SAP Front End Installation Guide

Release 730
Compilation 1

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Icons in Body Text

<table>
<thead>
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<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
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<td>Alert</td>
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<td>Note</td>
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<td>Recommendation</td>
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<tr>
<td>Syntax</td>
<td>Syntax</td>
</tr>
</tbody>
</table>

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see Help on Help ➔ General Information Classes and Information Classes for Business Information Warehouse on the first page of any version of SAP Library.

Typographic Conventions

<table>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example text</strong></td>
<td>Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Emphasized words or phrases in body text, graphic titles, and table titles.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.</td>
</tr>
<tr>
<td><strong>&lt;Example text&gt;</strong></td>
<td>Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Keys on the keyboard, for example, F2 or ENTER.</td>
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SAP Front End Installation Guide

Purpose
This documentation describes how to install and distribute the SAP front-end software on Windows.

The document contains the following sub-sections:

Introduction [page 9]
Planning [page 15]
Preparation [page 19]
Installation Process [page 35]
Additional Information [page 44]

1 Introduction

Scope of this Document
The SAP GUI family consists of:

- SAP GUI for Windows
  This GUI is described in detail here.
- SAP GUI for Java
  SAP GUI for Java is a generic SAP GUI that runs on a variety of platforms including Windows, Mac OS X, Linux, and UNIX platforms. It has the same look and feel as the Windows version with the exception of the platform-specific window design.
  
  **This GUI is not described here.** Instead, you can find documentation describing the installation of SAP GUI for Java in either of the following places:
  - In the folder PRES2/GUI/DOC on the SAP NetWeaver Presentation DVD.
  - On SDN under:
    https://www.sdn.sap.com/irj/sdn/sap-gui → Installation → SAP GUI for Java
    The installation instructions for SAP GUI for the Java environment are in chapter 4 of the document PlatinManual.
- SAP GUI for HTML
  SAP GUI for HTML is based on the SAP Internet Transaction Server (ITS), which has been integrated into the kernel of the SAP Web Application Server as of SAP NetWeaver 04 (SAP Web AS 6.40). If you are using SAP systems based on SAP NetWeaver releases older than SAP NetWeaver 04, make sure that the standalone ITS is installed on a dedicated server. On the desktop, a suitable browser is sufficient for both standalone and integrated ITS.
  
  **This GUI is not described here** since the SAP GUI for HTML does not need SAP software to be deployed on the client.
SAP GUI for HTML and SAP GUI for Java do not have all the capabilities of SAP GUI for Windows. Some applications such as SAP BI or SAP SCM require the SAP GUI for Windows. More information: Master Guides for the relevant SAP products

More information about the SAP GUI family: https://www.sdn.sap.com/irj/sdn/sap-gui

Platforms
SAP GUI for Windows provides support for the most common Microsoft Windows platforms:

- Windows XP
- Windows 2003 Server
- Windows Vista
- Windows 7
- Windows 2008 Server
- Windows 2008 R2 (Server)
- Windows 8 (planned)

More information: SAP Product Availability Matrix at https://service.sap.com/pam or SAP Note 66971

Compatibility
SAP GUI for Windows 7.30 is compatible with all SAP products based on SAP NetWeaver 7.30 and all earlier releases of SAP software that are still supported by SAP.

Only one version of SAP GUI is possible.

SAP GUI for Windows uses the Microsoft Controls technology, which means that all controls are registered locally during the installation. As a result, the system database contains an entry indicating where each control can be found. Since the system always registers the latest controls, only the most recently installed version of a control is available at any time.

This means that on a single computer only one version of SAP GUI for Windows can be installed. During installation of a new SAP GUI release, any older SAP GUI release present on the computer is uninstalled. However, SAP GUI for Windows supports virtualization products like Citrix XenApp, Microsoft App-V and VMWare Thinapp which can be used to run multiple SAP GUI versions on the same client in parallel if needed.
# 1.1 New or Changed Features in SAP GUI 7.30

This section lists the features that are new or changed with SAP GUI for Windows 7.30:

<table>
<thead>
<tr>
<th>Area</th>
<th>Changed or New Feature</th>
</tr>
</thead>
</table>
| **Support**         | **Longer lifetime:**  
SAP GUI for Windows 7.30 is built with Visual Studio 2010 (which is supported until July 2015). Therefore, SAP GUI for Windows 7.30 can be supported longer than release 7.20. |
| **Visual Appearance** | • **New SAP GUI design "Corbu":**  
The new "Corbu" design comes with a reduced color palette and enables a good integration into NWBC and SAP Portal with respect to look and feel.  
• **Support for different color schemes in SAP Signature Design:**  
The color scheme can be changed per system and even per client in order to distinguish different systems more easily. SAP offers 5 different color schemes (blue, red, green, purple and gold). Additionally, a system administrator can define a default color scheme per system. |
| **Usability**       | • **Customizable tab order:**  
Users can change the tab sequence on application screens according to their needs.  
• **Comments for connection entries in SAP Logon:**  
In SAP Logon, users and administrators can define comments per connection entry/shortcut/favorite. This will help users to identify the purpose of each entry.  
• **SAP Logon - Navigation to connection entry:**  
In SAP Logon, you can now easily navigate from a favorite entry to the related connection entry.  
• **Floating docking containers:**  
Docking containers (like in transaction SE80) can be moved as preferred by the user. The user settings can be persisted to enable users to change the layout of some screens according to their preference.  
• **Usability improvements in ALV:**  
Some operations in ALV (like the block copy) have been improved.  
• **Usability improvements for the security configuration:**  
The security center in the SAP GUI options dialog is now larger and can be resized. Additionally, users can search and filter for rules.  
Furthermore, the dialog that is displayed to a user in case a security-relevant event is triggered (like the starting of an external program on the PC) has been significantly simplified.  
• **Improved "Loaded DLLs" dialog:**  
The Loaded DLLs dialog is now resizable. You can sort and
the order of loaded modules is enhanced.

- **SAP GUI options dialog supports different font sizes:**
  In release 7.20 the font size settings did not have any effect on the SAP GUI options dialog. Now the SAP GUI font size is also used in SAPGUI options dialog.

### Security

**Indication of security status:**
Once a connection to an SAP System has been established, SAP GUI shows whether the connection is secure or not (indicated by a lock icon in the SAP GUI status bar).

### Customization

- **Branding:**
  Administrators can add a logo in the title bar of SAP Signature design to allow customer specific branding on SAP GUI screens.

- **Improved customization of SAP GUI during the installation:**
  The general rule is that HKCU has precedence over HKLM configurations. Therefore the administrator can consistently use HKLM to distribute default values.

- **Customizable permissions in the SAP GUI options dialog:**
  An administrator can define which sections / values can be changed by the users and which ones cannot.

- **Hiding unwanted SAP Logon view modes:**
  The administrator can hide the buttons for any of the view modes in SAP Logon (Tree View, Explorer View or List View). See SAP Note 1710864 for more information.

### Internationalization Support

**Improved RTL version of Textedit Control:**
A version of the Textedit Control that is better suited to RTL (right to left) languages like Hebrew and Arabic has been developed.

### NWSAPSetup

**Reparation of Front-end software installations using NWSAPSetup:**
NWSAPSetup /repair checks for discrepancies in files, services, registry-keys, and other artifacts deployed using NWSAPSetup and repairs the installation of SAP front-end components based on the outcome of these checks.

### Removed Features

- **BW 3.5 Add-On:**
  BW 3.5 Add-On has been removed. For details, see notes 1652771 and 1652772.

- **SAP Logon-based update:**
  The SAP Logon based update mechanism (when starting SAP Logon, SAP GUI checks for updates on the installation source and applies the updates) has been removed, because a superior mechanism is available (the SAP Workstation Update - WUS).

- **SAPPhone Server:**
  The SAPPhone Server and the SAPPhone Status Update control are no longer delivered together with SAP GUI for
1.2 General Features Overview

This section describes the general features of NetWeaver SAPSetup (NW SAPSetup) that have already been introduced with SAP GUI 7.10:

- The multi-product installation tool lets you maintain not only the SAP GUI for Windows 7.10 but almost all Windows-based SAP front-end software on a single installation server.
- Installation server features, such as Import Product, help integrate additional SAP front-end components into an existing installation server.
- You can configure packages with multiple SAP front-end components.
- With NW SAPSetup you can manage multiple SAP front-end components that are deployed on the front ends.
- If available on the installation server, you can deploy multiple SAP front-end components on the front ends using a command on a single line.
- NW SAPSetup provides full-featured install, uninstall, update, and patch of SAP front-end components that are available on an installation server or distribution medium such as a DVD.
- Wizard-driven user interfaces let you manage the installation server easily.
- You can install new components, uninstall existing ones, and update the remaining components in one cycle.
- You can customize the installation of packages by programming events that support Visual Basic (VB) scripting.
- Local Security Handling (LSH), when configured, lets you deploy SAP components on front ends without requiring administrative privileges on all machines.
- An Automatic Workstation Update Service will update the workstations and reboot them if necessary, whenever the installation server is patched, or the packages installed are updated.
- The folder for installation server creation is automatically configured. By default, it is made NULL-session accessible. Thus, it will be automatically shared on the network for everyone to read. This feature can also be switched off.
● The remote workstation control feature uses the Windows Management Instrumentation (WMI) to help you remotely access and control workstations on which you have administration privileges. You have the possibility to collect remote log files, execute processes remotely, and to enumerate remote processes.

