

HP Education Services

NonStop Transaction Management Facility (TMF) Operations and Management (U4186S)



This course provides an intensive introduction to the HP NonStop™ Transaction Management Facility (TMF). Learn terminology, components, and how NonStop TMF provides database protection. Participate in lab exercises covering media management, audit and online dumps, volume and file recovery, catalog manipulation, configuration, routine operations, and how to prepare for orderly recovery. This four-day course is 60 percent lecture and 40 percent hands-on labs using HP servers.

Audience

- Database administrators
- System managers
- System operators
- Technical support analysts

Prerequisites

- NonStop S-series Server Administration I (U5448S) and NonStop S-series Server Administration II (U5449S) or
- NonStop NS-series Server Administration I (U8528S) and NonStop NS-series Server Administration II (U8638S) or
- Concepts and Facilities for NonStop Systems (U4147S) and
- System management experience on NonStop K-series, S-series, or NS-series servers

Course Objective

At the conclusion of this course you should be able to:

- Recognize which system and software components are necessary for NonStop TMF to provide both minimum protection and full protection functions
- Plan, write, and execute a NonStop TMF configuration with and without file recovery
- Choose the appropriate values for the NonStop TMF configuration attributes based upon your particular needs
- Use the appropriate TMFCOM commands to perform routine maintenance on NonStop TMF objects

Benefits to You

- Learn how to use the appropriate TMFCOM commands to perform monitoring and configuration activities and routine maintenance on NonStop TMF objects
- Improve operational efficiencies by gaining valuable hands-on experience running and configuring TMF
- Learn how to recover from accidental or intentional database modification or deletion by enabling your applications to use NonStop TMF software

Why education services from HP?

- Focus on job-specific skills
- Hands-on practice
- Experienced and best-in-the-field HP instructors
- Comprehensive student materials
- More than 80 training locations worldwide
- Customized on-site delivery

Course Title: NonStop Transaction Management Facility (TMF) Operations and Management

HP Product Number: U4186S

Category/Subcategory: NonStop / System Operations and Management

Course Length: 4 days

Level: Intermediate

Delivery Language: English

To Order: To review course schedules and to register for a course, visit www.hp.com/learn/nonstop and select your country from the drop down menu, or, contact your HP sales representative or HP authorized channel partner.

Next Steps: Consider attending the other optional and advanced learning courses in the HP NonStop Operations Management curriculum

Detailed Course Outline

Module 1 - Introduction to Transaction Management

- Challenges and solutions in maintaining an online database
- Purpose and function of the different database protection strategies
- Protection terms and concepts associated with a database
- Lab: data integrity

Module 2 - NonStop TMF Components

- Major software and system components of NonStop TMF and their functions
- System and software components necessary for NonStop TMF to provide both minimum protection and full protection functions
- Database protection fundamental design of NonStop server hardware and software

Module 3 - NonStop TMF Configuration Planning and Installation

- NonStop TMF configuration examples with and without file recovery
- Choosing appropriate values for the NonStop TMF configuration attributes
- Subsystem and application impact of specific operations
- Lab: utilities for NonStop TMF operations

Module 4 - NonStop TMF Operations Overview

- Routine and corrective NonStop TMF operations and management tasks
- Display information from TMFCOM commands
- Use of other system utilities to perform NonStop TMF proactive tasks

Module 5 - NonStop TMF Catalog Operations

- TMFCOM commands to use and manipulate the NonStop TMF catalog
- Labs: NonStop TMF labeled tape processing; NonStop TMF dumps and file recovery; NonStop TMF dump operations

Module 6 - NonStop TMF Data Volume Operations

- Data volume operations and management tasks
- Online dumps
- Volume recovery
- File recovery

Module 7 - NonStop TMF Audit Trail Operations

- Multivolume audit trails
- Audit trail volume manipulations
- Audit trail files
- Overflow volumes
- Restore volumes
- Labs: NonStop TMF operator messages; NonStop TMF configuration; NonStop TMF data volumes; NonStop TMF audit trail operations

Module 8 - NonStop TMF Transaction Operations

- Local transactions
- Distributed transactions
- Heterogeneous transactions
- Transaction thresholds

Module 9 – NonStop TMF and TMFCOM Features Added in G06.17

- General enhancements
- Summary of G06.17 TMF updates
- TMFCOM general enhancements
- TMFCOM history buffer
- Added TMFCOM command options
- OBEYFORM option
- Improved wildcard function

Onsite Delivery Equipment Requirements

- One dedicated NonStop S-series server with a minimum of:
 - NonStop Kernel operating system, version G06.10 or later
 - Six disk volumes in addition to the system disk
 - 96 MB memory per CPU
 - One 3613/5 Ethernet controller
 - TCP/IP software package (SD20)
- One STK 4480 SILO with 25 tapes
- One PC per student and one PC for the instructor with projection capabilities
- All PCs must have Outside View and have connectivity to the server
- No other use of the NonStop TMF subsystem by any other class or product
- One volume that can be taken down multiple times in class to demo a crashed database
- Or
- Exclusive access to the customer's NonStop TMF subsystem and tape subsystem
- One volume that can be taken down multiple times to demo a crashed database
- One PC, workstation, or terminal with Outside View and TCP/IP LAN connectivity to the NonStop server per student and one for the instructor
- Note: The recommended maximum class size is 10 students

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