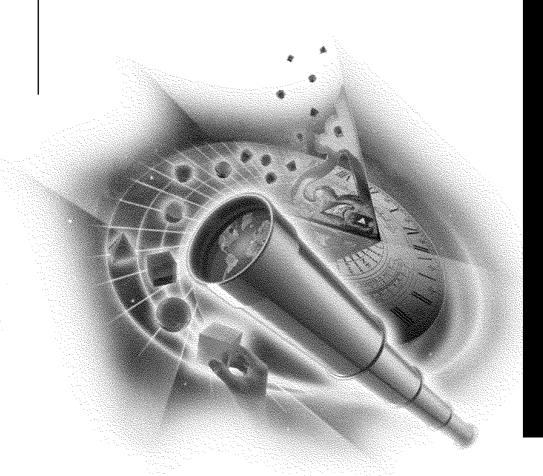**Quick Start**

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U.S. Patent Nos. 5,608,903; 5,671,414; 5,677,851; 5,758,344; 5,784,560; 5,794,232; 5,832,275; 5,832,483; 5,832,487; 5,864,865; 5,870,739; 5,873,079; 5,878,415; 5,884,304; 5,910,803; 5,913,025; 5,933,826; 5,946,467; 5,956,718; 5,956,745; 5,964,872; 5,983,234; 6,002,398; 6,016,499; 6,029,247. U.S. and Foreign Patents Pending.

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DirXML Quick Start
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Online Documentation: To access the online documentation for this and other Novell products, and to get updates, see www.novell.com/documentation.

VERSION 1.0

DirXML Overview

DirXML is a data sharing service that runs on NDS® eDirectory**TM** 8.5. This data sharing service enables the networking of application data through the directory. DirXML allows an application to share selected directory data with NDS and to synchronize that data between NDS and the application.

Supported Platforms

❑ NetWare®

❑ Windows* NT*

❑ Windows 2000

❑ Solaris*

❑ Linux*

❑ Tru64 UNIX*

More Information

For more information on DirXML, refer to the following sources:

◆ Product information (http://www.novell.com/products/nds)

◆ Product support (http://support.novell.com)

◆ Online forums (news://forums.novell.com)

◆ Product catalog (http://www.novell.com/catalog)

◆ Product documentation (http://www.novell.com/documentation)

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Installing DirXML on NetWare

Use these instructions to install DirXML on a NetWare® server.

Prerequisites

❑ NDS® eDirectory**TM** 8.5.

   The driver must run on the same computer as an NDS server. The application database can reside on the NDS server or on a remote server.

❑ ConsoleOne**TM** 1.2d.

Installing DirXML

Before installing DirXML, make sure you have installed NDS eDirectory 8.5.

1 At the server console, start NWCONFIG.NLM.

2 Select Product Options > Install a Product Not Listed.

3 Press F3 (F4 if you're using RCONSOLE) > specify the path to the DirXML NetWare installation files on the *DirXML* CD (for example, D:\NW).

   The graphical installation utility will start after a few moments.

4 Press Next.

5 Read the license agreement > press Accept.

6 Select the drivers you want to install by checking the corresponding boxes > press Next.

7 Review the components to be installed > press Finish.

8 After the installation completes and displays the Installation Complete dialog box, press Close.

   Use ConsoleOne to configure the drivers you installed.

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DirXML NLM Files

All necessary DirXML-related NLM**TM** files must be located in a system search path, typically the SYS:\SYSTEM directory. These files include:

- ◆ DIRXML.NLM

- ◆ JSAS.NLM

- ◆ JCLNT.NLM

- ◆ JCLNTR.NLM

JAVA.NLM must also be accessible from a system search path, typically SYS:\JAVA\BIN.

Java Class Path

All necessary Java* DirXML components and drivers (.JAR files) must be accessible from the Java class path, or must be located in the SYS:\SYSTEM\LIB directory. All .JAR files located in the SYS:\SYSTEM\LIB directory will be appended to any existing Java class path at the launch time of the Java DirXML driver.

The following .JAR files should be located in the SYS:\SYSTEM\LIB directory:

- ◆ COLLECTIONS.JAR

- ◆ I18N.JAR

- ◆ JCLIENT.JAR

- ◆ NDSTONDS.JAR

- ◆ NXSL.JAR

- ◆ DIRXML.JAR

- ◆ XP.JAR

Modifying the AUTOEXEC.NCF File

The automatic loading of DirXML drivers on NetWare might require minor AUTOEXEC.NCF changes on the NetWare server.

