

Software Provisioning Manager 1.0
Document Version: 2.3 – 2017-02-08

Installation of a Standalone SAP Gateway Instance for SAP Systems Based on SAP NetWeaver 7.0 to 7.03 onWindows



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Document History

Note

Before you start the implementation, make sure you have the latest version of this document that is available at <http://service.sap.com/instguides>.

The following table provides an overview on the most important document changes:

Table 1:

| Version | Date | Description |
|---------|------------|--|
| 2.3 | 2017-02-06 | Updated version for software provisioning manager 1.0 SP19 (SL Toolset 1.0 SP19) |
| 2.2 | 2016-10-07 | Updated version for software provisioning manager 1.0 SP18 (SL Toolset 1.0 SP18) |
| 2.1 | 2016-06-06 | Updated version for software provisioning manager 1.0 SP17 (SL Toolset 1.0 SP17) |
| 2.0 | 2016-02-15 | Updated version for software provisioning manager 1.0 SP10 (SL Toolset 1.0 SP16) |
| 1.9 | 2015-10-12 | Updated version for software provisioning manager 1.0 SP09 (SL Toolset 1.0 SP15) |
| 1.8 | 2015-09-14 | Updated version for software provisioning manager 1.0 SP09 (SL Toolset 1.0 SP14) |
| 1.7 | 2015-04-27 | Updated version for software provisioning manager 1.0 SP08 (SL Toolset 1.0 SP13) |
| 1.6 | 2014-11-24 | Updated version for software provisioning manager 1.0 SP07 (SL Toolset 1.0 SP12) |
| 1.5 | 2014-07-07 | Updated version for software provisioning manager 1.0 SP06 (SL Toolset 1.0 SP11) |

| Version | Date | Description |
|---------|------------|--|
| 1.4 | 2014-03-17 | Updated version for software provisioning manager 1.0 SP09 (SL Toolset 1.0 SP10) |
| 1.3 | 2013-10-28 | Updated version |
| 1.2 | 2013-07-15 | Updated version |
| 1.1 | 2013-04-12 | Updated version |
| 1.0 | 2012-12-17 | Initial version |

1 Introduction

1.1 About this Document

This installation guide describes how to install a **standalone** Gateway for SAP systems based on SAP NetWeaver using the installation tool software provisioning manager 1.0 SP19 (“installer” for short), which is part of SL Toolset 1.0 SP19.

You can find a complete list of supported SAP system products in SAP Note [1680045](#).

Each instance of an SAP system with AS ABAP has a Gateway. The Gateway enables communication between work processes and external programs, as well as communication between work processes from different instances of SAP systems.

With a **standalone** Gateway, you can install the Gateway service separately from the SAP system. In this case, the SAP system can access each external Gateway under a different Remote Function Call (RFC) connection.

Note

There is no difference between a standalone Gateway instance for a Unicode system and a standalone Gateway for a non-Unicode system.

1.2 About Software Provisioning Manager

Software Provisioning Manager 1.0 is the successor of the product- and release-specific delivery of provisioning tools, such as SAPInst. Before you run it, we recommend that you always download the latest version of Software Provisioning Manager 1.0. Software Provisioning Manager 1.0 is part of the Software Logistics Toolset 1.0 (“SL Toolset” for short). This way, you automatically get the latest fixes and supported processes. For more information about Software Provisioning Manager as well as products and releases supported by it, see SAP Note [1680045](#) and <http://scn.sap.com/docs/DOC-30236>. “SAPInst” has therefore been renamed to “Software Provisioning Manager 1.0” in this documentation. However, the term “SAPInst” is still used in:

- Texts and screen elements in the Software Provisioning Manager GUI
- Naming of executables, for example `sapinst.exe`

In the following, we generally refer to Software Provisioning Manager 1.0 as the “installer”. We only use the term “Software Provisioning Manager 1.0” if this is required for technical reasons.

- **⚠ Caution**

SAP is going to restrict maintenance for operating system versions that have been initially released with SAP kernel 7.2<x> but are no longer supported for SAP kernel 7.40 and higher. The following Software Provisioning Manager operating system versions are affected:

- WINDOWS SERVER ON IA32 32BIT
- WINDOWS ON IA64
- WINDOWS ON X86_64 64BIT: < 6.0 aka Windows 2008

With the release of Software Provisioning Manager 1.0 SPS 18, the 70SWPM*.SAR archive will stop working on the above listed outdated operating system versions.

Instead of using the 70SWPM*.SAR archive, you must use the RMOS70SWPM*.SAR archive for these outdated operating system versions.

Keep in mind that the RMOS70SWPM*.SAR archive will not receive improvements in the future. SAP maintenance for RMOS70SWPM*.SAR will be finally stopped by the end of 2017.

SAP recommends upgrading the operating system to a more recent version and using RMOS70SWPM*.SAR to export from existing SAP systems.

Related Information

[Preparing the Installation Media \[page 22\]](#)

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 on 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 in the SAP Service Marketplace at <http://service.sap.com/notes>.

Table 2: SAP Notes for the Installation

| SAP Note Number | Title | Description |
|-------------------------|--|---|
| 1680045 | Release Note for Software Provisioning Manager 1.0 | Software provisioning manager 1.0 with installation and system copy for SAP NetWeaver-based systems |
| 1760513 | Inst. Standalone Gateway for SAP Systems Based on SAP NetWeaver 7.0 incl. EHPs | Additional Information about standalone Gateway installation. |

1.4 Accessing the SAP Library

The references to **SAP NetWeaver Library** documentation in this installation guide always refer to the following on SAP Help Portal:

Table 3:

| Product and Release | SAP Library Path |
|--|--|
| SAP systems based on SAP NetWeaver 7.3 | http://help.sap.com/nw73 ► Application Help ► Function-Oriented View: English ► |
| SAP systems based on SAP NetWeaver 7.3 including Enhancement Package 1 | http://help.sap.com/nw731 ► Application Help ► Function-Oriented View: English ► |
| SAP systems based on SAP NetWeaver 7.4 | http://help.sap.com/nw74 ► Application Help ► Function-Oriented View: English ► |
| SAP systems based on SAP NetWeaver 7.5 | http://help.sap.com/nw75 ► Application Help ► Function-Oriented View: English ► |

1.5 Naming Conventions

In this documentation, the following naming conventions apply:

Note

From a technical point of view, the standalone Gateway is set up like an SAP system with its own SAP system ID (SAPSID), its own operating system users, and its own directory structure.

- *installer* refers to *software provisioning manager 1.0*.
- *SAP system* refers to *standalone gateway*.
- *instance* refers to *astandalone gateway instance*.

2 Planning

2.1 Hardware and Software Requirements

You check that your hosts meet the hardware and software requirements for your operating system and the Gateway instance.

Caution

If your hosts do not fully meet the requirements, you might experience problems when working with the SAP system.

