FROM SERVER
803      LENGTH ; 200 BITS
804      INHIBIT MESSAGE TO SELF ; YES
805      DESTINATION PROCESSOR ; R6/FILE SERVER
806      QUEUE FLAG ; YES
807      NAME ; UPDATE FILES
808      MESSAGE ; UPDATE FILES
809      LENGTH ; SDF2/LGSM1
810      INHIBIT MESSAGE TO SELF ; YES
811      DESTINATION PROCESSOR ; R6/FILE SERVER
812      QUEUE FLAG ; YES
813      INSTRUCTION TYPE = READ
814      NAME ; GET TRANSACTION MODULE
815      STORAGE DEVICE TO ACCESS ; S1/SD/LGSM1
816      FILE ACCESSED ; GENERAL STORAGE
817      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
818      ALLOWABLE BUSSES ;
819      S1/TD/LGSM1
820
821      HARDWARE TYPE = STORAGE
822      NAME = S1/SD/LGSM1
823      CAPACITY = 1090519040. BITS
824      BITS PER WORD = 4000. BITS
825      WORD ACCESS TIME = 48.83 MICROSEC
826      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
827      NUMBER OF PORTS = 1
828
829      HARDWARE TYPE = DATA TRANSFER
830      NAME = S1/TD/LGSM1
831      BITS PER CYCLE = 1 BITS
832      BUS CONNECTIONS =
833      S1/LGSM1
834      S1/SD/LGSM1
835
836      SOFTWARE TYPE = MODULE
837      * LGSM1
838      NAME = LGSM ACTIVITY 1
839      CONCURRENT EXECUTION = YES
840      ITERATION PERIOD = LGSM
841      RESIDENT PROCESSORS =
842      S1/LGSM1
843      INSTRUCTION LIST =
844      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
845      EXECUTE A TOTAL OF ; 1 MESSAGE
846      * LGSM1
847      NAME = FILE UPDATE
848      CONCURRENT EXECUTION = YES
849      ALLOWED PROCESSORS =
850      S1/LGSM1

```

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

851      REQUIRED MESSAGES =
852      SEND REPLY TO NODE
853      INSTRUCTION LIST =
854      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
855      EXECUTE A TOTAL OF ; 1 UPDATE FILES
856
857      ***** STATION LGSC1 # 1
858      * INDIVIDUAL 1.500 -1.500 15
859      HARDWARE TYPE = PROCESSING
860      NAME = S1/LGSC1
861      LOCATION = 265.175 89.118
862      STYLE/COLOR = 1 3
863      BASIC CYCLE TIME = 0. MICROSEC

```

```

864     INPUT CONTROLLER = YES
865     INSTRUCTION REPERTOIRE =
866         INSTRUCTION TYPE = PROCESSING
867             NAME ; NO/OP
868             TIME ; 0 CYCLES
869     INSTRUCTION TYPE = MESSAGE
870         NAME ; MESSAGE
871             MESSAGE ; REQUEST FROM SERVER
872             LENGTH ; 200 BITS
873             INHIBIT MESSAGE TO SELF ; YES
874             DESTINATION PROCESSOR ; R7/FILE SERVER
875             QUEUE FLAG ; YES
876         NAME ; UPDATE RECORDS
877             MESSAGE ; UPDATE FILES
878             LENGTH ; SDF2/LGSC1
879             INHIBIT MESSAGE TO SELF ; YES
880             DESTINATION PROCESSOR ; R7/FILE SERVER
881             QUEUE FLAG ; YES
882     INSTRUCTION TYPE = READ
883         NAME ; GET TRANSACTION MODULE
884             STORAGE DEVICE TO ACCESS ; S1/SD/LGSC1
885             FILE ACCESSED ; GENERAL STORAGE
886             NUMBER OF BITS TO TRANSMIT ; 20000 BITS
887             ALLOWABLE BUSSES ;
888                 S1/TD/LGSC1
889
890     HARDWARE TYPE = STORAGE
891         NAME = S1/SD/LGSC1
892         CAPACITY = 1090519040. BITS
893         BITS PER WORD = 4000. BITS
894         WORD ACCESS TIME = 48.83 MICROSEC
895         OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
896         NUMBER OF PORTS = 1
897
898     HARDWARE TYPE = DATA TRANSFER
899         NAME = S1/TD/LGSC1
900         BITS PER CYCLE = 1 BITS
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

901     BUS CONNECTIONS =
902         S1/LGSC1
903         S1/SD/LGSC1
904
905     SOFTWARE TYPE = MODULE
906     * LGSC1
907         NAME = LGSC ACTIVITY 1
908             CONCURRENT EXECUTION = YES
909             ITERATION PERIOD = LGSC
910             RESIDENT PROCESSORS =
911                 S1/LGSC1
912             INSTRUCTION LIST =
913                 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
914                 EXECUTE A TOTAL OF ; 1 MESSAGE
915     * LGSC1
916         NAME = RECORD UPDATE
917             CONCURRENT EXECUTION = YES
918             ALLOWED PROCESSORS =
919                 S1/LGSC1
920             REQUIRED MESSAGES =
921                 SEND REPLY TO NODE
922             INSTRUCTION LIST =
923                 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
924                 EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
925
926     ***** STATION FMFS # 1

```

```

927 * INDIVIDUAL 1.500 -1.500 15
928 HARDWARE TYPE = PROCESSING
929 NAME = S1/FMFS
930 LOCATION = 34.442 64.311
931 STYLE/COLOR = 1 5
932 ICON = MAINFRA2.ICN
933 BASIC CYCLE TIME = 0. MICROSEC
934 INPUT CONTROLLER = YES
935 INSTRUCTION REPERTOIRE =
936 INSTRUCTION TYPE = PROCESSING
937 NAME ; NO/OP
938 TIME ; 0 CYCLES
939 INSTRUCTION TYPE = MESSAGE
940 NAME ; MESSAGE
941 MESSAGE ; REQUEST FROM SERVER
942 LENGTH ; 200 BITS
943 INHIBIT MESSAGE TO SELF ; YES
944 DESTINATION PROCESSOR ; R8/FILE SERVER
945 QUEUE FLAG ; YES
946 NAME ; UPDATE FILES
947 MESSAGE ; UPDATE FILES
948 LENGTH ; SDF2/FMFS
949 INHIBIT MESSAGE TO SELF ; YES
950 DESTINATION PROCESSOR ; R8/FILE SERVER
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

951 QUEUE FLAG ; YES
952 INSTRUCTION TYPE = READ
953 NAME ; GET TRANSACTION MODULE
954 STORAGE DEVICE TO ACCESS ; S1/SD/FMFS
955 FILE ACCESSED ; GENERAL STORAGE
956 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
957 ALLOWABLE BUSSES ;
958 S1/TD/FMFS
959
960 HARDWARE TYPE = STORAGE
961 NAME = S1/SD/FMFS
962 CAPACITY = 1090519040. BITS
963 BITS PER WORD = 4000. BITS
964 WORD ACCESS TIME = 48.83 MICROSEC
965 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
966 NUMBER OF PORTS = 1
967
968 HARDWARE TYPE = DATA TRANSFER
969 NAME = S1/TD/FMFS
970 BITS PER CYCLE = 1 BITS
971 BUS CONNECTIONS =
972 S1/FMFS
973 S1/SD/FMFS
974
975 SOFTWARE TYPE = MODULE
976 * FMFS
977 NAME = FMFS ACTIVITY
978 CONCURRENT EXECUTION = YES
979 ITERATION PERIOD = FMFS
980 RESIDENT PROCESSORS =
981 S1/FMFS
982 INSTRUCTION LIST =
983 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
984 EXECUTE A TOTAL OF ; 1 MESSAGE
985 * FMFS
986 NAME = RECORDS UPDATE
987 CONCURRENT EXECUTION = YES
988 ALLOWED PROCESSORS =
989 S1/FMFS

```

```

990     REQUIRED MESSAGES =
991     SEND REPLY TO NODE
992     INSTRUCTION LIST =
993     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
994     EXECUTE A TOTAL OF ; 1 UPDATE FILES
995
996     ***** STATION DOMR # 1
997     * INDIVIDUAL 1.500 -1.500 15
998     HARDWARE TYPE = PROCESSING
999     NAME = S1/DOMR
1000    LOCATION = 76.736 64.142
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1001    STYLE/COLOR = 1 5
1002    ICON = MAINFRA2.ICN
1003    BASIC CYCLE TIME = 0. MICROSEC
1004    INPUT CONTROLLER = YES
1005    INSTRUCTION REPERTOIRE =
1006    INSTRUCTION TYPE = PROCESSING
1007    NAME ; NO/OP
1008    TIME ; 0 CYCLES
1009    INSTRUCTION TYPE = MESSAGE
1010    NAME ; MESSAGE
1011    MESSAGE ; REQUEST FROM SERVER
1012    LENGTH ; 200 BITS
1013    INHIBIT MESSAGE TO SELF ; YES
1014    DESTINATION PROCESSOR ; R9/FILE SERVER
1015    QUEUE FLAG ; YES
1016    NAME ; UPDATE FILES
1017    MESSAGE ; UPDATE FILES
1018    LENGTH ; SDF2/DOMR
1019    INHIBIT MESSAGE TO SELF ; YES
1020    DESTINATION PROCESSOR ; R9/FILE SERVER
1021    QUEUE FLAG ; YES
1022    INSTRUCTION TYPE = READ
1023    NAME ; GET TRANSACTION MODULE
1024    STORAGE DEVICE TO ACCESS ; S1/SD/DOMR
1025    FILE ACCESSED ; GENERAL STORAGE
1026    NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1027    ALLOWABLE BUSSES ;
1028    S1/TD/DOMR
1029
1030    HARDWARE TYPE = STORAGE
1031    NAME = S1/SD/DOMR
1032    CAPACITY = 1090519040. BITS
1033    BITS PER WORD = 4000. BITS
1034    WORD ACCESS TIME = 48.83 MICROSEC
1035    OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1036    NUMBER OF PORTS = 1
1037
1038    HARDWARE TYPE = DATA TRANSFER
1039    NAME = S1/TD/DOMR
1040    BITS PER CYCLE = 1 BITS
1041    BUS CONNECTIONS =
1042    S1/DOMR
1043    S1/SD/DOMR
1044
1045    SOFTWARE TYPE = MODULE
1046    * DOMR
1047    NAME = DOMR ACTIVITY
1048    CONCURRENT EXECUTION = YES
1049    ITERATION PERIOD = DOMR
1050    RESIDENT PROCESSORS =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1051      S1/DOMR
1052      INSTRUCTION LIST =
1053      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1054      EXECUTE A TOTAL OF ; 1 MESSAGE
1055  * DOMR
1056      NAME = FILES UPDATE
1057      CONCURRENT EXECUTION = YES
1058      ALLOWED PROCESSORS =
1059      S1/DOMR
1060      REQUIRED MESSAGES =
1061      SEND REPLY TO NODE
1062      INSTRUCTION LIST =
1063      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1064      EXECUTE A TOTAL OF ; 1 UPDATE FILES
1065
1066  ***** STATION LGSD 2 # 1
1067  * INDIVIDUAL 1.500 -1.500 15
1068  HARDWARE TYPE = PROCESSING
1069  NAME = S1/LGSD 2
1070  LOCATION = 77.893 4.910
1071  STYLE/COLOR = 1 3
1072  BASIC CYCLE TIME = 0. MICROSEC
1073  INPUT CONTROLLER = YES
1074  INSTRUCTION REPERTOIRE =
1075  INSTRUCTION TYPE = PROCESSING
1076  NAME ; NO/OP
1077  TIME ; 0 CYCLES
1078  INSTRUCTION TYPE = MESSAGE
1079  NAME ; MESSAGE
1080  MESSAGE ; REQUEST FROM SERVER
1081  LENGTH ; 200 BITS
1082  INHIBIT MESSAGE TO SELF ; YES
1083  DESTINATION PROCESSOR ; R10/FILE SERVER
1084  QUEUE FLAG ; YES
1085  NAME ; UPDATE FILES
1086  MESSAGE ; UPDATE FILES
1087  LENGTH ; SDF2/LGSD 2
1088  INHIBIT MESSAGE TO SELF ; YES
1089  DESTINATION PROCESSOR ; R10/FILE SERVER
1090  QUEUE FLAG ; YES
1091  INSTRUCTION TYPE = READ
1092  NAME ; GET TRANSACTION MODULE
1093  STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 2
1094  FILE ACCESSED ; GENERAL STORAGE
1095  NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1096  ALLOWABLE BUSSES ;
1097  S1/TD/LGSD 2
1098
1099  HARDWARE TYPE = STORAGE
1100  NAME = S1/SD/LGSD 2

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1101  CAPACITY = 1090519040. BITS
1102  BITS PER WORD = 4000. BITS
1103  WORD ACCESS TIME = 48.83 MICROSEC
1104  OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1105  NUMBER OF PORTS = 1
1106
1107  HARDWARE TYPE = DATA TRANSFER
1108  NAME = S1/TD/LGSD 2
1109  BITS PER CYCLE = 1 BITS
1110  BUS CONNECTIONS =

```

```

1111      S1/LGSD 2
1112      S1/SD/LGSD 2
1113
1114  SOFTWARE TYPE = MODULE
1115  * LGSD 2
1116      NAME = LGSD ACTIVITY 2
1117      CONCURRENT EXECUTION = YES
1118      ITERATION PERIOD = LGSD
1119      RESIDENT PROCESSORS =
1120          S1/LGSD 2
1121      INSTRUCTION LIST =
1122          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1123          EXECUTE A TOTAL OF ; 1 MESSAGE
1124  * LGSD 2
1125      NAME = UPDATE SERVER2
1126      CONCURRENT EXECUTION = YES
1127      ALLOWED PROCESSORS =
1128          S1/LGSD 2
1129      REQUIRED MESSAGES =
1130          SEND REPLY TO NODE
1131      INSTRUCTION LIST =
1132          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1133          EXECUTE A TOTAL OF ; 1 UPDATE FILES
1134
1135  ***** STATION LGSD 3 # 1
1136  * INDIVIDUAL 1.500 -1.500 15
1137  HARDWARE TYPE = PROCESSING
1138      NAME = S1/LGSD 3
1139          LOCATION = 97.893 4.910
1140          STYLE/COLOR = 1 3
1141          BASIC CYCLE TIME = 0. MICROSEC
1142          INPUT CONTROLLER = YES
1143          INSTRUCTION REPERTOIRE =
1144              INSTRUCTION TYPE = PROCESSING
1145                  NAME ; NO/OP
1146                  TIME ; 0 CYCLES
1147              INSTRUCTION TYPE = MESSAGE
1148                  NAME ; MESSAGE
1149                  MESSAGE ; REQUEST FROM SERVER
1150                  LENGTH ; 200 BITS
1151
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1151      INHIBIT MESSAGE TO SELF ; YES
1152      DESTINATION PROCESSOR ; R11/FILE SERVER
1153      QUEUE FLAG ; YES
1154      NAME ; UPDATE FILES
1155      MESSAGE ; UPDATE FILES
1156      LENGTH ; SDF2/LGSD 3
1157      INHIBIT MESSAGE TO SELF ; YES
1158      DESTINATION PROCESSOR ; R11/FILE SERVER
1159      QUEUE FLAG ; YES
1160      INSTRUCTION TYPE = READ
1161          NAME ; GET TRANSACTION MODULE
1162          STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 3
1163          FILE ACCESSED ; GENERAL STORAGE
1164          NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1165          ALLOWABLE BUSSES ;
1166          S1/TD/LGSD 3
1167
1168  HARDWARE TYPE = STORAGE
1169      NAME = S1/SD/LGSD 3
1170          CAPACITY = 1090519040. BITS
1171          BITS PER WORD = 4000. BITS
1172          WORD ACCESS TIME = 48.83 MICROSEC
1173          OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS

```

```

1174     NUMBER OF PORTS = 1
1175
1176     HARDWARE TYPE = DATA TRANSFER
1177     NAME = S1/TD/LGSD 3
1178     BITS PER CYCLE = 1 BITS
1179     BUS CONNECTIONS =
1180     S1/LGSD 3
1181     S1/SD/LGSD 3
1182
1183     SOFTWARE TYPE = MODULE
1184     * LGSD 3
1185     NAME = LGSD ACTIVITY 3
1186     CONCURRENT EXECUTION = YES
1187     ITERATION PERIOD = LGSD
1188     RESIDENT PROCESSORS =
1189     S1/LGSD 3
1190     INSTRUCTION LIST =
1191     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1192     EXECUTE A TOTAL OF ; 1 MESSAGE
1193     * LGSD 3
1194     NAME = UPDATE SERVER3
1195     CONCURRENT EXECUTION = YES
1196     ALLOWED PROCESSORS =
1197     S1/LGSD 3
1198     REQUIRED MESSAGES =
1199     SEND REPLY TO NODE
1200     INSTRUCTION LIST =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1201     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1202     EXECUTE A TOTAL OF ; 1 UPDATE FILES
1203
1204     ***** STATION LGSD 4 # 1
1205     * INDIVIDUAL 1.500 -1.500 15
1206     HARDWARE TYPE = PROCESSING
1207     NAME = S1/LGSD 4
1208     LOCATION = 117.893 4.910
1209     STYLE/COLOR = 1 3
1210     BASIC CYCLE TIME = 0. MICROSEC
1211     INPUT CONTROLLER = YES
1212     INSTRUCTION REPERTOIRE =
1213     INSTRUCTION TYPE = PROCESSING
1214     NAME ; NO/OP
1215     TIME ; 0 CYCLES
1216     INSTRUCTION TYPE = MESSAGE
1217     NAME ; MESSAGE
1218     MESSAGE ; REQUEST FROM SERVER
1219     LENGTH ; 200 BITS
1220     INHIBIT MESSAGE TO SELF ; YES
1221     DESTINATION PROCESSOR ; R12/FILE SERVER
1222     QUEUE FLAG ; YES
1223     NAME ; UPDATE FILES
1224     MESSAGE ; UPDATE FILES
1225     LENGTH ; SDF2/LGSD 4
1226     INHIBIT MESSAGE TO SELF ; YES
1227     DESTINATION PROCESSOR ; R12/FILE SERVER
1228     QUEUE FLAG ; YES
1229     INSTRUCTION TYPE = READ
1230     NAME ; GET TRANSACTION MODULE
1231     STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 4
1232     FILE ACCESSED ; GENERAL STORAGE
1233     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1234     ALLOWABLE BUSSES ;
1235     S1/TD/LGSD 4
1236

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```

1237  HARDWARE TYPE = STORAGE
1238    NAME = S1/SD/LGSD 4
1239    CAPACITY = 1090519040. BITS
1240    BITS PER WORD = 4000. BITS
1241    WORD ACCESS TIME = 48.83 MICROSEC
1242    OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1243    NUMBER OF PORTS = 1
1244
1245  HARDWARE TYPE = DATA TRANSFER
1246    NAME = S1/TD/LGSD 4
1247    BITS PER CYCLE = 1 BITS
1248    BUS CONNECTIONS =
1249      S1/LGSD 4
1250      S1/SD/LGSD 4
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```

1251
1252  SOFTWARE TYPE = MODULE
1253  * LGSD 4
1254    NAME = LGSD AVTIVITY 4
1255    CONCURRENT EXECUTION = YES
1256    ITERATION PERIOD = LGSD
1257    RESIDENT PROCESSORS =
1258      S1/LGSD 4
1259    INSTRUCTION LIST =
1260      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1261      EXECUTE A TOTAL OF ; 1 MESSAGE
1262  * LGSD 4
1263    NAME = UPDATE SERVER4
1264    CONCURRENT EXECUTION = YES
1265    ALLOWED PROCESSORS =
1266      S1/LGSD 4
1267    REQUIRED MESSAGES =
1268      SEND REPLY TO NODE
1269    INSTRUCTION LIST =
1270      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1271      EXECUTE A TOTAL OF ; 1 UPDATE FILES
1272
1273  ***** STATION LGSD 5 # 1
1274  * INDIVIDUAL 1.500 -1.500 15
1275  HARDWARE TYPE = PROCESSING
1276    NAME = S1/LGSD 5
1277    LOCATION = 137.893 4.910
1278    STYLE/COLOR = 1 3
1279    BASIC CYCLE TIME = 0. MICROSEC
1280    INPUT CONTROLLER = YES
1281    INSTRUCTION REPERTOIRE =
1282      INSTRUCTION TYPE = PROCESSING
1283      NAME ; NO/OP
1284      TIME ; 0 CYCLES
1285      INSTRUCTION TYPE = MESSAGE
1286      NAME ; MESSAGE
1287      MESSAGE ; REQUEST FROM SERVER
1288      LENGTH ; 200 BITS
1289      INHIBIT MESSAGE TO SELF ; YES
1290      DESTINATION PROCESSOR ; R13/FILE SERVER
1291      QUEUE FLAG ; YES
1292      NAME ; UPDATE FILES
1293      MESSAGE ; UPDATE FILES
1294      LENGTH ; SDF2/LGSD 5
1295      INHIBIT MESSAGE TO SELF ; YES
1296      DESTINATION PROCESSOR ; R13/FILE SERVER
1297      QUEUE FLAG ; YES
1298      INSTRUCTION TYPE = READ
1299      NAME ; GET TRANSACTION MODULE

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1301 FILE ACCESSED ; GENERAL STORAGE
1302 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1303 ALLOWABLE BUSSES ;
1304 S1/TD/LGSD 5
1305
1306 HARDWARE TYPE = STORAGE
1307 NAME = S1/SD/LGSD 5
1308 CAPACITY = 1090519040. BITS
1309 BITS PER WORD = 4000. BITS
1310 WORD ACCESS TIME = 48.83 MICROSEC
1311 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1312 NUMBER OF PORTS = 1
1313
1314 HARDWARE TYPE = DATA TRANSFER
1315 NAME = S1/TD/LGSD 5
1316 BITS PER CYCLE = 1 BITS
1317 BUS CONNECTIONS =
1318 S1/LGSD 5
1319 S1/SD/LGSD 5
1320
1321 SOFTWARE TYPE = MODULE
1322 * LGSD 5
1323 NAME = LGSD ACTIVITY 5
1324 CONCURRENT EXECUTION = YES
1325 ITERATION PERIOD = LGSD
1326 RESIDENT PROCESSORS =
1327 S1/LGSD 5
1328 INSTRUCTION LIST =
1329 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1330 EXECUTE A TOTAL OF ; 1 MESSAGE
1331 * LGSD 5
1332 NAME = UPDATE SERVERS
1333 CONCURRENT EXECUTION = YES
1334 ALLOWED PROCESSORS =
1335 S1/LGSD 5
1336 REQUIRED MESSAGES =
1337 SEND REPLY TO NODE
1338 INSTRUCTION LIST =
1339 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1340 EXECUTE A TOTAL OF ; 1 UPDATE FILES
1341
1342 ***** STATION LGSD 6 # 1
1343 * INDIVIDUAL 1.500 -1.500 15
1344 HARDWARE TYPE = PROCESSING
1345 NAME = S1/LGSD 6
1346 LOCATION = 157.893 4.910
1347 STYLE/COLOR = 1 3
1348 BASIC CYCLE TIME = 0. MICROSEC
1349 INPUT CONTROLLER = YES
1350 INSTRUCTION REPERTOIRE =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1351 INSTRUCTION TYPE = PROCESSING
1352 NAME ; NO/OP
1353 TIME ; 0 CYCLES
1354 INSTRUCTION TYPE = MESSAGE
1355 NAME ; MESSAGE
1356 MESSAGE ; REQUEST FROM SERVER
1357 LENGTH ; 200 BITS

```

1358      INHIBIT MESSAGE TO SELF ; YES
1359      DESTINATION PROCESSOR ; R14/FILE SERVER
1360      QUEUE FLAG ; YES
1361      NAME ; UPDATE FILES
1362      MESSAGE ; UPDATE FILES
1363      LENGTH ; SDF2/LGSD 6
1364      INHIBIT MESSAGE TO SELF ; YES
1365      DESTINATION PROCESSOR ; R14/FILE SERVER
1366      QUEUE FLAG ; YES
1367      INSTRUCTION TYPE = READ
1368      NAME ; GET TRANSACTION MODULE
1369      STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 6
1370      FILE ACCESSED ; GENERAL STORAGE
1371      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1372      ALLOWABLE BUSSES ;
1373      S1/TD/LGSD 6
1374
1375      HARDWARE TYPE = STORAGE
1376      NAME = S1/SD/LGSD 6
1377      CAPACITY = 1090519040. BITS
1378      BITS PER WORD = 4000. BITS
1379      WORD ACCESS TIME = 48.83 MICROSEC
1380      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1381      NUMBER OF PORTS = 1
1382
1383      HARDWARE TYPE = DATA TRANSFER
1384      NAME = S1/TD/LGSD 6
1385      BITS PER CYCLE = 1 BITS
1386      BUS CONNECTIONS =
1387      S1/LGSD 6
1388      S1/SD/LGSD 6
1389
1390      SOFTWARE TYPE = MODULE
1391      * LGSD 6
1392      NAME = LGSD ACTIVITY 6
1393      CONCURRENT EXECUTION = YES
1394      ITERATION PERIOD = LGSD
1395      RESIDENT PROCESSORS =
1396      S1/LGSD 6
1397      INSTRUCTION LIST =
1398      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1399      EXECUTE A TOTAL OF ; 1 MESSAGE
1400      * LGSD 6
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1401      NAME = UPDATE SERVER6
1402      CONCURRENT EXECUTION = YES
1403      ALLOWED PROCESSORS =
1404      S1/LGSD 6
1405      REQUIRED MESSAGES =
1406      SEND REPLY TO NODE
1407      INSTRUCTION LIST =
1408      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1409      EXECUTE A TOTAL OF ; 1 UPDATE FILES
1410
1411      ***** STATION LGSP 2 # 1
1412      * INDIVIDUAL 1.500 -1.500 15
1413      HARDWARE TYPE = PROCESSING
1414      NAME = S1/LGSP 2
1415      LOCATION = 284.756 1.872
1416      STYLE/COLOR = 1 3
1417      BASIC CYCLE TIME = 0. MICROSEC
1418      INPUT CONTROLLER = YES
1419      INSTRUCTION REPERTOIRE =
1420      INSTRUCTION TYPE = PROCESSING

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1421     NAME ; NO/OP
1422     TIME ; 0 CYCLES
1423     INSTRUCTION TYPE = MESSAGE
1424     NAME ; MESSAGE
1425     MESSAGE ; REQUEST FROM SERVER
1426     LENGTH ; 200 BITS
1427     INHIBIT MESSAGE TO SELF ; YES
1428     DESTINATION PROCESSOR ; S1/FILE SERVER
1429     QUEUE FLAG ; YES
1430     NAME ; UPDATE FILES
1431     MESSAGE ; UPDATE FILES
1432     LENGTH ; SDF2/LGSP 2
1433     INHIBIT MESSAGE TO SELF ; YES
1434     DESTINATION PROCESSOR ; S1/FILE SERVER
1435     QUEUE FLAG ; YES
1436     INSTRUCTION TYPE = READ
1437     NAME ; GET TRANSACTION MODULE
1438     STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 2
1439     FILE ACCESSED ; GENERAL STORAGE
1440     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1441     ALLOWABLE BUSSES ;
1442     S1/TD/LGSP 2
1443
1444     HARDWARE TYPE = STORAGE
1445     NAME = S1/SD/LGSP 2
1446     CAPACITY = 1090519040. BITS
1447     BITS PER WORD = 4000. BITS
1448     WORD ACCESS TIME = 48.83 MICROSEC
1449     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1450     NUMBER OF PORTS = 1
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1451
1452     HARDWARE TYPE = DATA TRANSFER
1453     NAME = S1/TD/LGSP 2
1454     BITS PER CYCLE = 1 BITS
1455     BUS CONNECTIONS =
1456     S1/LGSP 2
1457     S1/SD/LGSP 2
1458
1459     SOFTWARE TYPE = MODULE
1460     * LGSP 2
1461     NAME = LGSP ACTIVITY 2
1462     CONCURRENT EXECUTION = YES
1463     ITERATION PERIOD = LGSP
1464     RESIDENT PROCESSORS =
1465     S1/LGSP 2
1466     INSTRUCTION LIST =
1467     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1468     EXECUTE A TOTAL OF ; 1 MESSAGE
1469     * LGSP 2
1470     NAME = UPDATE FILES2
1471     CONCURRENT EXECUTION = YES
1472     ALLOWED PROCESSORS =
1473     S1/LGSP 2
1474     REQUIRED MESSAGES =
1475     SEND REPLY TO NODE
1476     INSTRUCTION LIST =
1477     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1478     EXECUTE A TOTAL OF ; 1 UPDATE FILES
1479
1480     ***** STATION LGSP 3 # 1
1481     * INDIVIDUAL 1.500 -1.500 15
1482     HARDWARE TYPE = PROCESSING
1483     NAME = S1/LGSP 3

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```

1484      LOCATION =      304.756      1.872
1485      STYLE/COLOR =   1    3
1486      BASIC CYCLE TIME = 0.    MICROSEC
1487      INPUT CONTROLLER = YES
1488      INSTRUCTION REPERTOIRE =
1489      INSTRUCTION TYPE = PROCESSING
1490      NAME ; NO/OP
1491      TIME ; 0 CYCLES
1492      INSTRUCTION TYPE = MESSAGE
1493      NAME ; MESSAGE
1494      MESSAGE ; REQUEST FROM SERVER
1495      LENGTH ; 200 BITS
1496      INHIBIT MESSAGE TO SELF ; YES
1497      DESTINATION PROCESSOR ; S1/FILE SERVER
1498      QUEUE FLAG ; YES
1499      NAME ; UPDATE FILES
1500      MESSAGE ; UPDATE FILES
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1501      LENGTH ; SDF2/LGSP 3
1502      INHIBIT MESSAGE TO SELF ; YES
1503      DESTINATION PROCESSOR ; S1/FILE SERVER
1504      QUEUE FLAG ; YES
1505      INSTRUCTION TYPE = READ
1506      NAME ; GET TRANSACTION MODULE
1507      STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 3
1508      FILE ACCESSED ; GENERAL STORAGE
1509      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1510      ALLOWABLE BUSSES ;
1511      S1/TD/LGSP 3
1512
1513      HARDWARE TYPE = STORAGE
1514      NAME = S1/SD/LGSP 3
1515      CAPACITY = 1090519040. BITS
1516      BITS PER WORD = 4000. BITS
1517      WORD ACCESS TIME = 48.83 MICROSEC
1518      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1519      NUMBER OF PORTS = 1
1520
1521      HARDWARE TYPE = DATA TRANSFER
1522      NAME = S1/TD/LGSP 3
1523      BITS PER CYCLE = 1 BITS
1524      BUS CONNECTIONS =
1525      S1/LGSP 3
1526      S1/SD/LGSP 3
1527
1528      SOFTWARE TYPE = MODULE
1529      * LGSP 3
1530      NAME = LGSP ACTIVITY 3
1531      CONCURRENT EXECUTION = YES
1532      ITERATION PERIOD = LGSP
1533      RESIDENT PROCESSORS =
1534      S1/LGSP 3
1535      INSTRUCTION LIST =
1536      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1537      EXECUTE A TOTAL OF ; 1 MESSAGE
1538      * LGSP 3
1539      NAME = UPDATE FILES3
1540      CONCURRENT EXECUTION = YES
1541      ALLOWED PROCESSORS =
1542      S1/LGSP 3
1543      REQUIRED MESSAGES =
1544      SEND REPLY TO NODE
1545      INSTRUCTION LIST =
1546      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```

1547 EXECUTE A TOTAL OF ; 1 UPDATE FILES
1548
1549 ***** STATION LGSP 4 # 1
1550 * INDIVIDUAL 1.500 -1.500 15
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1551 HARDWARE TYPE = PROCESSING
1552 NAME = S1/LGSP 4
1553 LOCATION = 324.756 1.872
1554 STYLE/COLOR = 1 3
1555 BASIC CYCLE TIME = 0. MICROSEC
1556 INPUT CONTROLLER = YES
1557 INSTRUCTION REPERTOIRE =
1558 INSTRUCTION TYPE = PROCESSING
1559 NAME ; NO/OP
1560 TIME ; 0 CYCLES
1561 INSTRUCTION TYPE = MESSAGE
1562 NAME ; MESSAGE
1563 MESSAGE ; REQUEST FROM SERVER
1564 LENGTH ; 200 BITS
1565 INHIBIT MESSAGE TO SELF ; YES
1566 DESTINATION PROCESSOR ; S1/FILE SERVER
1567 QUEUE FLAG ; YES
1568 NAME ; UPDATE FILES
1569 MESSAGE ; UPDATE FILES
1570 LENGTH ; SDF2/LGSP 4
1571 INHIBIT MESSAGE TO SELF ; YES
1572 DESTINATION PROCESSOR ; S1/FILE SERVER
1573 QUEUE FLAG ; YES
1574 INSTRUCTION TYPE = READ
1575 NAME ; GET TRANSACTION MODULE
1576 STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 4
1577 FILE ACCESSED ; GENERAL STORAGE
1578 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1579 ALLOWABLE BUSSES ;
1580 S1/TD/LGSP 4
1581
1582 HARDWARE TYPE = STORAGE
1583 NAME = S1/SD/LGSP 4
1584 CAPACITY = 1090519040. BITS
1585 BITS PER WORD = 4000. BITS
1586 WORD ACCESS TIME = 48.83 MICROSEC
1587 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1588 NUMBER OF PORTS = 1
1589
1590 HARDWARE TYPE = DATA TRANSFER
1591 NAME = S1/TD/LGSP 4
1592 BITS PER CYCLE = 1 BITS
1593 BUS CONNECTIONS =
1594 S1/LGSP 4
1595 S1/SD/LGSP 4
1596
1597 SOFTWARE TYPE = MODULE
1598 * LGSP 4
1599 NAME = LGSD ACTIVITY 4
1600 CONCURRENT EXECUTION = YES
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1601 ITERATION PERIOD = LGSP
1602 RESIDENT PROCESSORS =
1603 S1/LGSP 4
1604 INSTRUCTION LIST =

```

1605     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1606     EXECUTE A TOTAL OF ; 1 MESSAGE
1607 * LGSP 4
1608     NAME = UPDATE FILES4
1609     CONCURRENT EXECUTION = YES
1610     ALLOWED PROCESSORS =
1611         S1/LGSP 4
1612     REQUIRED MESSAGES =
1613     SEND REPLY TO NODE
1614     INSTRUCTION LIST =
1615         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1616         EXECUTE A TOTAL OF ; 1 UPDATE FILES
1617
1618 ***** STATION LGSP 5 # 1
1619 * INDIVIDUAL 1.500 -1.500 15
1620     HARDWARE TYPE = PROCESSING
1621     NAME = S1/LGSP 5
1622         LOCATION = 344.756 1.872
1623         STYLE/COLOR = 1 3
1624         BASIC CYCLE TIME = 0. MICROSEC
1625         INPUT CONTROLLER = YES
1626         INSTRUCTION REPERTOIRE =
1627             INSTRUCTION TYPE = PROCESSING
1628             NAME ; NO/OP
1629             TIME ; 0 CYCLES
1630             INSTRUCTION TYPE = MESSAGE
1631             NAME ; MESSAGE
1632             MESSAGE ; REQUEST FROM SERVER
1633             LENGTH ; 200 BITS
1634             INHIBIT MESSAGE TO SELF ; YES
1635             DESTINATION PROCESSOR ; S1/FILE SERVER
1636             QUEUE FLAG ; YES
1637             NAME ; UPDATE FILES
1638             MESSAGE ; UPDATE FILES
1639             LENGTH ; SDF2/LGSP 5
1640             INHIBIT MESSAGE TO SELF ; YES
1641             DESTINATION PROCESSOR ; S1/FILE SERVER
1642             QUEUE FLAG ; YES
1643             INSTRUCTION TYPE = READ
1644             NAME ; GET TRANSACTION MODULE
1645             STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 5
1646             FILE ACCESSED ; GENERAL STORAGE
1647             NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1648             ALLOWABLE BUSSES ;
1649             S1/TD/LGSP 5
1650

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```

1651     HARDWARE TYPE = STORAGE
1652     NAME = S1/SD/LGSP 5
1653     CAPACITY = 1090519040. BITS
1654     BITS PER WORD = 4000. BITS
1655     WORD ACCESS TIME = 48.83 MICROSEC
1656     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1657     NUMBER OF PORTS = 1
1658
1659     HARDWARE TYPE = DATA TRANSFER
1660     NAME = S1/TD/LGSP 5
1661     BITS PER CYCLE = 1 BITS
1662     BUS CONNECTIONS =
1663         S1/LGSP 5
1664         S1/SD/LGSP 5
1665
1666     SOFTWARE TYPE = MODULE
1667 * LGSP 5

```

```

1668 NAME = LGSP ACTIVITY 5
1669 CONCURRENT EXECUTION = YES
1670 ITERATION PERIOD = LGSP
1671 RESIDENT PROCESSORS =
1672 S1/LGSP 5
1673 INSTRUCTION LIST =
1674 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1675 EXECUTE A TOTAL OF ; 1 MESSAGE
1676 * LGSP 5
1677 NAME = UPDATE FILES5
1678 CONCURRENT EXECUTION = YES
1679 ALLOWED PROCESSORS =
1680 S1/LGSP 5
1681 REQUIRED MESSAGES =
1682 SEND REPLY TO NODE
1683 INSTRUCTION LIST =
1684 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1685 EXECUTE A TOTAL OF ; 1 UPDATE FILES
1686
1687 ***** STATION LGSP 6 # 1
1688 * INDIVIDUAL 1.500 -1.500 15
1689 HARDWARE TYPE = PROCESSING
1690 NAME = S1/LGSP 6
1691 LOCATION = 364.756 1.872
1692 STYLE/COLOR = 1 3
1693 BASIC CYCLE TIME = 0. MICROSEC
1694 INPUT CONTROLLER = YES
1695 INSTRUCTION REPERTOIRE =
1696 INSTRUCTION TYPE = PROCESSING
1697 NAME ; NO/OP
1698 TIME ; 0 CYCLES
1699 INSTRUCTION TYPE = MESSAGE
1700 NAME ; MESSAGE

```

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1701 MESSAGE ; REQUEST FROM SERVER
1702 LENGTH ; 200 BITS
1703 INHIBIT MESSAGE TO SELF ; YES
1704 DESTINATION PROCESSOR ; S1/FILE SERVER
1705 QUEUE FLAG ; YES
1706 NAME ; UPDATE FILES
1707 MESSAGE ; UPDATE FILES
1708 LENGTH ; SDF2/LGSP 6
1709 INHIBIT MESSAGE TO SELF ; YES
1710 DESTINATION PROCESSOR ; S1/FILE SERVER
1711 QUEUE FLAG ; YES
1712 INSTRUCTION TYPE = READ
1713 NAME ; GET TRANSACTION MODULE
1714 STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 6
1715 FILE ACCESSED ; GENERAL STORAGE
1716 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1717 ALLOWABLE BUSSES ;
1718 S1/TD/LGSP 6
1719
1720 HARDWARE TYPE = STORAGE
1721 NAME = S1/SD/LGSP 6
1722 CAPACITY = 1090519040. BITS
1723 BITS PER WORD = 4000. BITS
1724 WORD ACCESS TIME = 48.83 MICROSEC
1725 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1726 NUMBER OF PORTS = 1
1727
1728 HARDWARE TYPE = DATA TRANSFER
1729 NAME = S1/TD/LGSP 6
1730 BITS PER CYCLE = 1 BITS

```

```

1731     BUS CONNECTIONS =
1732     S1/LGSP 6
1733     S1/SD/LGSP 6
1734
1735 SOFTWARE TYPE = MODULE
1736 * LGSP 6
1737     NAME = LGSP ACTIVITY 6
1738     CONCURRENT EXECUTION = YES
1739     ITERATION PERIOD = LGSP
1740     RESIDENT PROCESSORS =
1741     S1/LGSP 6
1742     INSTRUCTION LIST =
1743     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1744     EXECUTE A TOTAL OF ; 1 MESSAGE
1745 * LGSP 6
1746     NAME = UPDATE FILES6
1747     CONCURRENT EXECUTION = YES
1748     ALLOWED PROCESSORS =
1749     S1/LGSP 6
1750     REQUIRED MESSAGES =

```

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

1751     SEND REPLY TO NODE
1752     INSTRUCTION LIST =
1753     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1754     EXECUTE A TOTAL OF ; 1 UPDATE FILES
1755
1756 ***** STATION LGSM 2 # 1
1757 * INDIVIDUAL 1.500 -1.500 15
1758 HARDWARE TYPE = PROCESSING
1759     NAME = S1/LGSM 2
1760     LOCATION = 90.036 94.349
1761     STYLE/COLOR = 1 3
1762     BASIC CYCLE TIME = 0. MICROSEC
1763     INPUT CONTROLLER = YES
1764     INSTRUCTION REPERTOIRE =
1765     INSTRUCTION TYPE = PROCESSING
1766     NAME ; NO/OP
1767     TIME ; 0 CYCLES
1768     INSTRUCTION TYPE = MESSAGE
1769     NAME ; MESSAGE
1770     MESSAGE ; REQUEST FROM SERVER
1771     LENGTH ; 200 BITS
1772     INHIBIT MESSAGE TO SELF ; YES
1773     DESTINATION PROCESSOR ; R20/FILE SERVER
1774     QUEUE FLAG ; YES
1775     NAME ; UPDATE FILES
1776     MESSAGE ; UPDATE FILES
1777     LENGTH ; SDF2/LGSM 2
1778     INHIBIT MESSAGE TO SELF ; YES
1779     DESTINATION PROCESSOR ; R20/FILE SERVER
1780     QUEUE FLAG ; YES
1781     INSTRUCTION TYPE = READ
1782     NAME ; GET TRANSACTION MODULE
1783     STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 2
1784     FILE ACCESSED ; GENERAL STORAGE
1785     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1786     ALLOWABLE BUSSES ;
1787     S1/TD/LGSM 2
1788
1789 HARDWARE TYPE = STORAGE
1790     NAME = S1/SD/LGSM 2
1791     CAPACITY = 1090519040. BITS
1792     BITS PER WORD = 4000. BITS
1793     WORD ACCESS TIME = 48.83 MICROSEC

```


1794 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
 1795 NUMBER OF PORTS = 1
 1796
 1797 HARDWARE TYPE = DATA TRANSFER
 1798 NAME = S1/TD/LGSM 2
 1799 BITS PER CYCLE = 1 BITS
 1800 BUS CONNECTIONS =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1801 S1/LGSM 2
 1802 S1/SD/LGSM 2
 1803
 1804 SOFTWARE TYPE = MODULE
 1805 * LGSM 2
 1806 NAME = LGSM ACTIVITY 2
 1807 CONCURRENT EXECUTION = YES
 1808 ITERATION PERIOD = LGSM
 1809 RESIDENT PROCESSORS =
 1810 S1/LGSM 2
 1811 INSTRUCTION LIST =
 1812 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 1813 EXECUTE A TOTAL OF ; 1 MESSAGE
 1814 * LGSM 2
 1815 NAME = FILE UPDATE2
 1816 CONCURRENT EXECUTION = YES
 1817 ALLOWED PROCESSORS =
 1818 S1/LGSM 2
 1819 REQUIRED MESSAGES =
 1820 SEND REPLY TO NODE
 1821 INSTRUCTION LIST =
 1822 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 1823 EXECUTE A TOTAL OF ; 1 UPDATE FILES
 1824
 1825 ***** STATION LGSM 3 # 1
 1826 * INDIVIDUAL 1.500 -1.500 15
 1827 HARDWARE TYPE = PROCESSING
 1828 NAME = S1/LGSM 3
 1829 LOCATION = 110.036 94.349
 1830 STYLE/COLOR = 1 3
 1831 BASIC CYCLE TIME = 0. MICROSEC
 1832 INPUT CONTROLLER = YES
 1833 INSTRUCTION REPERTOIRE =
 1834 INSTRUCTION TYPE = PROCESSING
 1835 NAME ; NO/OP
 1836 TIME ; 0 CYCLES
 1837 INSTRUCTION TYPE = MESSAGE
 1838 NAME ; MESSAGE
 1839 MESSAGE ; REQUEST FROM SERVER
 1840 LENGTH ; 200 BITS
 1841 INHIBIT MESSAGE TO SELF ; YES
 1842 DESTINATION PROCESSOR ; R21/FILE SERVER
 1843 QUEUE FLAG ; YES
 1844 NAME ; UPDATE FILES
 1845 MESSAGE ; UPDATE FILES
 1846 LENGTH ; SDF2/LGSM 3
 1847 INHIBIT MESSAGE TO SELF ; YES
 1848 DESTINATION PROCESSOR ; R21/FILE SERVER
 1849 QUEUE FLAG ; YES
 1850 INSTRUCTION TYPE = READ
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

1851 NAME ; GET TRANSACTION MODULE

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1852     STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 3
1853     FILE ACCESSED ; GENERAL STORAGE
1854     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1855     ALLOWABLE BUSSES ;
1856     S1/TD/LGSM 3
1857
1858     HARDWARE TYPE = STORAGE
1859     NAME = S1/SD/LGSM 3
1860     CAPACITY = 1090519040. BITS
1861     BITS PER WORD = 4000. BITS
1862     WORD ACCESS TIME = 48.83 MICROSEC
1863     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1864     NUMBER OF PORTS = 1
1865
1866     HARDWARE TYPE = DATA TRANSFER
1867     NAME = S1/TD/LGSM 3
1868     BITS PER CYCLE = 1 BITS
1869     BUS CONNECTIONS =
1870     S1/LGSM 3
1871     S1/SD/LGSM 3
1872
1873     SOFTWARE TYPE = MODULE
1874     * LGSM 3
1875     NAME = LGSM ACTIVITY 3
1876     CONCURRENT EXECUTION = YES
1877     ITERATION PERIOD = LGSM
1878     RESIDENT PROCESSORS =
1879     S1/LGSM 3
1880     INSTRUCTION LIST =
1881     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1882     EXECUTE A TOTAL OF ; 1 MESSAGE
1883     * LGSM 3
1884     NAME = FILE UPDATE3
1885     CONCURRENT EXECUTION = YES
1886     ALLOWED PROCESSORS =
1887     S1/LGSM 3
1888     REQUIRED MESSAGES =
1889     SEND REPLY TO NODE
1890     INSTRUCTION LIST =
1891     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1892     EXECUTE A TOTAL OF ; 1 UPDATE FILES
1893
1894     ***** STATION LGSM 4 # 1
1895     * INDIVIDUAL 1.500 -1.500 15
1896     HARDWARE TYPE = PROCESSING
1897     NAME = S1/LGSM 4
1898     LOCATION = 129.918 94.349
1899     STYLE/COLOR = 1 3
1900     BASIC CYCLE TIME = 0. MICROSEC
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

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1901     INPUT CONTROLLER = YES
1902     INSTRUCTION REPERTOIRE =
1903     INSTRUCTION TYPE = PROCESSING
1904     NAME ; NO/OP
1905     TIME ; 0 CYCLES
1906     INSTRUCTION TYPE = MESSAGE
1907     NAME ; MESSAGE
1908     MESSAGE ; REQUEST FROM SERVER
1909     LENGTH ; 200 BITS
1910     INHIBIT MESSAGE TO SELF ; YES
1911     DESTINATION PROCESSOR ; R22/FILE SERVER
1912     QUEUE FLAG ; YES
1913     NAME ; UPDATE FILES
1914     MESSAGE ; UPDATE FILES

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1915          LENGTH ; SDF2/LGSM 4
1916          INHIBIT MESSAGE TO SELF ; YES
1917          DESTINATION PROCESSOR ; R22/FILE SERVER
1918          QUEUE FLAG ; YES
1919          INSTRUCTION TYPE = READ
1920          NAME ; GET TRANSACTION MODULE
1921          STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 4
1922          FILE ACCESSED ; GENERAL STORAGE
1923          NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1924          ALLOWABLE BUSSES ;
1925          S1/TD/LGSM 4
1926
1927          HARDWARE TYPE = STORAGE
1928          NAME = S1/SD/LGSM 4
1929          CAPACITY = 1090519040. BITS
1930          BITS PER WORD = 4000. BITS
1931          WORD ACCESS TIME = 48.83 MICROSEC
1932          OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1933          NUMBER OF PORTS = 1
1934
1935          HARDWARE TYPE = DATA TRANSFER
1936          NAME = S1/TD/LGSM 4
1937          BITS PER CYCLE = 1 BITS
1938          BUS CONNECTIONS =
1939          S1/LGSM 4
1940          S1/SD/LGSM 4
1941
1942          SOFTWARE TYPE = MODULE
1943          * LGSM 4
1944          NAME = LGSM ACTIVITY 4
1945          CONCURRENT EXECUTION = YES
1946          ITERATION PERIOD = LGSM
1947          RESIDENT PROCESSORS =
1948          S1/LGSM 4
1949          INSTRUCTION LIST =
1950          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

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1951          EXECUTE A TOTAL OF ; 1 MESSAGE
1952          * LGSM 4
1953          NAME = FILE UPDATE4
1954          CONCURRENT EXECUTION = YES
1955          ALLOWED PROCESSORS =
1956          S1/LGSM 4
1957          REQUIRED MESSAGES =
1958          SEND REPLY TO NODE
1959          INSTRUCTION LIST =
1960          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1961          EXECUTE A TOTAL OF ; 1 UPDATE FILES
1962
1963          ***** STATION LGSM 5 # 1
1964          * INDIVIDUAL 1.500 -1.500 15
1965          HARDWARE TYPE = PROCESSING
1966          NAME = S1/LGSM 5
1967          LOCATION = 150.036 94.349
1968          STYLE/COLOR = 1 3
1969          BASIC CYCLE TIME = 0. MICROSEC
1970          INPUT CONTROLLER = YES
1971          INSTRUCTION REPERTOIRE =
1972          INSTRUCTION TYPE = PROCESSING
1973          NAME ; NO/OP
1974          TIME ; 0 CYCLES
1975          INSTRUCTION TYPE = MESSAGE
1976          NAME ; MESSAGE
1977          MESSAGE ; REQUEST FROM SERVER

```

