

Requirements Document for the MAPS Performance Support System

March 8, 1999

RWD-R-2258

Prepared for



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Submitted by



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Section 1

Introduction

1.1 What this Document Covers

This document defines the requirements for an online performance support system, referred to in this document as the . Currently, maintains an existing support system based on Lotus Notes that is referred to in this document as MAPS Help. The key purpose of this document is to explain what the online support system will do. It also serves as the primary alignment tool between and RWD Technologies, Inc. for the scope of functionality of the . With clear and mutually understood requirements defined, the scope and delivery schedule for the online system will be well understood, ensuring timely delivery of a complete online system.

1.2 About the Online System Development Process

In a broader sense, this document is part of the overall process used to construct an effective online performance support system during an integrated training development project. The goal of this process is to deliver the online system in concert with the training material for key training events and to make it readily available for end-users on the job, providing just-in-time performance support.

1.2.1 The Analysis Phase

This requirements document and the accompanying storyboard is the culmination of the Analysis phase. During this phase, information is gathered to determine the requirements and develop a basic model of the online system's functionality. Among the key drivers used to determine the online system requirements are 's information infrastructure, training strategy, and end-user needs. 's network and end-user workstation infrastructure are assessed to determine what level of functionality can be reasonably accommodated. Existing content from the MAPS Help system is assessed to determine information requirements. Current and proposed training strategies are assessed to ensure the online system will complement planned training events to increase their effectiveness.

The storyboard is constructed to demonstrate the intended approach for the online system and provide a platform for discussions of desired functionality and potential design approaches. The storyboard is intended to provide a "first look" at the proposed functionality of the online system.

1.2.2 The Design and Development Phases

Following the analysis phase, design of an online prototype will occur. This requirements document will be used in the design phase as a basis for the development of the design prototype. The design prototype will demonstrate the exact appearance and functionality of the final online system using a limited amount of content. Once the design prototype is finalized and approved, the prototype will be populated with additional training content in the appropriate format to become the actual online system.

1.3 System Characteristics

The will provide training and performance support information via the Intranet. To provide the most benefit to users, the system will be:

- MAPS Performance Support SystemMAPSMAPS Performance Support SystemMAPS Performance Support SystemMAPS Performance Support SystemGATXMAPS Performance Support SystemGATXMAPS Performance Support SystemThe will consist of HTML documents that will reside on the client side of the client-server framework, with the server acting as the repository. End-users will be able to access training and performance support materials by navigating from the home page via job role, functional area, or business process-based navigation methods. In addition to providing performance support information, the MAPS Performance Support System will provide certain global functionality that can be accessed from any of its pages. This functionality includes a feedback mechanism, an online glossary, and search capability.

1.4 Role in the GATX Workplace

In January 1999, went live with the Management of Assets and Portfolio System (), their SAP R/3 implementation. will be migrating to SAP R/3 4.5 during the first half of 1999. The introduction of and the pending R/3 system upgrade affects the work processes of many employees and organizations within . The will be developed to support the performance support needs of these users. The role of the in end-user support is threefold:

- GATXMAPS**1.5 Role in the Training Analysis**

As part of the training analysis effort RWD is conducting for , several findings and recommendations will be presented to . The can provide an effective means of implementing these recommendations. Table 1.1 provides a brief summary of the solutions the can provide.

The current scope of the online performance support project consists of leveraging the existing procedures for use in the . These procedures are organized and stored as documents in a Lotus Notes database (known as MAPS Help). To fully implement the training analysis recommendations and provide the content outlined in this requirements document, additional training and support information may be necessary. GATX Capital Corporation is responsible for the development of all existing source documents that are to become a part of the MAPS Performance Support System. However, if requested, RWD can work with to design, develop, and deliver comprehensive training and support content. This is an additional service, and is therefore outside the scope of this project.

Table 1.1 Online Solutions for Training Analysis Recommendations

Recommendation	Online Solution
Document and disseminate high-level overall and task-specific business processes throughout GATX.	The online system can enable users to access business process flow information and navigate to task-level instructions using these flows.
Repurpose training material for self-study purposes.	The online system can enable users to access and review training/learning materials from their desktop.
Document and disseminate new policies and procedures throughout GATX.	The online system can provide links from task-level instructions to the policies and procedures related to the task.
Create a forum for documenting process improvements and updating procedures.	The online system can provide a feedback function that enables users to report problems, incorrect information, and other information relevant to system administrators and documentation maintainers.