Process Flow

1. Check the *Product Availability Matrix* at <http://service.sap.com/pam> for supported operating system releases.
2. If you want to use the standalone Gateway for a **production** system, the values provided by the Prerequisite Checker and the hardware and software requirements checklists are not sufficient. In addition, do the following:
 - You use the hardware sizing information available at <http://service.sap.com/sizing>.
 - You contact your hardware vendor, who can analyze the load and calculate suitable hardware sizing depending on:
 - The set of applications to be deployed
 - How intensively the applications are to be used
 - The number of users

2.1.1 Hardware and Software Requirements Tables

Use

The Gateway host must meet at least the following requirements for the Gateway instance:

Table 5: Hardware Requirements

| Hardware Requirement | Requirement | How to Check |
|----------------------|---|--|
| Minimum disk space | <ul style="list-style-type: none"> 1 GB of hard disk space minimum for the installation as such. Temporary disk space for every required installation medium that you have to copy to a local hard disk: 4.3 GB | <p>To check disk space:</p> <ul style="list-style-type: none"> Windows Server 2012 (R2): <ol style="list-style-type: none"> Open PowerShell in elevated mode, and enter the following command: get-volume Check the value <i>SizeRemaining</i> of the disk you want to install on. Windows Server 2008 (R2): <ol style="list-style-type: none"> Choose ► <i>Start</i> ► <i>All Programs</i> ► <i>Administrative Tools</i> ► <i>Storage</i> ► <i>Computer Management</i> ► <i>Disk Management</i> ►. Right-click the drive and choose <i>Properties</i>. |
| Minimum RAM | The standalone gateway instance requires 1 GB RAM minimum. | <p>To check RAM:</p> <ul style="list-style-type: none"> Windows Server 2012 (R2): Open PowerShell in elevated mode, and enter the following command: Get-WmiObject Win32_ComputerSystem Windows Server 2008 (R2): Choose ► <i>Start</i> ► <i>Control Panel</i> ► <i>System</i> ►. <div> <p>i Note</p> <p>If <i>System</i> is not visible, change <i>View by</i>: from <i>Category</i> into <i>Large icons</i>.</p> </div> |















| Hardware Requirement | Requirement | How to Check |
|------------------------|--|---|
| Paging file size | For more information, see SAP Note 1518419  . | <p>To check paging file size:</p> <ul style="list-style-type: none"> Windows Server 2012 (R2): For more information, see Checking and Changing the Paging File Settings on Windows Server 2012 (R2) [page 40] Windows Server 2008 (R2): <ol style="list-style-type: none"> Choose  Start  Control Panel  System . <div data-bbox="989 728 1396 891" data-label="Complex-Block"> <p>i Note</p> <p>If System is not visible, change View by: from Category into Large icons.</p> </div> <ol style="list-style-type: none"> Choose Advanced system settings. In section Performance, select  Settings...  Advanced . If required, in section Virtual memory, choose Change. <div data-bbox="989 1097 1396 1261" data-label="Complex-Block"> <p>i Note</p> <p>Do not select Automatically managed paging file size for all drives.</p> </div> |
| Processing units | <p>The number of physical or virtual processing units usable by the operating system image must be equal to or greater than 2.</p> <p>One physical or virtual processing unit usable by the operating system image might be sufficient.</p> <p>Examples of processing units are processor cores or hardware threads (multithreading).</p> <p>In a virtualized environment, ensure that adequate processor resources are available to support the workloads of the running SAP systems.</p> | – |
| Suitable backup system | – | – |





Table 6: Software Requirements

| Software Requirement | Requirement | How to Check |
|---------------------------|--|---|
| Windows operating system | <ul style="list-style-type: none"> • 64-bit version of one of the following Windows Server Editions of a supported Windows operating system: <ul style="list-style-type: none"> ◦ Windows Server 2012 (R2): <ul style="list-style-type: none"> ◦ Windows Server Standard Edition ◦ Windows Server Datacenter Edition ◦ Windows Server Standard Edition ◦ Windows Server Enterprise Edition ◦ Windows Server Datacenter Edition ◦ Windows Server 2008 (R2) for Itanium-Based Systems Edition <div style="background-color: #fff9c4; padding: 10px; margin: 10px 0;"> <p> Caution</p> <p>Make sure that you install the English language pack so that your support requests can be handled quickly.</p> </div> <ul style="list-style-type: none"> • For any version of Windows Server, you need the latest supported service pack | <p>To check your Windows version:</p> <ul style="list-style-type: none"> • Windows Server 2012 (R2): Open PowerShell in elevated mode, and enter the following command: Get-WmiObject Win32_OperatingSystem select caption • Windows Server 2008 (R2): <ol style="list-style-type: none"> 1. Choose  Start > All Programs > Accessories > Command Prompt  2. Enter the command winver |
| Windows regional settings | <p><i>English (United States)</i> must be set by default. For more information about localized Windows versions, see SAP Note 362379 .</p> <p>You can install additional languages but the default setting for new users must always be <i>English (United States)</i>.</p> | <p>Choose  Start > Control Panel > Clock, Language, and Region > Language .</p> |

2.2 Basic Installation Parameters

The tables below list the basic system parameters that you need to determine before you start the installation. For all other SAP system parameters, use the **F1** help in the installer screens.

Table 7:

| Parameters | Description |
|------------------------|--|
| SAP System ID <SAPSID> | <p>The SAP System ID <SAPSID> identifies the whole SAP system.</p> <div>  Caution Choose your SAP system ID carefully. You cannot change the SAP system ID after the installation. </div> <p>Make sure that your SAP system ID:</p> <ul style="list-style-type: none"> • Consists of exactly three alphanumeric characters • Contains only uppercase letters • Has a letter for the first character • Does not include any of the reserved IDs listed in SAP Note 1979280 . <div>  Caution You must choose an SAP system ID that is different from the SAP system ID of the central instance of the SAP system for which you want to use the standalone Gateway. </div> |
| Instance Number | <p>Instance Number:</p> <p>Technical identifier for internal processes. Consists of a two-digit number from 00 to 98. The instance number must be unique on a host. That is, if more than one SAP instance is running on the same host, these instances must be assigned different numbers.</p> <div>  Caution Do not use 43, 89 for the instance number because: <ul style="list-style-type: none"> • 43 is used by MSCS • 89 is used by Windows Terminal Server </div> |

| Parameters | Description |
|-----------------------------|--|
| Operating System (OS) Users | <p>The installer will create the following operating system users:</p> <ul style="list-style-type: none"> • If you perform a local installation <ul style="list-style-type: none"> ◦ SAP system administrator: <code><Host_Name>\<sapsid>adm</code> ◦ SAP service user: <code><Host_Name>\SAPService<sapsid></code> • If you perform a domain installation <ul style="list-style-type: none"> ◦ SAP system administrator: <code><Domain_Name>\<sapsid>adm</code> ◦ SAP service user: <code><Domain_Name>\SAPService<sapsid></code> <p>The installer prompts you to assign a password during the input phase of the installation.</p> |

3 Preparation




3.1 Checking the Windows File System

Use

Note

You must use NTFS for an SAP system installation. Do not install the SAP directories on a FAT partition.

Procedure

1. Open the Windows Explorer.
2. Select the relevant disk.
3. Choose  [Properties](#)  [General](#) .
- The system displays the type of file system in use.
4. Check that the file system is NTFS.

3.2 Reducing the Size of the File Cache

Use

Note

This step is not required if you use Windows Server 2008.

The Windows file cache directly competes with SAP programs for memory. Therefore, you should adjust the file cache as described below.

Procedure

1. Choose  [Start](#)  [Control Panel](#)  [Network Connections](#)  [Local Area Connections](#) .

2. In the *Local Area Connection Status* dialog box, choose *Properties*.
3. In the *Local Area Connection Properties* dialog box, double-click *File and Printer Sharing for Microsoft Networks*.
4. Select *Maximize data throughput for network applications*.