```

1978      LENGTH ; 200 BITS
1979      INHIBIT MESSAGE TO SELF ; YES
1980      DESTINATION PROCESSOR ; R23/FILE SERVER
1981      QUEUE FLAG ; YES
1982      NAME ; UPDATE FILES
1983      MESSAGE ; UPDATE FILES
1984      LENGTH ; SDF2/LGSM 5
1985      INHIBIT MESSAGE TO SELF ; YES
1986      DESTINATION PROCESSOR ; R23/FILE SERVER
1987      QUEUE FLAG ; YES
1988      INSTRUCTION TYPE = READ
1989      NAME ; GET TRANSACTION MODULE
1990      STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 5
1991      FILE ACCESSED ; GENERAL STORAGE
1992      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1993      ALLOWABLE BUSSES ;
1994      S1/TD/LGSM 5
1995
1996      HARDWARE TYPE = STORAGE
1997      NAME = S1/SD/LGSM 5
1998      CAPACITY = 1090519040. BITS
1999      BITS PER WORD = 4000. BITS
2000      WORD ACCESS TIME = 48.83 MICROSEC
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2001      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2002      NUMBER OF PORTS = 1
2003
2004      HARDWARE TYPE = DATA TRANSFER
2005      NAME = S1/TD/LGSM 5
2006      BITS PER CYCLE = 1 BITS
2007      BUS CONNECTIONS =
2008      S1/LGSM 5
2009      S1/SD/LGSM 5
2010
2011      SOFTWARE TYPE = MODULE
2012      * LGSM 5
2013      NAME = LGSM ACTIVITY 5
2014      CONCURRENT EXECUTION = YES
2015      ITERATION PERIOD = LGSM
2016      RESIDENT PROCESSORS =
2017      S1/LGSM 5
2018      INSTRUCTION LIST =
2019      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2020      EXECUTE A TOTAL OF ; 1 MESSAGE
2021      * LGSM 5
2022      NAME = FILE UPDATES
2023      CONCURRENT EXECUTION = YES
2024      ALLOWED PROCESSORS =
2025      S1/LGSM 5
2026      REQUIRED MESSAGES =
2027      SEND REPLY TO NODE
2028      INSTRUCTION LIST =
2029      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2030      EXECUTE A TOTAL OF ; 1 UPDATE FILES
2031
2032      ***** STATION LGSM 6 # 1
2033      * INDIVIDUAL 1.500 -1.500 15
2034      HARDWARE TYPE = PROCESSING
2035      NAME = S1/LGSM 6
2036      LOCATION = 170.036 94.349
2037      STYLE/COLOR = 1 3
2038      BASIC CYCLE TIME = 0. MICROSEC
2039      INPUT CONTROLLER = YES
2040      INSTRUCTION REPERTOIRE =

```

2041 INSTRUCTION TYPE = PROCESSING
 2042 NAME ; NO/OP
 2043 TIME ; 0 CYCLES
 2044 INSTRUCTION TYPE = MESSAGE
 2045 NAME ; MESSAGE
 2046 MESSAGE ; REQUEST FROM SERVER
 2047 LENGTH ; 200 BITS
 2048 INHIBIT MESSAGE TO SELF ; YES
 2049 DESTINATION PROCESSOR ; R24/FILE SERVER
 2050 QUEUE FLAG ; YES
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

2051 NAME ; UPDATE FILES
 2052 MESSAGE ; UPDATE FILES
 2053 LENGTH ; SDF2/LGSM 6
 2054 INHIBIT MESSAGE TO SELF ; YES
 2055 DESTINATION PROCESSOR ; R24/FILE SERVER
 2056 QUEUE FLAG ; YES
 2057 INSTRUCTION TYPE = READ
 2058 NAME ; GET TRANSACTION MODULE
 2059 STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 6
 2060 FILE ACCESSED ; GENERAL STORAGE
 2061 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
 2062 ALLOWABLE BUSSES ;
 2063 S1/TD/LGSM 6
 2064
 2065 HARDWARE TYPE = STORAGE
 2066 NAME = S1/SD/LGSM 6
 2067 CAPACITY = 1090519040. BITS
 2068 BITS PER WORD = 4000. BITS
 2069 WORD ACCESS TIME = 48.83 MICROSEC
 2070 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
 2071 NUMBER OF PORTS = 1
 2072
 2073 HARDWARE TYPE = DATA TRANSFER
 2074 NAME = S1/TD/LGSM 6
 2075 BITS PER CYCLE = 1 BITS
 2076 BUS CONNECTIONS =
 2077 S1/LGSM 6
 2078 S1/SD/LGSM 6
 2079
 2080 SOFTWARE TYPE = MODULE
 2081 * LGSM 6
 2082 NAME = LGSM ACTIVITY 6
 2083 CONCURRENT EXECUTION = YES
 2084 ITERATION PERIOD = LGSM
 2085 RESIDENT PROCESSORS =
 2086 S1/LGSM 6
 2087 INSTRUCTION LIST =
 2088 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2089 EXECUTE A TOTAL OF ; 1 MESSAGE
 2090 * LGSM 6
 2091 NAME = FILE UPDATE6
 2092 CONCURRENT EXECUTION = YES
 2093 ALLOWED PROCESSORS =
 2094 S1/LGSM 6
 2095 REQUIRED MESSAGES =
 2096 SEND REPLY TO NODE
 2097 INSTRUCTION LIST =
 2098 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2099 EXECUTE A TOTAL OF ; 1 UPDATE FILES
 2100
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```

2101 ***** STATION LGSC 2 # 1
2102 * INDIVIDUAL 1.500 -1.500 15
2103 HARDWARE TYPE = PROCESSING
2104 NAME = S1/LGSC 2
2105 LOCATION = 285.175 89.118
2106 STYLE/COLOR = 1 3
2107 BASIC CYCLE TIME = 0. MICROSEC
2108 INPUT CONTROLLER = YES
2109 INSTRUCTION REPERTOIRE =
2110 INSTRUCTION TYPE = PROCESSING
2111 NAME ; NO/OP
2112 TIME ; 0 CYCLES
2113 INSTRUCTION TYPE = MESSAGE
2114 NAME ; MESSAGE
2115 MESSAGE ; REQUEST FROM SERVER
2116 LENGTH ; 200 BITS
2117 INHIBIT MESSAGE TO SELF ; YES
2118 DESTINATION PROCESSOR ; R25/FILE SERVER
2119 QUEUE FLAG ; YES
2120 NAME ; UPDATE RECORDS
2121 MESSAGE ; UPDATE FILES
2122 LENGTH ; SDF2/LGSC 2
2123 INHIBIT MESSAGE TO SELF ; YES
2124 DESTINATION PROCESSOR ; R25/FILE SERVER
2125 QUEUE FLAG ; YES
2126 INSTRUCTION TYPE = READ
2127 NAME ; GET TRANSACTION MODULE
2128 STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 2
2129 FILE ACCESSED ; GENERAL STORAGE
2130 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2131 ALLOWABLE BUSSES ;
2132 S1/TD/LGSC 2
2133
2134 HARDWARE TYPE = STORAGE
2135 NAME = S1/SD/LGSC 2
2136 CAPACITY = 1090519040. BITS
2137 BITS PER WORD = 4000. BITS
2138 WORD ACCESS TIME = 48.83 MICROSEC
2139 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2140 NUMBER OF PORTS = 1
2141
2142 HARDWARE TYPE = DATA TRANSFER
2143 NAME = S1/TD/LGSC 2
2144 BITS PER CYCLE = 1 BITS
2145 BUS CONNECTIONS =
2146 S1/LGSC 2
2147 S1/SD/LGSC 2
2148
2149 SOFTWARE TYPE = MODULE
2150 * LGSC 2

```

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2151 NAME = LGSC ACTIVITY 2
2152 CONCURRENT EXECUTION = YES
2153 ITERATION PERIOD = LGSC
2154 RESIDENT PROCESSORS =
2155 S1/LGSC 2
2156 INSTRUCTION LIST =
2157 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2158 EXECUTE A TOTAL OF ; 1 MESSAGE
2159 * LGSC 2
2160 NAME = RECORD UPDATE2
2161 CONCURRENT EXECUTION = YES
2162 ALLOWED PROCESSORS =

```

```

2163      S1/LGSC 2
2164      REQUIRED MESSAGES =
2165      SEND REPLY TO NODE
2166      INSTRUCTION LIST =
2167      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2168      EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
2169
2170      ***** STATION LGSC 3 # 1
2171      * INDIVIDUAL 1.500 -1.500 15
2172      HARDWARE TYPE = PROCESSING
2173      NAME = S1/LGSC 3
2174      LOCATION = 305.175 89.118
2175      STYLE/COLOR = 1 3
2176      BASIC CYCLE TIME = 0. MICROSEC
2177      INPUT CONTROLLER = YES
2178      INSTRUCTION REPERTOIRE =
2179      INSTRUCTION TYPE = PROCESSING
2180      NAME ; NO/OP
2181      TIME ; 0 CYCLES
2182      INSTRUCTION TYPE = MESSAGE
2183      NAME ; MESSAGE
2184      MESSAGE ; REQUEST FROM SERVER
2185      LENGTH ; 200 BITS
2186      INHIBIT MESSAGE TO SELF ; YES
2187      DESTINATION PROCESSOR ; R26/FILE SERVER
2188      QUEUE FLAG ; YES
2189      NAME ; UPDATE RECORDS
2190      MESSAGE ; UPDATE FILES
2191      LENGTH ; SDF2/LGSC 3
2192      INHIBIT MESSAGE TO SELF ; YES
2193      DESTINATION PROCESSOR ; R26/FILE SERVER
2194      QUEUE FLAG ; YES
2195      INSTRUCTION TYPE = READ
2196      NAME ; GET TRANSACTION MODULE
2197      STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 3
2198      FILE ACCESSED ; GENERAL STORAGE
2199      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2200      ALLOWABLE BUSSES ;
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```

2201      S1/TD/LGSC 3
2202
2203      HARDWARE TYPE = STORAGE
2204      NAME = S1/SD/LGSC 3
2205      CAPACITY = 1090519040. BITS
2206      BITS PER WORD = 4000. BITS
2207      WORD ACCESS TIME = 48.83 MICROSEC
2208      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2209      NUMBER OF PORTS = 1
2210
2211      HARDWARE TYPE = DATA TRANSFER
2212      NAME = S1/TD/LGSC 3
2213      BITS PER CYCLE = 1 BITS
2214      BUS CONNECTIONS =
2215      S1/LGSC 3
2216      S1/SD/LGSC 3
2217
2218      SOFTWARE TYPE = MODULE
2219      * LGSC 3
2220      NAME = LGSC ACTIVITY 3
2221      CONCURRENT EXECUTION = YES
2222      ITERATION PERIOD = LGSC
2223      RESIDENT PROCESSORS =
2224      S1/LGSC 3
2225      INSTRUCTION LIST =

```

```

2226     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2227     EXECUTE A TOTAL OF ; 1 MESSAGE
2228 * LGSC 3
2229     NAME = RECORD UPDATE3
2230     CONCURRENT EXECUTION = YES
2231     ALLOWED PROCESSORS =
2232         S1/LGSC 3
2233     REQUIRED MESSAGES =
2234     SEND REPLY TO NODE
2235     INSTRUCTION LIST =
2236         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2237         EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
2238
2239 ***** STATION LGSC 4 # 1
2240 * INDIVIDUAL 1.500 -1.500 15
2241 HARDWARE TYPE = PROCESSING
2242     NAME = S1/LGSC 4
2243     LOCATION = 325.175 89.118
2244     STYLE/COLOR = 1 3
2245     BASIC CYCLE TIME = 0. MICROSEC
2246     INPUT CONTROLLER = YES
2247     INSTRUCTION REPERTOIRE =
2248     INSTRUCTION TYPE = PROCESSING
2249     NAME ; NO/OP
2250     TIME ; 0 CYCLES

```

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```

2251     INSTRUCTION TYPE = MESSAGE
2252     NAME ; MESSAGE
2253     MESSAGE ; REQUEST FROM SERVER
2254     LENGTH ; 200 BITS
2255     INHIBIT MESSAGE TO SELF ; YES
2256     DESTINATION PROCESSOR ; R27/FILE SERVER
2257     QUEUE FLAG ; YES
2258     NAME ; UPDATE RECORDS
2259     MESSAGE ; UPDATE FILES
2260     LENGTH ; SDF2/LGSC 4
2261     INHIBIT MESSAGE TO SELF ; YES
2262     DESTINATION PROCESSOR ; R27/FILE SERVER
2263     QUEUE FLAG ; YES
2264     INSTRUCTION TYPE = READ
2265     NAME ; GET TRANSACTION MODULE
2266     STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 4
2267     FILE ACCESSED ; GENERAL STORAGE
2268     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2269     ALLOWABLE BUSSES ;
2270     S1/TD/LGSC 4
2271
2272 HARDWARE TYPE = STORAGE
2273     NAME = S1/SD/LGSC 4
2274     CAPACITY = 1090519040. BITS
2275     BITS PER WORD = 4000. BITS
2276     WORD ACCESS TIME = 48.83 MICROSEC
2277     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2278     NUMBER OF PORTS = 1
2279
2280 HARDWARE TYPE = DATA TRANSFER
2281     NAME = S1/TD/LGSC 4
2282     BITS PER CYCLE = 1 BITS
2283     BUS CONNECTIONS =
2284     S1/LGSC 4
2285     S1/SD/LGSC 4
2286
2287 SOFTWARE TYPE = MODULE
2288 * LGSC 4

```


2289 NAME = LGSC ACTIVITY 4
 2290 CONCURRENT EXECUTION = YES
 2291 ITERATION PERIOD = LGSC
 2292 RESIDENT PROCESSORS =
 2293 S1/LGSC 4
 2294 INSTRUCTION LIST =
 2295 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2296 EXECUTE A TOTAL OF ; 1 MESSAGE
 2297 * LGSC 4
 2298 NAME = RECORD UPDATE4
 2299 CONCURRENT EXECUTION = YES
 2300 ALLOWED PROCESSORS =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

2301 S1/LGSC 4
 2302 REQUIRED MESSAGES =
 2303 SEND REPLY TO NODE
 2304 INSTRUCTION LIST =
 2305 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2306 EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
 2307
 2308 ***** STATION LGSC 5 # 1
 2309 * INDIVIDUAL 1.500 -1.500 15
 2310 HARDWARE TYPE = PROCESSING
 2311 NAME = S1/LGSC 5
 2312 LOCATION = 345.175 89.118
 2313 STYLE/COLOR = 1 3
 2314 BASIC CYCLE TIME = 0. MICROSEC
 2315 INPUT CONTROLLER = YES
 2316 INSTRUCTION REPERTOIRE =
 2317 INSTRUCTION TYPE = PROCESSING
 2318 NAME ; NO/OP
 2319 TIME ; 0 CYCLES
 2320 INSTRUCTION TYPE = MESSAGE
 2321 NAME ; MESSAGE
 2322 MESSAGE ; REQUEST FROM SERVER
 2323 LENGTH ; 200 BITS
 2324 INHIBIT MESSAGE TO SELF ; YES
 2325 DESTINATION PROCESSOR ; R28/FILE SERVER
 2326 QUEUE FLAG ; YES
 2327 NAME ; UPDATE RECORDS
 2328 MESSAGE ; UPDATE FILES
 2329 LENGTH ; SDF2/LGSC 5
 2330 INHIBIT MESSAGE TO SELF ; YES
 2331 DESTINATION PROCESSOR ; R28/FILE SERVER
 2332 QUEUE FLAG ; YES
 2333 INSTRUCTION TYPE = READ
 2334 NAME ; GET TRANSACTION MODULE
 2335 STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 5
 2336 FILE ACCESSED ; GENERAL STORAGE
 2337 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
 2338 ALLOWABLE BUSSES ;
 2339 S1/TD/LGSC 5
 2340
 2341 HARDWARE TYPE = STORAGE
 2342 NAME = S1/SD/LGSC 5
 2343 CAPACITY = 1090519040. BITS
 2344 BITS PER WORD = 4000. BITS
 2345 WORD ACCESS TIME = 48.83 MICROSEC
 2346 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
 2347 NUMBER OF PORTS = 1
 2348
 2349 HARDWARE TYPE = DATA TRANSFER
 2350 NAME = S1/TD/LGSC 5
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```

2351     BITS PER CYCLE = 1 BITS
2352     BUS CONNECTIONS =
2353     S1/LGSC 5
2354     S1/SD/LGSC 5
2355
2356     SOFTWARE TYPE = MODULE
2357     * LGSC 5
2358     NAME = LGSC ACTIVITY 5
2359     CONCURRENT EXECUTION = YES
2360     ITERATION PERIOD = LGSC
2361     RESIDENT PROCESSORS =
2362     S1/LGSC 5
2363     INSTRUCTION LIST =
2364     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2365     EXECUTE A TOTAL OF ; 1 MESSAGE
2366     * LGSC 5
2367     NAME = RECORD UPDATES
2368     CONCURRENT EXECUTION = YES
2369     ALLOWED PROCESSORS =
2370     S1/LGSC 5
2371     REQUIRED MESSAGES =
2372     SEND REPLY TO NODE
2373     INSTRUCTION LIST =
2374     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2375     EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
2376
2377     ***** STATION LGSC 6 # 1
2378     * INDIVIDUAL 1.500 -1.500 15
2379     HARDWARE TYPE = PROCESSING
2380     NAME = S1/LGSC 6
2381     LOCATION = 365.175 89.118
2382     STYLE/COLOR = 1 3
2383     BASIC CYCLE TIME = 0. MICROSEC
2384     INPUT CONTROLLER = YES
2385     INSTRUCTION REPERTOIRE =
2386     INSTRUCTION TYPE = PROCESSING
2387     NAME ; NO/OP
2388     TIME ; 0 CYCLES
2389     INSTRUCTION TYPE = MESSAGE
2390     NAME ; MESSAGE
2391     MESSAGE ; REQUEST FROM SERVER
2392     LENGTH ; 200 BITS
2393     INHIBIT MESSAGE TO SELF ; YES
2394     DESTINATION PROCESSOR ; R29/FILE SERVER
2395     QUEUE FLAG ; YES
2396     NAME ; UPDATE RECORDS
2397     MESSAGE ; UPDATE FILES
2398     LENGTH ; SDF2/LGSC 6
2399     INHIBIT MESSAGE TO SELF ; YES
2400     DESTINATION PROCESSOR ; R29/FILE SERVER
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```

2401     QUEUE FLAG ; YES
2402     INSTRUCTION TYPE = READ
2403     NAME ; GET TRANSACTION MODULE
2404     STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 6
2405     FILE ACCESSED ; GENERAL STORAGE
2406     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2407     ALLOWABLE BUSSES ;
2408     S1/TD/LGSC 6
2409
2410     HARDWARE TYPE = STORAGE

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```

2411 NAME = S1/SD/LGSC 6
2412 CAPACITY = 1090519040. BITS
2413 BITS PER WORD = 4000. BITS
2414 WORD ACCESS TIME = 48.83 MICROSEC
2415 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2416 NUMBER OF PORTS = 1
2417
2418 HARDWARE TYPE = DATA TRANSFER
2419 NAME = S1/TD/LGSC 6
2420 BITS PER CYCLE = 1 BITS
2421 BUS CONNECTIONS =
2422 S1/LGSC 6
2423 S1/SD/LGSC 6
2424
2425 SOFTWARE TYPE = MODULE
2426 * LGSC 6
2427 NAME = LGSC ACTIVITY 6
2428 CONCURRENT EXECUTION = YES
2429 ITERATION PERIOD = LGSC
2430 RESIDENT PROCESSORS =
2431 S1/LGSC 6
2432 INSTRUCTION LIST =
2433 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2434 EXECUTE A TOTAL OF ; 1 MESSAGE
2435 * LGSC 6
2436 NAME = RECORD UPDATE6
2437 CONCURRENT EXECUTION = YES
2438 ALLOWED PROCESSORS =
2439 S1/LGSC 6
2440 REQUIRED MESSAGES =
2441 SEND REPLY TO NODE
2442 INSTRUCTION LIST =
2443 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2444 EXECUTE A TOTAL OF ; 1 UPDATE RECORDS
2445
2446 * MESSAGE REMOVAL MODULES
2447 SOFTWARE TYPE = MODULE
2448 NAME = MR/NOISE
2449 CONCURRENT EXECUTION = YES
2450 ALLOWED PROCESSORS =

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2451 S1/BASE TRAFFIC2
2452 REQUIRED MESSAGES =
2453 NOISE
2454 INSTRUCTION LIST =
2455 EXECUTE A TOTAL OF ; 1 NO/OP
2456
2457 ***** GATEWAYS
2458 *** BEGIN GATEWAY DEFINITION
2459 STATISTICAL DISTRIBUTIONS =
2460 NAME = GPSDF/GW1
2461 TYPE = MESSAGE.LINEAR
2462 A = 0.
2463 B = 0.
2464 NAME = GMSDF/GW1
2465 TYPE = MESSAGE.LINEAR
2466 A = 1.0
2467 B = 0.
2468 HARDWARE TYPE = PROCESSING
2469 NAME = G1/GW1
2470 LOCATION = 171.374 24.654
2471 STYLE/COLOR = 1 5
2472 BASIC CYCLE TIME = 1 MIC
2473 INPUT CONTROLLER = YES

```

```

2474     INSTRUCTION REPERTOIRE =
2475     INSTRUCTION TYPE = PROCESSING
2476     NAME ; GATEWAY PROCESSING
2477     TIME ; GPSDF/GW1
2478     INSTRUCTION TYPE = MESSAGE
2479     NAME ; RETRANSMIT ANYTHING
2480     MESSAGE ; *
2481     DESTINATION PROCESSOR ; NEXT
2482     ECHO PE LIST = GW1 CLUSTER
2483     LENGTH ; GMSDF/GW1
2484     QUEUE FLAG ; YES
2485     RESUME FLAG ; NO
2486     SOFTWARE TYPE = MODULE
2487     NAME = G1/GW1/RETRANSMIT
2488     PRIORITY = 0
2489     INTERRUPTABILITY FLAG = NO
2490     CONCURRENT EXECUTION = YES
2491     ALLOWED PROCESSORS =
2492     G1/GW1
2493     REQUIRED MESSAGES =
2494     *
2495     INSTRUCTION LIST =
2496     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2497     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2498     HARDWARE TYPE = PROCESSING
2499     NAME = G2/GW1
2500     BASIC CYCLE TIME = 1 MIC
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2501     INPUT CONTROLLER = YES
2502     INSTRUCTION REPERTOIRE =
2503     INSTRUCTION TYPE = PROCESSING
2504     NAME ; GATEWAY PROCESSING
2505     TIME ; GPSDF/GW1
2506     INSTRUCTION TYPE = MESSAGE
2507     NAME ; RETRANSMIT ANYTHING
2508     MESSAGE ; *
2509     DESTINATION PROCESSOR ; NEXT
2510     ECHO PE LIST = GW1 CLUSTER
2511     LENGTH ; GMSDF/GW1
2512     QUEUE FLAG ; YES
2513     RESUME FLAG ; NO
2514     SOFTWARE TYPE = MODULE
2515     NAME = G2/GW1/RETRANSMIT
2516     PRIORITY = 0
2517     INTERRUPTABILITY FLAG = NO
2518     CONCURRENT EXECUTION = YES
2519     ALLOWED PROCESSORS =
2520     G2/GW1
2521     REQUIRED MESSAGES =
2522     *
2523     INSTRUCTION LIST =
2524     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2525     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2526     HARDWARE TYPE = ECHO PE LIST
2527     NAME = GW1 CLUSTER
2528     TD = RING1
2529     ECHO PE = G1/GW1
2530     TD = LGSD
2531     ECHO PE = G2/GW1
2532     *** END GATEWAY DEFINITION
2533     *** BEGIN GATEWAY DEFINITION
2534     STATISTICAL DISTRIBUTIONS =
2535     NAME = GPSDF/GATE TO LGSP
2536     TYPE = MESSAGE.LINEAR

```

2537 A = 0.
 2538 B = 0.
 2539 NAME = GMSDF/GATE TO LGSP
 2540 TYPE = MESSAGE.LINEAR
 2541 A = 1.0
 2542 B = 0.
 2543 HARDWARE TYPE = PROCESSING
 2544 NAME = G1/GATE TO LGSP
 2545 LOCATION = 250.519 23.641
 2546 STYLE/COLOR = 1 6
 2547 ICON = PC2.ICN
 2548 BASIC CYCLE TIME = 1 MIC
 2549 INPUT CONTROLLER = YES
 2550 INSTRUCTION REPERTOIRE =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

2551 INSTRUCTION TYPE = PROCESSING
 2552 NAME ; GATEWAY PROCESSING
 2553 TIME ; GPSDF/GATE TO LGSP
 2554 INSTRUCTION TYPE = MESSAGE
 2555 NAME ; RETRANSMIT ANYTHING
 2556 MESSAGE ; *
 2557 DESTINATION PROCESSOR ; NEXT
 2558 ECHO PE LIST = GATE TO LGSP CLUSTER
 2559 LENGTH ; GMSDF/GATE TO LGSP
 2560 QUEUE FLAG ; YES
 2561 RESUME FLAG ; NO
 2562 SOFTWARE TYPE = MODULE
 2563 NAME = G1/GATE TO LGSP/RETRANSMIT
 2564 PRIORITY = 0
 2565 INTERRUPTABILITY FLAG = NO
 2566 CONCURRENT EXECUTION = YES
 2567 ALLOWED PROCESSORS =
 2568 G1/GATE TO LGSP
 2569 REQUIRED MESSAGES =
 2570 *
 2571 INSTRUCTION LIST =
 2572 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
 2573 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
 2574 HARDWARE TYPE = PROCESSING
 2575 NAME = G2/GATE TO LGSP
 2576 BASIC CYCLE TIME = 1 MIC
 2577 INPUT CONTROLLER = YES
 2578 INSTRUCTION REPERTOIRE =
 2579 INSTRUCTION TYPE = PROCESSING
 2580 NAME ; GATEWAY PROCESSING
 2581 TIME ; GPSDF/GATE TO LGSP
 2582 INSTRUCTION TYPE = MESSAGE
 2583 NAME ; RETRANSMIT ANYTHING
 2584 MESSAGE ; *
 2585 DESTINATION PROCESSOR ; NEXT
 2586 ECHO PE LIST = GATE TO LGSP CLUSTER
 2587 LENGTH ; GMSDF/GATE TO LGSP
 2588 QUEUE FLAG ; YES
 2589 RESUME FLAG ; NO
 2590 SOFTWARE TYPE = MODULE
 2591 NAME = G2/GATE TO LGSP/RETRANSMIT
 2592 PRIORITY = 0
 2593 INTERRUPTABILITY FLAG = NO
 2594 CONCURRENT EXECUTION = YES
 2595 ALLOWED PROCESSORS =
 2596 G2/GATE TO LGSP
 2597 REQUIRED MESSAGES =
 2598 *
 2599 INSTRUCTION LIST =

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```
2601 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2602 HARDWARE TYPE = ECHO PE LIST
2603 NAME = GATE TO LGSP CLUSTER
2604 TD = RING1
2605 ECHO PE = G1/GATE TO LGSP
2606 TD = LGSP
2607 ECHO PE = G2/GATE TO LGSP
2608 *** END GATEWAY DEFINITION
2609 *** BEGIN GATEWAY DEFINITION
2610 STATISTICAL DISTRIBUTIONS =
2611 NAME = GPSDF/GW3
2612 TYPE = MESSAGE.LINEAR
2613 A = 0.
2614 B = 0.
2615 NAME = GMSDF/GW3
2616 TYPE = MESSAGE.LINEAR
2617 A = 1.0
2618 B = 0.
2619 HARDWARE TYPE = PROCESSING
2620 NAME = G1/GW3
2621 LOCATION = 178.074 57.730
2622 STYLE/COLOR = 1 7
2623 BASIC CYCLE TIME = 1 MIC
2624 INPUT CONTROLLER = YES
2625 INSTRUCTION REPERTOIRE =
2626 INSTRUCTION TYPE = PROCESSING
2627 NAME ; GATEWAY PROCESSING
2628 TIME ; GPSDF/GW3
2629 INSTRUCTION TYPE = MESSAGE
2630 NAME ; RETRANSMIT ANYTHING
2631 MESSAGE ; *
2632 DESTINATION PROCESSOR ; NEXT
2633 ECHO PE LIST = GW3 CLUSTER
2634 LENGTH ; GMSDF/GW3
2635 QUEUE FLAG ; YES
2636 RESUME FLAG ; NO
2637 SOFTWARE TYPE = MODULE
2638 NAME = G1/GW3/RETRANSMIT
2639 PRIORITY = 0
2640 INTERRUPTABILITY FLAG = NO
2641 CONCURRENT EXECUTION = YES
2642 ALLOWED PROCESSORS =
2643 G1/GW3
2644 REQUIRED MESSAGES =
2645 *
2646 INSTRUCTION LIST =
2647 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2648 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2649 HARDWARE TYPE = PROCESSING
2650 NAME = G2/GW3
```

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```
2651 BASIC CYCLE TIME = 1 MIC
2652 INPUT CONTROLLER = YES
2653 INSTRUCTION REPERTOIRE =
2654 INSTRUCTION TYPE = PROCESSING
2655 NAME ; GATEWAY PROCESSING
2656 TIME ; GPSDF/GW3
2657 INSTRUCTION TYPE = MESSAGE
```

```

2658     NAME ; RETRANSMIT ANYTHING
2659     MESSAGE ; *
2660     DESTINATION PROCESSOR ; NEXT
2661     ECHO PE LIST = GW3 CLUSTER
2662     LENGTH ; GMSDF/GW3
2663     QUEUE FLAG ; YES
2664     RESUME FLAG ; NO
2665 SOFTWARE TYPE = MODULE
2666     NAME = G2/GW3/RETRANSMIT
2667     PRIORITY = 0
2668     INTERRUPTABILITY FLAG = NO
2669     CONCURRENT EXECUTION = YES
2670     ALLOWED PROCESSORS =
2671     G2/GW3
2672     REQUIRED MESSAGES =
2673     *
2674     INSTRUCTION LIST =
2675     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2676     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2677 HARDWARE TYPE = ECHO PE LIST
2678     NAME = GW3 CLUSTER
2679     TD = RING1
2680     ECHO PE = G1/GW3
2681     TD = LGSM
2682     ECHO PE = G2/GW3
2683 *** END GATEWAY DEFINITION
2684 *** BEGIN GATEWAY DEFINITION
2685 STATISTICAL DISTRIBUTIONS =
2686     NAME = GPSDF/GW4
2687     TYPE = MESSAGE.LINEAR
2688     A = 0.
2689     B = 0.
2690     NAME = GMSDF/GW4
2691     TYPE = MESSAGE.LINEAR
2692     A = 1.0
2693     B = 0.
2694 HARDWARE TYPE = PROCESSING
2695     NAME = G1/GW4
2696     LOCATION =          277.319          54.017
2697     STYLE/COLOR =    1    10
2698     BASIC CYCLE TIME = 1 MIC
2699     INPUT CONTROLLER = YES
2700     INSTRUCTION REPERTOIRE =
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2701     INSTRUCTION TYPE = PROCESSING
2702     NAME ; GATEWAY PROCESSING
2703     TIME ; GPSDF/GW4
2704     INSTRUCTION TYPE = MESSAGE
2705     NAME ; RETRANSMIT ANYTHING
2706     MESSAGE ; *
2707     DESTINATION PROCESSOR ; NEXT
2708     ECHO PE LIST = GW4 CLUSTER
2709     LENGTH ; GMSDF/GW4
2710     QUEUE FLAG ; YES
2711     RESUME FLAG ; NO
2712 SOFTWARE TYPE = MODULE
2713     NAME = G1/GW4/RETRANSMIT
2714     PRIORITY = 0
2715     INTERRUPTABILITY FLAG = NO
2716     CONCURRENT EXECUTION = YES
2717     ALLOWED PROCESSORS =
2718     G1/GW4
2719     REQUIRED MESSAGES =
2720     *

```

```

2721     INSTRUCTION LIST =
2722     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2723     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2724     HARDWARE TYPE = PROCESSING
2725     NAME = G2/GW4
2726     BASIC CYCLE TIME = 1 MIC
2727     INPUT CONTROLLER = YES
2728     INSTRUCTION REPERTOIRE =
2729     INSTRUCTION TYPE = PROCESSING
2730     NAME ; GATEWAY PROCESSING
2731     TIME ; GPSDF/GW4
2732     INSTRUCTION TYPE = MESSAGE
2733     NAME ; RETRANSMIT ANYTHING
2734     MESSAGE ; *
2735     DESTINATION PROCESSOR ; NEXT
2736     ECHO PE LIST = GW4 CLUSTER
2737     LENGTH ; GMSDF/GW4
2738     QUEUE FLAG ; YES
2739     RESUME FLAG ; NO
2740     SOFTWARE TYPE = MODULE
2741     NAME = G2/GW4/RETRANSMIT
2742     PRIORITY = 0
2743     INTERRUPTABILITY FLAG = NO
2744     CONCURRENT EXECUTION = YES
2745     ALLOWED PROCESSORS =
2746     G2/GW4
2747     REQUIRED MESSAGES =
2748     *
2749     INSTRUCTION LIST =
2750     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2751     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2752     HARDWARE TYPE = ECHO PE LIST
2753     NAME = GW4 CLUSTER
2754     TD = RING1
2755     ECHO PE = G1/GW4
2756     TD = LGSC
2757     ECHO PE = G2/GW4
2758     *** END GATEWAY DEFINITION
2759     *** BEGIN GATEWAY DEFINITION
2760     STATISTICAL DISTRIBUTIONS =
2761     NAME = GPSDF/GW6
2762     TYPE = MESSAGE.LINEAR
2763     A = 0.
2764     B = 0.
2765     NAME = GMSDF/GW6
2766     TYPE = MESSAGE.LINEAR
2767     A = 1.0
2768     B = 0.
2769     HARDWARE TYPE = PROCESSING
2770     NAME = G1/GW6
2771     LOCATION =      64.174      37.985
2772     STYLE/COLOR =    1    12
2773     BASIC CYCLE TIME = 1 MIC
2774     INPUT CONTROLLER = YES
2775     INSTRUCTION REPERTOIRE =
2776     INSTRUCTION TYPE = PROCESSING
2777     NAME ; GATEWAY PROCESSING
2778     TIME ; GPSDF/GW6
2779     INSTRUCTION TYPE = MESSAGE
2780     NAME ; RETRANSMIT ANYTHING
2781     MESSAGE ; *
2782     DESTINATION PROCESSOR ; NEXT
2783     ECHO PE LIST = GW6 CLUSTER

```



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2784          LENGTH ; GMSDF/GW6
2785          QUEUE FLAG ; YES
2786          RESUME FLAG ; NO
2787  SOFTWARE TYPE = MODULE
2788          NAME = G1/GW6/RETRANSMIT
2789          PRIORITY = 0
2790          INTERRUPTABILITY FLAG = NO
2791          CONCURRENT EXECUTION = YES
2792          ALLOWED PROCESSORS =
2793          G1/GW6
2794          REQUIRED MESSAGES =
2795          *
2796          INSTRUCTION LIST =
2797          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2798          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2799  HARDWARE TYPE = PROCESSING
2800          NAME = G2/GW6
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```

2801  BASIC CYCLE TIME = 1 MIC
2802  INPUT CONTROLLER = YES
2803  INSTRUCTION REPERTOIRE =
2804          INSTRUCTION TYPE = PROCESSING
2805          NAME ; GATEWAY PROCESSING
2806          TIME ; GPSDF/GW6
2807          INSTRUCTION TYPE = MESSAGE
2808          NAME ; RETRANSMIT ANYTHING
2809          MESSAGE ; *
2810          DESTINATION PROCESSOR ; NEXT
2811          ECHO PE LIST = GW6 CLUSTER
2812          LENGTH ; GMSDF/GW6
2813          QUEUE FLAG ; YES
2814          RESUME FLAG ; NO
2815  SOFTWARE TYPE = MODULE
2816          NAME = G2/GW6/RETRANSMIT
2817          PRIORITY = 0
2818          INTERRUPTABILITY FLAG = NO
2819          CONCURRENT EXECUTION = YES
2820          ALLOWED PROCESSORS =
2821          G2/GW6
2822          REQUIRED MESSAGES =
2823          *
2824          INSTRUCTION LIST =
2825          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
2826          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
2827  HARDWARE TYPE = ECHO PE LIST
2828          NAME = GW6 CLUSTER
2829          TD = RING1
2830          ECHO PE = G1/GW6
2831          TD = AFNET
2832          ECHO PE = G2/GW6
2833  *** END GATEWAY DEFINITION
2834
2835  ***** ROUTES
2836  HARDWARE TYPE = ROUTE
2837          NAME = R1/FILE SERVER
2838          NEXT PE = G1/GW1
2839          ALLOWABLE BUSSES ;
2840          LGSD
2841          NEXT PE = G2/GATE TO LGSP
2842          ALLOWABLE BUSSES ;
2843          RING1
2844          NEXT PE = S1/FILE SERVER
2845          ALLOWABLE BUSSES ;
2846          LGSP

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2847 NAME = R6/FILE SERVER
2848 NEXT PE = G1/GW3
2849 ALLOWABLE BUSSES ;
2850 LGSM
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

2851 NEXT PE = G2/GATE TO LGSP
2852 ALLOWABLE BUSSES ;
2853 RING1
2854 NEXT PE = S1/FILE SERVER
2855 ALLOWABLE BUSSES ;
2856 LGSP
2857 NAME = R7/FILE SERVER
2858 NEXT PE = G1/GW4
2859 ALLOWABLE BUSSES ;
2860 LGSC
2861 NEXT PE = G2/GATE TO LGSP
2862 ALLOWABLE BUSSES ;
2863 RING1
2864 NEXT PE = S1/FILE SERVER
2865 ALLOWABLE BUSSES ;
2866 LGSP
2867 NAME = R8/FILE SERVER
2868 NEXT PE = G1/GW6
2869 ALLOWABLE BUSSES ;
2870 AFNET
2871 NEXT PE = G2/GATE TO LGSP
2872 ALLOWABLE BUSSES ;
2873 RING1
2874 NEXT PE = S1/FILE SERVER
2875 ALLOWABLE BUSSES ;
2876 LGSP
2877 NAME = R9/FILE SERVER
2878 NEXT PE = G1/GW6
2879 ALLOWABLE BUSSES ;
2880 AFNET
2881 NEXT PE = G2/GATE TO LGSP
2882 ALLOWABLE BUSSES ;
2883 RING1
2884 NEXT PE = S1/FILE SERVER
2885 ALLOWABLE BUSSES ;
2886 LGSP
2887 NAME = R10/FILE SERVER
2888 NEXT PE = G1/GW1
2889 ALLOWABLE BUSSES ;
2890 LGSD
2891 NEXT PE = G2/GATE TO LGSP
2892 ALLOWABLE BUSSES ;
2893 RING1
2894 NEXT PE = S1/FILE SERVER
2895 ALLOWABLE BUSSES ;
2896 LGSP
2897 NAME = R11/FILE SERVER
2898 NEXT PE = G1/GW1
2899 ALLOWABLE BUSSES ;
2900 LGSD

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

2901 NEXT PE = G2/GATE TO LGSP
2902 ALLOWABLE BUSSES ;
2903 RING1
2904 NEXT PE = S1/FILE SERVER

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2905     ALLOWABLE BUSSES ;
2906     LGSP
2907     NAME = R12/FILE SERVER
2908     NEXT PE = G1/GW1
2909     ALLOWABLE BUSSES ;
2910     LGSD
2911     NEXT PE = G2/GATE TO LGSP
2912     ALLOWABLE BUSSES ;
2913     RING1
2914     NEXT PE = S1/FILE SERVER
2915     ALLOWABLE BUSSES ;
2916     LGSP
2917     NAME = R13/FILE SERVER
2918     NEXT PE = G1/GW1
2919     ALLOWABLE BUSSES ;
2920     LGSD
2921     NEXT PE = G2/GATE TO LGSP
2922     ALLOWABLE BUSSES ;
2923     RING1
2924     NEXT PE = S1/FILE SERVER
2925     ALLOWABLE BUSSES ;
2926     LGSP
2927     NAME = R14/FILE SERVER
2928     NEXT PE = G1/GW1
2929     ALLOWABLE BUSSES ;
2930     LGSD
2931     NEXT PE = G2/GATE TO LGSP
2932     ALLOWABLE BUSSES ;
2933     RING1
2934     NEXT PE = S1/FILE SERVER
2935     ALLOWABLE BUSSES ;
2936     LGSP
2937     NAME = R20/FILE SERVER
2938     NEXT PE = G1/GW3
2939     ALLOWABLE BUSSES ;
2940     LGSM
2941     NEXT PE = G2/GATE TO LGSP
2942     ALLOWABLE BUSSES ;
2943     RING1
2944     NEXT PE = S1/FILE SERVER
2945     ALLOWABLE BUSSES ;
2946     LGSP
2947     NAME = R21/FILE SERVER
2948     NEXT PE = G1/GW3
2949     ALLOWABLE BUSSES ;
2950     LGSM

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

2951     NEXT PE = G2/GATE TO LGSP
2952     ALLOWABLE BUSSES ;
2953     RING1
2954     NEXT PE = S1/FILE SERVER
2955     ALLOWABLE BUSSES ;
2956     LGSP
2957     NAME = R22/FILE SERVER
2958     NEXT PE = G1/GW3
2959     ALLOWABLE BUSSES ;
2960     LGSM
2961     NEXT PE = G2/GATE TO LGSP
2962     ALLOWABLE BUSSES ;
2963     RING1
2964     NEXT PE = S1/FILE SERVER
2965     ALLOWABLE BUSSES ;
2966     LGSP
2967     NAME = R23/FILE SERVER

```

2968 NEXT PE = G1/GW3
 2969 ALLOWABLE BUSSES ;
 2970 LGSM
 2971 NEXT PE = G2/GATE TO LGSP
 2972 ALLOWABLE BUSSES ;
 2973 RING1
 2974 NEXT PE = S1/FILE SERVER
 2975 ALLOWABLE BUSSES ;
 2976 LGSP
 2977 NAME = R24/FILE SERVER
 2978 NEXT PE = G1/GW3
 2979 ALLOWABLE BUSSES ;
 2980 LGSM
 2981 NEXT PE = G2/GATE TO LGSP
 2982 ALLOWABLE BUSSES ;
 2983 RING1
 2984 NEXT PE = S1/FILE SERVER
 2985 ALLOWABLE BUSSES ;
 2986 LGSP
 2987 NAME = R25/FILE SERVER
 2988 NEXT PE = G1/GW4
 2989 ALLOWABLE BUSSES ;
 2990 LGSC
 2991 NEXT PE = G2/GATE TO LGSP
 2992 ALLOWABLE BUSSES ;
 2993 RING1
 2994 NEXT PE = S1/FILE SERVER
 2995 ALLOWABLE BUSSES ;
 2996 LGSP
 2997 NAME = R26/FILE SERVER
 2998 NEXT PE = G1/GW4
 2999 ALLOWABLE BUSSES ;
 3000 LGSC

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

3001 NEXT PE = G2/GATE TO LGSP
 3002 ALLOWABLE BUSSES ;
 3003 RING1
 3004 NEXT PE = S1/FILE SERVER
 3005 ALLOWABLE BUSSES ;
 3006 LGSP
 3007 NAME = R27/FILE SERVER
 3008 NEXT PE = G1/GW4
 3009 ALLOWABLE BUSSES ;
 3010 LGSC
 3011 NEXT PE = G2/GATE TO LGSP
 3012 ALLOWABLE BUSSES ;
 3013 RING1
 3014 NEXT PE = S1/FILE SERVER
 3015 ALLOWABLE BUSSES ;
 3016 LGSP
 3017 NAME = R28/FILE SERVER
 3018 NEXT PE = G1/GW4
 3019 ALLOWABLE BUSSES ;
 3020 LGSC
 3021 NEXT PE = G2/GATE TO LGSP
 3022 ALLOWABLE BUSSES ;
 3023 RING1
 3024 NEXT PE = S1/FILE SERVER
 3025 ALLOWABLE BUSSES ;
 3026 LGSP
 3027 NAME = R29/FILE SERVER
 3028 NEXT PE = G1/GW4
 3029 ALLOWABLE BUSSES ;
 3030 LGSC

```

3031     NEXT PE = G2/GATE TO LGSP
3032     ALLOWABLE BUSSES ;
3033     RING1
3034     NEXT PE = S1/FILE SERVER
3035     ALLOWABLE BUSSES ;
3036     LGSP
3037
3038 ***** FILES
3039 SOFTWARE TYPE = FILE
3040     NAME = GENERAL STORAGE
3041     NUMBER OF BITS = 15000000.000 BITS
3042     READ ONLY FLAG = NO
3043     INITIAL RESIDENCY =
3044     S1/SD/LGSD1
3045     NAME = GENERAL STORAGE
3046     NUMBER OF BITS = +1.500000000E+008 BITS
3047     READ ONLY FLAG = NO
3048     INITIAL RESIDENCY =
3049     S1/SD/FILE SERVER
3050     NAME = GENERAL STORAGE
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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