1.6 End-user Characteristics That Must Be Considered

The characteristics of end-users within a group often vary a great deal. Education level, geography, and previous exposure to among other factors tend to contribute to these differences. The online system will be developed with as few assumptions about end-user characteristics as possible; however, some minimal user characteristics concerning language and systems training experience are assumed.

1.6.1 Language

The will be designed in English. Any translation of materials or replication of the online system into any other language is beyond the scope of these requirements and the online system development effort.

1.6.2 Systems Training/Experience

All potential users of the should be proficient with the use of and . Training and familiarization for these applications and systems are outside the scope of this project. Performance support information available within the assumes users have the requisite knowledge of these systems and applications.

1.7 Dependencies and Assumptions

Certain dependencies and assumptions apply to the development and functionality of the . These dependencies and assumptions concern items that are either outside the control of RWD, or are items that are important to the successful delivery of the online system in accordance with the project schedule.

1.7.1 Dependencies

- Microsoft Internet Explorer 4.01.7.2 **Assumptions**

1.8 Related Documents

This requirements document is part of the GATX Capital Corporation Performance Support project. The following documents are related to this requirements document and should be referenced when appropriate:

1.9 Revisions to this Document

This requirements document provides a thorough treatment of the MAPS Performance Support System requirements. Any modifications to this document after the analysis phase of online system development effort will have an impact on the schedule and budget associated with the development of the online system.

Any revisions to this document will be deliberate and will occur only after consensus is reached by the RWD project manager and the GATX Capital Corporation project manager. Revisions will be controlled to ensure that all applicable personnel have an up-to-date copy of this document.

Section 2

System Requirements

2.1 What this Section Covers

This section addresses the hardware and software that are necessary for the proper functioning of the .

2.2 User Interface

The user interface for the is running on . Although the MAPS Performance Support System is not required to be compatible with any web browser other than Microsoft Internet Explorer 4.0, every effort will be made to make the content accessible by other browsers that support the HTML 4.0 standard.

2.3 Hardware Requirements

Client workstation and server hardware will be obtained and maintained by GATX Capital Corporation independently of the development effort.

2.3.1 Client Workstation Hardware Requirements

The client workstation hardware platform required to access the online system is a personal computer with the following minimum characteristics:

Proper and efficient functioning of the cannot be guaranteed for workstations that do not meet the minimum requirements.

2.3.2 Server Hardware Requirements

To accommodate the files that comprise the , the server should meet the following hardware requirements:

Additional storage space is necessary for the source files that will be delivered with the .

2.4 Software Requirements

Client workstation and server software will be obtained and maintained by GATX Capital Corporation independently of the development effort.

2.4.1 Client Workstation Software Requirements

As a web-based system, the is not a completely self-contained product. For the system to function, client workstations must be running , a web browser, and a TCP/IP stack. The is comprised of HTML files, graphics files, and other specialized content files. These files specifically require the use of or compatible web browser.

Proper and efficient functioning of the cannot be guaranteed for workstations that do not meet the minimum requirements.

2.4.2 Server Software Requirements

The requires the following server software in order to function:

2.5 SAP R/3 Server Instance Requirements

SAP R/3 server instances will be obtained and maintained by GATX Capital Corporation independently of the development effort. RWD will configure custom tables, functions, and structures as necessary to implement a context-sensitive link between SAP R/3 4.5 and the . There are several prerequisites that are required prior to implementation of the context-sensitive help functionality. GATX Capital Corporation must make preparations to their SAP R/3 system and have an administrator available to remedy any needs that may arise.

2.5.1 System Administration/Modification Access

GATX Capital Corporation must provide the appropriate SAP R/3 access rights so RWD can make the necessary modifications and additions to the SAP R/3 system to support context-sensitive help linkage. Implementation of the context-sensitive help linkage requires an active OSS account to register SAP R/3 objects and retrieve change request keys.