● If NwSapSetup.exe is started from a batch file, the return code can be caught by the %ErrorLevel% environment variable.

1.3 SAP Notes for the Installation

You must read the following SAP Notes before you start the installation. These SAP Notes contain the most recent information about the installation, as well as corrections to the installation documentation.

Make sure that you have the up-to-date version of each SAP Note, which you can find on SAP Service Marketplace at https://service.sap.com/notes.

SAP Notes for the Installation

<table>
<thead>
<tr>
<th>SAP Note Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>456905</td>
<td>Composite SAP Note about SAPSetup as of Release 6.20. Lists the SAP Notes relevant for the installation of SAP GUI for Windows.</td>
</tr>
<tr>
<td>26417</td>
<td>Latest information about hardware and software requirements of SAP GUI for Windows</td>
</tr>
<tr>
<td>66971</td>
<td>Latest information about supported front-end platforms</td>
</tr>
<tr>
<td>147519</td>
<td>Latest information about release and maintenance strategy of SAP GUI.</td>
</tr>
<tr>
<td>166130</td>
<td>Latest information about delivery and compatibility of the components delivered on the SAP NetWeaver Presentation DVD.</td>
</tr>
</tbody>
</table>

1.4 Information Available on SAP Service Marketplace

**Installation of the SAP GUI for Windows**

Latest version of this document: SAP Service Marketplace at https://service.sap.com/instguidesNW

**Installation of the SAP GUI for Java**

You find Information about the installation of SAP GUI for Java on SDN under https://www.sdn.sap.com/irj/sdn/sap-gui → Installation → SAP GUI for Java.

**Installation of the SAP Online Documentation**

You can access the SAP online documentation from the front end. The installation of the SAP online documentation is described in the document Installing the SAP Library on SAP Service Marketplace at https://service.sap.com/instguidesNW → Other Documentation → SAP Library.
SAP GUI Family


Supported Platforms

Information about the platforms on which you can run SAP GUI: SAP Product Availability Matrix at https://service.sap.com/pam or SAP Note 66971

1.5 Naming Conventions

“Upgrade” means the transition from one release to another, for example, from 7.20 to 7.30.

“Update” means a change within the same release. You use a "patch" to apply the update.
2. Planning

Purpose
This section tells you how to plan the front-end installation.

Process Flow
1. You plan an installation scenario [page 16].
2. You meet the hardware and software requirements [page 18].
3. You review the installation and maintenance flow [page 18].

2.1 Installation Scenarios
You can install SAP GUI for Windows in the following ways:

- Workstation installation from a server
  The administrator sets up an installation server, from which the installation of the SAP front-end software is run on many different clients.
  All the necessary files are copied from the server to the client during installation.

- Workstation installation from a distribution medium such as a DVD
  The administrator takes the distribution medium from PC to PC. This is mainly for testing or for standalone computers and is not to be used for software distribution.

  We recommend you to use workstation installation from a server because of its greater flexibility, especially if many workstations are involved.

These methods are described in more detail below.

Workstation Installation from a Server
The installation process from an installation server is flexible, easy, and customizable. It makes maintenance easier in any phase of the distribution process, for example, when patches are to be applied.

You have the following options when installing SAP GUI for Windows with server-based workstation installation:

- Without user interaction (unattended)
- With user interaction (attended), where the user can:
  ○ Select from installation packages that the administrator configured
  ○ Select from the complete component list of each product available on the installation server

The following figure shows how server-based installation works:
The type of user determines which components to install and on which workstations. Different types of user have different requirements. For example, an employee in the HR department requires different products and components than a software developer.

Using an installation server, the administrator can group various components together as installation packages relevant for certain types of employee. The administrator can also specify which package particular users receive or offer a variety of packages and allow the user to choose the most appropriate one.

In addition, you can configure a distribution service to add local security handling functions to the installation server. With local security handling, the installation can be started even in the context of a user who is not a member of the local group of administrators. The distribution service then installs a service process on the client and starts NWSAPSetup.exe in the context of this service. The user rights and privileges are not altered. The installed service does not start other processes except NWSAPSetup from configured installation servers.

The hard disk requirement on the installation server depends on the type and number of products that are added to an installation server. SAP GUI for Windows requires approximately 800 MB with all components installed.

As administrator, you can configure your own installation packages with NWSAPSetupAdmin.exe on the installation server or use the preconfigured packages provided by SAP.

You apply patches on the installation server and call NWSAPSetup on your client again to apply the patch on the client. You can control the installation using the command line. You can perform unattended installations with automatic patch installation on the client. To do this you place the appropriate command line in the logon script of the client. The logon script is a program that is executed when you log on.

Alternatively, you can use the SAP Automatic Workstation Update. Whenever the installation server is patched, or the packages installed are updated, this service will update the workstation(s) and reboot them if necessary. The workstation updater works in two modes - one in the presence of a logged-on user and another in his or her absence:

- When a user is logged on, the user is informed of update availability and the update happens on the user's assent. The user is also informed if a reboot is necessary and the reboot is also only executed on the user's assent.
If no user is logged on, the update is done automatically and the reboot (if necessary) is done automatically, too.

The SAP Automatic Workstation Update is not SAP GUI-specific, it works with all components available on the installation server. For detailed information, see section 3.9 Configuring SAP Automatic Workstation Update.

**Workstation Installation from a Distribution Medium**

Local installation on workstations with a distribution medium such as a DVD is useful for installing SAP GUI on single machines (for example, laptops) that are not connected to a Local Area Network (LAN). You can also use it for test purposes.

This installation type has the following disadvantages:

- No installation scenarios are available.
- When patches need to be applied, you need to patch each workstation separately.

**2.2 Hardware and Software Requirements**

You need to make sure in advance that your system meets the following requirements:

- **Front-end workstations:**
  - Read SAP Note 26417 to check that all hardware and software requirements for the front-end workstations have been met.
  - Hard-disk clones only:
    - If the operating systems of your client computers were generated through hard-disk cloning, make sure that the domain is set correctly. To do this, take the computers out of the domain and then put them back in. This is especially important if you intend to use local security handling (LSH) [page 31].

- **The host for server-based installations must:**
  - Be accessible to all users at any time, even after the installation is complete
    - This is required for maintenance purposes such as the distribution of patches.
  - Have broadband network connection for high throughput
  - Have 800 MB of free disk space
  - Use Windows 2008 R2 Server or Windows 2003 Server

**2.3 Installation and Maintenance Flow**

**Purpose**

This section describes a typical installation and maintenance flow for a server-based workstation installation.

**Process Flow**

1. You set up an installation server [page 20] and, if necessary, local security handling [page 31] (LSH).

   The installation server contains:
   - Installation programs
   - Configuration information (for example, packages)
   - Service files (for local security handling)
○ Front-end components to be installed

2. You maintain installation packages [page 25] for different user groups.

Users can install multiple packages and packages can share components. You can configure installation parameters, such as installation directories for the components that a package contains.

3. We recommend that you configure local security handling [page 31] and test it.

You can do this by logging on to a user PC with a user that does not have local administrator rights and running NWSAPSetup.exe.

Many Windows operating systems have local security mechanisms. In these systems, only users with local administrator rights have write access to parts of the system database and the file system.

NWSAPSetup solves this problem with the Distribution Service (DS), which resides on the server, and the Installation Service (IS) that has been installed on the workstation. The IS starts a new instance of NWSAPSetup.exe that runs with sufficient privileges.

4. You install packages using the logon script [page 40] of your PC or using other software distribution technologies.

5. You patch the installation server [page 30].

6. You upgrade the front-end [page 43] client computers when a new front-end release becomes available.

3. Preparation

Purpose
This section tells you how to prepare an installation server for the front-end software installation.

Process Flow

1. You set up an installation server [page 20].

2. If required, you administer your installation server [page 22].

3. If required, you add new SAP front-end components to an existing installation [page 22].

4. If required, you update products on the installation server with a newer version using a patch [page 24].

5. If required, you create and maintain installation packages [page 25].

6. If required, you patch the installation server [page 30].

7. If required, you configure local security handling [page 31].

After you have set up the installation server, it is ready for use during the deployment of SAP front-end components on the workstations.

Creating packages for deployment is optional. Packages contain administrator-selected components, which are helpful to regulate and customize installation parameters such as the installation directory.
3.1 Setting Up an Installation Server

Use
You use this procedure to help distribute SAP front-end software on multiple workstations on the network.

NWCreateInstServer is a wizard driven tool that helps the administrator create a new installation server. After the server is set up, NWUpdateInstServer starts importing SAP products from the source into the newly created server.

Prerequisites
You need local administrator rights under Windows operating systems with local security mechanisms.

Procedure
1. Execute the file NwCreateInstServer.exe from the SETUP folder of the DVD SAP Product Media.

2. Choose Next to continue.

   ![Warning]
   You can choose Cancel at any stage to abort the process.

NWCreateInstServer.exe prompts you to supply the path where you want to create the installation server.

3. Enter the folder name manually or use Browse to navigate to the folder where you want to create the installation server. Make sure the folder is empty.

4. Choose Verify to make sure that the chosen folder meets the prerequisites:
   - It must exist.
   - It must be accessible to the administrator with full access.

   ![Warning]
   The folder is automatically configured. It is made NULL-session accessible. Thus, it will be automatically shared on the network for everyone to read. If you do not want this automatic configuration, use the command line parameter DontConfigureServerPath.

