



S-Class and
X-Class Servers

Guide to Exemplar Documentation

Fourth Edition

Guide to Exemplar Documentation

S-Class and X-Class Servers

B5655-90031

Fourth Edition

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Hewlett-Packard Company
Convex Division
Richardson, Texas
United States of America

Guide to Exemplar Documentation

S-Class and X-Class Servers

B5655-90031

Fourth Edition

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Preface

This document lists and describes all documentation available to support the HP Exemplar S-Class and X-Class Servers. Documents and their descriptions are divided into chapters by intended audience.

Delivery media information

In this guide, each document's media availability is marked as hardcopy and/or PinPoint.

PinPoint is Hewlett-Packard's online book browser for SPP-UX servers; it provides access to most Exemplar documentation. PinPoint runs on both SPP-UX and HP-UX platforms and is available in both CD-ROM and DAT formats. It is shipped automatically with Exemplar 1200, 1600, 2000, and 2200 servers.

Ordering information

To order hardcopy (printed) versions of the current edition of the documents listed in this guide, call 1-800-227-8164. Please have the order number (xxxxx-9xxxx) or the exact title of each document handy when you call.

To order an additional copy of PinPoint, contact your HP sales representative.

Administrator-level documentation

1

This chapter describes Exemplar documentation useful to system administrators. Some documents may be listed in more than one chapter, as they are written for multiple audiences.

Exemplar Architecture

S-Class and X-Class Servers

Provides technical information on Exemplar S-Class and X-Class Servers and on the optimization of applications that run on those servers.

Edition

First

Order Number

A4716-90001

Audience

Service personnel, general users, administrators, and programmers

Media availability

Hardcopy and PinPoint

Contents

This document provides the following information:

- Introduction to the HP implementation of scalable parallel processing in the S-Class and X-Class Exemplar product line
- Description of memory systems
- Description of messaging mechanisms
- Description of synchronization mechanisms
- Description of exceptions and interrupts
- Description of the I/O subsystem
- Description of performance monitors
- Description of system initialization and booting
- Glossary of terms

Exemplar Diagnostics Guide S-Class and X-Class Servers

Provides a general roadmap to pertinent diagnostic programs and definitive descriptions of the purpose of each test. It also defines minimum hardware configurations required for each test.

Edition

Second

Order Number

A4716-90020

Audience

System managers, administrators, system support engineers, and general users

Media availability

Hardcopy

Contents

Read this book to learn how to use the following tests:

- Memory
- Inter-Node Coherency
- Architectural
- Arbitration
- Stress

Exemplar Installation Guide

S-Class Server

Provides technical information and instructions needed for the installation of an Exemplar S-Class Server.

Edition

First

Order Number

A4716-90003

Audience

System and facility administrators and Customer Engineers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates
- Hardware installation instructions
- Diagnostics and utilities

Exemplar Installation Guide

X-Class Server

Provides technical information and instructions needed for the installation of an Exemplar X-Class Server.

Edition

First

Order Number

A4700-90001

Audience

System and facility administrators and Customer Engineers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates
- Hardware installation instructions
- Diagnostics and utilities

Exemplar Maintenance Guide S-Class and X-Class Servers

Provides reference information on the maintenance of Exemplar S-Class and X-Class Servers. It also provides a general overview of the servers' operational features.

Edition

First

Order Number

A4716-90004

Audience

System managers, administrators, system support engineers, and general users

Media availability

Hardcopy

Contents

Read this book for information on how to:

- Maintain the power subsystem
- Remove and replace system components
- Order Field Replaceable Units
- Return equipment

Exemplar Networking Guide

S-Class Servers

Describes networking tasks that system administrators perform on Exemplar S-Class Servers. Serves as supplement to other HP networking documentation that is shipped with S-Class Servers.

Edition

Fifth

Order Number

B5655-90004

Audience

System administrators

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Setting up, maintaining, and troubleshooting networking
- Configuring FDDI
- Configuring Ethernet
- Configuring HiPPI
- Configuring ATM

Exemplar Networking Guide

X-Class Servers

Describes networking tasks that system administrators perform on Exemplar X-Class Servers. Serves as supplement to other HP networking documentation that is shipped with X-Class Servers.