The server's system search paths for Java components usually look like this:

```
SEARCH ADD SYS:\JAVA\BIN
SEARCH ADD SYS:\JAVA\NWGFX
```

Traditionally, the installation program automatically places these search paths near the end of the AUTOEXEC.NCF file. However, placing these search commands near the end of the AUTOEXEC.NCF file might prevent DirXML from automatically loading DirXML drivers at startup time.These search paths need to be placed early enough in the AUTOEXEC.NCF file so that as DS.NLM loads, it has the Java search paths available to find the DirXML Java components.

We recommend placing these search commands near the top of the AUTOEXEC.NCF file and before any volumes are mounted.

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Installing DirXML on Windows NT/ 2000

Use these instructions to install DirXML on a Windows* NT* or Windows 2000 server.

Prerequisites

❑ NDS® eDirectory**™** 8.5.

   The driver must run on the same computer as an NDS server. The application database can reside on the NDS server or on a remote server.

❑ ConsoleOne**™** 1.2d.

Installing DirXML

Before installing DirXML, make sure you have installed NDS eDirectory 8.5.

1 Run INSTALL.EXE from the NT directory on the *DirXML* CD.

2 Click Next.

3 Read the License Agreement > click Accept.

4 (Optional) Select any of the following drivers:

   ◆ Active Directory

   ◆ Microsoft* Exchange

   ◆ Lotus* Notes*

   ◆ Netscape* Directory Server*

   ◆ NDS eDirectory to eDirectory

   You can also install a custom driver.

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5 Click Next.

6 Read the Summary screen > click Finish > click Close.

After the installation finishes, ConsoleOne launches with the option to run either the Application Driver Creation Wizard or the Filtered Replica Configuration Wizard.

Installing a Custom Driver

1 Run INSTALL.EXE from the NT directory on the *DirXML* CD.

2 Click Next.

3 Read and accept the License Agreement.

4 Click Custom Driver > Next.

5 Click Browse to find the archive file (*.JAR or *.ZIP) containing the driver provided by the software manufacturer > click Open.

6 Click Next > Finish > Close.

Use ConsoleOne to configure the new driver.

Installing DirXML on Solaris

Use these instructions to install DirXML on a Solaris* 2.6, 7, or later server.

Prerequisites

❏ NDS® eDirectory**TM** 8.5.

   The driver must run on the same computer as an NDS server. The application database can reside on the NDS server or on a remote server.

❏ ConsoleOne**TM** 1.2d.

   You will need ConsoleOne 1.2d to administer the Solaris installation of DirXML. ConsoleOne can be installed on the same server on which DirXML is installed, or on another Solaris workstation in the network.

Minimum System Requirements

❏ Solaris 2.6 or Solaris 7 and later (Ultra SPARC* platform edition).

❏ 28 MB disk space and at least 258 MB of swap space.

❏ Install the latest recommended Solaris 2.6 (105591-07) and Solaris 7 (106327-06 for 32-bit systems) patches on the Solaris host. The patches are available at the Sunsolve Online Web page (http://sunsolve.sun.com).

❏ Administrative rights to the Solaris server and to all portions of the NDS tree that contain User objects. For an installation into an existing tree, you need administrative rights to the Tree object to extend the schema.

❏ For JDK1.2.2, the following patches are required or recommended:

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Solaris Version	Required JDK Patch	Recommended JDK Patch
Solaris 2.6	105490-07, 105568-14, 105210-25, 106040-13, 105633-30, 106409-01, 108091-03	105181-17, 105669-09, 105284-31
Solaris 7	106980-05, 107636-03, 107607-01, 107078-18	
Solaris 8	None required	None recommended

The JDK patches are available at the Java* Platform Technologies for the Solaris Operating Environment Web page (http://www.sun.com/solaris/java).

Installing DirXML

Before installing DirXML, make sure you have installed NDS eDirectory 8.5.

1 On the Solaris host, log in as root.

2 On the DirXML CD, go to the folder named Solaris > select Setup > type `nds-install`.

3 Type `y` > press Enter to accept the license agreement.

4 Choose to install DirXML.

The installation program proceeds to add various packages of the DirXML component.

5 You can configure driver parameters at this time by entering the required values in the ndscfg.inp file.

The file will open in your default text editor or in the VI Editor, if it is a remote install.

6 Enter the following configuration parameters in the ndscfg.inp file:

- Name (with full context) of the user with administration rights to the Tree object.

- (Optional) NDS Driver Object Name: The name (without context) of the NDS to NDS Driver object. The default is NDS2NDS.

