# InfoServer 100 Software Version 1.1 Release Notes

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This document describes problems in Version 1.0 of the InfoServer 100 software and documentation, with changes and corrections provided in the Version 1.1 release.

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| **Revision/Update Information:** | This document supersedes the *DEC InfoServer 100 Software Version 1.0 Release Notes*. |
| **Operating System and Version:** | VMS Version 5.4 |
| **Software Version:** | InfoServer 100 Version 1.1 |

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These release notes provide update information for the Version 1.1 release of the InfoServer 100 software. All known problems affecting InfoServer 100 operation in VAX/VMS and MS-DOS Personal Computer Systems Architecture (PCSA) environments are documented, together with information specific to the Version 1.1 release.

The release notes should be distributed to InfoServer managers and other individuals responsible for the installation, operation, and management of InfoServer 100.

# 1 InfoServer 100 Description

InfoServer 100 is an Ethernet-based, high-performance virtual disk server that can serve physical disk media and sets of logical disk blocks to the network. Host systems running the appropriate client software can connect to virtual disks served by InfoServer 100 and utilize them as though they were locally attached devices.

Unlike a file server, InfoServer 100 does not impose a file system on the virtual disks that it serves. This means that InfoServer 100 can serve a disk with any type of on-disk file structure. Because the host client system interprets the on-disk structure, each host system can use its own native file system. Multiple on-disk structures can be served and accessed simultaneously on a single InfoServer 100.

A primary function of InfoServer 100 is to make compact discs (CDs) available to clients on the network. The InfoServer automatically serves CDs using their volume labels as service names when the server is booted or when CDs are inserted into their drives. No management action is required. Client systems need only ‘‘bind to’’ and mount the CDs under their volume labels. The InfoServer can automatically serve CDs in ODS-2, ISO-9660, or High Sierra format. Other media types can be served manually through the InfoServer management interface.

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. These partitions appear as whole disks to the remote client systems. For example, an MS-DOS PC using the PCSA product can access and use InfoServer partitions as though they were local hard disks.

InfoServer 100 can serve as an initial load system for some VAX computers. Using Maintenance Operation Protocol (MOP), InfoServer 100 can downline load the primary bootstrap to these VAX computers. The computers then connect back to the VMS software distribution CD and allow the VMS BACKUP utility to make a copy of the VMS operating system savesets on a local read/write disk from the CD. All future VMS boots are then done from that local read/write disk.

## 1 InfoServer 100 Description

InfoServer 100 can downline load other products. Any Ethernet-based product that requests a particular file name (that is, does not require a Network Control Program (NCP) database entry to locate the required downline load file) can be loaded from InfoServer. Special MOP partitions can be created and the desired file copied to that partition. Each InfoServer can handle up to 100 simultaneous downline loads more efficiently than host-based downline loaders, which must start processes to assist in the load.

# 2 Software Changes from Version 1.0 to Version 1.1

This section describes the changes made in the Version 1.1 release of the InfoServer 100 software.

## 2.1 Updating System Software

The InfoServer Version 1.1 software is distributed on the VMS Consolidated Software Distribution CDROM disk. To run the Version 1.1 software on InfoServer 100, you must first copy the software to the InfoServer internal read/write disk. Follow these steps:

1. Insert the VMS Consolidated Software Distribution CDROM with the InfoServer software update into the InfoServer to be upgraded. The documentation for VMS Consolidated Software Distribution indicates which CDROM contains the InfoServer software update.
2. Log in to the InfoServer either from a locally attached terminal or from a remote LAT terminal. Refer to the *InfoServer 100 System Operations Guide* for more information about using the InfoServer command set.
3. Enter the InfoServer SHOW DEVICES command to identify the InfoServer device that holds the VMS Consolidated Software Distribution CDROM. For example, if the CDROM is located in the internal CDROM drive on the right side of the unit, the InfoServer device name is DK2:.
4. On the InfoServer, enter the following commands at the InfoServer prompt, specifying in the second command the InfoServer device identified in the previous step:

```
InfoServer>  SET SERVER STATE OFF
InfoServer>  UPDATE SYSTEM device
InfoServer>  SET SERVER STATE ON
```