Edition

Sixth

Order Number

B5655-90029

Audience

System administrators

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Setting up, maintaining, and troubleshooting networking
- Configuring FDDI
- Configuring Ethernet
- Configuring HiPPI
- Configuring ATM

NQS System Administration Guide Exemplar S-Class and X-Class Servers

Describes how to configure and manage NQS, a batch queuing system.

Edition

Fourth

Order Number

B5589-90008

Audience

System administrators

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- NQS concepts
- Configuring NQS
- Controlling queue operations
- Generating NQS accounting report
- Configuring your NQS network
- Maintaining queue requests on a regular basis

***NQS System Manager's Quick Reference
Exemplar S-Class and X-Class Servers***

Lists frequently-used NQS configuration and management commands.

Edition

Third

Order Number

B5589-90006

Audience

System administrators

Media availability

Hardcopy

OpenBoot Quick Reference
Exemplar S-Class and X-Class Servers

Lists frequently-used Exemplar OpenBoot Prom (OBP) firmware commands.

Edition

Third

Order Number

B5655-90028

Audience

System administrators and field engineers

Media availability

Hardcopy

SPP-UX System Administration Guide Exemplar S-Class and X-Class Servers

Describes and provides instructions for the administration and maintenance of SPP-UX V5.2.

Edition

Fifth

Order Number

B5655-90023

Audience

SPP-UX system administrators and managers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Starting and stopping SPP-UX
- Setting run levels
- Managing users
- Monitoring system performance
- Setting up and maintaining file systems
- Configuring processor and memory resources
- Managing printers
- Backing up and recovering information

TMR Administrator's Guide Exemplar S-Class and X-Class Servers

Explains how to configure and administer the Tape Mount Request (TMR) tape management software system.

Edition

Second

Order Number

B6017-90009

Audience

SPP-UX system administrators

Media availability

Hardcopy

Contents

This guide provides the following information:

- An overview of the mount request system
- Configuring and administering the mount request system
- Message routing options
- Using accounting data
- Using log files

TMR Operator's Guide

Exemplar S-Class and X-Class Servers

Describes how to operate TMR, including how to monitor and control tape system resources and how to respond to tape mount and unmount requests.

Edition

Second

Order Number

B6017-90010

Audience

SPP-UX system administrators and operators

Media availability

Hardcopy

Contents

Read this book for information on:

- Mounting and unmounting tapes
- Moving tapes to new locations
- Performance tape maintenance
- Monitoring and controlling servers
- Monitoring and controlling tape devices

***TMR Operator's Quick Reference
Exemplar S-Class and X-Class Servers***

Lists frequently-used TMR operator-level commands.

Edition

Second

Order Number

B6017-90012

Audience

SPP-UX system administrators and operators

Media availability

Hardcopy

Programmer-level documentation

2

This chapter lists and describes documentation useful to people who program Exemplar servers. Some documents may be listed in more than one chapter, as they are written for multiple audiences.

CXdb Quick Reference Card
Exemplar S-Class and X-Class Servers

Lists frequently-used commands for CXdb, a visual debugger for debugging applications written in Fortran 77, Fortran 90, C, and C++.

Edition

First

Order Number

B5639-90007

Audience

Technical marketing and system engineers, ISVs, and customers who develop C, Fortran 77, and C++ applications

Media availability

Hardcopy

CXpa Reference ***Exemplar S-Class and X-Class Servers***

Describes how to use CXpa, an interactive runtime performance analysis tool for tuning Fortran, C, and C++ applications on Exemplar S-Class, X-Class, and SPP1200/1600 Series systems.

