

# Installing SAP Unification Server



**Release 5.0 SP4 Patch 3**



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## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

## Typographic Conventions

Type Style	Description
<i>Example text</i>	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.  Cross-references to other documentation.
<b>Example text</b>	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.
<b>Example text</b>	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

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## Installing SAP Unification Server

This guide covers how to install SAP Unification Server.

After installation, you can access the administration and development environment of Unification Server, in which you can create a Database Unifier project. This Web-based interface to data in a database enables users to analyze and interrelate data.

See the Unification Server Administration Guide for instructions.

On top of your installation of SAP Unification Server, you can choose to install a unifier for enterprise applications, extending its development tools to handle enterprise applications such as SAP Unifier for R/3 and SAP Unifier for BW..

See the documentation of the unifiers for details.

For the latest information concerning SAP Unification Server, see SAP note 448316.



## System Requirements

The following are the hardware and software required for installing and running the Unification Server.

### Hardware

The server machine on which you install the Unification Server together with its prerequisite software, requires the following hardware configuration:

- 2xPentium III 700 MHz CPU
- 2-4 GB RAM
- 30 GB disk space
- Screen settings: 1024 x 768 pixel resolution; thousands of colors

### Software

All the following should be installed on one or more server machines:

- SAP Unification 5.0 SP4 Patch 3 must work with SAP Enterprise Portal SP4 Patch 2 or higher.
- Microsoft® Windows 2000 Server with Service Pack 2

During the installation of Windows, make sure that the Internet Information Services (IIS) component is selected.

Note: Microsoft® Windows 2000 Advanced Server is required for Network Load Balancing.

- Make sure that the FrontPage Server Extensions checkbox, under Internet Information Services (IIS) installation, is selected. The FrontPage Server Extensions are included with Office 2000.

If Office 2000 is not installed on the Unification Server machine, install the FrontPage Server Extensions separately. They are available for download from the Microsoft Web site, [www.microsoft.com/downloads](http://www.microsoft.com/downloads).

- Microsoft® SQL Server 2000 with Service Pack 2

SAP Unification Server requires a Microsoft® SQL Server 2000 database for its repository.

If Unification Server is installed on the same machine an Enterprise Portal installation which uses Microsoft® SQL Server for its repository, it can use the same SQL Server installation for unifier project repositories.

Unification Server can also use a Microsoft® SQL Server 2000 which is installed on a remote machine. In this case, a Microsoft® SQL Server 2000 client can be installed on the Unification Server machine to point to a repository located on that remote machine.



- Any server installation of Microsoft® SQL Server 2000 must be configured as specified in the SAP Enterprise Portal Installation Guide.
- SQL Server SP2 requires the running a Microsoft patch. For information about obtaining the appropriate patch, see SAP note 448316.
- Microsoft® InterDev 6.0 with Service Pack 4 (recommended for advanced development) and/or Microsoft® FrontPage 2000 (sufficient for UI development).

- Microsoft® Internet Explorer 5.01 or later. Service Pack 1 is adequate for clients; use Service Pack 2 for server machines.
- Microsoft® Internet Explorer 6.0
- MSXML 4.0 on the machine running Unification Server. Download the latest version from <http://www.microsoft.com>

If the database server, and the dedicated directory server are on different machines, then the RAM and free disk space requirements for each machine is as follows:

- 1xPentium III 700 MHz CPU
- 1-2 GB RAM
- 10 GB disk space

## Install Novell Developer Kit (NDK)



- In the event that Unification server is to reside on the same machine as SAP Enterprise → Portal, this section may be skipped. It is also prerequisite for the portal and need only be performed once on the same machine.

Unification Server requires that certain Novell DLL files are located in a specific folder prior to running the Installation wizard. These files are included in the Novell Developer Kit (NDK).

- This procedure is relevant for all installations, regardless of the LDAP directory server type in use.