Caution

If you cannot select *File and Printer Sharing for Microsoft Networks*, this option has not yet been installed. To install it, you need the Windows Server CDs.

5. To confirm your entries, choose *OK*.

3.3 Required User Authorization for Running the Installer

Use

Although the installer automatically grants the required rights to the user account used for the installation, you have to check whether this account has the required authorization to perform the installation. The authorization required depends on whether you intend to perform a **domain** or **local** installation. If necessary, you have to ask the system administrator to grant the account the necessary authorization **before** you start the installation. If you attempt the installation with an account that has not the required authorization, the installation aborts.

This section informs you about the authorization required for a domain and a local installation.

Procedure

Caution

Do **not** use the user <sapsid>adm for the installation of the SAP system.

Domain Installation

For a domain installation the account used for the installation needs to be a member of the local `Administrators` and the domain `Admins` group of the domain involved. All machines in the system must belong to the same domain. In a domain installation, the user information is stored centrally on the domain controller and can be accessed by all hosts in the system.

If the SAP system is to be distributed across **more than one** machine, SAP strongly recommends you to perform a domain installation to avoid authorization problems.

For a domain installation, you need to:

1. Check that the account used for the installation is a member of the domain `Admins` group.
2. If required, obtain these rights by asking the system administrator to enter the account as a member of the domain `Admins` group.

Local Installation

For a local installation the account used for the installation needs to be a member of the local `Administrators` group of the machine involved. In a local installation, all Windows account information is stored locally on one host and is not visible to any other hosts in the system.

If the SAP system is to run on a **single** machine, you can perform a local installation.

Caution

Do not use the Windows built-in account `Administrator` or the renamed built-in account to install your SAP system with the installer. The built-in account only has restricted network access rights that are required by the installer. If you renamed the built-in account `Administrator`, do not create a new account named `Administrator`.

For a local installation, you need to:

1. Check that the account used for the installation is a member of the local `Administrators` group.
2. If required, obtain these rights by asking the system administrator to enter the account as a member of the local `Administrators` group.

3.4 Performing a Domain Installation Without Being a Domain Administrator

Use

You normally perform a domain installation of the SAP system with a user who is a member of the domain `Admins` group, as described in [Required User Authorization for Running the Installer \[page 16\]](#). If for any reason, the account used for the installation is not a member of the domain `Admins` group, you can perform the installation with a domain user who is a member of the local `Administrators` group. In this case, the domain administrator has to prepare the system appropriately for you. The domain administrator can perform the following steps either using the installer or manually:

1. Create the new global group `SAP_<SAPSID>_GlobalAdmin`.
2. Create the two new SAP system users `<sapsid>adm` and `SAPService<SAPSID>`.
3. Add the users `<sapsid>adm` and `SAPService<SAPSID>` to the newly created group `SAP_<SAPSID>_GlobalAdmin`.

Note

The installer creates the operating system user for the SAP Host Agent by default as a local user that is not a member of the local `Administrators` group. If you want to create this user manually as a domain user, you must perform the following steps:

1. Create the new global group `SAP_SAP_GlobalAdmin`.
2. Create the SAP system user `sapadm`.
3. Add the user `sapadm` to the newly created group `SAP_SAP_GlobalAdmin`.

However, for security reasons we strongly recommend you to create this users as a local user.

Prerequisites

- You must be domain administrator to perform the required steps.
- Windows Server 2008 (R2) and Windows Server 2012 (R2):
You must have installed the feature *Remote Server Administration Tools* as follows:
 - Windows Server 2012 (R2):
Open PowerShell in elevated mode, and enter the following command:
add-windowsfeature RSAT-ADDS
 - Windows Server 2008 (R2):
 1. Choose ► *Start* ► *Administrative Tools* ► *Server Manager* ►.
 2. In the *Server Manager* window, select *Features*.
 3. Select the feature ► *Remote Server Administration Tools* ► *Role Administration Tools* ► *Active Directory Domain Services Tools* ►.

Procedure

Creating the Required Users and Groups Using the Installer

On the host where the SAP system is to be installed, the domain administrator [runs the installer \[page 27\]](#), and chooses ► *<Product>* ► *Software Life-Cycle Options* ► *Additional Preparation Options* ► *Operating System Users and Groups* ► to have the group and users created automatically.

Creating the Required Users and Groups Manually

i Note

To create the users and groups specific to the SAP Host Agent, you must follow the procedure below, and replace the users and groups with those for the SAP Host Agent.

Creating the New Global Group SAP_<SAPSID>_GlobalAdmin

Perform the following steps:

- Windows Server 2012 (R2):
Open PowerShell in elevated mode, and enter the following command:
net group SAP_<SAPSID>_GlobalAdmin /add /domain
- Windows Server 2008 (R2):
 1. Log on as domain administrator.
 2. Start the *Active Directory Users and Computers Console* by choosing:
► *Start* ► *Control Panel* ► *Administrative Tools* ► *Active Directory Users and Computers* ►.
 3. Right-click *Users* in *Tree*, and choose ► *New* ► *Group* ►.
 4. Enter the following:
Group name: **SAP_<SAPSID>_GlobalAdmin**

5. Select the following:
 1. *Group scope*: Global
 2. *Group type*: Security
6. Choose *OK*.

Creating the New SAP System Users <sapsid>adm and SAPService<SAPSID>

Perform the following steps:


- Windows Server 2012 (R2):
 1. Open PowerShell in elevated mode.
 2. Create the <sapsid>adm user with the following command:
`net user sapsid>adm <password> /add /domain`
 3. Create the SAPService<SAPSID> user with the following command:
`net user SAPService<SAPSID> <password> /add /domain`
- Windows Server 2008 (R2):
 1. In *Active Directory Users and Computers Console*, right-click *Users* in *Tree* and choose:

 2. Enter the following:

Table 8:

| Field | Input for <sapsid>adm | Input for SAPService<SAPSID> |
|-------------|-----------------------|------------------------------|
| First name: | None | None |
| Initials: | None | None |
| Last name: | None | None |

3. Choose *Next* and enter the following:
Password: <password>
Confirm password: <password>
4. Select *Password never expires*.

Note

Make sure that no other options are selected.

5. Choose .

Adding the Manually Created Users to Groups

Note

To add the users specific to the SAP Host Agent to the relevant groups, you must follow the procedure below, and replace the users and groups with those for the SAP Host Agent.

Adding the <sapsid>adm User to the SAP_<SAPSID>_GlobalAdmin Group

- Windows Server 2012 (R2):
 Open PowerShell in elevated mode, and enter the following command:
`net group SAP_<SAPSID>_GlobalAdmin <sapsid>adm /add /domain`

- Windows Server 2008 (R2):
 1. In the *Users* folder, double-click the newly created user account `<sapsid>adm` in the list on the right.
 2. Choose ► *Member* ► *Add* .
 3. Select the new *SAP_<SAPSID>_GlobalAdmin* group and choose *Add* to add it to the list.

i Note

By default, the user is also a member of the `Domain Users` group.

