

Software Product Description

**PRODUCT NAME: DEC Computer Integrated Telephony (CIT)
Server 100/500, Version 1.0A**

SPD 36.33.02

DESCRIPTION

The DEC CIT Server 100/500 provides access to CIT-compatible voice-switches for applications using the CIT Applications Interface. The CIT Applications Interface allows applications to establish and control logical communication channels between the application and devices attached to the CIT-compatible switches. These channels can be used to control activities such as:

- Making and accepting telephone calls
- Additional call processing, such as transferring and conferencing calls
- Monitoring the status of the devices

Refer to the SPDs for the DEC CIT Applications Interface (for ULTRIX, VMS, and MS® Windows™) for further details on the functions provided.

The CIT Server 100/500 software runs on either the DEC MicroServer-SP (DEMSB) or DEC MicroServer (DEMSA) hardware units. These combination software/hardware packages are known as the DEC CIT Server 100 when running on a DEC MicroServer-SP (DEMSB) and DEC CIT Server 500 when running on a DEC MicroServer (DEMSA).

The CIT Server 100/500 software supports communications links to the following voice switches:

- The HCI protocol on Mitel's SX2000™ PBX
- The Meridian Link™ (ISDN/AP) protocol on the Northern Telecom® Meridian™ 1 PBX
- The ACL/H protocol on the Siemens® HICOM™ 300 series PBXs
- Rolm® CBX, supporting the CSTA protocol
- Ericsson MD110, supporting the CSTA protocol

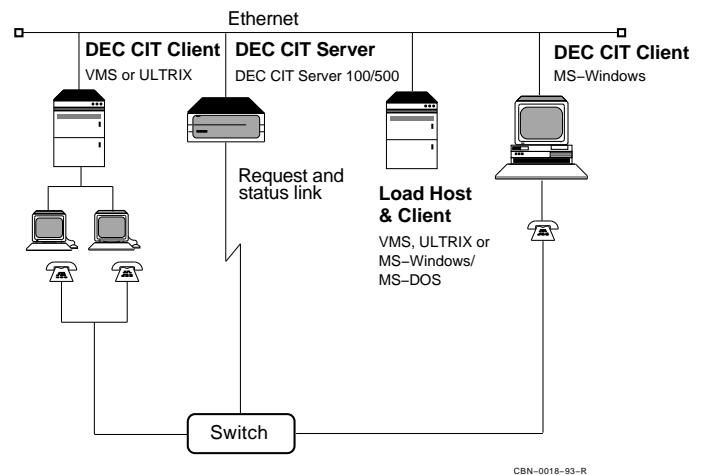
This version of the software also continues support for Digital's implementation of the European Computer Manufacturers Association (ECMA) Computer Supported Telecommunications Applications (CSTA) protocol.

Overview

The DEC CIT Server 100/500 software image is installed and configured on a VMS, ULTRIX, or MS-DOS® PC system (termed a load host) on the same LAN as the DEC MicroServer or DEC MicroServer-SP. This software image is then down-line loaded to the hardware unit from the load host.

The DEC CIT Server 100/500 software can be managed from any VMS, ULTRIX, or MS-DOS load-host using the DEC CIT Control Program (CITCP).

The following diagram illustrates an example of a DEC CIT configuration, including the DEC CIT Server 100/500.



Installation and Configuration

The minimum requirement is for one host to load the DEC MicroServer or DEC MicroServer-SP, although the DEC CIT Server 100/500 software can be installed on a number of load hosts. This helps to protect against loss of service if a single load host is unavailable, or unable to load the system for any other reason. Each load host must be on the same LAN as the CIT server.

Installation is performed using VMSINSTAL (on VMS), setld (on ULTRIX), or a SETUP.BAT file (on MS-DOS). The software must be configured using the installation

and configuration programs supplied with the product. This configuration program allows the network manager to set up the link to the voice switch.

Management

Permanent changes to the configuration of the DEC CIT Server 100/500 software can be made by using the configuration utility to create a command procedure, re-booting the hardware unit and starting up the software (VMS/ULTRIX) or using the SETUP utility to create a STARTUP.BAT file (MS-DOS). Temporary changes to the configuration of the DEC CIT Server 100/500 software can be made by using the DEC CIT Control Program (CITCP) from any CIT load-host. These temporary changes are lost when the hardware unit is rebooted.