2.5.2 Custom Table Population and Transport

As part of the context-sensitive help implementation, RWD will implement custom SAP R/3 tables to support transaction/help lookup information. GATX Capital Corporation will be responsible for populating and maintaining the information in these tables. RWD will provide details on the field entries that are required for the custom SAP R/3 tables.

Custom tables are typically maintained on one instance of SAP R/3 and then transported to other instances as required. This strategy minimizes the amount of effort required to maintain the tables on all instances. GATX Capital Corporation must perform transport of the custom SAP R/3 tables.

2.6 Performance Requirements

RWD will design the online system with the goal of optimizing the file sizes of documents to decrease download times to the greatest extent possible. However, with the exception of file size, the system performance of the online system will depend largely upon factors outside the control of this project, including:

RWD Technologies, Inc. is not responsible for the impact these factors may have on system performance. However, if requested, RWD can assess system performance and make recommendations for improving the performance of the . This performance assessment is an additional service, and is therefore outside the scope of this project.

2.7 Security Requirements

The will have no unique security features. Existing network servers and security features of the network grant access to the .

Section 3

Content Requirements

3.1 What this Section Covers

This section addresses the source information required to develop the and the planned online format of the information.

3.2 Source Documents

The table below lists the source documents that are required to develop the .

Table 3.1 Required Source Documents

Document Type	Source Document Format	Author(s)
MAPS Help Glossary	Lotus Notes Document	GATX Capital Corporation
MAPS Help Procedures	Lotus Notes Document	GATX Capital Corporation
Role-to-Procedure Map	Microsoft Office-compatible file format	GATX Capital Corporation
List of Key Contact Personnel	Microsoft Office-compatible file format	GATX Capital Corporation

3.2.1 MAPS Help Files

As part of's implementation, GATX Capital Corporation developed task-level SAP R/3 procedures. These procedures are currently organized and stored as documents in a Lotus Notes database, known as MAPS Help. To enable these documents to be included in the , RWD must extract the procedures from the Lotus Notes database into Microsoft Word 97 documents, format the files as necessary, and rename the files using a consistent file naming convention.

3.3 Presentation Format of Materials

During the development of the , source documents will be converted into formats designed for online viewing. Table 3.2 below lists the online formats of the source documents listed in Table 3.1.

Table 3.2 Document Presentation Formats

Document Type	Online Format
MAPS Help Glossary	HTML/GIF
MAPS Help Procedures	HTML/GIF
Role-to-Procedure Map	HTML
List of Key Contact Personnel	HTML

3.4 Documentation Standards Compliance

The conversion process for document files in the is highly dependent upon the proper formatting of the text and graphics contained in these files. RWD will generate new source documents from the MAPS Help database in Lotus Notes to comply with an established document standard. Likewise, all new MAPS Help documents provided by for inclusion in the should also adhere to a document standard RWD will establish together with . This document standard must, at a minimum, define a consistent file naming convention and file format for the MAPS Help documents. RWD will provide recommendations for the document standard.

Section 4

Functional Requirements

4.1 What this Section Covers

This section addresses the functional requirements of the , including navigation and printing capability.

4.2 Functions of the

Because the will be an online performance support system, each aspect of its functionality typically corresponds to a "page" containing text and graphics or a link to some other page within the system. Therefore, most of the functions of the online system will be to display contents using HTML pages or link to other HTML pages. Certain HTML pages within the are designed solely to provide organization and navigation to content files. These pages are referred to as *navigation pages*.

The will provide the following functions:

- MAPS Performance Support System **4.3 Functional Navigation**

From the main (home page), end-users will be able to access information in the using four discrete navigation paths:

- MAPSGATXMAPSGATXMAPSFigure 4.1 displays a representation of the high-level navigation paths for the . Each rectangular shaped item in the figure represents a page in the online system. Arrows in the figure represent page-to-page navigation paths available to users.

Note: Shaded items in the figure indicate content that would be developed outside of this online performance support project.