4. Choose *OK* twice.

Adding the SAPService<SAPSID> User to the SAP_<SAPSID>_GlobalAdmin Group

- Windows Server 2012 (R2):
Open PowerShell in elevated mode, and enter the following command:
`net group SAP_<SAPSID>_GlobalAdmin SAPService<SAPSID> /add /domain`
- Windows Server 2008 (R2):
 1. In the *Users* folder, double-click the newly created user account *SAPService<SAPSID>* in the list on the right.
 2. Choose ► *Member* ► *Add* .
 3. Select the new *SAP_<SAPSID>_GlobalAdmin* group.
 4. Choose *Add* to add it to the list, and then *OK*.
 5. Choose *OK* to close *SAPService<SAPSID>Properties*.
 6. Close the *Active Directory Users and Computers Management Console*.

3.5 SAP Directories

The installer automatically creates the directories listed in the following figures and tables.

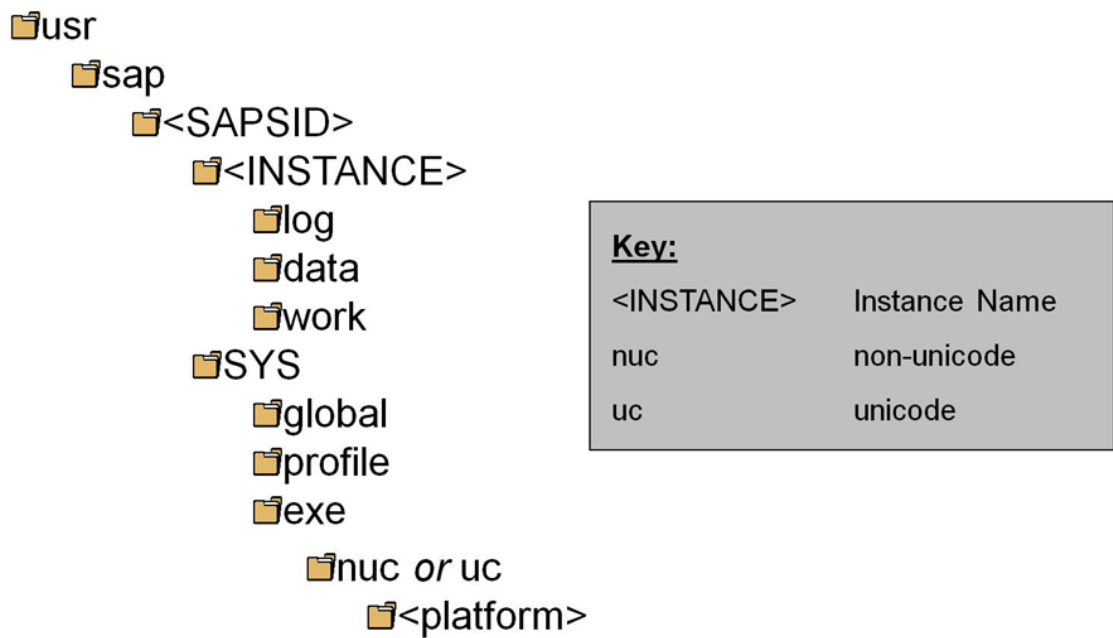


Figure 1:

The instance name (<INSTANCE>) of the Gateway instance is G<Instance_Number>, for example G00.

SAP Directories in Detail

Note

The listed space requirements are initial SAP requirements.

Depending on your operating system, you might also have to add space for administrative purposes.


Table 9:

| Directory Name | Description | Space Required |
|-------------------------------|---|----------------|
| <Drive>:\usr\sap \<SAPSID> | The system will be installed under <Drive>:\usr \sap\<SAPSID>. | 400 MB |


3.6 Using Virtual Host Names

You can use one or more virtual TCP/IP host names for SAP servers within an SAP server landscape to hide their physical network identities from each other. This can be useful when quickly moving SAP servers or complete server landscapes to alternative hardware without having to reinstall or reconfigure.

Prerequisites

- Make sure that the virtual host name can be correctly resolved in your Domain Name System (DNS) setup.
- Make sure that you configured the Windows operating system properly to use virtual host names. For more information, see SAP Note [1564275](#) .

Procedure

To install a **non-high-availability** system using virtual host names, proceed as described in SAP Note [1564275](#) .

3.7 Preparing the Installation Media

This section describes how to prepare the installation media.

Installation media are available as follows:

- The Software Provisioning Manager 1.0 archive containing the installer.
You always have to download the latest version of the Software Provisioning Manager 1.0 archive.
- The media containing the software to be installed, which are available as follows:
 - You normally obtain the physical installation media as part of the installation package.
 - You can also download the installation media apart from the Software Provisioning Manager 1.0 archive from SAP Service Marketplace, as described at the end of this section.

Related Information

[Downloading the Software Provisioning Manager Archive \[page 23\]](#)

[Downloading Installation Media \[page 25\]](#)

[Using the Physical Media from the Installation Package \[page 24\]](#)

3.7.1 Downloading the Software Provisioning Manager Archive




You always have to download and unpack the Software Provisioning Manager 1.0 archive (70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR) from the SAP Software Download Center because you must use the latest version.

Prerequisites

Make sure the latest version of the SAPCAR archiving tool is available on each installation host.

You require the SAPCAR archiving tool to be able to unpack software component archives (*.SAR files), which is the format of software lifecycle media and tools that you can download from the SAP Software Download Center.

If required, you can download the latest version of SAPCAR from:

<http://support.sap.com/swdc>  Software Downloads  SUPPORT PACKAGES & PATCHES  By Alphabetical Index (A-Z)  S  SAPCAR .

For more information about SAPCAR, see SAP Note [212876](#) .

Procedure

1. Download the latest version of the Software Provisioning Manager 1.0 archive 70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR from:


<http://support.sap.com/swdc>  Software Downloads  SUPPORT PACKAGES & PATCHES  By Alphabetical Index (A-Z)  S  SOFTWARE PROVISIONING MANAGER 

Note

If you have an operating system version that has been initially released with SAP kernel 7.2<X> but is no longer supported for SAP kernel 7.21 or 7.22, instead of the 70SWPM*.SAR archive you must download the RMOS70SWPM*.SAR archive for these outdated operating system versions. For more information, see [About Software Provisioning Manager \[page 6\]](#).

2. If you want to verify the signature of the 70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR archive, execute the following commands :

Note

In addition, check SAP Note [1680045](#)  whether additional information is available.

```
<Path to SAPCAR>\sapcar.exe -tVvf<Path to Temporary Directory>
\70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR
```

3. Unpack the Software Provisioning Manager archive to a local directory using the following command:

```
<Path to SAPCAR>\sapcar.exe -xvf <Path to Temporary Directory>\70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR
```

Note

Make sure that all users have read permissions for the directory where you want to unpack the installer.

Caution

Make sure that you unpack the Software Provisioning Manager archive to a dedicated folder. Do not unpack it to the same folder as other installation media.

3.7.2 Using the Physical Media from the Installation Package

This section describes how you use the physical installation media as part of the installation package.

Procedure

1. Identify the required media for your installation as listed below.

Note

For more information about which kernel version to use, see SAP Note [1680045](#). In addition, check the Product Availability Matrix at <http://support.sap.com/pam>.

The following table shows the media required for the installation of a standalone Gateway instance:

Table 10:

| Installation Media | Description |
|-----------------------------------|--|
| Software Provisioning Manager 1.0 | Software provisioning manager 1.0 archive 70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR |
| SAP Kernel | Non-Unicode (NUC) Kernel (folder K_<Version>_N_<OS>) where N means "non-Unicode". |

2. Make the installation media available on the installation host as follows:
 - a. Download and unpack the latest version of Software Provisioning Manager as described in [Downloading the Software Provisioning Manager Archive \[page 23\]](#).
 - b. Make the installation media containing the software to be installed available.