Hardware

The DEC MicroServer (DEMSA) and DEC MicroServer-SP (DEMSB) hardware units contain an Ethernet interface port (IEEE 802.3 compatible) and one or four synchronous communications ports. The DEC MicroServer has four synchronous communications ports, and the DEC MicroServer-SP has a single synchronous communications port. Both hardware units are supplied as table-top units, but also can be wall- or rack-mounted in a standard 19-inch rack.

The hardware package includes the required adapter cables for RS232 connections. One adapter cable is provided with the single-port DEC MicroServer-SP; 2 adapter cables for the four-port DEC MicroServer.

The DEC MicroServer-SP and DEC MicroServer always require an external clock source (such as a modem).

Refer to the SSA for further details of packaging.

INSTALLATION

Although the DEC CIT Server 100/500 software is customer installable, Digital recommends you purchase Digital Installation Services if you are installing the software for the first time. These services provide for installation of the software product by an experienced Digital Software Specialist.

Only customers experienced with Digital's CIT product set should attempt second or subsequent installations. Digital recommends that all other customers purchase Digital's Installation Services.

Courtesy Installation Service

This software product will be installed by Digital at no additional charge if you purchase it concurrently with a Startup Service Package that includes installation service. This service may not be available in all countries.

HARDWARE REQUIREMENTS

You will require the following hardware:

- VAX, MicroVAX, VAXstation, VAXserver, DECstation, DECsystem, or IBM®-compatible PC configuration as specified in the System Support Addendum (SSA 36.33.02-x)
- DEC MicroServer or DEC MicroServer-SP as specified in the System Support Addendum (SSA 36.33.02-x)
- Ethernet with the appropriate connections for both the load-host and the DEC MicroServer
- VT220-compatible terminal for running the configuration utility (VMS/ULTRIX)
- CIT-compatible voice switch
- Synchronous cable, connecting the voice switch and the DEC MicroServer adapter cable

SOFTWARE REQUIREMENTS

Each VMS system acting as a load host or dump receiver requires:

- OpenVMS VAX Operating System
- DECnet-VAX

Each VAX/ULTRIX system acting as a load host or dump receiver requires:

- ULTRIX Operating System
or
ULTRIX Workstation Software
- DECnet for ULTRIX

Each RISC/ULTRIX system acting as a load host or dump receiver requires:

- ULTRIX Operating System
or
ULTRIX Workstation Software
- DECnet for ULTRIX

Each IBM-compatible PC acting as a load host or dump receiver requires:

- MS-DOS
- PATHWORKS for DOS

Note that for both the DEC MicroServer and DEC MicroServer-SP there is a limit of 500 DECnet channels allowed, and one CIT channel requires one DECnet channel. However, the number of CIT channels supported depends on the amount of activity on those channels.

Refer to the System Support Addendum (SSA 36.33.02-x) for availability and required versions of prerequisite /optional software.

ORDERING INFORMATION

- Packages:
A package including the software license for the DEC CIT Server 100/500 software, and either the DEC MicroServer or the DEC MicroServer-SP hardware along with the appropriate power cable and RS232 adapter cables is available. (In addition to the hardware/software license package, you may also require a media/documentation kit.)
— DEC MicroServer-SP Country Kits: DEMSB-J*
— DEC MicroServer Country Kits: DEMSA-J*
Please check your country price book for further details.

- Software Media and Documentation:

System	Part Number
VMS	QA-XNQAA-H5
ULTRIX	QA-XNQAB-H5
MS-DOS	QA-XNQAC-H5

- Software Documentation:

System	Part Number
VMS	QA-XNQAA-GZ
ULTRIX	QA-XNQAB-GZ
MS-DOS	QA-XNQAC-GZ

- Software Product Services: QT-XNQ**-**

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

SOFTWARE LICENSING

A separate license is needed for each DEC MicroServer or DEC MicroServer-SP unit on which the software product is used (except as otherwise specified by Digital).

The licensing provisions of Digital's Standard Terms and Conditions specify that the software and any part thereof (but excluding those parts specific to the load hosts) may be used only on the single DEC MicroServer hardware unit on which the software is operated, but may be copied, in whole or in part (with the proper inclusion of Digital's copyright notice and any proprietary notices on the software) between multiple load hosts on the same LAN.

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

SOFTWARE PRODUCT SERVICES

A variety of service options are available. For more information on these or other services, please 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.