Edition

First

Order Number

B5639-90002

Audience

Technical marketing and system engineers, ISVs, and customers who develop and tune C, Fortran 77, and C++ applications

Media availability

Hardcopy

Contents

Read this book for information on:

- Preparing applications, object files, and archive libraries for profiling with CXpa
- Types of metrics that can be collected using CXpa
- Selecting source code regions and metrics for profiling
- Collecting performance data
- Analyzing performance data using CXpa's 2D and 3D graphs, dynamic call graphs, and text reports
- Using CXpa's X/Motif GUI, command line (tty) and batch mode interfaces

CXtrace User's Guide

Exemplar S-Class and X-Class Servers

Describes CXtrace, a trace-based performance analysis tool for C and Fortran 77 MPI and PVM applications on Exemplar S-Class, X-Class, and SPP1200/1600 Series systems.

Edition

First

Order Number

B5639-90003

Audience

Technical marketing and system engineers, ISVs, and customers who develop and tune C, Fortran 77, and C++ applications

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Instrumenting and building applications for profiling with CXtrace
- Using the CXtrace runtime monitoring library
- Using the trace view tool (tv) to view a timeline-oriented graphical representation of trace file data
- Using the tally report generator utility to produce statistical reports for the application, based on trace file data

Exemplar C and Fortran 77 Programmer's Guide S-Class and X-Class Servers

Introduces the Exemplar C and Fortran 77 compilers, which are based on Hewlett-Packard's C and Fortran 77 compilers and support the Exemplar programming model.

Edition

First

Order Number

B5600-90002

Audience

Experienced C and Fortran 77 programmers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Exemplar extensions to the standard HP C and Fortran 77 compilers
- Migrating from SPP1x00-Series compilers to the Exemplar compilers
- Exemplar linker and assembler overview
- Debugging and profiling
- Exemplar utilities such as `mpa` and `sysinfo`
- Related environment variables

Exemplar C++ Programming Guide

S-Class and X-Class Servers

Describes the features and operation of the Exemplar C++ compiler. It is not a complete reference for the C++ compiler but instead focuses on differences between the Exemplar C++ compiler and the standard HP C++ compiler on which it is based.

Edition

Third

Order Number

B5630-90001

Audience

C++ programmers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Compiling and linking C++ source code
- Using the compiler command line options
- Handling inter-language programming issues
- Using environment variables to pass information to the compiler

Exemplar Programming Guide S-Class and X-Class Servers

Describes efficient parallel programming techniques that are available with the Exemplar C and Fortran compilers.

Edition

First

Order Number

B5600-90001

Audience

Experienced C and Fortran 77 programmers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- A programmer's overview of the architecture
- Exemplar compiler optimizations
- Compiler optimization options, directives, and pragmas
- Basic and advanced shared-memory programming
- Compiler optimization reports
- Compiler Parallel Support Library routines

HP Fortran 90 Programmer's Reference

Provides a complete description of the HP Fortran 90 programming language, including all standard features and HP language extensions.

Edition

First

Order Number

B5876-90001

Audience

Fortran 90 programmers

Media availability

Hardcopy, PinPoint, LaserRom

Contents

This document describes:

- Features of Fortran 90 that distinguish it from Fortran 77
- Basic language elements of HP Fortran 90
- Intrinsic and derived (user-defined) data types
- Arrays and array-handling features of HP Fortran 90
- Expressions, operators, assignments, and the WHERE construct
- Constructs and statements that control program execution
- Program units and procedures
- I/O and file handling features
- Syntax and use of format specifications and edit descriptors
- Syntax and function of all HP Fortran 90 statements
- Intrinsic procedures, including standard intrinsics and HP extensions
- Libraries shipped with and used by the HP Fortran 90 compiler
- Compile-line options, including optimization options, accepted by the HP Fortran 90 compiler
- Compiler directives
- Other information related to the HP Fortran 90 language

HP Fortran 90 Programmer's Notes

Provides information about using the HP Fortran 90 compiler on Exemplar S-Class and X-Class systems. It is intended to accompany the *HP Fortran 90 Programmer's Reference*.

