Software Product Description

PRODUCT NAME: Digital Distributed Computing Environment (DCE) Starter Kit for DEC OSF/1, Version 1.0 **SPD 38.74.00**

DESCRIPTION

The Digital Distributed Computing Environment Starter Kit provides a subset of the distributed computing functionality specified for the Open Software Foundation™'s (OSF®) Distributed Computing Environment (DCE). The OSF DCE consists of software technology that facilitates the development of distributed applications by making the underlying network transports and systems transparent to application developers. This version of the Digital DCE Starter Kit supports the DEC OSF/1® Operating System.

The Digital DCE Starter Kit for DEC OSF/1 consists of three layered products, each licensed separately, to provide customers with maximum flexibility for configuring the environment. The products are:

- Digital DCE Runtime Services Starter Kit, which is required for all hosts participating in the distributed environment. The Runtime Services Kit includes DCE administration tools as well as client functions.
- Digital DCE Cell Directory Server Starter Kit, which is required if customers need naming services for larger cells (10 hosts or more). This kit is optional for smaller cells (5-10 hosts). Since the DCE Cell Directory Server requires the Digital DCE Runtime Services Starter Kit, it is included in this package.
- Digital DCE Application Development Kit, which is required for the development of distributed applications, but optional for other users. The Digital DCE Application Development Kit provides users with an Interface Definition Language (IDL). The IDL is an easy-to-use, ANSI C-based language used for writing remote procedure calls. Since the Digital DCE Application Development Kit requires the Digital DCE Runtime Services Starter Kit, it is included in this package.

The functionality provided in the Digital Distributed Computing Environment Starter Kit for DEC OSF/1 includes:

- DCE Remote Procedure Call (RPC), which creates and runs client/server applications.
- DCE Cell Directory Server (CDS), which provides location-independent naming for servers.
- DCE Distributed Time Service (DTS), which provides synchronization of time in a distributed network environment.

Additionally, the DCE Threads Service, which provides user context multiprocessing functionality, is supported by a DECthreads package that is included in the Digital DCE Runtime Services Starter Kit.

The Digital DCE Starter Kit for DEC OSF/1 is intended to provide as much DCE functionality as early as possible. The Digital DCE Starter Kit for DEC OSF/1 provides a means for application developers to begin design and development of distributed applications prior to the availability of a full DCE.

Configuration Options

The Digital Distributed Computing Environment Starter Kit functionality is provided in three separately orderable products, designed to provide maximum flexibility in configuring the software to meet the needs of the user's distributed application.

Digital DCE Runtime Services Starter Kit

This is a fully integrated set of services that provide applications with the essential capabilities required to use distributed services. The Digital DCE Runtime Services Starter Kit makes the following DCE features available to distributed applications:

- Remote Procedure Call Runtime API and Library that includes:
  - — access to DECthreads
  - — use of Cell Directory Services (CDS) for locating server
- Distributed Time Service (DTS)
- RPC Local Directory Service (LDS)
- Administrative Tools
- Compatibility Tools for existing applications that use DECrpc V1.0

A group of DCE systems that work together and are administered as a unit is called a cell. Each system within a DCE cell must run the Digital DCE Runtime Services Starter Kit. The Digital DCE Runtime Services Starter Kit has two alternative installation options:

1. As a DCE Cell — This option follows the DCE model including the production system characteristics of CDS and DTS (replication and scaleability). This configuration requires at least one Digital DCE CDS Server Starter Kit per cell.

2. An RPC Subset — This option provides full RPC Starter Kit functionality oriented toward small (5-10 hosts) configurations. Users of the RPC subset may purchase the Digital DCE CDS Server Starter Kit and upgrade to full the Digital DCE Starter Kit configuration without any changes to their RPC-based applications.

RPC supports the client-server distribution model that characterizes many applications. The Digital DCE Runtime Services Starter Kit provides such client-server applications the ability to interoperate over TCP/IP and UDP/IP network protocols on the DEC OSF/1 Operating System.

Digital DCE Cell Directory Server (CDS) Starter Kit

The Digital DCE Cell Directory Server Starter Kit provides a consistent mechanism for naming and locating users, applications, files and systems within a DCE cell. The Digital DCE Runtime Services Starter Kit is required on each host in the cell that requires access to CDS server. If the RPC subset mode (included in the Digital DCE Runtime Services Starter Kit) is used, then use of the Digital CDS Server Starter Kit is optional. In cell configurations of greater than 10 hosts, Digital recommends use of the optional CDS Server Starter Kit for optimal performance and flexibility.