- ® IBM is a registered trademark of International Business Machines Corporation.
- ® MS and MS-DOS are registered trademarks of Microsoft Corporation.
- ® Northern Telecom is a registered trademark of Northern Telecom, Ltd.
- ® Rolm is a registered trademark of Rolm Corporation.
- ® Siemens is a registered trademark of Siemens Nixdorf Information Systems Inc.
- ™ HICOM is a trademark of Siemens AG.
- ™ Meridian and Meridian Link are trademarks of Northern Telecom.
- ™ SX2000 is a trademark of Mitel Corporation.
- ™ Windows is trademark of Microsoft Corporation.
- ™ The DIGITAL Logo, DEC, DECnet, DECstation, DECSYSTEM, Digital, MicroVAX, OpenVMS, PATHWORKS, TK, ULTRIX, VAX, VAXft, VAXserver, VAXstation, VMS, and VT220 are trademarks of Digital Equipment Corporation.

System Support Addendum

**PRODUCT NAME: DEC Computer Integrated Telephony (CIT)
Server 100/500, Version 1.0A**

SSA 36.33.02-A

HARDWARE REQUIREMENTS

VMS Load Host Systems

Processors Supported

VAX: VAX 4000 Model 100,
VAX 4000 Model 200,
VAX 4000 Model 300,
VAX 4000 Model 400,
VAX 4000 Model 500,
VAX 4000 Model 600

VAX 6000 Model 200 Series,
VAX 6000 Model 300 Series,
VAX 6000 Model 400 Series,
VAX 6000 Model 500 Series,
VAX 6000 Model 600 Series

VAX 7000 Model 600 Series

VAX 8200, VAX 8250, VAX 8300,
VAX 8350, VAX 8500, VAX 8530,
VAX 8550, VAX 8600, VAX 8650,
VAX 8700, VAX 8800, VAX 8810,
VAX 8820, VAX 8830, VAX 8840

VAX 9000 Model 110,
VAX 9000 Model 210,
VAX 9000 Model 300 Series,
VAX 9000 Model 400 Series

VAX 10000 Model 600 Series
VAXft Model 110,
VAXft Model 310,
VAXft Model 410,
VAXft Model 610,
VAXft Model 612

VAX-11/730, VAX-11/750,
VAX-11/780, VAX-11/785

MicroVAX: MicroVAX II, MicroVAX 2000,
MicroVAX 3100 Model 10/10E,
MicroVAX 3100 Model 20/20E,
MicroVAX 3100 Model 30,
MicroVAX 3100 Model 40,
MicroVAX 3100 Model 80,
MicroVAX 3100 Model 90,
MicroVAX 3300, MicroVAX 3400,
MicroVAX 3500, MicroVAX 3600,
MicroVAX 3800, MicroVAX 3900

VAXstation: VAXstation II, VAXstation 2000,
VAXstation 3100 Model 30,
VAXstation 3100 Model 38,
VAXstation 3100 Model 40,
VAXstation 3100 Model 48,
VAXstation 3100 Model 76,
VAXstation 3200, VAXstation 3500,
VAXstation 3520, VAXstation 3540

VAXstation 4000 Model 60,
VAXstation 4000 Model 90,
VAXstation 4000 VLC

VAXserver: VAXserver 3100 Model 10/10E,
VAXserver 3100 Model 20/20E,
VAXserver 3300, VAXserver 3400,
VAXserver 3500, VAXserver 3600,
VAXserver 3602, VAXserver 3800,
VAXserver 3900

VAXserver 4000 Model 200,
VAXserver 4000 Model 300,
VAXserver 4000 Model 500

VAXserver 6000 Model 210,
VAXserver 6000 Model 220,
VAXserver 6000 Model 310,
VAXserver 6000 Model 320,
VAXserver 6000 Model 410,
VAXserver 6000 Model 420,
VAXserver 6000 Model 510,
VAXserver 6000 Model 520,
VAXserver 6000 Model 610,
VAXserver 6000 Model 620,
VAXserver 6000 Model 630

Processors Not Supported

MicroVAX I, VAXstation I, VAX-11/725,
VAX-11/782, VAXstation 8000

ULTRIX Load Host Systems

RISC-Based Processors Supported

DECstation: DECstation 2100, DECstation 3100,
DECstation 3100s

Personal DECstation 5000 Model 20/25 HX,
Personal DECstation 5000 Model 20/25 MX,
Personal DECstation 5000 Model 20/25 TX,
Personal DECstation 5000 Model 20/25
PXG+,
Personal DECstation 5000 Model 20/25 PXG
Turbo+