### To install Novell Developer Kit:

1. Access the Novell site at: <http://developer.novell.com/ndk/cldap.htm>
2. Click the Download button in the Software package column.  
(It is not necessary to download the documentation and samples.)
3. Enter your Novell profile credentials.
4. The NDK download is free of charge. However, you are required to get a Novell profile in order to provide your username and password for the download. If you do not have a profile yet, follow the site's instructions for creating one.
5. In the File Download screen, choose Run this program from its current location and click OK. The file cldap.exe is copied and opened.
6. In the Security Warning screen, when asked if you want to install and run the Setup.exe, click Yes.
7. In the Novell Developer Kit wizard that opens, follow the instructions to install the NDK files into a default directory.

When you are prompted for confirmation to change the path, click Yes.

8. In the Complete screen, click Finish. In the text file that opens, verify the location of the downloaded DLL files.



## Running The Setup Wizard

After equipping your system with all the required hardware and software, you are ready to install SAP Unification Server.



Do not install the Unification Server on a machine that already has an installation of the product. If there are any previous versions on the machine, remove them and restart prior to installation.

### To install SAP Unification Server:

1. Insert the Enterprise Portal 5.0 (Unification Server / Database Unifier) CD-ROM into the drive.
2. The Welcome screen for Unification for Enterprise Portal 5.0 Installation displays automatically. If it does not, from the CD-ROM root folder, double-click the *Start.hta* file.
3. Click the *Unification Server* link to launch the setup wizard.
4. In the File Download dialog, select to *Run this program from its current location*, click *OK*, and in the Security Warning dialog, which asks if you want to install and run *Setup.exe*, click *Yes*.
5. When the Welcome screen appears, click *Next* to begin.

The Setup wizard opens and checks for the presence of the Microsoft Virtual Machine. If the Microsoft Virtual Machine is missing or out of date, you are prompted to install it.

6. In the *Choose Destination Location* screen, specify the destination folder in which to install the Unification Server and click *Next*.
7. In the Authentication Information screen, specify the user name and password of a Windows administrator on the machine, and an encryption key, which may consist of any combination of characters.

The encryption key you enter is used in an encryption algorithm, based on Triple DES (The American Standard for Data Encryption).



#### Note regarding *Verify.pse*:

The *verify.pse* file supports the mechanism of logon tickets for single sign-on in the Enterprise Portal. If you install the Enterprise Portal, and subsequently install the Unification Server on a different machine, then copy the *verify.pse* file from the first machine to the second in order to enable logon tickets. After logging on to the Portal, you can find the *verify.pse* file in the *WINNT/system32* folder on the Enterprise Portal machine. Copy it to the same location on the Unification Server machine.

8. Make sure you specify the same encryption password in this screen as you did when installing SAP Enterprise Portal. In this way, the portal and Unification Server can share secure data.



If Enterprise Portal was already installed on the machine, or if you installed and then uninstalled Unification Server on the machine, this screen does not appear.

9. Click *Next*.
10. In the Select Program Folder screen, specify a program folder for the Unification Server and click *Next*.
11. In the Portal Information screen, select the SAP Enterprise Portal version with which Unification Server is to operate.

If you are working with EP 6.0, enter the portal URL address in the following format:

`http(s)://<fully_qualified_machine_name>:<port_number>/SAPPortal`  
for example, `https://pwwdf115.wdf.sap.corp/irj`

Click *Next*.

The setup wizard copies files to your computer; the Setup Status screen opens and indicates the progress of installation.

In the Installation Wizard Complete screen, select a radio button to specify whether to restart your computer now or later. Remove any disks from their drives and click *Finish* to complete the setup.



## Defining Proxy Settings

If your organization network is connected to the Internet via a proxy server, and you do not install the Unification Server on the Enterprise Portal machine (where you would have already defined proxy settings), you need to define a proxy configuration on the Unification Server machine.

The reason is that you may later set up Correlation over the Internet.

For more details about Correlation, see “Correlating Projects” in the “ - Unification Server Administration Guide”.



If you want to enable a direct connection to the Internet, skip this section.



