

IBM Distributed Computing Environment Version 3.1 for  
AIX:



# Release Notes



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AIX:



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**Note**

Before using this document, read the general information under "Appendix. Notices" on page 13.

**First Edition (August 1999)**

This edition applies to Version 3.1 of *IBM Distributed Computing Environment for AIX* and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters.

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# DCE Version 3.1 for AIX Release Notes

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## Introduction

This document contains information about the IBM® DCE Version 3.1 for AIX® release. DCE 3.1 is available in the following Licensed Program Products:

- **DCE Version 3.1 Base Services for AIX** which includes the following packages:
  - **DCE Client Services, Version 3.1**
  - **DCE System Management, Version 3.1**
  - **DCE X.500 API Library, Version 3.1**
  - **DCE Tools for Application Developers, Version 3.1**
  - **DCE Messages, Version 3.1**
  - **DCE Online Documentation, Version 3.1**
  - **DCE Data Encryption Standard (DES) Library, Version 3.1**
- **DCE Version 3.1 for AIX** which includes all the packages found in **DCE Version 3.1 Base Services for AIX** as well as the following packages:
  - **DCE Cell Directory Server, Version 3.1**
  - **DCE Security Server, Version 3.1**

Previous releases of the Distributed Computing Environment for AIX included the Distributed File System (DFS) product. With this release, the packaging has been changed and DFS is no longer included. Previously shipped versions of DFS (Version 2.2 or prior) will not run on machines with DCE V3.1 for AIX. IBM intends to release a new version of the DFS product that runs with the DCE V3.1 for AIX product at a later date.

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## Highlights of This Release

IBM DCE Version 3.1 for AIX is based upon The Open Group's (TOG) release, formerly known as Open Software Foundation (OSF) DCE 1.2.2 release. The following are significant items that have been added since the IBM DCE Version 2.2 for AIX release.

### IBM Enhancements

The significant improvements added by IBM to the DCE Version 3.1 for AIX release include:

## **DCE Audit Information Enhancements**

Audit Information Enhancements provide enhanced enablement for an administrator to recognize if the security of the Trusted Computing Base (TCB) has been compromised. The administrator has enhanced abilities to reconstruct, completely, the state of the system before the event took place. DCE also provides the ability to read and understand the textual representation of this information. This translation of event-specific information for the administrator is the default behavior.

## **CDS Preferencing**

CDS Preferencing enables administrators to specify a preferred CDS clearinghouse from which a client will obtain CDS information. This feature is provided to improve performance at CDS clients, by enabling cell administrators the ability to specify a preferred CDS clearinghouse from which a client will obtain CDS information. This is useful in situations where, for example, there are multiple high-performance LANs connected by a low-performance WAN, and there are CDS replica clearinghouses in each of the LANs. With this feature, administrators can specify that local clearinghouses are preferred over distant clearinghouses, and then clients will use the distant clearinghouses only when the local clearinghouses are unable to satisfy a request.

## **AIX Secure Remote Commands support**

AIX Secure Remote Commands support allows the AIX remote commands (like telnet and FTP) to use the Kerberos V5 authentication mechanism. This allows DCE users to use these commands to authenticate to remote hosts using their existing DCE credentials and, optionally, forward the credentials to the remote host. This feature makes use of the DCE Security Server's ability to function as a Kerberos V5 server.

## **DCE Web Secure**

In addition to the Netscape FastTrack 3.01 and Enterprise 3.61 Web servers, the DCE Web Secure component includes support for the Netscape Enterprise 3.01 and 3.51 Web servers. Also supported are the Netscape FastTrack 2.01 and Enterprise 2.01 Web servers. This allows administration of the DCE cell using a Web browser from a machine that is not configured into the cell. The DCE Web Secure component provides DCE credentials to Common Gateway Interface (CGI) programs.

## **DCE Web Administration**



Provides a CGI program that administrators can use to manage DCE users, groups, organizations, and permissions. The CGI program is accessible from your Web browser at:

`http://servername/dceweb`

where *servername* is the name of the Netscape server machine.