5. If required, choose Share to maintain the file-sharing properties of the selected folder.

6. Choose Next to continue.

   You see a screen indicating that the server is being created.

   ![Warning]
   Processing is recorded in the following file:
   %ProgramFiles%\SAP\SAPSetup\Logs\NwCreateInstServer.log.

   If there are errors, you see a link to an Error Report. Any errors are recorded in the following file, which you can view using your normal web browser:
   %ProgramFiles%\SAP\SAPSetup\Errors\NwCreateInstServer_<CurrentDateTime>.xml.

   If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.

When the installation is complete, you see a screen confirming that the server has been successfully created.

You now have a valid but empty SAPSetup installation server.
7. Choose Next to continue.  
NWCreateInstServer.exe automatically calls NWUpdateInstServer.exe to transfer SAP products to your installation server.

8. Choose Next to continue.  
You see the following screen:

C:\MyNewInstServer is the path where NWCreateInstServer.exe initially created a new installation server in this example.

9. Enter the folder name manually or use Browse to navigate to the folder of the installation server that you want to update.

10. Choose Next to start the server update.  
You see a screen indicating that the server is being updated.

Processing is recorded in the following file:
%ProgramFiles%\SAP\SAPSetup\Logs\NWUpdateInstServer.log

If there are errors, you see a link to an Error Report. Errors are recorded in the following file, which you can view using your normal web browser:
%ProgramFiles%\SAP\SAPSetup\Errors\NWUpdateInstServer_<CurrentDateTime>.xml

If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.

NWServerUpdate.exe transfers all SAP products available on the DVD or source to the installation server.

When the update is complete, you see a screen confirming that you can use the installation server for SAP product installation on end-user workstations.
11. If you have .NET Framework version 4 installed, choosing Finish automatically starts NWSAPSetupAdmin.exe from the recently updated installation server.

The new NetWeaver SAPAdmin is a multi-product server administration tool.

More information: Administering an Installation Server [page 22]

You can replicate an installation server to an existing network share by entering the following command:

```
\\InstallationServerShare\Setup\NwCreateInstServer.exe /Dest=<ReplicationPath> /NoDlg
```

After setting up your installation server, it is recommended to look for the latest patches. See also chapter 3.7 Patching the Installation Server.

### 3.2 Administering an Installation Server

**Use**

After you have successfully set up the installation server, you can find NWSAPSetupAdmin.exe in the SETUP directory of the installation server.

NWSAPSetupAdmin.exe is designed to help you administer the multi-product installation server. It supplies the following features:

- **Import Product**
  Use this feature to add new products (for example, SAP front-end components) to an existing installation server for distribution over the network.

- **Export Product**
  Use this feature to export front-end components available on one installation server to another.

- **Delete Product**
  Use this feature to delete a product from an installation server.

- **Create Package**
  Use this feature to create packages for deployment. Packages can contain many components and their installation parameters can also be customized.

- **Create Package Definition File (PDF)**
  You can create a package definition file (PDF) for an installation server package. PDF is a package description format that simplifies the interoperability and information exchange between the SAP Installer and system management products like the System Management Server from Microsoft.

- **Configure Package**
  Use this feature to change the attributes or the content of your packages.

- **Patch**
  Use this feature to patch components that are available on the installation server.

- **Local Security Handling**
  This feature allows workstation users to install SAP components from the installation server without requiring administrative privileges.
NWSAPSetupAdmin.exe requires the .NET Framework 4 to be installed as a prerequisite. You can download the .NET Framework from:


- Configuring SAP Automatic Workstation Update

Whenever the installation server is patched, or the packages installed are updated, this service will update the workstation(s) and reboot them if necessary. The workstation updater works in two modes - one in the presence of a logged-on user and another in his or her absence:

  ○ When a user is logged on, the user is informed of update availability and the update happens on the user's assent. The user is also informed if a reboot is necessary and the reboot is also only executed on the user's assent.

  ○ If no user is logged on, the update is done automatically and the reboot (if necessary) is done automatically, too.

- Control Remote Workstations

This functionality uses the Windows Management Instrumentation (WMI) to help you remotely access and control workstations on which you have administration privileges. You access this feature via the Remote menu, where you find the options to:

  ○ collect remote log files
  ○ execute processes remotely
  ○ enumerate remote processes

You find detailed information in section Controlling Remote Workstations.

3.3 Adding New SAP Front-End Components to an Existing Installation Server

Use

This procedure tells you how to transfer new SAP front-end components on a distribution medium to your installation server. Then you can deploy them to the workstations on the network.

You can add SAP products either using NWUpdateInstServer.exe or NWSAPSetupAdmin.exe (using the import product wizard) that you can find in the SETUP directory of the source medium.

Prerequisites

- An existing installation server
- A medium that contains an SAP product to be added to the installation server
- Enough disk space

You must not use the installation server during processing.

Procedure

To update the installation server with new SAP components, use one of the following two methods:
● Using NWUpdateInstServer.exe
  a. Start NWUpdateInstServer.exe from the SETUP directory of the source that contains the component to be added.
  b. Supply the path of the installation server.
  c. Follow the wizard to update it with components that are available on the source.

● Using NWSAPSetupAdmin.exe
  a. Start NWSAPSetupAdmin.exe from the SETUP directory of the installation server that needs to be updated with the new component.
  b. In the toolbar, choose Import Products.
  c. Follow the wizard and supply the path to the source containing the product to be added to the installation server.

Example
You can update the installation server with the Adobe LiveCycle Designer which is delivered on the same DVD as the SAP GUI for Windows. You just have to start the program <Disc Drive of DVD>:\ADOBE_LC_<release>\setup\NwUpdateInstServer.exe. After being shown a welcome page, you will be asked for the path to the installation server that should be updated. Here, you must navigate to the path of the installation server which has been set up in section 3.1 (C:\MyNewInstServer).

You just have to choose Next and wait until the process ends. Afterwards, the SAPSetup Installation Server Administration Tool (NwSAPSetupAdmin.exe) is displayed. On the Products tab, you will see the added product Adobe LiveCycle Designer.

The user can now install the product by starting the program <Path of the installation server share>\SetupAll.exe and selecting the product to be installed, in this case the Adobe LiveCycle Designer.

3.4 Updating Products on the Installation Server with a Newer Version

Use
If newer releases of SAP products or components are required, you have to update your installation server to be able to distribute these new products to the workstations using a network.

This wizard-driven process is handled by a tool called NWUpdateInstServer.exe that you can find in the SETUP directory of your source medium.

Prerequisites
- A medium with an SAP product in a release newer than that on the installation server
- Enough disk space

You must not use the installation server during processing.

Procedure
1. Follow the steps as described in Adding New SAP Front-End Components to an Existing Installation Server [page 23].
2. Start NWUpdateInstServer.exe from the source medium.
3. Follow the instructions in the wizard.

You can also update products on the Installation Server by using the following command line:

```
\UpdateSource\Setup\NwUpdateInstServer.exe
/dest=<installation server setup directory> /NoDlg or /silent
```

For a description of the command line parameters see section 5.5.

3.5 Deleting Products from the Installation Server

To delete products from the installation server, proceed as follows:

1. Start `NWSAPSetupAdmin.exe` from the SETUP directory of the installation server where you want to delete a product.
2. On the Products tab, right-click the product to be deleted and choose Delete Product.
   The product deletion wizard appears.
3. Follow the deletion wizard.
   At the end of the deletion process, a message will inform you, if the deletion process completed successfully.

   If you delete a product that is still a part of a preselection package, the indicator appears next to the name of the affected package on the Packages tab. This indicates that a product that is a part of the package is not available on the installation server. Thus, either the package has to be deleted or the product must be re-imported into the server from another source.

3.6 Creating and Maintaining Installation Packages

After setting up an installation server, you can create packages for an installation performed by users. The tool that you use is `NWSAPSetupAdmin.exe`, which you can find in the SETUP folder on the installation server.

The package creation and deployment in the new NetWeaver SAPSetup is enabled on multiple-product level, so enabling the administrator of the installation server to create packages comprising more than one SAP front-end component and parts.

3.6.1 Creating a New Installation Package

Procedure

1. Start `NWSAPSetupAdmin.exe` from the SETUP folder of your installation server.
2. In the toolbar, choose New Package.
   The Package Creation Wizard appears.
3. To continue, choose Next.
   The wizard displays components available on the installation server.
4. Select the products that you want to add to your package.
Yellow dots indicate changes in the selection list. The green plus signs next to the product names indicate that these products will be installed when the user installs the package on his or her workstation.

5. Choose Next.
   You are prompted for a package name.
6. Enter a name and choose Next.
   NWSAPSetupAdmin.exe now creates a package and confirms the successful creation.
7. To return to NWSAPSetupAdmin.exe, choose Finish.
   The newly created package is now visible in the Package View.
8. Right-click a package and choose Configure from the context menu to customize installation parameters, such as the installation path for components contained in the package.

### 3.6.2 Configuring Packages and Scripting Events

**Purpose**

Package configuration lets the administrator change the attributes of a package (for example, the name), give the package a description and customize the installation of the package by adding scripts that are to be executed during events in the package deployment cycle.

**Prerequisites**

- An installation server
- Packages created by the administrator and available for customization

**Process Flow**
1. Start NWSAPSetupAdmin.exe from the SETUP directory of the Installation Server.

2. Switch to the Configure Packages tab page. In the left window pane, you can see a tree listing the existing packages.

   The indicator ❌ next to a package indicates that the package is incomplete. This typically occurs when a product that the package contains has been deleted from the installation server. You can either delete this package or re-import the missing product.