Edition

First

Order Number

B5876-90002

Audience

Fortran 90 programmers

Media availability

Hardcopy and PinPoint

Contents

This document describes:

- Requirements for using the HP Fortran 90 compiler
- Restrictions on using the HP Fortran 90 compiler
- Using the HP Fortran 90 compiler
- Migrating code from Fortran 77 to Fortran 90
- Calling C routines from HP Fortran 90
- Writing HP Fortran 90 programs for use with the SPP-UX operating system
- Using CXdb, CXpa, PVM, and MPI with HP Fortran 90

HP MLIB LAPACK User's Guide

Describes HP's LAPACK software library. LAPACK is a collection of Fortran-callable subprograms for mathematical applications involving linear algebra, including

- Linear equations
- Least squares
- Eigenvalue problems
- Singular value decomposition

Edition

Third

Order Number

B5649-90001

Audience

Fortran programmers

Media availability

Hardcopy and PinPoint

Contents

This guide describes Fortran-callable routines for:

- Simple drivers for linear equations
- Expert drivers for linear equations
- Computational subprograms for linear equations
- Drivers for linear least squares problems
- Computational subprograms for orthogonal factorizations
- Simple drivers for ordinary eigenvalue problems
- Expert drivers for ordinary eigenvalue problems
- Drivers for generalized eigenvalue problems
- Drivers for the singular value decomposition
- LAPACK auxiliary subprograms

HP MLIB SCILIB User's Guide

Describes HP's SCILIB software library, which is a collection of Fortran-callable, Cray-compatible mathematical subprograms for scientific applications.

Edition

Second

Order Number

B5649-90002

Audience

Fortran programmers

Media availability

Hardcopy and PinPoint

Contents

This guide describes Fortran-callable routines for:

- Vector operations
- Matrix operations
- Linear equation solutions
- Eigenvalue and eigenvector computation
- Fast Fourier transforms
- Correlation and convolution
- Linear recurrences
- Sorting

HP MLIB VECLIB User's Guide

Describes HP's VECLIB software library, which is a collection of Fortran-callable mathematical subprograms for scientific applications.

Edition

Second

Order Number

B5649-90003

Audience

Fortran, C, and Ada programmers

Media availability

Hardcopy and PinPoint

Contents

This guide describes Fortran-callable routines for:

- Dense and sparse vector operations, including the Basic Linear Algebra Subprograms (BLAS)
- Matrix operations, including the Level 2 and Level 3 BLAS
- Linear equation solutions, including LINPACK
- Eigensystem problems, including EISPACK
- Sparse symmetric linear equation solutions
- Sparse symmetric ordinary and generalized eigensystem problems
- Skyline linear equation solutions
- Fast Fourier transforms
- Convolution and correlation
- Linear recurrences
- Sorting and generating random numbers

HP MPI User's Guide

Describes how to use HP MPI (Message Passing Interface), a library of C- and Fortran-callable routines used for message-passing programming.

Edition

First

Order Number

B6011-90001

Audience

Programmers experienced with SPP1600 and Exemplar S-Class and X-Class servers running under SPP-UX and/or D-Class and K-Class servers running under HP-UX

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Understanding and using HP MPI
- Analyzing HP MPI applications
- Tuning HP MPI applications to improve performance
- Troubleshooting HP MPI applications

HP PVM User's Guide

Describes how to use HP PVM (Parallel Virtual Machine), a library of C- and Fortran-callable routines used for message-passing programming.

Edition

First

Order Number

B5885-90001

Audience

Programmers experienced with S-Class and X-Class servers running SPP-UX

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Building and running HP PVM applications
- Analyzing HP PVM applications
- Tuning HP PVM applications to improve performance

VAST/f90 User's Guide

Describes the VAST/f90 compiling system. VAST/f90 translates Fortran 90 programs into Fortran 77, which is then compiled by an HP Fortran 77 compiler.