Caution

- If you copy the media to disk, make sure that the paths to the destination location of the copied media do not contain any blanks and commas.
- If you perform a domain installation and do not want to copy the media but use network drives for mapping the installation media, make sure that the `<sapsid>adm` user has access to the UNC paths of the network drives.

3.7.3 Downloading Installation Media














This section describes how you download installation media from the SAP Software Download Center.

Procedure

1. Download and unpack the latest version of Software Provisioning Manager as described in [Downloading the Software Provisioning Manager Archive \[page 23\]](#).
2. Create a download directory on the host on which you want to run the installer.
3. Identify **all** download objects that belong to one installation medium according to the following criteria:

Note

Installation media might be split into several files. In this case, you have to reassemble the required files after the download.

- Download path or location:
You can download installation media from the SAP Software Download Center using one of the following paths:
 - <http://support.sap.com/swdc>  *Software Downloads*  *Installations & Upgrades*  *By Alphabetical Index (A-Z)*  *<First_Letter_Of_Product>*  *<Product_Version>* 
 - <http://support.sap.com/swdc>  *Software Downloads*  *Installations & Upgrades*  *By Category*  *<Product>*  *<Product_Version>* 
 - For downloading the kernel media, proceed as described in the *Kernel Media* section of SAP Note [1680045](#) .
- Material number
All download objects that are part of an installation medium have the same material number and an individual sequence number:
`<Material_Number>_<Sequence_Number>`

Example

51031387_1

51031387_2

...

- Title

All objects that are part of a medium have the same title, such as <Solution><Media_Name><OS> or <Database>RDBMS<OS> for RDBMS media.

4. Download the objects to the download directory.
5. To correctly recombine the media that are split into small parts, unpack all parts into the same directory.

In the unpacking directory, the system creates a subdirectory with a short text describing the medium and copies the data into it. The data is now all in the correct directory, the same as on the medium that was physically produced. For more information, see SAP Note [1258173](#).

Caution

Make sure that you unpack each installation media to a separate folder. Do not unpack installation media to the same folder where you unpack the Software Provisioning Manager archive.

Related Information

[Downloading Installation Media \[page 25\]](#)

4 Installation

4.1 Prerequisites for Running the Installer

Make sure you fulfil the following prerequisites before running the installer:

- Make sure that you use an account with the [required user authorization to run the installer \[page 16\]](#).
- Make sure that you have specified the most important SAP system parameters as described in [Basic SAP System Installation Parameters \[page 12\]](#) **before** you start the installation.
- Make sure that the following ports are not used by other processes:
 - Port 21212 is used by default for communication between the installer GUI server and the installer GUI client.
If this port cannot be used, you can assign a free port number by executing `sapinst.exe` with the following command line parameter:
`SAPINST_DIALOG_PORT=<Port_Number>`
 - Port 4239 is used by default for displaying the feedback evaluation form at the end of the installer processing.
The filled-out evaluation form is then sent to SAP using HTTPS.
If this port cannot be used, you can assign a free port number by executing `sapinst.exe` with the following command line parameter:
`SAPINST_HTTP_PORT=<Port_Number>`

4.2 Running the Installer

This section describes how to run the installation tool Software Provisioning Manager 1.0 (the “installer” for short).

Software Provisioning Manager 1.0 includes a GUI client and a GUI server, which both use Java. In the following, GUI client and GUI server are called the “installer GUI”. For more information about the installer, see [Useful Information About the Installer \[page 29\]](#).

This procedure describes an installation where the installer and the installer GUI are running on the same host.

Prerequisites

For more information, see [Prerequisites for Running the Installer \[page 27\]](#).

Procedure

1. Log on to the installation host using an account with the [required user authorization to run the installer](#) [page 16].

Caution

Do **not** use an existing <sapsid>adm user.

2. Make the installation media available on the installation host.
For more information, see [Preparing the Installation Media](#) [page 22].
3. Start the installer by double-clicking `sapinst.exe` from the directory to which you unpacked the Software Provisioning Manager archive.
The GUI starts automatically by displaying the [Welcome](#) screen.

Note















If you want to use a virtual host name, open a command prompt or PowerShell window in elevated mode and change to the directory to which you unpacked the Software Provisioning Manager archive .

Start the installer with the following command:


`sapinst.exe SAPINST_USE_HOSTNAME=<Virtual_Host_Name>` (in a command prompt)

`.\sapinst.exe SAPINST_USE_HOSTNAME=<Virtual_Host_Name>` (in PowerShell)

For more information, see [Using Virtual Host Names](#) [page 22].

4. On the [Welcome](#) screen, choose the following options in the following sequence:
 - To install a new standalone Gateway instance, go to  [<Product>](#)  and choose:  [Standalone Engines](#)  [Gateway](#) 
 - To rename an existing standalone Gateway instance, go to [System Rename](#) and choose:  [Distributed System](#)  [System Rename for Gateway Instance](#) 
 - To uninstall an existing standalone Gateway instance, go to  [<Product>](#)  [Software Life-Cycle Options](#)  [Uninstall](#)  and choose:  [Uninstall - Systems / Standalone Engine / Optional Standalone Unit](#) 
5. Choose [Next](#).
6. If the installer prompts you to log off from your system, log off and log on again.
The installer restarts automatically.
7. Follow the instructions on the installer input screens and enter the required parameters.

Note

For more information about the input parameters, position the cursor on the parameter and press .

After you have entered all requested input parameters, the installer displays the [Parameter Summary](#) screen. This screen shows both the parameters that you entered and those that the installer set by default. If required, you can revise the parameters before starting the installation.

8. To start the installation, choose [Start](#).
The installer starts the installation and displays the progress of the installation.
When the installation option has finished successfully, the installer displays the message *Execution of <Option Name> has completed*.
9. We recommend that you delete the directory %userprofile%\sdtgui.
10. If you copied installation media to your hard disk, you can delete these files when the installation has successfully completed.

4.3 Additional Information About the Installer

The following sections provide additional information about the installer:

- [Useful Information About the Installer \[page 29\]](#)
- [How to Avoid Automatic Logoff by the Installer \[page 30\]](#)
- [Interrupted Installation \[page 31\]](#)
- [Performing a Remote Installation \[page 33\]](#)
- [Starting the Installer GUI Separately \[page 35\]](#)
- [Running the Installer with Accessibility Mode \[page 37\]](#)
- [Troubleshooting with the Installer \[page 38\]](#)

4.3.1 Useful Information About the Installer

This section contains some useful technical background information about the installer and the installer GUI.

- When you start the installer, it automatically starts the installer GUI.
- The installer creates the installation directory sapinst_instdir, which is located directly in the %ProgramFiles% directory. If the installer is not able to create sapinst_instdir there, it tries to create sapinst_instdir in the directory defined by the environment variable TEMP.

➔ Recommendation

We recommend that you keep all installation directories until the system is completely and correctly installed.

- For each installation option, the installer creates a subdirectory located in the sapinst_instdir directory.
- The installer extracts itself to a temporary directory called sapinst_exe., which is located in %TEMP%, %TMP%, %TMPDIR%, or %SystemRoot%. These files are deleted after the installer has stopped running.
The temporary directory sapinst_exe. sometimes remains undeleted. You can safely delete it.
The temporary directory also contains the log file dev_selfex.out from the extraction process, which might be useful if an error occurs.

