Software Product Description

PRODUCT NAME: **InfoServer 100 Software, Version 1.1** **SPD 33.20.01**

DESCRIPTION

InfoServer 100 Software is the software component of a special-purpose hardware/software system that makes up an InfoServer 100 Ethernet-based virtual disk server. This product supports locally attached SCSI removable CDROMs and SCSI disk storage.

The server contains 4 MB of memory (3 MB of cache), an internal RZ23 drive (100 MB), and either one or two integral RRD40 CDROM drives (635 MB each).

The InfoServer 100 supports up to 100 concurrent clients. Supported clients are listed in the *Client Support Matrix* table in this Software Product Description (SPD).

Virtual disks, both physical disk media and sets of logical disk blocks, can be served to the network by the InfoServer 100. InfoServer 100 is the server component in a client-server model. Client systems running the appropriate client software can connect to virtual disks served by the InfoServer 100 and use them as though they were locally attached devices. Together, the clients and servers form a LAN-based network in which server based storage can be accessed from client systems.

InfoServer 100 Software is factory-installed on the server hardware. The server boots when powered on, requiring little or no management for the default mode of operation.

Software protocols provide remote access to the server on the LAN. These protocols are Local Area Transport (LAT) for remote management, Local Area Disk (LAD) and Local Area Systems Transport (LAST) for virtual disk access, and Maintenance Operations Protocol (MOP) for down-line loading.

InfoServer 100 operation across low-speed bridges is possible, however, the underlying LAST protocol assumes a low rate of packet loss. Therefore, low-speed bridges may cause significant performance degradation. For this reason, operation of the InfoServer is supported only over 10 megabit bridges.

Features

Pre-installation of InfoServer 100 Software with Simplified Updating

The InfoServer 100 Software is factory-installed on the internal RZ23 disk. Installation of the InfoServer 100 Software is not required. The server boots when powered on. A simple server command is provided for updating the InfoServer 100 Software from CDROM.

Autoconfiguration

The server autoconfigures memory and devices and automatically creates service names for media present on the server.

Local and Remote Management Capability

The server can be managed by either a locally attached console or a remote Local Area Transport (LAT) terminal. Local and remote console capabilities include configuration management, diagnostic information (built-in self-test and diagnostic messages) and server control.

A local console is not required for the default mode of unattended operation, but may be helpful in diagnosing certain types of server problems.

Password Protected Management Interface

A password-protected management interface allows control and monitoring of server activity, with autoprompting at any point in the command sequence, command line recall, and built-in help.

Access Control

Server Access Control

Every InfoServer and its corresponding set of clients is a member of a single workgroup. A work group is a mechanism used by the InfoServer software to logically subdivide the InfoServer network. Client systems and InfoServers must belong to the same work group for clients to access virtual disks on the InfoServer. Up to 1024 workgroups can coexist in a single LAN.

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Management Interface Access Control

- Password protection
- LAT group codes

Device Access Control

- Password protection
- Concurrent usage quotas

Multiple Read/Write Virtual Disks on a Single Physical Disk

The InfoServer 100 can serve read/write disk partitions. A partition is a logical subset of a read/write disk. A single disk can be subdivided into several partitions, each of which can be served to the network independently as a virtual disk. The access mode supports a single writer or multiple readers, but not both concurrently (to prevent accidental corruption of data on the disk).

Read/Write Data Back-Up

Back-up operations can be performed locally via server commands or remotely using client-specific utilities.

File System Independence

InfoServer 100 is a "virtual disk" server. InfoServer 100 does not impose a file system on the virtual disks that it serves, instead the client system interprets the on-disk structure. Multiple on-disk structures can be served on a single InfoServer 100 simultaneously. InfoServer 100 is capable of automatically serving ODS-2, High Sierra, and ISO 9660 disk formats. Other disk formats may be served manually through the InfoServer management interface.

Automatic Failover to Duplicate Media

Server protocols are designed to allow client systems to perform automatic failover between duplicate media. The implementation of failover varies from client to client.

Load Balancing

InfoServer 100 dynamically calculates a service rating for virtual disks based upon load. These ratings are used by some client systems when connections are requested. When the same disk is offered more than once on the network, load balancing is provided. This includes the ability to load balance connections within a single InfoServer 100 when duplicate virtual disks are present, as well as between multiple InfoServers with duplicate media on the network. Client systems will select the highest rated service.

Initial System Load

Some client systems implement Initial System Load (ISL) using a combination of server implemented downline load and virtual disk capabilities. This feature eliminates the need for locally attached software distribution devices on those client systems.

SOFTWARE REQUIREMENTS

Refer to client documentation for specific client features that support InfoServer 100.

VMS Clients

InfoServer client support is included in VMS Operating System, at a minimum of V5.4. See the VMS Operating System cover letter and VMS Operating System V5.4 SPD (25.01.xx) for details of client support and any restrictions.

InfoServer client support for VMS V5.0 - V5.3-2 is available by installing the DEC InfoServer Client for VMS kit (SPD 33.91.xx).