### **Password Strength Enhancements**

The IBM DCE Enhanced Password Strength Server extends the capabilities of the password strength server in previous DCE releases. The enhanced server allows you to control the following characteristics of user passwords:

- Password composition
- Password age
- Password history and re-use
- Password dictionaries and user-defined rules

### **Public Key Certificate Login**

Public Key Certificate Login allows DCE users to prove their identity to the DCE authentication service using an X509v3 digital certificate and its associated public key pair, rather than a shared-secret key password. This authentication mechanism, in the event of a compromise of the DCE Security Server, prevents exposure to the intruder of any identifying information about the users. Users need not have either a traditional secret-key password nor a public key pair generated by the DCE Security Server. This feature is intended for customers who are currently using the Entrust Public Key Infrastructure (PKI) and have a need to map Entrust users to DCE users for authentication and access to resources provided by DCE. DCE 3.1 for AIX servers and clients support this public key certificate login feature.

### **Public Key Login Server**

Public Key Login Server support provides the OSF DCE 1.2.2 capability of using public and private keys for initial DCE authentication from client systems that support the OSF DCE 1.2.2 public key feature. DCE 3.1 for AIX clients do not support this public key feature. Public key support does not include the public key certification API or the private key storage server.

***Read the following information before installing IBM DCE Version 3.1 for AIX.***

---

## README File

The `/usr/lpp/dce.client/lpp.README` file contains information about the installation and configuration of DCE Version 3.1 for AIX as well as notes on known problems and limitations. You can view the README file from the command line by using the **installp** command or by using the **SMIT** interface.

To view the file using the **installp** command, you must have the CD-ROM mounted to a directory on your file system. Type the following command:

```
installp -d directory/usr/sys/inst.images dce.client
```

where *directory* is the directory to which you have mounted the CD-ROM. For example, if you have the CD-ROM mounted to `/mnt`, the argument for the `-d` command would be `/mnt/usr/sys/inst.images`.

To view the README file from within the **SMIT** interface, do the following:

1. Select **Software Installation and Maintenance**.
2. Select **Install and Update Software**.
3. Select **List User Instructions for Update Media**.
4. At the **INPUT device/directory for software** field, press the **F4** key to display a list of devices. Move the cursor to `/dev/cd0` or the name of the device that specifies your CD-ROM drive, and then press Enter.
5. Type `dce.client` in the **SOFTWARE name** field and then press Enter.

Translated versions of the README files are located on an installed machine in the following locations:

### Japanese

`/usr/lpp/dce/README.Ja_JP` and `/usr/lpp/dce/README.ja_JP`

### Korean

`/usr/lpp/dce/README.ko_KR`

### Traditional Chinese

`/usr/lpp/dce/README.zh_TW` and `/usr/lpp/dce/README.Zh_TW`

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## Supported Versions of AIX

DCE Version 3.1 for AIX supports the following releases of the AIX operating system:

- AIX Version 4.3.2
- AIX Version 4.3.1
- AIX Version 4.2.1

---

## Before You Install

In addition to the base operating system requirements, additional AIX software updates might be required. The following describes the DCE filesets and the AIX software updates that they require. See Table 1 for a listing of the prerequisite software.

### Prerequisite Software

Table 1 lists the IBM DCE 3.1 for AIX filesets in the order in which they are installed.

**Note:** Software names beginning with dce are at the same release level as the shipped DCE product.

Table 1. Installation filesets and prerequisite software

Fileset You Are Installing	Prerequisite <sup>1</sup> , Corequisite <sup>2</sup> , and Instreq <sup>3</sup> Software Names	Prerequisite, Corequisite, or Instreq Software Description
<b>dce.client — Base Services Package</b>		
dce.client.rte.pthreads	bos.rte <sup>1</sup>	AIX Base Operating System (BOS) Runtime
dce.client.rte.pthreads	bos.rte.libpthread <sup>1</sup>	libpthread Library
dce.client.rte	bos.net.tcp.client <sup>1</sup>	TCP/IP Client Support
dce.client.rte	xlC.rte <sup>1</sup>	C ++ Set for AIX Application Runtime
dce.client.rte	bos.adt.lib <sup>1</sup>	Base Application Development Libraries
dce.client.rte	dce.client.rte.pthreads <sup>1</sup>	DCE Threads Compatibility Library for AIX
dce.client.rte	dce.client.rte.config <sup>2</sup>	DCE Client Configuration Tools
dce.client.rte	dce.client.rte.security <sup>2</sup>	DCE Client Security Tools
dce.client.rte	dce.client.core.rte.cds <sup>2</sup>	DCE Client CDS Tools
dce.client.rte	dce.client.rte.time <sup>2</sup>	DCE Client Time Tools
dce.client.rte	dce.client.rte.zones <sup>2</sup>	DCE Client Time Zones
dce.client.rte	dce.client.rte.admin <sup>2</sup>	DCE Client Administrative Tools
dce.client.rte	dce.client.rte.rpc <sup>2</sup>	DCE Client RPC Tools
dce.client.rte.admin	dce.client.rte <sup>1</sup>	DCE Client Services