Edition

3.0

Order Number

B5610-90001

Audience

Fortran programmers

Media availability

Hardcopy

Contents

Read this book for information on:

- Translating Fortran 90 programs into Fortran 77
- Compiling Fortran 90 programs using the VAST/f90 command line
- Example uses of the VAST/f90 command line
- Distinctive Fortran 90 features and example code that illustrates their use

User-level documentation

3

This chapter describes available Exemplar documentation that is useful to general users of S-Class and X-Class Servers. Some documents may be listed in other chapters of this guide, as they are written for multiple audiences.

Checkpoint Restart User's Guide Exemplar S-Class and X-Class Servers

Provides instructions on how to save the state of selected processes to disk files and later restart them from their saved states.

Edition

Third

Order Number

B5655-90027

Audience

Programmers and general SPP-UX users

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- How checkpoint restart works
- How to checkpoint processes and process hierarchies
- How to restart processes and process hierarchies
- How to program in C, C++, and Fortran using checkpoint restart

Exemplar User's Guide

S-Class Servers

Provides general user-level information about using HP Exemplar S-Class Servers.

Edition

First

Order Number

B5655-90003

Audience

Exemplar users, including programmers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- An overview of the Exemplar operating system (SPP-UX), file system, and varieties of memory
- Determining an Exemplar server's hardware and software configuration
- Monitoring an Exemplar system's resources
- Differences between Exemplar utilities and those found on traditional HP workstations
- Overview of programming strategies, languages, tools, and libraries

NQS User's Guide
Exemplar S-Class and X-Class Servers

Provides user-level information on NQS, a batch queuing system, and instructions on its use.

Edition

Fourth

Order Number

B5589-90009

Audience

Programmers and general system users

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Queue processing, levels of authorization, and NQS accounting
- Displaying information
- Submitting and controlling requests
- Transaction completion messages and request completion messages

***NQS User's Quick Reference
Exemplar S-Class and X-Class Servers***

Lists frequently-used NQS user-level commands.

Edition

Third

Order Number

B5589-90007

Audience

Programmers and general system users

Media availability

Hardcopy

SPP-UX Large Files User's Guide Exemplar S-Class and X-Class Servers

Describes large files and provides information on programming and usage.

Edition

Third

Order Number

B5655-90032

Audience

Programmers and general system users

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- The relationship between file systems and large files
- How/which SPP-UX utilities work with large files
- How to program using large files

TMR User's Guide ***Exemplar S-Class and X-Class Servers***

Introduces TMR, a tape management software system that provides traditional tape management. Provides tape system concepts and instruction for performing tape-related tasks.

Edition

Second

Order Number

B6017-90008

Audience

Programmers and general system users

Media availability

Hardcopy

Contents

Read this book for information on:

- Access tape and tape drives
- Write and read tape files
- Group files together
- Request tape movements

***TMR User's Quick Reference
Exemplar S-Class and X-Class Servers***

Lists frequently-used TMR user-level commands.

Edition

Second

Order Number

B6017-90011

Audience

Programmers and general system users

Media availability

Hardcopy

Hardware and I/O documentation

4

This chapter describes hardware and I/O documentation that supports Exemplar S-Class and X-Class Servers. Some documents may also be listed in other chapters, as they are written for multiple audiences.

Exemplar Architecture

S-Class and X-Class Servers

Provides technical information for the evaluation of the Exemplar product line and the optimization of applications that run on the Exemplar system.

Edition

First

Order Number

A4716-90001

Audience

Service personnel, general users, and programmers

Media availability

Hardcopy and PinPoint

Contents

This manual provides:

- Introduction to the Hewlett-Packard implementation of scalable parallel processing in the Exemplar product line
- Description of memory systems
- Description of messaging mechanisms
- Description of synchronization mechanisms
- Description of exceptions and interrupts
- Description of the I/O subsystem
- Description of performance monitors
- Description of system initialization and booting
- Glossary of terms

Exemplar Diagnostics Guide S-Class and X-Class Servers

Provides a general roadmap to pertinent diagnostic programs and definitive descriptions of the purpose of each test. It also defines minimum hardware configurations required for each test.