```

3051     NUMBER OF BITS = 15000000.000 BITS
3052     READ ONLY FLAG = NO
3053     INITIAL RESIDENCY =
3054     S1/SD/LGSP1
3055     NAME = GENERAL STORAGE
3056     NUMBER OF BITS = 15000000.000 BITS
3057     READ ONLY FLAG = NO
3058     INITIAL RESIDENCY =
3059     S1/SD/LGSM1
3060     NAME = GENERAL STORAGE
3061     NUMBER OF BITS = 15000000.000 BITS
3062     READ ONLY FLAG = NO
3063     INITIAL RESIDENCY =
3064     S1/SD/LGSC1
3065     NAME = GENERAL STORAGE
3066     NUMBER OF BITS = 15000000.000 BITS
3067     READ ONLY FLAG = NO
3068     INITIAL RESIDENCY =
3069     S1/SD/FMFS
3070     NAME = GENERAL STORAGE
3071     NUMBER OF BITS = 15000000.000 BITS
3072     READ ONLY FLAG = NO
3073     INITIAL RESIDENCY =
3074     S1/SD/DOMR
3075     NAME = GENERAL STORAGE
3076     NUMBER OF BITS = 15000000.000 BITS
3077     READ ONLY FLAG = NO
3078     INITIAL RESIDENCY =
3079     S1/SD/LGSD 2
3080     NAME = GENERAL STORAGE
3081     NUMBER OF BITS = 15000000.000 BITS
3082     READ ONLY FLAG = NO
3083     INITIAL RESIDENCY =
3084     S1/SD/LGSD 3
3085     NAME = GENERAL STORAGE
3086     NUMBER OF BITS = 15000000.000 BITS
3087     READ ONLY FLAG = NO
3088     INITIAL RESIDENCY =
3089     S1/SD/LGSD 4
3090     NAME = GENERAL STORAGE
3091     NUMBER OF BITS = 15000000.000 BITS
3092     READ ONLY FLAG = NO
3093     INITIAL RESIDENCY =

```

3094 S1/SD/LGSD 5
3095 NAME = GENERAL STORAGE
3096 NUMBER OF BITS = 15000000.000 BITS
3097 READ ONLY FLAG = NO
3098 INITIAL RESIDENCY =
3099 S1/SD/LGSD 6
3100 NAME = GENERAL STORAGE

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

3101 NUMBER OF BITS = 15000000.000 BITS
3102 READ ONLY FLAG = NO
3103 INITIAL RESIDENCY =
3104 S1/SD/LGSP 2
3105 NAME = GENERAL STORAGE
3106 NUMBER OF BITS = 15000000.000 BITS
3107 READ ONLY FLAG = NO
3108 INITIAL RESIDENCY =
3109 S1/SD/LGSP 3
3110 NAME = GENERAL STORAGE
3111 NUMBER OF BITS = 15000000.000 BITS
3112 READ ONLY FLAG = NO
3113 INITIAL RESIDENCY =
3114 S1/SD/LGSP 4
3115 NAME = GENERAL STORAGE
3116 NUMBER OF BITS = 15000000.000 BITS
3117 READ ONLY FLAG = NO
3118 INITIAL RESIDENCY =
3119 S1/SD/LGSP 5
3120 NAME = GENERAL STORAGE
3121 NUMBER OF BITS = 15000000.000 BITS
3122 READ ONLY FLAG = NO
3123 INITIAL RESIDENCY =
3124 S1/SD/LGSP 6
3125 NAME = GENERAL STORAGE
3126 NUMBER OF BITS = 15000000.000 BITS
3127 READ ONLY FLAG = NO
3128 INITIAL RESIDENCY =
3129 S1/SD/LGSM 2
3130 NAME = GENERAL STORAGE
3131 NUMBER OF BITS = 15000000.000 BITS
3132 READ ONLY FLAG = NO
3133 INITIAL RESIDENCY =
3134 S1/SD/LGSM 3
3135 NAME = GENERAL STORAGE
3136 NUMBER OF BITS = 15000000.000 BITS
3137 READ ONLY FLAG = NO
3138 INITIAL RESIDENCY =
3139 S1/SD/LGSM 4
3140 NAME = GENERAL STORAGE
3141 NUMBER OF BITS = 15000000.000 BITS
3142 READ ONLY FLAG = NO
3143 INITIAL RESIDENCY =
3144 S1/SD/LGSM 5
3145 NAME = GENERAL STORAGE
3146 NUMBER OF BITS = 15000000.000 BITS
3147 READ ONLY FLAG = NO
3148 INITIAL RESIDENCY =
3149 S1/SD/LGSM 6
3150 NAME = GENERAL STORAGE

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SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

3151 NUMBER OF BITS = 15000000.000 BITS

3152 READ ONLY FLAG = NO
3153 INITIAL RESIDENCY =
3154 S1/SD/LGSC 2
3155 NAME = GENERAL STORAGE
3156 NUMBER OF BITS = 15000000.000 BITS
3157 READ ONLY FLAG = NO
3158 INITIAL RESIDENCY =
3159 S1/SD/LGSC 3
3160 NAME = GENERAL STORAGE
3161 NUMBER OF BITS = 15000000.000 BITS
3162 READ ONLY FLAG = NO
3163 INITIAL RESIDENCY =
3164 S1/SD/LGSC 4
3165 NAME = GENERAL STORAGE
3166 NUMBER OF BITS = 15000000.000 BITS
3167 READ ONLY FLAG = NO
3168 INITIAL RESIDENCY =
3169 S1/SD/LGSC 5
3170 NAME = GENERAL STORAGE
3171 NUMBER OF BITS = 15000000.000 BITS
3172 READ ONLY FLAG = NO
3173 INITIAL RESIDENCY =
3174 S1/SD/LGSC 6

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSM	LGSD	LGSC
COLLISION EPISODES	6	310	7
COLLIDED TRANSFERS	16	763	16
AVG TO RESOLVE	1.778	2.137	2.000
MAX TO RESOLVE	3	8	6
DEFERRALS	8	333	6
AVG DEFERRAL DELAY	535.338	652.614	804.367
MAX DEFERRAL DELAY	1169.600	1193.792	1130.941
STD DEV DEFERRAL DELAY	404.944	424.002	256.162
AVG DEFERRAL QUEUE	.000	.000	.000
MAX QUEUE SIZE	1.000	2.000	1.000
STD DEV QUEUE SIZE	.000	.001	.000
MULTIPLE COLLISIONS	3	126	2
AVG MULT COLLISIONS	3.333	3.135	3.000
MAX MULT COLLISIONS	4	4	3
SUCCESSFUL TRANSFERS	118044	459335	120874
AVG USAGE TIME	957.778	957.890	957.786
MAX USAGE TIME	1220.800	1220.800	1220.800
STD DEV USAGE TIME	403.107	403.059	403.104
PER CENT OF TIME BUSY	.052	.204	.054

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSP	AFNET
COLLISION EPISODES	2039	0
COLLIDED TRANSFERS	5007	0
AVG TO RESOLVE	2.133	0.
MAX TO RESOLVE	8	0
DEFERRALS	2223	0
AVG DEFERRAL DELAY	635.476	0.
MAX DEFERRAL DELAY	1215.532	0.
STD DEV DEFERRAL DELAY	431.524	0.
AVG DEFERRAL QUEUE	.000	0.
MAX QUEUE SIZE	2.000	0.
STD DEV QUEUE SIZE	.003	0.
MULTIPLE COLLISIONS	812	0
AVG MULT COLLISIONS	3.144	0.
MAX MULT COLLISIONS	4	0
SUCCESSFUL TRANSFERS	1325536	32310
AVG USAGE TIME	958.052	571.323
MAX USAGE TIME	1220.800	726.667
STD DEV USAGE TIME	402.987	239.633
PER CENT OF TIME BUSY	.588	.009

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

TOKEN LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME

RING1

LAN REQUESTS GRANTED	632115
AVG REQUEST DELAY	1.737
MAX REQUEST DELAY	2634.484
STD DEV REQUEST DELAY	54.884

COMPLETED TRANSFERS	632115
AVG USAGE TIME	695.979
MAX USAGE TIME	2638.250
STD DEV USAGE TIME	1141.588

AVG QUEUE SIZE	.000
MAX QUEUE SIZE	1.000
STD DEV QUEUE SIZE	.002

PER CENT OF TIME BUSY	.204

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LGSD	UPDATE SERVER	BASE TRAFIC
HOST STATION	LGSD1	LGSD1	BASE TRAFFIC1
COMPLETED EXECUTIONS	8537	8537	388661
AVG EXECUTION TIME	75304.545	79560.919	27.456
MAX EXECUTION TIME	87960.253	86454.280	2659.484
MIN EXECUTION TIME	75293.587	79555.180	25.000
STD DEV EXECUTION TIME	274.316	127.633	65.503

ACTIVITY NAME	MESSAGE REPLY	UPDATE RECORDS	LGSP ACTIVITY 1
HOST STATION	FILE SERVER	FILE SERVER	LGSP1
COMPLETED EXECUTIONS	147128	147126	10976
AVG EXECUTION TIME	395590.945	391269.580	75315.112
MAX EXECUTION TIME	406024.380	391269.580	89734.006
MIN EXECUTION TIME	395582.780	391269.580	75293.395
STD DEV EXECUTION TIME	203.039	0.	400.627

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE FILES	LGSM ACTIVITY 1	FILE UPDATE
HOST STATION	LGSP1	LGSM1	LGSM1
COMPLETED EXECUTIONS	10976	2099	2099
AVG EXECUTION TIME	79565.726	75295.357	79557.350
MAX EXECUTION TIME	87419.952	75297.151	79559.175
MIN EXECUTION TIME	79555.601	75293.417	79555.840
STD DEV EXECUTION TIME	211.672	.504	.496

ACTIVITY NAME	LGSC ACTIVITY 1	RECORD UPDATE	FMFS ACTIVITY
HOST STATION	LGSC1	LGSC1	FMFS
COMPLETED EXECUTIONS	2231	2231	2706
AVG EXECUTION TIME	75296.144	79557.331	75270.359
MAX EXECUTION TIME	76544.224	79558.948	75272.407
MIN EXECUTION TIME	75293.706	79555.624	75268.520
STD DEV EXECUTION TIME	28.755	.490	.509

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	RECORDS UPDATE	DOMR ACTIVITY	FILES UPDATE
HOST STATION	FMFS	DOMR	DOMR
COMPLETED EXECUTIONS	2706	884	884
AVG EXECUTION TIME	77830.816	75270.361	77830.812
MAX EXECUTION TIME	77832.660	75271.906	77832.215
MIN EXECUTION TIME	77829.008	75268.746	77829.015
STD DEV EXECUTION TIME	.497	.478	.493

ACTIVITY NAME	LGSD ACTIVITY 2	UPDATE SERVER2	LGSD ACTIVITY 3
HOST STATION	LGSD 2	LGSD 2	LGSD 3
COMPLETED EXECUTIONS	8447	8447	8602
AVG EXECUTION TIME	75309.608	79558.249	75300.269
MAX EXECUTION TIME	92565.089	86407.402	84868.074
MIN EXECUTION TIME	75293.373	79555.426	75293.362
STD DEV EXECUTION TIME	362.675	74.735	183.907

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER3	LGSD AVTIVITY 4	UPDATE SERVER4

HOST STATION	LGSD 3	LGSD 4	LGSD 4

COMPLETED EXECUTIONS	8602	8629	8629

AVG EXECUTION TIME	79557.407	75300.573	79561.417

MAX EXECUTION TIME	79819.513	84766.526	87583.368

MIN EXECUTION TIME	79555.529	75293.465	79555.536

STD DEV EXECUTION TIME	3.404	196.707	151.679

ACTIVITY NAME	LGSD ACTIVITY 5	UPDATE SERVER5	LGSD ACTIVITY 6

HOST STATION	LGSD 5	LGSD 5	LGSD 6

COMPLETED EXECUTIONS	8420	8420	8381

AVG EXECUTION TIME	75301.214	79561.979	75307.406

MAX EXECUTION TIME	89676.592	86090.819	94464.638

MIN EXECUTION TIME	75293.260	79555.144	75293.656

STD DEV EXECUTION TIME	216.366	154.745	364.243

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER6	LGSP ACTIVITY 2	UPDATE FILES2

HOST STATION	LGSD 6	LGSP 2	LGSP 2

COMPLETED EXECUTIONS	8380	11125	11125

AVG EXECUTION TIME	79561.147	75327.152	79562.983

MAX EXECUTION TIME	88971.195	90562.902	86191.486

MIN EXECUTION TIME	79555.511	75293.106	79555.362

STD DEV EXECUTION TIME	149.121	523.072	158.688

ACTIVITY NAME	LGSP ACTIVITY 3	UPDATE FILES3	LGSD ACTIVITY 4

HOST STATION	LGSP 3	LGSP 3	LGSP 4

COMPLETED EXECUTIONS	10943	10943	10942

AVG EXECUTION TIME	75311.367	79563.515	75314.139

MAX EXECUTION TIME	89489.350	88758.256	88032.583

MIN EXECUTION TIME	75293.211	79555.399	75293.621

STD DEV EXECUTION TIME	355.552	169.034	374.129

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE FILES4	LGSP ACTIVITY 5	UPDATE FILES5
HOST STATION	LGSP 4	LGSP 5	LGSP 5
COMPLETED EXECUTIONS	10942	10955	10955
AVG EXECUTION TIME	79564.691	75316.236	79564.999
MAX EXECUTION TIME	87538.128	94114.648	86090.163
MIN EXECUTION TIME	79555.346	75293.184	79555.479
STD DEV EXECUTION TIME	192.981	420.749	176.956

ACTIVITY NAME	LGSP ACTIVITY 6	UPDATE FILES6	LGSM ACTIVITY 2
HOST STATION	LGSP 6	LGSP 6	LGSM 2
COMPLETED EXECUTIONS	11036	11036	2223
AVG EXECUTION TIME	75324.908	79563.961	75295.530
MAX EXECUTION TIME	88480.494	87633.924	75558.863
MIN EXECUTION TIME	75293.409	79555.419	75293.578
STD DEV EXECUTION TIME	478.262	187.620	6.133

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FILE UPDATE2	LGSM ACTIVITY 3	FILE UPDATE3

HOST STATION	LGSM 2	LGSM 3	LGSM 3

COMPLETED EXECUTIONS	2223	2256	2256

AVG EXECUTION TIME	79557.344	75295.593	79557.344
MAX EXECUTION TIME	79559.127	75826.651	79558.873
MIN EXECUTION TIME	79555.858	75293.750	79555.692
STD DEV EXECUTION TIME	.507	11.194	.504

ACTIVITY NAME	LGSM ACTIVITY 4	FILE UPDATE4	LGSM ACTIVITY 5

HOST STATION	LGSM 4	LGSM 4	LGSM 5

COMPLETED EXECUTIONS	2189	2189	2202

AVG EXECUTION TIME	75295.648	79557.336	75296.299
MAX EXECUTION TIME	75969.592	79559.005	77372.397
MIN EXECUTION TIME	75293.645	79555.417	75293.380
STD DEV EXECUTION TIME	14.417	.506	44.255

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FILE UPDATE5	LGSM ACTIVITY 6	FILE UPDATE6
HOST STATION	LGSM 5	LGSM 6	LGSM 6
COMPLETED EXECUTIONS	2202	2147	2147
AVG EXECUTION TIME	79557.425	75295.911	79557.359
MAX EXECUTION TIME	79723.631	76519.301	79559.009
MIN EXECUTION TIME	79555.658	75293.637	79555.555
STD DEV EXECUTION TIME	3.578	26.414	.503

ACTIVITY NAME	LGSC ACTIVITY 2	RECORD UPDATE2	LGSC ACTIVITY 3
HOST STATION	LGSC 2	LGSC 2	LGSC 3
COMPLETED EXECUTIONS	2184	2184	2276
AVG EXECUTION TIME	75295.347	79557.348	75297.879
MAX EXECUTION TIME	75297.203	79559.074	81032.278
MIN EXECUTION TIME	75293.725	79555.694	75293.724
STD DEV EXECUTION TIME	.506	.505	120.227

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	RECORD UPDATE3	LGSC ACTIVITY 4	RECORD UPDATE4

HOST STATION	LGSC 3	LGSC 4	LGSC 4

COMPLETED EXECUTIONS	2276	2234	2234

AVG EXECUTION TIME	79557.416	75295.750	79557.356
MAX EXECUTION TIME	79672.463	76169.509	79559.204
MIN EXECUTION TIME	79555.860	75293.600	79555.732
STD DEV EXECUTION TIME	2.464	18.497	.497

ACTIVITY NAME	LGSC ACTIVITY 5	RECORD UPDATE5	LGSC ACTIVITY 6

HOST STATION	LGSC 5	LGSC 5	LGSC 6

COMPLETED EXECUTIONS	2270	2270	2235

AVG EXECUTION TIME	75295.353	79558.055	75295.354
MAX EXECUTION TIME	75297.021	81162.118	75296.923
MIN EXECUTION TIME	75293.737	79555.796	75293.916
STD DEV EXECUTION TIME	.506	33.679	.494

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME

RECORD UPDATE6

HOST STATION

LGSC 6

COMPLETED EXECUTIONS

2235

AVG EXECUTION TIME

79559.091

MAX EXECUTION TIME

83460.159

MIN EXECUTION TIME

79555.589

STD DEV EXECUTION TIME

82.537

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSD1	BASE TRAFFIC1	BASE TRAFFIC2
LAN REQUESTS GRANTED	42820	388661	0
AVERAGE WAIT TIME	7.659	2.456	0.
MAXIMUM WAIT TIME	7376.000	2634.484	0.
STD DEV WAIT TIME	64.242	65.503	0.
DISK REQUESTS GRANTED	17074	0	0
AVERAGE BITS USED	15000000.000	0.	0.
MAXIMUM BITS USED	15000000.	0.	0.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.612	.005	0.

STATION NAME	FILE SERVER	LGSP1	LGSM1
LAN REQUESTS GRANTED	591049	55258	10495
AVERAGE WAIT TIME	7.415	9.827	5.760
MAXIMUM WAIT TIME	771.200	5737.600	9.600
STD DEV WAIT TIME	7.073	86.009	4.703
DISK REQUESTS GRANTED	7650630	21952	4198
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	150000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	53.597	.787	.150

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSC1	FMFS	DOMR
LAN REQUESTS GRANTED	11157	13530	4420
AVERAGE WAIT TIME	5.919	5.760	5.760
MAXIMUM WAIT TIME	1140.541	9.600	9.600
STD DEV WAIT TIME	12.767	4.703	4.703
DISK REQUESTS GRANTED	4462	5412	1768
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.160	.192	.063

STATION NAME	LGSD 2	LGSD 3	LGSD 4
LAN REQUESTS GRANTED	42352	43055	43250
AVERAGE WAIT TIME	8.623	6.748	6.864
MAXIMUM WAIT TIME	8400.000	1970.800	2921.600
STD DEV WAIT TIME	80.564	36.570	39.666
DISK REQUESTS GRANTED	16894	17204	17258
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.606	.617	.619

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSD 5	LGSD 6	LGSP 2
LAN REQUESTS GRANTED	42241	42042	56052
AVERAGE WAIT TIME	7.052	8.232	12.167
MAXIMUM WAIT TIME	5276.800	10448.000	7939.200
STD DEV WAIT TIME	45.842	88.298	116.384
DISK REQUESTS GRANTED	16840	16761	22250
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.604	.601	.798

STATION NAME	LGSP 3	LGSP 4	LGSP 5
LAN REQUESTS GRANTED	55008	55080	55140
AVERAGE WAIT TIME	9.055	9.648	10.061
MAXIMUM WAIT TIME	7017.600	6454.400	10908.800
STD DEV WAIT TIME	75.399	82.127	97.185
DISK REQUESTS GRANTED	21886	21884	21910
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.785	.785	.786

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSP 6	LGSM 2	LGSM 3
LAN REQUESTS GRANTED	55617	11116	11280
AVERAGE WAIT TIME	11.705	5.794	5.807
MAXIMUM WAIT TIME	5584.000	263.789	530.718
STD DEV WAIT TIME	100.253	5.385	6.822
DISK REQUESTS GRANTED	22072	4446	4512
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.791	.159	.162

STATION NAME	LGSM 4	LGSM 5	LGSM 6
LAN REQUESTS GRANTED	10947	11014	10737
AVERAGE WAIT TIME	5.821	5.962	5.873
MAXIMUM WAIT TIME	617.367	1284.800	1010.179
STD DEV WAIT TIME	7.516	14.889	10.859
DISK REQUESTS GRANTED	4378	4404	4294
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.157	.158	.154

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSC 2	LGSC 3	LGSC 4
LAN REQUESTS GRANTED	10920	11387	11171
AVERAGE WAIT TIME	5.760	6.270	5.838
MAXIMUM WAIT TIME	9.600	2563.200	819.104
STD DEV WAIT TIME	4.703	30.412	9.030
DISK REQUESTS GRANTED	4368	4552	4468
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.157	.163	.160

STATION NAME	LGSC 5	LGSC 6
LAN REQUESTS GRANTED	11355	11180
AVERAGE WAIT TIME	5.791	5.779
MAXIMUM WAIT TIME	156.800	156.800
STD DEV WAIT TIME	5.041	4.936
DISK REQUESTS GRANTED	4540	4470
AVERAGE BITS USED	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.
STD DEV BITS USED	0.	0.
STATION UTILIZATION	.163	.160

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW1	G2/GW1	G1/GATE TO LGSP
SERVING LAN	RING1	LGSD	RING1
LAN REQUESTS GRANTED	102031	204338	81151
AVERAGE WAIT TIME	.729	7.262	.001
MAXIMUM WAIT TIME	2576.629	412.800	18.238
STD DEV WAIT TIME	34.720	5.016	.084
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	0.	0.
STD DEV MESSAGE QUEUE	.001	0.	0.
GATEWAY UTILIZATION	.063	.102	.099

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G2/GATE TO LGSP	G1/GW3	G2/GW3
SERVING LAN	LGSP	RING1	LGSM
LAN REQUESTS GRANTED	407339	26232	52471
AVERAGE WAIT TIME	8.686	.999	7.215
MAXIMUM WAIT TIME	11472.000	2147.482	361.600
STD DEV WAIT TIME	75.373	39.078	4.571
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	.000	0.
STD DEV MESSAGE QUEUE	.002	.000	0.
GATEWAY UTILIZATION	.165	.016	.026

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW4	G2/GW4	G1/GW6
SERVING LAN	RING1	LGSC	RING1
LAN REQUESTS GRANTED	26860	53720	7180
AVERAGE WAIT TIME	1.310	7.200	1.114
MAXIMUM WAIT TIME	2617.200	9.600	2362.936
STD DEV WAIT TIME	46.776	4.157	44.385
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	0.	0.
STD DEV MESSAGE QUEUE	.000	0.	0.
GATEWAY UTILIZATION	.017	.027	.004

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME G2/GW6

SERVING LAN AFNET

LAN REQUESTS GRANTED	14360
AVERAGE WAIT TIME	7.200
MAXIMUM WAIT TIME	9.600
STD DEV WAIT TIME	4.157

MAX MESSAGE QUEUE SIZE	1
AVG MESSAGE QUEUE SIZE	0.
STD DEV MESSAGE QUEUE	0.

GATEWAY UTILIZATION	.004

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
LGSD1	8537	SEND REPLY TO NODE
BASE TRAFFIC2	388661	NOISE
FILE SERVER	147129	REQUEST FROM SERVER
	147128	UPDATE FILES
LGSP1	10976	SEND REPLY TO NODE
LGSM1	2099	SEND REPLY TO NODE
LGSC1	2231	SEND REPLY TO NODE
FMFS	2706	SEND REPLY TO NODE
DOMR	884	SEND REPLY TO NODE
LGSD 2	8447	SEND REPLY TO NODE
LGSD 3	8602	SEND REPLY TO NODE
LGSD 4	8629	SEND REPLY TO NODE
LGSD 5	8420	SEND REPLY TO NODE
LGSD 6	8380	SEND REPLY TO NODE
LGSP 2	11125	SEND REPLY TO NODE

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
LGSP 3	10943	SEND REPLY TO NODE
LGSP 4	10942	SEND REPLY TO NODE
LGSP 5	10955	SEND REPLY TO NODE
LGSP 6	11036	SEND REPLY TO NODE
LGSM 2	2223	SEND REPLY TO NODE
LGSM 3	2256	SEND REPLY TO NODE
LGSM 4	2189	SEND REPLY TO NODE
LGSM 5	2202	SEND REPLY TO NODE
LGSM 6	2147	SEND REPLY TO NODE
LGSC 2	2184	SEND REPLY TO NODE
LGSC 3	2276	SEND REPLY TO NODE
LGSC 4	2234	SEND REPLY TO NODE
LGSC 5	2270	SEND REPLY TO NODE
LGSC 6	2235	SEND REPLY TO NODE

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 6	LGSM 6	LGSM 6
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2147	2147	2147
AVG DELIVERY TIME	51.770	79.528	153.307
MAX DELIVERY TIME	1275.779	2067.664	10149.767
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	26.422	67.368	412.303

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 2	LGSD 2	LGSD 2
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8447	8447	8447
AVG DELIVERY TIME	65.457	94.700	172.125
MAX DELIVERY TIME	17320.699	17345.699	17839.748
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	362.678	407.430	635.701

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSP 4	LGSD1	LGSD1
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10942	8537	8537
AVG DELIVERY TIME	69.989	60.397	87.481
MAX DELIVERY TIME	12787.775	12715.859	12740.859
MIN DELIVERY TIME	51.200	51.200	76.200
STD DEV DELIVERY TIME	374.124	274.306	301.823

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD1	LGSD 5	LGSD 5
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	8537	8420	8420
AVG DELIVERY TIME	157.661	57.060	85.300
MAX DELIVERY TIME	17147.039	14432.281	14457.281
MIN DELIVERY TIME	127.400	51.200	76.200
STD DEV DELIVERY TIME	515.714	216.367	238.381

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 5	LGSP1	LGSC 2
DESTINATION STATION	FILE SERVER	FILE SERVER	GW4
NUMBER SENT	8420	10976	2184
AVG DELIVERY TIME	156.329	70.959	51.200
MAX DELIVERY TIME	15541.714	14489.365	51.200
MIN DELIVERY TIME	127.400	51.200	51.200
STD DEV DELIVERY TIME	463.791	400.620	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 2	LGSC 2	LGSP 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2184	2184	11125
AVG DELIVERY TIME	79.139	156.206	83.004
MAX DELIVERY TIME	1703.262	9375.084	15317.786
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	65.023	408.359	523.080

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 2	LGSM 2	LGSM 2
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2223	2223	2223
AVG DELIVERY TIME	51.371	78.471	158.220
MAX DELIVERY TIME	314.989	2223.682	10866.188
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	6.116	57.418	417.488

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 5	LGSM 5	LGSM 5
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2202	2202	2202
AVG DELIVERY TIME	52.143	79.619	152.821
MAX DELIVERY TIME	2127.907	2212.063	10031.271
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	44.245	78.651	385.519

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 3	LGSD 3	LGSD 3
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8602	8602	8602
AVG DELIVERY TIME	56.111	84.898	163.301
MAX DELIVERY TIME	9622.870	9647.870	13399.067
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	183.896	212.719	493.778

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSP 3	LGSD 6	LGSD 6
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10943	8381	8381
AVG DELIVERY TIME	67.222	63.252	90.623
MAX DELIVERY TIME	14245.258	19220.041	19245.041
MIN DELIVERY TIME	51.200	51.200	76.200
STD DEV DELIVERY TIME	355.552	364.239	378.318

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 6	LGSP 6	LGSD 4
DESTINATION STATION	FILE SERVER	FILE SERVER	GW1
NUMBER SENT	8381	11036	8629
AVG DELIVERY TIME	162.614	80.755	56.419
MAX DELIVERY TIME	19296.240	13235.849	9522.867
MIN DELIVERY TIME	127.400	51.200	51.200
STD DEV DELIVERY TIME	561.423	478.254	196.722

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 4	LGSD 4	LGSC1
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	8629	8629	2231
AVG DELIVERY TIME	84.336	159.716	52.000
MAX DELIVERY TIME	11836.917	17202.523	1300.541
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	222.020	475.091	28.759

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC1	LGSC1	LGSC 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2231	2231	2234
AVG DELIVERY TIME	83.446	156.224	51.591
MAX DELIVERY TIME	3188.229	8613.188	924.704
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	124.142	418.335	18.477

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 4	LGSC 4	LGSM 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2234	2234	2189
AVG DELIVERY TIME	78.296	148.359	51.508
MAX DELIVERY TIME	2365.030	11073.122	726.167
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	60.969	382.865	14.423

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 4	LGSM 4	LGSC 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2189	2189	2270
AVG DELIVERY TIME	79.415	148.138	51.200
MAX DELIVERY TIME	1904.054	10634.138	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	64.591	366.840	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 5	LGSC 5	LGSM 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2270	2270	2256
AVG DELIVERY TIME	79.498	165.579	51.435
MAX DELIVERY TIME	2232.095	11654.825	581.918
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	73.152	515.636	11.171

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 3	LGSM 3	LGSP 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2256	2256	10955
AVG DELIVERY TIME	78.771	173.523	72.080
MAX DELIVERY TIME	3184.368	21051.648	18870.203
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	80.201	665.781	420.747

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM1	LGSM1	LGSM1
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2099	2099	2099
AVG DELIVERY TIME	51.200	77.062	153.921
MAX DELIVERY TIME	51.200	1486.881	11907.091
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	31.983	453.742

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 6	LGSC 6	LGSC 6
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2235	2235	2235
AVG DELIVERY TIME	51.200	78.753	142.643
MAX DELIVERY TIME	51.200	1937.942	10347.041
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	0.	58.239	296.893

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 3	LGSC 3	LGSC 3
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2276	2276	2276
AVG DELIVERY TIME	53.721	80.262	145.926
MAX DELIVERY TIME	5787.980	7794.830	13081.843
MIN DELIVERY TIME	51.200	76.200	127.400
STD DEV DELIVERY TIME	120.223	163.780	408.208

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	FMFS	FMFS	FMFS
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	2706	2706	2706
AVG DELIVERY TIME	26.191	54.146	121.216
MAX DELIVERY TIME	26.191	2414.126	9208.054
MIN DELIVERY TIME	26.191	51.191	102.391
STD DEV DELIVERY TIME	.000	72.262	309.183

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	DOMR	DOMR	DOMR
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	884	884	884
AVG DELIVERY TIME	26.191	51.191	121.283
MAX DELIVERY TIME	26.191	51.191	6940.283
MIN DELIVERY TIME	26.191	51.191	102.391
STD DEV DELIVERY TIME	.000	.000	289.656

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 6	LGSM 6	LGSM 6
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2147	2147	2147
AVG DELIVERY TIME	4313.200	6951.450	11273.742
MAX DELIVERY TIME	4313.200	6951.450	16979.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	.001	0.	211.562

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 2	LGSD 2	LGSD 2
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8447	8447	8447
AVG DELIVERY TIME	4314.100	6952.350	11268.222
MAX DELIVERY TIME	11162.800	13801.050	18114.250
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	74.729	74.729	132.765

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSP 4	LGSD1	LGSD1
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10942	8537	8537
AVG DELIVERY TIME	4320.537	4316.766	6955.016
MAX DELIVERY TIME	12294.000	11210.800	13849.050
MIN DELIVERY TIME	4313.200	4313.200	6951.450
STD DEV DELIVERY TIME	192.987	127.640	127.640

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD1	LGSD 5	LGSD 5
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	8537	8420	8420
AVG DELIVERY TIME	11272.381	4317.836	6956.087
MAX DELIVERY TIME	18162.250	10846.000	13484.250
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	194.403	154.743	154.743

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 5	LGSP1	LGSC 2
DESTINATION STATION	FILE SERVER	FILE SERVER	GW4
NUMBER SENT	8420	10976	2184
AVG DELIVERY TIME	11272.414	4321.568	4313.200
MAX DELIVERY TIME	20575.051	12175.600	4313.200
MIN DELIVERY TIME	11264.650	4313.200	4313.200
STD DEV DELIVERY TIME	205.835	211.674	.001

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 2	LGSC 2	LGSP 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2184	2184	11125
AVG DELIVERY TIME	6951.453	11267.126	4318.836
MAX DELIVERY TIME	6957.551	16666.250	10948.400
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	.131	115.557	158.689

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 2	LGSM 2	LGSM 2
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2223	2223	2223
AVG DELIVERY TIME	4313.200	6951.450	11269.084
MAX DELIVERY TIME	4313.200	6951.450	16771.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	.001	0.	147.304

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 5	LGSM 5	LGSM 5
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2202	2202	2202
AVG DELIVERY TIME	4313.276	6951.526	11269.159
MAX DELIVERY TIME	4479.600	7117.850	15435.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	3.545	3.545	114.114

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 3	LGSD 3	LGSD 3
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	8602	8602	8602
AVG DELIVERY TIME	4313.264	6951.514	11267.427
MAX DELIVERY TIME	4575.600	7213.850	19239.051
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	3.371	3.371	140.480

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSP 3	LGSD 6	LGSD 6
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	10943	8380	8380
AVG DELIVERY TIME	4319.366	4316.996	6955.246
MAX DELIVERY TIME	13514.800	13726.000	16364.250
MIN DELIVERY TIME	4313.200	4313.200	6951.450
STD DEV DELIVERY TIME	169.034	149.115	149.115

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 6	LGSP 6	LGSD 4
DESTINATION STATION	FILE SERVER	FILE SERVER	GW1
NUMBER SENT	3380	11036	8629
AVG DELIVERY TIME	11270.684	4319.812	4317.260
MAX DELIVERY TIME	20677.449	12390.000	12338.800
MIN DELIVERY TIME	11264.650	4313.200	4313.200
STD DEV DELIVERY TIME	174.210	187.624	151.670

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 4	LGSD 4	LGSC1
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	8629	8629	2231
AVG DELIVERY TIME	6955.510	11273.217	4313.200
MAX DELIVERY TIME	14977.050	19290.250	4313.200
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	151.670	216.023	.001

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC1	LGSC1	LGSC 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2231	2231	2234
AVG DELIVERY TIME	6951.459	11264.659	4313.200
MAX DELIVERY TIME	6971.133	11284.333	4313.200
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	.417	.417	.001

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 4	LGSC 4	LGSM 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2234	2234	2189
AVG DELIVERY TIME	6951.450	11267.071	4313.200
MAX DELIVERY TIME	6951.450	16672.650	4313.200
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	0.	114.393	.001

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 4	LGSM 4	LGSC 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2189	2189	2270
AVG DELIVERY TIME	6951.450	11264.771	4313.907
MAX DELIVERY TIME	6951.450	11530.250	5918.000
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	0.	5.676	33.675

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 5	LGSC 5	LGSM 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	2270	2270	2256
AVG DELIVERY TIME	6952.157	11272.040	4313.200
MAX DELIVERY TIME	8556.250	16880.650	4313.200
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	33.675	185.544	.001

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 3	LGSM 3	LGSP 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	2256	2256	10955
AVG DELIVERY TIME	6951.450	11267.114	4320.847
MAX DELIVERY TIME	6951.450	16611.850	10846.000
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	0.	112.640	176.960

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM1	LGSM1	LGSM1
DESTINATION STATION	GW3	GATE TO LGSP	FILE SERVER
NUMBER SENT	2099	2099	2099
AVG DELIVERY TIME	4313.200	6951.450	11264.726
MAX DELIVERY TIME	4313.200	6951.450	11424.650
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	.001	0.	3.491

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 6	LGSC 6	LGSC 6
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2235	2235	2235
AVG DELIVERY TIME	4314.946	6953.196	11271.356
MAX DELIVERY TIME	8215.600	10853.850	18059.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	82.527	82.527	185.152

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 3	LGSC 3	LGSC 3
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	2276	2276	2276
AVG DELIVERY TIME	4313.251	6951.501	11264.701
MAX DELIVERY TIME	4428.400	7066.650	11379.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	2.414	2.414	2.414

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	FMFS	FMFS	FMFS
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	2706	2706	2706
AVG DELIVERY TIME	2586.658	5224.908	9542.204
MAX DELIVERY TIME	2586.658	5224.908	13606.908
MIN DELIVERY TIME	2586.658	5224.908	9538.108
STD DEV DELIVERY TIME	0.	.001	122.566

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	DOMR	DOMR	DOMR
DESTINATION STATION	GW6	GATE TO LGSP	FILE SERVER
NUMBER SENT	884	884	884
AVG DELIVERY TIME	2586.658	5224.908	9538.108
MAX DELIVERY TIME	2586.658	5224.908	9538.108
MIN DELIVERY TIME	2586.658	5224.908	9538.108
STD DEV DELIVERY TIME	.000	0.	.001

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	GATE TO LGSP	GW3	LGSM 6
NUMBER SENT	81151	13116	2147
AVG DELIVERY TIME	4321.766	6964.199	11273.169
MAX DELIVERY TIME	14754.800	15082.650	19392.650
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	210.876	262.116	224.230

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	GW1	LGSD 2	LGSP 4
NUMBER SENT	51015	8447	10942
AVG DELIVERY TIME	6958.763	11277.360	4323.322
MAX DELIVERY TIME	17393.051	18210.250	12342.000
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	193.630	250.457	222.950

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSD1	LGSD 5	LGSP1
NUMBER SENT	8537	8420	10976
AVG DELIVERY TIME	11272.861	11274.757	4321.465
MAX DELIVERY TIME	19699.850	21648.650	12182.000
MIN DELIVERY TIME	11264.650	11264.650	4313.200
STD DEV DELIVERY TIME	197.275	250.538	203.256

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	GW4	LGSC 2	LGSP 2
NUMBER SENT	13430	2184	11125
AVG DELIVERY TIME	6959.316	11268.650	4317.928
MAX DELIVERY TIME	13797.850	15583.050	12178.800
MIN DELIVERY TIME	6951.450	11264.650	4313.200
STD DEV DELIVERY TIME	198.592	126.406	146.723

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 2	LGSM 5	LGSD 3
NUMBER SENT	2223	2202	8602
AVG DELIVERY TIME	11272.317	11287.737	11272.695
MAX DELIVERY TIME	16621.449	19395.850	21706.250
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	175.365	360.513	211.517

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP 3	LGSD 6	LGSP 6
NUMBER SENT	10943	8380	11036
AVG DELIVERY TIME	4320.028	11275.849	4320.800
MAX DELIVERY TIME	12076.400	19338.250	12233.200
MIN DELIVERY TIME	4313.200	11264.650	4313.200
STD DEV DELIVERY TIME	179.732	225.250	199.168

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSD 4	LGSC1	LGSC 4
NUMBER SENT	8629	2231	2234
AVG DELIVERY TIME	11273.837	11275.040	11274.958
MAX DELIVERY TIME	19079.051	17797.449	17903.051
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	211.296	226.060	220.873

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 4	LGSC 5	LGSM 3
NUMBER SENT	2189	2270	2256
AVG DELIVERY TIME	11274.412	11271.862	11274.963
MAX DELIVERY TIME	16787.850	16874.250	18107.850
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	209.115	173.071	241.953

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSP 5	LGSM1	LGSC 6
NUMBER SENT	10955	2099	2235
AVG DELIVERY TIME	4321.738	11282.401	11276.650
MAX DELIVERY TIME	12438.000	17899.850	18111.051
MIN DELIVERY TIME	4313.200	11264.650	11264.650
STD DEV DELIVERY TIME	197.751	316.824	281.700

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSC 3	GW6	FMFS
NUMBER SENT	2276	3590	2706
AVG DELIVERY TIME	11267.949	6965.171	9556.311
MAX DELIVERY TIME	15384.650	14865.050	17451.709
MIN DELIVERY TIME	11264.650	6951.450	9538.108
STD DEV DELIVERY TIME	107.433	271.578	312.677

SBSS SIMULATION - DISTRIBUTED PROCESSING - TASKINGS EVENLY DISTRIBUTED

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	NOISE
SOURCE STATION	FILE SERVER	BASE TRAFFIC1
DESTINATION STATION	DOMR	BASE TRAFFIC2
NUMBER SENT	884	388661
AVG DELIVERY TIME	9538.108	27.456
MAX DELIVERY TIME	9538.108	2659.484
MIN DELIVERY TIME	9538.108	25.000
STD DEV DELIVERY TIME	.001	65.503

SBSS Simulation Distributed processing - Workload hierarchically distributed

```
1 * SBSS Simulation Distributed processing - Workload hierarchically distributed
2 ***** LANGEN RELEASE 4.01 FILE SAVED 07/20/1993 14:53:48
3
4 ***** GLOBAL VARIABLES
5 GLOBAL FLAGS =
6 TEXT SCALE FACTOR = 3 24 0111110
7 DIAGRAM BOUNDARIES = 0. 400.000 120.000 0.
8 MINIMIZE RANDOM SEED ARRAY = YES
9 ANTITHETIC VARIATE = NO
10 RANDOMIZER = 0
11 CLOCK = YES
12 CLOCK INCREMENT = 4320.000000 SEC
13 BATCH = YES
14 INPUT LISTING = YES
15 LENGTH = +2.1600E+005 SEC
16
17 ***** STATISTICAL DISTRIBUTION FUNCTIONS
18 STATISTICAL DISTRIBUTIONS =
19 NAME = DISK ACCESS
20 TYPE = NORMAL
21 MEAN = 15000.000
22 STANDARD.DEVIATION = .100
23 NAME = BASE TRAFFIC
24 TYPE = EXPONENTIAL
25 MEAN = 582726.800
26 UPPER.BOUND = +1.75E+006
27 NAME = RECLGSD1
28 TYPE = EXPONENTIAL
29 MEAN = +1.84E+007
30 UPPER.BOUND = +5.52E+007
31 NAME = RECLGSD2
32 TYPE = EXPONENTIAL
33 MEAN = +6.85E+007
34 UPPER.BOUND = +2.06E+008
35 NAME = RECLGSD3
36 TYPE = EXPONENTIAL
37 MEAN = +7.10E+007
38 UPPER.BOUND = +2.13E+008
39 NAME = RECLGSD4
40 TYPE = EXPONENTIAL
41 MEAN = +9.96E+007
42 UPPER.BOUND = +2.99E+008
43 NAME = RECLGSD5
44 TYPE = EXPONENTIAL
45 MEAN = +1.12E+008
46 UPPER.BOUND = +3.35E+008
47 NAME = RECLGSD6
48 TYPE = EXPONENTIAL
49 MEAN = +5.03E+007
50 UPPER.BOUND = +1.51E+008
```

SBSS Simulation Distributed processing - Workload hierarchically distributed

```
51 NAME = RECLGSM1
52 TYPE = EXPONENTIAL
53 MEAN = +2.43E+008
54 UPPER.BOUND = +7.30E+008
55 NAME = RECLGSM2
56 TYPE = EXPONENTIAL
57 MEAN = +2.32E+008
58 UPPER.BOUND = +6.95E+008
```

```

59  NAME = RECLGSC
60  TYPE = EXPONENTIAL
61  MEAN = +3.66E+008
62  UPPER.BOUND = +1.10E+009
63  NAME = RECLGSP
64  TYPE = EXPONENTIAL
65  MEAN = +3.02E+008
66  UPPER.BOUND = +9.07E+008
67  NAME = RECDOMR
68  TYPE = EXPONENTIAL
69  MEAN = +5.75E+008
70  UPPER.BOUND = +1.72E+009
71  NAME = ISULGSM1
72  TYPE = EXPONENTIAL
73  MEAN = +7.47E+007
74  UPPER.BOUND = +2.24E+008
75  NAME = ISULGSM2
76  TYPE = EXPONENTIAL
77  MEAN = +1.78E+008
78  UPPER.BOUND = +5.33E+008
79  NAME = ISULGSM3
80  TYPE = EXPONENTIAL
81  MEAN = +3.67E+008
82  UPPER.BOUND = +1.10E+009
83  NAME = ISULGSM4
84  TYPE = EXPONENTIAL
85  MEAN = +5.31E+008
86  UPPER.BOUND = +1.59E+009
87  NAME = ISULGSM5
88  TYPE = EXPONENTIAL
89  MEAN = +1.36E+009
90  UPPER.BOUND = +4.08E+009
91  NAME = ISULGSP1
92  TYPE = EXPONENTIAL
93  MEAN = +1.66E+007
94  UPPER.BOUND = +4.99E+007
95  NAME = ISULGSP2
96  TYPE = EXPONENTIAL
97  MEAN = +3.54E+008
98  UPPER.BOUND = +1.06E+009
99  NAME = ISULGSC1
100 TYPE = EXPONENTIAL

```

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SBSS Simulation Distributed processing - Workload hierarchically distributed

```

101 MEAN = +9.60E+007
102 UPPER.BOUND = +2.88E+008
103 NAME = ISULGSC2
104 TYPE = EXPONENTIAL
105 MEAN = +5.71E+008
106 UPPER.BOUND = +1.71E+009
107 NAME = ISULGSC3
108 TYPE = EXPONENTIAL
109 MEAN = +6.17E+008
110 UPPER.BOUND = +1.85E+009
111 NAME = ISULGSC4
112 TYPE = EXPONENTIAL
113 MEAN = +7.97E+008
114 UPPER.BOUND = +2.39E+009
115 NAME = ISULGSC5
116 TYPE = EXPONENTIAL
117 MEAN = +9.58E+008
118 UPPER.BOUND = +2.87E+009
119 NAME = ISULGSC6
120 TYPE = EXPONENTIAL
121 MEAN = +7.86E+008

```

```

122     UPPER.BOUND = +2.36E+009
123     NAME = ISULGSD1
124     TYPE = EXPONENTIAL
125     MEAN = +5.60E+008
126     UPPER.BOUND = +1.68E+009
127     NAME = ISULGSD2
128     TYPE = EXPONENTIAL
129     MEAN = +8.41E+008
130     UPPER.BOUND = +2.52E+009
131     NAME = ISULGSD3
132     TYPE = EXPONENTIAL
133     MEAN = +1.17E+009
134     UPPER.BOUND = +3.51E+009
135     NAME = ISULGSD4
136     TYPE = EXPONENTIAL
137     MEAN = +1.42E+009
138     UPPER.BOUND = +4.27E+009
139     NAME = ISULGSD5
140     TYPE = EXPONENTIAL
141     MEAN = +1.46E+009
142     UPPER.BOUND = +4.39E+009
143     NAME = ISULGSD6
144     TYPE = EXPONENTIAL
145     MEAN = +2.24E+009
146     UPPER.BOUND = +6.72E+009
147     NAME = ISULGSF
148     TYPE = EXPONENTIAL
149     MEAN = +1.23E+009
150     UPPER.BOUND = +3.68E+009
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SBSS Simulation Distributed processing - Workload hierarchically distributed

```

151     NAME = ISURMSS
152     TYPE = EXPONENTIAL
153     MEAN = +1.75E+009
154     UPPER.BOUND = +5.25E+009
155     NAME = DORLGSD1
156     TYPE = EXPONENTIAL
157     MEAN = +3.03E+007
158     UPPER.BOUND = +9.09E+007
159     NAME = DORLGSD2
160     TYPE = EXPONENTIAL
161     MEAN = +1.33E+008
162     UPPER.BOUND = +3.98E+008
163     NAME = DORLGSD3
164     TYPE = EXPONENTIAL
165     MEAN = +1.44E+008
166     UPPER.BOUND = +4.31E+008
167     NAME = DORLGSD4
168     TYPE = EXPONENTIAL
169     MEAN = +1.68E+008
170     UPPER.BOUND = +5.05E+008
171     NAME = DORLGSD5
172     TYPE = EXPONENTIAL
173     MEAN = +1.86E+008
174     UPPER.BOUND = +5.57E+008
175     NAME = DORLGSD6
176     TYPE = EXPONENTIAL
177     MEAN = +3.75E+007
178     UPPER.BOUND = +1.13E+008
179     NAME = DORLGSM1
180     TYPE = EXPONENTIAL
181     MEAN = +6.12E+008
182     UPPER.BOUND = +1.83E+009
183     NAME = DORLGSM2
184     TYPE = EXPONENTIAL

```

```

185      MEAN = +4.01E+009
186      UPPER.BOUND = +1.20E+010
187      NAME = DORLGSM3
188      TYPE = EXPONENTIAL
189      MEAN = +4.01E+009
190      UPPER.BOUND = +1.20E+010
191      NAME = DORLGSC1
192      TYPE = EXPONENTIAL
193      MEAN = +7.12E+008
194      UPPER.BOUND = +2.14E+009
195      NAME = DORLGSC2
196      TYPE = EXPONENTIAL
197      MEAN = +1.62E+009
198      UPPER.BOUND = +4.86E+009
199      NAME = DORLGSC3
200      TYPE = EXPONENTIAL
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```

SBSS Simulation Distributed processing - Workload hierarchically distributed

```

201      MEAN = +1.81E+009
202      UPPER.BOUND = +5.44E+009
203      NAME = DORLGSC4
204      TYPE = EXPONENTIAL
205      MEAN = +3.31E+009
206      UPPER.BOUND = +9.93E+009
207      NAME = DORLGSP
208      TYPE = EXPONENTIAL
209      MEAN = +8.28E+008
210      UPPER.BOUND = +2.48E+009
211      NAME = DORDOMR
212      TYPE = EXPONENTIAL
213      MEAN = +3.99E+008
214      UPPER.BOUND = +1.20E+009
215      NAME = LPSLGSP
216      TYPE = EXPONENTIAL
217      MEAN = +1.74E+007
218      UPPER.BOUND = +5.20E+007
219      NAME = LPSLGSM1
220      TYPE = EXPONENTIAL
221      MEAN = +4.96E+008
222      UPPER.BOUND = +1.49E+009
223      NAME = LPSLGSM2
224      TYPE = EXPONENTIAL
225      MEAN = +7.29E+008
226      UPPER.BOUND = +2.19E+009
227      NAME = LPSLGSM3
228      TYPE = EXPONENTIAL
229      MEAN = +7.73E+008
230      UPPER.BOUND = +2.32E+009
231      NAME = FK1LGSP
232      TYPE = EXPONENTIAL
233      MEAN = +2.83E+007
234      UPPER.BOUND = +8.50E+007
235      NAME = FK1FMFS
236      TYPE = EXPONENTIAL
237      MEAN = +3.54E+008
238      UPPER.BOUND = +1.06E+009
239      NAME = BKALGSP
240      TYPE = EXPONENTIAL
241      MEAN = +3.64E+007
242      UPPER.BOUND = +1.09E+008
243      NAME = BKAFMFS
244      TYPE = EXPONENTIAL
245      MEAN = +2.99E+008
246      UPPER.BOUND = +8.97E+008
247      NAME = DUOLGSC1

```

248 TYPE = EXPONENTIAL
249 MEAN = +2.36E+008
250 UPPER.BOUND = +7.08E+008
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SBSS Simulation Distributed processing - Workload hierarchically distributed

251 NAME = DUOLGSC2
252 TYPE = EXPONENTIAL
253 MEAN = +5.71E+008
254 UPPER.BOUND = +1.71E+009
255 NAME = DUOLGSC3
256 TYPE = EXPONENTIAL
257 MEAN = +6.07E+008
258 UPPER.BOUND = +1.82E+009
259 NAME = DUOLGSC4
260 TYPE = EXPONENTIAL
261 MEAN = +8.10E+008
262 UPPER.BOUND = +2.43E+009
263 NAME = DOULGSC5
264 TYPE = EXPONENTIAL
265 MEAN = +1.04E+009
266 UPPER.BOUND = +3.13E+009
267 NAME = DUOLGSC6
268 TYPE = EXPONENTIAL
269 MEAN = +3.33E+008
270 UPPER.BOUND = +9.98E+008
271 NAME = DUOLGSP
272 TYPE = EXPONENTIAL
273 MEAN = +2.03E+008
274 UPPER.BOUND = +6.08E+008
275 NAME = DUOLGSD1
276 TYPE = EXPONENTIAL
277 MEAN = +4.90E+008
278 UPPER.BOUND = +1.47E+009
279 NAME = DUOLGSD2
280 TYPE = EXPONENTIAL
281 MEAN = +2.14E+009
282 UPPER.BOUND = +6.43E+009
283 NAME = DUOLGSD3
284 TYPE = EXPONENTIAL
285 MEAN = +3.18E+009
286 UPPER.BOUND = +9.53E+009
287 NAME = DUOLGSD4
288 TYPE = EXPONENTIAL
289 MEAN = +3.46E+009
290 UPPER.BOUND = +1.04E+010
291 NAME = DUOLGSD5
292 TYPE = EXPONENTIAL
293 MEAN = +6.92E+009
294 UPPER.BOUND = +2.08E+010
295 NAME = DUOLGSD6
296 TYPE = EXPONENTIAL
297 MEAN = +3.31E+009
298 UPPER.BOUND = +9.93E+009
299 NAME = DUOLGSM1
300 TYPE = EXPONENTIAL

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SBSS Simulation Distributed processing - Workload hierarchically distributed

301 MEAN = +8.96E+008
302 UPPER.BOUND = +2.69E+009
303 NAME = DUOLGSM2
304 TYPE = EXPONENTIAL
305 MEAN = +1.54E+009


```

306     UPPER.BOUND = +4.61E+009
307     NAME = DUOLGSM3
308     TYPE = EXPONENTIAL
309     MEAN = +2.62E+009
310     UPPER.BOUND = +7.87E+009
311     NAME = DUOLGSM4
312     TYPE = EXPONENTIAL
313     MEAN = +2.62E+009
314     UPPER.BOUND = +7.87E+009
315     NAME = DUOLGSM5
316     TYPE = EXPONENTIAL
317     MEAN = +2.99E+009
318     UPPER.BOUND = +8.97E+009
319     NAME = DUOLGSM6
320     TYPE = EXPONENTIAL
321     MEAN = +4.33E+008
322     UPPER.BOUND = +1.30E+009
323     NAME = DUODOMR
324     TYPE = EXPONENTIAL
325     MEAN = +9.41E+008
326     UPPER.BOUND = +2.82E+009
327     NAME = DUOMISC
328     TYPE = EXPONENTIAL
329     MEAN = +9.40E+008
330     UPPER.BOUND = +2.82E+009
331     NAME = AOALGSC1
332     TYPE = EXPONENTIAL
333     MEAN = +7.73E+008
334     UPPER.BOUND = +2.32E+009
335     NAME = AOALGSC2
336     TYPE = EXPONENTIAL
337     MEAN = +1.18E+009
338     UPPER.BOUND = +3.54E+009
339     NAME = AOALGSC3
340     TYPE = EXPONENTIAL
341     MEAN = +1.30E+009
342     UPPER.BOUND = +3.91E+009
343     NAME = AOALGSC4
344     TYPE = EXPONENTIAL
345     MEAN = +1.64E+009
346     UPPER.BOUND = +4.91E+009
347     NAME = AOALGSC5
348     TYPE = EXPONENTIAL
349     MEAN = +2.82E+009
350     UPPER.BOUND = +8.47E+009

```

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SBSS Simulation Distributed processing - Workload hierarchically distributed

```

351     NAME = AOALGSC6
352     TYPE = EXPONENTIAL
353     MEAN = +1.04E+009
354     UPPER.BOUND = +3.13E+009
355     NAME = AOALGSM1
356     TYPE = EXPONENTIAL
357     MEAN = +4.48E+009
358     UPPER.BOUND = +1.34E+010
359     NAME = AOALGSM2
360     TYPE = EXPONENTIAL
361     MEAN = +5.07E+009
362     UPPER.BOUND = +1.52E+010
363     NAME = AOALGSM3
364     TYPE = EXPONENTIAL
365     MEAN = +6.09E+009
366     UPPER.BOUND = +1.83E+010
367     NAME = AOALGSM4
368     TYPE = EXPONENTIAL

```

```

369      MEAN = +6.63E+009
370      UPPER.BOUND = +1.99E+010
371      NAME = AOALGSM5
372      TYPE = EXPONENTIAL
373      MEAN = +6.63E+009
374      UPPER.BOUND = +1.99E+010
375      NAME = AOALGSD
376      TYPE = EXPONENTIAL
377      MEAN = +7.63E+009
378      UPPER.BOUND = +2.29E+010
379      NAME = AOALGSP
380      TYPE = EXPONENTIAL
381      MEAN = +5.75E+007
382      UPPER.BOUND = +1.72E+008
383      NAME = AOADOMR
384      TYPE = EXPONENTIAL
385      MEAN = +8.02E+009
386      UPPER.BOUND = +2.41E+010
387      NAME = AOAMISC
388      TYPE = EXPONENTIAL
389      MEAN = +2.06E+009
390      UPPER.BOUND = +6.17E+009
391      NAME = 1RFLGSF
392      TYPE = EXPONENTIAL
393      MEAN = +3.99E+007
394      UPPER.BOUND = +1.20E+008
395      NAME = FCSLGSD1
396      TYPE = EXPONENTIAL
397      MEAN = +1.88E+008
398      UPPER.BOUND = +5.64E+008
399      NAME = FCSLGSD2
400      TYPE = EXPONENTIAL

```

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SBSS Simulation Distributed processing - Workload hierarchically distributed

```

401      MEAN = +1.90E+008
402      UPPER.BOUND = +5.71E+008
403      NAME = FCSLGSD3
404      TYPE = EXPONENTIAL
405      MEAN = +9.29E+008
406      UPPER.BOUND = +2.79E+009
407      NAME = FCSLGSD4
408      TYPE = EXPONENTIAL
409      MEAN = +1.57E+009
410      UPPER.BOUND = +4.71E+009
411      NAME = FCSLGSD5
412      TYPE = EXPONENTIAL
413      MEAN = +1.62E+009
414      UPPER.BOUND = +4.86E+009
415      NAME = FCSLGSD6
416      TYPE = EXPONENTIAL
417      MEAN = +2.01E+009
418      UPPER.BOUND = +6.02E+009
419      NAME = FCSLGSM1
420      TYPE = EXPONENTIAL
421      MEAN = +6.57E+008
422      UPPER.BOUND = +1.97E+009
423      NAME = FCSLGSM2
424      TYPE = EXPONENTIAL
425      MEAN = +1.38E+009
426      UPPER.BOUND = +4.15E+009
427      NAME = FCSLGSM3
428      TYPE = EXPONENTIAL
429      MEAN = +2.87E+009
430      UPPER.BOUND = +8.62E+009
431      NAME = FCSLGSM4

```

```

432     TYPE = EXPONENTIAL
433     MEAN = +3.24E+009
434     UPPER.BOUND = +9.72E+009
435     NAME = FCSLGSM5
436     TYPE = EXPONENTIAL
437     MEAN = +5.07E+009
438     UPPER.BOUND = +1.52E+010
439     NAME = FCSLGSC1
440     TYPE = EXPONENTIAL
441     MEAN = +7.29E+008
442     UPPER.BOUND = +2.19E+009
443     NAME = FCSLGSC2
444     TYPE = EXPONENTIAL
445     MEAN = +7.32E+008
446     UPPER.BOUND = +2.20E+009
447     NAME = FCSLGSP
448     TYPE = EXPONENTIAL
449     MEAN = +4.77E+008
450     UPPER.BOUND = +1.43E+009
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```

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```

451     NAME = FICLGSP
452     TYPE = EXPONENTIAL
453     MEAN = +6.51E+007
454     UPPER.BOUND = +1.95E+008
455     NAME = FICLGSD1
456     TYPE = EXPONENTIAL
457     MEAN = +2.85E+008
458     UPPER.BOUND = +8.56E+008
459     NAME = FICLGSD2
460     TYPE = EXPONENTIAL
461     MEAN = +1.90E+009
462     UPPER.BOUND = +5.71E+009
463     NAME = TINLGSC1
464     TYPE = EXPONENTIAL
465     MEAN = +3.03E+008
466     UPPER.BOUND = +9.10E+008
467     NAME = TINLGSC2
468     TYPE = EXPONENTIAL
469     MEAN = +6.48E+008
470     UPPER.BOUND = +1.94E+009
471     NAME = TINLGSC3
472     TYPE = EXPONENTIAL
473     MEAN = +8.06E+008
474     UPPER.BOUND = +2.42E+009
475     NAME = TINLGSC4
476     TYPE = EXPONENTIAL
477     MEAN = +1.18E+009
478     UPPER.BOUND = +3.54E+009
479     NAME = TINLGSC5
480     TYPE = EXPONENTIAL
481     MEAN = +1.81E+009
482     UPPER.BOUND = +5.44E+009
483     NAME = TINLGSC6
484     TYPE = EXPONENTIAL
485     MEAN = +6.86E+008
486     UPPER.BOUND = +2.06E+009
487     NAME = TINLGSD1
488     TYPE = EXPONENTIAL
489     MEAN = +3.87E+008
490     UPPER.BOUND = +1.16E+009
491     NAME = TINLGSD2
492     TYPE = EXPONENTIAL
493     MEAN = +6.22E+008
494     UPPER.BOUND = +1.87E+009

```

495 NAME = TINLGSD3
496 TYPE = EXPONENTIAL
497 MEAN = +9.18E+008
498 UPPER.BOUND = +2.75E+009
499 NAME = TINLGSD4
500 TYPE = EXPONENTIAL
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501 MEAN = +1.90E+009
502 UPPER.BOUND = +5.71E+009
503 NAME = TINLGSD5
504 TYPE = EXPONENTIAL
505 MEAN = +2.03E+009
506 UPPER.BOUND = +6.09E+009
507 NAME = TINLGSD6
508 TYPE = EXPONENTIAL
509 MEAN = +2.67E+009
510 UPPER.BOUND = +8.02E+009
511 NAME = TINLGSM1
512 TYPE = EXPONENTIAL
513 MEAN = +1.48E+009
514 UPPER.BOUND = +4.44E+009
515 NAME = TINLGSM2
516 TYPE = EXPONENTIAL
517 MEAN = +1.98E+009
518 UPPER.BOUND = +5.93E+009
519 NAME = TINLGSM3
520 TYPE = EXPONENTIAL
521 MEAN = +5.07E+009
522 UPPER.BOUND = +1.52E+010
523 NAME = TIMLGSM4
524 TYPE = EXPONENTIAL
525 MEAN = +6.63E+009
526 UPPER.BOUND = +1.99E+010
527 NAME = TINLGSM5
528 TYPE = EXPONENTIAL
529 MEAN = +9.53E+009
530 UPPER.BOUND = +2.86E+010
531 NAME = TINLGSM6
532 TYPE = EXPONENTIAL
533 MEAN = +1.17E+010
534 UPPER.BOUND = +3.52E+010
535 NAME = TINLGSP
536 TYPE = EXPONENTIAL
537 MEAN = +2.24E+009
538 UPPER.BOUND = +6.72E+009
539 NAME = TINDOMR
540 TYPE = EXPONENTIAL
541 MEAN = +2.67E+009
542 UPPER.BOUND = +8.02E+009
543 NAME = TINCEOLW
544 TYPE = EXPONENTIAL
545 MEAN = +8.02E+009
546 UPPER.BOUND = +2.41E+010
547 NAME = FIDLGSC1
548 TYPE = EXPONENTIAL
549 MEAN = +4.63E+008
550 UPPER.BOUND = +1.39E+009
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551 NAME = FIDLGSC2
552 TYPE = EXPONENTIAL