Caution

If the installer cannot find a temporary directory, the installation terminates with the error FCO-00058.

- To see a list of all available installer properties, open a command prompt and start the installer with command line parameter `-p`:
`sapinst.exe -p`
- If you need to run the installer in accessibility mode, make sure that you have activated and adjusted accessibility settings as described in [Running the Installer in Accessibility Mode \[page 37\]](#).
- If required, you can stop the installer by choosing **SAPinst > Exit Process** in the installer GUI menu.

Note

If you need to terminate the installer, choose **File > Close GUI only** in the menu of the *Program Starter* window.

- If you want to install an SAP system in unattended mode, see SAP Note [2230669](#) which describes an improved procedure using `inifile.params`.

4.3.2 How to Avoid Automatic Logoff by the Installer

When you install the SAP system, the installation tool checks whether the user account used for the installation has the required privileges and authorization.

For a domain installation, the account needs to be both a member of the local `Administrators` group and the domain `Admins` group. For a local installation, the account needs to be a member of the local group `Administrators` group.

In both cases, the user account must be authorized to do the following:

- Act as part of the operating system
- Adjust memory quotas for a process
- Replace a process level token

If the user account does not have these rights assigned, the installer assigns them and automatically logs the account off to activate them. To avoid the installer logging the account off, you can set these rights manually before you start the installation.

Procedure

You perform the following steps to assign these rights to the user account used for the installation.

Caution

Be aware that domain policies override locally defined policies. This means that if you want to grant domain administrator rights to a user who belongs to the local `Administrators` group, make sure that you have also defined domain administrator rights for this user on domain level.

1. Windows Server 2012 (R2): Press `Ctrl` + `Esc` and choose ► *Administrative Tools* ► *Local Security Policy*.
2. Windows Server 2008 (R2): Choose ► *Start* ► *Control Panel* ► *Administrative Tools* ► *Local Security Policy*.
3. In the *Local Security Settings* window, choose ► *Local Policies* ► *User Rights Assignment*.
4. Double-click the required right under *Policy* and choose *Add User or Group*.
5. In the *Select Users and Groups* window, choose the required user and choose *Add*.
The selected user appears in the box below.
6. Confirm your entry and then repeat the steps for each remaining policy that the user requires for the installation.
7. Log off and log on again to apply the changes.

More Information

[Required User Authorization for Running the Installer \[page 16\]](#)

4.3.3 Interrupted Processing of the Installer

Use

The processing of the installer might be interrupted for one of the following reasons:

- An error occurred during the *Define Parameters* or *Execute* phase:
The installer does not abort the installation in error situations. If an error occurs, the installation pauses and a dialog box appears. The dialog box contains a short description of the choices listed in the table below as well as a path to a log file that contains detailed information about the error.
- You interrupted the installation by choosing *Exit Process* in the *SAPinst* menu.

Caution

If you stop an option in the *Execute* phase, any system or component **installed** by this option is incomplete and not ready to be used. Any system or component **uninstalled** by this option is not completely uninstalled.

The following table describes the options in the dialog box:

Table 14:

| Option | Definition |
|--------------------------|---|
| Retry | <p>The installer retries the installation from the point of failure without repeating any of the previous steps.</p> <p>This is possible because the installer records the installation progress in the <code>keydb.xml</code> file.</p> <p>We recommend that you view the entries in the log files, try to solve the problem, and then choose Retry.</p> <p>If the same or a different error occurs, the installer displays the same dialog box again.</p> |
| Stop | <p>The installer stops the installation, closing the dialog box, the installer GUI, and the GUI server.</p> <p>The installer records the installation progress in the <code>keydb.xml</code> file. Therefore, you can continue the installation from the point of failure without repeating any of the previous steps (see the procedure below).</p> |
| Continue | The installer continues the installation from the current point. |
| View Log | Access installation log files. |

Procedure

This procedure describes the steps to restart an installation, which you stopped by choosing [Stop](#), or to continue an interrupted installation after an error.

1. Log on to the installation host as a user with the required permissions as described in [Running the Installer \[page 27\]](#).
2. Make sure that the installation media are still available on the installation host.
For more information, see [Preparing the Installation Media \[page 22\]](#).

➔ Recommendation

Make the installation media **locally** available. For example, if you use remote file shares on other Windows hosts, CIFS shares on third-party SMB-servers, or Network File System (NFS), reading from media mounted with NFS might fail.



3. Restart the installer by double-clicking `sapinst.exe` from the directory to which you unpacked the Software Provisioning Manager archive.

i Note

For more information about how to start the installer, see [Running the Installer \[page 27\]](#) or [Performing a Remote Installation \[page 33\]](#) and [Starting the Installer GUI Separately \[page 35\]](#).

4. From the tree structure on the [Welcome](#) screen, select the installation option that you want to continue and choose [Next](#).
The [What do you want to do?](#) screen appears.
5. On the [What do you want to do?](#) screen, decide between the following alternatives and continue with [Next](#):

Table 15:

| Alternative | Behavior |
|--|---|
| Run a new option | <p>The installer does not continue the interrupted installation option. Instead, it moves the content of the old installation directory and all installation-specific files to a backup directory. Afterwards, you can no longer continue the old installation option.</p> <p>The following naming convention is used for the backup directory:</p> <pre>log_<Day>_<Month>_<Year>_<Hours>_<Minutes>_<Seconds></pre> <div style="background-color: #fff9c4; padding: 10px; margin: 10px 0;"> <p> Example</p> <pre>log_01_Oct_2008_13_47_56</pre> </div> <div style="background-color: #fff9c4; padding: 10px; margin: 10px 0;"> <p> Caution</p> <p>The installer moves all the files and folders to a new log directory, even if these files and folders are owned by other users. If there are any processes currently running on these files and folders, they might no longer function properly.</p> </div> |
| Continue with the old option | The installer continues the interrupted installation option from the point of failure. |

4.3.4 Performing a Remote Installation

You use this procedure to install your SAP system on a **remote** host. In this case, the installer runs on the **remote host**, and the installer GUI runs on the **local** host. The local host is the host from which you control the installation with the installer GUI. The installer GUI connects using a secure SSL connection to the installer.

If your security policy requires that the person performing the installation by running the installer GUI on the local host is not allowed to know administrator credentials on the remote host, you can specify another operating system user for authentication purposes. You do this using the `SAPINST_REMOTE_ACCESS_USER` parameter when starting the `sapinst.exe` from the command line. You have to confirm that the user is a trusted one. For more information, see SAP Note [1745524](#).

Prerequisites

-
- Both computers are in the same network and can ping each other.

To test this:

1. Log on to your remote host and enter the command `ping <Local_Host>`.
 2. Log on to the local host and enter the command `ping <Remote_Host>`.
- Make sure that the `sapinst.exe` on the remote host and the `sapinstgui.exe` on the local host have exactly the same version. You can check this by using the option `-sfxver` as described in the procedure below and in the procedure in [Starting the Installer GUI Separately \[page 35\]](#).
 - If you need to specify another operating system user with the `SAPINST_REMOTE_ACCESS_USER` command line parameter, make sure that this user exists on the remote host.