Edition

Second

Order Number

A4716-90020

Audience

System administrators, system support engineers, and general users

Media availability

Hardcopy

Contents

Read this book to learn how to use the following tests:

- Memory
- Inter-Node Coherency
- Architectural
- Arbitration
- Stress

Exemplar Installation Guide

S-Class Server

Provides technical information and instructions needed for the installation of an Exemplar S-Class Server.

Edition

First

Order Number

A4716-90003

Audience

System and facility administrators and Customer Engineers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates
- Hardware installation instructions
- Diagnostics and utilities

Exemplar Installation Guide X-Class Server

Provides technical information and instructions needed for the installation of an Exemplar X-Class Server.

Edition

First

Order Number

A4700-90001

Audience

System and facility administrators and Customer Engineers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates
- Hardware installation instructions
- Diagnostics and utilities

Exemplar Maintenance Guide S-Class and X-Class Servers

Provides reference information on the maintenance of Exemplar S-Class and X-Class Servers. It also provides a general overview of the servers' operational features.

Edition

First

Order Number

A4716-90004

Audience

System managers, administrators, system support engineers, and general users

Media availability

Hardcopy

Contents

Read this book for information on:

- Maintaining the power subsystem
- Removing and replacing system components
- Obtaining Field Replaceable Units
- Returning equipment

Exemplar Site Preparation Guide S-Class Servers

Provides technical information needed to prepare a site for installation of an Exemplar S-Class system.

Edition

First

Order Number

A4716-90005

Audience

System and facility managers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates

Exemplar Site Preparation Guide X-Class Servers

Provides technical information needed to prepare a site for installation of an Exemplar X-Class system.

Edition

First

Order Number

A4700-90000

Audience

System and facility managers

Media availability

Hardcopy

Contents

This guide provides:

- System definitions and specifications
- Electrical and environmental guidelines
- Facilities guidelines
- Preinstallation survey
- Summary of requirements
- Templates

Exemplar Tape Integration Guide

Provides technical information needed to integrate Tier 2 devices with SPP-1200/1600 Series and Exemplar S-Class and X-Class systems.

Edition

First

Order Number

A4716-90019

Audience

Field Service personnel and general users.

Media availability

Hardcopy

Contents

Read this book for information on:

- Drive descriptions
- Supported configurations
- Installing drives
- Supported firmware revisions

Barracuda 9 Gb Disk Drive Installation and Service Guide

Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of 9 Gb disk drives.

Edition

First

Order Number

A4716-90008

Audience

System administrators and system support engineers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Drive specifications, DC power requirements, and drive jumper configuration
- Unpacking and inspecting drives
- Installing drives
- Downloading the SCSI configuration
- Troubleshooting
- Performing maintenance
- Obtaining Field Replaceable Units

DDS 2 DAT Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the Digital Audio Tape (DAT) drive.

Edition

First

Order Number

A4716-90014

Audience

System administrators and system support engineers

Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Features and specifications of the DAT
- Unpacking and inspecting drives
- Installing drive and integrating system
- Troubleshooting
- Running diagnostic routines
- Removing and replacing drive
- Obtaining Field Replaceable Units

DDS 3 DAT Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the Digital Audio Tape (DAT) drive.

Edition

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- Unpacking and inspecting drives
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- Running diagnostic routines
- Removing and replacing drive
- Obtaining Field Replaceable Units

Digital Tape Autoloader Installation and Service Guide

Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the Digital Tape Autoloader.

Edition

First

Order Number

A4716-90013

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Contents

Read this book for information on:

- Drive specifications
- Unpacking and inspecting autoloader
- Installing autoloader
- Troubleshooting
- Obtaining Field Replaceable Units

Disk Array Storage Subsystem User's Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the disk array.

Edition

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A4716-90021

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Contents

Read this book for information on:

- Drive specifications
- Unpacking and inspecting disk arrays
- Installing disk arrays
- Troubleshooting
- Obtaining Field Replaceable Units

Embedded Disk Drive Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the embedded disk drive in the Exemplar S-Class and X-Class Servers.

