



Software Product Description

PRODUCT NAME: DEC VOICE:mail for OpenVMS VAX,
Version 2.0A

SPD 38.62.03

DESCRIPTION

DEC VOICE:mail is a full functional voice messaging system that provides powerful features for sending, receiving, saving and managing voice information over the phone. Voice information management features include user defined folders for message management, selective review of messages, and user controlled filters to control paging and message notification. DEC VOICE:mail is an OpenVMS layered application.

DEC VOICE:mail includes a message management environment for storage, processing and management of the user's voice messages and stored voice phrases.

DEC VOICE:mail connects to the telephone system via Digital's DECvoice T1 hardware and software for audio messaging. DEC VOICE:mail also links to the telephone system providing incoming call ID which can be used for direct connection to personal greetings. Message waiting indication is also provided.

DEC VOICE:mail software provides users with personal voice Mailboxes for these and other important communication functions:

- 24-hour telephone answering in the user's voice, providing a variety of personal greetings.
- Easy transmission of messages and other voice information between users, including the creation of Distribution Lists for group messages.
- World-wide access to messages from any DTMF (Dual Tone Multi Frequency) telephone, including office, home, hotel, car or airplane.
- User-defined folders that allow the categorizing and saving of messages for future use and reference.

- A selective review feature that lets users choose the type of messages they want to hear, such as messages from a specific caller, or messages saved in a particular Folder.
- Message notification to any other telephone, including cellular phones and pagers. DEC VOICE:mail has the ability to call the user at any designated telephone number or pager for notification that a new message has been received.
- Message editing, which allows the user to review and modify a message before sending it out. The user can add on to the message or erase and re-record the message.
- Call management, which allows the user to control DEC VOICE:mail call transfers. The call management features includes: Call screening, Call blocking and Forwarding of calls to another number.

The message management environment in DEC VOICE:mail allows for effective storage and distribution of voice messages. Messages are stored with envelopes which contain message addressing information that points to a single stored message segment. Messages sent to several Mailboxes are recorded and stored only once, conserving disk space. DEC VOICE:mail includes Phrase Library storage management of pre-recorded phrases, and a phrase recording system which allows for creation of recorded phrases using a telephone.

DEC VOICE:mail includes phone book services, which allow dial-by-name requests using DEC VOICE:mail's directory.

DEC VOICE:mail Mailboxes can be controlled, managed and customized in their access to the capabilities

of the messaging system. Each Mailbox is assigned a Class Of Service (COS) which control access to functions like:

- Maximum Message Length, Retention Time, Number of messages
- Allow/Disallow Message Editing
- Message forwarding to Local extensions, Toll Calls or Long Distance
- Allow/Disallow Message Notification to a Pager
- Transfer to Extension or Operator
- Access to Distribution Lists
- Number of Greetings Allowed
- Allow/Disallow Tagging messages Urgent, Private
- Delivery/Receipt notification provides confirmation of messages reaching the recipient

DEC VOICE:mail includes System Management and Administration Utilities for effective management of the messaging system. The utilities are provided with both menu driven and command line interfaces. These Utilities include:

- Mailbox Utility to create, modify and delete individual or groups of Mailboxes.
- Class Of Service Utility to modify any or all categories within a Class Of Service.
- Mailbox and Line Usage Statistics DEC VOICE:mail provides statistics collection and management reporting on individual or groups of Mailboxes. Telephone line statistics can be collected and reported to analyze telephone port usage. Statistics data can be fed to external applications, e.g. billing applications.
- Diagnostic Utilities for real-time monitoring of telephone ports and the information transfer between the PBX and DEC VOICE:mail.

DEC VOICE:mail allows for information transfer between DEC VOICE:mail and most popular PBX models. This integration communicates the following information to and from the PBX:

- The PBX identifies the called party so that DEC VOICE:mail can automatically access the correct Mailbox after a busy signal or ring/no answer.
- When a new message has been delivered to a Mailbox, DEC VOICE:mail signals the PBX to activate Message Waiting Indication (MWI), either a light on the telephone or a special "stutter" dial tone.

- A mailbox owner can be presented with a password prompt immediately if calling party information is available

Up to 31 PBXs can be supported from one DEC VOICE:mail system.

DEC VOICE:mail supports the following telephone integration methods:

- SMDI (Simplified Message Desk Interface) The SMDI protocol uses a RS232 data link for communication.
- In-Band DTMF (Dual Tone Multi Frequency) In-Band DTMF uses DTMF tones on the talk-path for communication between the PBX and DEC VOICE:mail. In-Band DTMF integration can be received by DEC VOICE:mail immediately after the phone call has been established, or through E&M signalling protocol before establishing the phone call.