DECstation 5000 Model 120/125/133 CX,
DECstation 5000 Model 120/125/133 HX,
DECstation 5000 Model 120/125/133 MX,
DECstation 5000 Model 120/125/133 PX,
DECstation 5000 Model 120/125/133 TX,
DECstation 5000 Model 120/125/133 PXG,
DECstation 5000 Model 120/125/133 PXG+,
DECstation 5000 Model 120/125/133 PXG
Turbo,
DECstation 5000 Model 120/125/133 PXG
Turbo+

DECstation 5000 Model 200 CX,
DECstation 5000 Model 200 HX,
DECstation 5000 Model 200 MX,
DECstation 5000 Model 200 PX,
DECstation 5000 Model 200 TX,
DECstation 5000 Model 200 PXG,
DECstation 5000 Model 200 PXG+,
DECstation 5000 Model 200 PXG Turbo,
DECstation 5000 Model 200 PXG Turbo+

DECstation 5000 Model 240 HX,
DECstation 5000 Model 240 MX,
DECstation 5000 Model 240 TX,
DECstation 5000 Model 240 PXG+,
DECstation 5000 Model 240 PXG Turbo+

DECsystem: DECsystem 3100,
DECsystem 5000 Model 25,
DECsystem 5000 Model 200,
DECsystem 5000 Model 240,
DECsystem 5100, DECsystem 5400,
DECsystem 5500, DECsystem 5810,
DECsystem 5820, DECsystem 5830,
DECsystem 5840, DECsystem 5900

VAX-Based Processors Supported

VAX: VAX 6000 Model 200 Series,
VAX 6000 Model 300 Series,
VAX 6000 Model 400 Series,
VAX 6000 Model 500 Series

VAX 8200, VAX 8250, VAX 8300, VAX 8350,
VAX 8500, VAX 8530, VAX 8550, VAX 8600,
VAX 8650, VAX 8700, VAX 8800, VAX 8810,
VAX 8820, VAX 8830, VAX 8840

VAX 9000 Model 110, VAX 9000 Model 210,
VAX 9000 Model 300, VAX 9000 Model 410
Series, VAX 9000 Model 420

VAX-11/750, VAX-11/780, VAX-11/785

MicroVAX: MicroVAX II, MicroVAX 2000,
MicroVAX 3100, MicroVAX 3300,
MicroVAX 3400, MicroVAX 3500,
MicroVAX 3600, MicroVAX 3800,
MicroVAX 3900

VAXstation: VAXstation II, VAXstation II/GPX,
VAXstation 2000, VAXstation 3100,
VAXstation 3200, VAXstation 3500,
VAXstation 3520, VAXstation 3540

VAXserver: VAXserver 100, VAXserver 2000,
VAXserver 3100, VAXserver 3300,
VAXserver 3400, VAXserver 3500,
VAXserver 3600, VAXserver 3602,
VAXserver 3800, VAXserver 3900

VAXserver 6000 Model 210,
VAXserver 6000 Model 220,
VAXserver 6000 Model 310,
VAXserver 6000 Model 320,
VAXserver 6000 Model 410,
VAXserver 6000 Model 420,
VAXserver 6000 Model 510,
VAXserver 6000 Model 520

MS-DOS® Load Host Systems

Processors Supported

IBM®-compatible PCs

OTHER HARDWARE REQUIRED

The DEC CIT Server 100/500 software requires a DEC MicroServer (DEMSA) or DEC MicroServer-SP (DEMBS) hardware unit available as follows:

- DEC MicroServer-SP Country Kits: DEMSB-J*
- DEC MicroServer Country Kits: DEMSA-J*

These packages include the software license for the DEC CIT Server 100/500 software, and either the DEC MicroServer or the DEC MicroServer-SP hardware along with the appropriate power cable and RS232 adapter cables.

The DEC MicroServer and DEC MicroServer-SP have a built-in LAN controller, but need a suitable connection to connect to the customer's LAN, together with any necessary extension cables.

A synchronous cable (Digital part number BC22F) is required to connect the CIT-compatible voice switch and the DEC MicroServer adapter cable.