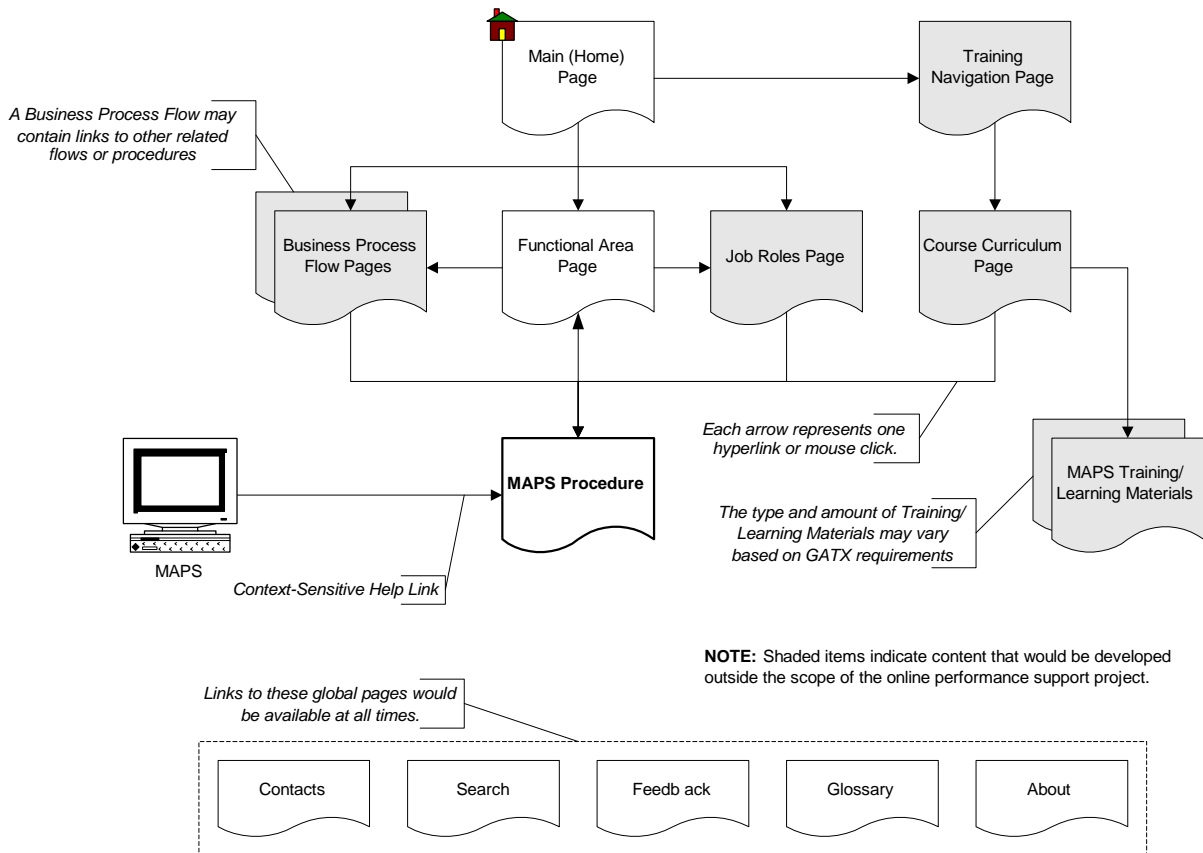


Figure 4.1 Online System Navigation

4.4 Function Requirements

Each section below describes the purpose, user action, and result for each functional element of the .

4.4.1 Display Main Page (Home Page)

Purpose: Provides top level navigational choices to the end-user. The end-user may select a business process, job role, functional area, or MAPS Learning tools links. Also provides choices to ancillary information through links in a tool bar to a Glossary, Contact List, Feedback Form, a Search tool, and About MAPS Help.

User Action: The end-user selects a desired business process, job role, functional area, or other information link.

Result: The displays the business process page, job function, or functional area page. If the user selects a business process, the top-level page for that area will appear with a high-level graphical depiction of business processes at . If the user selects a job role or functional area, a page will appear with a listing of performance support materials pertinent to that job role.

4.4.2 Display Job Role Navigation Pages

Purpose: Provides access to work instructions that pertain to a specific job role.
User Action: The end-user selects a Task link from a list.
Result: The displays the selected document.