For certain PBXs that do not support SMDI or In-Band DTMF, signaling integration can be achieved via a SID (Software Integration Device). A SID is a protocol converter connected to the PBX on a separate station line not connected to DEC VOICE:mail's talk path. The SID is connected to the DEC VOICE:mail system via a RS232 data link, analogous to the SMDI signaling method.

DOCUMENTATION

DEC VOICE:mail includes documentation targeted for the following audiences:

- System Manager
- System Administrator
- End User - Mailbox Subscriber
- Pocket and Wallet size guides for End Users

The documentation kit for DEC VOICE:mail includes 100 copies each of the Pocket and Wallet size guides and one copy each of the remaining manuals. A separate End User guide kit is available with 100 copies each of the Pocket and Wallet size guides.

INSTALLATION

Digital recommends that a customer's first purchase of this product include Digital Installation Services. These services provide for installation and telephone connection of the product by an experienced Digital Specialist.

HARDWARE REQUIREMENTS

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 4000 Model 100A,
VAX 4000 Model 105A,
VAX 4000 Model 106A,
VAX 4000 Model 500A,
VAX 4000 Model 600A,
VAX 4000 Model 700A,
VAX 4000 Model 705A,

MicroVAX: MicroVAX 3500, MicroVAX 3600,
MicroVAX 3800, MicroVAX 3900

VAXserver: VAXserver 3500, VAXserver 3600,
VAXserver 3800, VAXserver 3900,
VAXserver 4000 Model 200,
VAXserver 4000 Model 300,
VAXserver 4000 Model 400,
VAXserver 4000 Model 500,
VAXserver 4000 Model 600

Processors Not Supported:

VAX: VAXft 3000 Models 110, 310, 410, 610, 612

VAX 4000 Model 50,

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

VAXserver: VAXserver 3100, VAXserver 3200,
VAXserver 3300, VAXserver 3400,
VAXserver 6000, Models 210, 220, 310, 320,
410, 420, 510, 520

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

VAX-11/725, VAX-11/730, VAX-11/750,
VAX-11/780, VAX-11/785

MicroVAX: MicroVAX I, MicroVAX II, MicroVAX 2000,
MicroVAX 3100, MicroVAX 3200
MicroVAX 3300, MicroVAX 3400

VAXstation: VAXstation I, VAXstation II, VAXstation 2000,
VAXstation 3100, VAXstation 3200, VAXs-
tation 3500, VAXstation 3520, VAXstation
3540, VAXstation 4000

Other Hardware Required:

DECvoice T1 Hardware options:

The DTCN5 option is used to connect the DECvoice system to a maximum of three digital DS1 telephone circuits. It consists of a quad Q-bus module and a bulkhead adapter assembly used for telephone network connection and a voice interconnect bus connection.

The DTC05 option is a quad sized Q-bus module that provides voice recording, reproduction and DTMF recognition. One module required per eight ports.

Disk Space Requirements (Block Cluster Size = 1):

Disk space required for installation: 85,000 blocks
(42 Mbytes)

Disk space required for use (permanent): 55,000 blocks
(27 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 main purpose of DEC VOICE:mail is to store and manage Voice Messages. Storage of Voice Messages requires significant disk space. As general guideline in planning disk space requirements the following information can be used:

1 Minute of Voice storage requires 240 kbytes of disk space when the default recording algorithm (32 Kbps ADPCM) is used.

Memory Requirements:

The minimum memory size required for most typical hardware configurations is at least 24 Mbyte plus 1 Mbyte per telephone port connected to the system.

Processor Restrictions:

DECvoice T1 hardware modules are not distributed, nor shareable, across nodes in the VAXcluster. The DECvoice T1 modules must reside locally, that is, on the processor where DEC VOICE:mail is installed. For more information on DECvoice, refer to the DECvoice Software Product Description (SPD 29.97.xx).

DEC VOICE:mail supports DECnet networking to exchange messages between mailboxes. The networking functionality requires purchase of a FTSV 3.0 (SPD 39.84.xx) license. Networking allows nodes that are not on the same cluster to deliver messages to each other.

DEC VOICE:mail can be used on a VAXcluster. Messages for all mailboxes are available from any node in the Cluster which runs DEC VOICE:mail V2.0 and has DECvoice hardware modules. Up to 400 DECvoice ports can be supported across an eight (8) node cluster. To ensure a Digital supportable configuration, Digital recommends that installation include Digital Installation Services. These services provide for configuration, installation and telephone connection of the product by an experienced Digital Specialist.

Based on typical application performance, the following table lists the maximum supported number of physical telephone lines for each system processor type. This is based on 90% concurrent line utilization.