## Using The Proxy Server Configuration File

The *PROXYCFG.EXE* is a utility that enables the administrator to configure access to HTTP and HTTPS servers through a proxy server. You must have administrator privilege so that the utility can update the system registry of the local computer.

You specify the proxy settings in the proxy server configuration file, *PROXYCFG.EXE*, which can be downloaded from Microsoft's MSDN Web site, <http://msdn.microsoft.com/downloads/default.asp?URL=/code/sample.asp?url=/msdn-files/027/001/468/msdncompositedoc.xml>

Note that all the applications that access the Internet from this machine are affected by these settings.

You can configure the proxy server configuration file for one of the following options:

- **Configure to use Internet Explorer proxy settings**

This configuration defines access from SAP Unification Server to the Internet according to the Internet Explorer settings on the Unification Server installation machine.



If you use this method, make sure to define the proxy server's address and port in your Internet Explorer settings.

- **Configure to use a specific proxy server**

In this configuration, you define the proxy server address directly in the proxy server configuration file. Provide the following details:

<b>Proxy host</b>	The server name where the proxy resides is required. <b>Note:</b> A fully qualified server name may be required.
<b>Port</b>	The proxy port number is required.
<b>Excluded URLs</b> Optional	You can define URL addresses that do not access the Internet via the proxy server.

### To use the proxy server configuration file:

1. Obtain the file *PROXYCFG.EXE* from the Microsoft Web site.
2. In the command line, run the *PROXYCFG.EXE* with one of the following parameters:
  - To use Internet Explorer settings:

```
PROXYCFG -U
```

- To use a specific proxy:

```
PROXYCFG -D -P <fully qualified proxy server host name>:<proxy port>  
<excluded URL>;<another excluded URL>
```

**Example:** If your proxy server is located on a machine called *kenny*, in the domain *us.sapportals.com*, port *1010*, and you want to exclude internal URLs and addresses of academic sites, then in the command line you enter the following:

```
PROXYCFG -D -P kenny.us.sapportals.com:1010 *.us.sapportals.com; *.edu
```



## Additions to Your File System

The SAP Unification Server installation program copies a number of files into your file system, including the following:

<b>SAPPortalsComponents</b>	<p>The installer creates the <i>SAPPortalsComponents</i> folder in your Windows directory. In it, are several DLL files.</p> <p>Both the Unification Server and the Enterprise Portal share DLL files in the <i>Common</i> folder under the Windows directory, when both applications are installed on the same machine.</p>
<b>DLL Files</b>	<p>The installer copies the following components (DLLs) to the System32 folder in your Windows directory:</p> <p><i>TopTierLocator.dll</i>:- creates Unification Server objects on the Microsoft® Internet Information Server.</p> <p><i>TopTierTracerParams.dll</i>:- handles the Tracer that tracks system operation.</p> <p><i>PrivateMallocLib.dll</i>:- is responsible for memory allocation.</p>

### Main Application Directory

The installer creates a main application directory, ...\*SAPPORTALS\Unification Server*\, under the folder Program Files.

The following are the folders in the main directory:

<b>Bin</b>	The Unification Server .dll, .ocx, .exe and .class files
<b>Client</b>	The files for the ActiveX iPanel in Internet Explorer
<b>Common Tools</b>	Files for the administration of user management
<b>Examples</b>	Not relevant
<b>Help</b>	Not relevant
<b>Icons</b>	Graphics files containing the icons in the product
<b>Images</b>	Graphics files with the images in the product
<b>iPanel</b>	The files for the HTML iPanel in Internet Explorer and Netscape
<b>ISAPI Filters</b>	The security filter .DLL for user management purposes
<b>ISAPIConnector</b>	The Unification Server ISAPI extension/filter for the Internet Information Server.
<b>MetaTemplates</b>	<p>The default VBScript metatemplates of the Database Unifier. When you generate a Database Unifier project, these construct its ASP templates. At run time, the ASP templates, residing on the Internet Information Server, build the forms displayed to an end user on the client browser.</p> <p>This folder contains separate subfolders for Internet Explorer metatemplates and for Netscape metatemplates.</p>
<b>Netscape</b>	This folder includes the files for the HTML iPanel in Netscape. The iPanel enables Drag&Relate navigation.
<b>Project Root</b>	The global.asa file containing application level objects