```

553      MEAN = +1.71E+009
554      UPPER.BOUND = +5.14E+009
555      NAME = FIDLGSP
556      TYPE = EXPONENTIAL
557      MEAN = +9.68E+007
558      UPPER.BOUND = +2.90E+008
559      NAME = FILLGSC1
560      TYPE = EXPONENTIAL
561      MEAN = +4.63E+008
562      UPPER.BOUND = +1.39E+009
563      NAME = FILLGSC2
564      TYPE = EXPONENTIAL
565      MEAN = +8.19E+008
566      UPPER.BOUND = +2.46E+009
567      NAME = FILLGSC3
568      TYPE = EXPONENTIAL
569      MEAN = +1.06E+009
570      UPPER.BOUND = +3.17E+009
571      NAME = FILLGSC4
572      TYPE = EXPONENTIAL
573      MEAN = +1.09E+009
574      UPPER.BOUND = +3.26E+009
575      NAME = FILLGSC5
576      TYPE = EXPONENTIAL
577      MEAN = +1.09E+009
578      UPPER.BOUND = +3.26E+009
579      NAME = FILLGSC6
580      TYPE = EXPONENTIAL
581      MEAN = +3.50E+008
582      UPPER.BOUND = +1.05E+009
583      NAME = FILLGSM
584      TYPE = EXPONENTIAL
585      MEAN = +4.91E+009
586      UPPER.BOUND = +1.47E+010
587      NAME = FILLGSP
588      TYPE = EXPONENTIAL
589      MEAN = +2.18E+009
590      UPPER.BOUND = +6.53E+009
591      NAME = FILCEOLM
592      TYPE = EXPONENTIAL
593      MEAN = +6.99E+008
594      UPPER.BOUND = +2.10E+009
595      NAME = SPRLGSM1
596      TYPE = EXPONENTIAL
597      MEAN = +4.91E+008
598      UPPER.BOUND = +1.47E+009
599      NAME = SPRLGSM2
600      TYPE = EXPONENTIAL

```

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```

601      MEAN = +9.06E+008
602      UPPER.BOUND = +2.72E+009
603      NAME = SPRLGSM3
604      TYPE = EXPONENTIAL
605      MEAN = +1.24E+009
606      UPPER.BOUND = +3.72E+009
607      NAME = SPRLGSM4
608      TYPE = EXPONENTIAL
609      MEAN = +1.31E+009
610      UPPER.BOUND = +3.94E+009
611      NAME = SPRLGSM5
612      TYPE = EXPONENTIAL
613      MEAN = +1.67E+009
614      UPPER.BOUND = +5.02E+009
615      NAME = SPRLGSM6

```

```

616     TYPE = EXPONENTIAL
617     MEAN = +2.34E+008
618     UPPER.BOUND = +7.01E+008
619     NAME = SPRLGSC1
620     TYPE = EXPONENTIAL
621     MEAN = +6.09E+009
622     UPPER.BOUND = +1.83E+010
623     NAME = SPRLGSC2
624     TYPE = EXPONENTIAL
625     MEAN = +6.92E+009
626     UPPER.BOUND = +2.08E+010
627     NAME = SPRLGSC3
628     TYPE = EXPONENTIAL
629     MEAN = +8.45E+009
630     UPPER.BOUND = +2.53E+010
631     NAME = SPRLGSC4
632     TYPE = EXPONENTIAL
633     MEAN = +8.99E+009
634     UPPER.BOUND = +2.70E+010
635     NAME = SPRLGSC5
636     TYPE = EXPONENTIAL
637     MEAN = +1.01E+010
638     UPPER.BOUND = +3.04E+010
639     NAME = SPRLGSD
640     TYPE = EXPONENTIAL
641     MEAN = +2.72E+009
642     UPPER.BOUND = +8.16E+009
643     NAME = SPRLGSP
644     TYPE = EXPONENTIAL
645     MEAN = +1.30E+009
646     UPPER.BOUND = +3.91E+009
647     NAME = SPRDMSMS
648     TYPE = EXPONENTIAL
649     MEAN = +8.45E+009
650     UPPER.BOUND = +2.43E+010

```

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```

651     NAME = AE1LGSM1
652     TYPE = EXPONENTIAL
653     MEAN = +1.73E+009
654     UPPER.BOUND = +5.19E+009
655     NAME = AE1LGSM2
656     TYPE = EXPONENTIAL
657     MEAN = +2.54E+009
658     UPPER.BOUND = +7.62E+009
659     NAME = AE1LGSM3
660     TYPE = EXPONENTIAL
661     MEAN = +2.77E+009
662     UPPER.BOUND = +8.30E+009
663     NAME = AE1LGSM4
664     TYPE = EXPONENTIAL
665     MEAN = +4.91E+009
666     UPPER.BOUND = +1.47E+010
667     NAME = AE1LGSM5
668     TYPE = EXPONENTIAL
669     MEAN = +6.09E+009
670     UPPER.BOUND = +1.83E+010
671     NAME = AE1LGSM6
672     TYPE = EXPONENTIAL
673     MEAN = +1.31E+009
674     UPPER.BOUND = +3.94E+009
675     NAME = AE1LGSD
676     TYPE = EXPONENTIAL
677     MEAN = +1.17E+010
678     UPPER.BOUND = +3.52E+010

```

```

679 NAME = AE1LGSP
680 TYPE = EXPONENTIAL
681 MEAN = +1.33E+008
682 UPPER.BOUND = +3.98E+008
683 NAME = FCULGSC1
684 TYPE = EXPONENTIAL
685 MEAN = +1.25E+009
686 UPPER.BOUND = +3.75E+009
687 NAME = FCULGSC2
688 TYPE = EXPONENTIAL
689 MEAN = +5.87E+009
690 UPPER.BOUND = +1.76E+010
691 NAME = FCULGSC3
692 TYPE = EXPONENTIAL
693 MEAN = +8.99E+009
694 UPPER.BOUND = +2.70E+010
695 NAME = FCULGSP
696 TYPE = EXPONENTIAL
697 MEAN = +1.24E+008
698 UPPER.BOUND = +3.72E+008
699 NAME = SHPLGSC1
700 TYPE = EXPONENTIAL
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```

701 MEAN = +1.32E+009
702 UPPER.BOUND = +3.97E+009
703 NAME = SHPLGSC2
704 TYPE = EXPONENTIAL
705 MEAN = +2.42E+009
706 UPPER.BOUND = +7.25E+009
707 NAME = SHPLGSC3
708 TYPE = EXPONENTIAL
709 MEAN = +2.99E+009
710 UPPER.BOUND = +8.97E+009
711 NAME = SHPLGSC4
712 TYPE = EXPONENTIAL
713 MEAN = +3.31E+009
714 UPPER.BOUND = +9.93E+009
715 NAME = SHPLGSC5
716 TYPE = EXPONENTIAL
717 MEAN = +3.46E+009
718 UPPER.BOUND = +1.04E+010
719 NAME = SHPLGSC6
720 TYPE = EXPONENTIAL
721 MEAN = +8.19E+008
722 UPPER.BOUND = +2.46E+009
723 NAME = SHPLGSM1
724 TYPE = EXPONENTIAL
725 MEAN = +5.87E+009
726 UPPER.BOUND = +1.76E+010
727 NAME = SHPLGSM2
728 TYPE = EXPONENTIAL
729 MEAN = +7.63E+009
730 UPPER.BOUND = +2.29E+010
731 NAME = SHPLGSM3
732 TYPE = EXPONENTIAL
733 MEAN = +2.53E+010
734 UPPER.BOUND = +7.60E+010
735 NAME = SHPLGSD
736 TYPE = EXPONENTIAL
737 MEAN = +1.27E+010
738 UPPER.BOUND = +3.80E+010
739 NAME = SHPLGSP
740 TYPE = EXPONENTIAL
741 MEAN = +3.24E+008

```

```

742     UPPER.BOUND = +9.72E+008
743     NAME = SHPDMSM
744     TYPE = EXPONENTIAL
745     MEAN = +1.38E+010
746     UPPER.BOUND = +4.13E+010
747     NAME = FTRLGSM1
748     TYPE = EXPONENTIAL
749     MEAN = +6.63E+009
750     UPPER.BOUND = +1.99E+010
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```

751     NAME = FTRLGSM2
752     TYPE = EXPONENTIAL
753     MEAN = +7.45E+010
754     UPPER.BOUND = +2.24E+011
755     NAME = FTRLGSP
756     TYPE = EXPONENTIAL
757     MEAN = +1.47E+008
758     UPPER.BOUND = +4.41E+008
759     NAME = FETLGSM1
760     TYPE = EXPONENTIAL
761     MEAN = +7.32E+008
762     UPPER.BOUND = +2.20E+009
763     NAME = FETLGSM2
764     TYPE = EXPONENTIAL
765     MEAN = +9.23E+008
766     UPPER.BOUND = +2.77E+009
767     NAME = FETLGSM3
768     TYPE = EXPONENTIAL
769     MEAN = +1.06E+009
770     UPPER.BOUND = +3.17E+009
771     NAME = FETLGSM4
772     TYPE = EXPONENTIAL
773     MEAN = +1.52E+009
774     UPPER.BOUND = +4.57E+009
775     NAME = FETLGSM5
776     TYPE = EXPONENTIAL
777     MEAN = +1.86E+009
778     UPPER.BOUND = +5.57E+009
779     NAME = FETLGSM6
780     TYPE = EXPONENTIAL
781     MEAN = +5.36E+008
782     UPPER.BOUND = +1.61E+009
783     NAME = FETLGSD
784     TYPE = EXPONENTIAL
785     MEAN = +8.45E+009
786     UPPER.BOUND = +2.53E+010
787     NAME = BPALGSC
788     TYPE = EXPONENTIAL
789     MEAN = +7.45E+010
790     UPPER.BOUND = +2.24E+011
791     NAME = BPALGSP
792     TYPE = EXPONENTIAL
793     MEAN = +1.50E+008
794     UPPER.BOUND = +4.50E+008
795     NAME = TRMLGSD1
796     TYPE = EXPONENTIAL
797     MEAN = +9.52E+008
798     UPPER.BOUND = +2.86E+009
799     NAME = TRMLGSD2
800     TYPE = EXPONENTIAL
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```

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```

801      MEAN = +2.28E+009
802      UPPER.BOUND = +6.83E+009
803      NAME = TRMLGSD3
804      TYPE = EXPONENTIAL
805      MEAN = +2.54E+009
806      UPPER.BOUND = +7.62E+009
807      NAME = TRMLGSD4
808      TYPE = EXPONENTIAL
809      MEAN = +4.11E+009
810      UPPER.BOUND = +1.23E+010
811      NAME = TRMLGSD5
812      TYPE = EXPONENTIAL
813      MEAN = +7.63E+009
814      UPPER.BOUND = +2.29E+010
815      NAME = TRMLGSD6
816      TYPE = EXPONENTIAL
817      MEAN = +5.84E+009
818      UPPER.BOUND = +1.75E+010
819      NAME = TRMLGSM1
820      TYPE = EXPONENTIAL
821      MEAN = +2.14E+009
822      UPPER.BOUND = +6.43E+009
823      NAME = TRMLGSM2
824      TYPE = EXPONENTIAL
825      MEAN = +1.38E+010
826      UPPER.BOUND = +4.13E+010
827      NAME = TRMLGSM3
828      TYPE = EXPONENTIAL
829      MEAN = +2.53E+010
830      UPPER.BOUND = +7.60E+010
831      NAME = TRMLGSM4
832      TYPE = EXPONENTIAL
833      MEAN = +3.02E+008
834      UPPER.BOUND = +9.05E+010
835      NAME = TRMLGSC1
836      TYPE = EXPONENTIAL
837      MEAN = +4.11E+009
838      UPPER.BOUND = +1.23E+010
839      NAME = TRMLGSC2
840      TYPE = EXPONENTIAL
841      MEAN = +1.09E+010
842      UPPER.BOUND = +3.28E+010
843      NAME = TRMLGSC3
844      TYPE = EXPONENTIAL
845      MEAN = +1.89E+010
846      UPPER.BOUND = +5.67E+010
847      NAME = TRMLGSC4
848      TYPE = EXPONENTIAL
849      MEAN = +3.02E+010
850      UPPER.BOUND = +9.05E+010

```

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```

851      NAME = TRMLGSP1
852      TYPE = EXPONENTIAL
853      MEAN = +4.98E+008
854      UPPER.BOUND = +1.49E+009
855      NAME = TRMLGSP2
856      TYPE = EXPONENTIAL
857      MEAN = +1.69E+010
858      UPPER.BOUND = +5.07E+010
859      NAME = TRMDMSMR
860      TYPE = EXPONENTIAL
861      MEAN = +8.45E+009
862      UPPER.BOUND = +2.53E+010
863      NAME = AOALGSM6

```

```

864     TYPE = EXPONENTIAL
865     MEAN = +8.99E+009
866     UPPER.BOUND = +2.70E+010
867     NAME = SDF2/LGSP 1
868     TYPE = MESSAGE.LINEAR
869     A = 1.000
870     NAME = SDF1/FILE SERVER
871     TYPE = MESSAGE.LINEAR
872     A = 1.000
873     B = 41812.000
874     NAME = SDF2/LGSP2
875     TYPE = MESSAGE.LINEAR
876     A = 1.000
877     NAME = SDF2/LGSD1
878     TYPE = MESSAGE.LINEAR
879     A = 1.000
880     NAME = SDF2/LGSM 1
881     TYPE = MESSAGE.LINEAR
882     A = 1.000
883     NAME = SDF2/LGSC 1
884     TYPE = MESSAGE.LINEAR
885     A = 1.000
886     NAME = SDF2/FMFS
887     TYPE = MESSAGE.LINEAR
888     A = 1.000
889     NAME = SDF2/DOMR
890     TYPE = MESSAGE.LINEAR
891     A = 1.000
892     NAME = SDF2/LGSD 2
893     TYPE = MESSAGE.LINEAR
894     A = 1.000
895     NAME = SDF2/LGSD 3
896     TYPE = MESSAGE.LINEAR
897     A = 1.000
898     NAME = SDF2/LGSD 4
899     TYPE = MESSAGE.LINEAR
900     A = 1.000

```

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```

901     NAME = SDF2/LGSD 5
902     TYPE = MESSAGE.LINEAR
903     A = 1.000
904     NAME = SDF2/LGSD 6
905     TYPE = MESSAGE.LINEAR
906     A = 1.000
907     NAME = SDF2/LGSM 2
908     TYPE = MESSAGE.LINEAR
909     A = 1.000
910     NAME = SDF2/LGSM 3
911     TYPE = MESSAGE.LINEAR
912     A = 1.000
913     NAME = SDF2/LGSM 4
914     TYPE = MESSAGE.LINEAR
915     A = 1.000
916     NAME = SDF2/LGSM 5
917     TYPE = MESSAGE.LINEAR
918     A = 1.000
919     NAME = SDF2/LGSM 6
920     TYPE = MESSAGE.LINEAR
921     A = 1.000
922     NAME = SDF2/LGSC 2
923     TYPE = MESSAGE.LINEAR
924     A = 1.000
925     NAME = SDF2/LGSC 3
926     TYPE = MESSAGE.LINEAR

```

```

927      A =      1.000
928      NAME = SDF2/LGSC 4
929      TYPE = MESSAGE.LINEAR
930      A =      1.000
931      NAME = SDF2/LGSC 5
932      TYPE = MESSAGE.LINEAR
933      A =      1.000
934      NAME = SDF2/LGSC 6
935      TYPE = MESSAGE.LINEAR
936      A =      1.000
937      NAME = I/LGSM RETRY SDF
938      TYPE = IEEE.BACKOFF
939      SLOT.TIME =      51.200
940      RETRY.LIMIT =      16.000
941      LIMIT.DELAY =      51.200
942      NAME = I/LGSD RETRY SDF
943      TYPE = IEEE.BACKOFF
944      SLOT.TIME =      51.200
945      RETRY.LIMIT =      16.000
946      LIMIT.DELAY =      51.200
947      NAME = I/LGSC RETRY SDF
948      TYPE = IEEE.BACKOFF
949      SLOT.TIME =      51.200
950      RETRY.LIMIT =      16.000
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```

951      LIMIT.DELAY =      51.200
952      NAME = I/LGSP RETRY SDF
953      TYPE = IEEE.BACKOFF
954      SLOT.TIME =      51.200
955      RETRY.LIMIT =      16.000
956      LIMIT.DELAY =      51.200
957      NAME = I/AFNET RETRY SDF
958      TYPE = IEEE.BACKOFF
959      SLOT.TIME =      51.200
960      RETRY.LIMIT =      16.000
961      LIMIT.DELAY =      51.200
962
963      ***** LAN RING1 DEFINITION BEGINS
964      HARDWARE TYPE = DATA TRANSFER
965      * LAN SUBTYPE IS IEEE 802.5 16Mb
966      NAME = RING1
967      DRAW TYPE = RING
968      NAME/MSG LOCATION =      226.818      40.686      186.818      40.686
969      STYLE/WIDTH =      1      60
970      SEGMENTS =      7
971      176.818      40.686
972      176.818      38.686
973      236.818      38.686
974      246.818      40.686
975      236.818      42.686
976      186.818      42.686
977      176.818      40.686
978      PROTOCOL = TOKEN RING
979      SEPARATE BLOCKS = YES
980      CYCLE TIME = .0625 MIC
981      BITS PER CYCLE = 1 BITS
982      CYCLES PER WORD = 8 CYCLES
983      WORDS PER BLOCK = 17942 WORDS
984      MINIMUM DATA BITS PER TRANSFER = 0 BITS
985      WORD OVERHEAD TIME = 0. MIC
986      BLOCK OVERHEAD TIME = 12.5 MIC
987      BUS CONNECTIONS =
988      G1/GW6
989      SEGMENTS =      177.376      40.574      79.528      40.460

```

990	G2/GW6				
991	SEGMENTS =	177.376	40.574	79.528	40.460
992	G1/GW1				
993	SEGMENTS =	194.405	38.686	178.354	28.254
994	G2/GW1				
995	SEGMENTS =	194.405	38.686	178.354	28.254
996	G1/GATE TO LGSP				
997	SEGMENTS =	230.418	38.686	259.732	27.579
998	G2/GATE TO LGSP				
999	SEGMENTS =	230.418	38.686	259.732	27.579
1000	G1/GW4				
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1001	SEGMENTS =	229.301	42.686	284.578	55.929
1002	G2/GW4				
1003	SEGMENTS =	229.301	42.686	284.578	55.929
1004	G1/GW3				
1005	SEGMENTS =	195.801	42.686	185.891	57.842
1006	G2/GW3				
1007	SEGMENTS =	195.801	42.686	185.891	57.842
1008	S1/BASE TRAFFIC1				
1009	SEGMENTS =	213.668	38.686	198.593	12.672
1010	S1/BASE TRAFFIC2				
1011	SEGMENTS =	222.043	42.686	218.274	64.817
1012					
1013	***** LAN LGSM DEFINITION BEGINS				
1014	HARDWARE TYPE = DATA TRANSFER				
1015	* LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5				
1016	NAME = LGSM				
1017	DRAW TYPE = BUS				
1018	NAME/MSG LOCATION =	142.230	82.212	92.230	82.212
1019	STYLE/WIDTH =	1	60		
1020	SEGMENTS =	2			
1021	92.230	83.212			
1022	162.230	83.212			
1023	PROTOCOL = COLLISION				
1024	SEPARATE BLOCKS = YES				
1025	CYCLE TIME = .1 MIC				
1026	RETRY INTERVAL = 1/LGSM RETRY SDF				
1027	COLLISION WINDOW = 4.33 MIC				
1028	INTERFRAME GAP = 9.6 MIC				
1029	JAM TIME = 3.2 MIC				
1030	BITS PER CYCLE = 1 BITS				
1031	CYCLES PER WORD = 8 CYCLES				
1032	WORDS PER BLOCK = 1500 WORDS				
1033	MINIMUM DATA BITS PER TRANSFER = 304 BITS				
1034	WORD OVERHEAD TIME = 0. MIC				
1035	BLOCK OVERHEAD TIME = 20.8 MIC				
1036	BUS CONNECTIONS =				
1037	G1/GW3				
1038	SEGMENTS =	157.834	83.212	180.866	62.455
1039	G2/GW3				
1040	SEGMENTS =	157.834	83.212	180.866	62.455
1041	S1/LGSM 1				
1042	SEGMENTS =	108.143	83.212	87.624	94.349
1043	S1/LGSM 2				
1044	SEGMENTS =	135.186	83.212	107.624	94.349
1045	S1/LGSM 3				
1046	SEGMENTS =	148.708	83.212	127.624	94.349
1047	S1/LGSM 4				
1048	SEGMENTS =	155.469	83.212	147.624	94.349
1049	S1/LGSM 5				
1050	SEGMENTS =	158.850	83.212	167.624	94.349
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```

1051      S1/LGSM 6
1052      SEGMENTS =          160.540          83.212          187.624          94.349
1053
1054      ***** LAN LGSD DEFINITION BEGINS
1055      HARDWARE TYPE = DATA TRANSFER
1056      * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
1057      NAME = LGSD
1058      DRAW TYPE = BUS
1059      NAME/MSG LOCATION =          135.949          16.229          85.949          16.229
1060      STYLE/WIDTH =      1      60
1061      SEGMENTS =      2
1062          85.949          17.229
1063          155.949          17.229
1064      PROTOCOL = COLLISION
1065      SEPARATE BLOCKS = YES
1066      CYCLE TIME = .1 MIC
1067      RETRY INTERVAL = 1/LGSD RETRY SDF
1068      COLLISION WINDOW = 4.33 MIC
1069      INTERFRAME GAP = 9.6 MIC
1070      JAM TIME = 3.2 MIC
1071      BITS PER CYCLE = 1 BITS
1072      CYCLES PER WORD = 8 CYCLES
1073      WORDS PER BLOCK = 1500 WORDS
1074      MINIMUM DATA BITS PER TRANSFER = 304 BITS
1075      WORD OVERHEAD TIME = 0. MIC
1076      BLOCK OVERHEAD TIME = 20.8 MIC
1077      BUS CONNECTIONS =
1078      G1/GW1
1079      SEGMENTS =          152.112          17.229          181.145          24.992
1080      G2/GW1
1081      SEGMENTS =          152.112          17.229          181.145          24.992
1082      S1/LGSD1
1083      SEGMENTS =          110.655          17.229          70.874          9.635
1084      S1/LGSD 2
1085      SEGMENTS =          118.204          17.229          90.874          9.635
1086      S1/LGSD 3
1087      SEGMENTS =          125.753          17.229          110.874          9.635
1088      S1/LGSD 4
1089      SEGMENTS =          133.302          17.229          130.874          9.635
1090      S1/LGSD 5
1091      SEGMENTS =          140.851          17.229          150.874          9.635
1092      S1/LGSD 6
1093      SEGMENTS =          148.400          17.229          170.874          9.635
1094
1095      ***** LAN LGSC DEFINITION BEGINS
1096      HARDWARE TYPE = DATA TRANSFER
1097      * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
1098      NAME = LGSC
1099      DRAW TYPE = BUS
1100      NAME/MSG LOCATION =          343.231          80.355          293.231          80.355
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```

1101      STYLE/WIDTH =      1      60
1102      SEGMENTS =      2
1103          293.231          81.355
1104          363.231          81.355
1105      PROTOCOL = COLLISION
1106      SEPARATE BLOCKS = YES
1107      CYCLE TIME = .1 MIC
1108      RETRY INTERVAL = 1/LGSC RETRY SDF
1109      COLLISION WINDOW = 4.33 MIC
1110      INTERFRAME GAP = 9.6 MIC

```

```

1111 JAM TIME = 3.2 MIC
1112 BITS PER CYCLE = 1 BITS
1113 CYCLES PER WORD = 8 CYCLES
1114 WORDS PER BLOCK = 1500 WORDS
1115 MINIMUM DATA BITS PER TRANSFER = 304 BITS
1116 WORD OVERHEAD TIME = 0. MIC
1117 BLOCK OVERHEAD TIME = 20.8 MIC
1118 BUS CONNECTIONS =
1119 G1/GW4
1120 SEGMENTS = 296.022 81.355 291.836 58.630
1121 G2/GW4
1122 SEGMENTS = 296.022 81.355 291.836 58.630
1123 S1/LGSC 1
1124 SEGMENTS = 307.469 78.318 278.575 96.037
1125 S1/LGSC 2
1126 SEGMENTS = 314.169 81.355 296.163 95.362
1127 S1/LGSC 3
1128 SEGMENTS = 323.800 81.355 317.519 93.337
1129 S1/LGSC 4
1130 SEGMENTS = 337.619 81.355 337.619 93.506
1131 S1/LGSC 5
1132 SEGMENTS = 343.900 81.355 354.369 92.999
1133 S1/LGSC 6
1134 SEGMENTS = 346.832 81.355 376.563 93.674
1135
1136 ***** LAN LGSP DEFINITION BEGINS
1137 HARDWARE TYPE = DATA TRANSFER
1138 * LAN SUBTYPE IS IEEE 802.3 ETHERNET 10BASE5
1139 NAME = LGSP
1140 DRAW TYPE = BUS
1141 NAME/MSG LOCATION = 324.387 14.035 274.387 14.035
1142 STYLE/WIDTH = 1 60
1143 SEGMENTS = 2
1144 274.387 15.035
1145 344.387 15.035
1146 PROTOCOL = COLLISION
1147 SEPARATE BLOCKS = YES
1148 CYCLE TIME = .1 MIC
1149 RETRY INTERVAL = 1/LGSP RETRY SDF
1150 COLLISION WINDOW = 4.33 MIC
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```

1151 INTERFRAME GAP = 9.6 MIC
1152 JAM TIME = 3.2 MIC
1153 BITS PER CYCLE = 1 BITS
1154 CYCLES PER WORD = 8 CYCLES
1155 WORDS PER BLOCK = 1500 WORDS
1156 MINIMUM DATA BITS PER TRANSFER = 304 BITS
1157 WORD OVERHEAD TIME = 0. MIC
1158 BLOCK OVERHEAD TIME = 20.8 MIC
1159 BUS CONNECTIONS =
1160 G1/GATE TO LGSP
1161 SEGMENTS = 278.016 15.035 255.544 24.316
1162 G2/GATE TO LGSP
1163 SEGMENTS = 278.016 15.035 255.544 24.316
1164 S1/LGSP 1
1165 SEGMENTS = 289.881 15.035 280.250 5.753
1166 S1/LGSP2
1167 SEGMENTS = 299.094 15.035 313.331 5.922
1168 S1/FILE SERVER
1169 SEGMENTS = 300.350 15.035 288.206 33.598
1170
1171 ***** LAN AFNET DEFINITION BEGINS
1172 HARDWARE TYPE = DATA TRANSFER
1173 * LAN SUBTYPE IS USER DEFINED COLLISION LAN

```

```

1174 NAME = AFNET
1175 DRAW TYPE = STAR
1176 NAME/MSG LOCATION = 66.261 52.855 50.261 52.855
1177 STYLE/WIDTH = 1 60
1178 SEGMENTS = 5
1179 48.261 54.355
1180 48.261 50.355
1181 88.261 50.355
1182 88.261 54.355
1183 48.261 54.355
1184 PROTOCOL = COLLISION
1185 SEPARATE BLOCKS = YES
1186 CYCLE TIME = .05952381 MICROSEC
1187 BITS PER CYCLE = 1
1188 CYCLES PER WORD = 8
1189 WORDS PER BLOCK = 1496
1190 WORD OVERHEAD TIME = 0. MICROSEC
1191 BLOCK OVERHEAD TIME = 14.286 MICROSEC
1192 RETRY INTERVAL = I/AFNET RETRY SDF
1193 COLLISION WINDOW = 4.33 MICROSEC
1194 INTERFRAME GAP = 9.6 MICROSEC
1195 JAM TIME = 3.2 MICROSEC
1196 BUS CONNECTIONS =
1197 G1/GW6
1198 SEGMENTS = 71.711 50.355 68.361 42.542
1199 G2/GW6
1200 SEGMENTS = 71.711 50.355 68.361 42.542
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```

1201 S1/FMFS
1202 SEGMENTS = 63.336 52.836 46.586 63.467
1203 S1/DOMR
1204 SEGMENTS = 75.899 53.342 91.811 62.455
1205
1206 ***** STATION LGSP 1 # 1
1207 * INDIVIDUAL 1.500 -1.500 15
1208 HARDWARE TYPE = PROCESSING
1209 NAME = S1/LGSP 1
1210 LOCATION = 271.875 1.366
1211 STYLE/COLOR = 1 3
1212 BASIC CYCLE TIME = 0. MICROSEC
1213 INPUT CONTROLLER = YES
1214 INSTRUCTION REPERTOIRE =
1215 INSTRUCTION TYPE = PROCESSING
1216 NAME ; NO/OP
1217 TIME ; 0 CYCLES
1218 INSTRUCTION TYPE = MESSAGE
1219 NAME ; MESSAGE
1220 MESSAGE ; REQUEST FROM SERVER
1221 LENGTH ; 200 BITS
1222 INHIBIT MESSAGE TO SELF ; YES
1223 DESTINATION PROCESSOR ; S1/FILE SERVER
1224 QUEUE FLAG ; YES
1225 NAME ; UPDATE FILES
1226 MESSAGE ; UPDATE FILES
1227 LENGTH ; SDF2/LGSP 1
1228 INHIBIT MESSAGE TO SELF ; YES
1229 DESTINATION PROCESSOR ; S1/FILE SERVER
1230 QUEUE FLAG ; YES
1231 INSTRUCTION TYPE = READ
1232 NAME ; GET TRANSACTION MODULE
1233 STORAGE DEVICE TO ACCESS ; S1/SD/LGSP 1
1234 FILE ACCESSED ; GENERAL STORAGE
1235 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1236 ALLOWABLE BUSSES ;

```

```

1237         S1/TD/LGSP 1
1238
1239 HARDWARE TYPE = STORAGE
1240     NAME = S1/SD/LGSP 1
1241     CAPACITY = 1090519040. BITS
1242     BITS PER WORD = 4000. BITS
1243     WORD ACCESS TIME = 48.83 MICROSEC
1244     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1245     NUMBER OF PORTS = 1
1246
1247 HARDWARE TYPE = DATA TRANSFER
1248     NAME = S1/TD/LGSP 1
1249     BITS PER CYCLE = 1 BITS
1250     BUS CONNECTIONS =
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```

1251         S1/LGSP 1
1252         S1/SD/LGSP 1
1253
1254 SOFTWARE TYPE = MODULE
1255 * LGSP 1
1256     NAME = UPDATE SERVER P1
1257     CONCURRENT EXECUTION = YES
1258     ALLOWED PROCESSORS =
1259         S1/LGSP 1
1260     REQUIRED MESSAGES =
1261     SEND REPLY TO NODE
1262     INSTRUCTION LIST =
1263         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1264         EXECUTE A TOTAL OF ; 1 UPDATE FILES
1265 * LGSP 1
1266     NAME = REC P1
1267     CONCURRENT EXECUTION = YES
1268     ITERATION PERIOD = RECLGSP
1269     RESIDENT PROCESSORS =
1270         S1/LGSP 1
1271     INSTRUCTION LIST =
1272         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1273         EXECUTE A TOTAL OF ; 1 MESSAGE
1274 * LGSP 1
1275     NAME = ISU P1
1276     CONCURRENT EXECUTION = YES
1277     ITERATION PERIOD = ISULGSP1
1278     RESIDENT PROCESSORS =
1279         S1/LGSP 1
1280     INSTRUCTION LIST =
1281         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1282         EXECUTE A TOTAL OF ; 1 MESSAGE
1283 * LGSP 1
1284     NAME = DOR P1
1285     CONCURRENT EXECUTION = YES
1286     ITERATION PERIOD = DORLGSP
1287     RESIDENT PROCESSORS =
1288         S1/LGSP 1
1289     INSTRUCTION LIST =
1290         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1291         EXECUTE A TOTAL OF ; 1 MESSAGE
1292 * LGSP 1
1293     NAME = LPS P1
1294     CONCURRENT EXECUTION = YES
1295     ITERATION PERIOD = LPSLGSP
1296     RESIDENT PROCESSORS =
1297         S1/LGSP 1
1298     INSTRUCTION LIST =
1299         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```


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```
1301 * LGSP 1
1302 NAME = FK1 P1
1303 CONCURRENT EXECUTION = YES
1304 ITERATION PERIOD = FK1LGSP
1305 RESIDENT PROCESSORS =
1306 S1/LGSP 1
1307 INSTRUCTION LIST =
1308 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1309 EXECUTE A TOTAL OF ; 1 MESSAGE
1310 * LGSP 1
1311 NAME = BKA P1
1312 CONCURRENT EXECUTION = YES
1313 ITERATION PERIOD = BKALGSP
1314 RESIDENT PROCESSORS =
1315 S1/LGSP 1
1316 INSTRUCTION LIST =
1317 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1318 EXECUTE A TOTAL OF ; 1 MESSAGE
1319 * LGSP 1
1320 NAME = DUO P1
1321 CONCURRENT EXECUTION = YES
1322 ITERATION PERIOD = DUOLGSP
1323 RESIDENT PROCESSORS =
1324 S1/LGSP 1
1325 INSTRUCTION LIST =
1326 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1327 EXECUTE A TOTAL OF ; 1 MESSAGE
1328 * LGSP 1
1329 NAME = AOA P1
1330 CONCURRENT EXECUTION = YES
1331 ITERATION PERIOD = AOALGSP
1332 RESIDENT PROCESSORS =
1333 S1/LGSP 1
1334 INSTRUCTION LIST =
1335 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1336 EXECUTE A TOTAL OF ; 1 MESSAGE
1337 * LGSP 1
1338 NAME = 1RF P1
1339 CONCURRENT EXECUTION = YES
1340 ITERATION PERIOD = 1RFLGSP
1341 RESIDENT PROCESSORS =
1342 S1/LGSP 1
1343 INSTRUCTION LIST =
1344 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1345 EXECUTE A TOTAL OF ; 1 MESSAGE
1346 * LGSP 1
1347 NAME = FCS P1
1348 CONCURRENT EXECUTION = YES
1349 ITERATION PERIOD = FCSLGSP
1350 RESIDENT PROCESSORS =
```

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```
1351 S1/LGSP 1
1352 INSTRUCTION LIST =
1353 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1354 EXECUTE A TOTAL OF ; 1 MESSAGE
1355 * LGSP 1
1356 NAME = FIC P1
1357 CONCURRENT EXECUTION = YES
```

```

1358     ITERATION PERIOD = FICLGSP
1359     RESIDENT PROCESSORS =
1360         S1/LGSP 1
1361     INSTRUCTION LIST =
1362         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1363         EXECUTE A TOTAL OF ; 1 MESSAGE
1364 * LGSP 1
1365     NAME = TIN P1
1366     CONCURRENT EXECUTION = YES
1367     ITERATION PERIOD = TINLGSP
1368     RESIDENT PROCESSORS =
1369         S1/LGSP 1
1370     INSTRUCTION LIST =
1371         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1372         EXECUTE A TOTAL OF ; 1 MESSAGE
1373 * LGSP 1
1374     NAME = FID P1
1375     CONCURRENT EXECUTION = YES
1376     ITERATION PERIOD = FIDLGSP
1377     RESIDENT PROCESSORS =
1378         S1/LGSP 1
1379     INSTRUCTION LIST =
1380         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1381         EXECUTE A TOTAL OF ; 1 MESSAGE
1382 * LGSP 1
1383     NAME = FIL P1
1384     CONCURRENT EXECUTION = YES
1385     ITERATION PERIOD = FILLGSP
1386     RESIDENT PROCESSORS =
1387         S1/LGSP 1
1388     INSTRUCTION LIST =
1389         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1390         EXECUTE A TOTAL OF ; 1 MESSAGE
1391 * LGSP 1
1392     NAME = SPR P1
1393     CONCURRENT EXECUTION = YES
1394     ITERATION PERIOD = SPRLGSP
1395     RESIDENT PROCESSORS =
1396         S1/LGSP 1
1397     INSTRUCTION LIST =
1398         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1399         EXECUTE A TOTAL OF ; 1 MESSAGE
1400 * LGSP 1

```

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```

1401     NAME = AE1 P1
1402     CONCURRENT EXECUTION = YES
1403     ITERATION PERIOD = AE1LGSP
1404     RESIDENT PROCESSORS =
1405         S1/LGSP 1
1406     INSTRUCTION LIST =
1407         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1408         EXECUTE A TOTAL OF ; 1 MESSAGE
1409 * LGSP 1
1410     NAME = FCU P1
1411     CONCURRENT EXECUTION = YES
1412     ITERATION PERIOD = FCULGSP
1413     RESIDENT PROCESSORS =
1414         S1/LGSP 1
1415     INSTRUCTION LIST =
1416         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1417         EXECUTE A TOTAL OF ; 1 MESSAGE
1418 * LGSP 1
1419     NAME = SHP P1
1420     CONCURRENT EXECUTION = YES

```

```

1421     ITERATION PERIOD = SHPLGSP
1422     RESIDENT PROCESSORS =
1423         S1/LGSP 1
1424     INSTRUCTION LIST =
1425         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1426         EXECUTE A TOTAL OF ; 1 MESSAGE
1427 * LGSP 1
1428     NAME = FTR P1
1429     CONCURRENT EXECUTION = YES
1430     ITERATION PERIOD = FTRLGSP
1431     RESIDENT PROCESSORS =
1432         S1/LGSP 1
1433     INSTRUCTION LIST =
1434         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1435         EXECUTE A TOTAL OF ; 1 MESSAGE
1436 * LGSP 1
1437     NAME = BPA P1
1438     CONCURRENT EXECUTION = YES
1439     ITERATION PERIOD = BPALGSP
1440     RESIDENT PROCESSORS =
1441         S1/LGSP 1
1442     INSTRUCTION LIST =
1443         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1444         EXECUTE A TOTAL OF ; 1 MESSAGE
1445 * LGSP 1
1446     NAME = TRM P1
1447     CONCURRENT EXECUTION = YES
1448     ITERATION PERIOD = TRMLGSP1
1449     RESIDENT PROCESSORS =
1450         S1/LGSP 1
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```

1451     INSTRUCTION LIST =
1452         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1453         EXECUTE A TOTAL OF ; 1 MESSAGE
1454
1455 ***** STATION BASE TRAFFIC1 # 1
1456 * INDIVIDUAL 1.500 -1.500 15
1457 HARDWARE TYPE = PROCESSING
1458     NAME = S1/BASE TRAFFIC1
1459     LOCATION = 188.962      8.116
1460     STYLE/COLOR = 1 2
1461     BASIC CYCLE TIME = 0. MICROSEC
1462     INPUT CONTROLLER = YES
1463     INSTRUCTION REPERTOIRE =
1464         INSTRUCTION TYPE = PROCESSING
1465             NAME ; NO/OP
1466             TIME ; 0 CYCLES
1467         INSTRUCTION TYPE = MESSAGE
1468             NAME ; NOISE
1469             MESSAGE ; NOISE
1470             LENGTH ; 200 BITS
1471             INHIBIT MESSAGE TO SELF ; YES
1472             DESTINATION PROCESSOR ; S1/BASE TRAFFIC2
1473             QUEUE FLAG ; YES
1474
1475 SOFTWARE TYPE = MODULE
1476 * BASE TRAFFIC1
1477     NAME = BASE TRAFFIC
1478     CONCURRENT EXECUTION = YES
1479     ITERATION PERIOD = BASE TRAFFIC
1480     RESIDENT PROCESSORS =
1481         S1/BASE TRAFFIC1
1482     INSTRUCTION LIST =
1483         EXECUTE A TOTAL OF ; 1 NOISE

```

```

1484
1485 ***** STATION BASE TRAFFIC2 # 1
1486 * INDIVIDUAL 1.500 -1.500 15
1487 HARDWARE TYPE = PROCESSING
1488 NAME = S1/BASE TRAFFIC2
1489 LOCATION = 209.062 64.480
1490 STYLE/COLOR = 1 3
1491 BASIC CYCLE TIME = 0. MICROSEC
1492 INPUT CONTROLLER = YES
1493 INSTRUCTION REPERTOIRE =
1494 INSTRUCTION TYPE = PROCESSING
1495 NAME ; NO/OP
1496 TIME ; 0 CYCLES
1497
1498 ***** STATION FILE SERVER # 1
1499 * INDIVIDUAL 1.500 -1.500 15
1500 HARDWARE TYPE = PROCESSING
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```

1501 NAME = S1/FILE SERVER
1502 LOCATION = 278.994 31.910
1503 STYLE/COLOR = 1 4
1504 BASIC CYCLE TIME = 0. MICROSEC
1505 INPUT CONTROLLER = YES
1506 INSTRUCTION REPERTOIRE =
1507 INSTRUCTION TYPE = PROCESSING
1508 NAME ; NO/OP
1509 TIME ; 0 CYCLES
1510 INSTRUCTION TYPE = MESSAGE
1511 NAME ; SEND REPLY
1512 MESSAGE ; SEND REPLY TO NODE
1513 LENGTH ; SDF1/FILE SERVER
1514 INHIBIT MESSAGE TO SELF ; YES
1515 DESTINATION PROCESSOR ; ECHO
1516 QUEUE FLAG ; YES
1517 INSTRUCTION TYPE = READ
1518 NAME ; READ FOURTH RECORD
1519 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1520 FILE ACCESSED ; GENERAL STORAGE
1521 NUMBER OF BITS TO TRANSMIT ; 957 BITS
1522 ALLOWABLE BUSSES ;
1523 S1/TD/FILE SERVER
1524 NAME ; READ THIRD RECORD
1525 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1526 FILE ACCESSED ; GENERAL STORAGE
1527 NUMBER OF BITS TO TRANSMIT ; 3456 BITS
1528 ALLOWABLE BUSSES ;
1529 S1/TD/FILE SERVER
1530 NAME ; READ SECOND RECORD
1531 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1532 FILE ACCESSED ; GENERAL STORAGE
1533 NUMBER OF BITS TO TRANSMIT ; 2582 BITS
1534 ALLOWABLE BUSSES ;
1535 S1/TD/FILE SERVER
1536 NAME ; READ CONTROL RECORD
1537 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1538 FILE ACCESSED ; GENERAL STORAGE
1539 NUMBER OF BITS TO TRANSMIT ; 1044 BITS
1540 ALLOWABLE BUSSES ;
1541 S1/TD/FILE SERVER
1542 INSTRUCTION TYPE = WRITE
1543 NAME ; WRITE1
1544 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1545 FILE ACCESSED ; GENERAL STORAGE
1546 NUMBER OF BITS TO TRANSMIT ; 2582 BITS

```

1547 REPLACE FLAG ; YES
1548 PARTIAL FLAG ; YES
1549 ALLOWABLE BUSSES ;
1550 S1/TD/FILE SERVER
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1551 NAME ; WRITE2
1552 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1553 FILE ACCESSED ; GENERAL STORAGE
1554 NUMBER OF BITS TO TRANSMIT ; 3456 BITS
1555 REPLACE FLAG ; YES
1556 PARTIAL FLAG ; YES
1557 ALLOWABLE BUSSES ;
1558 S1/TD/FILE SERVER
1559 NAME ; WRITE3
1560 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1561 FILE ACCESSED ; GENERAL STORAGE
1562 NUMBER OF BITS TO TRANSMIT ; 1044 BITS
1563 REPLACE FLAG ; YES
1564 PARTIAL FLAG ; YES
1565 ALLOWABLE BUSSES ;
1566 S1/TD/FILE SERVER
1567 NAME ; WRITE4
1568 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1569 FILE ACCESSED ; GENERAL STORAGE
1570 NUMBER OF BITS TO TRANSMIT ; 957 BITS
1571 REPLACE FLAG ; YES
1572 PARTIAL FLAG ; YES
1573 ALLOWABLE BUSSES ;
1574 S1/TD/FILE SERVER
1575 NAME ; WRITE6
1576 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1577 FILE ACCESSED ; GENERAL STORAGE
1578 NUMBER OF BITS TO TRANSMIT ; 1044 BITS
1579 REPLACE FLAG ; YES
1580 PARTIAL FLAG ; YES
1581 ALLOWABLE BUSSES ;
1582 S1/TD/FILE SERVER
1583 NAME ; WRITE5
1584 STORAGE DEVICE TO ACCESS ; S1/SD/FILE SERVER
1585 FILE ACCESSED ; GENERAL STORAGE
1586 NUMBER OF BITS TO TRANSMIT ; 3456 BITS
1587 REPLACE FLAG ; YES
1588 PARTIAL FLAG ; YES
1589 ALLOWABLE BUSSES ;
1590 S1/TD/FILE SERVER
1591

1592 HARDWARE TYPE = STORAGE
1593 NAME = S1/SD/FILE SERVER
1594 CAPACITY = 12582912000. BITS
1595 BITS PER WORD = 512000. BITS
1596 WORD ACCESS TIME = 48.83 MICROSEC
1597 OVERHEAD TIME PER BLOCK ACCESS = 15000.0 MICROSEC
1598 NUMBER OF PORTS = 1
1599

1600 HARDWARE TYPE = DATA TRANSFER
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1601 NAME = S1/TD/FILE SERVER
1602 BITS PER CYCLE = 1 BITS
1603 BUS CONNECTIONS =
1604 S1/FILE SERVER

```

1605      S1/SD/FILE SERVER
1606
1607      SOFTWARE TYPE = MODULE
1608      * FILE SERVER
1609      NAME = MESSAGE REPLY
1610      CONCURRENT EXECUTION = YES
1611      ALLOWED PROCESSORS =
1612      S1/FILE SERVER
1613      REQUIRED MESSAGES =
1614      REQUEST FROM SERVER
1615      INSTRUCTION LIST =
1616      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1617      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1618      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1619      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1620      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1621      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1622      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1623      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1624      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1625      EXECUTE A TOTAL OF ; 1 READ SECOND RECORD
1626      EXECUTE A TOTAL OF ; 1 READ CONTROL RECORD
1627      EXECUTE A TOTAL OF ; 1 READ THIRD RECORD
1628      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1629      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1630      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1631      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1632      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1633      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1634      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1635      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1636      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1637      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1638      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1639      EXECUTE A TOTAL OF ; 1 READ FOURTH RECORD
1640      EXECUTE A TOTAL OF ; 1 READ CONTROL RECORD
1641      EXECUTE A TOTAL OF ; 1 READ THIRD RECORD
1642      EXECUTE A TOTAL OF ; 1 SEND REPLY
1643      * FILE SERVER
1644      NAME = UPDATE RECORDS
1645      CONCURRENT EXECUTION = YES
1646      ALLOWED PROCESSORS =
1647      S1/FILE SERVER
1648      REQUIRED MESSAGES =
1649      UPDATE FILES
1650      INSTRUCTION LIST =

```

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```

1651      EXECUTE A TOTAL OF ; 1 WRITE1
1652      EXECUTE A TOTAL OF ; 1 WRITE1
1653      EXECUTE A TOTAL OF ; 1 WRITE1
1654      EXECUTE A TOTAL OF ; 1 WRITE1
1655      EXECUTE A TOTAL OF ; 1 WRITE1
1656      EXECUTE A TOTAL OF ; 1 WRITE1
1657      EXECUTE A TOTAL OF ; 1 WRITE1
1658      EXECUTE A TOTAL OF ; 1 WRITE1
1659      EXECUTE A TOTAL OF ; 1 WRITE1
1660      EXECUTE A TOTAL OF ; 1 WRITE1
1661      EXECUTE A TOTAL OF ; 1 WRITE2
1662      EXECUTE A TOTAL OF ; 1 WRITE3
1663      EXECUTE A TOTAL OF ; 1 WRITE4
1664      EXECUTE A TOTAL OF ; 1 WRITE4
1665      EXECUTE A TOTAL OF ; 1 WRITE4
1666      EXECUTE A TOTAL OF ; 1 WRITE4
1667      EXECUTE A TOTAL OF ; 1 WRITE4

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```

1668     EXECUTE A TOTAL OF ; 1 WRITE4
1669     EXECUTE A TOTAL OF ; 1 WRITE4
1670     EXECUTE A TOTAL OF ; 1 WRITE4
1671     EXECUTE A TOTAL OF ; 1 WRITE4
1672     EXECUTE A TOTAL OF ; 1 WRITE4
1673     EXECUTE A TOTAL OF ; 1 WRITE4
1674     EXECUTE A TOTAL OF ; 1 WRITE4
1675     EXECUTE A TOTAL OF ; 1 WRITE5
1676     EXECUTE A TOTAL OF ; 1 WRITE6
1677
1678     ***** STATION LGSP2 # 1
1679     * INDIVIDUAL 1.500 -1.500 15
1680     HARDWARE TYPE = PROCESSING
1681     NAME = S1/LGSP2
1682     LOCATION = 305.375 1.703
1683     STYLE/COLOR = 1 3
1684     BASIC CYCLE TIME = 0. MICROSEC
1685     INPUT CONTROLLER = YES
1686     INSTRUCTION REPERTOIRE =
1687     INSTRUCTION TYPE = PROCESSING
1688     NAME ; NO/OP
1689     TIME ; 0 CYCLES
1690     INSTRUCTION TYPE = MESSAGE
1691     NAME ; MESSAGE
1692     MESSAGE ; REQUEST FROM SERVER
1693     LENGTH ; 200 BITS
1694     INHIBIT MESSAGE TO SELF ; YES
1695     DESTINATION PROCESSOR ; S1/FILE SERVER
1696     QUEUE FLAG ; YES
1697     NAME ; UPDATE FILES
1698     MESSAGE ; UPDATE FILES
1699     LENGTH ; SDF2/LGSP2
1700     INHIBIT MESSAGE TO SELF ; YES
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```

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```

1701     DESTINATION PROCESSOR ; S1/FILE SERVER
1702     QUEUE FLAG ; YES
1703     INSTRUCTION TYPE = READ
1704     NAME ; GET TRANSACTION MODULE
1705     STORAGE DEVICE TO ACCESS ; S1/SD/LGSP2
1706     FILE ACCESSED ; GENERAL STORAGE
1707     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1708     ALLOWABLE BUSSES ;
1709     S1/TD/LGSP2
1710
1711     HARDWARE TYPE = STORAGE
1712     NAME = S1/SD/LGSP2
1713     CAPACITY = 1090519040. BITS
1714     BITS PER WORD = 4000. BITS
1715     WORD ACCESS TIME = 48.83 MICROSEC
1716     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1717     NUMBER OF PORTS = 1
1718
1719     HARDWARE TYPE = DATA TRANSFER
1720     NAME = S1/TD/LGSP2
1721     BITS PER CYCLE = 1 BITS
1722     BUS CONNECTIONS =
1723     S1/LGSP2
1724     S1/SD/LGSP2
1725
1726     SOFTWARE TYPE = MODULE
1727     * LGSP2
1728     NAME = UPDATE SERVER P2
1729     CONCURRENT EXECUTION = YES
1730     ALLOWED PROCESSORS =

```

```

1731      S1/LGSP2
1732      REQUIRED MESSAGES =
1733      SEND REPLY TO NODE
1734      INSTRUCTION LIST =
1735      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1736      EXECUTE A TOTAL OF ; 1 UPDATE FILES
1737 * LGSP2
1738      NAME = ISU P2
1739      CONCURRENT EXECUTION = YES
1740      ITERATION PERIOD = ISULGSP2
1741      RESIDENT PROCESSORS =
1742      S1/LGSP2
1743      INSTRUCTION LIST =
1744      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1745      EXECUTE A TOTAL OF ; 1 MESSAGE
1746 * LGSP2
1747      NAME = TRM P2
1748      CONCURRENT EXECUTION = YES
1749      ITERATION PERIOD = TRMLGSP2
1750      RESIDENT PROCESSORS =

```

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```

1751      S1/LGSP2
1752      INSTRUCTION LIST =
1753      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1754      EXECUTE A TOTAL OF ; 1 MESSAGE
1755
1756 ***** STATION LGSD1 # 1
1757 * INDIVIDUAL 1.500 -1.500 15
1758 HARDWARE TYPE = PROCESSING
1759      NAME = S1/LGSD1
1760      LOCATION = 60.824 5.416
1761      STYLE/COLOR = 1 3
1762      BASIC CYCLE TIME = 0. MICROSEC
1763      INPUT CONTROLLER = YES
1764      INSTRUCTION REPERTOIRE =
1765      INSTRUCTION TYPE = PROCESSING
1766      NAME ; NO/OP
1767      TIME ; 0 CYCLES
1768      INSTRUCTION TYPE = MESSAGE
1769      NAME ; MESSAGE
1770      MESSAGE ; REQUEST FROM SERVER
1771      LENGTH ; 200 BITS
1772      INHIBIT MESSAGE TO SELF ; YES
1773      DESTINATION PROCESSOR ; R6/FILE SERVER
1774      QUEUE FLAG ; YES
1775      NAME ; UPDATE FILES
1776      MESSAGE ; UPDATE FILES
1777      LENGTH ; SDF2/LGSD1
1778      INHIBIT MESSAGE TO SELF ; YES
1779      DESTINATION PROCESSOR ; R6/FILE SERVER
1780      QUEUE FLAG ; YES
1781      INSTRUCTION TYPE = READ
1782      NAME ; GET TRANSACTION MODULE
1783      STORAGE DEVICE TO ACCESS ; S1/SD/LGSD1
1784      FILE ACCESSED ; GENERAL STORAGE
1785      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1786      ALLOWABLE BUSSES ;
1787      S1/TD/LGSD1
1788
1789 HARDWARE TYPE = STORAGE
1790      NAME = S1/SD/LGSD1
1791      CAPACITY = 1090519040. BITS
1792      BITS PER WORD = 4000. BITS
1793      WORD ACCESS TIME = 48.83 MICROSEC