Procedure

1. Log on to your remote host as a user that has the [required authorization for running the installer \[page 16\]](#).
2. Make the installation media available on your remote host.
For more information, see [Preparing the Installation Media \[page 22\]](#).
3. Open a command prompt and change to the directory to which you unpacked the archive
`SWPM10SP<Support_Package_Number>_<Version_Number>.SAR`.
4. Check the version of the `sapinst` executable by entering the following command:
`sapinst -sfxver`
The version of the `sapinst` executable must be exactly the same as the version of the `sapinstgui` executable on the local host (see also [Starting the Installer GUI Separately \[page 35\]](#)).
5. Execute `sapinst.exe -nogui`

Note

If you need to specify another operating system user for authentication purposes, enter the following command:

```
sapinst.exe -nogui SAPINST_REMOTE_ACCESS_USER=<Specified_OS_User>
```

Note

If you want to use a virtual host name, open a command prompt or PowerShell window in elevated mode and change to the directory to which you unpacked the file

```
70SWPM10SP<Support_Package_Number>_<Version_Number>.SAR.
```

Start the installer with the following command:

```
sapinst.exe -nogui SAPINST_USE_HOSTNAME=<Virtual_Host_Name> (in a command prompt)
```

```
.\sapinst.exe -nogui SAPINST_USE_HOSTNAME=<Virtual_Host_Name> (in PowerShell)
```

For more information, see [Using Virtual Host Names \[page 22\]](#).

The installer now starts and waits for the connection to the installer GUI. You see the following in the [Program Starter](#) window:

```
guiengine: no GUI connected; waiting for a connection on host <Host_Name>, port  
<Port_Number> to continue with the installation
```

6. Start the installer GUI on your **local** host as described in [Starting the Installer GUI Separately \[page 35\]](#).

4.3.5 Starting the Installer GUI Separately

You use this procedure to start the installer GUI separately.

You need to start the installer GUI separately in the following cases:

- You closed the installer GUI using **File > Close GUI only** from the installer menu while the installer is still running.
- You want to perform a remote installation, where the installer GUI runs on a different host from the installer. For more information, see [Performing a Remote Installation \[page 33\]](#).

Prerequisites

- The host on which you want to start the installer GUI meets the prerequisites for starting the installer as described in [Prerequisites for Running the Installer \[page 27\]](#).

i Note

If you want to run the installer on a UNIX host, make sure that you meet the prerequisites for the installer listed in the relevant UNIX guide.

- Make sure that the `sapinst.exe` on the remote host and the `sapinstgui.exe` on the local host have exactly the same version. You can check this by using the option `-sfxver` as described in the procedure below and in the procedure in [Performing a Remote Installation \[page 33\]](#).

Procedure

In this procedure, the following variables are used: `<Remote_Host>` is the name of the remote host, and `<Port_Number_Gui_Server_To_Gui_Client>` is the port the GUI server uses to communicate with the GUI client (21212 by default).

i Note

If you want to run the installer GUI on a remote host, it is mandatory to start the installer using the `-nogui` property. If you have already started the installer without the `-nogui` property and want to run the GUI on a different host, you have to exit the installation process by choosing **SAPinst > Exit Process** and then follow the steps described in [Interrupted Installation \[page 31\]](#). Use the `-nogui` property to restart the installer and start the installer GUI on the intended host.

Starting the Installer GUI on Windows

1. Make the installer software available on the host on which you want to start the installer GUI.
For more information, see [Preparing the Installation Media \[page 22\]](#).

2. Start the installer GUI by executing `<Drive>:\<Path_To_Unpack_Directory>\sapinstgui.exe` with the appropriate command line parameters:
 - If you want to perform a remote installation, proceed as follows:
 1. Check the version of `sapinstgui.exe` by entering the following command:


```
sapinstgui.exe -sfxver
```

The version of the `sapinstgui` executable must be exactly the same as the version of the `sapinst` executable on the remote host (see also [Performing a Remote Installation \[page 33\]](#)).
 2. Start the installer GUI by entering the following command:


```
sapinstgui.exe -host <Remote_Host> -port  
<Port_Number_Gui_Server_To_Gui_Client>
```
 - If you closed the installer GUI using **File > Close GUI only** and want to reconnect to the installer, proceed as follows:
 - If you are performing a local installation with the installer and the installer GUI running on the same host, execute the following command:


```
sapinstgui.exe -port <Port_Number_Gui_Server_To_Gui_Client>
```
 - If you are performing a remote installation with the installer and the installer GUI running on different hosts, execute the following command:


```
sapinstgui.exe -host <Remote_Host> -port  
<Port_Number_Gui_Server_To_Gui_Client>
```
3. The installer GUI starts and connects to the installer.

Starting the Installer GUI on UNIX

1. Make the installer software available on the host on which you want to start the installer GUI.
For more information, see [Preparing the Installation Media \[page 22\]](#).
2. Start the `sapinstgui` executable with the appropriate command line parameters:
 - If you want to perform a remote installation, proceed as follows:
 1. Check the version of the `sapinstgui` executable by entering the following command:


```
<Path_To_Unpack_Directory>/sapinstgui -sfxver
```

The version of the `sapinstgui` executable must be exactly the same as the version of the `sapinst` executable on the remote host (see also [Performing a Remote Installation \[page 33\]](#)).
 2. Start the installer GUI by entering the following command:


```
<Path_To_Unpack_Directory>/sapinstgui -host <Remote_Host> -port  
<Port_Number_Gui_Server_To_Gui_Client>
```
 - If you closed the installer GUI using **File > Close GUI only** and want to reconnect to the installer, proceed as follows:
 - If you are performing a local installation with the installer and the installer GUI running on the same host, execute the following command:


```
<Path_To_Unpack_Directory>/sapinstgui -port  
<Port_Number_Gui_Server_To_Gui_Client>
```
 - If you are performing a remote installation with the installer and the installer GUI running on different hosts, execute the following command:


```
<Path_To_Unpack_Directory>/sapinstgui -host <Remote_Host> -port  
<Port_Number_Gui_Server_To_Gui_Client>
```
3. The installer GUI starts and connects to the installer.

4.3.6 Running the Installer in Accessibility Mode

Use

You can also run the installer in accessibility mode. The following features are available:

- Keyboard access:
This feature is generally available for all operating systems.
- High-contrast color:
This feature is derived from the Windows display properties. You can use it either for a local installation or for a remote installation.
- Custom font setting:
This feature is derived from the Windows display properties. You can use it either for a local installation or for a remote installation.

Procedure

Activating and Adjusting Accessibility Settings on Windows

You first have to activate and adjust the relevant settings for the font size and color schemes **before** you start the installer or the installer GUI.

Note

The following procedure applies for Windows Server 2012 and might be different when using another Windows operating system.

1. Right click on your Windows desktop and choose *Personalize*.
2. Select *Adjust font size (DPI)* and choose *Larger scale (120 DPI)*.
To define other font size schemes, choose *Custom DPI*.
3. In the right-hand pane, select *Window Color and Appearance*.
Select a color scheme from the *Color scheme* drop-down box.
To define your own color schemes, choose *Advanced*.

Running the Installer in Accessibility Mode

You can either perform a local installation, where the installer and the installer GUI are running on the same host, or a remote installation, where the installer and the installer GUI are running on different hosts.