<b>Scripts</b>	The TTHyRelInit.asa file, which initializes Drag&Relate support
<b>Temp</b>	Not relevant.
<b>Templates</b>	Contains ASP and CSS files for Database Unifier projects. This folder contains separate subfolders for Internet Explorer and for Netscape.
<b>Tools</b>	Contains the executables, and other necessary files, for Unification Server utilities
<b>Tracer</b>	Contains graphic and log files specific to the Tracer tool
<b>UIStyles</b>	Contains the Enterprise Portal style design files
<b>UnifiersSpecifics</b>	Files specific to SAP Portals Applications Unifiers, which are copied to this folder when the unifiers are installed.
<b>Utils</b>	The Analyzer utility, which helps you to identify problems in the Unification Server, resides here. In addition, there are files that support the creation of .cab files in the Deployer export mechanism.



## Additions to Your System Registry

The SAP Unification Server installation makes several entries into the system registry at the following location: My Computer\HKEY\_LOCAL\_MACHINE\SOFTWARE\SAPPortals\

### Trace

Contains, under the Unification Server key, the path to the trace file and a mask definition for trace flags.

### Unification Server

Contains the key **5.0**:

- The 5.0 key contains a string value that specifies the root directory of the Unification Server installation.
- If Unification Server is working with Enterprise Portal 6.0, this is indicated by the additional string value *http://*.



## A Note Regarding Log On Tickets

You need a log on ticket to enable you to run the Unification Server. A log on ticket mechanism is implemented by the file *verify.pse*. The file supports the mechanism of log on tickets for single sign-on in the Enterprise Portal.

If you installed SAP Enterprise Portal, and subsequently installed Unification Server on a different machine, then copy the *verify.pse* file from the portal machine to the Unification Server machine in order to enable logon tickets.

After logging on to the portal, you can find the *verify.pse* file in the `... \WINNT\SYSTEM32\` folder on the Enterprise Portal machine. Copy it to the same location on the Unification Server machine.



## Upgrading SAP Unification Server

This section describes the upgrade of SAP Unification Server 5.0 from Support Package 4 Patch 2 to Support Package 4 Patch 3. The upgrade procedure updates the Unification Server installation, preserving the customizations and content already created within the Unifier projects.

### Prerequisites

- SAP Unification Server 5.0 from Support Package 4, with installations of Patch 1 and Patch 2, must be installed.
- The upgrade procedure requires you to stop the IIS. Therefore, before starting the upgrade, make sure that the IIS is not in use by other applications.
- If you have made changes to the code, these changes may be overwritten by the upgrader. Make sure to save the files that you changed before starting the upgrade.

### Procedure

1. Stop the IIS.
2. Insert the Unification Server 5.0 SP4 Patch 3 CD-ROM into the CD drive of your portal server machine.  
  
The Unification Server *Welcome* screen should display automatically. If it does not, double-click the file. *Start.hta* from the Unification Server CD-ROM root folder.
3. In the Welcome screen, click the link "Upgrader from Unification Server 5.0 SP4 to SP4 Patch 3."
4. At the prompt asking if you want to run the program from the current location, choose OK and run the upgrader.

Alternatively, from the folder UnificationUpgrade, click Setup.exe to launch the Upgrade Setup wizard.

Wait for the upgrade to be performed.

5. Start the IIS.



## Uninstalling Unification Server

In order to uninstall SAP Unification Server, use the Windows Add/Remove Programs control.

Before uninstalling, first delete the project(s) you generated.

Before deleting your projects, It is possible to export them before uninstalling, and later to import them into a new installation of Unification Server and application unifiers. Note that the export/import feature is not yet implemented for SAP Unifier for SAP R/3.



Uninstalling Unification Server also uninstalls any application unifiers which may have been installed on top of it, such as the SAP Unifier for R/3 or SAP Unifier for BW.