```


1794 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1795 NUMBER OF PORTS = 1
1796
1797 HARDWARE TYPE - DATA TRANSFER
1798 NAME = S1/TD/LGSD1
1799 BITS PER CYCLE = 1 BITS
1800 BUS CONNECTIONS =
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1801 S1/LGSD1
1802 S1/SD/LGSD1
1803
1804 SOFTWARE TYPE = MODULE
1805 * LGSD1
1806 NAME = UPDATE SERVER D1
1807 CONCURRENT EXECUTION = YES
1808 ALLOWED PROCESSORS =
1809 S1/LGSD1
1810 REQUIRED MESSAGES =
1811 SEND REPLY TO NODE
1812 INSTRUCTION LIST =
1813 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1814 EXECUTE A TOTAL OF ; 1 UPDATE FILES
1815 * LGSD1
1816 NAME = REC D1
1817 CONCURRENT EXECUTION = YES
1818 ITERATION PERIOD = RECLGSD1
1819 RESIDENT PROCESSORS =
1820 S1/LGSD1
1821 INSTRUCTION LIST =
1822 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1823 EXECUTE A TOTAL OF ; 1 MESSAGE
1824 * LGSD1
1825 NAME = ISU D1
1826 CONCURRENT EXECUTION = YES
1827 ITERATION PERIOD = ISULGSD1
1828 RESIDENT PROCESSORS =
1829 S1/LGSD1
1830 INSTRUCTION LIST =
1831 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1832 EXECUTE A TOTAL OF ; 1 MESSAGE
1833 * LGSD1
1834 NAME = DOR D1
1835 CONCURRENT EXECUTION = YES
1836 ITERATION PERIOD = DORLGSD1
1837 RESIDENT PROCESSORS =
1838 S1/LGSD1
1839 INSTRUCTION LIST =
1840 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1841 EXECUTE A TOTAL OF ; 1 MESSAGE
1842 * LGSD1
1843 NAME = DUO D1
1844 CONCURRENT EXECUTION = YES
1845 ITERATION PERIOD = DUOLGSD1
1846 RESIDENT PROCESSORS =
1847 S1/LGSD1
1848 INSTRUCTION LIST =
1849 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1850 EXECUTE A TOTAL OF ; 1 MESSAGE
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1851 * LGSD1

```

1852     NAME = AOA D1
1853     CONCURRENT EXECUTION = YES
1854     ITERATION PERIOD = AOALGSD
1855     RESIDENT PROCESSORS =
1856     S1/LGSD1
1857     INSTRUCTION LIST =
1858     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1859     EXECUTE A TOTAL OF ; 1 MESSAGE
1860 * LGSD1
1861     NAME = FCS D1
1862     CONCURRENT EXECUTION = YES
1863     ITERATION PERIOD = FCSLGSD1
1864     RESIDENT PROCESSORS =
1865     S1/LGSD1
1866     INSTRUCTION LIST =
1867     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1868     EXECUTE A TOTAL OF ; 1 MESSAGE
1869 * LGSD1
1870     NAME = FIC D1
1871     CONCURRENT EXECUTION = YES
1872     ITERATION PERIOD = FICLGSD1
1873     RESIDENT PROCESSORS =
1874     S1/LGSD1
1875     INSTRUCTION LIST =
1876     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1877     EXECUTE A TOTAL OF ; 1 MESSAGE
1878 * LGSD1
1879     NAME = TIN D1
1880     CONCURRENT EXECUTION = YES
1881     ITERATION PERIOD = TINLGSD1
1882     RESIDENT PROCESSORS =
1883     S1/LGSD1
1884     INSTRUCTION LIST =
1885     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1886     EXECUTE A TOTAL OF ; 1 MESSAGE
1887 * LGSD1
1888     NAME = SPR D1
1889     CONCURRENT EXECUTION = YES
1890     ITERATION PERIOD = SPRLGSD
1891     RESIDENT PROCESSORS =
1892     S1/LGSD1
1893     INSTRUCTION LIST =
1894     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1895     EXECUTE A TOTAL OF ; 1 MESSAGE
1896 * LGSD1
1897     NAME = AE1 D1
1898     CONCURRENT EXECUTION = YES
1899     ITERATION PERIOD = AE1LGSD
1900     RESIDENT PROCESSORS =

```

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```

1901     S1/LGSD1
1902     INSTRUCTION LIST =
1903     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1904     EXECUTE A TOTAL OF ; 1 MESSAGE
1905 * LGSD1
1906     NAME = SHP D1
1907     CONCURRENT EXECUTION = YES
1908     ITERATION PERIOD = SHPLGSD
1909     RESIDENT PROCESSORS =
1910     S1/LGSD1
1911     INSTRUCTION LIST =
1912     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1913     EXECUTE A TOTAL OF ; 1 MESSAGE
1914 * LGSD1

```

```

1915 NAME = FET D1
1916 CONCURRENT EXECUTION = YES
1917 ITERATION PERIOD = FETLGSD
1918 RESIDENT PROCESSORS =
1919 S1/LGSD1
1920 INSTRUCTION LIST =
1921 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1922 EXECUTE A TOTAL OF ; 1 MESSAGE
1923 * LGSD1
1924 NAME = TRM D1
1925 CONCURRENT EXECUTION = YES
1926 ITERATION PERIOD = TRMLGSD1
1927 RESIDENT PROCESSORS =
1928 S1/LGSD1
1929 INSTRUCTION LIST =
1930 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1931 EXECUTE A TOTAL OF ; 1 MESSAGE
1932
1933 ***** STATION LGSM 1 # 1
1934 * INDIVIDUAL 1.500 -1.500 15
1935 HARDWARE TYPE = PROCESSING
1936 NAME = S1/LGSM 1
1937 LOCATION = 72.968 91.649
1938 STYLE/COLOR = 1 3
1939 BASIC CYCLE TIME = 0. MICROSEC
1940 INPUT CONTROLLER = YES
1941 INSTRUCTION REPERTOIRE =
1942 INSTRUCTION TYPE = PROCESSING
1943 NAME ; NO/OP
1944 TIME ; 0 CYCLES
1945 INSTRUCTION TYPE = MESSAGE
1946 NAME ; MESSAGE
1947 MESSAGE ; REQUEST FROM SERVER
1948 LENGTH ; 200 BITS
1949 INHIBIT MESSAGE TO SELF ; YES
1950 DESTINATION PROCESSOR ; R7/FILE SERVER
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```

1951 QUEUE FLAG ; YES
1952 NAME ; UPDATE FILES
1953 MESSAGE ; UPDATE FILES
1954 LENGTH ; SDF2/LGSM 1
1955 INHIBIT MESSAGE TO SELF ; YES
1956 DESTINATION PROCESSOR ; R7/FILE SERVER
1957 QUEUE FLAG ; YES
1958 INSTRUCTION TYPE = READ
1959 NAME ; GET TRANSACTION MODULE
1960 STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 1
1961 FILE ACCESSED ; GENERAL STORAGE
1962 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
1963 ALLOWABLE BUSSES ;
1964 S1/TD/LGSM 1
1965
1966 HARDWARE TYPE = STORAGE
1967 NAME = S1/SD/LGSM 1
1968 CAPACITY = 1090519040. BITS
1969 BITS PER WORD = 4000. BITS
1970 WORD ACCESS TIME = 48.83 MICROSEC
1971 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
1972 NUMBER OF PORTS = 1
1973
1974 HARDWARE TYPE = DATA TRANSFER
1975 NAME = S1/TD/LGSM 1
1976 BITS PER CYCLE = 1 BITS
1977 BUS CONNECTIONS =

```

```

1978      S1/LGSM 1
1979      S1/SD/LGSM 1
1980
1981  SOFTWARE TYPE = MODULE
1982  * LGSM 1
1983      NAME = UPDATE SERVER M1
1984      CONCURRENT EXECUTION = YES
1985      ALLOWED PROCESSORS =
1986          S1/LGSM 1
1987      REQUIRED MESSAGES =
1988      SEND REPLY TO NODE
1989      INSTRUCTION LIST =
1990          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
1991          EXECUTE A TOTAL OF ; 1 UPDATE FILES
1992  * LGSM 1
1993      NAME = REC M1
1994      CONCURRENT EXECUTION = YES
1995      ITERATION PERIOD = RECLGSM1
1996      RESIDENT PROCESSORS =
1997          S1/LGSM 1
1998      INSTRUCTION LIST =
1999          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2000          EXECUTE A TOTAL OF ; 1 MESSAGE
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```

2001  * LGSM 1
2002      NAME = ISU M1
2003      CONCURRENT EXECUTION = YES
2004      ITERATION PERIOD = ISULGSM1
2005      RESIDENT PROCESSORS =
2006          S1/LGSM 1
2007      INSTRUCTION LIST =
2008          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2009          EXECUTE A TOTAL OF ; 1 MESSAGE
2010  * LGSM 1
2011      NAME = DOR M1
2012      CONCURRENT EXECUTION = YES
2013      ITERATION PERIOD = DORLGSM1
2014      RESIDENT PROCESSORS =
2015          S1/LGSM 1
2016      INSTRUCTION LIST =
2017          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2018          EXECUTE A TOTAL OF ; 1 MESSAGE
2019  * LGSM 1
2020      NAME = LPS M1
2021      CONCURRENT EXECUTION = YES
2022      ITERATION PERIOD = LPSLGSM1
2023      RESIDENT PROCESSORS =
2024          S1/LGSM 1
2025      INSTRUCTION LIST =
2026          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2027          EXECUTE A TOTAL OF ; 1 MESSAGE
2028  * LGSM 1
2029      NAME = DUO M1
2030      CONCURRENT EXECUTION = YES
2031      ITERATION PERIOD = DUOLGSM1
2032      RESIDENT PROCESSORS =
2033          S1/LGSM 1
2034      INSTRUCTION LIST =
2035          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2036          EXECUTE A TOTAL OF ; 1 MESSAGE
2037  * LGSM 1
2038      NAME = AOA M1
2039      CONCURRENT EXECUTION = YES
2040      ITERATION PERIOD = AOALGSM1

```

```

2041     RESIDENT PROCESSORS =
2042         S1/LGSM 1
2043     INSTRUCTION LIST =
2044         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2045         EXECUTE A TOTAL OF ; 1 MESSAGE
2046 * LGSM 1
2047     NAME = FCS M1
2048         CONCURRENT EXECUTION = YES
2049         ITERATION PERIOD = FCSLGSM1
2050     RESIDENT PROCESSORS =
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```

2051     S1/LGSM 1
2052     INSTRUCTION LIST =
2053         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2054         EXECUTE A TOTAL OF ; 1 MESSAGE
2055 * LGSM 1
2056     NAME = TIN M1
2057         CONCURRENT EXECUTION = YES
2058         ITERATION PERIOD = TINLGSM1
2059     RESIDENT PROCESSORS =
2060         S1/LGSM 1
2061     INSTRUCTION LIST =
2062         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2063         EXECUTE A TOTAL OF ; 1 MESSAGE
2064 * LGSM 1
2065     NAME = FIL M1
2066         CONCURRENT EXECUTION = YES
2067         ITERATION PERIOD = FILLGSM
2068     RESIDENT PROCESSORS =
2069         S1/LGSM 1
2070     INSTRUCTION LIST =
2071         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2072         EXECUTE A TOTAL OF ; 1 MESSAGE
2073 * LGSM 1
2074     NAME = SPR M1
2075         CONCURRENT EXECUTION = YES
2076         ITERATION PERIOD = SPRLGSM1
2077     RESIDENT PROCESSORS =
2078         S1/LGSM 1
2079     INSTRUCTION LIST =
2080         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2081         EXECUTE A TOTAL OF ; 1 MESSAGE
2082 * LGSM 1
2083     NAME = AE1 M1
2084         CONCURRENT EXECUTION = YES
2085         ITERATION PERIOD = AE1LGSM1
2086     RESIDENT PROCESSORS =
2087         S1/LGSM 1
2088     INSTRUCTION LIST =
2089         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2090         EXECUTE A TOTAL OF ; 1 MESSAGE
2091 * LGSM 1
2092     NAME = SHP M1
2093         CONCURRENT EXECUTION = YES
2094         ITERATION PERIOD = SHPLGSM1
2095     RESIDENT PROCESSORS =
2096         S1/LGSM 1
2097     INSTRUCTION LIST =
2098         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2099         EXECUTE A TOTAL OF ; 1 MESSAGE
2100 * LGSM 1
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```

2101 NAME = FTR M1
2102 CONCURRENT EXECUTION = YES
2103 ITERATION PERIOD = FTRLGSM1
2104 RESIDENT PROCESSORS =
2105 S1/LGSM 1
2106 INSTRUCTION LIST =
2107 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2108 EXECUTE A TOTAL OF ; 1 MESSAGE
2109 * LGSM 1
2110 NAME = FET M1
2111 CONCURRENT EXECUTION = YES
2112 ITERATION PERIOD = FETLGSM1
2113 RESIDENT PROCESSORS =
2114 S1/LGSM 1
2115 INSTRUCTION LIST =
2116 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2117 EXECUTE A TOTAL OF ; 1 MESSAGE
2118 * LGSM 1
2119 NAME = TRM M1
2120 CONCURRENT EXECUTION = YES
2121 ITERATION PERIOD = TRMLGSM1
2122 RESIDENT PROCESSORS =
2123 S1/LGSM 1
2124 INSTRUCTION LIST =
2125 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2126 EXECUTE A TOTAL OF ; 1 MESSAGE
2127
2128 ***** STATION LGSC 1 # 1
2129 * INDIVIDUAL 1.500 -1.500 15
2130 HARDWARE TYPE = PROCESSING
2131 NAME = S1/LGSC 1
2132 LOCATION = 268.106 93.168
2133 STYLE/COLOR = 1 3
2134 BASIC CYCLE TIME = 0. MICROSEC
2135 INPUT CONTROLLER = YES
2136 INSTRUCTION REPERTOIRE =
2137 INSTRUCTION TYPE = PROCESSING
2138 NAME ; NO/OP
2139 TIME ; 0 CYCLES
2140 INSTRUCTION TYPE = MESSAGE
2141 NAME ; MESSAGE
2142 MESSAGE ; REQUEST FROM SERVER
2143 LENGTH ; 200 BITS
2144 INHIBIT MESSAGE TO SELF ; YES
2145 DESTINATION PROCESSOR ; R8/FILE SERVER
2146 QUEUE FLAG ; YES
2147 NAME ; UPDATE FILES
2148 MESSAGE ; UPDATE FILES
2149 LENGTH ; SDF2/LGSC 1
2150 INHIBIT MESSAGE TO SELF ; YES

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```

2151 DESTINATION PROCESSOR ; R8/FILE SERVER
2152 QUEUE FLAG ; YES
2153 INSTRUCTION TYPE = READ
2154 NAME ; GET TRANSACTION MODULE
2155 STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 1
2156 FILE ACCESSED ; GENERAL STORAGE
2157 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2158 ALLOWABLE BUSSES ;
2159 S1/TD/LGSC 1
2160
2161 HARDWARE TYPE = STORAGE
2162 NAME = S1/SD/LGSC 1

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```

2163     CAPACITY =      1090519040. BITS
2164     BITS PER WORD =      4000. BITS
2165     WORD ACCESS TIME =  48.83 MICROSEC
2166     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2167     NUMBER OF PORTS = 1
2168
2169     HARDWARE TYPE = DATA TRANSFER
2170     NAME = S1/TD/LGSC 1
2171     BITS PER CYCLE = 1 BITS
2172     BUS CONNECTIONS =
2173         S1/LGSC 1
2174         S1/SD/LGSC 1
2175
2176     SOFTWARE TYPE = MODULE
2177     * LGSC 1
2178     NAME = UPDATE SERVER C1
2179     CONCURRENT EXECUTION = YES
2180     ALLOWED PROCESSORS =
2181         S1/LGSC 1
2182     REQUIRED MESSAGES =
2183         SEND REPLY TO NODE
2184     INSTRUCTION LIST =
2185         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2186         EXECUTE A TOTAL OF ; 1 UPDATE FILES
2187     * LGSC 1
2188     NAME = REC C1
2189     CONCURRENT EXECUTION = YES
2190     ITERATION PERIOD = RECLGSC
2191     RESIDENT PROCESSORS =
2192         S1/LGSC 1
2193     INSTRUCTION LIST =
2194         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2195         EXECUTE A TOTAL OF ; 1 MESSAGE
2196     * LGSC 1
2197     NAME = ISU C1
2198     CONCURRENT EXECUTION = YES
2199     ITERATION PERIOD = ISULGSC1
2200     RESIDENT PROCESSORS =
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```

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```

2201     S1/LGSC 1
2202     INSTRUCTION LIST =
2203         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2204         EXECUTE A TOTAL OF ; 1 MESSAGE
2205     * LGSC 1
2206     NAME = DOR C1
2207     CONCURRENT EXECUTION = YES
2208     ITERATION PERIOD = DORLGSC1
2209     RESIDENT PROCESSORS =
2210         S1/LGSC 1
2211     INSTRUCTION LIST =
2212         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2213         EXECUTE A TOTAL OF ; 1 MESSAGE
2214     * LGSC 1
2215     NAME = DUO C1
2216     CONCURRENT EXECUTION = YES
2217     ITERATION PERIOD = DUOLGSC1
2218     RESIDENT PROCESSORS =
2219         S1/LGSC 1
2220     INSTRUCTION LIST =
2221         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2222         EXECUTE A TOTAL OF ; 1 MESSAGE
2223     * LGSC 1
2224     NAME = AOA C1
2225     CONCURRENT EXECUTION = YES

```

```

2226     ITERATION PERIOD = AOALGSC1
2227     RESIDENT PROCESSORS =
2228         S1/LGSC 1
2229     INSTRUCTION LIST =
2230         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2231         EXECUTE A TOTAL OF ; 1 MESSAGE
2232 * LGSC 1
2233     NAME = FCS C1
2234     CONCURRENT EXECUTION = YES
2235     ITERATION PERIOD = FCSLGSC1
2236     RESIDENT PROCESSORS =
2237         S1/LGSC 1
2238     INSTRUCTION LIST =
2239         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2240         EXECUTE A TOTAL OF ; 1 MESSAGE
2241 * LGSC 1
2242     NAME = TIN C1
2243     CONCURRENT EXECUTION = YES
2244     ITERATION PERIOD = TINLGSC1
2245     RESIDENT PROCESSORS =
2246         S1/LGSC 1
2247     INSTRUCTION LIST =
2248         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2249         EXECUTE A TOTAL OF ; 1 MESSAGE
2250 * LGSC 1

```

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```

2251     NAME = FID C1
2252     CONCURRENT EXECUTION = YES
2253     ITERATION PERIOD = FIDLGSC1
2254     RESIDENT PROCESSORS =
2255         S1/LGSC 1
2256     INSTRUCTION LIST =
2257         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2258         EXECUTE A TOTAL OF ; 1 MESSAGE
2259 * LGSC 1
2260     NAME = FIL C1
2261     CONCURRENT EXECUTION = YES
2262     ITERATION PERIOD = FILLGSC1
2263     RESIDENT PROCESSORS =
2264         S1/LGSC 1
2265     INSTRUCTION LIST =
2266         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2267         EXECUTE A TOTAL OF ; 1 MESSAGE
2268 * LGSC 1
2269     NAME = SPR C1
2270     CONCURRENT EXECUTION = YES
2271     ITERATION PERIOD = SPRLGSC1
2272     RESIDENT PROCESSORS =
2273         S1/LGSC 1
2274     INSTRUCTION LIST =
2275         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2276         EXECUTE A TOTAL OF ; 1 MESSAGE
2277 * LGSC 1
2278     NAME = FCU C1
2279     CONCURRENT EXECUTION = YES
2280     ITERATION PERIOD = FCULGSC1
2281     RESIDENT PROCESSORS =
2282         S1/LGSC 1
2283     INSTRUCTION LIST =
2284         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2285         EXECUTE A TOTAL OF ; 1 MESSAGE
2286 * LGSC 1
2287     NAME = SHP C1
2288     CONCURRENT EXECUTION = YES

```


2289 ITERATION PERIOD = SHPLGSC1
 2290 RESIDENT PROCESSORS =
 2291 S1/LGSC 1
 2292 INSTRUCTION LIST =
 2293 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2294 EXECUTE A TOTAL OF ; 1 MESSAGE
 2295 * LGSC 1
 2296 NAME = BPA C1
 2297 CONCURRENT EXECUTION = YES
 2298 ITERATION PERIOD = BPALGSC
 2299 RESIDENT PROCESSORS =
 2300 S1/LGSC 1

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2301 INSTRUCTION LIST =
 2302 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2303 EXECUTE A TOTAL OF ; 1 MESSAGE
 2304 * LGSC 1
 2305 NAME = TRM C1
 2306 CONCURRENT EXECUTION = YES
 2307 ITERATION PERIOD = TRMLGSC1
 2308 RESIDENT PROCESSORS =
 2309 S1/LGSC 1
 2310 INSTRUCTION LIST =
 2311 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2312 EXECUTE A TOTAL OF ; 1 MESSAGE
 2313
 2314 ***** STATION FMFS # 1
 2315 * INDIVIDUAL 1.500 -1.500 15
 2316 HARDWARE TYPE = PROCESSING
 2317 NAME = S1/FMFS
 2318 LOCATION = 39.049 61.105
 2319 STYLE/COLOR = 1 3
 2320 BASIC CYCLE TIME = 0. MICROSEC
 2321 INPUT CONTROLLER = YES
 2322 INSTRUCTION REPERTOIRE =
 2323 INSTRUCTION TYPE = PROCESSING
 2324 NAME ; NO/OP
 2325 TIME ; 0 CYCLES
 2326 INSTRUCTION TYPE = MESSAGE
 2327 NAME ; MESSAGE
 2328 MESSAGE ; REQUEST FROM SERVER
 2329 LENGTH ; 200 BITS
 2330 INHIBIT MESSAGE TO SELF ; YES
 2331 DESTINATION PROCESSOR ; R9/FILE SERVER
 2332 QUEUE FLAG ; YES
 2333 NAME ; UPDATE FILES
 2334 MESSAGE ; UPDATE FILES
 2335 LENGTH ; SDF2/FMFS
 2336 INHIBIT MESSAGE TO SELF ; YES
 2337 DESTINATION PROCESSOR ; R9/FILE SERVER
 2338 QUEUE FLAG ; YES
 2339 INSTRUCTION TYPE = READ
 2340 NAME ; GET TRANSACTION MODULE
 2341 STORAGE DEVICE TO ACCESS ; S1/SD/FMFS
 2342 FILE ACCESSED ; GENERAL STORAGE
 2343 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
 2344 ALLOWABLE BUSSES ;
 2345 S1/TD/FMFS
 2346
 2347 HARDWARE TYPE = STORAGE
 2348 NAME = S1/SD/FMFS
 2349 CAPACITY = 1090519040. BITS
 2350 BITS PER WORD = 4000. BITS

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```

2351     WORD ACCESS TIME = 48.83 MICROSEC
2352     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2353     NUMBER OF PORTS = 1
2354
2355     HARDWARE TYPE = DATA TRANSFER
2356     NAME = S1/TD/FMFS
2357     BITS PER CYCLE = 1 BITS
2358     BUS CONNECTIONS =
2359     S1/FMFS
2360     S1/SD/FMFS
2361
2362     SOFTWARE TYPE = MODULE
2363     * FMFS
2364     NAME = UPDATE SERVER FMFS
2365     CONCURRENT EXECUTION = YES
2366     ALLOWED PROCESSORS =
2367     S1/FMFS
2368     REQUIRED MESSAGES =
2369     SEND REPLY TO NODE
2370     INSTRUCTION LIST =
2371     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2372     EXECUTE A TOTAL OF ; 1 UPDATE FILES
2373     * FMFS
2374     NAME = ISU RM
2375     CONCURRENT EXECUTION = YES
2376     ITERATION PERIOD = ISURMSS
2377     RESIDENT PROCESSORS =
2378     S1/FMFS
2379     INSTRUCTION LIST =
2380     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2381     EXECUTE A TOTAL OF ; 1 MESSAGE
2382     * FMFS
2383     NAME = FK1 FMFS
2384     CONCURRENT EXECUTION = YES
2385     ITERATION PERIOD = FK1FMFS
2386     RESIDENT PROCESSORS =
2387     S1/FMFS
2388     INSTRUCTION LIST =
2389     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2390     EXECUTE A TOTAL OF ; 1 MESSAGE
2391     * FMFS
2392     NAME = BKA FMFS
2393     CONCURRENT EXECUTION = YES
2394     ITERATION PERIOD = BKA FMFS
2395     RESIDENT PROCESSORS =
2396     S1/FMFS
2397     INSTRUCTION LIST =
2398     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2399     EXECUTE A TOTAL OF ; 1 MESSAGE
2400     * FMFS

```

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```

2401     NAME = DUO MISC
2402     CONCURRENT EXECUTION = YES
2403     ITERATION PERIOD = DUOMISC
2404     RESIDENT PROCESSORS =
2405     S1/FMFS
2406     INSTRUCTION LIST =
2407     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2408     EXECUTE A TOTAL OF ; 1 MESSAGE
2409     * FMFS
2410     NAME = AOA MISC

```

```

2411     CONCURRENT EXECUTION = YES
2412     ITERATION PERIOD = AOAMISC
2413     RESIDENT PROCESSORS =
2414         S1/FMFS
2415     INSTRUCTION LIST =
2416         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2417         EXECUTE A TOTAL OF ; 1 MESSAGE
2418 * FMFS
2419     NAME = TIN CE
2420     CONCURRENT EXECUTION = YES
2421     ITERATION PERIOD = TINCLOLW
2422     RESIDENT PROCESSORS =
2423         S1/FMFS
2424     INSTRUCTION LIST =
2425         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2426         EXECUTE A TOTAL OF ; 1 MESSAGE
2427 * FMFS
2428     NAME = FIL CE
2429     CONCURRENT EXECUTION = YES
2430     ITERATION PERIOD = FILCEOLM
2431     RESIDENT PROCESSORS =
2432         S1/FMFS
2433     INSTRUCTION LIST =
2434         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2435         EXECUTE A TOTAL OF ; 1 MESSAGE
2436
2437 ***** STATION DOMR # 1
2438 * INDIVIDUAL 1.500 -1.500 15
2439 HARDWARE TYPE = PROCESSING
2440     NAME = S1/DOMR
2441         LOCATION = 85.530 61.442
2442         STYLE/COLOR = 1 3
2443         BASIC CYCLE TIME = 0. MICROSEC
2444         INPUT CONTROLLER = YES
2445         INSTRUCTION REPERTOIRE =
2446             INSTRUCTION TYPE = PROCESSING
2447                 NAME ; NO/OP
2448                 TIME ; 0 CYCLES
2449             INSTRUCTION TYPE = MESSAGE
2450                 NAME ; MESSAGE
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```

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```

2451     MESSAGE ; REQUEST FROM SERVER
2452     LENGTH ; 200 BITS
2453     INHIBIT MESSAGE TO SELF ; YES
2454     DESTINATION PROCESSOR ; R10/FILE SERVER
2455     QUEUE FLAG ; YES
2456     NAME ; UPDATE FILES
2457     MESSAGE ; UPDATE FILES
2458     LENGTH ; SDF2/DOMR
2459     INHIBIT MESSAGE TO SELF ; YES
2460     DESTINATION PROCESSOR ; R10/FILE SERVER
2461     QUEUE FLAG ; YES
2462     INSTRUCTION TYPE = READ
2463     NAME ; GET TRANSACTION MODULE
2464     STORAGE DEVICE TO ACCESS ; S1/SD/DOMR
2465     FILE ACCESSED ; GENERAL STORAGE
2466     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2467     ALLOWABLE BUSSES ;
2468         S1/TD/DOMR
2469
2470 HARDWARE TYPE = STORAGE
2471     NAME = S1/SD/DOMR
2472     CAPACITY = 1090519040. BITS
2473     BITS PER WORD = 4000. BITS

```

```

2474     WORD ACCESS TIME = 48.83 MICROSEC
2475     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2476     NUMBER OF PORTS = 1
2477
2478     HARDWARE TYPE = DATA TRANSFER
2479     NAME = S1/TD/DOMR
2480     BITS PER CYCLE = 1 BITS
2481     BUS CONNECTIONS =
2482         S1/DOMR
2483         S1/SD/DOMR
2484
2485     SOFTWARE TYPE = MODULE
2486     * DOMR
2487     NAME = UPDATE SERVER DO
2488     CONCURRENT EXECUTION = YES
2489     ALLOWED PROCESSORS =
2490         S1/DOMR
2491     REQUIRED MESSAGES =
2492     SEND REPLY TO NODE
2493     INSTRUCTION LIST =
2494         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2495         EXECUTE A TOTAL OF ; 1 UPDATE FILES
2496     * DOMR
2497     NAME = REC DO
2498     CONCURRENT EXECUTION = YES
2499     ITERATION PERIOD = RECDOMR
2500     RESIDENT PROCESSORS =
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```

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```

2501     S1/DOMR
2502     INSTRUCTION LIST =
2503         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2504         EXECUTE A TOTAL OF ; 1 MESSAGE
2505     * DOMR
2506     NAME = ISU LGSF
2507     CONCURRENT EXECUTION = YES
2508     ITERATION PERIOD = ISULGSF
2509     RESIDENT PROCESSORS =
2510         S1/DOMR
2511     INSTRUCTION LIST =
2512         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2513         EXECUTE A TOTAL OF ; 1 MESSAGE
2514     * DOMR
2515     NAME = DOR DO
2516     CONCURRENT EXECUTION = YES
2517     ITERATION PERIOD = DORDOMR
2518     RESIDENT PROCESSORS =
2519         S1/DOMR
2520     INSTRUCTION LIST =
2521         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2522         EXECUTE A TOTAL OF ; 1 MESSAGE
2523     * DOMR
2524     NAME = DUO DO
2525     CONCURRENT EXECUTION = YES
2526     ITERATION PERIOD = DUODOMR
2527     RESIDENT PROCESSORS =
2528         S1/DOMR
2529     INSTRUCTION LIST =
2530         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2531         EXECUTE A TOTAL OF ; 1 MESSAGE
2532     * DOMR
2533     NAME = AOA DO
2534     CONCURRENT EXECUTION = YES
2535     ITERATION PERIOD = AOADOMR
2536     RESIDENT PROCESSORS =

```

```

2537      S1/DOMR
2538      INSTRUCTION LIST =
2539      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2540      EXECUTE A TOTAL OF ; 1 MESSAGE
2541 * DOMR
2542      NAME = TIN DO
2543      CONCURRENT EXECUTION = YES
2544      ITERATION PERIOD = TINDOMR
2545      RESIDENT PROCESSORS =
2546      S1/DOMR
2547      INSTRUCTION LIST =
2548      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2549      EXECUTE A TOTAL OF ; 1 MESSAGE
2550 * DOMR
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```

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```

2551      NAME = SPR DM
2552      CONCURRENT EXECUTION = YES
2553      ITERATION PERIOD = SPRDMSMS
2554      RESIDENT PROCESSORS =
2555      S1/DOMR
2556      INSTRUCTION LIST =
2557      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2558      EXECUTE A TOTAL OF ; 1 MESSAGE
2559 * DOMR
2560      NAME = SHP DM
2561      CONCURRENT EXECUTION = YES
2562      ITERATION PERIOD = SHPDMSM
2563      RESIDENT PROCESSORS =
2564      S1/DOMR
2565      INSTRUCTION LIST =
2566      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2567      EXECUTE A TOTAL OF ; 1 MESSAGE
2568 * DOMR
2569      NAME = TRN DM
2570      CONCURRENT EXECUTION = YES
2571      ITERATION PERIOD = TRMDMSMR
2572      RESIDENT PROCESSORS =
2573      S1/DOMR
2574      INSTRUCTION LIST =
2575      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2576      EXECUTE A TOTAL OF ; 1 MESSAGE
2577
2578 ***** STATION LGSD 2 # 1
2579 * INDIVIDUAL 1.500 -1.500 15
2580 HARDWARE TYPE = PROCESSING
2581      NAME = S1/LGSD 2
2582      LOCATION = 80.824 5.416
2583      STYLE/COLOR = 1 3
2584      BASIC CYCLE TIME = 0. MICROSEC
2585      INPUT CONTROLLER = YES
2586      INSTRUCTION REPERTOIRE =
2587      INSTRUCTION TYPE = PROCESSING
2588      NAME ; NO/OP
2589      TIME ; 0 CYCLES
2590      INSTRUCTION TYPE = MESSAGE
2591      NAME ; MESSAGE
2592      MESSAGE ; REQUEST FROM SERVER
2593      LENGTH ; 200 BITS
2594      INHIBIT MESSAGE TO SELF ; YES
2595      DESTINATION PROCESSOR ; R11/FILE SERVER
2596      QUEUE FLAG ; YES
2597      NAME ; UPDATE FILES
2598      MESSAGE ; UPDATE FILES
2599      LENGTH ; SDF2/LGSD 2

```

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```
2601 DESTINATION PROCESSOR ; R11/FILE SERVER
2602 QUEUE FLAG ; YES
2603 INSTRUCTION TYPE = READ
2604 NAME ; GET TRANSACTION MODULE
2605 STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 2
2606 FILE ACCESSED ; GENERAL STORAGE
2607 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2608 ALLOWABLE BUSSES ;
2609 S1/TD/LGSD 2
2610
2611 HARDWARE TYPE = STORAGE
2612 NAME = S1/SD/LGSD 2
2613 CAPACITY = 1090519040. BITS
2614 BITS PER WORD = 4000. BITS
2615 WORD ACCESS TIME = 48.83 MICROSEC
2616 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2617 NUMBER OF PORTS = 1
2618
2619 HARDWARE TYPE = DATA TRANSFER
2620 NAME = S1/TD/LGSD 2
2621 BITS PER CYCLE = 1 BITS
2622 BUS CONNECTIONS =
2623 S1/LGSD 2
2624 S1/SD/LGSD 2
2625
2626 SOFTWARE TYPE = MODULE
2627 * LGSD 2
2628 NAME = UPDATE SERVER D2
2629 CONCURRENT EXECUTION = YES
2630 ALLOWED PROCESSORS =
2631 S1/LGSD 2
2632 REQUIRED MESSAGES =
2633 SEND REPLY TO NODE
2634 INSTRUCTION LIST =
2635 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2636 EXECUTE A TOTAL OF ; 1 UPDATE FILES
2637 * LGSD 2
2638 NAME = REC D2
2639 CONCURRENT EXECUTION = YES
2640 ITERATION PERIOD = RECLGSD2
2641 RESIDENT PROCESSORS =
2642 S1/LGSD 2
2643 INSTRUCTION LIST =
2644 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2645 EXECUTE A TOTAL OF ; 1 MESSAGE
2646 * LGSD 2
2647 NAME = ISU D2
2648 CONCURRENT EXECUTION = YES
2649 ITERATION PERIOD = ISULGSD2
2650 RESIDENT PROCESSORS =
```

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```
2651 S1/LGSD 2
2652 INSTRUCTION LIST =
2653 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2654 EXECUTE A TOTAL OF ; 1 MESSAGE
2655 * LGSD 2
2656 NAME = DOR D2
2657 CONCURRENT EXECUTION = YES
```

```

2658     ITERATION PERIOD = DORLGSD2
2659     RESIDENT PROCESSORS =
2660         S1/LGSD 2
2661     INSTRUCTION LIST =
2662         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2663         EXECUTE A TOTAL OF ; 1 MESSAGE
2664 * LGSD 2
2665     NAME = DUO D2
2666     CONCURRENT EXECUTION = YES
2667     ITERATION PERIOD = DUOLGSD2
2668     RESIDENT PROCESSORS =
2669         S1/LGSD 2
2670     INSTRUCTION LIST =
2671         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2672         EXECUTE A TOTAL OF ; 1 MESSAGE
2673 * LGSD 2
2674     NAME = FCS D2
2675     CONCURRENT EXECUTION = YES
2676     ITERATION PERIOD = FCSLGSD2
2677     RESIDENT PROCESSORS =
2678         S1/LGSD 2
2679     INSTRUCTION LIST =
2680         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2681         EXECUTE A TOTAL OF ; 1 MESSAGE
2682 * LGSD 2
2683     NAME = FIC D2
2684     CONCURRENT EXECUTION = YES
2685     ITERATION PERIOD = FICLGSD2
2686     RESIDENT PROCESSORS =
2687         S1/LGSD 2
2688     INSTRUCTION LIST =
2689         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2690         EXECUTE A TOTAL OF ; 1 MESSAGE
2691 * LGSD 2
2692     NAME = TIN D2
2693     CONCURRENT EXECUTION = YES
2694     ITERATION PERIOD = TINLGSD2
2695     RESIDENT PROCESSORS =
2696         S1/LGSD 2
2697     INSTRUCTION LIST =
2698         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2699         EXECUTE A TOTAL OF ; 1 MESSAGE
2700 * LGSD 2

```

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```

2701     NAME = TRM D2
2702     CONCURRENT EXECUTION = YES
2703     ITERATION PERIOD = TRMLGSD2
2704     RESIDENT PROCESSORS =
2705         S1/LGSD 2
2706     INSTRUCTION LIST =
2707         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2708         EXECUTE A TOTAL OF ; 1 MESSAGE
2709
2710 ***** STATION LGSD 3 # 1
2711 * INDIVIDUAL 1.500 -1.500 15
2712 HARDWARE TYPE = PROCESSING
2713     NAME = S1/LGSD 3
2714     LOCATION = 100.824 5.416
2715     STYLE/COLOR = 1 3
2716     BASIC CYCLE TIME = 0. MICROSEC
2717     INPUT CONTROLLER = YES
2718     INSTRUCTION REPERTOIRE =
2719     INSTRUCTION TYPE = PROCESSING
2720     NAME ; NO/OP

```

```

2721         TIME ; 0 CYCLES
2722     INSTRUCTION TYPE = MESSAGE
2723         NAME ; MESSAGE
2724         MESSAGE ; REQUEST FROM SERVER
2725         LENGTH ; 200 BITS
2726         INHIBIT MESSAGE TO SELF ; YES
2727         DESTINATION PROCESSOR ; R12/FILE SERVER
2728         QUEUE FLAG ; YES
2729         NAME ; UPDATE FILES
2730         MESSAGE ; UPDATE FILES
2731         LENGTH ; SDF2/LGSD 3
2732         INHIBIT MESSAGE TO SELF ; YES
2733         DESTINATION PROCESSOR ; R12/FILE SERVER
2734         QUEUE FLAG ; YES
2735     INSTRUCTION TYPE = READ
2736         NAME ; GET TRANSACTION MODULE
2737         STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 3
2738         FILE ACCESSED ; GENERAL STORAGE
2739         NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2740         ALLOWABLE BUSSES ;
2741         S1/TD/LGSD 3
2742
2743     HARDWARE TYPE = STORAGE
2744         NAME = S1/SD/LGSD 3
2745         CAPACITY = 1090519040. BITS
2746         BITS PER WORD = 4000. BITS
2747         WORD ACCESS TIME = 48.83 MICROSEC
2748         OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2749         NUMBER OF PORTS = 1
2750
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```

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```

2751     HARDWARE TYPE = DATA TRANSFER
2752         NAME = S1/TD/LGSD 3
2753         BITS PER CYCLE = 1 BITS
2754         BUS CONNECTIONS =
2755             S1/LGSD 3
2756             S1/SD/LGSD 3
2757
2758     SOFTWARE TYPE = MODULE
2759     * LGSD 3
2760         NAME = UPDATE SERVER D3
2761         CONCURRENT EXECUTION = YES
2762         ALLOWED PROCESSORS =
2763             S1/LGSD 3
2764         REQUIRED MESSAGES =
2765             SEND REPLY TO NODE
2766         INSTRUCTION LIST =
2767             EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2768             EXECUTE A TOTAL OF ; 1 UPDATE FILES
2769     * LGSD 3
2770         NAME = REC D3
2771         CONCURRENT EXECUTION = YES
2772         ITERATION PERIOD = RECLGSD3
2773         RESIDENT PROCESSORS =
2774             S1/LGSD 3
2775         INSTRUCTION LIST =
2776             EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2777             EXECUTE A TOTAL OF ; 1 MESSAGE
2778     * LGSD 3
2779         NAME = ISU D3
2780         CONCURRENT EXECUTION = YES
2781         ITERATION PERIOD = ISULGSD3
2782         RESIDENT PROCESSORS =
2783             S1/LGSD 3

```


2784 INSTRUCTION LIST =
 2785 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2786 EXECUTE A TOTAL OF ; 1 MESSAGE
 2787 * LGSD 3
 2788 NAME = DOR D3
 2789 CONCURRENT EXECUTION = YES
 2790 ITERATION PERIOD = DORLGSD3
 2791 RESIDENT PROCESSORS =
 2792 S1/LGSD 3
 2793 INSTRUCTION LIST =
 2794 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2795 EXECUTE A TOTAL OF ; 1 MESSAGE
 2796 * LGSD 3
 2797 NAME = DUO D3
 2798 CONCURRENT EXECUTION = YES
 2799 ITERATION PERIOD = DUOLGSD3
 2800 RESIDENT PROCESSORS =
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2801 S1/LGSD 3
 2802 INSTRUCTION LIST =
 2803 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2804 EXECUTE A TOTAL OF ; 1 MESSAGE
 2805 * LGSD 3
 2806 NAME = FCS D3
 2807 CONCURRENT EXECUTION = YES
 2808 ITERATION PERIOD = FCSLGSD3
 2809 RESIDENT PROCESSORS =
 2810 S1/LGSD 3
 2811 INSTRUCTION LIST =
 2812 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2813 EXECUTE A TOTAL OF ; 1 MESSAGE
 2814 * LGSD 3
 2815 NAME = TIN D3
 2816 CONCURRENT EXECUTION = YES
 2817 ITERATION PERIOD = TINLGSD3
 2818 RESIDENT PROCESSORS =
 2819 S1/LGSD 3
 2820 INSTRUCTION LIST =
 2821 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2822 EXECUTE A TOTAL OF ; 1 MESSAGE
 2823 * LGSD 3
 2824 NAME = TRM D3
 2825 CONCURRENT EXECUTION = YES
 2826 ITERATION PERIOD = TRMLGSD3
 2827 RESIDENT PROCESSORS =
 2828 S1/LGSD 3
 2829 INSTRUCTION LIST =
 2830 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 2831 EXECUTE A TOTAL OF ; 1 MESSAGE
 2832
 2833 ***** STATION LGSD 4 # 1
 2834 * INDIVIDUAL 1.500 -1.500 15
 2835 HARDWARE TYPE = PROCESSING
 2836 NAME = S1/LGSD 4
 2837 LOCATION = 120.824 5.416
 2838 STYLE/COLOR = 1 3
 2839 BASIC CYCLE TIME = 0. MICROSEC
 2840 INPUT CONTROLLER = YES
 2841 INSTRUCTION REPERTOIRE =
 2842 INSTRUCTION TYPE = PROCESSING
 2843 NAME ; NO/OP
 2844 TIME ; 0 CYCLES
 2845 INSTRUCTION TYPE = MESSAGE
 2846 NAME ; MESSAGE

2847 MESSAGE ; REQUEST FROM SERVER
2848 LENGTH ; 200 BITS
2849 INHIBIT MESSAGE TO SELF ; YES
2850 DESTINATION PROCESSOR ; R13/FILE SERVER
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2851 QUEUE FLAG ; YES
2852 NAME ; UPDATE FILES
2853 MESSAGE ; UPDATE FILES
2854 LENGTH ; SDF2/LGSD 4
2855 INHIBIT MESSAGE TO SELF ; YES
2856 DESTINATION PROCESSOR ; R13/FILE SERVER
2857 QUEUE FLAG ; YES
2858 INSTRUCTION TYPE = READ
2859 NAME ; GET TRANSACTION MODULE
2860 STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 4
2861 FILE ACCESSED ; GENERAL STORAGE
2862 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2863 ALLOWABLE BUSSES ;
2864 S1/TD/LGSD 4
2865
2866 HARDWARE TYPE = STORAGE
2867 NAME = S1/SD/LGSD 4
2868 CAPACITY = 1090519040. BITS
2869 BITS PER WORD = 4000. BITS
2870 WORD ACCESS TIME = 48.83 MICROSEC
2871 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2872 NUMBER OF PORTS = 1
2873
2874 HARDWARE TYPE = DATA TRANSFER
2875 NAME = S1/TD/LGSD 4
2876 BITS PER CYCLE = 1 BITS
2877 BUS CONNECTIONS =
2878 S1/LGSD 4
2879 S1/SD/LGSD 4
2880
2881 SOFTWARE TYPE = MODULE
2882 * LGSD 4
2883 NAME = UPDATE SERVER D4
2884 CONCURRENT EXECUTION = YES
2885 ALLOWED PROCESSORS =
2886 S1/LGSD 4
2887 REQUIRED MESSAGES =
2888 SEND REPLY TO NODE
2889 INSTRUCTION LIST =
2890 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2891 EXECUTE A TOTAL OF ; 1 UPDATE FILES
2892 * LGSD 4
2893 NAME = REC D4
2894 CONCURRENT EXECUTION = YES
2895 ITERATION PERIOD = RECLGSD4
2896 RESIDENT PROCESSORS =
2897 S1/LGSD 4
2898 INSTRUCTION LIST =
2899 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2900 EXECUTE A TOTAL OF ; 1 MESSAGE
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2901 * LGSD 4
2902 NAME = ISU D4
2903 CONCURRENT EXECUTION = YES
2904 ITERATION PERIOD = ISULGSD4

```

2905     RESIDENT PROCESSORS =
2906         S1/LGSD 4
2907     INSTRUCTION LIST =
2908         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2909         EXECUTE A TOTAL OF ; 1 MESSAGE
2910 * LGSD 4
2911     NAME = DOR D4
2912     CONCURRENT EXECUTION = YES
2913     ITERATION PERIOD = DORLGSD4
2914     RESIDENT PROCESSORS =
2915         S1/LGSD 4
2916     INSTRUCTION LIST =
2917         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2918         EXECUTE A TOTAL OF ; 1 MESSAGE
2919 * LGSD 4
2920     NAME = DUO D4
2921     CONCURRENT EXECUTION = YES
2922     ITERATION PERIOD = DUOLGSD4
2923     RESIDENT PROCESSORS =
2924         S1/LGSD 4
2925     INSTRUCTION LIST =
2926         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2927         EXECUTE A TOTAL OF ; 1 MESSAGE
2928 * LGSD 4
2929     NAME = FCS D4
2930     CONCURRENT EXECUTION = YES
2931     ITERATION PERIOD = FCSLGSD4
2932     RESIDENT PROCESSORS =
2933         S1/LGSD 4
2934     INSTRUCTION LIST =
2935         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2936         EXECUTE A TOTAL OF ; 1 MESSAGE
2937 * LGSD 4
2938     NAME = TIN D4
2939     CONCURRENT EXECUTION = YES
2940     ITERATION PERIOD = TINLGSD4
2941     RESIDENT PROCESSORS =
2942         S1/LGSD 4
2943     INSTRUCTION LIST =
2944         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2945         EXECUTE A TOTAL OF ; 1 MESSAGE
2946 * LGSD 4
2947     NAME = TRM D4
2948     CONCURRENT EXECUTION = YES
2949     ITERATION PERIOD = TRMLGSD4
2950     RESIDENT PROCESSORS =

```

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```

2951     S1/LGSD 4
2952     INSTRUCTION LIST =
2953         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
2954         EXECUTE A TOTAL OF ; 1 MESSAGE
2955
2956 ***** STATION LGSD 5 # 1
2957 * INDIVIDUAL 1.500 -1.500 15
2958 HARDWARE TYPE = PROCESSING
2959     NAME = S1/LGSD 5
2960     LOCATION = 140.824 5.416
2961     STYLE/COLOR = 1 3
2962     BASIC CYCLE TIME = 0. MICROSEC
2963     INPUT CONTROLLER = YES
2964     INSTRUCTION REPERTOIRE =
2965         INSTRUCTION TYPE = PROCESSING
2966         NAME ; NO/OP
2967         TIME ; 0 CYCLES

```

```

2968      INSTRUCTION TYPE = MESSAGE
2969      NAME ; MESSAGE
2970      MESSAGE ; REQUEST FROM SERVER
2971      LENGTH ; 200 BITS
2972      INHIBIT MESSAGE TO SELF ; YES
2973      DESTINATION PROCESSOR ; R14/FILE SERVER
2974      QUEUE FLAG ; YES
2975      NAME ; UPDATE FILES
2976      MESSAGE ; UPDATE FILES
2977      LENGTH ; SDF2/LGSD 5
2978      INHIBIT MESSAGE TO SELF ; YES
2979      DESTINATION PROCESSOR ; R14/FILE SERVER
2980      QUEUE FLAG ; YES
2981      INSTRUCTION TYPE = READ
2982      NAME ; GET TRANSACTION MODULE
2983      STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 5
2984      FILE ACCESSED ; GENERAL STORAGE
2985      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
2986      ALLOWABLE BUSSES ;
2987      S1/TD/LGSD 5
2988
2989      HARDWARE TYPE = STORAGE
2990      NAME = S1/SD/LGSD 5
2991      CAPACITY = 1090519040. BITS
2992      BITS PER WORD = 4000. BITS
2993      WORD ACCESS TIME = 48.83 MICROSEC
2994      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
2995      NUMBER OF PORTS = 1
2996
2997      HARDWARE TYPE = DATA TRANSFER
2998      NAME = S1/TD/LGSD 5
2999      BITS PER CYCLE = 1 BITS
3000      BUS CONNECTIONS =
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```

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```

3001      S1/LGSD 5
3002      S1/SD/LGSD 5
3003
3004      SOFTWARE TYPE = MODULE
3005      * LGSD 5
3006      NAME = UPDATE SERVER D5
3007      CONCURRENT EXECUTION = YES
3008      ALLOWED PROCESSORS =
3009      S1/LGSD 5
3010      REQUIRED MESSAGES =
3011      SEND REPLY TO NODE
3012      INSTRUCTION LIST =
3013      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3014      EXECUTE A TOTAL OF ; 1 UPDATE FILES
3015      * LGSD 5
3016      NAME = REC D5
3017      CONCURRENT EXECUTION = YES
3018      ITERATION PERIOD = RECLGSD5
3019      RESIDENT PROCESSORS =
3020      S1/LGSD 5
3021      INSTRUCTION LIST =
3022      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3023      EXECUTE A TOTAL OF ; 1 MESSAGE
3024      * LGSD 5
3025      NAME = ISU D5
3026      CONCURRENT EXECUTION = YES
3027      ITERATION PERIOD = ISULGSD5
3028      RESIDENT PROCESSORS =
3029      S1/LGSD 5
3030      INSTRUCTION LIST =

```

```

3031     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3032     EXECUTE A TOTAL OF ; 1 MESSAGE
3033 * LGSD 5
3034     NAME = DOR D5
3035     CONCURRENT EXECUTION = YES
3036     ITERATION PERIOD = DORLGSD5
3037     RESIDENT PROCESSORS =
3038     S1/LGSD 5
3039     INSTRUCTION LIST =
3040     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3041     EXECUTE A TOTAL OF ; 1 MESSAGE
3042 * LGSD 5
3043     NAME = DUO D5
3044     CONCURRENT EXECUTION = YES
3045     ITERATION PERIOD = DUOLGSD5
3046     RESIDENT PROCESSORS =
3047     S1/LGSD 5
3048     INSTRUCTION LIST =
3049     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3050     EXECUTE A TOTAL OF ; 1 MESSAGE
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```

3051 * LGSD 5
3052     NAME = FCS D5
3053     CONCURRENT EXECUTION = YES
3054     ITERATION PERIOD = FCSLGSD5
3055     RESIDENT PROCESSORS =
3056     S1/LGSD 5
3057     INSTRUCTION LIST =
3058     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3059     EXECUTE A TOTAL OF ; 1 MESSAGE
3060 * LGSD 5
3061     NAME = TIN D5
3062     CONCURRENT EXECUTION = YES
3063     ITERATION PERIOD = TINLGSD5
3064     RESIDENT PROCESSORS =
3065     S1/LGSD 5
3066     INSTRUCTION LIST =
3067     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3068     EXECUTE A TOTAL OF ; 1 MESSAGE
3069 * LGSD 5
3070     NAME = TRM D5
3071     CONCURRENT EXECUTION = YES
3072     ITERATION PERIOD = TRMLGSD5
3073     RESIDENT PROCESSORS =
3074     S1/LGSD 5
3075     INSTRUCTION LIST =
3076     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3077     EXECUTE A TOTAL OF ; 1 MESSAGE
3078
3079 ***** STATION LGSD 6 # 1
3080 * INDIVIDUAL 1.500 -1.500 15
3081 HARDWARE TYPE = PROCESSING
3082     NAME = S1/LGSD 6
3083     LOCATION = 160.824 5.416
3084     STYLE/COLOR = 1 3
3085     BASIC CYCLE TIME = 0. MICROSEC
3086     INPUT CONTROLLER = YES
3087     INSTRUCTION REPERTOIRE =
3088     INSTRUCTION TYPE = PROCESSING
3089     NAME ; NO/OP
3090     TIME ; 0 CYCLES
3091     INSTRUCTION TYPE = MESSAGE
3092     NAME ; MESSAGE
3093     MESSAGE ; REQUEST FROM SERVER