LOAD-HOST PROCESSOR RESTRICTIONS

A TK50 tape drive is required for standalone MicroVAX 2000 and VAXstation 2000 systems.

Every load host on which the DEC CIT Server 100/500 software is installed must contain:

- A valid system configuration for the relevant operating system and for the appropriate DECnet product (refer to the DECnet and appropriate operating system SPDs)
- A supported connection on the same LAN as the DEC MicroServer or DEC MicroServer-SP
- An appropriate device available to read the software during installation:
 - TK50 tape drive
 - 3½-inch diskette drive

Disk Space Requirements (block cluster size = 1)

For VMS:

Disk space required for installation: 4,000 blocks

Disk space required for use (permanent): 1,000 blocks

For ULTRIX:

Disk space required for installation: 2,300 Kbytes

Disk space required for use (permanent): 2,300 Kbytes

For MS-DOS:

Disk space required for installation: 1 Mbyte

Disk space required for use (permanent): 0.5 Mbytes

These counts refer to the disk space required on the system disk. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options. The space indicated for permanent occupancy is needed to receive one up-line dump.

SOFTWARE REQUIREMENTS

The DEC CIT Server 100/500 requires at least one local system to act as a load host. That system needs to be a VAX-based system running the OpenVMS or ULTRIX operating system, a RISC-based system running the ULTRIX operating system, or an IBM-compatible PC running MS-DOS.

Each VMS system acting as a load host or dump receiver requires:

- OpenVMS VAX Operating System V5.2 or later
- DECnet-VAX Phase IV

Each VAX/ULTRIX system acting as a load host or dump receiver requires:

- ULTRIX Operating System V4.0 - V4.2
or
ULTRIX Worksystem Software V4.0 - V4.2
- DECnet for ULTRIX V4.0 - V4.2

Each RISC/ULTRIX system acting as a load host or dump receiver requires:

- ULTRIX Operating System V4.0 - V4.2
or
ULTRIX Worksystem Software V4.0 - V4.2
- DECnet for ULTRIX V4.0 - V4.2

Each IBM-compatible PC acting as a load host or dump receiver requires:

- MS-DOS version 3.3 or later
- PATHWORKS for DOS version 4.1 or later

Note that for both the DEC MicroServer and DEC MicroServer-SP there is a limit of 500 DECnet channels allowed, and one CIT channel requires one DECnet channel. However, the number of CIT channels supported depends on the amount of activity on those channels.

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the requirements of the current version.

DISTRIBUTION MEDIA

The software is distributed on one of the following media types:

- TK50 cassette tape
- 3½-inch diskette

ORDERING INFORMATION

- Packages:
A package including the software license for the DEC CIT Server 100/500 software, and either the DEC MicroServer or the DEC MicroServer-SP hardware along with the appropriate power cable and RS232 adapter cables is available. (In addition to the hardware/ software license package, you may also require a media/documentation kit.)
— DEC MicroServer-SP Country Kits: DEMSB-J*
— DEC MicroServer Country Kits: DEMSA-J*

Please check your country price book for further details.

- Software Media and Documentation:

System	Part Number
VMS	QA-XNQAA-H5
ULTRIX	QA-XNQAB-H5
MS-DOS	QA-XNQAC-H5

- Software Documentation:

System	Part Number
VMS	QA-XNQAA-GZ
ULTRIX	QA-XNQAB-GZ
MS-DOS	QA-XNQAC-GZ

- Software Product Services: QT-XNQ**-**

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

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

- ® IBM is a registered trademark of International Business Machines Corporation.
- ® MS and MS-DOS are registered trademarks of Microsoft Corporation.
- ® Northern Telecom is a registered trademark of Northern Telecom, Ltd.
- ® Rolm is a registered trademark of Rolm Corporation.
- ® Siemens is a registered trademark of Siemens Nixdorf Information Systems Inc.
- ™ HICOM is a trademark of Siemens AG.
- ™ Meridian and Meridian Link are trademarks of Northern Telecom.
- ™ SX2000 is a trademark of Mitel Corporation.
- ™ Windows is trademark of Microsoft Corporation.
- ™ The DIGITAL Logo, DEC, DECnet, DECstation, DECsystem, Digital, MicroVAX, OpenVMS, PATHWORKS, TK, ULTRIX, VAX, VAXft, VAXserver, VAXstation, VMS, and VT220 are trademarks of Digital Equipment Corporation.