5. The Version 1.1 software is installed on the internal disk and will run when the InfoServer reboots. To run the new software immediately, enter the following command:

```
InfoServer>  REBOOT YES
```

To identify the Version 1.1 software running on the InfoServer, you can enter the InfoServer SHOW SERVER command. The system displays V1.1, BL5. For more information on the commands used to update InfoServer system software, refer to the *InfoServer 100 System Operations Guide*.

## 2.2 Managing Client Licenses

InfoServer 100 requires licenses for each client system that accesses the InfoServer system. The Version 1.1 software includes two new commands to manage licensed clients. These commands are described in Sections 2.2.1 and 2.2.2. The software also includes a new login informational message, described in Section 2.2.3.

### 2.2.1 SET SERVER DISK ACCESS Command

The SET SERVER DISK ACCESS command allows the InfoServer manager to set the number of client access licenses that have been purchased for the InfoServer. The command syntax is as follows:

SET [SERVER] DISK ACCESS value

In this command, *value* is the decimal number of client licenses that have been purchased. When the Version 1.1 software is first loaded on the InfoServer, the software assumes a disk access value of 4, which is the default number of client access licenses shipped with each InfoServer.

If you have purchased more licenses, you can use this command to indicate the appropriate number. For example, if you have purchased an additional four client access licenses for the InfoServer, you would enter the following command to set your authorized clients to a total of eight:

```
InfoServer> SET SERVER DISK ACCESS 8
```

### 2.2.2 SHOW DISK ACCESS Command

The SHOW DISK ACCESS command allows the InfoServer manager to monitor client disk usage. The command syntax is as follows:

SHOW DISK [ACCESS]

The system displays disk usage as follows:

```
InfoServer>  SHOW DISK ACCESS

                  * InfoServer Virtual Disk Access Summary *

Current clients using disk access:               3
Highest clients using disk access:               5

Authorized clients for disk access:              4
Client disk access overdraft:                    1

*** Your highest disk access exceeds the authorized limit by 1.
*** Current server overdraft policy is to allow unlimited overdraft.
```

The new display includes these items:

- Number of client systems currently accessing the InfoServer
- Highest number of client systems that have accessed the InfoServer concurrently
- Number of client systems authorized for the InfoServer (with the SET SERVER DISK ACCESS command)
- Number of client systems that have temporarily ‘‘overdrafted’’ the authorized limit

The field ‘‘Client disk access overdraft’’ shows the number of client systems that have connected to the InfoServer concurrently in excess of the number of authorized clients. In this example, the InfoServer manager has authorized four clients to access the InfoServer. At some point, five client systems were connected to the InfoServer concurrently, meaning that the the authorized limit was exceeded by one. In this situation, the InfoServer manager must purchase one additional client access license and then enter the SET SERVER DISK ACCESS command to set the number of authorized clients to 5.

When the ‘‘Client disk access overdraft’’ field is not zero, two additional lines of information are displayed. The first line repeats the overdraft value. The second line indicates the InfoServer overdraft policy. For the Version 1.1 software release, the policy allows an unlimited number of client systems to exceed the authorized limit, until the required additional client licenses can be purchased and authorized with the SET SERVER DISK ACCESS command. This policy might change in future software releases.

### 2.2.3 Login Informational Message

If the highest number of concurrent client systems that access the InfoServer exceeds the authorized value set with the SET SERVER DISK ACCESS command, an informational message like the following is displayed each time the system manager logs in to the InfoServer, either from a locally attached terminal or from a remote LAT terminal.

```
Enter Password:  ESS (not echoed)

DEC InfoServer 100 Version 1.1

%ESS-I-AUTHACC, there are 4 disk access licenses authorized for this server.
%ESS-I-ACTACC, highest number of clients using disk access is 5.
%ESS-I-LIC, please purchase and authorize 1 additional client access licenses.

InfoServer>
```

In this example, the informational message indicates that one additional client access license is needed for the InfoServer. When the license has been purchased, you can use the SET SERVER DISK ACCESS command to indicate the new number of authorized clients for the InfoServer (in this example, five).