For existing applications that use DECrpc, the Digital CDS Server Starter Kit also includes the Global Location Broker.

The Digital CDS Server Starter Kit also includes the Global Directory Agent (GDA). The Global Directory Agent provides a means of linking multiple CDS namespaces via the INTERNET Domain® Name Server (BIND).

Digital DCE Application Development Starter Kit

The DCE Application Development Starter Kit includes tools required for the development of distributed applications using Remote Procedure Calls (RPC). It includes:

- Digital DCE Runtime Services Starter Kit (required to execute RPC applications)
- IDL RPC stub compiler
- Time provider routines
- Sample applications
- All DCE Starter Kit application programming interfaces

The Digital DCE Runtime Services Starter Kit is required on each host in the cell and must be installed prior to the Digital DCE Application Development Starter Kit.

HARDWARE REQUIREMENTS

Processors and/or hardware configurations as specified in the System Support Addendum for this product (SSA 38.74.00-x).

SOFTWARE REQUIREMENTS

DEC OSF/1 Operating System

Refer to the System Support Addendum (SSA 38.74.00-x) of this product for availability and required versions of prerequisite/optional software.

ORDERING INFORMATION

Digital DCE Runtime Services for DEC OSF/1:

Software License: QL-MJEA9-AA
Software Media: QA-MJEAA-H5
Software Documentation: QA-MJEAA-GZ
Software Product Services: QT-MJEL*-**

Digital DCE Application Development Kit for DEC OSF/1:

Software License: QL-MJHA9-AA
Software Media: QA-MJHAA-H5
Software Documentation: QA-MJHAA-GZ
Software Product Services: QT-MJHL*-**

Digital DCE CDS Server for DEC OSF/1:

Software License: QL-MJLA9-AA
Software Media: QA-MJLAA-H5
Software Documentation: QA-MJLAA-GZ
Software Product Services: QT-MJLL*-**

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

SOFTWARE LICENSING

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 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.

System Support Addendum

PRODUCT NAME: Digital Distributed Computing Environment (DCE) Starter Kit for DEC OSF/1, Version 1.0 **SSA 38.74.00-A**

HARDWARE REQUIREMENTS

Processors Supported

DECstation: DECstation 2100, DECstation 3100, DECstation 3100s

Personal DECstation 5000 Model 20/25 MX, Personal DECstation 5000 Model 20/25 HX, 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 MX, DECstation 5000 Model 120/125/133 CX, DECstation 5000 Model 120/125/133 HX, 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 MX, DECstation 5000 Model 200 CX, DECstation 5000 Model 200 HX, 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 MX, DECstation 5000 Model 240 HX, 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

Processors Not Supported

MicroVAX, VAX, VAXstation, and VAXserver processors

Disk Space Requirements

Disk space required for installation:
- 60 Mbytes

Disk space required for use (permanent):
- 30 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.

SOFTWARE REQUIREMENTS

DEC OSF/1 Operating System V1.0

Refer to the DEC OSF/1 Operating System, System Support Addendum (SSA 36.29.xx-x), for the availability and required versions of prerequisite software.

OPTIONAL SOFTWARE

Digital C for DEC OSF/1 Version 1.0 (included in DEC OSF/1 Operating System)

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

digital™

April 1992
AE-PN5EA-TE

ORDERING INFORMATION

Digital DCE Runtime Services for DEC OSF/1:

Software License: QL-MJEA9-AA
Software Media: QA-MJEAA-H5
Software Documentation: QA-MJEAA-GZ
Software Product Services: QT-MJEL*-**

Digital DCE Application Development Kit for DEC OSF/1:

Software License: QL-MJHA9-AA
Software Media: QA-MJHAA-H5
Software Documentation: QA-MJHAA-GZ
Software Product Services: QT-MJHL*-**

Digital DCE CDS Server for DEC OSF/1:

Software License: QL-MJLA9-AA
Software Media: QA-MJLAA-H5
Software Documentation: QA-MJLAA-GZ
Software Product Services: QT-MJLL*-**

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

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