- (Optional) NCSP Driver Object Name: The name (without context) of the Netscape* to NDS Driver object. The default is NDStoNCSP.

- ◆ (Optional) NDS Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then both are created by default.

    Enter **1** to install both the Publisher and the Subscriber.

    Enter **2** to install only the Publisher.

    Enter **3** to install the Subscriber.

    Enter **4** to install neither the Publisher nor the Subscriber.

  The Publisher holds the configuration used to drive the publication of information (for an event such as the creation of a new user) from an application to NDS. The Subscriber holds the configuration used to drive the subscription of information from NDS to an application.

  These options can be used to determine the flow of data (for example, during synchronization) between two databases.

- ◆ (Optional) NSCP Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then both are created by default.

    Enter **1** to install both the Publisher and the Subscriber.

    Enter **2** to install only the Publisher.

    Enter **3** to install the Subscriber.

    Enter **4** to install neither the Publisher nor the Subscriber.

- ◆ (Optional) Driver Set Context: The context under which the Driver Set needs to be created. This parameter will not have any effect if a Driver Set is already associated with the server.

- ◆ (Optional) Driver Set Name: The name (without context) of the Driver Set object.

- ◆ (Optional) Driver Choice: Specifies which driver to install.

    Enter **1** to install both the NDS to NDS, and the NDS to Netscape drivers.

    Enter **2** to install the NDS to NDS driver.

    Enter **3** to install the NDS to Netscape driver.

7 Save the information and close the editor.

8 Enter the password of the user with administration rights, when prompted.

You can configure DirXML using the ndsdxcfg utility. You need to do this if you exit the configuration during installation, if the configuration fails, or if you need to reconfigure DirXML for any reason. For more information on using ndsdxcfg, see the ndsdxcfg man page.

After the install finishes, use ConsoleOne to configure the application driver.

Installing DirXML on Linux

Use these instructions to install DirXML on a Linux* server.

Prerequisites

❑ NDS® eDirectory**TM** 8.5.

 The driver must run on the same computer as an NDS server. The application database can reside on the NDS server or on a remote server.

❑ ConsoleOne**TM** 1.2d or later.

 You will need ConsoleOne 1.2d to administer the Linux installation of DirXML. ConsoleOne can be installed on the same server on which DirXML is installed, or on another Linux workstation in the network.

Minimum System Requirements

❑ Glibc 2.1.2 or later.

❑ Kernel 2.2.*xx* or later.

❑ A Pentium* 200 with 128 MB of RAM and 28 MB disk space.

❑ At least 258 MB of swap space.

❑ Administrative rights to the Linux server and to all portions of the NDS tree that contain User objects. For an installation into an existing tree, you need administrative rights to the root of the tree to extend the schema.

Installing DirXML

Before installing DirXML, make sure you have installed NDS eDirectory 8.5.

1 On the Linux host, log in as root.

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2 On the DirXML CD, go to the folder named Linux > select Setup > type `nds-install`.

3 Type `y` > press Enter to accept the license agreement.

4 Choose to install DirXML.

The installation program proceeds to add various packages of the DirXML component.

5 You can configure driver parameters at this time by entering the required values in the ndscfg.inp file.

The file will open in your default text editor or in the VI Editor, if it is a remote install.

6 Enter the following configuration parameters in the ndscfg.inp file:

- Name (with full context) of the user with administration rights to the root of the tree.

- (Optional) NDS Driver Object Name: The name (without context) of the NDS to NDS Driver object. The default is NDS2NDS.

- (Optional) NCSP Driver Object Name: The name (without context) of the Netscape* to NDS Driver object. The default is NDStoNCSP.

- (Optional) NDS Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then both are created by default.

    Enter `1` to install both the Publisher and the Subscriber.

    Enter `2` to install only the Publisher.

    Enter `3` to install the Subscriber.

    Enter `4` to install neither the Publisher nor the Subscriber.

The Publisher holds the configuration used to drive the publication of information (for an event such as the creation of a new user) from an application to NDS. The Subscriber holds the configuration used to drive the subscription of information from NDS to an application.

These options can be used to determine the flow of data (for example, during synchronization) between two databases.

- ◆ (Optional) NSCP Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then both are created by default.

    Enter **1** to install both the Publisher and the Subscriber.

    Enter **2** to install only the Publisher.

    Enter **3** to install the Subscriber.

    Enter **4** to install neither the Publisher nor the Subscriber.

- ◆ (Optional) Driver Set Context: The context under which the Driver Set needs to be created. This parameter will not have any effect if a Driver Set is already associated with the server.