Edition

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A4716-90009

Audience

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Read this book for information on:

- Drive specifications, DC power requirements, and drive jumper configuration
- Unpacking and inspecting disk canisters
- Installing drives
- Troubleshooting
- Performing maintenance
- Obtaining Field Replaceable Units

JBOD Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of JBOD (Just a Bunch of Disks) subsystem and related equipment.

Edition

First

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A4716-90022

Audience

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Contents

Read this book for information on:

- JBOD specifications, DC power requirements, and drive jumper configuration
- Unpacking and inspecting disk canisters
- Installing subsystem
- Troubleshooting
- Performing maintenance
- Obtaining Field Replaceable Units

PCI ATM and HiPPi Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of the PCI ATM controller and PCI HiPPi controller.

Edition

First

Order Number

A4716-90017

Audience

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Media availability

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Contents

Read this book for information on:

- Features and specifications of the controller
- Unpacking and inspecting controllers
- Installing controller and integrating system
- Troubleshooting
- Performing diagnostic routines
- Obtaining Field Replaceable Units

PCI Dual Attach FDDI Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of PCI Dual Attach FDDI controllers.

Edition

First

Order Number

A4716-90012

Audience

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Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Features and specifications of the controller
- Unpacking and inspecting controllers
- Installing controller and integrating system
- Troubleshooting
- Performing diagnostic routines
- Removing and replacing controllers
- Obtaining Field Replaceable Units

PCI Fast Ethernet Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of PCI Fast Ethernet controllers.

Edition

First

Order Number

A4716-90010

Audience

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Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Features and specifications of the controller
- Unpacking and inspecting controllers
- Installing controller and integrating system
- Use of the espeed utility program
- Troubleshooting
- Performing diagnostic routines
- Removing and replacing controllers
- Obtaining Field Replaceable Units

PCI Ultra SCSI Installation and Service Guide Exemplar S-Class and X-Class Servers

Provides technical instructions for installation, service, and replacement of PCI Ultra SCSI controllers.

Edition

First

Order Number

A4716-90011

Audience

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Media availability

Hardcopy and PinPoint

Contents

Read this book for information on:

- Features and specifications of the controller
- Unpacking the board
- Inspecting controllers
- Installing controllers
- Troubleshooting
- Performing diagnostics routines
- Removing and replacing controllers
- Obtaining Field Replaceable Units

Some of the documents listed in this guide are intended to be supplemented by other Hewlett-Packard or 3rd-party documents.

Table 1 lists supplemental Hewlett-Packard documents that were shipped to you with your S-Class or X-Class Server with the HP products they support. Table 2 lists 3rd-party documents that were shipped to you with the HP product they describe.

You can order these documents by contacting your local HP sales office with each document's 5x5-digit order number and title, or by sending requests to the address listed in the section "Ordering information" on page ix.

Table 1 Hewlett-Packard supplemental documentation

Title	Order number
<i>HP C HP-UX Reference Manual</i>	92453-90024
<i>HP C Programming Guide</i>	92434-90002
<i>HP C++ Programmer's Guide</i>	92501-90005
<i>HP C++ Quick Reference</i>	B1637-90001
<i>HP Codelib Library Reference</i>	B2617-90000
<i>HP Fortran/9000 Programmer's Guide</i>	B3906-90001
<i>HP Fortran/9000 Programmer's Reference</i>	B3906-90002
<i>HP Installing and Administering Internet Services</i>	B1030-90000
<i>HP Installing and Administering NFS</i>	B1031-90000
<i>HP PA-RISC 2.0 Architecture Reference</i>	B5655-90009
<i>HP Networking Overview</i>	B1029-90000
<i>HP-UX Assembly Language Reference Manual</i>	92432-90001
<i>HP-UX Error Message Catalog</i>	B1862-90004
<i>PA-RISC Procedure Calling Conventions Reference</i>	09740-90015

Table 2 3rd-party supplemental documentation

Title	Order number
<i>MPI: The Complete Reference</i>	B6011-90003
<i>PVM User's Guide</i>	B5885-90002
<i>FlexLM User's Guide</i>	B5655-90010









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