```

3094 LENGTH ; 200 BITS
 3095 INHIBIT MESSAGE TO SELF ; YES
 3096 DESTINATION PROCESSOR ; R15/FILE SERVER
 3097 QUEUE FLAG ; YES
 3098 NAME ; UPDATE FILES
 3099 MESSAGE ; UPDATE FILES
 3100 LENGTH ; SDF2/LGSD 6
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3101 INHIBIT MESSAGE TO SELF ; YES
 3102 DESTINATION PROCESSOR ; R15/FILE SERVER
 3103 QUEUE FLAG ; YES
 3104 INSTRUCTION TYPE = READ
 3105 NAME ; GET TRANSACTION MODULE
 3106 STORAGE DEVICE TO ACCESS ; S1/SD/LGSD 6
 3107 FILE ACCESSED ; GENERAL STORAGE
 3108 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
 3109 ALLOWABLE BUSSES ;
 3110 S1/TD/LGSD 6
 3111
 3112 HARDWARE TYPE = STORAGE
 3113 NAME = S1/SD/LGSD 6
 3114 CAPACITY = 1090519040. BITS
 3115 BITS PER WORD = 4000. BITS
 3116 WORD ACCESS TIME = 48.83 MICROSEC
 3117 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
 3118 NUMBER OF PORTS = 1
 3119
 3120 HARDWARE TYPE = DATA TRANSFER
 3121 NAME = S1/TD/LGSD 6
 3122 BITS PER CYCLE = 1 BITS
 3123 BUS CONNECTIONS =
 3124 S1/LGSD 6
 3125 S1/SD/LGSD 6
 3126
 3127 SOFTWARE TYPE = MODULE
 3128 * LGSD 6
 3129 NAME = UPDATE SERVER D6
 3130 CONCURRENT EXECUTION = YES
 3131 ALLOWED PROCESSORS =
 3132 S1/LGSD 6
 3133 REQUIRED MESSAGES =
 3134 SEND REPLY TO NODE
 3135 INSTRUCTION LIST =
 3136 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 3137 EXECUTE A TOTAL OF ; 1 UPDATE FILES
 3138 * LGSD 6
 3139 NAME = REC D6
 3140 CONCURRENT EXECUTION = YES
 3141 ITERATION PERIOD = RECLGSD6
 3142 RESIDENT PROCESSORS =
 3143 S1/LGSD 6
 3144 INSTRUCTION LIST =
 3145 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 3146 EXECUTE A TOTAL OF ; 1 MESSAGE
 3147 * LGSD 6
 3148 NAME = ISU D6
 3149 CONCURRENT EXECUTION = YES
 3150 ITERATION PERIOD = ISULGSD6
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3151 RESIDENT PROCESSORS =

```

3152      S1/LGSD 6
3153      INSTRUCTION LIST =
3154      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3155      EXECUTE A TOTAL OF ; 1 MESSAGE
3156 * LGSD 6
3157      NAME = DOR D6
3158      CONCURRENT EXECUTION = YES
3159      ITERATION PERIOD = DORLGSD6
3160      RESIDENT PROCESSORS =
3161      S1/LGSD 6
3162      INSTRUCTION LIST =
3163      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3164      EXECUTE A TOTAL OF ; 1 MESSAGE
3165 * LGSD 6
3166      NAME = DUO D6
3167      CONCURRENT EXECUTION = YES
3168      ITERATION PERIOD = DUOLGSD6
3169      RESIDENT PROCESSORS =
3170      S1/LGSD 6
3171      INSTRUCTION LIST =
3172      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3173      EXECUTE A TOTAL OF ; 1 MESSAGE
3174 * LGSD 6
3175      NAME = FCS D6
3176      CONCURRENT EXECUTION = YES
3177      ITERATION PERIOD = FCSLGSD6
3178      RESIDENT PROCESSORS =
3179      S1/LGSD 6
3180      INSTRUCTION LIST =
3181      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3182      EXECUTE A TOTAL OF ; 1 MESSAGE
3183 * LGSD 6
3184      NAME = TIN D6
3185      CONCURRENT EXECUTION = YES
3186      ITERATION PERIOD = TINLGSD6
3187      RESIDENT PROCESSORS =
3188      S1/LGSD 6
3189      INSTRUCTION LIST =
3190      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3191      EXECUTE A TOTAL OF ; 1 MESSAGE
3192 * LGSD 6
3193      NAME = TRM D6
3194      CONCURRENT EXECUTION = YES
3195      ITERATION PERIOD = TRMLGSD6
3196      RESIDENT PROCESSORS =
3197      S1/LGSD 6
3198      INSTRUCTION LIST =
3199      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3200      EXECUTE A TOTAL OF ; 1 MESSAGE
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```

3201
3202 ***** STATION LGSM 2 # 1
3203 * INDIVIDUAL 1.500 -1.500 15
3204 HARDWARE TYPE = PROCESSING
3205      NAME = S1/LGSM 2
3206      LOCATION = 92.968 91.649
3207      STYLE/COLOR = 1 3
3208      BASIC CYCLE TIME = 0. MICROSEC
3209      INPUT CONTROLLER = YES
3210      INSTRUCTION REPERTOIRE =
3211      INSTRUCTION TYPE = PROCESSING
3212      NAME ; NO/OP
3213      TIME ; 0 CYCLES
3214      INSTRUCTION TYPE = MESSAGE

```

```

3215     NAME ; MESSAGE
3216     MESSAGE ; REQUEST FROM SERVER
3217     LENGTH ; 200 BITS
3218     INHIBIT MESSAGE TO SELF ; YES
3219     DESTINATION PROCESSOR ; R16/FILE SERVER
3220     QUEUE FLAG ; YES
3221     NAME ; UPDATE FILES
3222     MESSAGE ; UPDATE FILES
3223     LENGTH ; SDF2/LGSM 2
3224     INHIBIT MESSAGE TO SELF ; YES
3225     DESTINATION PROCESSOR ; R16/FILE SERVER
3226     QUEUE FLAG ; YES
3227     INSTRUCTION TYPE = READ
3228     NAME ; GET TRANSACTION MODULE
3229     STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 2
3230     FILE ACCESSED ; GENERAL STORAGE
3231     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3232     ALLOWABLE BUSSES ;
3233     S1/TD/LGSM 2
3234
3235     HARDWARE TYPE = STORAGE
3236     NAME = S1/SD/LGSM 2
3237     CAPACITY = 1090519040. BITS
3238     BITS PER WORD = 4000. BITS
3239     WORD ACCESS TIME = 48.83 MICROSEC
3240     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3241     NUMBER OF PORTS = 1
3242
3243     HARDWARE TYPE = DATA TRANSFER
3244     NAME = S1/TD/LGSM 2
3245     BITS PER CYCLE = 1 BITS
3246     BUS CONNECTIONS =
3247     S1/LGSM 2
3248     S1/SD/LGSM 2
3249
3250     SOFTWARE TYPE = MODULE

```

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```

3251 * LGSM 2
3252     NAME = UPDATE SERVER M2
3253     CONCURRENT EXECUTION = YES
3254     ALLOWED PROCESSORS =
3255     S1/LGSM 2
3256     REQUIRED MESSAGES =
3257     SEND REPLY TO NODE
3258     INSTRUCTION LIST =
3259     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3260     EXECUTE A TOTAL OF ; 1 UPDATE FILES
3261 * LGSM 2
3262     NAME = REC M2
3263     CONCURRENT EXECUTION = YES
3264     ITERATION PERIOD = RECLGSM2
3265     RESIDENT PROCESSORS =
3266     S1/LGSM 2
3267     INSTRUCTION LIST =
3268     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3269     EXECUTE A TOTAL OF ; 1 MESSAGE
3270 * LGSM 2
3271     NAME = ISU M2
3272     CONCURRENT EXECUTION = YES
3273     ITERATION PERIOD = ISULGSM2
3274     RESIDENT PROCESSORS =
3275     S1/LGSM 2
3276     INSTRUCTION LIST =
3277     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```



```

3278      EXECUTE A TOTAL OF ; 1 MESSAGE
3279 * LGSM 2
3280      NAME = DOR M2
3281      CONCURRENT EXECUTION = YES
3282      ITERATION PERIOD = DORLGSM2
3283      RESIDENT PROCESSORS =
3284      S1/LGSM 2
3285      INSTRUCTION LIST =
3286      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3287      EXECUTE A TOTAL OF ; 1 MESSAGE
3288 * LGSM 2
3289      NAME = LPS M2
3290      CONCURRENT EXECUTION = YES
3291      ITERATION PERIOD = LPSLGSM2
3292      RESIDENT PROCESSORS =
3293      S1/LGSM 2
3294      INSTRUCTION LIST =
3295      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3296      EXECUTE A TOTAL OF ; 1 MESSAGE
3297 * LGSM 2
3298      NAME = DUO M2
3299      CONCURRENT EXECUTION = YES
3300      ITERATION PERIOD = DUOLGSM2
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```

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```

3301      RESIDENT PROCESSORS =
3302      S1/LGSM 2
3303      INSTRUCTION LIST =
3304      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3305      EXECUTE A TOTAL OF ; 1 MESSAGE
3306 * LGSM 2
3307      NAME = AOA M2
3308      CONCURRENT EXECUTION = YES
3309      ITERATION PERIOD = AOALGSM2
3310      RESIDENT PROCESSORS =
3311      S1/LGSM 2
3312      INSTRUCTION LIST =
3313      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3314      EXECUTE A TOTAL OF ; 1 MESSAGE
3315 * LGSM 2
3316      NAME = FCS M2
3317      CONCURRENT EXECUTION = YES
3318      ITERATION PERIOD = FCSLGSM2
3319      RESIDENT PROCESSORS =
3320      S1/LGSM 2
3321      INSTRUCTION LIST =
3322      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3323      EXECUTE A TOTAL OF ; 1 MESSAGE
3324 * LGSM 2
3325      NAME = TIN M2
3326      CONCURRENT EXECUTION = YES
3327      ITERATION PERIOD = TINLGSM2
3328      RESIDENT PROCESSORS =
3329      S1/LGSM 2
3330      INSTRUCTION LIST =
3331      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3332      EXECUTE A TOTAL OF ; 1 MESSAGE
3333 * LGSM 2
3334      NAME = SPR M2
3335      CONCURRENT EXECUTION = YES
3336      ITERATION PERIOD = SPRLGSM2
3337      RESIDENT PROCESSORS =
3338      S1/LGSM 2
3339      INSTRUCTION LIST =
3340      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```

```

3341     EXECUTE A TOTAL OF ; 1 MESSAGE
3342 * LGSM 2
3343     NAME = AE1 M2
3344     CONCURRENT EXECUTION = YES
3345     ITERATION PERIOD = AE1LGSM2
3346     RESIDENT PROCESSORS =
3347     S1/LGSM 2
3348     INSTRUCTION LIST =
3349     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3350     EXECUTE A TOTAL OF ; 1 MESSAGE
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```

3351 * LGSM 2
3352     NAME = SHP M2
3353     CONCURRENT EXECUTION = YES
3354     ITERATION PERIOD = SHPLGSM2
3355     RESIDENT PROCESSORS =
3356     S1/LGSM 2
3357     INSTRUCTION LIST =
3358     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3359     EXECUTE A TOTAL OF ; 1 MESSAGE
3360 * LGSM 2
3361     NAME = FTR M2
3362     CONCURRENT EXECUTION = YES
3363     ITERATION PERIOD = FTRLGSM2
3364     RESIDENT PROCESSORS =
3365     S1/LGSM 2
3366     INSTRUCTION LIST =
3367     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3368     EXECUTE A TOTAL OF ; 1 MESSAGE
3369 * LGSM 2
3370     NAME = FET M2
3371     CONCURRENT EXECUTION = YES
3372     ITERATION PERIOD = FETLGSM2
3373     RESIDENT PROCESSORS =
3374     S1/LGSM 2
3375     INSTRUCTION LIST =
3376     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3377     EXECUTE A TOTAL OF ; 1 MESSAGE
3378 * LGSM 2
3379     NAME = TRM M2
3380     CONCURRENT EXECUTION = YES
3381     ITERATION PERIOD = TRMLGSM2
3382     RESIDENT PROCESSORS =
3383     S1/LGSM 2
3384     INSTRUCTION LIST =
3385     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3386     EXECUTE A TOTAL OF ; 1 MESSAGE
3387
3388 ***** STATION LGSM 3 # 1
3389 * INDIVIDUAL 1.500 -1.500 15
3390 HARDWARE TYPE = PROCESSING
3391     NAME = S1/LGSM 3
3392     LOCATION = 112.968      91.649
3393     STYLE/COLOR = 1 3
3394     BASIC CYCLE TIME = 0. MICROSEC
3395     INPUT CONTROLLER = YES
3396     INSTRUCTION REPERTOIRE =
3397     INSTRUCTION TYPE = PROCESSING
3398     NAME ; NO/OP
3399     TIME ; 0 CYCLES
3400     INSTRUCTION TYPE = MESSAGE
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```

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```

3401      NAME ; MESSAGE
3402      MESSAGE ; REQUEST FROM SERVER
3403      LENGTH ; 200 BITS
3404      INHIBIT MESSAGE TO SELF ; YES
3405      DESTINATION PROCESSOR ; R17/FILE SERVER
3406      QUEUE FLAG ; YES
3407      NAME ; UPDATE FILES
3408      MESSAGE ; UPDATE FILES
3409      LENGTH ; SDF2/LGSM 3
3410      INHIBIT MESSAGE TO SELF ; YES
3411      DESTINATION PROCESSOR ; R17/FILE SERVER
3412      QUEUE FLAG ; YES
3413      INSTRUCTION TYPE = READ
3414      NAME ; GET TRANSACTION MODULE
3415      STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 3
3416      FILE ACCESSED ; GENERAL STORAGE
3417      NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3418      ALLOWABLE BUSSES ;
3419      S1/TD/LGSM 3
3420
3421      HARDWARE TYPE = STORAGE
3422      NAME = S1/SD/LGSM 3
3423      CAPACITY = 1090519040. BITS
3424      BITS PER WORD = 4000. BITS
3425      WORD ACCESS TIME = 48.83 MICROSEC
3426      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3427      NUMBER OF PORTS = 1
3428
3429      HARDWARE TYPE = DATA TRANSFER
3430      NAME = S1/TD/LGSM 3
3431      BITS PER CYCLE = 1 BITS
3432      BUS CONNECTIONS =
3433      S1/LGSM 3
3434      S1/SD/LGSM 3
3435
3436      SOFTWARE TYPE = MODULE
3437      * LGSM 3
3438      NAME = UPDATE SERVER M3
3439      CONCURRENT EXECUTION = YES
3440      ALLOWED PROCESSORS =
3441      S1/LGSM 3
3442      REQUIRED MESSAGES =
3443      SEND REPLY TO NODE
3444      INSTRUCTION LIST =
3445      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3446      EXECUTE A TOTAL OF ; 1 UPDATE FILES
3447      * LGSM 3
3448      NAME = ISU M3
3449      CONCURRENT EXECUTION = YES
3450      ITERATION PERIOD = ISULGSM3
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```

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```

3451      RESIDENT PROCESSORS =
3452      S1/LGSM 3
3453      INSTRUCTION LIST =
3454      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3455      EXECUTE A TOTAL OF ; 1 MESSAGE
3456      * LGSM 3
3457      NAME = DOR M3
3458      CONCURRENT EXECUTION = YES
3459      ITERATION PERIOD = DORLGSM3
3460      RESIDENT PROCESSORS =
3461      S1/LGSM 3
3462      INSTRUCTION LIST =

```

```

3463     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3464     EXECUTE A TOTAL OF ; 1 MESSAGE
3465 * LGSM 3
3466     NAME = LPS M3
3467     CONCURRENT EXECUTION = YES
3468     ITERATION PERIOD = LPSLGSM3
3469     RESIDENT PROCESSORS =
3470     S1/LGSM 3
3471     INSTRUCTION LIST =
3472     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3473     EXECUTE A TOTAL OF ; 1 MESSAGE
3474 * LGSM 3
3475     NAME = DUO M3
3476     CONCURRENT EXECUTION = YES
3477     ITERATION PERIOD = DUOLGSM3
3478     RESIDENT PROCESSORS =
3479     S1/LGSM 3
3480     INSTRUCTION LIST =
3481     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3482     EXECUTE A TOTAL OF ; 1 MESSAGE
3483 * LGSM 3
3484     NAME = AOA M3
3485     CONCURRENT EXECUTION = YES
3486     ITERATION PERIOD = AOALGSM3
3487     RESIDENT PROCESSORS =
3488     S1/LGSM 3
3489     INSTRUCTION LIST =
3490     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3491     EXECUTE A TOTAL OF ; 1 MESSAGE
3492 * LGSM 3
3493     NAME = FCS M3
3494     CONCURRENT EXECUTION = YES
3495     ITERATION PERIOD = FCSLGSM3
3496     RESIDENT PROCESSORS =
3497     S1/LGSM 3
3498     INSTRUCTION LIST =
3499     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3500     EXECUTE A TOTAL OF ; 1 MESSAGE
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```

3501 * LGSM 3
3502     NAME = TIN M3
3503     CONCURRENT EXECUTION = YES
3504     ITERATION PERIOD = TINLGSM3
3505     RESIDENT PROCESSORS =
3506     S1/LGSM 3
3507     INSTRUCTION LIST =
3508     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3509     EXECUTE A TOTAL OF ; 1 MESSAGE
3510 * LGSM 3
3511     NAME = SPR M3
3512     CONCURRENT EXECUTION = YES
3513     ITERATION PERIOD = SPRLGSM3
3514     RESIDENT PROCESSORS =
3515     S1/LGSM 3
3516     INSTRUCTION LIST =
3517     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3518     EXECUTE A TOTAL OF ; 1 MESSAGE
3519 * LGSM 3
3520     NAME = AE1 M3
3521     CONCURRENT EXECUTION = YES
3522     ITERATION PERIOD = AE1LGSM3
3523     RESIDENT PROCESSORS =
3524     S1/LGSM 3
3525     INSTRUCTION LIST =

```

```

3526     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3527     EXECUTE A TOTAL OF ; 1 MESSAGE
3528 * LGSM 3
3529     NAME = SHP M3
3530     CONCURRENT EXECUTION = YES
3531     ITERATION PERIOD = SHPLGSM3
3532     RESIDENT PROCESSORS =
3533         S1/LGSM 3
3534     INSTRUCTION LIST =
3535         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3536         EXECUTE A TOTAL OF ; 1 MESSAGE
3537 * LGSM 3
3538     NAME = FET M3
3539     CONCURRENT EXECUTION = YES
3540     ITERATION PERIOD = FETLGSM3
3541     RESIDENT PROCESSORS =
3542         S1/LGSM 3
3543     INSTRUCTION LIST =
3544         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3545         EXECUTE A TOTAL OF ; 1 MESSAGE
3546 * LGSM 3
3547     NAME = TRM M3
3548     CONCURRENT EXECUTION = YES
3549     ITERATION PERIOD = TRMLGSM3
3550     RESIDENT PROCESSORS =
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```

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```

3551     S1/LGSM 3
3552     INSTRUCTION LIST =
3553         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3554         EXECUTE A TOTAL OF ; 1 MESSAGE
3555
3556 ***** STATION LGSM 4 # 1
3557 * INDIVIDUAL 1.500 -1.500 15
3558 HARDWARE TYPE = PROCESSING
3559     NAME = S1/LGSM 4
3560     LOCATION = 132.968 91.649
3561     STYLE/COLOR = 1 3
3562     BASIC CYCLE TIME = 0. MICROSEC
3563     INPUT CONTROLLER = YES
3564     INSTRUCTION REPERTOIRE =
3565         INSTRUCTION TYPE = PROCESSING
3566             NAME ; NO/OP
3567             TIME ; 0 CYCLES
3568         INSTRUCTION TYPE = MESSAGE
3569             NAME ; MESSAGE
3570             MESSAGE ; REQUEST FROM SERVER
3571             LENGTH ; 200 BITS
3572             INHIBIT MESSAGE TO SELF ; YES
3573             DESTINATION PROCESSOR ; R18/FILE SERVER
3574             QUEUE FLAG ; YES
3575             NAME ; UPDATE FILES
3576             MESSAGE ; UPDATE FILES
3577             LENGTH ; SDF2/LGSM 4
3578             INHIBIT MESSAGE TO SELF ; YES
3579             DESTINATION PROCESSOR ; R18/FILE SERVER
3580             QUEUE FLAG ; YES
3581     INSTRUCTION TYPE = READ
3582         NAME ; GET TRANSACTION MODULE
3583         STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 4
3584         FILE ACCESSED ; GENERAL STORAGE
3585         NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3586         ALLOWABLE BUSSES ;
3587             S1/TD/LGSM 4
3588

```

```

3589  HARDWARE TYPE = STORAGE
3590      NAME = S1/SD/LGSM 4
3591      CAPACITY = 1090519040. BITS
3592      BITS PER WORD = 4000. BITS
3593      WORD ACCESS TIME = 48.83 MICROSEC
3594      OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3595      NUMBER OF PORTS = 1
3596
3597  HARDWARE TYPE = DATA TRANSFER
3598      NAME = S1/TD/LGSM 4
3599      BITS PER CYCLE = 1 BITS
3600      BUS CONNECTIONS =
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```

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```

3601      S1/LGSM 4
3602      S1/SD/LGSM 4
3603
3604  SOFTWARE TYPE = MODULE
3605  * LGSM 4
3606      NAME = UPDATE SERVER M4
3607      CONCURRENT EXECUTION = YES
3608      ALLOWED PROCESSORS =
3609          S1/LGSM 4
3610      REQUIRED MESSAGES =
3611          SEND REPLY TO NODE
3612      INSTRUCTION LIST =
3613          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3614          EXECUTE A TOTAL OF ; 1 UPDATE FILES
3615  * LGSM 4
3616      NAME = ISU M4
3617      CONCURRENT EXECUTION = YES
3618      ITERATION PERIOD = ISULGSM4
3619      RESIDENT PROCESSORS =
3620          S1/LGSM 4
3621      INSTRUCTION LIST =
3622          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3623          EXECUTE A TOTAL OF ; 1 MESSAGE
3624  * LGSM 4
3625      NAME = DUO M4
3626      CONCURRENT EXECUTION = YES
3627      ITERATION PERIOD = DUOLGSM4
3628      RESIDENT PROCESSORS =
3629          S1/LGSM 4
3630      INSTRUCTION LIST =
3631          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3632          EXECUTE A TOTAL OF ; 1 MESSAGE
3633  * LGSM 4
3634      NAME = AOA M4
3635      CONCURRENT EXECUTION = YES
3636      ITERATION PERIOD = AOALGSM4
3637      RESIDENT PROCESSORS =
3638          S1/LGSM 4
3639      INSTRUCTION LIST =
3640          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3641          EXECUTE A TOTAL OF ; 1 MESSAGE
3642  * LGSM 4
3643      NAME = FCS M4
3644      CONCURRENT EXECUTION = YES
3645      ITERATION PERIOD = FCSLGSM4
3646      RESIDENT PROCESSORS =
3647          S1/LGSM 4
3648      INSTRUCTION LIST =
3649          EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3650          EXECUTE A TOTAL OF ; 1 MESSAGE
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```

3651 * LGSM 4
3652   NAME = TIN M4
3653   CONCURRENT EXECUTION = YES
3654   ITERATION PERIOD = TIMLGSM4
3655   RESIDENT PROCESSORS =
3656     S1/LGSM 4
3657   INSTRUCTION LIST =
3658     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3659     EXECUTE A TOTAL OF ; 1 MESSAGE
3660 * LGSM 4
3661   NAME = SPR M4
3662   CONCURRENT EXECUTION = YES
3663   ITERATION PERIOD = SPRLGSM4
3664   RESIDENT PROCESSORS =
3665     S1/LGSM 4
3666   INSTRUCTION LIST =
3667     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3668     EXECUTE A TOTAL OF ; 1 MESSAGE
3669 * LGSM 4
3670   NAME = AE1 M4
3671   CONCURRENT EXECUTION = YES
3672   ITERATION PERIOD = AE1LGSM4
3673   RESIDENT PROCESSORS =
3674     S1/LGSM 4
3675   INSTRUCTION LIST =
3676     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3677     EXECUTE A TOTAL OF ; 1 MESSAGE
3678 * LGSM 4
3679   NAME = FET M4
3680   CONCURRENT EXECUTION = YES
3681   ITERATION PERIOD = FETLGSM4
3682   RESIDENT PROCESSORS =
3683     S1/LGSM 4
3684   INSTRUCTION LIST =
3685     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3686     EXECUTE A TOTAL OF ; 1 MESSAGE
3687 * LGSM 4
3688   NAME = TRM M4
3689   CONCURRENT EXECUTION = YES
3690   ITERATION PERIOD = TRMLGSM4
3691   RESIDENT PROCESSORS =
3692     S1/LGSM 4
3693   INSTRUCTION LIST =
3694     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3695     EXECUTE A TOTAL OF ; 1 MESSAGE
3696
3697 ***** STATION LGSM 5 # 1
3698 * INDIVIDUAL 1.500 -1.500 15
3699 HARDWARE TYPE = PROCESSING
3700   NAME = S1/LGSM 5
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```

3701   LOCATION = 152.968 91.649
3702   STYLE/COLOR = 1 3
3703   BASIC CYCLE TIME = 0. MICROSEC
3704   INPUT CONTROLLER = YES
3705   INSTRUCTION REPERTOIRE =
3706     INSTRUCTION TYPE = PROCESSING
3707     NAME ; NO/OP
3708     TIME ; 0 CYCLES
3709     INSTRUCTION TYPE = MESSAGE
3710     NAME ; MESSAGE

```

```

3711     MESSAGE ; REQUEST FROM SERVER
3712     LENGTH ; 200 BITS
3713     INHIBIT MESSAGE TO SELF ; YES
3714     DESTINATION PROCESSOR ; R19/FILE SERVER
3715     QUEUE FLAG ; YES
3716     NAME ; UPDATE FILES
3717     MESSAGE ; UPDATE FILES
3718     LENGTH ; SDF2/LGSM 5
3719     INHIBIT MESSAGE TO SELF ; YES
3720     DESTINATION PROCESSOR ; R19/FILE SERVER
3721     QUEUE FLAG ; YES
3722     INSTRUCTION TYPE = READ
3723     NAME ; GET TRANSACTION MODULE
3724     STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 5
3725     FILE ACCESSED ; GENERAL STORAGE
3726     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3727     ALLOWABLE BUSSES ;
3728     S1/TD/LGSM 5
3729
3730     HARDWARE TYPE = STORAGE
3731     NAME = S1/SD/LGSM 5
3732     CAPACITY = 1090519040. BITS
3733     BITS PER WORD = 4000. BITS
3734     WORD ACCESS TIME = 48.83 MICROSEC
3735     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3736     NUMBER OF PORTS = 1
3737
3738     HARDWARE TYPE = DATA TRANSFER
3739     NAME = S1/TD/LGSM 5
3740     BITS PER CYCLE = 1 BITS
3741     BUS CONNECTIONS =
3742     S1/LGSM 5
3743     S1/SD/LGSM 5
3744
3745     SOFTWARE TYPE = MODULE
3746     * LGSM 5
3747     NAME = UPDATE SERVER M5
3748     CONCURRENT EXECUTION = YES
3749     ALLOWED PROCESSORS =
3750     S1/LGSM 5
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```

3751     REQUIRED MESSAGES =
3752     SEND REPLY TO NODE
3753     INSTRUCTION LIST =
3754     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3755     EXECUTE A TOTAL OF ; 1 UPDATE FILES
3756     * LGSM 5
3757     NAME = ISU M5
3758     CONCURRENT EXECUTION = YES
3759     ITERATION PERIOD = ISULGSM5
3760     RESIDENT PROCESSORS =
3761     S1/LGSM 5
3762     INSTRUCTION LIST =
3763     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3764     EXECUTE A TOTAL OF ; 1 MESSAGE
3765     * LGSM 5
3766     NAME = DUO M5
3767     CONCURRENT EXECUTION = YES
3768     ITERATION PERIOD = DUOLGSM5
3769     RESIDENT PROCESSORS =
3770     S1/LGSM 5
3771     INSTRUCTION LIST =
3772     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3773     EXECUTE A TOTAL OF ; 1 MESSAGE

```



```

3774 * LGSM 5
3775   NAME = AOA M5
3776   CONCURRENT EXECUTION = YES
3777   ITERATION PERIOD = AOALGSM5
3778   RESIDENT PROCESSORS =
3779     S1/LGSM 5
3780   INSTRUCTION LIST =
3781     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3782     EXECUTE A TOTAL OF ; 1 MESSAGE
3783 * LGSM 5
3784   NAME = FCS M5
3785   CONCURRENT EXECUTION = YES
3786   ITERATION PERIOD = FCSLGSM5
3787   RESIDENT PROCESSORS =
3788     S1/LGSM 5
3789   INSTRUCTION LIST =
3790     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3791     EXECUTE A TOTAL OF ; 1 MESSAGE
3792 * LGSM 5
3793   NAME = TIN M5
3794   CONCURRENT EXECUTION = YES
3795   ITERATION PERIOD = TINLGSM5
3796   RESIDENT PROCESSORS =
3797     S1/LGSM 5
3798   INSTRUCTION LIST =
3799     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3800     EXECUTE A TOTAL OF ; 1 MESSAGE

```

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```

3801 * LGSM 5
3802   NAME = SPR M5
3803   CONCURRENT EXECUTION = YES
3804   ITERATION PERIOD = SPRLGSM5
3805   RESIDENT PROCESSORS =
3806     S1/LGSM 5
3807   INSTRUCTION LIST =
3808     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3809     EXECUTE A TOTAL OF ; 1 MESSAGE
3810 * LGSM 5
3811   NAME = AE1 M5
3812   CONCURRENT EXECUTION = YES
3813   ITERATION PERIOD = AE1LGSM5
3814   RESIDENT PROCESSORS =
3815     S1/LGSM 5
3816   INSTRUCTION LIST =
3817     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3818     EXECUTE A TOTAL OF ; 1 MESSAGE
3819 * LGSM 5
3820   NAME = FET M5
3821   CONCURRENT EXECUTION = YES
3822   ITERATION PERIOD = FETLGSM5
3823   RESIDENT PROCESSORS =
3824     S1/LGSM 5
3825   INSTRUCTION LIST =
3826     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3827     EXECUTE A TOTAL OF ; 1 MESSAGE
3828
3829 ***** STATION LGSM 6 # 1
3830 * INDIVIDUAL 1.500 -1.500 15
3831 HARDWARE TYPE = PROCESSING
3832   NAME = S1/LGSM 6
3833     LOCATION = 172.968 91.649
3834     STYLE/COLOR = 1 3
3835     BASIC CYCLE TIME = 0. MICROSEC
3836     INPUT CONTROLLER = YES

```

```

3837     INSTRUCTION REPERTOIRE =
3838         INSTRUCTION TYPE = PROCESSING
3839         NAME ; NO/OP
3840         TIME ; 0 CYCLES
3841     INSTRUCTION TYPE = MESSAGE
3842         NAME ; MESSAGE
3843         MESSAGE ; REQUEST FROM SERVER
3844         LENGTH ; 200 BITS
3845         INHIBIT MESSAGE TO SELF ; YES
3846         DESTINATION PROCESSOR ; R20/FILE SERVER
3847         QUEUE FLAG ; YES
3848         NAME ; UPDATE FILES
3849         MESSAGE ; UPDATE FILES
3850         LENGTH ; SDF2/LGSM 6
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```

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```

3851         INHIBIT MESSAGE TO SELF ; YES
3852         DESTINATION PROCESSOR ; R20/FILE SERVER
3853         QUEUE FLAG ; YES
3854     INSTRUCTION TYPE = READ
3855         NAME ; GET TRANSACTION MODULE
3856         STORAGE DEVICE TO ACCESS ; S1/SD/LGSM 6
3857         FILE ACCESSED ; GENERAL STORAGE
3858         NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3859         ALLOWABLE BUSSES ;
3860         S1/TD/LGSM 6
3861
3862     HARDWARE TYPE = STORAGE
3863         NAME = S1/SD/LGSM 6
3864         CAPACITY = 1090519040. BITS
3865         BITS PER WORD = 4000. BITS
3866         WORD ACCESS TIME = 48.83 MICROSEC
3867         OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3868         NUMBER OF PORTS = 1
3869
3870     HARDWARE TYPE = DATA TRANSFER
3871         NAME = S1/TD/LGSM 6
3872         BITS PER CYCLE = 1 BITS
3873         BUS CONNECTIONS =
3874         S1/LGSM 6
3875         S1/SD/LGSM 6
3876
3877     SOFTWARE TYPE = MODULE
3878     * LGSM 6
3879         NAME = UPDATE SERVER M6
3880         CONCURRENT EXECUTION = YES
3881         ALLOWED PROCESSORS =
3882         S1/LGSM 6
3883         REQUIRED MESSAGES =
3884         SEND REPLY TO NODE
3885         INSTRUCTION LIST =
3886         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3887         EXECUTE A TOTAL OF ; 1 UPDATE FILES
3888     * LGSM 6
3889         NAME = DUO M6
3890         CONCURRENT EXECUTION = YES
3891         ITERATION PERIOD = DUOLGSM6
3892         RESIDENT PROCESSORS =
3893         S1/LGSM 6
3894         INSTRUCTION LIST =
3895         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3896         EXECUTE A TOTAL OF ; 1 MESSAGE
3897     * LGSM 6
3898         NAME = AOA M6
3899         CONCURRENT EXECUTION = YES

```

SBSS Simulation Distributed processing - Workload hierarchically distributed

```

3901 RESIDENT PROCESSORS =
3902 S1/LGSM 6
3903 INSTRUCTION LIST =
3904 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3905 EXECUTE A TOTAL OF ; 1 MESSAGE
3906 * LGSM 6
3907 NAME = TIN M6
3908 CONCURRENT EXECUTION = YES
3909 ITERATION PERIOD = TINLGSM6
3910 RESIDENT PROCESSORS =
3911 S1/LGSM 6
3912 INSTRUCTION LIST =
3913 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3914 EXECUTE A TOTAL OF ; 1 MESSAGE
3915 * LGSM 6
3916 NAME = SPR M6
3917 CONCURRENT EXECUTION = YES
3918 ITERATION PERIOD = SPRLGSM6
3919 RESIDENT PROCESSORS =
3920 S1/LGSM 6
3921 INSTRUCTION LIST =
3922 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3923 EXECUTE A TOTAL OF ; 1 MESSAGE
3924 * LGSM 6
3925 NAME = AE1 M6
3926 CONCURRENT EXECUTION = YES
3927 ITERATION PERIOD = AE1LGSM6
3928 RESIDENT PROCESSORS =
3929 S1/LGSM 6
3930 INSTRUCTION LIST =
3931 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3932 EXECUTE A TOTAL OF ; 1 MESSAGE
3933 * LGSM 6
3934 NAME = FET M6
3935 CONCURRENT EXECUTION = YES
3936 ITERATION PERIOD = FETLGSM6
3937 RESIDENT PROCESSORS =
3938 S1/LGSM 6
3939 INSTRUCTION LIST =
3940 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
3941 EXECUTE A TOTAL OF ; 1 MESSAGE
3942
3943 ***** STATION LGSC 2 # 1
3944 * INDIVIDUAL 1.500 -1.500 15
3945 HARDWARE TYPE = PROCESSING
3946 NAME = S1/LGSC 2
3947 LOCATION = 288.106 93.168
3948 STYLE/COLOR = 1 3
3949 BASIC CYCLE TIME = 0. MICROSEC
3950 INPUT CONTROLLER = YES
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```

3951 INSTRUCTION REPERTOIRE =
3952 INSTRUCTION TYPE = PROCESSING
3953 NAME ; NO/OP
3954 TIME ; 0 CYCLES
3955 INSTRUCTION TYPE = MESSAGE
3956 NAME ; MESSAGE
3957 MESSAGE ; REQUEST FROM SERVER

```

```

3958     LENGTH ; 200 BITS
3959     INHIBIT MESSAGE TO SELF ; YES
3960     DESTINATION PROCESSOR ; R21/FILE SERVER
3961     QUEUE FLAG ; YES
3962     NAME ; UPDATE FILES
3963     MESSAGE ; UPDATE FILES
3964     LENGTH ; SDF2/LGSC 2
3965     INHIBIT MESSAGE TO SELF ; YES
3966     DESTINATION PROCESSOR ; R21/FILE SERVER
3967     QUEUE FLAG ; YES
3968     INSTRUCTION TYPE = READ
3969     NAME ; GET TRANSACTION MODULE
3970     STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 2
3971     FILE ACCESSED ; GENERAL STORAGE
3972     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
3973     ALLOWABLE BUSSES ;
3974     S1/TD/LGSC 2
3975
3976     HARDWARE TYPE = STORAGE
3977     NAME = S1/SD/LGSC 2
3978     CAPACITY = 1090519040. BITS
3979     BITS PER WORD = 4000. BITS
3980     WORD ACCESS TIME = 48.83 MICROSEC
3981     OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
3982     NUMBER OF PORTS = 1
3983
3984     HARDWARE TYPE = DATA TRANSFER
3985     NAME = S1/TD/LGSC 2
3986     BITS PER CYCLE = 1 BITS
3987     BUS CONNECTIONS =
3988     S1/LGSC 2
3989     S1/SD/LGSC 2
3990
3991     SOFTWARE TYPE = MODULE
3992     * LGSC 2
3993     NAME = UPDATE SERVER C2
3994     CONCURRENT EXECUTION = YES
3995     ALLOWED PROCESSORS =
3996     S1/LGSC 2
3997     REQUIRED MESSAGES =
3998     SEND REPLY TO NODE
3999     INSTRUCTION LIST =
4000     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```

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```

4001     EXECUTE A TOTAL OF ; 1 UPDATE FILES
4002     * LGSC 2
4003     NAME = ISU C2
4004     CONCURRENT EXECUTION = YES
4005     ITERATION PERIOD = ISULGSC2
4006     RESIDENT PROCESSORS =
4007     S1/LGSC 2
4008     INSTRUCTION LIST =
4009     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4010     EXECUTE A TOTAL OF ; 1 MESSAGE
4011     * LGSC 2
4012     NAME = DOR C2
4013     CONCURRENT EXECUTION = YES
4014     ITERATION PERIOD = DORLGSC2
4015     RESIDENT PROCESSORS =
4016     S1/LGSC 2
4017     INSTRUCTION LIST =
4018     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4019     EXECUTE A TOTAL OF ; 1 MESSAGE
4020     * LGSC 2

```

```

4021     NAME = DUO C2
4022     CONCURRENT EXECUTION = YES
4023     ITERATION PERIOD = DUOLGSC2
4024     RESIDENT PROCESSORS =
4025         S1/LGSC 2
4026     INSTRUCTION LIST =
4027         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4028         EXECUTE A TOTAL OF ; 1 MESSAGE
4029 * LGSC 2
4030     NAME = AOA C2
4031     CONCURRENT EXECUTION = YES
4032     ITERATION PERIOD = AOALGSC2
4033     RESIDENT PROCESSORS =
4034         S1/LGSC 2
4035     INSTRUCTION LIST =
4036         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4037         EXECUTE A TOTAL OF ; 1 MESSAGE
4038 * LGSC 2
4039     NAME = FCS C2
4040     CONCURRENT EXECUTION = YES
4041     ITERATION PERIOD = FCSLGSC2
4042     RESIDENT PROCESSORS =
4043         S1/LGSC 2
4044     INSTRUCTION LIST =
4045         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4046         EXECUTE A TOTAL OF ; 1 MESSAGE
4047 * LGSC 2
4048     NAME = TIN C2
4049     CONCURRENT EXECUTION = YES
4050     ITERATION PERIOD = TINLGSC2
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```

4051     RESIDENT PROCESSORS =
4052         S1/LGSC 2
4053     INSTRUCTION LIST =
4054         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4055         EXECUTE A TOTAL OF ; 1 MESSAGE
4056 * LGSC 2
4057     NAME = FID C2
4058     CONCURRENT EXECUTION = YES
4059     ITERATION PERIOD = FIDLGSC2
4060     RESIDENT PROCESSORS =
4061         S1/LGSC 2
4062     INSTRUCTION LIST =
4063         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4064         EXECUTE A TOTAL OF ; 1 MESSAGE
4065 * LGSC 2
4066     NAME = FIL C2
4067     CONCURRENT EXECUTION = YES
4068     ITERATION PERIOD = FILLGSC2
4069     RESIDENT PROCESSORS =
4070         S1/LGSC 2
4071     INSTRUCTION LIST =
4072         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4073         EXECUTE A TOTAL OF ; 1 MESSAGE
4074 * LGSC 2
4075     NAME = SPR C2
4076     CONCURRENT EXECUTION = YES
4077     ITERATION PERIOD = SPRLGSC2
4078     RESIDENT PROCESSORS =
4079         S1/LGSC 2
4080     INSTRUCTION LIST =
4081         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4082         EXECUTE A TOTAL OF ; 1 MESSAGE
4083 * LGSC 2

```

```

4084     NAME = FCU C2
4085     CONCURRENT EXECUTION = YES
4086     ITERATION PERIOD = FCULGSC2
4087     RESIDENT PROCESSORS =
4088         S1/LGSC 2
4089     INSTRUCTION LIST =
4090         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4091         EXECUTE A TOTAL OF ; 1 MESSAGE
4092 * LGSC 2
4093     NAME = SHP C2
4094     CONCURRENT EXECUTION = YES
4095     ITERATION PERIOD = SHPLGSC2
4096     RESIDENT PROCESSORS =
4097         S1/LGSC 2
4098     INSTRUCTION LIST =
4099         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4100         EXECUTE A TOTAL OF ; 1 MESSAGE
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```

4101 * LGSC 2
4102     NAME = TRM C2
4103     CONCURRENT EXECUTION = YES
4104     ITERATION PERIOD = TRMLGSC2
4105     RESIDENT PROCESSORS =
4106         S1/LGSC 2
4107     INSTRUCTION LIST =
4108         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4109         EXECUTE A TOTAL OF ; 1 MESSAGE
4110
4111 ***** STATION LGSC 3 # 1
4112 * INDIVIDUAL 1.500 -1.500 15
4113 HARDWARE TYPE = PROCESSING
4114     NAME = S1/LGSC 3
4115         LOCATION = 308.106 93.168
4116         STYLE/COLOR = 1 3
4117         BASIC CYCLE TIME = 0. MICROSEC
4118         INPUT CONTROLLER = YES
4119         INSTRUCTION REPERTOIRE =
4120             INSTRUCTION TYPE = PROCESSING
4121                 NAME ; NO/OP
4122                 TIME ; 0 CYCLES
4123             INSTRUCTION TYPE = MESSAGE
4124                 NAME ; MESSAGE
4125                     MESSAGE ; REQUEST FROM SERVER
4126                     LENGTH ; 200 BITS
4127                     INHIBIT MESSAGE TO SELF ; YES
4128                     DESTINATION PROCESSOR ; R22/FILE SERVER
4129                     QUEUE FLAG ; YES
4130                 NAME ; UPDATE FILES
4131                     MESSAGE ; UPDATE FILES
4132                     LENGTH ; SDF2/LGSC 3
4133                     INHIBIT MESSAGE TO SELF ; YES
4134                     DESTINATION PROCESSOR ; R22/FILE SERVER
4135                     QUEUE FLAG ; YES
4136             INSTRUCTION TYPE = READ
4137                 NAME ; GET TRANSACTION MODULE
4138                     STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 3
4139                     FILE ACCESSED ; GENERAL STORAGE
4140                     NUMBER OF BITS TO TRANSMIT ; 20000 BITS
4141                     ALLOWABLE BUSSES ;
4142                     S1/TD/LGSC 3
4143
4144 HARDWARE TYPE = STORAGE
4145     NAME = S1/SD/LGSC 3
4146     CAPACITY = 1090519040. BITS

```

4147 BITS PER WORD = 4000. BITS
4148 WORD ACCESS TIME = 48.83 MICROSEC
4149 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
4150 NUMBER OF PORTS = 1
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4151
4152 HARDWARE TYPE = DATA TRANSFER
4153 NAME = S1/TD/LGSC 3
4154 BITS PER CYCLE = 1 BITS
4155 BUS CONNECTIONS =
4156 S1/LGSC 3
4157 S1/SD/LGSC 3
4158
4159 SOFTWARE TYPE = MODULE
4160 * LGSC 3
4161 NAME = UPDATE SERVER C3
4162 CONCURRENT EXECUTION = YES
4163 ALLOWED PROCESSORS =
4164 S1/LGSC 3
4165 REQUIRED MESSAGES =
4166 SEND REPLY TO NODE
4167 INSTRUCTION LIST =
4168 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4169 EXECUTE A TOTAL OF ; 1 UPDATE FILES
4170 * LGSC 3
4171 NAME = ISU C3
4172 CONCURRENT EXECUTION = YES
4173 ITERATION PERIOD = ISULGSC3
4174 RESIDENT PROCESSORS =
4175 S1/LGSC 3
4176 INSTRUCTION LIST =
4177 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4178 EXECUTE A TOTAL OF ; 1 MESSAGE
4179 * LGSC 3
4180 NAME = DOR C3
4181 CONCURRENT EXECUTION = YES
4182 ITERATION PERIOD = DORLGSC3
4183 RESIDENT PROCESSORS =
4184 S1/LGSC 3
4185 INSTRUCTION LIST =
4186 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4187 EXECUTE A TOTAL OF ; 1 MESSAGE
4188 * LGSC 3
4189 NAME = DUO C3
4190 CONCURRENT EXECUTION = YES
4191 ITERATION PERIOD = DUOLGSC3
4192 RESIDENT PROCESSORS =
4193 S1/LGSC 3
4194 INSTRUCTION LIST =
4195 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4196 EXECUTE A TOTAL OF ; 1 MESSAGE
4197 * LGSC 3
4198 NAME = AOA C3
4199 CONCURRENT EXECUTION = YES
4200 ITERATION PERIOD = AOALGSC3
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4201 RESIDENT PROCESSORS =
4202 S1/LGSC 3
4203 INSTRUCTION LIST =
4204 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE

```

4205     EXECUTE A TOTAL OF ; 1 MESSAGE
4206 * LGSC 3
4207     NAME = TIN C3
4208     CONCURRENT EXECUTION = YES
4209     ITERATION PERIOD = TINLGSC3
4210     RESIDENT PROCESSORS =
4211         S1/LGSC 3
4212     INSTRUCTION LIST =
4213         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4214         EXECUTE A TOTAL OF ; 1 MESSAGE
4215 * LGSC 3
4216     NAME = FIL C3
4217     CONCURRENT EXECUTION = YES
4218     ITERATION PERIOD = FILLGSC3
4219     RESIDENT PROCESSORS =
4220         S1/LGSC 3
4221     INSTRUCTION LIST =
4222         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4223         EXECUTE A TOTAL OF ; 1 MESSAGE
4224 * LGSC 3
4225     NAME = SPR C3
4226     CONCURRENT EXECUTION = YES
4227     ITERATION PERIOD = SPRLGSC3
4228     RESIDENT PROCESSORS =
4229         S1/LGSC 3
4230     INSTRUCTION LIST =
4231         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4232         EXECUTE A TOTAL OF ; 1 MESSAGE
4233 * LGSC 3
4234     NAME = FCU C3
4235     CONCURRENT EXECUTION = YES
4236     ITERATION PERIOD = FCULGSC3
4237     RESIDENT PROCESSORS =
4238         S1/LGSC 3
4239     INSTRUCTION LIST =
4240         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4241         EXECUTE A TOTAL OF ; 1 MESSAGE
4242 * LGSC 3
4243     NAME = SHP C3
4244     CONCURRENT EXECUTION = YES
4245     ITERATION PERIOD = SHPLGSC3
4246     RESIDENT PROCESSORS =
4247         S1/LGSC 3
4248     INSTRUCTION LIST =
4249         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4250         EXECUTE A TOTAL OF ; 1 MESSAGE

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```

4251 * LGSC 3
4252     NAME = TRM C3
4253     CONCURRENT EXECUTION = YES
4254     ITERATION PERIOD = TRMLGSC3
4255     RESIDENT PROCESSORS =
4256         S1/LGSC 3
4257     INSTRUCTION LIST =
4258         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4259         EXECUTE A TOTAL OF ; 1 MESSAGE
4260
4261 ***** STATION LGSC 4 # 1
4262 * INDIVIDUAL 1.500 -1.500 15
4263 HARDWARE TYPE = PROCESSING
4264     NAME = S1/LGSC 4
4265     LOCATION = 328.106 93.168
4266     STYLE/COLOR = 1 3
4267     BASIC CYCLE TIME = 0. MICROSEC

```



```

4268 INPUT CONTROLLER = YES
4269 INSTRUCTION REPERTOIRE =
4270 INSTRUCTION TYPE = PROCESSING
4271 NAME ; NO/OP
4272 TIME ; 0 CYCLES
4273 INSTRUCTION TYPE = MESSAGE
4274 NAME ; MESSAGE
4275 MESSAGE ; REQUEST FROM SERVER
4276 LENGTH ; 200 BITS
4277 INHIBIT MESSAGE TO SELF ; YES
4278 DESTINATION PROCESSOR ; R23/FILE SERVER
4279 QUEUE FLAG ; YES
4280 NAME ; UPDATE FILES
4281 MESSAGE ; UPDATE FILES
4282 LENGTH ; SDF2/LGSC 4
4283 INHIBIT MESSAGE TO SELF ; YES
4284 DESTINATION PROCESSOR ; R23/FILE SERVER
4285 QUEUE FLAG ; YES
4286 INSTRUCTION TYPE = READ
4287 NAME ; GET TRANSACTION MODULE
4288 STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 4
4289 FILE ACCESSED ; GENERAL STORAGE
4290 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
4291 ALLOWABLE BUSSES ;
4292 S1/TD/LGSC 4
4293
4294 HARDWARE TYPE = STORAGE
4295 NAME = S1/SD/LGSC 4
4296 CAPACITY = 1090519040. BITS
4297 BITS PER WORD = 4000. BITS
4298 WORD ACCESS TIME = 48.83 MICROSEC
4299 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
4300 NUMBER OF PORTS = 1

```

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```

4301
4302 HARDWARE TYPE = DATA TRANSFER
4303 NAME = S1/TD/LGSC 4
4304 BITS PER CYCLE = 1 BITS
4305 BUS CONNECTIONS =
4306 S1/LGSC 4
4307 S1/SD/LGSC 4
4308
4309 SOFTWARE TYPE = MODULE
4310 * LGSC 4
4311 NAME = UPDATE SERVER C4
4312 CONCURRENT EXECUTION = YES
4313 ALLOWED PROCESSORS =
4314 S1/LGSC 4
4315 REQUIRED MESSAGES =
4316 SEND REPLY TO NODE
4317 INSTRUCTION LIST =
4318 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4319 EXECUTE A TOTAL OF ; 1 UPDATE FILES
4320 * LGSC 4
4321 NAME = DOR C4
4322 CONCURRENT EXECUTION = YES
4323 ITERATION PERIOD = DORLGSC4
4324 RESIDENT PROCESSORS =
4325 S1/LGSC 4
4326 INSTRUCTION LIST =
4327 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4328 EXECUTE A TOTAL OF ; 1 MESSAGE
4329 * LGSC 4
4330 NAME = DUO C4

```

```

4331     CONCURRENT EXECUTION = YES
4332     ITERATION PERIOD = DUOLGSC4
4333     RESIDENT PROCESSORS =
4334         S1/LGSC 4
4335     INSTRUCTION LIST =
4336         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4337         EXECUTE A TOTAL OF ; 1 MESSAGE
4338 * LGSC 4
4339     NAME = AOA C4
4340     CONCURRENT EXECUTION = YES
4341     ITERATION PERIOD = AOALGSC4
4342     RESIDENT PROCESSORS =
4343         S1/LGSC 4
4344     INSTRUCTION LIST =
4345         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4346         EXECUTE A TOTAL OF ; 1 MESSAGE
4347 * LGSC 4
4348     NAME = TIN C4
4349     CONCURRENT EXECUTION = YES
4350     ITERATION PERIOD = TINLGSC4
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```

