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Traffic Management System

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Note: This research is supported by Advanced Distributed Simulation Research Consortium and Office of Naval Research

About The Project

1. Traffic Management System
2. Modernization and Module Architecture
3. Goals
4. Modifying the Software
5. Changing the Target Hardware

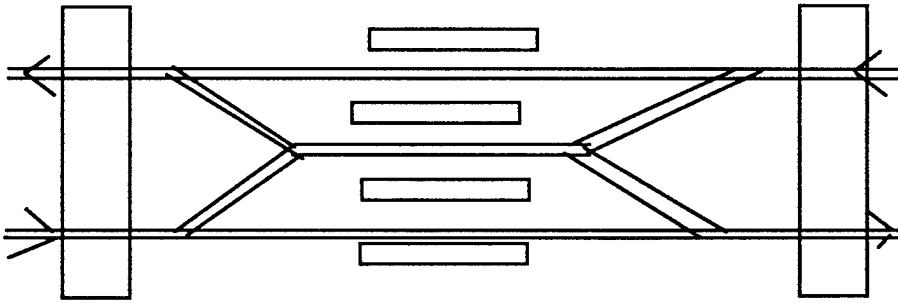
Outline

1. About The Project
2. Requirements of the System
3. Specifications of System
4. Design Specifications
5. Implementation
6. Testing and Maintenance
7. Conclusions

Specifications of System

1. Hardware Architecture
2. Boundaries of the Problem

Load/Unload Platform



Load/Unload Platform

Train ID	Arrival	From	Depart	To
3040	0700		0720	Stat B
7676	0800		0830	Stat B
9090	0950		1030	Stat B
1121	1050		1120	Stat B
4426	1200		1210	Stat B
6535	1300		1320	Stat B

Requirements of the System

1. Routing
 - Network Control System
(progress individual routes and tracks)
 - Scheduling
 - Communication Control

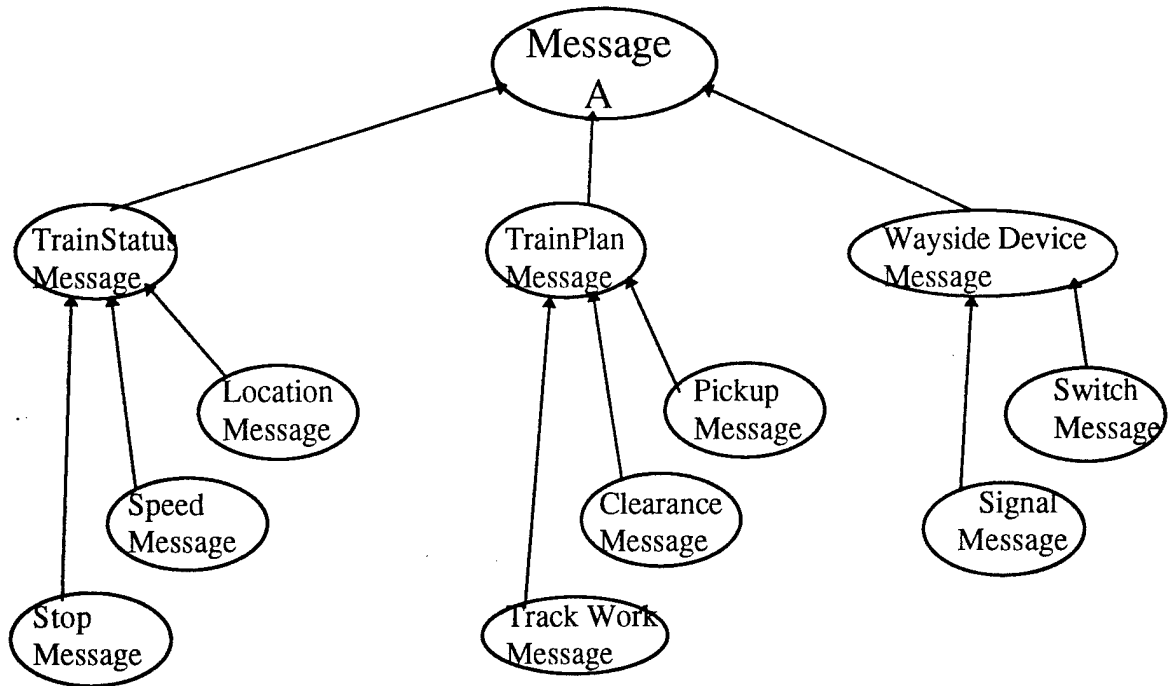
2. Train System Monitoring
 - Locomotive analysis and Reporting System
 - Energy Management System
 - On-Board Display System
 - Data-management Unit
 - Train Location Tracking

3. System and Software Requirements
(Various Scenario for Processing Daily Train orders)

Implementation

1. Language C++
2. To be completed in Fall 95
3. System RISC-6000
4. Packages to use:
CADRE/teamwork
SRI Testing Package

Design Specifications



Testing and Maintenance

1. Tracking the Bugs and Correcting
2. Adding more modules
3. Software Re-use (property of OOD)

Conclusions

1. **Object-Oriented Design Allows**
Adding new Functionality
Allows Software Reuse Property
2. **Studied the Requirements and Specifications of the project**
3. **Experiences helps to**
design and implement of other similar projects
4. **Hardware Independent Design**