3. Select the package that you want to customize. You can for example change the name of the package, add a description, or script events.

   The text supplied as description is eventually visible to the end-user wanting to install the package using NWSAPSetup.exe.

4. Optional: Add event-scripting to perform custom actions on the user’s workstation during the installation of the package (for example, copying additional files). You can insert scripting samples delivered by SAP via Insert Script and adapt them to your requirements. The scripts are executed at the following events:
   ○ On Begin Install: executed before the installation of a selected package
   ○ On End Install: executed after the completion of package installation
   ○ On Begin Uninstall: executed before the uninstallation of a selected package
   ○ On End Uninstall: executed after the completion of package uninstallation
   ○ On Begin Update: Executed before the update of a selected Package.
   ○ On End Update: Executed after the completion of the Package update.

   To learn more about the package update option see the next section Changing the Package Content.

5. To save your changes, choose Save.

Sample documentation
The documentation of the samples for package event scripting is contained in the Installation Server Help.chm file, which you can either find on the DVD, or in the installation directory, or using the SAPSetup Installation Server Administration Tool (NWSAPSetupAdmin.exe) by choosing the Help Menu ➔ SAP Installation Server Help. In this documentation, navigate through the tree structure as follows: Administering an Installation Server ➔ Maintaining Installation Packages ➔ Configuring Packages and Scripting Events ➔ Package Event Scripting Samples.

3.6.3 Changing the Package Content

Purpose
The package configuration lets the administrator also update the package content. This means, you can add or remove components to be installed with the package. Also, you can add scripts that are to be executed before or after the update.

Prerequisites
- An Installation Server
- Packages created by the administrator and available for customization.

Process Flow

1. Start NWSAPSetupAdmin.exe from the SETUP directory of the Installation Server.

2. Switch to the Configure Packages tab. In the left window pane, you can see a tree listing the existing packages.

   ![The indicator next to a package indicates that the package is incomplete. This typically occurs when a product that the package contains has been deleted from the installation server. You can either delete this package or re-import the missing product.]

3. Select the package for which you want to update the content, and choose Change Package Content.
   You can now select or deselect components. Components added will be newly installed on the workstations. Those removed will be uninstalled from the workstations, if they are not part of any other package marked for installation. When updating a package, the package installation parameters are also refreshed and include new variables or delete those that belong to components that are no longer part of this package.

4. Optional: Add event-scripting to perform custom actions on the user's workstation during the update of the package. You can insert scripting samples delivered by SAP via Insert Script and adapt them to your requirements. The scripts will be executed before and after the update:
   a. On Begin Update: Executed before the update of a selected Package.
   b. On End Update: Executed after the completion of the Package update.

5. Remember to click the Save button to persist changes made.
   Saving the package increases the version number and the package is marked for update on the workstation. When the package installation is updated on the workstation, the package components that have been newly added or removed by the administrator are automatically installed or uninstalled respectively.

   ![If you are using package event-scripting to transfer your files, the Mark for Update link as seen on the Configure Packages tab can be used to inform the installer of the availability of an update after you have modified this file. The installer will now recognize the package as updated and the modifications will be transferred to the workstations at update time via the OnBeginUpdate and /or OnEndUpdate scripts.]

3.6.4 Deleting an Installation Package

Procedure

1. Switch to Package view.

2. Right-click the package you want to delete.

3. From the context menu, choose Delete Package.

The package is deleted. It is removed from the Package view.
3.6.5 Creating a Package Definition File

Use
You can create a package definition file (PDF) for an installation server package. PDF is a package description format that simplifies the interoperability and information exchange between the SAP Installer and system management products like the System Management Server from Microsoft.

Procedure
Proceed as follows to create a package definition file:

1. If not already started, start NWSAPSetupAdmin.exe from the SETUP directory of the installation server.
2. On the Packages tab, right-click the package for which you want to create a PDF file and choose Create Package Definition File.
3. Choose the directory where you want to save the file, enter a file name, and choose Save.

Result
NWSAPSetupAdmin.exe creates a PDF and an SMS file in the specified directory.

3.6.6 Creating and Deploying Self-Installing Packages

Use
You can create single-file self-installing .exe-packages via NWSAPSetupAdmin.exe.

Such a package contains only those files that belong to the components that are a part of the package. Thus, it reduces your network load in certain distribution scenarios where you previously had to make local copies of your installation source before installing.

This single-file self-installer can also install silently without user interaction.

Prerequisites
- You have created a SAP installation server using NWCreateInstServer.exe available with your SAP GUI DVD, or inside the SETUP folder of any other SAP software installed using SAP Installer.
- You have created a package or packages that contain the desired components.
- Optional: If you want to distribute configuration files, e.g. the saplogon.ini, together with the self-installing package, create a folder on the installation server named CustomerFiles, and copy your files in this folder. See also the scripting example Sample 1: Copying a file that you find by following the instructions given in section Configuring Packages and Scripting Events, point 4.

Procedures
Proceed as follows to create or deploy a self-installing package:

Creating a self-installing package
1. Start NWSAPSetupAdmin.exe (you will need .NET 2.0 to use this version).
2. In the Packages tree, right-click the package you want to create a self-installing file from, and choose Compress Package To Single-File Installer.

3. Following the wizard instructions, you will get a single exe-self-extractor at the end of the process.


Deploying a self-installing package

1. The self-installing file created above can be executed on any workstation to install your package.

2. Follow the installation wizard.
   
   This self-installing package can be installed silently (i.e. without user-interaction) when invoked with the command-line parameter /silent.

Result

You have created and deployed a self-installing package.

Troubleshooting

If you face problems with creating a self-installing package, check first that your server has no missing files - via the Check Server feature in the NWSAPSetup administration tool (NwSapSetupAdmin.exe).

If you encounter problems with installing the self-installing package, use the Check-Workstation tool (NwCheckWorkstation.exe).

3.7 Patching the Installation Server

Use

Patching products on the installation server keeps them up-to-date with the most recent correction and enhancements from SAP.

You can configure the SAP Automatic Workstation Update. This service will update the workstation(s) and reboot them if necessary whenever the installation server is patched, or the packages installed are updated. The workstation updater works in two modes - one in the presence of a logged-on user and another in his or her absence. For detailed information, see section 3.9 Configuring SAP Automatic Workstation Update.

Prerequisites

- An existing installation server

  To ensure a successful patch and to avoid having to reboot after the patch, you can unshare the installation server during the patch and recreate it when the patch has finished.

- A patch supplied by SAP for products or components available on the installation server.

Procedure

1. Start NWSAPSetupAdmin.exe from the SETUP directory of the installation server.

2. Choose Patch Server.

   This starts the patch wizard.

3. Choose Next to continue.

4. Browse to a valid SAP patch file and choose Next to continue.
NWSAPSetupAdmin.exe now validates the patch, which takes a few minutes.

If the patch is valid, you are prompted to proceed with it.

To ensure that the installation server is not in use, the patch now closes NWSAPSetupAdmin.exe before continuing. It restarts NWSAPSetupAdmin.exe after completing the patch.

5. Choose Next to continue.

NWUpdateInstServer.exe starts patching the installation server.

6. Follow the patch wizard, choosing Next as required.

Processing is recorded in the following file:

%ProgramFiles%\SAP\SapSetup\Logs\NWUpdateInstServer.log

If there are errors, you see a link to an Error Report. Any errors are recorded in the following file, which you can view using your normal web browser:

%ProgramFiles%\SAP\SapSetup\Errors\NWUpdateInstServerErrors_<CurrentDateTime>.xml

If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.

At the end of the process, you see a message indicating that the patch was successful.

7. Choose Finish.

NWSAPSetupAdmin.exe now restarts.

If you have patched a SAP front-end component (for example, SAP GUI for Windows 7.30), the version number of this component in NWSAPSetupAdmin.exe increases after applying the patch.

### 3.8 Configuring Local Security Handling

#### Use

Local security handling (LSH) lets users on the network deploy SAP front-end components on their front ends using NetWeaver SAPSetup without requiring administrative privileges on each front end.

#### Prerequisites

- You have set up an installation server [page 20].

- To enable front ends running Windows Vista to use LSH, you need to change the default firewall setting to enable remote service management as follows:
  
  a. Open the control panel and choose Windows Firewall → Change Settings.
  
  b. On tab page Exceptions, select Remote Service Management and choose OK.

#### Procedure

1. Start NWSAPSetupAdmin.exe from the SETUP folder of the installation server.

2. Choose Services and select Configure local security handling.

   The LSH configuration wizard starts.

3. Choose Next.
The wizard prompts you for the credentials of an account that has administrative privileges for all front ends on the network.

4. Enter the account name with domain qualifiers.

5. Choose Verify.
   Verification only confirms that the password supplied matches its repetition. Verification does not validate credentials.

6. Choose Next.

7. Enter details for the installation service (IS) account, verify, and choose Next to complete the process.
   The wizard displays the success state in starting the distribution service and the status bar at the bottom of NWSAPSetupAdmin.exe displays the service state as Active.

8. Test the functioning of the LSH feature by starting NWSAPSetup.exe from this installation server on a front end where the logged-on user has ordinary user privileges (that is, the user does not have administrative privileges).

Result
If the front-end installer starts successfully and is able to install components available on the installation server, the configuration is successful.
If not, you need to reconfigure LSH.