4351     RESIDENT PROCESSORS =
4352         S1/LGSC 4
4353     INSTRUCTION LIST =
4354         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4355         EXECUTE A TOTAL OF ; 1 MESSAGE
4356 * LGSC 4
4357     NAME = FIL C4
4358     CONCURRENT EXECUTION = YES
4359     ITERATION PERIOD = FILLGSC4
4360     RESIDENT PROCESSORS =
4361         S1/LGSC 4
4362     INSTRUCTION LIST =
4363         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4364         EXECUTE A TOTAL OF ; 1 MESSAGE
4365 * LGSC 4
4366     NAME = SPR C4
4367     CONCURRENT EXECUTION = YES
4368     ITERATION PERIOD = SPRLGSC4
4369     RESIDENT PROCESSORS =
4370         S1/LGSC 4
4371     INSTRUCTION LIST =
4372         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4373         EXECUTE A TOTAL OF ; 1 MESSAGE
4374 * LGSC 4
4375     NAME = SHP C4
4376     CONCURRENT EXECUTION = YES
4377     ITERATION PERIOD = SHPLGSC4
4378     RESIDENT PROCESSORS =
4379         S1/LGSC 4
4380     INSTRUCTION LIST =
4381         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4382         EXECUTE A TOTAL OF ; 1 MESSAGE
4383 * LGSC 4
4384     NAME = TRN C4
4385     CONCURRENT EXECUTION = YES
4386     ITERATION PERIOD = TRMLGSC4
4387     RESIDENT PROCESSORS =
4388         S1/LGSC 4
4389     INSTRUCTION LIST =
4390         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4391         EXECUTE A TOTAL OF ; 1 MESSAGE
4392 * LGSC 4
4393     NAME = ISU C4

```

4394 CONCURRENT EXECUTION = YES
 4395 ITERATION PERIOD = ISULGSC4
 4396 RESIDENT PROCESSORS =
 4397 S1/LGSC 4
 4398 INSTRUCTION LIST =
 4399 EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
 4400 EXECUTE A TOTAL OF ; 1 MESSAGE
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4401
 4402 ***** STATION LGSC 5 # 1
 4403 * INDIVIDUAL 1.500 -1.500 15
 4404 HARDWARE TYPE = PROCESSING
 4405 NAME = S1/LGSC 5
 4406 LOCATION = 348.106 93.168
 4407 STYLE/COLOR = 1 3
 4408 BASIC CYCLE TIME = 0. MICROSEC
 4409 INPUT CONTROLLER = YES
 4410 INSTRUCTION REPERTOIRE =
 4411 INSTRUCTION TYPE = PROCESSING
 4412 NAME ; NO/OP
 4413 TIME ; 0 CYCLES
 4414 INSTRUCTION TYPE = MESSAGE
 4415 NAME ; MESSAGE
 4416 MESSAGE ; REQUEST FROM SERVER
 4417 LENGTH ; 200 BITS
 4418 INHIBIT MESSAGE TO SELF ; YES
 4419 DESTINATION PROCESSOR ; R24/FILE SERVER
 4420 QUEUE FLAG ; YES
 4421 NAME ; UPDATE FILES
 4422 MESSAGE ; UPDATE FILES
 4423 LENGTH ; SDF2/LGSC 5
 4424 INHIBIT MESSAGE TO SELF ; YES
 4425 DESTINATION PROCESSOR ; R24/FILE SERVER
 4426 QUEUE FLAG ; YES
 4427 INSTRUCTION TYPE = READ
 4428 NAME ; GET TRANSACTION MODULE
 4429 STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 5
 4430 FILE ACCESSED ; GENERAL STORAGE
 4431 NUMBER OF BITS TO TRANSMIT ; 20000 BITS
 4432 ALLOWABLE BUSSES ;
 4433 S1/TD/LGSC 5
 4434
 4435 HARDWARE TYPE = STORAGE
 4436 NAME = S1/SD/LGSC 5
 4437 CAPACITY = 1090519040. BITS
 4438 BITS PER WORD = 4000. BITS
 4439 WORD ACCESS TIME = 48.83 MICROSEC
 4440 OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
 4441 NUMBER OF PORTS = 1
 4442
 4443 HARDWARE TYPE = DATA TRANSFER
 4444 NAME = S1/TD/LGSC 5
 4445 BITS PER CYCLE = 1 BITS
 4446 BUS CONNECTIONS =
 4447 S1/LGSC 5
 4448 S1/SD/LGSC 5
 4449
 4450 SOFTWARE TYPE = MODULE
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4451 * LGSC 5

```

4452     NAME = UPDATE SERVER C5
4453     CONCURRENT EXECUTION = YES
4454     ALLOWED PROCESSORS =
4455         S1/LGSC 5
4456     REQUIRED MESSAGES =
4457     SEND REPLY TO NODE
4458     INSTRUCTION LIST =
4459         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4460         EXECUTE A TOTAL OF ; 1 UPDATE FILES
4461 * LGSC 5
4462     NAME = ISU C5
4463     CONCURRENT EXECUTION = YES
4464     ITERATION PERIOD = ISULGSC5
4465     RESIDENT PROCESSORS =
4466         S1/LGSC 5
4467     INSTRUCTION LIST =
4468         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4469         EXECUTE A TOTAL OF ; 1 MESSAGE
4470 * LGSC 5
4471     NAME = DUO C5
4472     CONCURRENT EXECUTION = YES
4473     ITERATION PERIOD = DOULGSC5
4474     RESIDENT PROCESSORS =
4475         S1/LGSC 5
4476     INSTRUCTION LIST =
4477         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4478         EXECUTE A TOTAL OF ; 1 MESSAGE
4479 * LGSC 5
4480     NAME = AOA C5
4481     CONCURRENT EXECUTION = YES
4482     ITERATION PERIOD = AOALGSC5
4483     RESIDENT PROCESSORS =
4484         S1/LGSC 5
4485     INSTRUCTION LIST =
4486         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4487         EXECUTE A TOTAL OF ; 1 MESSAGE
4488 * LGSC 5
4489     NAME = TIN C5
4490     CONCURRENT EXECUTION = YES
4491     ITERATION PERIOD = TINLGSC5
4492     RESIDENT PROCESSORS =
4493         S1/LGSC 5
4494     INSTRUCTION LIST =
4495         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4496         EXECUTE A TOTAL OF ; 1 MESSAGE
4497 * LGSC 5
4498     NAME = FIL C5
4499     CONCURRENT EXECUTION = YES
4500     ITERATION PERIOD = FILLGSC5
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```

4501     RESIDENT PROCESSORS =
4502         S1/LGSC 5
4503     INSTRUCTION LIST =
4504         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4505         EXECUTE A TOTAL OF ; 1 MESSAGE
4506 * LGSC 5
4507     NAME = SPR C5
4508     CONCURRENT EXECUTION = YES
4509     ITERATION PERIOD = SPRLGSC5
4510     RESIDENT PROCESSORS =
4511         S1/LGSC 5
4512     INSTRUCTION LIST =
4513         EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4514         EXECUTE A TOTAL OF ; 1 MESSAGE

```

```

4515 * LGSC 5
4516   NAME = SHP C5
4517   CONCURRENT EXECUTION = YES
4518   ITERATION PERIOD = SHPLGSC5
4519   RESIDENT PROCESSORS =
4520     S1/LGSC 5
4521   INSTRUCTION LIST =
4522     EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4523     EXECUTE A TOTAL OF ; 1 MESSAGE
4524
4525 ***** STATION LGSC 6 # 1
4526 * INDIVIDUAL 1.500 -1.500 15
4527 HARDWARE TYPE = PROCESSING
4528   NAME = S1/LGSC 6
4529   LOCATION = 368.106 93.168
4530   STYLE/COLOR = 1 3
4531   BASIC CYCLE TIME = 0. MICROSEC
4532   INPUT CONTROLLER = YES
4533   INSTRUCTION REPERTOIRE =
4534     INSTRUCTION TYPE = PROCESSING
4535     NAME ; NO/OP
4536     TIME ; 0 CYCLES
4537     INSTRUCTION TYPE = MESSAGE
4538     NAME ; MESSAGE
4539     MESSAGE ; REQUEST FROM SERVER
4540     LENGTH ; 200 BITS
4541     INHIBIT MESSAGE TO SELF ; YES
4542     DESTINATION PROCESSOR ; R25/FILE SERVER
4543     QUEUE FLAG ; YES
4544     NAME ; UPDATE FILES
4545     MESSAGE ; UPDATE FILES
4546     LENGTH ; SDF2/LGSC 6
4547     INHIBIT MESSAGE TO SELF ; YES
4548     DESTINATION PROCESSOR ; R25/FILE SERVER
4549     QUEUE FLAG ; YES
4550     INSTRUCTION TYPE = READ
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```

4551   NAME ; GET TRANSACTION MODULE
4552   STORAGE DEVICE TO ACCESS ; S1/SD/LGSC 6
4553   FILE ACCESSED ; GENERAL STORAGE
4554   NUMBER OF BITS TO TRANSMIT ; 20000 BITS
4555   ALLOWABLE BUSSES ;
4556   S1/TD/LGSC 6
4557
4558 HARDWARE TYPE = STORAGE
4559   NAME = S1/SD/LGSC 6
4560   CAPACITY = 1090519040. BITS
4561   BITS PER WORD = 4000. BITS
4562   WORD ACCESS TIME = 48.83 MICROSEC
4563   OVERHEAD TIME PER BLOCK ACCESS = DISK ACCESS
4564   NUMBER OF PORTS = 1
4565
4566 HARDWARE TYPE = DATA TRANSFER
4567   NAME = S1/TD/LGSC 6
4568   BITS PER CYCLE = 1 BITS
4569   BUS CONNECTIONS =
4570     S1/LGSC 6
4571     S1/SD/LGSC 6
4572
4573 SOFTWARE TYPE = MODULE
4574 * LGSC 6
4575   NAME = UPDATE SERVER C6
4576   CONCURRENT EXECUTION = YES
4577   ALLOWED PROCESSORS =

```

```

4578      S1/LGSC 6
4579      REQUIRED MESSAGES =
4580      SEND REPLY TO NODE
4581      INSTRUCTION LIST =
4582      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4583      EXECUTE A TOTAL OF ; 1 UPDATE FILES
4584 * LGSC 6
4585      NAME = ISU C6
4586      CONCURRENT EXECUTION = YES
4587      ITERATION PERIOD = ISULGSC6
4588      RESIDENT PROCESSORS =
4589      S1/LGSC 6
4590      INSTRUCTION LIST =
4591      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4592      EXECUTE A TOTAL OF ; 1 MESSAGE
4593 * LGSC 6
4594      NAME = DUO C6
4595      CONCURRENT EXECUTION = YES
4596      ITERATION PERIOD = DUOLGSC6
4597      RESIDENT PROCESSORS =
4598      S1/LGSC 6
4599      INSTRUCTION LIST =
4600      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
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```

4601      EXECUTE A TOTAL OF ; 1 MESSAGE
4602 * LGSC 6
4603      NAME = AOA C6
4604      CONCURRENT EXECUTION = YES
4605      ITERATION PERIOD = AOALGSC6
4606      RESIDENT PROCESSORS =
4607      S1/LGSC 6
4608      INSTRUCTION LIST =
4609      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4610      EXECUTE A TOTAL OF ; 1 MESSAGE
4611 * LGSC 6
4612      NAME = TIN C6
4613      CONCURRENT EXECUTION = YES
4614      ITERATION PERIOD = TINLGSC6
4615      RESIDENT PROCESSORS =
4616      S1/LGSC 6
4617      INSTRUCTION LIST =
4618      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4619      EXECUTE A TOTAL OF ; 1 MESSAGE
4620 * LGSC 6
4621      NAME = FIL C6
4622      CONCURRENT EXECUTION = YES
4623      ITERATION PERIOD = FILLGSC6
4624      RESIDENT PROCESSORS =
4625      S1/LGSC 6
4626      INSTRUCTION LIST =
4627      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4628      EXECUTE A TOTAL OF ; 1 MESSAGE
4629 * LGSC 6
4630      NAME = SHP C6
4631      CONCURRENT EXECUTION = YES
4632      ITERATION PERIOD = SHPLGSC6
4633      RESIDENT PROCESSORS =
4634      S1/LGSC 6
4635      INSTRUCTION LIST =
4636      EXECUTE A TOTAL OF ; 1 GET TRANSACTION MODULE
4637      EXECUTE A TOTAL OF ; 1 MESSAGE
4638
4639 * MESSAGE REMOVAL MODULES
4640 SOFTWARE TYPE = MODULE

```

```

4641 NAME = MR/NOISE
4642 CONCURRENT EXECUTION = YES
4643 ALLOWED PROCESSORS =
4644 S1/BASE TRAFFIC2
4645 REQUIRED MESSAGES =
4646 NOISE
4647 INSTRUCTION LIST =
4648 EXECUTE A TOTAL OF ; 1 NO/OP
4649
4650 ***** GATEWAYS
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```

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```

4651 *** BEGIN GATEWAY DEFINITION
4652 STATISTICAL DISTRIBUTIONS =
4653 NAME = GPSDF/GW1
4654 TYPE = MESSAGE.LINEAR
4655 A = 0.
4656 B = 0.
4657 NAME = GMSDF/GW1
4658 TYPE = MESSAGE.LINEAR
4659 A = 1.0
4660 B = 0.
4661 HARDWARE TYPE = PROCESSING
4662 NAME = G1/GW1
4663 LOCATION = 171.374 24.654
4664 STYLE/COLOR = 1 5
4665 BASIC CYCLE TIME = 1 MIC
4666 INPUT CONTROLLER = YES
4667 INSTRUCTION REPERTOIRE =
4668 INSTRUCTION TYPE = PROCESSING
4669 NAME ; GATEWAY PROCESSING
4670 TIME ; GPSDF/GW1
4671 INSTRUCTION TYPE = MESSAGE
4672 NAME ; RETRANSMIT ANYTHING
4673 MESSAGE ; *
4674 DESTINATION PROCESSOR ; NEXT
4675 ECHO PE LIST = GW1 CLUSTER
4676 LENGTH ; GMSDF/GW1
4677 QUEUE FLAG ; YES
4678 RESUME FLAG ; NO
4679 SOFTWARE TYPE = MODULE
4680 NAME = G1/GW1/RETRANSMIT
4681 PRIORITY = 0
4682 INTERRUPTABILITY FLAG = NO
4683 CONCURRENT EXECUTION = YES
4684 ALLOWED PROCESSORS =
4685 G1/GW1
4686 REQUIRED MESSAGES =
4687 *
4688 INSTRUCTION LIST =
4689 EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4690 EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4691 HARDWARE TYPE = PROCESSING
4692 NAME = G2/GW1
4693 BASIC CYCLE TIME = 1 MIC
4694 INPUT CONTROLLER = YES
4695 INSTRUCTION REPERTOIRE =
4696 INSTRUCTION TYPE = PROCESSING
4697 NAME ; GATEWAY PROCESSING
4698 TIME ; GPSDF/GW1
4699 INSTRUCTION TYPE = MESSAGE
4700 NAME ; RETRANSMIT ANYTHING
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```

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```

4701      MESSAGE ; *
4702      DESTINATION PROCESSOR ; NEXT
4703      ECHO PE LIST = GW1 CLUSTER
4704      LENGTH ; GMSDF/GW1
4705      QUEUE FLAG ; YES
4706      RESUME FLAG ; NO
4707  SOFTWARE TYPE = MODULE
4708      NAME = G2/GW1/RETRANSMIT
4709      PRIORITY = 0
4710      INTERRUPTABILITY FLAG = NO
4711      CONCURRENT EXECUTION = YES
4712      ALLOWED PROCESSORS =
4713          G2/GW1
4714      REQUIRED MESSAGES =
4715          *
4716      INSTRUCTION LIST =
4717          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4718          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4719  HARDWARE TYPE = ECHO PE LIST
4720      NAME = GW1 CLUSTER
4721      TD = RING1
4722      ECHO PE = G1/GW1
4723      TD = LGSD
4724      ECHO PE = G2/GW1
4725  *** END GATEWAY DEFINITION
4726  *** BEGIN GATEWAY DEFINITION
4727  STATISTICAL DISTRIBUTIONS =
4728      NAME = GPSDF/GATE TO LGSP
4729      TYPE = MESSAGE.LINEAR
4730          A = 0.
4731          B = 0.
4732      NAME = GMSDF/GATE TO LGSP
4733      TYPE = MESSAGE.LINEAR
4734          A = 1.0
4735          B = 0.
4736  HARDWARE TYPE = PROCESSING
4737      NAME = G1/GATE TO LGSP
4738      LOCATION =      250.519      23.641
4739      STYLE/COLOR = 1      6
4740      ICON = PC2.ICN
4741      BASIC CYCLE TIME = 1 MIC
4742      INPUT CONTROLLER = YES
4743      INSTRUCTION REPERTOIRE =
4744          INSTRUCTION TYPE = PROCESSING
4745              NAME ; GATEWAY PROCESSING
4746              TIME ; GPSDF/GATE TO LGSP
4747          INSTRUCTION TYPE = MESSAGE
4748              NAME ; RETRANSMIT ANYTHING
4749              MESSAGE ; *
4750      DESTINATION PROCESSOR ; NEXT
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```

4751      ECHO PE LIST = GATE TO LGSP CLUSTER
4752      LENGTH ; GMSDF/GATE TO LGSP
4753      QUEUE FLAG ; YES
4754      RESUME FLAG ; NO
4755  SOFTWARE TYPE = MODULE
4756      NAME = G1/GATE TO LGSP/RETRANSMIT
4757      PRIORITY = 0
4758      INTERRUPTABILITY FLAG = NO
4759      CONCURRENT EXECUTION = YES
4760      ALLOWED PROCESSORS =
4761          G1/GATE TO LGSP
4762      REQUIRED MESSAGES =

```



```

4763      *
4764      INSTRUCTION LIST =
4765          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4766          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4767      HARDWARE TYPE = PROCESSING
4768          NAME = G2/GATE TO LGSP
4769          BASIC CYCLE TIME = 1 MIC
4770          INPUT CONTROLLER = YES
4771          INSTRUCTION REPERTOIRE =
4772              INSTRUCTION TYPE = PROCESSING
4773                  NAME ; GATEWAY PROCESSING
4774                  TIME ; GPSDF/GATE TO LGSP
4775              INSTRUCTION TYPE = MESSAGE
4776                  NAME ; RETRANSMIT ANYTHING
4777                  MESSAGE ; *
4778                  DESTINATION PROCESSOR ; NEXT
4779                  ECHO PE LIST = GATE TO LGSP CLUSTER
4780                  LENGTH ; GMSDF/GATE TO LGSP
4781                  QUEUE FLAG ; YES
4782                  RESUME FLAG ; NO
4783      SOFTWARE TYPE = MODULE
4784          NAME = G2/GATE TO LGSP/RETRANSMIT
4785          PRIORITY = 0
4786          INTERRUPTABILITY FLAG = NO
4787          CONCURRENT EXECUTION = YES
4788          ALLOWED PROCESSORS =
4789              G2/GATE TO LGSP
4790          REQUIRED MESSAGES =
4791      *
4792      INSTRUCTION LIST =
4793          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4794          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4795      HARDWARE TYPE = ECHO PE LIST
4796          NAME = GATE TO LGSP CLUSTER
4797          TD = RING1
4798          ECHO PE = G1/GATE TO LGSP
4799          TD = LGSP
4800          ECHO PE = G2/GATE TO LGSP
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```

4801      *** END GATEWAY DEFINITION
4802      *** BEGIN GATEWAY DEFINITION
4803      STATISTICAL DISTRIBUTIONS =
4804          NAME = GPSDF/GW3
4805          TYPE = MESSAGE.LINEAR
4806              A = 0.
4807              B = 0.
4808          NAME = GMSDF/GW3
4809          TYPE = MESSAGE.LINEAR
4810              A = 1.0
4811              B = 0.
4812      HARDWARE TYPE = PROCESSING
4813          NAME = G1/GW3
4814              LOCATION =      178.074      57.730
4815              STYLE/COLOR = 1 7
4816              BASIC CYCLE TIME = 1 MIC
4817              INPUT CONTROLLER = YES
4818              INSTRUCTION REPERTOIRE =
4819                  INSTRUCTION TYPE = PROCESSING
4820                      NAME ; GATEWAY PROCESSING
4821                      TIME ; GPSDF/GW3
4822                  INSTRUCTION TYPE = MESSAGE
4823                      NAME ; RETRANSMIT ANYTHING
4824                      MESSAGE ; *
4825                      DESTINATION PROCESSOR ; NEXT

```

```

4826          ECHO PE LIST = GW3 CLUSTER
4827          LENGTH ; GMSDF/GW3
4828          QUEUE FLAG ; YES
4829          RESUME FLAG ; NO
4830 SOFTWARE TYPE = MODULE
4831   NAME = G1/GW3/RETRANSMIT
4832   PRIORITY = 0
4833   INTERRUPTABILITY FLAG = NO
4834   CONCURRENT EXECUTION = YES
4835   ALLOWED PROCESSORS =
4836   G1/GW3
4837   REQUIRED MESSAGES =
4838   *
4839   INSTRUCTION LIST =
4840     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4841     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4842 HARDWARE TYPE = PROCESSING
4843   NAME = G2/GW3
4844   BASIC CYCLE TIME = 1 MIC
4845   INPUT CONTROLLER = YES
4846   INSTRUCTION REPERTOIRE =
4847   INSTRUCTION TYPE = PROCESSING
4848     NAME ; GATEWAY PROCESSING
4849     TIME ; GPSDF/GW3
4850   INSTRUCTION TYPE = MESSAGE
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```

4851          NAME ; RETRANSMIT ANYTHING
4852          MESSAGE ; *
4853          DESTINATION PROCESSOR ; NEXT
4854          ECHO PE LIST = GW3 CLUSTER
4855          LENGTH ; GMSDF/GW3
4856          QUEUE FLAG ; YES
4857          RESUME FLAG ; NO
4858 SOFTWARE TYPE = MODULE
4859   NAME = G2/GW3/RETRANSMIT
4860   PRIORITY = 0
4861   INTERRUPTABILITY FLAG = NO
4862   CONCURRENT EXECUTION = YES
4863   ALLOWED PROCESSORS =
4864   G2/GW3
4865   REQUIRED MESSAGES =
4866   *
4867   INSTRUCTION LIST =
4868     EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4869     EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4870 HARDWARE TYPE = ECHO PE LIST
4871   NAME = GW3 CLUSTER
4872   TD = RING1
4873   ECHO PE = G1/GW3
4874   TD = LGSM
4875   ECHO PE = G2/GW3
4876 *** END GATEWAY DEFINITION
4877 *** BEGIN GATEWAY DEFINITION
4878 STATISTICAL DISTRIBUTIONS =
4879   NAME = GPSDF/GW4
4880   TYPE = MESSAGE.LINEAR
4881   A = 0.
4882   B = 0.
4883   NAME = GMSDF/GW4
4884   TYPE = MESSAGE.LINEAR
4885   A = 1.0
4886   B = 0.
4887 HARDWARE TYPE = PROCESSING
4888   NAME = G1/GW4

```

```

4889      LOCATION =      277.319      54.017
4890      STYLE/COLOR = 1 10
4891      BASIC CYCLE TIME = 1 MIC
4892      INPUT CONTROLLER = YES
4893      INSTRUCTION REPERTOIRE =
4894          INSTRUCTION TYPE = PROCESSING
4895          NAME ; GATEWAY PROCESSING
4896          TIME ; GPSDF/GW4
4897      INSTRUCTION TYPE = MESSAGE
4898          NAME ; RETRANSMIT ANYTHING
4899          MESSAGE ; *
4900          DESTINATION PROCESSOR ; NEXT
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```

4901      ECHO PE LIST = GW4 CLUSTER
4902      LENGTH ; GMSDF/GW4
4903      QUEUE FLAG ; YES
4904      RESUME FLAG ; NO
4905  SOFTWARE TYPE = MODULE
4906      NAME = G1/GW4/RETRANSMIT
4907      PRIORITY = 0
4908      INTERRUPTABILITY FLAG = NO
4909      CONCURRENT EXECUTION = YES
4910      ALLOWED PROCESSORS =
4911          G1/GW4
4912      REQUIRED MESSAGES =
4913      *
4914      INSTRUCTION LIST =
4915          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4916          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4917  HARDWARE TYPE = PROCESSING
4918      NAME = G2/GW4
4919      BASIC CYCLE TIME = 1 MIC
4920      INPUT CONTROLLER = YES
4921      INSTRUCTION REPERTOIRE =
4922          INSTRUCTION TYPE = PROCESSING
4923          NAME ; GATEWAY PROCESSING
4924          TIME ; GPSDF/GW4
4925          INSTRUCTION TYPE = MESSAGE
4926          NAME ; RETRANSMIT ANYTHING
4927          MESSAGE ; *
4928          DESTINATION PROCESSOR ; NEXT
4929          ECHO PE LIST = GW4 CLUSTER
4930          LENGTH ; GMSDF/GW4
4931          QUEUE FLAG ; YES
4932          RESUME FLAG ; NO
4933  SOFTWARE TYPE = MODULE
4934      NAME = G2/GW4/RETRANSMIT
4935      PRIORITY = 0
4936      INTERRUPTABILITY FLAG = NO
4937      CONCURRENT EXECUTION = YES
4938      ALLOWED PROCESSORS =
4939          G2/GW4
4940      REQUIRED MESSAGES =
4941      *
4942      INSTRUCTION LIST =
4943          EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4944          EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4945  HARDWARE TYPE = ECHO PE LIST
4946      NAME = GW4 CLUSTER
4947      TD = RING1
4948      ECHO PE = G1/GW4
4949      TD = LGSC
4950      ECHO PE = G2/GW4
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```

4951 *** END GATEWAY DEFINITION
4952 *** BEGIN GATEWAY DEFINITION
4953 STATISTICAL DISTRIBUTIONS =
4954     NAME = GPSDF/GW6
4955     TYPE = MESSAGE.LINEAR
4956     A = 0.
4957     B = 0.
4958     NAME = GMSDF/GW6
4959     TYPE = MESSAGE.LINEAR
4960     A = 1.0
4961     B = 0.
4962 HARDWARE TYPE = PROCESSING
4963     NAME = G1/GW6
4964     LOCATION =          64.174          37.985
4965     STYLE/COLOR =    1    12
4966     BASIC CYCLE TIME = 1 MIC
4967     INPUT CONTROLLER = YES
4968     INSTRUCTION REPERTOIRE =
4969         INSTRUCTION TYPE = PROCESSING
4970             NAME ; GATEWAY PROCESSING
4971             TIME ; GPSDF/GW6
4972         INSTRUCTION TYPE = MESSAGE
4973             NAME ; RETRANSMIT ANYTHING
4974             MESSAGE ; *
4975             DESTINATION PROCESSOR ; NEXT
4976             ECHO PE LIST = GW6 CLUSTER
4977             LENGTH ; GMSDF/GW6
4978             QUEUE FLAG ; YES
4979             RESUME FLAG ; NO
4980 SOFTWARE TYPE = MODULE
4981     NAME = G1/GW6/RETRANSMIT
4982     PRIORITY = 0
4983     INTERRUPTABILITY FLAG = NO
4984     CONCURRENT EXECUTION = YES
4985     ALLOWED PROCESSORS =
4986         G1/GW6
4987     REQUIRED MESSAGES =
4988         *
4989     INSTRUCTION LIST =
4990         EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
4991         EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
4992 HARDWARE TYPE = PROCESSING
4993     NAME = G2/GW6
4994     BASIC CYCLE TIME = 1 MIC
4995     INPUT CONTROLLER = YES
4996     INSTRUCTION REPERTOIRE =
4997         INSTRUCTION TYPE = PROCESSING
4998             NAME ; GATEWAY PROCESSING
4999             TIME ; GPSDF/GW6
5000     INSTRUCTION TYPE = MESSAGE
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```

5001     NAME ; RETRANSMIT ANYTHING
5002     MESSAGE ; *
5003     DESTINATION PROCESSOR ; NEXT
5004     ECHO PE LIST = GW6 CLUSTER
5005     LENGTH ; GMSDF/GW6
5006     QUEUE FLAG ; YES
5007     RESUME FLAG ; NO
5008 SOFTWARE TYPE = MODULE
5009     NAME = G2/GW6/RETRANSMIT
5010     PRIORITY = 0

```

```

5011     INTERRUPTABILITY FLAG = NO
5012     CONCURRENT EXECUTION = YES
5013     ALLOWED PROCESSORS =
5014         G2/GW6
5015     REQUIRED MESSAGES =
5016         *
5017     INSTRUCTION LIST =
5018         EXECUTE A TOTAL OF ; 1 GATEWAY PROCESSING
5019         EXECUTE A TOTAL OF ; 1 RETRANSMIT ANYTHING
5020     HARDWARE TYPE = ECHO PE LIST
5021     NAME = GW6 CLUSTER
5022     TD = RING1
5023         ECHO PE = G1/GW6
5024     TD = AFNET
5025         ECHO PE = G2/GW6
5026     *** END GATEWAY DEFINITION
5027
5028     ***** ROUTES
5029     HARDWARE TYPE = ROUTE
5030     NAME = R6/FILE SERVER
5031     NEXT PE = G1/GW1
5032         ALLOWABLE BUSSES ;
5033         LGSD
5034     NEXT PE = G2/GATE TO LGSP
5035         ALLOWABLE BUSSES ;
5036         RING1
5037     NEXT PE = S1/FILE SERVER
5038         ALLOWABLE BUSSES ;
5039         LGSP
5040     NAME = R7/FILE SERVER
5041     NEXT PE = G1/GW3
5042         ALLOWABLE BUSSES ;
5043         LGSM
5044     NEXT PE = G2/GATE TO LGSP
5045         ALLOWABLE BUSSES ;
5046         RING1
5047     NEXT PE = S1/FILE SERVER
5048         ALLOWABLE BUSSES ;
5049         LGSP
5050     NAME = R8/FILE SERVER

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```

5051     NEXT PE = G1/GW4
5052         ALLOWABLE BUSSES ;
5053         LGSC
5054     NEXT PE = G2/GATE TO LGSP
5055         ALLOWABLE BUSSES ;
5056         RING1
5057     NEXT PE = S1/FILE SERVER
5058         ALLOWABLE BUSSES ;
5059         LGSP
5060     NAME = R9/FILE SERVER
5061     NEXT PE = G1/GW6
5062         ALLOWABLE BUSSES ;
5063         AFNET
5064     NEXT PE = G2/GATE TO LGSP
5065         ALLOWABLE BUSSES ;
5066         RING1
5067     NEXT PE = S1/FILE SERVER
5068         ALLOWABLE BUSSES ;
5069         LGSP
5070     NAME = R10/FILE SERVER
5071     NEXT PE = G1/GW6
5072         ALLOWABLE BUSSES ;
5073         AFNET