- Local installation:
Start the installer as described in [Running the Installer \[page 27\]](#) by executing the following command:
sapinst.exe -accessible
- Remote installation:
 1. Start the installer on the remote host by executing the following command from the command line as described in [Performing a Remote Installation \[page 33\]](#):
sapinst.exe -nogui

2. Start the installer GUI on the local host by executing the following command from the command line as described in [Starting the Installer GUI Separately \[page 35\]](#):

```
sapinstgui.exe -accessible -host <Remote_Host> -port  
<Port_Number_Gui_Server_To_Gui_Client>
```





4.3.7 Troubleshooting with the Installer

This section tells you how to proceed when errors occur during the processing of the installer.


If an error occurs, the installer does one of the following:

- It stops processing
- It displays a dialog informing you about the error

Procedure

1. Check SAP Note [1548438](#)  for known installer issues.
2. To view the log file, choose [View Logs](#).
3. If an error occurs during the [Define Parameters](#) or [Execute](#) phase, do one of the following:
 - Try to solve the problem
 - Stop the installer by choosing [Stop](#) from the error message or  [SAPinst](#)  [Exit Process](#)  in the tool menu.For more information, see [Interrupted Installation \[page 31\]](#).

After resolving the problem, you can continue the processing of the installer by choosing [Retry](#).

4. Check the log and trace files of the GUI server and the installer GUI in the directory %userprofile%\sdtgui\ for errors.
 - If the installer GUI does not start, check the file sdtstart.err in the current %userprofile% directory.
5. If you cannot resolve the problem, create a customer message using component BC-INS.
For more information about using subcomponents of BC-INS, see SAP Note [1669327](#) .

5 Post-Installation Activities

5.1 SAP Gateway Configuration

You have to configure SAP Gateway to be able to use it.


You find the configuration documentation in the [SAP Library \[page 8\]](#) at: ► *Application Platform by Key Capability* ► *Platform-Wide Services* ► *Connectivity* ► *SAP Gateway* ►

6 Additional Information


6.1 Using Virtual Host Names

You can use one or more virtual TCP/IP host names for SAP servers within an SAP server landscape to hide their physical network identities from each other. This can be useful when quickly moving SAP servers or complete server landscapes to alternative hardware without having to reinstall or reconfigure.

Prerequisites

- Make sure that the virtual host name can be correctly resolved in your Domain Name System (DNS) setup.
- Make sure that you configured the Windows operating system properly to use virtual host names. For more information, see SAP Note [1564275](#) .

Procedure

To install a **non-high-availability** system using virtual host names, proceed as described in SAP Note [1564275](#) .

6.2 Checking and Changing the Paging File Settings on Windows Server 2012 (R2)

Use

This section describes how to check and change the paging file size on Windows Server 2012 (R2) with PowerShell.

The PowerShell commands also work in previous Windows versions where PowerShell is available.

Note

Some paging file operations require a reboot of the server to activate the changes you made. Wmi-commands do not indicate whether a reboot is required or not. Therefore, we recommend rebooting your system every time you change the paging file settings with PowerShell.

Prerequisites

Always start the PowerShell in elevated mode (run as administrator).

Procedure

Checking the Size of a Paging File

1. Start Windows PowerShell.
2. Check whether the default value *Automatic manage pagefile size for all devices* is activated.

i Note

We do not support automatically managed page file sizes.

To check this, enter the following command:

```
(Get-WmiObject Win32_Pagefile) -eq $null
```

If *Automatic manage pagefile size for all devices* is enabled, the output value is *True*.

If necessary, disable *Automatic manage pagefile size for all devices* with the following command:

```
$sys = Get-WmiObject Win32_Computersystem -EnableAllPrivileges
$sys.AutomaticManagedPagefile = $false
$sys.put()
```

3. Check the size of the paging files with the following command:

```
Get-WmiObject WIN32_Pagefile | Select-Object Name, InitialSize, MaximumSize,
FileSize
```

The output looks like the following:

| MaximumSize | Name | FileSize | InitialSize |
|-------------|-----------------|----------|-------------|
| ----- | ---- | ----- | ----- |
| 41943040000 | C:\pagefile.sys | 0 | 0 |
| 41943040000 | E:\pagefile.sys | 40000 | 80000 |

In this example, in the first line, the *InitialSize* and *MaximumSize* values of a paging file are 0, which means that the paging file size is *system managed* (not recommended).

In the second line, the paging file size has a minimum and a maximum size (recommended).

Changing the Size of a Single Paging File

Changing the *InitialSize* and *MaximumSize* values of a paging file to a size other than 0, will automatically switch off *system managed size*.

In the following example, we change the size of the paging file on *C:* to the *InitialSize* of 40 GB and to the *MaximumSize* of 80 GB.

Use the following commands in a PowerShell:

```
$Pagefile = Get-WmiObject Win32_PagefileSetting | Where-Object {$_.name -eq "C:
\pagefile.sys"}
```

```
$Pagefile.InitialSize = 40000
$Pagefile.MaximumSize = 80000
$Pagefile.put()
```

Typically, you choose the same value for *InitialSize* and *MaximumSize*.

i Note

The sum of all paging files *InitialSize* values must be equal to or higher than the value recommended for your SAP system.

Creating a Second Paging File on Another Disk

You might want to create a second or additional paging files to improve system performance, or if your disk does not have enough space.

To do so, enter the following commands in a PowerShell:

```
$Pagefile = Get-WmiObject Win32_PagefileSetting
$pagefile.Name = "E:\pagefile.sys"
$pagefile.Caption = "E:\pagefile.sys"
$pagefile.Description = "'pagefile.sys' @ E:\"
$pagefile.SettingID = "pagefile.sys @ E:"
$pagefile.InitialSize = 80000
$pagefile.MaximumSize = 80000
$pagefile.put()
```

Deleting a Paging File on a Specific Device

To delete a paging file, enter the following commands in a PowerShell:

```
$pagefile = Get-WmiObject Win32_PagefileSetting | Where-Object {$_.name -eq "E:\pagefile.sys"}
$pagefile.delete()
```

6.3 Starting and Stopping the Instance

Use

You have to check that you can start and stop the Gateway instance after the installation using the SAP Microsoft Management Console (SAP MMC).

Procedure

1. Log on as user <sapsid>adm.
2. Start the SAP MMC by choosing ► [Start](#) ► [Programs](#) ► [SAP Management Console](#) ►.
3. Right-click the icon of the standalone Gateway system under the [SAP systems](#) node and choose [Start](#) or [Stop](#).

More Information

For more information about the SAP MMC, see the [SAP Library \[page 8\]](#) at:

► [Solution Life Cycle Management by Key Capability](#) ► [Solution Monitoring](#) ► [Monitoring in the CCMS](#) ► [SAP Microsoft Management Console: Windows](#) ►

6.4 Uninstalling the Instance

Use

The following procedure describes how to uninstall a standalone Gateway instance using the installer.

Procedure

1. [Start the installer \[page 27\]](#).
2. On the Welcome screen, choose ► [Software Life-Cycle Options](#) ► [Uninstall System / Standalone Engine / Optional Standalone Unit](#) ►.
3. Follow the instructions in the installer screens.

Note

To find more information on each parameter during the [Define Parameters](#) phase of uninstalling, position the cursor on the field of the respective parameter and press **F1**.

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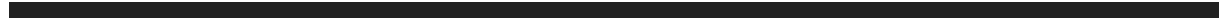
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