3.9 Configuring SAP Automatic Workstation Update

Use
The SAP Automatic Workstation Update works only when installed on the workstation. Whenever the installation server is patched, or the packages installed are updated, this service will update the workstation(s) and reboot them if necessary. The workstation updater works in two modes - one in the presence of a logged-on user and another in his or her absence:

- When a user is logged on, the user is informed of update availability and the update happens on the user's assent. The user is also informed if a reboot is necessary and the reboot is also only executed on the user's assent.
- If no user is logged on, the update is done automatically and the reboot (if necessary) is done automatically, too.

This service updates itself, when a patch of automatic workstation update is available.

Prerequisites
The workstation side needs a network connection to the installation source for any update to be possible.

On the installation server side, the following prerequisites must be met:

1. The installation server should be hosted on a machine that can work as a file-server and serve numerous network sessions.
2. Windows Server 2003 (or equivalent) is recommended as the installation server operating system with the following 'Local Security Policy':
   - “Accounts: Guest account status” – Enabled.
“Network Access: Let Everyone permissions apply to anonymous users” - Enabled.

3. The installation server should be created (and hence configured) using NWCreateInstServer.exe.

**Procedure**

In order to configure automatic workstation update, proceed as follows:

1. Open the administration tool NWSapSetupAdmin.exe.
2. Choose Services -> Configure automatic update.

   The screen *Automatic Workstation Update Configurations* appears as shown in the following picture:

   ![Automatic Workstation Update Configurations](image)

   You have now several options:

   a. Update re-check frequency
      
      The workstations that will have this feature installed, will poll the installation server at this interval to check for update availability. The default is 24 hours.
   
   b. Enforce reboot after every update
      
      When this flag is not set, the user is asked to reboot only if it is required to complete the deployment process. When the flag is set, a reboot is enforced, which means that the user is always asked to reboot.
   
   c. Additional Update Sources (optional)
      
      You can index additional servers. The update service will then look up the indexed servers per line in the given order for available updates.

3. Save your entries and close the program.

To make the automatic workstation update service available on workstations, you should create a package using NWSapSetupAdmin.exe on the installation server. This package should consist of SAP GUI for Windows and SAP Automatic Workstation Update. Once automatic workstation update is installed, then the following programs will run on the workstation in the background:

NWSAPSetupUserNotificationTool.exe and
NWSAPAutoWorkstationUpdateService.exe.
The front-end side will query the last 10 installation sources that are network paths.

**Result**

You have configured the SAP Automatic Workstation Update and made it available on the workstations.

To disable the service, activate the option *Disable Automatic Workstation Update* in the configuration tool on the installation server (see picture above). This configuration change is propagated as an update to the workstations at the time of the next update check.

Once disabled, this action cannot be undone until the Automatic Workstation Update Service is reinstalled.

### 3.10 Controlling Remote Workstations

**Use**

The remote workstation control functionality helps you to remotely access and control workstations on which you have administration privileges.

**Prerequisites**

- Since this functionality uses the Windows Management Instrumentation (WMI) service, WMI has to be enabled.
- The firewall should be configured, so that WMI access is not blocked.
- You need to be an administrator on the workstation you want to access. This means, you should have either domain administrator privileges or local administrator rights for the corresponding machine.

**Procedure**

In order to control workstations remotely, proceed as follows:

1. Open the administration tool `NWSapSetupAdmin.exe`.
2. Choose *Remote*.

   You have now several options:

   - Collect remote log files

     With this option, you can collect log files from remote workstations. For this, you just have to enter the workstation name. In case you want to collect log files from several machines, you have to separate the different names by a comma.

     **Concerning the section Optional - Administrative Credentials:** You need to supply administrative credentials for the workstation only if you are not running this application using the same credentials. For example, if you are domain administrator and the workstation is not part of your domain; however, you have local administration rights for the machine. Then you would enter your local administration credentials here. This data will not be saved.

     Finally, you choose *Collect* to collect the log files from the remote workstations. If you want to stop the collection process, just press *Abort*. When the file collection is finished, Windows Explorer opens automatically the corresponding folder under `%temp%\SAPRemoteWksta\`.

   - Execute processes remotely
With this option, you execute processes on a remote workstation. You just have to enter the workstation name as well as the application name in the appropriate field. Also, you can supply the application with the appropriate command line parameter, for example: `c:\Program Files\sap\sapsetup\setup\nwsapsetup.exe /uninstall /all/silent`. Then choose **Execute** to run the process on the remote machine.

Start only non-interactive processes with this feature, because WMI will not allow the application started remotely to interact with the user.

To get a list of running processes, use option **Display Running Processes** (for details see also paragraph 'Enumerate remote processes' below).

e. Enumerate remote processes

With this option, you get a list of processes running on a remote workstation. Just enter the workstation name and choose **Display**. If you want to terminate a process, select the process and choose **Terminate**.

Be careful with the **Terminate** option, because the user may lose unsaved data.

**Troubleshooting**

If you encounter problems with the WMI feature, diagnose WMI connectivity to a remote workstation using the Microsoft tool `wbemtest.exe`. Note, that you have to supply the connection namespace as `\\WorkstationName\root\cimv2`.

**Delegation**

In order to start an installation on a remote workstation that is located on an installation server, delegation is required to be activated for the client machine(s) in question. Please, refer to the Microsoft TechNet article at [http://technet.microsoft.com/en-us/library/ee692772.aspx](http://technet.microsoft.com/en-us/library/ee692772.aspx), question 10 for further details.

**4. Installation Process**

**Purpose**

This section provides information about the steps that you have to perform to install your SAP front end.

**Prerequisites**

You have completed **planning** [page 15] and **preparation** [page 19] before you start the installation.

In the event of errors, consult the **log files** [page 47] before creating a problem message.

If required, create a problem message in BC-FES-INS and attach these files to the message.

**Process Flow**

1. You **perform the installation** [page 36].
2. You **perform the required software updates** [page 43].
4.1 Installation of the SAP Front End

Purpose
This section describes how you install the SAP front-end software.

Process Flow
You install components on your front end centrally from an installation server or locally from a distribution medium such as DVD.

4.1.1 Installing Components from an Installation Server

Use
This procedure tells you how to install components from an installation server.

More information on how to install packages from an installation server:

- Installing Packages Configured by the Administrator
- Installing Packages Using the Logon Script

Prerequisites

- You have already set up an installation server.
- The user logged on to the front end must have local administrative privileges.
- If the user does not have local administrative privileges, make sure that local security handling is correctly configured on the installation server.

Procedure

1. Start NWSAPSetup.exe from the SETUP folder on the installation server.
   The SAPSetup installation wizard appears.
2. Choose Next.
   The product list is displayed. Products that have already been installed are pre-selected as shown in the following picture:
3. Select the products or SAP front-end components that you want to install or deselect the ones you want to remove.

Yellow dots indicate changes in the selection list. The green plus next to a product name indicates that this product will be installed when the user installs the package on his or her workstation.
If you deselect a product in this list that has already been installed, a red minus appears to indicate that this product is marked for uninstallation.

4. After (de)selection, choose Next.

The installation wizard might prompt you to enter or change information to customize the installation of the selected products, such as the installation folder.

![SAP Front-End Installer](image)

The default path for installing SAP GUI for Windows is `C:\%ProgramFiles%\SAP\FrontEnd`, but you can change this if required.

5. If necessary, change this information and choose Next to start the installation.

The installation starts and a progress screen appears.

![Progress Screen](image)

Processing is recorded in the following file:

`%ProgramFiles%\SAP\SAPsetup\Logs\NWSAPSetup.log`

If there are errors, you see a link to an Error Report. Errors are recorded in the following file, which you can view using your normal web browser:

`%ProgramFiles%\SAP\SAPsetup\Errors\SAPSetupErrors_<DateTime>.xml`

If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.

When the update is complete, you see a confirmation screen. Your SAP front-end component is now successfully configured and ready to use.

**4.1.1.1 Installing Packages Configured by the Administrator**

**Use**

This procedure lets you install or remove packages on your front end that have been configured by the administrator on the installation server.
Be careful when removing packages. Make sure you do not mistakenly remove shared components that are used by other packages you want to keep.

Prerequisites

- You have already set up an installation server [page 20].
- The user logged on to the front end must have local administrative privileges.
- If the user does not have local administrative privileges, make sure that local security handling is correctly configured [page 31] on the installation server.
- The administrator has created packages using NWSAPSetupAdmin for deployment on the front end.

Procedure

1. Start NWSAPSetup.exe /package from the SETUP folder of the installation server or distribution medium. A list of the packages that the user is authorized to install or uninstall is displayed. Packages that have already been installed are pre-selected. In the following case, the package Hospital Planning Package is already installed on the workstation.

   ![SAP Front-End Installer](image)

   - Switch to a list of all available products

2. Select the components or packages that you want to install or deselect the ones you want to remove.
In this case, the BW Package has been selected for installation. The yellow dot indicates a change in the selection list. The green plus next to the product name indicates that this object will be installed when the user installs the package on his or her workstation. If you deselected a package, you would see a red minus next to the object selected for de-installation.

3. After (de)selection, choose Next.

NWSAPSetup now processes the packages and displays the completion status when finished.

If errors occur during the installation, SAPSetup displays a link to a document in which the errors have been logged. Contact the administrator of the installation server or the network and pass on the information given in this document.

4.1.1.2 Installing Packages Using the Logon Script

Use

Since the front-end software is normally installed on a large number of computers, NWSAPSetup lets you automate this task.