Table 1. Installation filesets and prerequisite software (continued)

<b>Fileset You Are Installing</b>	<b>Prerequisite<sup>1</sup>, Corequisite<sup>2</sup>, and Instreq<sup>3</sup> Software Names</b>	<b>Prerequisite, Corequisite, or Instreq Software Description</b>
dce.client.rte.cds	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.config	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.rpc	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.security	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.time	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.zones	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.smit	dce.client.rte <sup>1</sup>	DCE Client Services
dce.client.rte.web	dce.client.rte <sup>1</sup>	DCE Client Services
<b>dce.priv — Privacy Level Protection Package</b>		
dce.priv.rte	dce.client.rte <sup>1</sup>	DCE Client Services
<b>dce.security — Security Server Package</b>		
dce.security.rte	dce.client.rte <sup>1</sup>	DCE Client Services
dce.security.smit	dce.security.rte <sup>1</sup>	DCE Security Server
dce.security.smit	dce.client.smit <sup>1</sup>	DCE SMIT Client Tools
<b>dce.cds — Cell Directory Server Package</b>		
dce.cds.rte	dce.client.rte <sup>1</sup>	DCE Client Services
dce.cds.smit	dce.cds.rte <sup>1</sup>	DCE Cell Directory Server
dce.cds.smit	dce.client.smit <sup>1</sup>	DCE SMIT Client Tools
<b>dce.doc — DCE Online Documentation</b>		
dce.doc.rte.ascii	dce.client.rte pthreads <sup>1</sup>	DCE Threads Compatibility Library for AIX
dce.doc.en_US.ascii	dce.doc.rte.ascii <sup>1</sup>	DCE ASCII Browser and <b>dceman</b>
dce.doc.en_US.html	N/A	Web Browser
dce.doc.en_US.pdf	N/A	PDF Files
<b>dce.tools — DCE Tools for Application Developers</b>		
dce.tools.admin.rte	dce.client.rte <sup>1</sup>	DCE Client Services

Table 1. Installation filesets and prerequisite software (continued)

Fileset You Are Installing	Prerequisite <sup>1</sup> , Corequisite <sup>2</sup> , and Instreq <sup>3</sup> Software Names	Prerequisite, Corequisite, or Instreq Software Description
dce.tools.appdev.adt	dce.client.rte <sup>1</sup> (See page 8 for a complete list of prerequisite filesets.)	DCE Client Services
<b>dce.xdsxom — X.500 API Library Package</b>		
dce.xdsxom.rte	dce.client.rte.pthreads <sup>1</sup>	DCE Threads Compatibility Library for AIX
<b>dce.sysmgmt — DCE System Management Package</b>		
dce.sysmgmt.ems.smit	dce.sysmgmt.ems.rte <sup>1</sup>	DCE Client Services
dce.sysmgmt.ems.smit	dce.client.smit <sup>1</sup>	DCE SMIT Client Tools
dce.sysmgmt.ems.rte	dce.client.rte <sup>1</sup>	DCE Client Services
dce.sysmgmt.snmpagt.rte	dce.client.rte <sup>1</sup>	DCE Client Services
dce.sysmgmt.snmpagt.smit	dce.sysmgmt.ems.rte <sup>1</sup>	DCE SNMP Subagent
dce.sysmgmt.snmpagt.smit	dce.client.smit <sup>1</sup>	DCE SMIT Client Services
dce.sysmgmt.webadmin.rte	dce.client.rte.web <sup>1</sup>	DCE Web Secure
<b>dce.msg.en_US — Messages Package</b>		
dce.msg.en_US.client.rte	dce.client.rte <sup>3</sup>	DCE Client Services
dce.msg.en_US.cds.smit	dce.cds.smit <sup>3</sup>	DCE SMIT Cell Directory Server
dce.msg.en_US.client.smit	dce.client.smit <sup>3</sup>	DCE SMIT Client Tools
dce.msg.en_US.security.smit	dce.security.smit <sup>3</sup>	DCE SMIT Security Server
dce.msg.en_US.sysmgmt.ems.smit	dce.sysmgmt.ems.smit <sup>3</sup>	DCE SMIT Event Management Messages
dce.msg.en_US.sysmgmt.snmpagt.smit	dce.sysmgmt.snmpagt.smit <sup>3</sup>	DCE SMIT SNMP Subagent Messages
dce.msg.en_US.sysmgmt.ems.rte	dce.sysmgmt.ems.rte <sup>3</sup>	DCE Event Management Services
dce.msg.en_US.sysmgmt.snmpagt.rte	dce.sysmgmt.snmpagt.rte <sup>3</sup>	DCE SNMP Subagent