4.4.3 Display Business Process Navigation Pages

Purpose: Provides access to work instructions within a business process.
User Action: The end-user selects a work instruction link from the available list.
Result: The displays the selected document.

4.4.4 Display Training Navigation Pages

Purpose: Provides access to training/learning materials.
User Action: The user actions available from this page depend on the training/learning content developed for inclusion in the .
Result: The displays the selected document.

4.4.5 Display Search Page

Purpose: Provides access to a search tool available within the online system.
User Action: The end-user enters a word or phrase to search the .
Result: The displays a list of possible documents.

4.4.6 Display Procedure

Purpose: Provides a work instruction for a selected task or transaction.
User Action: If necessary, the end-user selects a job aid or screen capture document. This information is supplemental to the core work instruction.
Result: The displays the work instruction.

4.4.7 Display About Page

Purpose: Explains key functionality of the online system and provides general help information, such as web browser settings, instructions for setting bookmarks, and other related topics.
User Action: The end-user selects about.
Result: The displays the About page.

4.4.8 Display Contacts List Page

- Purpose:** Provides the end-user with the names and phone extensions of key personnel to contact for additional help or coaching.
- User Action:** The Contacts List page is an informational document. No additional user action is required.
- Result:** The displays the Contacts List page.

4.4.9 Display Glossary

- Purpose:** Provides definitions for key terms related to and the business model.
- User Action:** The end-user selects the first letter of the desired word or phrase and, if necessary, scrolls down the list of terms beginning with that letter.
- Result:** The displays the selected letter at the top of the page and all terms beginning with that letter beneath it. If no term beginning with the selected letter exists in the glossary, the displays only the selected letter at the top of the page, followed by the next letter of the alphabet.

4.4.10 Send Feedback

- Purpose:** Allows users to report problems with the online system, incorrect information, and other information relevant to system administrators and documentation maintainers.
- User Action:** The end-user selects the feedback option.
- Result:** The launches e-mail to send the feedback to the person or persons responsible for maintaining the system.

4.4.11 Display Main

- Purpose:** Allows the end-user to return to the main web page of the .
- User Action:** The end-user selects the Main option.
- Result:** The displays the first web page to the .

4.5 Context-Sensitive Access

SAP R/3 online performance support materials are most effective when these materials are quickly and conveniently available to end users. RWD will provide a transaction-sensitive link from to the . To access context-sensitive help information in , the user begins the desired transaction (using a fast path or menu path) and selects the *Help > MAPS Help* menu path.

4.6 Printing

Printing capabilities will be available through standard print functionality for HTML pages.

Section 5

Maintenance Requirements

5.1 What this Section Covers

This section addresses the maintenance requirements of the .

5.2 Backup and Recovery Operations

To minimize the loss of system data due to hardware or software malfunctions, a proven backup and recovery operation must exist at the client site once the is implemented. is responsible for establishing a backup/recovery operation and conducting regular backups of all files associated with the on 's server.

5.3 Document Control Requirements

RWD will use an internally-developed methodology "InfoVision" to define a document naming convention, a directory structure, and source document style guidelines to control the information publication process. All documents to be published within the must conform to these conventions and guidelines to ensure quality conversion to HTML.

RWD will assign a lead technical developer who will coordinate document control activities. Further, RWD will work with to identify the process owner of the publication process and determine what skills and knowledge, support materials, and network security access requirements are necessary to fully support this role.

will determine the nature and number of pre-production and production environments and will communicate to RWD any website loading requirements.

5.4 Knowledge Transfer

To guarantee the transfer of knowledge, is encouraged to assign a suitable employee who will be responsible for maintaining the . This person, who should be assigned as soon as possible, will assist the team with development of the . Towards the conclusion of the project, RWD will develop instructional materials for the site maintainer, and deliver a Train-the-Maintainer session.

Appendix A

Storyboard

A.1 What this Section Covers

This section provides illustrations of the storyboard.

The storyboard is constructed to demonstrate the intended approach for the online system and provide a platform for discussions of desired content, functionality, and potential design approaches. The storyboard is intended to provide a "first look" at the proposed high-level functionality of the online system. A working prototype will be developed to support the design phase of the online system development.