By inserting a command line into the logon scripts of the computers on which the front-end software is to be installed, you can start a package installation each time the user logs on.

Prerequisites

Make sure that the front-end software (especially SAP GUI) is not running when you perform the procedure below because program files in use might cause a reboot.
Procedure

Enter the following command (both the path and either the package name or unique package identifier must be used):

\<server>\<shared folder>\setup\NWSAPSetup.exe /package:"<package command-line name>" /silent

You can also call NWSAPSetupAdmin.exe in the same way to perform this task.

When you start this command for the first time on a computer, NWSAPSetup installs the specified package.

For a list of options, see Command Line Parameters [page 47].

4.1.2 Installing Components Locally from a Distribution Medium

Use

This procedure installs SAP front-end software components on a single computer from a distribution medium such as a DVD.

Prerequisites

The user logged on to the front end must have local administrative privileges.

Procedure

1. In folder Gui\Windows\Win32 on the SAP NetWeaver Presentation DVD, start SAPGUISetup.exe.

   The SAPSetup installation wizard appears, showing you a list of components that are part of the product SAP GUI for Windows 7.30.

   To view and optionally install all products – that is, SAP front-end components available on the installation medium including SAP GUI and others (the SAP NetWeaver Presentation DVD contains SAP GUI for Windows and SAP BI front end as well as other components that can be integrated on an individual basis) – use SetupAll.exe.

2. Choose Next.

   A list with (de)selectable products is displayed:
Products that have already been installed are pre-selected.

3. Select the products or SAP front-end components that you want to install or deselect the ones you want to remove.

Changes in the selection list are indicated by a yellow dot. If you select a product for installation, you will see a green plus next to the product to install. If you select a product for de-installation, a red minus appears as shown in the following picture:

4. Choose Next.
The installation wizard might prompt you to enter or change information to customize the installation of the selected products, such as the installation folder.

The default path for installing SAP GUI for Windows is C:\%ProgramFiles\%SAP\FrontEnd, but you can change this if required.

5. If necessary, change this information and choose Next to start the installation.

The installation starts and you see a progress screen.

Processing is recorded in the following file:

%ProgramFiles%\SAP\SAPetup\Logs\NWSAPSetup.log

If there are errors, you see a link to an Error Report. Errors are recorded in the following file, which you can view using your normal web browser:

%ProgramFiles%\SAP\SAPSetup\Errors\SAPSetupErrors_<DateTime>.xml

If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.

When the update is complete, you see a confirmation screen. Your SAP front-end component is now successfully configured and ready to use.

4.2 Update of the SAP Front End

Purpose
This section describes how you update the installed front ends when a newer version is available as a patch either on the installation server or on a distribution medium (such as a DVD).

Patches for SAP GUI for Windows do not contain the complete set of files required for SAP GUI for Windows. Therefore, you cannot upgrade to a new release by just applying a patch for the new release to your existing installation.

Instead you have to start the installation of the new release using the SAP GUI version delivered on the SAP NetWeaver Presentation DVD. Afterwards you can use patches to update the new SAP GUI for Windows release.

Process Flow
You can update the SAP front end in one of the following ways:

Updating the Front End from an Installation Server [page 43]

Patching a Standalone Front End [page 43]

4.2.1 Updating the Front End from an Installation Server

Use
You can update the front end from an installation server.

Procedure
Updating the front end basically involves the same steps as an installation, see section Installation of the SAP Front End from an Installation Server [page 36].
You have the possibility to have the update run unattendedly or automatically:

- For unattended update, use the following command line:
  ```
  \<server_path>\setup\NWSAPSETUP.exe /UPDATE /silent
  ```

  To update a specific package or product, add:
  ```
  /package="package command-line name"
  ```
  Or
  ```
  /product="product command-line name"
  ```

  You will find the command-line name of the package or product in the administrative console \NWSAPSetupAdmin.exe.

- For automatic update, you can use the SAP Automatic Workstation Update. Whenever the installation server is patched, or the packages installed are updated, this service will update the workstation(s) and reboot them if necessary. The workstation updater works in two modes - one in the presence of a logged-on user and another in his or her absence
  - When a user is logged on, the user is informed of update availability and the update happens on the user's assent. The user is also informed if a reboot is necessary and the reboot is also only executed on the user's assent.
  - If no user is logged on, the update is done automatically and the reboot (if necessary) is done automatically, too.

  The SAP Automatic Workstation Update is not SAP GUI-specific, it works with all components available on the installation server. For details, see section 3.9 Configuring SAP Automatic Workstation Update.

**Result**

Depending on the chosen update method, the front end is updated with or without user interaction. In case of a user-interactive update, the user just has to choose Next to start the front-end update.

### 4.2.2 Patching a Standalone Front End

You can update a standalone front end by running a patch on it. Updating involves the same steps as an installation.

More information: [Installation of the SAP Front End](page.36)

- We recommend updating with an installation server instead of updating individual front ends by running a patch.

### 5. Additional Information

The following sections are optional and provide additional information:

- [Removing an Installation Server](page.45)
- [Uninstalling the SAP Front End](page.45)
5.1 Removing an Installation Server

Use
You can remove an installation server if it is no longer needed.

Procedure
1. If local security handling [page 31] is configured, start NWSAPSetupAdmin.exe and stop it using the Services menu.
2. First unshare the folder so that the installation server is not available to front ends on the network.
3. Delete the folder from the file system using the Windows explorer.

5.2 Uninstalling the SAP Front End

Prerequisites
Make sure that SAP GUI for Windows applications are not running at uninstall time. If an application is running during the uninstallation, the user is prompted to reboot afterwards.

Procedure
1. Choose Start → Settings → Control Panel → Add or Remove Programs.
   A list of the installed applications appears.
2. Select SAP GUI for Windows 730.
3. Choose Remove.
4. Choose Next.

Result
SAP GUI for Windows is uninstalled and a log file is generated.

To perform silent, unattended uninstallation, enter the following commands:

NWSAPSetup.exe /Product="<product name>" /Silent /Uninstall for uninstalling a certain product, for example SAPGUI710. Note: To ensure the upgrade possibility, the product name of the SAP GUI for Windows 7.30 is still SAPGUI710.

NWSAPSetup.exe /all /Silent /Uninstall for uninstalling all SAP components installed by SAPSetup without having to call specific command-lines for specific products

You find more information on this in section 5.5 Command Line Parameters.
5.3 FAQs

You can find FAQs for the server and the client part of NetWeaver SAP Setup either from the DVD, from the installation directory, or in the system documentation of the NetWeaver SAPSetup Server Installation Administration Tool (NWSAPSetup.exe) choosing Help -> SAP Installation Server Help.

The FAQs for the server can be found under SAP Installation Server Help -> Troubleshooting and FAQs.

The FAQs for the client can be found under SAP Front-End Installer Help -> Troubleshooting and FAQs.

5.4 Diagnosing Front-End Software Installations using NWCheckWorkstation

To diagnose a workstation containing installed SAP components, start NWCheckWorkstation.exe from either the SETUP directory of the Installation Server or from the SETUP directory of the workstation (%PROGRAMFILES%\SAP\SAPSetup\Setup), and follow the wizard. You will be presented with a report on completion of the check process.

NWCheckWorkstation verifies the installation of SAP front-end components by checking for discrepancies in files, services, registry-keys, and other artifacts deployed using NWSAPSetup.

The workstation check tool will collect critical installation files and compress them into a cabinet archive. This CAB-File will be presented to the user after the completion of the process, and can be supplied to SAP support staff when reporting installation issues - for quicker diagnosis.

5.5 Repairing Front-End Software Installations using NWSAPSetup

To repair a workstation containing installed SAP components, start NWSAPSetup.exe from the SETUP directory of the Installation Server. NWSAPSetup.exe has to be called from the command line with /repair.

NWSAPSetup /repair checks for discrepancies in files, services, registry-keys, and other artifacts deployed using NWSAPSetup and repairs the installation of SAP front-end components based on the outcome of these checks.

Note that the repair process includes an update of all Front End components as described in chapter 4.2.1. If the version of a component on the installation server is higher than of the component installed on the workstation, then this component will be updated.

When the repair process starts, a progress screen appears. Processing is recorded in the following file: %ProgramFiles%\SAP\SAPsetup\Logs\NWSAPSetup.log

If there are errors, you see a link to an Error Report. Errors are recorded in the following file, which you can view using your normal web browser:

%ProgramFiles%\SAP\SAPsetup\Errors\SAPsetupErrors_<DateTime>.xml

If you have a problem, create a problem message on component BC-FES-INS and attach these files to the message.
When the repair process is complete, you see a confirmation screen. Your SAP front-end components are now successfully repaired and ready to use.

### 5.6 Viewing Log and Error Files

#### Log Files

All the installation tools described in this document maintain an activity record in log files that you can find here:

%ProgramFiles%\SAP\SAPSetup\Logs

Each tool stores the last ten log files.

#### Error Files

Errors are stored in an XML format in files that you can view in any browser and you can find in the following folder:

%ProgramFiles%\SAP\SAPSetup\Errors

If you have a problem, create a problem message in BC-FES-INS and attach the relevant log files to the message.