These informational messages are displayed only if the maximum number of clients attempting to access the InfoServer concurrently exceeds the authorized value that you have set.

## 2.3 Magneto-optical Read/Write Disk Support

The Version 1.1 release of the InfoServer software includes changes that are required to support magneto-optical disk devices. These devices are optical disk drives that support read/write storage. The optical disks are double sided, with approximately 300Mb of storage per side. The Alphatronix Inspire magneto-optical disk drive has been qualified and is supported as an add-on device for InfoServer 100.

## 2.4 Software Corrections

This section describes software problems in the Version 1.0 InfoServer software that have been corrected in the Version 1.1 release.

- VMS BACKUP write access. VMS Version 5.4-1 includes write-access support for the InfoServer 100. The VMS BACKUP command requires that the source and target disks of a BACKUP/PHYSICAL command have the same value for ‘‘number of cylinders,’’ ‘‘tracks per cylinder,’’ and ‘‘sectors per track.’’ The InfoServer Version 1.1 software now passes this information to the client when a connection is made.
- MOP downline loading. InfoServer Version 1.0 software crashed with a crash code 11 when a MOP downline load was requested that contained a file name more than 12 characters in length. The Version 1.1 software fixes this problem.

- Device errors. If InfoServer Version 1.0 software detects a hardware or device error when reading a disk, the software returns an incorrect error code that causes the VMS operating system to enter and exit mount verification continually. The Version 1.1 software fixes this problem.
- AUTOMOUNT. The InfoServer Version 1.0 software automatically servs some CDROMs even when the AUTOMOUNT characteristic is set to DISABLED. The Version 1.1 software fixes this problem.
- MOP partitions. The InfoServer Version 1.0 software does not properly detect when an InfoServer partition is changed to MOP ENABLED. Downline load requests continue to fail as if the partition were set to MOP DISABLED. The Version 1.1 software fixes this problem.
- Device size. The InfoServer Version 1.0 software does not reset the device size listed in the SHOW DEVICES display when a CDROM is removed. The Version 1.1 software fixes this problem.
- Ethernet thickwire and no heartbeat. The InfoServer Version 1.0 software does not operate correctly when used with an Ethernet thickwire connector to a transceiver that does not supply heartbeat. The Version 1.1 software fixes this problem.
- Service passwords. The InfoServer Version 1.0 software does not correctly process a password-protected service if the service password is typed in lowercase letters. The Version 1.1 software fixes this problem.

## 2.5 Display Change

In Version 1.1, the BRIEF format of the InfoServer command SHOW SERVICES contains the current number of connections to the service. This new data has been added to the information that was already displayed for this command in the Version 1.0 software release.

# 3 Documentation Release Notes

The *InfoServer 100 System Operations Guide* for Version 1.0 contains the following erorrs:

- On page 1-3, the first sentence of the second paragraph should read as follows:

  ‘‘You can simply connect the InfoServer 100 to your Ethernet local area network and turn it on.’’

  In the Bookreader version of the document, a figure should be displayed between the first and second paragraphs. Because of a processing error, the figure does not appear.
- On page 3-38 (SET SERVER WRITE ACCESS command), the keyword SYNCHRONIZED should be PRE-EMPTIVE.
- On page 9-8 (CREATE PARTITION command), the first sentence in the Description section should begin ‘‘You use’’.

In the Bookreader version of the *VMS LAD Control Program (LADCP) Manual*, the Table of Contents display includes a spurious ‘‘0’’ before the LADCP Commands entry.

These errors will be corrected in the next documentation release.