Table 1. Installation filesets and prerequisite software (continued)

Fileset You Are Installing	Prerequisite <sup>1</sup> , Corequisite <sup>2</sup> , and Instreq <sup>3</sup> Software Names	Prerequisite, Corequisite, or Instreq Software Description
<p><b>Notes:</b></p> <p>The following language filesets can be substituted for the <b>en_US</b> file set: <b>Ja_JP</b>, <b>Zh_TW</b>, <b>es_ES</b>, <b>Es_ES</b>, <b>ja_JP</b>, <b>ko_KR</b>, or <b>zh_TW</b>.</p> <p><sup>1</sup>Prerequisite filesets must be installed prior to the fileset that you want to install. (The fileset can not be installed before the prerequisite fileset.)</p> <p><sup>2</sup>Corequisite (Coreq) filesets must be available to be installed when the fileset that you want to install is installed. (The order in which the filesets are installed is not important.) You can not uninstall one fileset without uninstalling others that it coreqs, or that coreq it.</p> <p><sup>3</sup>Filesets that instreq other filesets will only be installed if the instreq'ed fileset is installed or available for installation. The fileset that is instreq'ed has no dependency upon the fileset that instreq's it. (The order in which the filesets are installed is not important.) The fileset that instreq'ed another can be removed. The fileset that was instreq'ed can not be removed without removing the one that instreq'ed it.</p>		

To use the **dce.tools.appdev.adt** fileset for building DCE applications, the following filesets or equivalent options must be installed:

**bos.adt.syscalls**

System Calls Application Development Toolkit

**bos.adt.includes**

Base Application Development Include Files

**bos.adt.lib**

Base Application Development Libraries

**xlC.rte** C Set ++ AIX Application Runtime

You must reboot your system in order for the updates to take effect.

## Disk Space Requirements

See the **README** file for the most currently available LPP space requirements. Note that the sizes listed are approximations.

The following Licensed Program Products (LPPs) require the following amounts of disk space.

Table 2. LPP disk requirements

LPP	Components	Installable Packages	Space in Mb	
<b>DCE Version 3.1 for AIX</b>	<b>Base Services</b>	<b>dce.client</b>	<b>25.0</b>	
		<b>dce.msg.&lt;lang&gt;</b>	<b>1.6</b>	
		<b>dce.sysmgmt</b>	<b>7.0</b>	
		<b>dce.tools</b>	<b>6.5</b>	
		<b>dce.xdsxom</b>	<b>1.0</b>	
			<b>dce.doc<sup>1</sup></b>	<b>96.1</b>
			dce.doc.rte.ascii	0.10
			dce.doc.<lang>.ascii	12.0
			dce.doc.<lang>.html	61.0
			dce.doc.<lang>.pdf	23.0
	<b>Security Services</b>	<b>dce.security</b>	<b>4.5</b>	
		<b>dce.priv</b>	<b>5.5</b>	
	<b>Cell Directory Services</b>	<b>dce.cds</b>	<b>1.6</b>	
<b>DCE Version 3.1 Base Services for AIX</b>		<b>dce.client</b>	<b>25.0</b>	
		<b>dce.msg.&lt;lang&gt;</b>	<b>1.6</b>	
		<b>dce.sysmgmt</b>	<b>7.0</b>	
		<b>dce.tools</b>	<b>6.5</b>	
		<b>dce.xdsxom</b>	<b>1.0</b>	
			<b>dce.doc<sup>1</sup></b>	<b>96.1</b>
			dce.doc.rte.ascii	0.10
		dce.doc.<lang>.ascii	12.0	
		dce.doc.<lang>.html	61.0	
		dce.doc.<lang>.pdf	23.0	
		<b>dce.priv</b>	<b>5.5</b>	
<b>Note:</b>				
Substitute the appropriate locale name for <lang>. DCE 3.1 for AIX supports the following locales: en_US, Ja_JP, Zh_TW, es_ES, Es_ES, ja_JP, ko_KR, or zh_TW.				