- ◆ (Optional) Driver Set Name: The name (without context) of the Driver Set Object.

- ◆ (Optional) Driver Choice: Specifies which driver to install.

    Enter **1** to install both the NDS to NDS, and the NDS to Netscape drivers.

    Enter **2** to install the NDS to NDS driver.

    Enter **3** to install the NDS to Netscape driver.

7 Save the information and close the editor.

8 Enter the password of the user with administration rights, when prompted.

You can configure DirXML using the ndsdxcfg utility. You need to do this if you exit the configuration during installation, if the configuration fails, or if you need to reconfigure DirXML for any reason. For more information on using ndsdxcfg, see the ndsdxcfg man page.

After the install finishes, use ConsoleOne to configure the application driver.

Installing DirXML on Tru64 UNIX

Use these instructions to install DirXML on a Tru64 UNIX* 4.0 or later server.

Prerequisites

❑ NDS® eDirectory**TM** 8.5.

The driver must run on the same computer as an NDS server. The application database can reside on the NDS server or on a remote server.

❑ ConsoleOne**TM** 1.2d.

You will need ConsoleOne 1.2d to administer the Tru64 UNIX installation of DirXML. ConsoleOne can be installed on the same server on which DirXML is installed, or on another Solaris workstation in the network.

Minimum System Requirements

❑ Compaq* Tru64 UNIX 4.0F (formerly DIGITAL UNIX) or Tru64 UNIX 5.0.

❑ 28 MB disk space and at least 258 MB of swap space.

❑ Administrative rights to the Tru64 UNIX server and to all portions of the NDS tree that contain User objects. For an installation into an existing tree, you need administrative rights to the Tree object to extend the schema.

❑ ConsoleOne requirements:

  ◆ ConsoleOne 1.2d

  ◆ 32 MB disk space

Installing DirXML

Before installing DirXML, make sure you have installed NDS eDirectory 8.5.

1 On the Tru64 UNIX host, log in as root.

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2 On the DirXML CD, go to the folder named Tru64 > select Setup > type `nds-install`.

3 Type `y` > press Enter to accept the license agreement.

4 Choose to install DirXML.

The installation program proceeds to add various packages of the DirXML component.

5 Configure driver parameters by entering the required values in the ndscfg.inp file.

Open this file in your default text editor or in the VI Editor, if it is a remote install.

6 Enter the following configuration parameters in the ndscfg.inp file:

  ⬥ Name (with full context) of the user with administration rights to the Tree object.

  ⬥ (Optional) NDS Driver Object Name: The name (without context) of the NDS to NDS Driver object. The default is NDS2NDS.

  ⬥ (Optional) NCSP Driver Object Name: The name (without context) of the Netscape* to NDS Driver object. The default is NDStoNCSP.

  ⬥ (Optional) NDS Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then they are created by default.

     Enter `1` to install both the Publisher and the Subscriber.

     Enter `2` to install only the Publisher.

     Enter `3` to install the Subscriber.

     Enter `4` to install neither the Publisher nor the Subscriber.

  The Publisher holds the configuration used to drive the publication of information (for an event such as the creation of a new user) from an application to NDS. The Subscriber holds the configuration used to drive the subscription of information from NDS to an application.

  These options can be used to determine the flow of data (for example, during synchronization) between two databases.

  ⬥ (Optional) NSCP Driver Options: Specifies whether the Publisher, Subscriber, or both need to be created. If none of the parameters mentioned below are entered, then they are created by default.

     Enter `1` to install both the Publisher and the Subscriber.

Enter **2** to install only the Publisher.

Enter **3** to install the Subscriber.

Enter **4** to install neither the Publisher nor the Subscriber.

- ◆ (Optional) Driver Set Context: The context under which the Driver Set needs to be created. This parameter will not have any effect if a Driver Set is already associated with the server.

- ◆ (Optional) Driver Set Name: The name (without context) of the Driver Set object.

- ◆ (Optional) Driver Choice: Specifies which driver to install.

    Enter **1** to install both the NDS to NDS, and the NDS to Netscape drivers.

    Enter **2** to install the NDS to NDS driver.

    Enter **3** to install the NDS to Netscape driver.

7 Save the information and close the editor.

8 When prompted, enter the password of the user with administration rights.

You can configure DirXML using the ndsdxcfg utility. You need to do this if you exit the configuration during installation, if the configuration fails, or if you need to reconfigure DirXML for any reason. For more information on using ndsdxcfg, see the ndsdxcfg man page.

After the install finishes, use ConsoleOne to configure the application driver.