#### Log and Error Files for Each Tool

<table>
<thead>
<tr>
<th>Tool</th>
<th>Log File</th>
<th>Error File</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWCreateInstServer.exe</td>
<td>NWCreateInstServer.log</td>
<td>NWCreateInstServerErrors_&lt;DateTime&gt;.xml</td>
</tr>
<tr>
<td>NWUpdateInstServer.exe</td>
<td>NWUpdateInstServer.log</td>
<td>NWUpdateInstServerErrors_&lt;DateTime&gt;.xml</td>
</tr>
<tr>
<td>NWSAPSetupAdmin.exe</td>
<td>NwSAPSetupAdmin.log</td>
<td>NWSAPSetupAdminErrors_&lt;DateTime&gt;.xml</td>
</tr>
<tr>
<td>NWSAPSetup.exe</td>
<td>NWSAPSetup.log</td>
<td>SAPSetupErrors_&lt;DateTime&gt;.xml</td>
</tr>
</tbody>
</table>

### 5.7 Command-Line Parameters

In this section, you find two tables with command line parameters:

- **for installation server creation and update**
- **for frontend installation and update**

#### Installation Server Creation and Update Command Line Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/Dest</td>
<td>Use this parameter to supply the destination folder where you wish to create your installation server.</td>
</tr>
<tr>
<td></td>
<td>Sample: /Dest=”C:\MyInstServerPath”</td>
</tr>
<tr>
<td>/noDlg</td>
<td>Shows only the progress dialog</td>
</tr>
<tr>
<td></td>
<td>Displays no other user interface. You can use it instead of /silent, if you wish to see progress.</td>
</tr>
</tbody>
</table>
If using /noDlg, you need to supply the destination server path via /Dest.

<table>
<thead>
<tr>
<th>Command-Line Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/silent</td>
<td>Displays no user interface – not even progress</td>
</tr>
<tr>
<td></td>
<td>If using /silent, you need to supply the destination server path via /Dest.</td>
</tr>
<tr>
<td>/DontConfigureServerPath</td>
<td>Enables the automatic installation source folder configuration (network share creation and null-session accessibility).</td>
</tr>
</tbody>
</table>

You can use command-line parameters to automatically replicate your (master) installation server across multiple locations.

**Front-End Installation and Update Command Line Parameters**

You can call NWSAPSetup.exe with the command-line parameters listed below.

<table>
<thead>
<tr>
<th>NWSAPSetup Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/package:=&quot;&lt;package command-line name&gt;&quot; [silent] [uninstall] [update]</td>
<td>Displays the wizard that lets you choose packages</td>
</tr>
<tr>
<td></td>
<td>You cannot switch to Product View.</td>
</tr>
<tr>
<td>/Product:=&quot;&lt;product command-line name&gt;&quot; [uninstall] [silent] [update]</td>
<td>If no product name is supplied, this command line parameter enables a view of available products and products that have already been installed.</td>
</tr>
<tr>
<td></td>
<td>If a product name is supplied, the installer displays information about the supplied product only.</td>
</tr>
<tr>
<td></td>
<td>You cannot switch to Package View.</td>
</tr>
<tr>
<td>/ForceWindowsRestart</td>
<td>Restarts the workstation automatically when the installation is done.</td>
</tr>
<tr>
<td></td>
<td>Use in combination with package and product after /silent or /nodlg.</td>
</tr>
<tr>
<td></td>
<td>Example:</td>
</tr>
<tr>
<td></td>
<td>&lt;installation source&gt;\setup\nwsapsetup.exe /silent /product=&quot;SAPGUI710&quot; /ForceWindowsRestart</td>
</tr>
<tr>
<td>/noDlg</td>
<td>Shows only the progress dialog</td>
</tr>
<tr>
<td></td>
<td>Displays no other user interface. You can use it instead of /silent.</td>
</tr>
</tbody>
</table>
### /silent
Displays no user interface – not even progress

- If using /silent, you need to specify a product name or package name.

### /SMS:

```
<package command-line name>[/noDlg] [/silent] [/uninstall]
```

Creates a status file (Package Name.MIF) in the %TEMP% folder that indicates the success or failure of the package installation, or uninstallation.

Typically used by software distribution systems such as SMS to determine the success or failure of a remote installation (advertised package installation).

### /uninstall
Uninstalls components that belong to a specified product or a package.

This command-line parameter is valid only together with one of the following:

- `/Product="Product Command-Line Name"`
- `/Package="Package Command-Line Name"`
- `/all` for uninstalling all SAP components installed by SAPSetup; works only when supplied with `/nodlg` or `/silent`

### /update
Updates components present in a newer version on the installation server due to a patch.

To update a specific product or package, supply an additional parameter:

- `/Product="Product Command-Line Name"`
- `/Package="Package Command-Line Name"`

You can install multiple products using a single command with the + operator, as shown in the following examples:

```
\"ServerName\ShareName\Setup\NwSAPSetup.exe
/Product="SAPGUI710+SAPBI" /NoDlg
```

To uninstall multiple products, append the `/uninstall` command-line parameter.

### 5.8 Return Codes

If you start `NwSapSetup.exe` from a batch file, the return code can be caught by the `%ErrorLevel%` environment variable.
Example:

```bash
<Path to your installation source>\setup\NwSAPsetup.exe
/package="<Name of your Installation package>" /silent
echo %ErrorLevel%
```

The following table gives an overview of the return codes for `NwSapSetup.exe` and their descriptions:

<table>
<thead>
<tr>
<th>Return Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Process ended without any errors detected.</td>
</tr>
<tr>
<td>48</td>
<td>General Failure</td>
</tr>
<tr>
<td>67</td>
<td>Installation is canceled by the user.</td>
</tr>
<tr>
<td>68</td>
<td>Invalid patch</td>
</tr>
<tr>
<td>69</td>
<td>Installation engine registration failed.</td>
</tr>
<tr>
<td>70</td>
<td>Invalid XML Files</td>
</tr>
<tr>
<td>129</td>
<td>Reboot is recommended.</td>
</tr>
<tr>
<td>130</td>
<td>Reboot was forced.</td>
</tr>
<tr>
<td>144</td>
<td>Error report has been created.</td>
</tr>
<tr>
<td>145</td>
<td>Error report has been created and reboot is</td>
</tr>
<tr>
<td></td>
<td>recommended.</td>
</tr>
<tr>
<td>146</td>
<td>Error report has been created and reboot is</td>
</tr>
<tr>
<td></td>
<td>forced.</td>
</tr>
</tbody>
</table>

In case of return codes 144-146, have a look at the error and log file for `NwSapSetup.exe` as described in section Viewing Log and Error Files.

### 5.9 Component List

The component list describes the features and functions of the selectable components, and the prerequisites for using them. The components are grouped under component groups.

**List of Component Groups**

**Component Groups**

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP GUI Suite</td>
<td>SAP GUI for Windows along with all essential sub-components</td>
</tr>
<tr>
<td>R/3 Add-On</td>
<td>Front-end add-on for SAP R/3 Enterprise&lt;br&gt;This package contains application extensions that are needed for some R/3 transactions.</td>
</tr>
<tr>
<td>General Add-On</td>
<td>Front-end add-on that can be used to extend functionality of SAP systems and that are not restricted to one SAP Component</td>
</tr>
<tr>
<td>Legacy Components</td>
<td>Components for the usage with older SAP releases (SAP R/3 4.6 and lower) or old Office products (Excel 95, ...)</td>
</tr>
</tbody>
</table>

SAP Front End Installation Guide 730 50
These components will only be needed if you intend to use this version of SAP GUI for Windows with your old SAP installations.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM Add-On</td>
<td>Front-end add-on for SAP Customer Relationship Management (CRM)</td>
</tr>
<tr>
<td>KW Add-On</td>
<td>Front-end add-on of SAP’s Knowledge Management solution that includes all SAP training courses and all SAP documentation</td>
</tr>
<tr>
<td>SCM Add-On</td>
<td>Front-end add-on for of SAP Supply Chain Management (SCM)</td>
</tr>
<tr>
<td>SEM Add-On</td>
<td>Front-end add-on for SAP Strategic Enterprise Management (SEM)</td>
</tr>
<tr>
<td>i.s.h.med Planning Grid</td>
<td>The i.s.h.med Planning Grid is the graphics-based tool for planning appointments in the clinical system i.s.h.med. This component contains the current planning grid version as of SAP ECC 6.0, Industry Extension Healthcare, Enhancement Package 4. Its installation requires the Java Runtime Environment to be installed on the machine. For more information, see SAP Note 1013957 and the i.s.h.med Homepage <a href="http://www.ishmed.com">www.ishmed.com</a> where you can also download planning grid versions of earlier Releases.</td>
</tr>
<tr>
<td>SAP JNet/JGantt</td>
<td>JNet/JGantt is an editor for network graphics that can be used by any application to integrate different forms of graphic representations. This component requires a Java Runtime Environment to be installed on the client machine.</td>
</tr>
</tbody>
</table>
| SAP Automatic Workstation Update | The automatic workstation update service is a new installer feature shipped as of 7.20 compilation 2. It works only when installed on the workstation. Whenever the installation server is patched, or the packages installed are updated, this service will update the workstation(s) and reboot them if necessary. The workstation updater works in two modes - one in the presence of a logged-on user and another in his absence:  
  - When a user is logged on, the user is informed of update availability and the update happens on the user’s assent. The user is also informed if a reboot is necessary and the reboot is also only executed on the user’s assent.  
  - If no user is logged on, the update is done automatically and the reboot (if necessary) is done automatically, too. |
| Business Explorer             | You can perform a local installation of the Business Explorer by running SAPBISetup.exe from the PRES1\GUI\WINDOWS\WIN32 subfolder of the SAP NetWeaver Presentation DVD. You can also import “Business Explorer” to an installation server and define your own packages to include this product. The Business Explorer tree node also contains the OLE DB for OLAP clients to connect to SAP NetWeaver Business Intelligence (BI). |
| ECL Viewer                    | Engineering Client Viewer enables you to view 2D and 3D files in the Document Management System. The following 2D formats are supported: 906, 907, bmp, c4, cgm, dwf, dwg, dxf, gif, hpgl, iges, jpeg, mdl, mi, mls, mpc, ovi, pcx, pict, png, ps, ras, rtf, tgif, tiff, tlc, triff, txt |
The following 3D formats are supported:
- JT, STL, VRML 1.0, for ECL versions lower than 6.0 refer to Note 381777 to use VRML 2.0
- ECL Viewer Release 6.0 supports additionally the following formats:
  - VRML 2.0, PDF with redlining, AutoCAD 2007 (DWG), DGN, 902

The viewer provides functions such as Redlining/Markup, Comparing, Measurement, Stamps and Watermarks, Rotating, Zooming, Printing. Additionally, Dynamic Assembly Viewing, and Cross Sectioning are supported for 3D files.