## DCE Software Bundles

With the AIX operating system, you can install software more easily by using software bundles. A software bundle contains a list of software products that are suited for a particular use. See Table 3 on page 10 for the content of each DCE bundle selection.

Table 3. DCE Software Bundles

Software Bundle	Bundle Name	Name and Filesets
DCE-CDS	DCE-CDS.bnd	<b>CDS Bundle</b> dce.cds.smit dce.cds.rte
DCE-Client	DCEClient.bnd	<b>DCE Client Bundle</b> dce.client.rte dce.xdsxom.rte dce.client.smit
DCE-Management	DCE-Management.bnd	<b>DCE Management Bundle</b> dce.sysmgmt.ems.rte dce.sysmgmt.snmpagt.rte dce.sysmgmt.ems.smit dce.sysmgmt.snmpagt.smit dce.sysmgmt.webadmin.rte dce.client.rte.web
DCE-Security	DCE-Security.bnd	<b>DCE Security Bundle</b> dce.security.rte dce.security.smit
DCE-Starter	DCE-Starter.bnd	<b>DCE Starter Bundle</b> dce.client.rte dce.xdsxom.rte dce.client.smit dce.security.rte dce.cds.rte dce.security.smit dce.cds.smit



Table 3. DCE Software Bundles (continued)

Software Bundle	Bundle Name	Name and Filesets
DCE-Tools	DCE-Tools.bnd	<b>DCE Tools Bundle</b> dce.tools.admin.rte dce.tools.appdev.adt

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## DCE Hardcopy Documentation for Installation and Configuration

IBM DCE Version 3.1 for AIX comes with a hardcopy version of *IBM DCE Version 3.1 for AIX: Quick Beginnings*. This book describes the IBM DCE 3.1 product and explains how to plan for, install, and configure DCE 3.1. It also contains information on how to print PDF versions of the DCE online documentation for those customers who prefer hardcopy documentation.

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## DCE Online Documentation

All IBM DCE Version 3.1 for AIX online information is provided with the product along with the tools necessary for viewing it.

### Packages and Filesets to Install

The **dce.doc** package contains documentation files for both ASCII and graphics terminals. You can install either or both sets, depending on your preference.

If you need support for an ASCII terminal, install the following filesets of **dce.doc**:

- **dce.doc.rte.ascii** — DCE ASCII Browser and **dceman**
- **dce.doc.en\_US.ascii**— DCE ASCII Browser Files

**Note:** **en\_US** can be substituted with the appropriate locale name.

If you need support for a graphics terminal, install the following filesets:

- **dce.doc.en\_US.html**— HTML Documentation Files

If you need to view the documentation files using a PDF viewer, such as Adobe Acrobat Reader, install the following filesets:

- **dce.doc.en\_US.pdf**— PDF Documentation Files

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## Viewing the DCE Online Documentation

The IBM DCE Version 3.1 for AIX online documentation is provided in three file formats:

- HTML files that are viewable from any frame-enabled Web browser, such as Netscape Navigator.
- PDF files that are viewable with a PDF viewer, such as Adobe Acrobat Reader.
- ASCII files that are viewable with **asciiview**, the IBM ASCII browser.

The **start\_dcedoc** program defaults to the appropriate viewer for your interface based on your **\$DISPLAY** environment variable. You also can use flags to specify which viewer you want **start\_dcedoc** to start (**-g** for a graphical interface and **-a** for an ASCII interface).

### Viewing the DCE Online Documentation Using a Web Browser

Users with graphic interfaces can use a Web browser such as the **Netscape Navigator** browser, which is included with the AIX operating system, to read the DCE documentation HTML files.

If you have installed the documentation files locally, use your Web browser to view the DCE HTML documentation by opening the file:

```
/usr/lpp/dcedoc/html/en_US/index.html
```

**Note:** **en\_US** can be substituted with the appropriate locale name.

If you have **Web Administration** installed and configured into a **Netscape** Web server, go to the URL:

```
http://servername/dceweb
```

If you installed the DCE documentation on the server, select **DCE Documentation** from that Web page.

### Viewing the DCE Online Documentation Using ASCIIVIEW

Users with ASCII interfaces can use **asciiview** to read the ASCII documentation files. The browser allows structured access to all the books in the DCE library from a central menu. You can select a book by title and then choose the entries you want from a table of contents. You also can retrieve chapters in books other than the one you're viewing without having to exit and restart the browser.

To start the **asciiview** viewer, type the following on the command line:

```
asciiview
```

---

## Appendix. Notices

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