PATHWORKS for DOS Clients

InfoServer client support is included in PATHWORKS for DOS (formerly DECnet PCSA Client for DOS), at a minimum of Version 2.2.

Client Support Matrix

Server Capabilities	**Clients**		
	VMS V5.4-1	DEC PATHWORKS for DOS (formerly PCSA)	Digital LAT Terminal Servers
Read-write virtual disk support	X	X	–
Password-protected Virtual Disks	X	X	–
Workgroups	X	X	–
Failover to Duplicate Media	X	X	–
InfoServer management via LAT	X[1]	X	X
Load-Balancing	X	–	–
Initial System Load	VAX 6000	–	–

[1]Requires the optional installation of the LAT upgrade kit (LATU1054.A) available on VMS V5.4-1.

Device Support

Device	
RZ23	104MB fixed disk drive
RZ56	665MB fixed disk drive
Magneto-Optical[1]	600MB removable writeable/eraseable optical storage
RRD40	600MB removable read-only CDROM
RRD42	600MB removable read-only CDROM

[1]The Alphatronix Inspire drive is the only drive that has currently been qualified for support on the InfoServer 100.

HARDWARE REQUIREMENTS

InfoServer 100 Software V1.1 requires the following InfoServer 100 hardware:

SEABB-AA/A9: InfoServer 100 System, 4MB, 1 RZ23, 1 RRD40

SEABC-AA/A9: InfoServer 100 System, 4MB, 1 RZ23, 2 RRD40

Both ThinWire and ThickWire connections are available on the InfoServer 100.

OPTIONAL HARDWARE

A maximum of 9 disk drives per InfoServer 100 are supported (this includes the server's integral RZ23 disk). Any combination of the following devices may be connected:

Device	Internal	External
RZ23	1	N/A
RZ56	0	6 or 7
RRD40	1 or 2	6 or 7
Alphatronix Inspire	0	6 or 7

An 18" SCSI cable (BC19J-1E) is supported.

The BC16E-XX console cable is necessary to attach a console to InfoServer 100.

ORDERING INFORMATION

Any order for an InfoServer 100 system includes the InfoServer 100 Software with InfoServer 100 server license.

In addition, any order for InfoServer 100 includes four InfoServer client licenses, a documentation kit, the VMS Consolidated Software Distribution on CDROM, VMS Online Documentation Library on CDROM, and DEClearn on CDROM releases.

InfoServer 100 Software is factory-installed.

A separate InfoServer client license must be ordered for every client node beyond the four included with the initial system purchase (except for PATHWORKS for DOS, formerly PCSA Client for DOS).

InfoServer 100 Client License: QL-YTC99-AA
System Documentation: QA-YSHAA-GZ
Software Product Services: QT-YSHA*-**

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. Integrated System Support Services providing comprehensive hardware and software maintenance services, or separate hardware or software maintenance services are available for the InfoServer 100. For more information, contact your local Digital office.

Software Service is covered under the terms and conditions of the Integrated Hardware and Software Customer Service Contracts.

Service for InfoServer 100 Software must be ordered independently of the media delivering updates.

InfoServer 100 Software Product Services: QT-YSHA*-**
VMS Consolidated Software Distribution on CDROM: QT-VWJ8A-C8
VMS Online Documentation Library Subscription Service on CDROM: QT-VWR8A-C8

* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

VMS Consolidated Software Distribution on CDROM

Media containing periodic updates to the InfoServer software is available through a subscription to the VMS Consolidated Software Distribution Subscription Service (an alternative to Media and Documentation Distribution Service), delivering a new compact disc every other month with the latest software.

VMS Online Documentation Library Subscription Service on CDROM

Media containing periodic online updates to the InfoServer system documentation is available through a subscription to the VMS Online Documentation Library Subscription Service (an alternative to Media and Documentation Distribution Service), delivering a new compact disc every other month with the latest online documentation.

SOFTWARE LICENSING

InfoServer Server License — This license grants the right to use the InfoServer 100 Software on the InfoServer 100 hardware.

InfoServer Client License — This license grants access to the InfoServer 100 by any one client node.

InfoServer 100 PATHWORKS for DOS (formerly DECnet PCSA Client for DOS) clients are not required to purchase a client license at this time for this product.

Client access information for license management may be found in the InfoServer 100 by issuing the "Show Disk Access" command and reviewing the information in the display field.

This product does not provide support for the VMS License Management Facility. A Product Authorization Key (PAK) is not required for installation or use of this version of the product.

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

SOFTWARE WARRANTY

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD. Software accompanying an InfoServer 100 hardware order is covered under the terms of the hardware warranty and is warranted to perform according to the Software Product Description.

Software purchased separately is warranted only to the extent that it will perform according to the Software Product Description. The media itself carries a one year warranty. Software carries a standard ninety day software warranty.

The above information is valid at the time of release. Please contact your local Digital office for the most up-to-date information.