Discontinued Products
- **BW 3.5 Add-On:**
  - BW 3.5 Add-On has been removed. For details, see notes 1652771 and 1652772.
- **SAPPhone Server:**
  - The SAPPhone Server and the SAPPhone Status Update control are no longer delivered together with SAP GUI for Windows 7.30. For more information see SAP note 171201.
- **PS: Export Interfaces:**
  - The component PS: Export Interfaces is not delivered anymore with SAP GUI.
- **Balanced scorecard and Sales Planning:**
  - The SEM components Balanced scorecard as well as Sales Planning are not part of the delivery of SAP GUI for Windows 7.30. For more information, see SAP Note 1665318.

List of Available Components

SAP GUI Suite

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP GUI</td>
<td>SAP graphical front end with starter application SAP Logon Pad&lt;br&gt;The user can only display preconfigured connection information for SAP systems provided by the administrator (see documentation for details).</td>
</tr>
<tr>
<td>SAP Logon Pad</td>
<td>Desktop and Start menu shortcuts for SAP Logon Pad&lt;br&gt;The functionality of SAP Logon Pad is fully contained in SAP Logon. Therefore these shortcuts are only created if SAP Logon is not selected.</td>
</tr>
<tr>
<td>SAP Logon</td>
<td>Extended starter application SAP Logon with desktop and Start menu shortcuts&lt;br&gt;The user can display and modify connection information for SAP systems.</td>
</tr>
<tr>
<td>Component</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SAP GUI Scripting</td>
<td>SAP GUI scripting interface&lt;br&gt;More information: SAP_GUI_Scripting_API.pdf from the PRES1/DOCU folder on the SAP NetWeaver Presentation DVD</td>
</tr>
<tr>
<td>GUI XT</td>
<td>SAP GUI extensions for client side customizing of SAP Dynpro screens</td>
</tr>
<tr>
<td>Unicode RFC Libraries</td>
<td>Unicode RFC libraries for software developers&lt;br&gt;Supports Unicode and non-Unicode communication partners&lt;br&gt;Accessible from Visual Basic through COM Interface</td>
</tr>
</tbody>
</table>

**R/3 Add-On**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-CS: Remote Data Entry</td>
<td>Module EC: Data input and validation of reported financial data without a connection to an SAP system&lt;br&gt;Requires Microsoft Access 97</td>
</tr>
<tr>
<td>FI-LC: Remote Data Entry</td>
<td>Module FI: Data input and validation of reported financial data without a connection to an SAP system&lt;br&gt;Requires Microsoft Access 97</td>
</tr>
<tr>
<td>Interactive Excel</td>
<td>Module FI or EC: Add-on to Microsoft Excel for creating reports in Microsoft Excel using data from FI-LC or EC-CS consolidation&lt;br&gt;Excel sheets can be filled with data from the SAP system or the Remote Data Entry tools for FI-LC and EC-CS. It can be used for data entry into the FI-LC or EC-CS Remote Data Entry tool.&lt;br&gt;Requires Microsoft Excel 97</td>
</tr>
<tr>
<td>EC-EIS: Microsoft Word Link</td>
<td>Module EC /Executive Information System&lt;br&gt;Transfer of report data to Microsoft Word. Requires Microsoft Word 97 or 2000</td>
</tr>
<tr>
<td>PD: Microsoft Excel Link</td>
<td>Module PT/ Shift Planning&lt;br&gt;Allows you to display the SAP duty roster data with Microsoft Excel. Requires Microsoft Excel</td>
</tr>
<tr>
<td>EH&amp;S WWI</td>
<td>Module EH&amp;S: Windows Word Processor Integration&lt;br&gt;Report tool for SAP PLM Environment, Health and Safety to generate reports such as material safety data sheets and labels&lt;br&gt;RTF Viewer required</td>
</tr>
</tbody>
</table>

**General Add-On**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Synchronization for Microsoft Outlook</td>
<td>Outlook client extension for the synchronization of SAPoffice calendar with the Outlook calendar&lt;br&gt;Requires Microsoft Outlook 98 or higher, but is not compatible with Microsoft Outlook 2010</td>
</tr>
<tr>
<td>Graphical Distribution Network</td>
<td>Display and maintenance of a distribution network inside a corporation</td>
</tr>
</tbody>
</table>
The components SAPphone Server and SAPphone Call Status Control have been removed from SAP GUI for Windows 7.30.

More information: **SAP Note 171201**

The component SAP (WEB) Console is not part of the delivery as of SAP GUI for Windows 7.20.

More information: **SAP Note 1017827**

Microsoft Outlook Integration is no longer supported and therefore has been removed from the *SAP NetWeaver Presentation DVD*.

More information: **SAP Note 627397**

### Legacy Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Word Link via RFC</td>
<td>Installation of Word connection for SAP R/3 3.x, and 4.0B</td>
</tr>
<tr>
<td></td>
<td>Requires Microsoft Word 6, 95, 97, or 2000</td>
</tr>
<tr>
<td>Report Writer: Microsoft Excel Link</td>
<td>Import filter for Microsoft Excel: converts a file exported by Report Writer in Excel format (RPW format) into an Excel spreadsheet</td>
</tr>
<tr>
<td></td>
<td>Works with Excel 95, 97, or 2000</td>
</tr>
<tr>
<td></td>
<td>Used with SAP System Releases 3.1 to 4.5 only.</td>
</tr>
</tbody>
</table>

XXL List Viewer is no longer available on the *SAP NetWeaver Presentation DVD*.

More information: **SAP Note 526579**

### CRM Add-On

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM Front End</td>
<td>Front-end add-on of SAP Customer Relationship Management (CRM)</td>
</tr>
</tbody>
</table>

### KW Add-On

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW Knowledge Workbench</td>
<td>Authoring tool to easily maintain SAP documentation and SAP training</td>
</tr>
<tr>
<td></td>
<td>Requires Microsoft Internet Explorer 5 or higher</td>
</tr>
<tr>
<td>KW Online Editing</td>
<td>Knowledge Warehouse Editing within SAP GUI</td>
</tr>
<tr>
<td></td>
<td>Requires Microsoft Internet Explorer 5 or higher</td>
</tr>
<tr>
<td>KW Translator</td>
<td>Knowledge Warehouse Translator: Translation tool to process translation packages offline</td>
</tr>
<tr>
<td></td>
<td>Requires Microsoft Internet Explorer 5 or higher</td>
</tr>
<tr>
<td>PAW Author</td>
<td>Performance Assessment Workbench Author</td>
</tr>
<tr>
<td></td>
<td>Authoring tool to easily maintain test items, performance units, performance tests and surveys</td>
</tr>
</tbody>
</table>
### SAP Help

**SAP Front End Installation Guide**

**22.05.2012**

- **KW Viewer**: Viewing tool to display training courses offline

- **SAP dts Add-On**
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP dynamic test scripts (SAP dts)</td>
<td>SAP dts helps you to accelerate the test process by easy automation of your end-to-end business process validations. The integrated platform gives you the unique ability to define, compose and execute test scenarios with minimal effort of creation and maintenance. In addition, the solution enables efficient test analysis. Please, note that you need Office 2003 Primary Interop Assemblies and .Net 2.0 to install DTS.</td>
</tr>
</tbody>
</table>

- **SAP i.s.h.med Add-On**
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.s.h.med Planning Grid</td>
<td>The i.s.h.med Planning Grid is the graphics-based tool for planning appointments in the clinical system i.s.h.med. This component contains the current planning grid version as of SAP ECC 6.0, Industry Extension Healthcare, Enhancement Package 4. Its installation requires the Java Runtime Environment to be installed on the machine. For more information, see SAP Note 1013957 and the i.s.h.med Homepage <a href="http://www.ishmed.com">www.ishmed.com</a> where you can also download planning grid versions of earlier Releases.</td>
</tr>
</tbody>
</table>

- **SCM Add-On**
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCM Front End</td>
<td>Front-end add-on of SAP Supply Chain Management (SCM)</td>
</tr>
</tbody>
</table>

- **SEM Add-On**
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphical Assignment</td>
<td>Graphical assignment tool</td>
</tr>
</tbody>
</table>

Note: The components Balanced scorecard as well as Sales Planning are not part of the delivery of SAP GUI for Windows 7.30.

More information: **SAP Note 1665318**