System	Maximum Physical Telephone Lines
MicroVAX 3500, VAXserver 3500, MicroVAX 3600, VAXserver 3600	8
MicroVAX 3800, VAXserver 3800, MicroVAX 3900, VAXserver 3900, VAX 4000 Model 200, VAXserver 4000 Model 200	24
VAX 4000 Model 300, VAXserver 4000 Model 300, VAX 4000 Model 400	40
VAX 4000 Model 100, VAX 4000 Model 100A	56
VAX 4000 Model 105A, VAX 4000 Model 500, VAX 4000 Model 500A, VAXserver 4000 Model 500	64
VAX 4000 Model 600, VAX 4000 Model 600A, VAX 4000 Model 700A	72

OPTIONAL HARDWARE

DEC VOICE:mail initiates call transfers using switch/hook signaling. This requires that the DEC VOICE:mail system is connected via DECvoice T1 to a T1 trunk circuit with FXO/FXS channels. This often requires a

Channel Bank to be connected between the telephone switch and the DEC VOICE:mail system.

If PBX signaling integration is required via the SMDI or SID methods one or more RS232 ports are required on the processor where DEC VOICE:mail is installed.

DEC VOICE:mail is supported for SID integration using the VoiceBridge Series II PBX Integration Unit.

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

CLUSTER ENVIRONMENT

This layered product is fully supported when installed on any valid and licensed VAXcluster* configuration without restrictions. The *HARDWARE REQUIREMENTS* section of this product's Software Product Description details any special hardware required by this product.

* V6.x VAXcluster configurations are fully described in the OpenVMS Cluster Software Product Description (29.78.xx) and include CI, Ethernet, and Mixed Interconnect configurations.

SOFTWARE REQUIREMENTS

OpenVMS VAX Operating System V6.0, V6.1, V7.0
 DECnet-VAX V6.0, V6.1, V6.2
 DECvoice Software V2.4

OpenVMS Tailoring:

The following OpenVMS classes are required for full functionality of this layered product:

- OpenVMS Required Saveset
- Network Support
- System Programming Support
- Utilities

For more information on OpenVMS classes and tailoring, refer to the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx).

GROWTH CONSIDERATIONS

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

DISTRIBUTION MEDIA

TK50 Streaming Tape

This product is also available as part of the OpenVMS VAX Consolidated Software Distribution on CD-ROM.

ORDERING INFORMATION

Software Licenses: QL-0WBA*-**

Software Media: QA-0WBA*-**

Software Documentation Kit: QA-0WBA*-GZ

End-User Documentation Kit: QA-0WBA*-GZ

Software Product Services: QT-0WBA*-**

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

SOFTWARE LICENSING

This software is furnished only under a license. For more information about Digital's licensing terms and policies, contact your local Digital office.

License Management Facility Support:

This layered product supports the OpenVMS License Management Facility.

License units for this product are allocated on a Concurrent Use basis.

This layered product offers a Concurrent Use license. Each Concurrent Use license allows connection of up to eight telephone ports.

With the purchase of a license for V2.0A you may use all the software cited below on a single system, or you may use the Client Software on a single system and the Server & Major Software on a separate single system.

Client Software:

- * VCSI\$SYSTEM:PORT_MANAGER.EXE
- * VCSI\$SYSTEM:VOICEMAIL.EXE
- * VCSI\$SYSTEM:COS.EXE
- * VCSI\$SYSTEM:MBX.EXE
- * VCSI\$SYSTEM:STAT.EXE
- * VCSI\$SYSTEM:PORT.EXE
- * VCSI\$SYSTEM:ICONTROL.EXE
- * VCSI\$SYSTEM:VCSI_MASTER_MENU.EXE
- * VCSI\$SYSTEM:PORT_MONITOR.EXE
- * VCSI\$SYSTEM:INT_MONITOR.EXE
- * VCSI\$SYSTEM:SNOOPER.EXE

- * VCSI\$SYSTEM:VPR.EXE

Server Software:

- * VCSI\$SYSTEM:DELIVERY_AGENT.EXE
- * VCSI\$SYSTEM:DISTRIBUTION_SERVER.EXE
- * VCSI\$SYSTEM:FSM_MASTER.EXE
- * VCSI\$SYSTEM:FSR_REMOTE.EXE
- * VCSI\$SYSTEM:HOUSEKEEPER.EXE
- * VCSI\$SYSTEM:HOUSEKEEP_MASTER.EXE
- * VCSI\$SYSTEM:INT_SERVER.EXE
- * VCSI\$SYSTEM:LGS_SERVER.EXE
- * VCSI\$SYSTEM:MN_SERVER.EXE
- * VCSI\$SYSTEM:PHONE_BOOK_SERVER.EXE
- * VCSI\$SYSTEM:PHRASE_SERVER.EXE
- * VCSI\$SYSTEM:RECEIVE_AGENT.EXE
- * VCSI\$SYSTEM:USG_SERVER.EXE
- * VCSI\$SYSTEM:USG_STATS_COLLECTOR.EXE

For more information on the License Management Facility, refer to the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx) or the *License Management Facility* manual of the OpenVMS VAX Operating System documentation set.

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. For more information, 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.

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

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