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5074     NEXT PE = G2/GATE TO LGSP
5075     ALLOWABLE BUSSES ;
5076     RING1
5077     NEXT PE = S1/FILE SERVER
5078     ALLOWABLE BUSSES ;
5079     LGSP
5080     NAME = R11/FILE SERVER
5081     NEXT PE = G1/GW1
5082     ALLOWABLE BUSSES ;
5083     LGSD
5084     NEXT PE = G2/GATE TO LGSP
5085     ALLOWABLE BUSSES ;
5086     RING1
5087     NEXT PE = S1/FILE SERVER
5088     ALLOWABLE BUSSES ;
5089     LGSP
5090     NAME = R12/FILE SERVER
5091     NEXT PE = G1/GW1
5092     ALLOWABLE BUSSES ;
5093     LGSD
5094     NEXT PE = G2/GATE TO LGSP
5095     ALLOWABLE BUSSES ;
5096     RING1
5097     NEXT PE = S1/FILE SERVER
5098     ALLOWABLE BUSSES ;
5099     LGSP
5100     NAME = R13/FILE SERVER

```

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```

5101     NEXT PE = G1/GW1
5102     ALLOWABLE BUSSES ;
5103     LGSD
5104     NEXT PE = G2/GATE TO LGSP
5105     ALLOWABLE BUSSES ;
5106     RING1
5107     NEXT PE = S1/FILE SERVER
5108     ALLOWABLE BUSSES ;
5109     LGSP
5110     NAME = R14/FILE SERVER
5111     NEXT PE = G1/GW1
5112     ALLOWABLE BUSSES ;
5113     LGSD
5114     NEXT PE = G2/GATE TO LGSP
5115     ALLOWABLE BUSSES ;
5116     RING1
5117     NEXT PE = S1/FILE SERVER
5118     ALLOWABLE BUSSES ;
5119     LGSP
5120     NAME = R15/FILE SERVER
5121     NEXT PE = G1/GW1
5122     ALLOWABLE BUSSES ;
5123     LGSD
5124     NEXT PE = G2/GATE TO LGSP
5125     ALLOWABLE BUSSES ;
5126     RING1
5127     NEXT PE = S1/FILE SERVER
5128     ALLOWABLE BUSSES ;
5129     LGSP
5130     NAME = R16/FILE SERVER
5131     NEXT PE = G1/GW3
5132     ALLOWABLE BUSSES ;
5133     LGSM
5134     NEXT PE = G2/GATE TO LGSP
5135     ALLOWABLE BUSSES ;
5136     RING1

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5137     NEXT PE = S1/FILE SERVER
5138     ALLOWABLE BUSSES ;
5139     LGSP
5140     NAME = R17/FILE SERVER
5141     NEXT PE = G1/GW3
5142     ALLOWABLE BUSSES ;
5143     LGSM
5144     NEXT PE = G2/GATE TO LGSP
5145     ALLOWABLE BUSSES ;
5146     RING1
5147     NEXT PE = S1/FILE SERVER
5148     ALLOWABLE BUSSES ;
5149     LGSP
5150     NAME = R18/FILE SERVER
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```

5151     NEXT PE = G1/GW3
5152     ALLOWABLE BUSSES ;
5153     LGSM
5154     NEXT PE = G2/GATE TO LGSP
5155     ALLOWABLE BUSSES ;
5156     RING1
5157     NEXT PE = S1/FILE SERVER
5158     ALLOWABLE BUSSES ;
5159     LGSP
5160     NAME = R19/FILE SERVER
5161     NEXT PE = G1/GW3
5162     ALLOWABLE BUSSES ;
5163     LGSM
5164     NEXT PE = G2/GATE TO LGSP
5165     ALLOWABLE BUSSES ;
5166     RING1
5167     NEXT PE = S1/FILE SERVER
5168     ALLOWABLE BUSSES ;
5169     LGSP
5170     NAME = R20/FILE SERVER
5171     NEXT PE = G1/GW3
5172     ALLOWABLE BUSSES ;
5173     LGSM
5174     NEXT PE = G2/GATE TO LGSP
5175     ALLOWABLE BUSSES ;
5176     RING1
5177     NEXT PE = S1/FILE SERVER
5178     ALLOWABLE BUSSES ;
5179     LGSP
5180     NAME = R21/FILE SERVER
5181     NEXT PE = G1/GW4
5182     ALLOWABLE BUSSES ;
5183     LGSC
5184     NEXT PE = G2/GATE TO LGSP
5185     ALLOWABLE BUSSES ;
5186     RING1
5187     NEXT PE = S1/FILE SERVER
5188     ALLOWABLE BUSSES ;
5189     LGSP
5190     NAME = R22/FILE SERVER
5191     NEXT PE = G1/GW4
5192     ALLOWABLE BUSSES ;
5193     LGSC
5194     NEXT PE = G2/GATE TO LGSP
5195     ALLOWABLE BUSSES ;
5196     RING1
5197     NEXT PE = S1/FILE SERVER
5198     ALLOWABLE BUSSES ;
5199     LGSP

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5201 NEXT PE = G1/GW4
 5202 ALLOWABLE BUSSES ;
 5203 LGSC
 5204 NEXT PE = G2/GATE TO LGSP
 5205 ALLOWABLE BUSSES ;
 5206 RING1
 5207 NEXT PE = S1/FILE SERVER
 5208 ALLOWABLE BUSSES ;
 5209 LGSP
 5210 NAME = R24/FILE SERVER
 5211 NEXT PE = G1/GW4
 5212 ALLOWABLE BUSSES ;
 5213 LGSC
 5214 NEXT PE = G2/GATE TO LGSP
 5215 ALLOWABLE BUSSES ;
 5216 RING1
 5217 NEXT PE = S1/FILE SERVER
 5218 ALLOWABLE BUSSES ;
 5219 LGSP
 5220 NAME = R25/FILE SERVER
 5221 NEXT PE = G1/GW4
 5222 ALLOWABLE BUSSES ;
 5223 LGSC
 5224 NEXT PE = G2/GATE TO LGSP
 5225 ALLOWABLE BUSSES ;
 5226 RING1
 5227 NEXT PE = S1/FILE SERVER
 5228 ALLOWABLE BUSSES ;
 5229 LGSP
 5230
 5231 ***** FILES
 5232 SOFTWARE TYPE = FILE
 5233 NAME = GENERAL STORAGE
 5234 NUMBER OF BITS = 15000000.000 BITS
 5235 READ ONLY FLAG = NO
 5236 INITIAL RESIDENCY =
 5237 S1/SD/LGSP 1
 5238 NAME = GENERAL STORAGE
 5239 NUMBER OF BITS = +1.50000000E+008 BITS
 5240 READ ONLY FLAG = NO
 5241 INITIAL RESIDENCY =
 5242 S1/SD/FILE SERVER
 5243 NAME = GENERAL STORAGE
 5244 NUMBER OF BITS = 15000000.000 BITS
 5245 READ ONLY FLAG = NO
 5246 INITIAL RESIDENCY =
 5247 S1/SD/LGSP2
 5248 NAME = GENERAL STORAGE
 5249 NUMBER OF BITS = 15000000.000 BITS
 5250 READ ONLY FLAG = NO
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5251 INITIAL RESIDENCY =
 5252 S1/SD/LGSD1
 5253 NAME = GENERAL STORAGE
 5254 NUMBER OF BITS = 15000000.000 BITS
 5255 READ ONLY FLAG = NO
 5256 INITIAL RESIDENCY =
 5257 S1/SD/LGSM 1

5258 NAME = GENERAL STORAGE
 5259 NUMBER OF BITS = 15000000.000 BITS
 5260 READ ONLY FLAG = NO
 5261 INITIAL RESIDENCY =
 5262 S1/SD/LGSC 1
 5263 NAME = GENERAL STORAGE
 5264 NUMBER OF BITS = 15000000.000 BITS
 5265 READ ONLY FLAG = NO
 5266 INITIAL RESIDENCY =
 5267 S1/SD/FMFS
 5268 NAME = GENERAL STORAGE
 5269 NUMBER OF BITS = 15000000.000 BITS
 5270 READ ONLY FLAG = NO
 5271 INITIAL RESIDENCY =
 5272 S1/SD/DOMR
 5273 NAME = GENERAL STORAGE
 5274 NUMBER OF BITS = 15000000.000 BITS
 5275 READ ONLY FLAG = NO
 5276 INITIAL RESIDENCY =
 5277 S1/SD/LGSD 2
 5278 NAME = GENERAL STORAGE
 5279 NUMBER OF BITS = 15000000.000 BITS
 5280 READ ONLY FLAG = NO
 5281 INITIAL RESIDENCY =
 5282 S1/SD/LGSD 3
 5283 NAME = GENERAL STORAGE
 5284 NUMBER OF BITS = 15000000.000 BITS
 5285 READ ONLY FLAG = NO
 5286 INITIAL RESIDENCY =
 5287 S1/SD/LGSD 4
 5288 NAME = GENERAL STORAGE
 5289 NUMBER OF BITS = 15000000.000 BITS
 5290 READ ONLY FLAG = NO
 5291 INITIAL RESIDENCY =
 5292 S1/SD/LGSD 5
 5293 NAME = GENERAL STORAGE
 5294 NUMBER OF BITS = 15000000.000 BITS
 5295 READ ONLY FLAG = NO
 5296 INITIAL RESIDENCY =
 5297 S1/SD/LGSD 6
 5298 NAME = GENERAL STORAGE
 5299 NUMBER OF BITS = 15000000.000 BITS
 5300 READ ONLY FLAG = NO
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5301 INITIAL RESIDENCY =
 5302 S1/SD/LGSM 2
 5303 NAME = GENERAL STORAGE
 5304 NUMBER OF BITS = 15000000.000 BITS
 5305 READ ONLY FLAG = NO
 5306 INITIAL RESIDENCY =
 5307 S1/SD/LGSM 3
 5308 NAME = GENERAL STORAGE
 5309 NUMBER OF BITS = 15000000.000 BITS
 5310 READ ONLY FLAG = NO
 5311 INITIAL RESIDENCY =
 5312 S1/SD/LGSM 4
 5313 NAME = GENERAL STORAGE
 5314 NUMBER OF BITS = 15000000.000 BITS
 5315 READ ONLY FLAG = NO
 5316 INITIAL RESIDENCY =
 5317 S1/SD/LGSM 5
 5318 NAME = GENERAL STORAGE
 5319 NUMBER OF BITS = 15000000.000 BITS
 5320 READ ONLY FLAG = NO

5321 INITIAL RESIDENCY =
5322 S1/SD/LGSM 6
5323 NAME = GENERAL STORAGE
5324 NUMBER OF BITS = 15000000.000 BITS
5325 READ ONLY FLAG = NO
5326 INITIAL RESIDENCY =
5327 S1/SD/LGSC 2
5328 NAME = GENERAL STORAGE
5329 NUMBER OF BITS = 15000000.000 BITS
5330 READ ONLY FLAG = NO
5331 INITIAL RESIDENCY =
5332 S1/SD/LGSC 3
5333 NAME = GENERAL STORAGE
5334 NUMBER OF BITS = 15000000.000 BITS
5335 READ ONLY FLAG = NO
5336 INITIAL RESIDENCY =
5337 S1/SD/LGSC 4
5338 NAME = GENERAL STORAGE
5339 NUMBER OF BITS = 15000000.000 BITS
5340 READ ONLY FLAG = NO
5341 INITIAL RESIDENCY =
5342 S1/SD/LGSC 5
5343 NAME = GENERAL STORAGE
5344 NUMBER OF BITS = 15000000.000 BITS
5345 READ ONLY FLAG = NO
5346 INITIAL RESIDENCY =
5347 S1/SD/LGSC 6

SBSS Simulation Distributed processing - Workload hierarchically distributed

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSM	LGSD	LGSC
COLLISION EPISODES	10	262	9
COLLIDED TRANSFERS	28	652	23
AVG TO RESOLVE	2.000	2.210	1.917
MAX TO RESOLVE	3	8	7
DEFERRALS	16	284	13
AVG DEFERRAL DELAY	504.372	636.013	427.565
MAX DEFERRAL DELAY	1172.800	1215.582	1166.400
STD DEV DEFERRAL DELAY	481.054	431.575	347.797
AVG DEFERRAL QUEUE	.000	.000	.000
MAX QUEUE SIZE	1.000	2.000	1.000
STD DEV QUEUE SIZE	.000	.001	.000
MULTIPLE COLLISIONS	7	110	4
AVG MULT COLLISIONS	3.143	3.164	3.250
MAX MULT COLLISIONS	4	4	4
SUCCESSFUL TRANSFERS	150554	497744	139998
AVG USAGE TIME	957.789	957.863	957.783
MAX USAGE TIME	1220.800	1220.800	1220.800
STD DEV USAGE TIME	403.105	403.070	403.105
PER CENT OF TIME BUSY	.067	.221	.062

SBSS Simulation Distributed processing - Workload hierarchically distributed

COLLISION LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME	LGSP	AFNET
COLLISION EPISODES	1890	0
COLLIDED TRANSFERS	4673	0
AVG TO RESOLVE	2.122	0.
MAX TO RESOLVE	9	0
DEFERRALS	2096	0
AVG DEFERRAL DELAY	623.182	0.
MAX DEFERRAL DELAY	1213.041	0.
STD DEV DEFERRAL DELAY	432.077	0.
AVG DEFERRAL QUEUE	.000	0.
MAX QUEUE SIZE	2.000	0.
STD DEV QUEUE SIZE	.002	0.
MULTIPLE COLLISIONS	795	0
AVG MULT COLLISIONS	3.123	0.
MAX MULT COLLISIONS	4	0
SUCCESSFUL TRANSFERS	1434758	34038
AVG USAGE TIME	958.009	571.323
MAX USAGE TIME	1220.800	726.667
STD DEV USAGE TIME	403.006	239.633
PER CENT OF TIME BUSY	.636	.009

SBSS Simulation Distributed processing - Workload hierarchically distributed

TOKEN LAN UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

LAN NAME

RING1

LAN REQUESTS GRANTED	664480
AVG REQUEST DELAY	1.931
MAX REQUEST DELAY	2636.523
STD DEV REQUEST DELAY	58.107
COMPLETED TRANSFERS	664480
AVG USAGE TIME	743.526
MAX USAGE TIME	2638.250
STD DEV USAGE TIME	1166.794
AVG QUEUE SIZE	.000
MAX QUEUE SIZE	1.000
STD DEV QUEUE SIZE	.002
PER CENT OF TIME BUSY	.229

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER P1	REC P1	ISU P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	67260	734	13597
AVG EXECUTION TIME	79561.833	75325.368	75310.184
MAX EXECUTION TIME	88864.281	83877.233	89189.784
MIN EXECUTION TIME	79555.226	75293.725	75293.106
STD DEV EXECUTION TIME	153.519	458.194	346.523

ACTIVITY NAME	DOR P1	LPS P1	FK1 P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	255	13172	8050
AVG EXECUTION TIME	75302.437	75307.152	75309.850
MAX EXECUTION TIME	76991.614	94342.653	88513.538
MIN EXECUTION TIME	75294.281	75293.321	75293.604
STD DEV EXECUTION TIME	106.213	311.914	338.914

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	BKA P1	DUO P1	AOA P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	6308	1134	3957
AVG EXECUTION TIME	75314.642	75300.767	75316.636
MAX EXECUTION TIME	90073.135	77636.613	91376.916
MIN EXECUTION TIME	75293.362	75293.905	75293.260
STD DEV EXECUTION TIME	398.712	95.591	472.631

ACTIVITY NAME	1RF P1	FCS P1	FIC P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	5767	481	3428
AVG EXECUTION TIME	75312.744	75296.360	75305.753
MAX EXECUTION TIME	86417.496	75734.778	83352.302
MIN EXECUTION TIME	75293.517	75293.832	75293.495
STD DEV EXECUTION TIME	355.218	20.209	224.192

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TIN P1	FID P1	FIL P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	90	2335	107
AVG EXECUTION TIME	75295.446	75312.306	75318.811
MAX EXECUTION TIME	75297.371	85716.531	77798.521
MIN EXECUTION TIME	75294.402	75293.612	75294.195
STD DEV EXECUTION TIME	.557	371.345	240.851
ACTIVITY NAME	SPR P1	AE1 P1	FCU P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	181	1717	1815
AVG EXECUTION TIME	75299.064	75311.983	75318.095
MAX EXECUTION TIME	75914.697	86978.940	86484.228
MIN EXECUTION TIME	75294.257	75293.774	75293.825
STD DEV EXECUTION TIME	46.037	363.068	431.249

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	SHF P1	FTR P1	BPA P1
HOST STATION	LGSP 1	LGSP 1	LGSP 1
COMPLETED EXECUTIONS	697	1518	1491
AVG EXECUTION TIME	75303.619	75335.031	75304.016
MAX EXECUTION TIME	77314.393	87676.429	83817.985
MIN EXECUTION TIME	75293.184	75293.678	75293.847
STD DEV EXECUTION TIME	106.959	570.736	230.775

ACTIVITY NAME	TRM P1	BASE TRAFIC	MESSAGE REPLY
HOST STATION	LGSP 1	BASE TRAFFIC1	FILE SERVER
COMPLETED EXECUTIONS	426	390426	159277
AVG EXECUTION TIME	75296.021	27.754	395590.371
MAX EXECUTION TIME	75568.357	2661.523	404793.980
MIN EXECUTION TIME	75293.749	25.000	395582.780
STD DEV EXECUTION TIME	13.219	69.261	198.166

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE RECORDS	UPDATE SERVER P2	ISU P2
HOST STATION	FILE SERVER	LGSP2	LGSP2
COMPLETED EXECUTIONS	159276	666	652
AVG EXECUTION TIME	391269.580	79560.002	75307.537
MAX EXECUTION TIME	391269.580	81169.053	81220.094
MIN EXECUTION TIME	391269.580	79556.096	75293.824
STD DEV EXECUTION TIME	0.	62.705	239.779

ACTIVITY NAME	TRM P2	UPDATE SERVER D1	REC D1
HOST STATION	LGSP2	LGSD1	LGSD1
COMPLETED EXECUTIONS	14	23785	12417
AVG EXECUTION TIME	75310.978	79558.183	75304.394
MAX EXECUTION TIME	75512.317	84755.057	91052.169
MIN EXECUTION TIME	75294.757	79555.379	75293.435
STD DEV EXECUTION TIME	55.842	57.651	284.267

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	ISU D1	DOR D1	DUO D1
HOST STATION	LGSD1	LGSD1	LGSD1
COMPLETED EXECUTIONS	372	7524	485
AVG EXECUTION TIME	75316.231	75299.870	75298.998
MAX EXECUTION TIME	83046.834	85003.155	76666.598
MIN EXECUTION TIME	75294.164	75293.417	75293.508
STD DEV EXECUTION TIME	401.353	164.130	64.737

ACTIVITY NAME	AOA D1	FCS D1	FIC D1
HOST STATION	LGSD1	LGSD1	LGSD1
COMPLETED EXECUTIONS	25	1204	777
AVG EXECUTION TIME	75295.529	75295.366	75295.353
MAX EXECUTION TIME	75296.826	75296.790	75296.970
MIN EXECUTION TIME	75294.394	75293.535	75293.589
STD DEV EXECUTION TIME	.510	.489	.517

SBSJ Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TIN D1	SPR D1	AE1 D1
HOST STATION	LGSD1	LGSD1	LGSD1
COMPLETED EXECUTIONS	586	81	21
AVG EXECUTION TIME	75305.593	75295.206	75295.303
MAX EXECUTION TIME	81155.295	75296.280	75295.991
MIN EXECUTION TIME	75293.737	75294.115	75293.886
STD DEV EXECUTION TIME	241.946	.476	.496

ACTIVITY NAME	SHP D1	FET D1	TRM D1
HOST STATION	LGSD1	LGSD1	LGSD1
COMPLETED EXECUTIONS	23	31	239
AVG EXECUTION TIME	75295.200	75295.315	75295.403
MAX EXECUTION TIME	75295.888	75296.100	75296.767
MIN EXECUTION TIME	75293.504	75294.677	75293.867
STD DEV EXECUTION TIME	.489	.353	.488

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER M1	REC M1	ISU M1
HOST STATION	LGSM 1	LGSM 1	LGSM 1
COMPLETED EXECUTIONS	6734	925	3048
AVG EXECUTION TIME	79557.357	75295.379	75295.337
MAX EXECUTION TIME	79558.985	75297.051	75297.009
MIN EXECUTION TIME	79555.479	75293.797	75293.748
STD DEV EXECUTION TIME	.497	.525	.500

ACTIVITY NAME	DOR M1	LPS M1	DUO M1
HOST STATION	LGSM 1	LGSM 1	LGSM 1
COMPLETED EXECUTIONS	351	440	239
AVG EXECUTION TIME	75295.343	75295.353	75296.194
MAX EXECUTION TIME	75296.872	75296.947	75498.894
MIN EXECUTION TIME	75293.951	75294.054	75293.769
STD DEV EXECUTION TIME	.492	.486	13.149

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	AOA M1	FCS M1	TIN M1
HOST STATION	LGSM 1	LGSM 1	LGSM 1
COMPLETED EXECUTIONS	53	373	161
AVG EXECUTION TIME	75295.274	75298.572	75295.407
MAX EXECUTION TIME	75296.966	76483.714	75296.838
MIN EXECUTION TIME	75293.770	75293.853	75294.344
STD DEV EXECUTION TIME	.596	61.449	.536

ACTIVITY NAME	FIL M1	SPR M1	AE1 M1
HOST STATION	LGSM 1	LGSM 1	LGSM 1
COMPLETED EXECUTIONS	42	462	138
AVG EXECUTION TIME	75295.287	75295.361	75295.380
MAX EXECUTION TIME	75296.343	75296.948	75296.582
MIN EXECUTION TIME	75294.303	75293.865	75294.237
STD DEV EXECUTION TIME	.477	.506	.470

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	SHP M1	FTR M1	FET M1
HOST STATION	LGSM 1	LGSM 1	LGSM 1
COMPLETED EXECUTIONS	34	39	318
AVG EXECUTION TIME	75295.421	75295.216	75295.368
MAX EXECUTION TIME	75296.261	75296.242	75296.652
MIN EXECUTION TIME	75294.199	75294.004	75294.361
STD DEV EXECUTION TIME	.512	.444	.495

ACTIVITY NAME	TRM M1	UPDATE SERVER C1	REC C1
HOST STATION	LGSM 1	LGSC 1	LGSC 1
COMPLETED EXECUTIONS	112	6893	599
AVG EXECUTION TIME	75295.395	79557.355	75295.328
MAX EXECUTION TIME	75296.910	79559.256	75296.752
MIN EXECUTION TIME	75294.324	79555.618	75293.905
STD DEV EXECUTION TIME	.479	.511	.512

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	ISU C1	DOR C1	DUO C1
HOST STATION	LGSC 1	LGSC 1	LGSC 1
COMPLETED EXECUTIONS	2326	294	947
AVG EXECUTION TIME	75295.345	75295.328	75296.256
MAX EXECUTION TIME	75296.983	75296.657	76137.626
MIN EXECUTION TIME	75293.373	75293.621	75293.940
STD DEV EXECUTION TIME	.510	.498	27.360

ACTIVITY NAME	AOA C1	FCS C1	TIN C1
HOST STATION	LGSC 1	LGSC 1	LGSC 1
COMPLETED EXECUTIONS	292	281	727
AVG EXECUTION TIME	75295.328	75295.427	75295.355
MAX EXECUTION TIME	75296.884	75296.848	75296.825
MIN EXECUTION TIME	75293.362	75294.041	75293.636
STD DEV EXECUTION TIME	.519	.493	.512

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FID C1	FIL C1	SPR C1
HOST STATION	LGSC 1	LGSC 1	LGSC 1
COMPLETED EXECUTIONS	501	486	30
AVG EXECUTION TIME	75295.344	75295.358	75295.408
MAX EXECUTION TIME	75296.870	75296.939	75296.467
MIN EXECUTION TIME	75293.875	75293.755	75293.788
STD DEV EXECUTION TIME	.503	.499	.528

ACTIVITY NAME	FCU C1	SHP C1	BPA C1
HOST STATION	LGSC 1	LGSC 1	LGSC 1
COMPLETED EXECUTIONS	169	182	4
AVG EXECUTION TIME	75295.436	75295.366	75295.034
MAX EXECUTION TIME	75296.635	75296.768	75295.494
MIN EXECUTION TIME	75294.137	75293.994	75294.466
STD DEV EXECUTION TIME	.503	.506	.433

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TRM C1	UPDATE SERVER FMFS	ISU RM
HOST STATION	LGSC 1	FMFS	FMFS
COMPLETED EXECUTIONS	55	2244	137
AVG EXECUTION TIME	75295.227	77830.806	75270.317
MAX EXECUTION TIME	75296.158	77832.584	75271.351
MIN EXECUTION TIME	75294.407	77828.639	75268.813
STD DEV EXECUTION TIME	.480	.504	.486

ACTIVITY NAME	FK1 FMFS	BAK FMFS	DUO MISC
HOST STATION	FMFS	FMFS	FMFS
COMPLETED EXECUTIONS	661	763	225
AVG EXECUTION TIME	75270.351	75270.343	75270.311
MAX EXECUTION TIME	75271.867	75271.906	75271.519
MIN EXECUTION TIME	75268.824	75268.893	75269.004
STD DEV EXECUTION TIME	.500	.474	.495

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	AOA MISC	TIN CE	FIL CE
HOST STATION	FMFS	FMFS	FMFS
COMPLETED EXECUTIONS	109	18	331
AVG EXECUTION TIME	75270.345	75270.146	75270.299
MAX EXECUTION TIME	75272.315	75270.994	75272.094
MIN EXECUTION TIME	75269.144	75269.323	75268.831
STD DEV EXECUTION TIME	.551	.428	.480

ACTIVITY NAME	UPDATE SERVER DO	REC DO	ISU LGSF
HOST STATION	DOMR	DOMR	DOMR
COMPLETED EXECUTIONS	1538	369	177
AVG EXECUTION TIME	77830.785	75270.339	75270.323
MAX EXECUTION TIME	77832.275	75271.884	75271.937
MIN EXECUTION TIME	77829.115	75268.651	75269.253
STD DEV EXECUTION TIME	.503	.504	.445

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	DOR DO	DUO DO	AOA DO
HOST STATION	DOMR	DOMR	DOMR
COMPLETED EXECUTIONS	567	237	24
AVG EXECUTION TIME	75270.347	75270.343	75270.227
MAX EXECUTION TIME	75271.636	75271.943	75271.555
MIN EXECUTION TIME	75268.919	75268.726	75269.274
STD DEV EXECUTION TIME	.509	.530	.579

ACTIVITY NAME	TIN DO	SPR DM	SHP DM
HOST STATION	DOMR	DOMR	DOMR
COMPLETED EXECUTIONS	86	27	21
AVG EXECUTION TIME	75270.358	75270.297	75270.474
MAX EXECUTION TIME	75271.864	75270.999	75271.504
MIN EXECUTION TIME	75268.783	75269.210	75269.661
STD DEV EXECUTION TIME	.558	.474	.519

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TRN DM	UPDATE SERVER D2	REC D2
HOST STATION	DOMR	LGSD 2	LGSD 2
COMPLETED EXECUTIONS	30	7156	3312
AVG EXECUTION TIME	75270.472	79558.568	75300.245
MAX EXECUTION TIME	75271.451	83367.624	83809.781
MIN EXECUTION TIME	75269.649	79555.399	75293.548
STD DEV EXECUTION TIME	.438	61.783	188.855

ACTIVITY NAME	ISU D2	DOR D2	DUO D2
HOST STATION	LGSD 2	LGSD 2	LGSD 2
COMPLETED EXECUTIONS	238	1714	128
AVG EXECUTION TIME	75297.950	75303.826	75295.413
MAX EXECUTION TIME	75910.950	82857.666	75296.749
MIN EXECUTION TIME	75293.775	75293.707	75294.232
STD DEV EXECUTION TIME	39.822	248.053	.492

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FCS D2	FIC D2	TIN D2
HOST STATION	LGSD 2	LGSD 2	LGSD 2
COMPLETED EXECUTIONS	1172	134	359
AVG EXECUTION TIME	75295.685	75295.372	75320.170
MAX EXECUTION TIME	75676.374	75296.693	83197.718
MIN EXECUTION TIME	75293.658	75294.007	75294.126
STD DEV EXECUTION TIME	11.137	.537	419.671

ACTIVITY NAME	TRM D2	UPDATE SERVER D3	REC D3
HOST STATION	LGSD 2	LGSD 3	LGSD 3
COMPLETED EXECUTIONS	99	5635	3208
AVG EXECUTION TIME	75363.900	79559.354	75300.145
MAX EXECUTION TIME	82080.762	86611.622	82430.390
MIN EXECUTION TIME	75294.098	79555.505	75293.551
STD DEV EXECUTION TIME	678.506	108.458	170.004

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	ISU D3	DOR D3	DUO D3
HOST STATION	LGSD 3	LGSD 3	LGSD 3
COMPLETED EXECUTIONS	187	1560	90
AVG EXECUTION TIME	75295.379	75296.993	75295.310
MAX EXECUTION TIME	75296.623	76021.451	75296.433
MIN EXECUTION TIME	75294.131	75293.790	75294.103
STD DEV EXECUTION TIME	.487	32.331	.547

ACTIVITY NAME	FCS D3	TIN D3	TRM D3
HOST STATION	LGSD 3	LGSD 3	LGSD 3
COMPLETED EXECUTIONS	250	248	92
AVG EXECUTION TIME	75331.368	75295.367	75295.354
MAX EXECUTION TIME	84300.425	75296.832	75296.321
MIN EXECUTION TIME	75294.173	75293.774	75293.806
STD DEV EXECUTION TIME	568.391	.512	.460

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER D4	REC D4	ISU D4
HOST STATION	LGSD 4	LGSD 4	LGSD 4
COMPLETED EXECUTIONS	4144	2285	163
AVG EXECUTION TIME	79560.123	75302.405	75295.334
MAX EXECUTION TIME	83829.193	86585.228	75296.736
MIN EXECUTION TIME	79555.585	75293.587	75294.130
STD DEV EXECUTION TIME	101.524	250.076	.476

ACTIVITY NAME	DOR D4	DUO D4	FCS D4
HOST STATION	LGSD 4	LGSD 4	LGSD 4
COMPLETED EXECUTIONS	1304	60	148
AVG EXECUTION TIME	75307.165	75295.265	75295.322
MAX EXECUTION TIME	82581.570	75296.184	75296.617
MIN EXECUTION TIME	75293.882	75293.989	75293.978
STD DEV EXECUTION TIME	263.874	.456	.523

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TIN D4	TRM D4	UPDATE SERVER D5
HOST STATION	LGSD 4	LGSD 4	LGSD 5
COMPLETED EXECUTIONS	126	58	3662
AVG EXECUTION TIME	75295.364	75295.458	79560.036
MAX EXECUTION TIME	75296.334	75296.394	84907.825
MIN EXECUTION TIME	75294.293	75294.330	79555.687
STD DEV EXECUTION TIME	.474	.511	110.143

ACTIVITY NAME	REC D5	ISU D5	DOR D5
HOST STATION	LGSD 5	LGSD 5	LGSD 5
COMPLETED EXECUTIONS	2012	143	1207
AVG EXECUTION TIME	75301.217	75295.394	75307.215
MAX EXECUTION TIME	82914.209	75297.023	86277.656
MIN EXECUTION TIME	75293.790	75294.042	75293.549
STD DEV EXECUTION TIME	180.858	.535	330.319

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	DUO D5	FCS D5	TIN D5
HOST STATION	LGSD 5	LGSD 5	LGSD 5
COMPLETED EXECUTIONS	34	138	98
AVG EXECUTION TIME	75295.327	75295.392	75295.296
MAX EXECUTION TIME	75296.039	75296.952	75296.363
MIN EXECUTION TIME	75294.490	75293.740	75294.152
STD DEV EXECUTION TIME	.389	.547	.483

ACTIVITY NAME	TRM D5	UPDATE SERVER D6	REC D6
HOST STATION	LGSD 5	LGSD 6	LGSD 6
COMPLETED EXECUTIONS	30	10905	4514
AVG EXECUTION TIME	75295.418	79559.498	75302.498
MAX EXECUTION TIME	75296.455	86241.086	84551.648
MIN EXECUTION TIME	75294.571	79555.310	75293.409
STD DEV EXECUTION TIME	.538	99.833	219.428

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	ISU D6	DOR D6	DUO D6
HOST STATION	LGSD 6	LGSD 6	LGSD 6
COMPLETED EXECUTIONS	90	6021	55
AVG EXECUTION TIME	75295.267	75296.818	75295.369
MAX EXECUTION TIME	75296.639	80235.153	75296.429
MIN EXECUTION TIME	75293.780	75293.435	75294.470
STD DEV EXECUTION TIME	.527	67.722	.465

ACTIVITY NAME	FCS D6	TIN D6	TRM D6
HOST STATION	LGSD 6	LGSD 6	LGSD 6
COMPLETED EXECUTIONS	104	81	40
AVG EXECUTION TIME	75295.341	75295.355	75295.388
MAX EXECUTION TIME	75297.054	75296.148	75296.266
MIN EXECUTION TIME	75294.240	75294.080	75293.884
STD DEV EXECUTION TIME	.513	.464	.458

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER M2	REC M2	ISU M2
HOST STATION	LGSM 2	LGSM 2	LGSM 2
COMPLETED EXECUTIONS	3735	990	1284
AVG EXECUTION TIME	79557.355	75295.376	75297.057
MAX EXECUTION TIME	79624.782	75296.902	77473.998
MIN EXECUTION TIME	79555.755	75293.982	75293.850
STD DEV EXECUTION TIME	1.211	.516	60.778

ACTIVITY NAME	DOR M2	LPS M2	DUO M2
HOST STATION	LGSM 2	LGSM 2	LGSM 2
COMPLETED EXECUTIONS	52	311	129
AVG EXECUTION TIME	75295.248	75295.389	75295.349
MAX EXECUTION TIME	75296.309	75296.917	75296.501
MIN EXECUTION TIME	75294.179	75293.211	75293.991
STD DEV EXECUTION TIME	.506	.503	.481

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	AOA M2	FCS M2	TIN M2
HOST STATION	LGSM 2	LGSM 2	LGSM 2
COMPLETED EXECUTIONS	42	161	116
AVG EXECUTION TIME	75295.284	75295.347	75295.442
MAX EXECUTION TIME	75297.138	75296.647	75296.819
MIN EXECUTION TIME	75294.346	75294.267	75293.822
STD DEV EXECUTION TIME	.525	.485	.492

ACTIVITY NAME	SPR M2	AE1 M2	SHP M2
HOST STATION	LGSM 2	LGSM 2	LGSM 2
COMPLETED EXECUTIONS	251	87	45
AVG EXECUTION TIME	75295.371	75304.069	75295.341
MAX EXECUTION TIME	75296.820	76052.021	75296.192
MIN EXECUTION TIME	75293.994	75293.966	75294.124
STD DEV EXECUTION TIME	.525	80.655	.434

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FTR M2	FET M2	TRM M2
HOST STATION	LGSM 2	LGSM 2	LGSM 2
COMPLETED EXECUTIONS	7	240	20
AVG EXECUTION TIME	75295.040	75295.363	75295.443
MAX EXECUTION TIME	75295.629	75296.607	75295.944
MIN EXECUTION TIME	75294.205	75294.335	75294.543
STD DEV EXECUTION TIME	.470	.463	.358

ACTIVITY NAME	UPDATE SERVER M3	ISU M3	DOR M3
HOST STATION	LGSM 3	LGSM 3	LGSM 3
COMPLETED EXECUTIONS	1795	672	51
AVG EXECUTION TIME	79557.353	75299.162	75295.377
MAX EXECUTION TIME	79558.911	77846.028	75296.563
MIN EXECUTION TIME	79555.828	75293.941	75293.920
STD DEV EXECUTION TIME	.491	98.322	.567

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	LPS M3	DUO M3	AOA M3
HOST STATION	LGSM 3	LGSM 3	LGSM 3
COMPLETED EXECUTIONS	301	90	44
AVG EXECUTION TIME	75295.366	75295.355	75295.320
MAX EXECUTION TIME	75296.998	75296.690	75296.233
MIN EXECUTION TIME	75293.913	75293.794	75294.235
STD DEV EXECUTION TIME	.473	.545	.474

ACTIVITY NAME	FCS M3	TIN M3	SPR M3
HOST STATION	LGSM 3	LGSM 3	LGSM 3
COMPLETED EXECUTIONS	81	32	204
AVG EXECUTION TIME	75295.400	75295.337	75295.307
MAX EXECUTION TIME	75296.344	75296.428	75296.567
MIN EXECUTION TIME	75294.349	75293.970	75293.664
STD DEV EXECUTION TIME	.446	.541	.511

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	AE1 M3	SHP M3	FET M3
HOST STATION	LGSM 3	LGSM 3	LGSM 3
COMPLETED EXECUTIONS	82	7	222
AVG EXECUTION TIME	75295.360	75295.108	75295.376
MAX EXECUTION TIME	75296.544	75296.008	75296.700
MIN EXECUTION TIME	75294.026	75294.635	75294.144
STD DEV EXECUTION TIME	.538	.438	.516

ACTIVITY NAME	TRM M3	UPDATE SERVER M4	ISU M4
HOST STATION	LGSM 3	LGSM 4	LGSM 4
COMPLETED EXECUTIONS	9	1683	395
AVG EXECUTION TIME	75295.707	79557.336	75295.362
MAX EXECUTION TIME	75296.640	79559.080	75296.742
MIN EXECUTION TIME	75294.955	79555.346	75293.856
STD DEV EXECUTION TIME	.566	.503	.492

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	DUO M4	AOA M4	FCS M4
HOST STATION	LGSM 4	LGSM 4	LGSM 4
COMPLETED EXECUTIONS	88	44	65
AVG EXECUTION TIME	75295.310	75295.446	75295.293
MAX EXECUTION TIME	75296.609	75296.914	75296.196
MIN EXECUTION TIME	75293.656	75294.273	75294.213
STD DEV EXECUTION TIME	.498	.553	.424

ACTIVITY NAME	TIN M4	SPR M4	AE1 M4
HOST STATION	LGSM 4	LGSM 4	LGSM 4
COMPLETED EXECUTIONS	28	171	48
AVG EXECUTION TIME	75295.563	75295.303	75295.379
MAX EXECUTION TIME	75296.712	75296.750	75296.402
MIN EXECUTION TIME	75294.390	75293.997	75294.215
STD DEV EXECUTION TIME	.472	.510	.486

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FET M4	TRM M4	UPDATE SERVER M5
HOST STATION	LGSM 4	LGSM 4	LGSM 5
COMPLETED EXECUTIONS	145	699	645
AVG EXECUTION TIME	75295.352	75297.669	79557.344
MAX EXECUTION TIME	75296.304	76342.465	79559.151
MIN EXECUTION TIME	75294.302	75293.842	79555.747
STD DEV EXECUTION TIME	.482	45.386	.490

ACTIVITY NAME	ISU M5	DUO M5	AOA M5
HOST STATION	LGSM 5	LGSM 5	LGSM 5
COMPLETED EXECUTIONS	163	78	38
AVG EXECUTION TIME	75295.409	75295.346	75295.295
MAX EXECUTION TIME	75296.684	75296.275	75296.845
MIN EXECUTION TIME	75294.079	75294.156	75294.583
STD DEV EXECUTION TIME	.491	.415	.476

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	FCS M5	TIN M5	SPR M5
HOST STATION	LGSM 5	LGSM 5	LGSM 5
COMPLETED EXECUTIONS	43	26	143
AVG EXECUTION TIME	75295.434	75295.255	75295.468
MAX EXECUTION TIME	75296.399	75296.507	75297.321
MIN EXECUTION TIME	75294.636	75294.434	75294.206
STD DEV EXECUTION TIME	.428	.409	.482

ACTIVITY NAME	AE1 M5	FET M5	UPDATE SERVER M6
HOST STATION	LGSM 5	LGSM 5	LGSM 6
COMPLETED EXECUTIONS	40	114	2135
AVG EXECUTION TIME	75295.389	75295.455	79557.353
MAX EXECUTION TIME	75296.442	75296.820	79559.056
MIN EXECUTION TIME	75294.559	75294.511	79555.741
STD DEV EXECUTION TIME	.414	.430	.504

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	DUO M6	AOA M6	TIN M6
HOST STATION	LGSM 6	LGSM 6	LGSM 6
COMPLETED EXECUTIONS	524	26	21
AVG EXECUTION TIME	75295.315	75295.330	75295.386
MAX EXECUTION TIME	75296.937	75296.296	75296.040
MIN EXECUTION TIME	75293.963	75293.842	75294.583
STD DEV EXECUTION TIME	.480	.617	.406

ACTIVITY NAME	SPR M6	AE1 M6	FET M6
HOST STATION	LGSM 6	LGSM 6	LGSM 6
COMPLETED EXECUTIONS	951	187	426
AVG EXECUTION TIME	75295.347	75297.563	75295.391
MAX EXECUTION TIME	75297.133	75704.335	75296.647
MIN EXECUTION TIME	75293.778	75293.539	75293.988
STD DEV EXECUTION TIME	.514	29.830	.502

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER C2	ISU C2	DOR C2
HOST STATION	LGSC 2	LGSC 2	LGSC 2
COMPLETED EXECUTIONS	2387	381	125
AVG EXECUTION TIME	79557.333	75295.333	75295.248
MAX EXECUTION TIME	79559.014	75297.643	75296.467
MIN EXECUTION TIME	79555.144	75293.920	75294.228
STD DEV EXECUTION TIME	.512	.530	.501

ACTIVITY NAME	DUO C2	AOA C2	FCS C2
HOST STATION	LGSC 2	LGSC 2	LGSC 2
COMPLETED EXECUTIONS	401	218	298
AVG EXECUTION TIME	75298.315	75295.356	75295.344
MAX EXECUTION TIME	76169.675	75296.594	75297.071
MIN EXECUTION TIME	75294.186	75293.916	75293.686
STD DEV EXECUTION TIME	45.967	.492	.484

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TIN C2	FID C2	FIL C2
HOST STATION	LGSC 2	LGSC 2	LGSC 2
COMPLETED EXECUTIONS	343	143	303
AVG EXECUTION TIME	75317.276	75295.354	75295.315
MAX EXECUTION TIME	82813.248	75296.453	75296.981
MIN EXECUTION TIME	75294.045	75294.435	75293.627
STD DEV EXECUTION TIME	405.336	.468	.546

ACTIVITY NAME	SPR C2	FCU C2	SHP C2
HOST STATION	LGSC 2	LGSC 2	LGSC 2
COMPLETED EXECUTIONS	33	36	86
AVG EXECUTION TIME	75295.384	75295.292	75295.396
MAX EXECUTION TIME	75296.722	75296.209	75296.687
MIN EXECUTION TIME	75294.129	75294.416	75293.955
STD DEV EXECUTION TIME	.616	.366	.495

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TRM C2	UPDATE SERVER C3	ISU C3
HOST STATION	LGSC 2	LGSC 3	LGSC 3
COMPLETED EXECUTIONS	20	1634	349
AVG EXECUTION TIME	75295.331	79559.927	75295.401
MAX EXECUTION TIME	75296.044	83623.327	75296.948
MIN EXECUTION TIME	75294.384	79555.161	75293.650
STD DEV EXECUTION TIME	.432	100.595	.477

ACTIVITY NAME	DOR C3	DUO C3	AOA C3
HOST STATION	LGSC 3	LGSC 3	LGSC 3
COMPLETED EXECUTIONS	123	366	153
AVG EXECUTION TIME	75295.312	75295.373	75295.378
MAX EXECUTION TIME	75296.446	75297.179	75296.495
MIN EXECUTION TIME	75294.231	75294.164	75293.970
STD DEV EXECUTION TIME	.472	.465	.449

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	TIN C3	FIL C3	SPR C3
HOST STATION	LGSC 3	LGSC 3	LGSC 3
COMPLETED EXECUTIONS	303	210	22
AVG EXECUTION TIME	75295.302	75295.372	75295.222
MAX EXECUTION TIME	75296.901	75296.517	75296.178
MIN EXECUTION TIME	75294.046	75293.824	75294.348
STD DEV EXECUTION TIME	.497	.501	.539

ACTIVITY NAME	FCU C3	SHP C3	TRM C3
HOST STATION	LGSC 3	LGSC 3	LGSC 3
COMPLETED EXECUTIONS	25	72	11
AVG EXECUTION TIME	75326.265	75295.399	75295.456
MAX EXECUTION TIME	76067.460	75296.572	75296.189
MIN EXECUTION TIME	75294.426	75294.426	75294.801
STD DEV EXECUTION TIME	151.297	.442	.397

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER C4	DOR C4	DUO C4
HOST STATION	LGSC 4	LGSC 4	LGSC 4
COMPLETED EXECUTIONS	1255	63	286
AVG EXECUTION TIME	79557.351	75295.288	75295.313
MAX EXECUTION TIME	79558.866	75296.588	75296.977
MIN EXECUTION TIME	79555.823	75294.092	75293.957
STD DEV EXECUTION TIME	.498	.544	.516

ACTIVITY NAME	AOA C4	TIN C4	FIL C4
HOST STATION	LGSC 4	LGSC 4	LGSC 4
COMPLETED EXECUTIONS	132	187	206
AVG EXECUTION TIME	75295.363	75295.323	75295.381
MAX EXECUTION TIME	75296.536	75296.500	75296.562
MIN EXECUTION TIME	75294.229	75294.177	75293.909
STD DEV EXECUTION TIME	.487	.484	.498

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	SPR C4	SHP C4	TRN C4
HOST STATION	LGSC 4	LGSC 4	LGSC 4
COMPLETED EXECUTIONS	26	73	4
AVG EXECUTION TIME	75295.590	75295.381	75295.311
MAX EXECUTION TIME	75296.436	75296.376	75295.743
MIN EXECUTION TIME	75294.531	75294.009	75294.502
STD DEV EXECUTION TIME	.538	.495	.495

ACTIVITY NAME	ISU C4	UPDATE SERVER C5	ISU C5
HOST STATION	LGSC 4	LGSC 5	LGSC 5
COMPLETED EXECUTIONS	278	930	240
AVG EXECUTION TIME	75295.411	79557.326	75295.318
MAX EXECUTION TIME	75296.725	79558.635	75296.605
MIN EXECUTION TIME	75293.887	79555.548	75294.142
STD DEV EXECUTION TIME	.489	.499	.507

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	DUO C5	AOA C5	TIN C5
HOST STATION	LGSC 5	LGSC 5	LGSC 5
COMPLETED EXECUTIONS	222	75	111
AVG EXECUTION TIME	75295.364	75295.401	75295.369
MAX EXECUTION TIME	75296.877	75296.749	75296.331
MIN EXECUTION TIME	75293.983	75294.327	75294.271
STD DEV EXECUTION TIME	.498	.495	.493

ACTIVITY NAME	FIL C5	SPR C5	SHP C5
HOST STATION	LGSC 5	LGSC 5	LGSC 5
COMPLETED EXECUTIONS	196	23	63
AVG EXECUTION TIME	75295.324	75295.257	75295.347
MAX EXECUTION TIME	75296.432	75296.929	75296.373
MIN EXECUTION TIME	75293.603	75294.284	75294.485
STD DEV EXECUTION TIME	.463	.534	.480

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME	UPDATE SERVER C6	ISU C6	DUO C6
HOST STATION	LGSC 6	LGSC 6	LGSC 6
COMPLETED EXECUTIONS	2456	287	681
AVG EXECUTION TIME	79557.349	75295.322	75295.346
MAX EXECUTION TIME	79558.913	75296.889	75296.777
MIN EXECUTION TIME	79555.536	75294.198	75293.880
STD DEV EXECUTION TIME	.505	.498	.498

ACTIVITY NAME	AOA C6	TIN C6	FIL C6
HOST STATION	LGSC 6	LGSC 6	LGSC 6
COMPLETED EXECUTIONS	226	328	655
AVG EXECUTION TIME	75295.346	75295.388	75295.365
MAX EXECUTION TIME	75297.246	75296.670	75296.695
MIN EXECUTION TIME	75294.049	75293.918	75293.885
STD DEV EXECUTION TIME	.514	.519	.496

SBSS Simulation Distributed processing - Workload hierarchically distributed

COMPLETED ACTIVITY STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

ACTIVITY NAME SHP C6

HOST STATION LGSC 6

COMPLETED EXECUTIONS 279

AVG EXECUTION TIME 75295.346

MAX EXECUTION TIME 75296.836

MIN EXECUTION TIME 75293.882

STD DEV EXECUTION TIME .535

SBSS Simulation Distributed processing - Workload hierarchically distributed

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSP 1	BASE TRAFFIC1	BASE TRAFFIC2
LAN REQUESTS GRANTED	337874	390426	0
AVERAGE WAIT TIME	8.913	2.754	0.
MAXIMUM WAIT TIME	10550.400	2636.523	0.
STD DEV WAIT TIME	77.038	69.261	0.
DISK REQUESTS GRANTED	134520	0	0
AVERAGE BITS USED	15000000.000	0.	0.
MAXIMUM BITS USED	15000000.	0.	0.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	4.823	.005	0.

STATION NAME	FILE SERVER	LGSP2	LGSD1
LAN REQUESTS GRANTED	639670	3350	119127
AVERAGE WAIT TIME	7.399	8.333	7.131
MAXIMUM WAIT TIME	822.400	1916.400	7836.800
STD DEV WAIT TIME	6.900	56.232	50.660
DISK REQUESTS GRANTED	8282395	1332	47570
AVERAGE BITS USED	150000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	150000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	58.022	.048	1.705

SBSS Simulation Distributed processing - Workload hierarchically distributed

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSM 1	LGSC 1	FMFS
LAN REQUESTS GRANTED	33675	34468	11220
AVERAGE WAIT TIME	5.800	5.784	5.760
MAXIMUM WAIT TIME	1181.573	628.803	9.600
STD DEV WAIT TIME	7.974	5.840	4.703
DISK REQUESTS GRANTED	13469	13786	4488
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.483	.494	.159

STATION NAME	DOMR	LGSD 2	LGSD 3
LAN REQUESTS GRANTED	7690	35843	28229
AVERAGE WAIT TIME	5.760	7.113	6.756
MAXIMUM WAIT TIME	9.600	3126.400	3075.200
STD DEV WAIT TIME	4.703	44.274	37.850
DISK REQUESTS GRANTED	3076	14312	11270
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.109	.513	.404

SBSS Simulation Distributed processing - Workload hierarchically distributed

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSD 4	LGSD 5	LGSD 6
LAN REQUESTS GRANTED	20774	18354	54609
AVERAGE WAIT TIME	7.345	7.243	6.552
MAXIMUM WAIT TIME	3433.600	4918.400	2768.000
STD DEV WAIT TIME	49.830	54.705	33.134
DISK REQUESTS GRANTED	8288	7324	21810
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.297	.263	.782

STATION NAME	LGSM 2	LGSM 3	LGSM 4
LAN REQUESTS GRANTED	18681	8978	8417
AVERAGE WAIT TIME	5.919	6.042	5.953
MAXIMUM WAIT TIME	1284.800	1236.800	938.918
STD DEV WAIT TIME	13.459	17.496	12.926
DISK REQUESTS GRANTED	7470	3590	3366
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.268	.129	.121

SBSS Simulation Distributed processing - Workload hierarchically distributed

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME	LGSM 5	LGSM 6	LGSC 2
LAN REQUESTS GRANTED	3225	10675	11943
AVERAGE WAIT TIME	5.760	5.798	6.483
MAXIMUM WAIT TIME	9.600	409.486	1967.600
STD DEV WAIT TIME	4.703	6.114	31.221
DISK REQUESTS GRANTED	1290	4270	4774
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.046	.153	.171

STATION NAME	LGSC 3	LGSC 4	LGSC 5
LAN REQUESTS GRANTED	8181	6275	4650
AVERAGE WAIT TIME	5.910	5.760	5.760
MAXIMUM WAIT TIME	765.202	9.600	9.600
STD DEV WAIT TIME	9.866	4.703	4.703
DISK REQUESTS GRANTED	3268	2510	1860
AVERAGE BITS USED	15000000.000	15000000.000	15000000.000
MAXIMUM BITS USED	15000000.	15000000.	15000000.
STD DEV BITS USED	0.	0.	0.
STATION UTILIZATION	.117	.090	.067

SBSS Simulation Distributed processing - Workload hierarchically distributed

STATION UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

STATION NAME

LGSC 6

LAN REQUESTS GRANTED	12280
AVERAGE WAIT TIME	5.760
MAXIMUM WAIT TIME	9.600
STD DEV WAIT TIME	4.703

DISK REQUESTS GRANTED	4912

AVERAGE BITS USED	15000000.000
MAXIMUM BITS USED	15000000.
STD DEV BITS USED	0.

STATION UTILIZATION	.176

SBSS Simulation Distributed processing - Workload hierarchically distributed

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW1	G2/GW1	G1/GATE TO LGSP
SERVING LAN	RING1	LGSD	RING1
LAN REQUESTS GRANTED	110574	221460	91351
AVERAGE WAIT TIME	.831	7.272	.001
MAXIMUM WAIT TIME	2628.279	412.800	20.214
STD DEV WAIT TIME	38.244	5.326	.111
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	0.	0.
STD DEV MESSAGE QUEUE	.001	0.	0.
GATEWAY UTILIZATION	.068	.110	.112

SBSS Simulation Distributed processing - Workload hierarchically distributed

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G2/GATE TO LGSP	G1/GW3	G2/GW3
SERVING LAN	LGSP	RING1	LGSM
LAN REQUESTS GRANTED	458537	33455	66931
AVERAGE WAIT TIME	8.991	1.613	7.218
MAXIMUM WAIT TIME	15568.000	2619.626	361.600
STD DEV WAIT TIME	85.918	51.866	4.607
MAX MESSAGE QUEUE SIZE	2	1	1
AVG MESSAGE QUEUE SIZE	.000	.000	0.
STD DEV MESSAGE QUEUE	.002	.000	0.
GATEWAY UTILIZATION	.185	.021	.033

SBSS Simulation Distributed processing - Workload hierarchically distributed

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME	G1/GW4	G2/GW4	G1/GW6
SERVING LAN	RING1	LGSC	RING1
LAN REQUESTS GRANTED	31110	62224	7564
AVERAGE WAIT TIME	1.516	7.206	1.961
MAXIMUM WAIT TIME	2547.614	220.800	2515.447
STD DEV WAIT TIME	54.259	4.267	59.344
MAX MESSAGE QUEUE SIZE	1	1	1
AVG MESSAGE QUEUE SIZE	.000	0.	0.
STD DEV MESSAGE QUEUE	.000	0.	0.
GATEWAY UTILIZATION	.019	.031	.005

SBSS Simulation Distributed processing - Workload hierarchically distributed

GATEWAY UTILIZATION STATISTICS

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

GATEWAY NAME G2/GW6

SERVING LAN AFNET

LAN REQUESTS GRANTED	15128
AVERAGE WAIT TIME	7.200
MAXIMUM WAIT TIME	9.600
STD DEV WAIT TIME	4.157

MAX MESSAGE QUEUE SIZE	1
AVG MESSAGE QUEUE SIZE	0.
STD DEV MESSAGE QUEUE	0.

GATEWAY UTILIZATION .005

SBSS Simulation Distributed processing - Workload hierarchically distributed

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
LGSP 1	67260	SEND REPLY TO NODE
BASE TRAFFIC2	390426	NOISE
FILE SERVER	159278	REQUEST FROM SERVER
	159277	UPDATE FILES
LGSP2	666	SEND REPLY TO NODE
LGSD1	23785	SEND REPLY TO NODE
LGSM 1	6734	SEND REPLY TO NODE
LGSC 1	6893	SEND REPLY TO NODE
FMFS	2244	SEND REPLY TO NODE
DOMR	1538	SEND REPLY TO NODE
LGSD 2	7156	SEND REPLY TO NODE
LGSD 3	5635	SEND REPLY TO NODE
LGSD 4	4144	SEND REPLY TO NODE
LGSD 5	3662	SEND REPLY TO NODE
LGSD 6	10905	SEND REPLY TO NODE

SBSS Simulation Distributed processing - Workload hierarchically distributed

RECEIVED MESSAGE REPORT

FROM 0. TO 216000. SECONDS

RECEIVER	COUNT	MESSAGE NAME
LGSM 2	3735	SEND REPLY TO NODE
LGSM 3	1795	SEND REPLY TO NODE
LGSM 4	1683	SEND REPLY TO NODE
LGSM 5	645	SEND REPLY TO NODE
LGSM 6	2135	SEND REPLY TO NODE
LGSC 2	2387	SEND REPLY TO NODE
LGSC 3	1634	SEND REPLY TO NODE
LGSC 4	1255	SEND REPLY TO NODE
LGSC 5	930	SEND REPLY TO NODE
LGSC 6	2456	SEND REPLY TO NODE

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSP 1	LGSC 1	LGSC 1
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	67260	6893	6893
AVG DELIVERY TIME	66.633	51.322	79.477
MAX DELIVERY TIME	19098.326	894.403	2623.814
MIN DELIVERY TIME	51.200	51.200	76.200
STD DEV DELIVERY TIME	350.642	10.155	81.776

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 1	LGSD 6	LGSD 6
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	6893	10905	10905
AVG DELIVERY TIME	151.896	54.971	83.632
MAX DELIVERY TIME	9576.117	9307.451	11058.301
MIN DELIVERY TIME	127.400	51.200	76.200
STD DEV DELIVERY TIME	367.012	149.897	201.206

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 6	LGSP2	LGSM 1
DESTINATION STATION	FILE SERVER	FILE SERVER	GW3
NUMBER SENT	10905	666	6735
AVG DELIVERY TIME	162.999	63.487	51.407
MAX DELIVERY TIME	16402.787	5975.006	1239.173
MIN DELIVERY TIME	127.400	51.200	51.200
STD DEV DELIVERY TIME	553.490	237.355	14.686

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 1	LGSM 1	LGSD 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW1
NUMBER SENT	6735	6735	4144
AVG DELIVERY TIME	79.184	161.530	58.807
MAX DELIVERY TIME	2531.765	24557.172	11340.591
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	65.177	520.194	237.496

SHSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 4	LGSD 4	LGSC 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	4144	4144	2387
AVG DELIVERY TIME	87.256	167.485	54.839
MAX DELIVERY TIME	12582.641	19527.613	7569.314
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	273.072	590.622	154.991

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 2	LGSC 2	LGSD 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW1
NUMBER SENT	2387	2387	7156
AVG DELIVERY TIME	82.245	143.297	57.830
MAX DELIVERY TIME	10171.765	14520.765	8566.503
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	213.926	359.568	215.888

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 2	LGSD 2	LGSD1
DESTINATION STATION	GATE TO LGSP	FILE SERVER	LG1
NUMBER SENT	7156	7156	23785
AVG DELIVERY TIME	86.893	167.274	58.004
MAX DELIVERY TIME	10556.642	15379.599	15808.021
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	264.927	572.354	234.015

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD1	LGSD1	LGSM 2
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	23785	23785	3735
AVG DELIVERY TIME	85.981	159.344	51.986
MAX DELIVERY TIME	15833.021	23038.314	2230.266
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	253.714	496.360	37.734

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 2	LGSM 2	LGSM 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	3735	3735	1683
AVG DELIVERY TIME	79.515	163.845	52.172
MAX DELIVERY TIME	2505.695	13186.152	1098.918
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	74.054	488.872	29.277

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 4	LGSM 4	LGSM 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	1683	1683	1795
AVG DELIVERY TIME	82.540	159.068	52.621
MAX DELIVERY TIME	3242.261	8581.552	2602.592
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	122.812	434.703	60.204

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 3	LGSM 3	LGSD 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW1
NUMBER SENT	1795	1795	5635
AVG DELIVERY TIME	80.338	137.195	55.983
MAX DELIVERY TIME	2627.592	7016.225	9056.310
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	93.362	193.650	176.427

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 3	LGSD 3	FMFS
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW6
NUMBER SENT	5635	5635	2244
AVG DELIVERY TIME	82.821	157.742	26.191
MAX DELIVERY TIME	9081.310	15917.233	26.191
MIN DELIVERY TIME	76.200	127.400	26.191
STD DEV DELIVERY TIME	186.439	495.239	.000

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	FMFS	FMFS	LGSD 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW1
NUMBER SENT	2244	2244	3662
AVG DELIVERY TIME	54.579	136.943	58.347
MAX DELIVERY TIME	2379.380	12070.854	11033.322
MIN DELIVERY TIME	51.191	102.391	51.200
STD DEV DELIVERY TIME	70.473	479.055	232.268

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSD 5	LGSD 5	LGSM 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	3662	3662	645
AVG DELIVERY TIME	86.432	166.886	51.200
MAX DELIVERY TIME	11058.322	14982.772	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	242.458	504.336	.000

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 5	LGSM 5	LGSC 6
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	645	645	2456
AVG DELIVERY TIME	76.200	159.802	51.200
MAX DELIVERY TIME	76.200	8203.473	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	.000	399.606	0.

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 6	LGSC 6	LGSC 3
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2456	2456	1634
AVG DELIVERY TIME	83.837	168.444	51.672
MAX DELIVERY TIME	2608.466	12214.556	822.802
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	118.383	522.883	19.082

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 3	LGSC 3	DOMR
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW6
NUMBER SENT	1634	1634	1538
AVG DELIVERY TIME	79.005	140.788	26.191
MAX DELIVERY TIME	2473.940	5502.173	26.191
MIN DELIVERY TIME	76.200	127.400	26.191
STD DEV DELIVERY TIME	68.223	200.470	.000

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	DOMR	DOMR	LGSC 4
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	1538	1538	1255
AVG DELIVERY TIME	55.892	124.994	51.200
MAX DELIVERY TIME	2566.638	6610.227	51.200
MIN DELIVERY TIME	51.191	102.391	51.200
STD DEV DELIVERY TIME	100.269	332.241	.000

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSC 4	LGSC 4	LGSM 6
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW3
NUMBER SENT	1255	1255	2135
AVG DELIVERY TIME	77.712	150.935	51.392
MAX DELIVERY TIME	1202.702	12055.277	460.686
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	38.512	410.200	8.860

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	REQUEST FROM SERVER
SOURCE STATION	LGSM 6	LGSM 6	LGSC 5
DESTINATION STATION	GATE TO LGSP	FILE SERVER	GW4
NUMBER SENT	2135	2135	930
AVG DELIVERY TIME	84.377	155.770	51.200
MAX DELIVERY TIME	3063.136	7412.136	51.200
MIN DELIVERY TIME	76.200	127.400	51.200
STD DEV DELIVERY TIME	124.218	386.838	.000

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	REQUEST FROM SERVER	REQUEST FROM SERVER	UPDATE FILES
SOURCE STATION	LGSC 5	LGSC 5	LGSP 1
DESTINATION STATION	GATE TO LGSP	FILE SERVER	FILE SERVER
NUMBER SENT	930	930	67260
AVG DELIVERY TIME	78.074	156.394	4317.682
MAX DELIVERY TIME	1537.248	6962.758	13620.400
MIN DELIVERY TIME	76.200	127.400	4313.200
STD DEV DELIVERY TIME	48.324	382.966	153.518

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 1	LGSC 1	LGSC 1
DESTINATION STATION	GW4	GATE TO LGSP	FILE SERVER
NUMBER SENT	6893	6893	6893
AVG DELIVERY TIME	4313.200	6951.450	11266.277
MAX DELIVERY TIME	4313.200	6951.450	19699.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	0.	0.	106.966

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 6	LGSD 6	LGSD 6
DESTINATION STATION	GW1	GATE TO LGSP	FILE SERVER
NUMBER SENT	10905	10905	10905
AVG DELIVERY TIME	4315.341	6953.591	11268.819
MAX DELIVERY TIME	10996.400	13634.650	17947.850
MIN DELIVERY TIME	4313.200	6951.450	11264.650
STD DEV DELIVERY TIME	99.829	99.829	141.292

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSP2	LGSM 1	LGSM 1
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	666	6734	6734
AVG DELIVERY TIME	4315.859	4313.200	6951.450
MAX DELIVERY TIME	5924.400	4313.200	6954.591
MIN DELIVERY TIME	4313.200	4313.200	6951.450
STD DEV DELIVERY TIME	62.683	0.	.038

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 1	LGSD 4	LGSD 4
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	6734	4144	4144
AVG DELIVERY TIME	11266.195	4315.973	6954.223
MAX DELIVERY TIME	15218.250	8583.600	11221.850
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	74.198	101.509	101.509

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 4	LGSC 2	LGSC 2
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	4144	2387	2387
AVG DELIVERY TIME	11269.225	4313.200	6951.450
MAX DELIVERY TIME	15535.050	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	130.483	.001	0.

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 2	LGSD 2	LGSD 2
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	2387	7156	7156
AVG DELIVERY TIME	11271.556	4314.419	6952.669
MAX DELIVERY TIME	18313.012	8122.800	10761.050
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	198.129	61.778	61.778

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 2	LGSD1	LGSD1
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	7156	23785	23785
AVG DELIVERY TIME	11268.210	4314.031	6952.283
MAX DELIVERY TIME	18008.650	9510.000	12148.250
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	120.726	57.648	57.648

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD1	LGSM 2	LGSM 2
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	23785	3735	3735
AVG DELIVERY TIME	11267.294	4313.218	6951.472
MAX DELIVERY TIME	18159.051	4380.400	7018.650
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	109.025	1.099	1.116

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 2	LGSM 4	LGSM 4
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	3735	1683	1683
AVG DELIVERY TIME	11268.958	4313.200	6951.450
MAX DELIVERY TIME	15544.650	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	124.655	.000	0.

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 4	LGSM 3	LGSM 3
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	1683	1795	1795
AVG DELIVERY TIME	11268.471	4313.200	6951.450
MAX DELIVERY TIME	17695.051	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	156.699	.000	0.

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 3	LGSD 3	LGSD 3
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	1795	5635	5635
AVG DELIVERY TIME	11264.839	4315.194	6953.447
MAX DELIVERY TIME	11383.050	11367.600	14005.850
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	4.624	108.457	108.458

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 3	FMFS	FMFS
DESTINATION STATION	FILE SERVER	GW6	GATE TO LGSP
NUMBER SENT	5635	2244	2244
AVG DELIVERY TIME	11271.915	2586.658	5224.908
MAX DELIVERY TIME	18319.051	2586.658	5224.908
MIN DELIVERY TIME	11264.650	2586.658	5224.908
STD DEV DELIVERY TIME	195.700	0.	.001

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	FMFS	LGSD 5	LGSD 5
DESTINATION STATION	FILE SERVER	GW1	GATE TO LGSP
NUMBER SENT	2244	3662	3662
AVG DELIVERY TIME	9540.510	4315.887	6954.137
MAX DELIVERY TIME	13459.708	9663.600	12301.850
MIN DELIVERY TIME	9538.108	4313.200	6951.450
STD DEV DELIVERY TIME	87.568	110.144	110.144

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSD 5	LGSM 5	LGSM 5
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	3662	645	645
AVG DELIVERY TIME	11272.035	4313.200	6951.450
MAX DELIVERY TIME	16784.650	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	180.231	.001	.000

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 5	LGSC 6	LGSC 6
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	645	2456	2456
AVG DELIVERY TIME	11273.436	4313.200	6951.450
MAX DELIVERY TIME	15384.650	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	173.064	.001	0.

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 6	LGSC 3	LGSC 3
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	2456	1634	1634
AVG DELIVERY TIME	11266.307	4315.759	6954.009
MAX DELIVERY TIME	15333.450	8378.800	11017.050
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	82.085	100.585	100.585

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 3	DOMR	DOMR
DESTINATION STATION	FILE SERVER	GW6	GATE TO LGSP
NUMBER SENT	1634	1538	1538
AVG DELIVERY TIME	11276.060	2586.658	5224.908
MAX DELIVERY TIME	17797.449	2586.658	5224.908
MIN DELIVERY TIME	11264.650	2586.658	5224.908
STD DEV DELIVERY TIME	251.802	.000	.000

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	DOMR	LGSC 4	LGSC 4
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	1538	1255	1255
AVG DELIVERY TIME	9538.556	4313.200	6951.450
MAX DELIVERY TIME	10162.108	4313.200	6951.450
MIN DELIVERY TIME	9538.108	4313.200	6951.450
STD DEV DELIVERY TIME	15.989	.000	.001

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSC 4	LGSM 6	LGSM 6
DESTINATION STATION	FILE SERVER	GW3	GATE TO LGSP
NUMBER SENT	1255	2135	2135
AVG DELIVERY TIME	11268.196	4313.200	6951.450
MAX DELIVERY TIME	15179.850	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	111.140	.001	0.

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	UPDATE FILES	UPDATE FILES	UPDATE FILES
SOURCE STATION	LGSM 6	LGSC 5	LGSC 5
DESTINATION STATION	FILE SERVER	GW4	GATE TO LGSP
NUMBER SENT	2135	930	930
AVG DELIVERY TIME	11269.692	4313.200	6951.450
MAX DELIVERY TIME	18005.449	4313.200	6951.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	168.114	.000	.001

MESSAGE NAME	UPDATE FILES	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	LGSC 5	FILE SERVER	FILE SERVER
DESTINATION STATION	FILE SERVER	LGSP 1	GATE TO LGSP
NUMBER SENT	930	67260	91351
AVG DELIVERY TIME	11264.707	4320.511	4321.047
MAX DELIVERY TIME	11317.896	13466.800	13524.400
MIN DELIVERY TIME	11264.650	4313.200	4313.200
STD DEV DELIVERY TIME	1.745	195.551	200.780

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	GW4	LGSC 1	GW1
NUMBER SENT	15555	6893	55287
AVG DELIVERY TIME	6957.733	11270.946	6959.113
MAX DELIVERY TIME	16162.650	20475.850	14925.850
MIN DELIVERY TIME	6951.450	11264.650	6951.450
STD DEV DELIVERY TIME	180.749	193.634	195.484

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSD 6	LGSP2	GW3
NUMBER SENT	10905	666	16727
AVG DELIVERY TIME	11276.547	4313.829	6959.321
MAX DELIVERY TIME	19187.850	4732.400	15127.450
MIN DELIVERY TIME	11264.650	4313.200	6951.450
STD DEV DELIVERY TIME	253.030	16.231	208.135

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 1	LGSD 4	LGSC 2
NUMBER SENT	6734	4144	2387
AVG DELIVERY TIME	11270.353	11275.109	11273.331
MAX DELIVERY TIME	17803.850	19136.650	19187.850
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	158.902	230.981	240.217

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSD 2	LGSD1	LGSM 2
NUMBER SENT	7156	23785	3735
AVG DELIVERY TIME	11274.094	11275.144	11281.380
MAX DELIVERY TIME	17896.650	19239.051	19197.449
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	202.969	227.971	319.942

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 4	LGSM 3	LGSD 3
NUMBER SENT	1683	1795	5635
AVG DELIVERY TIME	11269.645	11271.564	11269.283
MAX DELIVERY TIME	15391.050	19440.650	17903.051
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	137.794	206.792	150.076

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	GW6	FMFS	LGSD 5
NUMBER SENT	3782	2244	3662
AVG DELIVERY TIME	6968.333	9551.193	11277.957
MAX DELIVERY TIME	15185.050	16176.509	19139.850
MIN DELIVERY TIME	6951.450	9538.108	11264.650
STD DEV DELIVERY TIME	298.365	235.120	253.714

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	LGSM 5	LGSC 6	LGSC 3
NUMBER SENT	645	2456	1634
AVG DELIVERY TIME	11270.879	11269.668	11269.464
MAX DELIVERY TIME	15167.050	15221.450	15218.250
MIN DELIVERY TIME	11264.650	11264.650	11264.650
STD DEV DELIVERY TIME	153.598	113.539	137.509

MESSAGE NAME	SEND REPLY TO NODE	SEND REPLY TO NODE	SEND REPLY TO NODE
SOURCE STATION	FILE SERVER	FILE SERVER	FILE SERVER
DESTINATION STATION	DOMR	LGSC 4	LGSM 6
NUMBER SENT	1538	1255	2135
AVG DELIVERY TIME	9560.533	11275.649	11273.794
MAX DELIVERY TIME	17771.709	15224.650	17794.250
MIN DELIVERY TIME	9538.108	11264.650	11264.650
STD DEV DELIVERY TIME	371.750	198.483	212.225

SBSS Simulation Distributed processing - Workload hierarchically distributed

MESSAGE DELIVERY REPORT

FROM 0. TO 216000. SECONDS

(ALL TIMES REPORTED IN MICROSECONDS)

MESSAGE NAME	SEND REPLY TO NODE	NOISE
SOURCE STATION	FILE SERVER	BASE TRAFFIC1
DESTINATION STATION	LGSC 5	BASE TRAFFIC2
NUMBER SENT	930	390426
AVG DELIVERY TIME	11264.650	27.754
MAX DELIVERY TIME	11264.650	2661.523
MIN DELIVERY TIME	11264.650	25.000
STD DEV DELIVERY TIME	.001	69.261

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Vita

Captain William D. Rath was born on 20 May 1964 in Sydney, Nebraska. He graduated from Ft. Collins High School in Ft. Collins, Colorado in 1983 and attended Colorado State University, graduating with a Bachelor of Science in Computer Science in December 1987. Upon graduation, he received a reserve commission in the USAF and served his first tour of duty at Offutt AFB, Nebraska. He began as a Supply Officer for the 55th Strategic Reconnaissance Wing where he managed high dollar repairable aircraft parts, and worked with various ALCs to obtain high priority parts until May 1989. He was then chosen to serve as the Base Fuels Officer. As the Base Fuels Officer he was responsible to the Chief of Supply for the effective management of all fuels operations supporting all host and tenant organizations until December 1990 when he was reassigned to Kunsan AB, ROK as the Base Fuels Officer. There he was responsible for all fuels operations supporting Kunsan AB including a cryogenics production facility and insuring compliance with host nation support agreements as they applied to fuel and cryogenics support. Then, in May 1992, he was selected to attend the Air Force Institute of Technology, the School of Logistics and Acquisition Management.

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Captain Scott A. Vesper was born in St Louis, MO on October 26, 1965. He graduated from the U.S. Air Force Academy in 1987. Captain Vesper has four years experience in acquisition management, serving as a project officer in both the Advanced Cruise Missile System Program Office (SPO) and the Training Systems SPO at WPAFB, OH. In May 1992, he was selected for the Graduate Software Systems Management Program at the Air Force Institute of Technology, School of Systems and Logistics. Upon graduation, he hopes to return to SPO duty.

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REPORT DOCUMENTATION PAGE

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13. ABSTRACT (Maximum 200 words) The purpose of this research was to determine the technical feasibility of a PC-based Standard Base Supply System (SBSS). The SBSS is currently run in a mainframe environment; however, the current hardware contract will be reviewed in 1997. At that time, a decision as to what hardware implementation best serves Base Supply needs must be made. This document evaluates various possible PC-based SBSS Local Area Network (LAN) architectures, as well as provides an initial direction for implementation. The current mainframe-based Regional SBSS implementation serves multiple bases via long haul networks and may not effectively satisfy Air Force/base level requirements. In writing this thesis, information on a typical SBSS was gathered and summarized. Also, information on standard LAN architectures was evaluated. For added depth of understanding, interviews with personnel involved in the use, design, and development of the current SBSS were conducted. The study showed that a single file server could handle the entire workload, but future expansion considerations and a slightly lower expected user response time indicate that fully distributing the processes, while using a file server to maintain the SBSS database, might be more appropriate.					
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