SAP Content Server for Windows Installation Guide

Release 6.30
Icons in Body Text

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Caution" /></td>
<td>Caution</td>
</tr>
<tr>
<td><img src="image" alt="Example" /></td>
<td>Example</td>
</tr>
<tr>
<td><img src="image" alt="Note" /></td>
<td>Note</td>
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<tr>
<td><img src="image" alt="Recommendation" /></td>
<td>Recommendation</td>
</tr>
<tr>
<td><img src="image" alt="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 the any version of SAP Library.

Typographic Conventions

<table>
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<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td><em>Example text</em></td>
<td>Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.</td>
</tr>
<tr>
<td><em>Example text</em></td>
<td>Cross-references to other documentation.</td>
</tr>
<tr>
<td><em>Example text</em></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><em>Example text</em></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><em>Example text</em></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><code>&lt;Example text&gt;</code></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>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
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In previous releases, the installation guide for the Content Server and the Cache Server was a part of the installation guide *SAP Knowledge Provider Server Infrastructure Components*.

**Purpose**

Knowledge Provider is a component of SAP Web Application Server and provides the general infrastructure for storing and administrating documents. SAP Content Server is based on the SAP DB and is available on Windows NT Server and Windows 2000 Server.

Both the SAP database, which serves as a Content Server, and the Content Server itself are provided with every SAP system installation. This provides the required technical infrastructure for all document-oriented applications and business scenarios that do not require long-term archiving. Because SAP Content Server is integrated via the HTTP interface, the actual storage medium used is transparent to the SAP applications.

The Content Server and the Cache Server are server components that interact with the Knowledge Provider. This document describes how to install these components. For further information on Knowledge Provider, the Content Server, and the Cache Server, see the SAP Library (on the documentation CD or under http://help.sap.com) under *SAP Web Application Server → Basis Services → Knowledge Provider*.

For the database documentation and information on SAP DB tools, see the SAP Library (on the documentation CD or under http://help.sap.com) under *mySAP Technology Components → SAP DB*.

- **Warning**: If you already have a SAP DB lower than Release 7.2, **do not** install a new database instance.
- **Warning**: In particular, do not install any cache server on top of an existing SAP Content Server with SAP DB 7.1.3. If you have an existing SAP Content Server with DB 7.1.3, only install the new SAP Content Server, so that the new versions of the program files are installed.
- **Warning**: If you disregard this warning, your previous database contents may be lost!

To run both components on one computer, you first have to migrate your database to release 7.2.5. Also see note 382741 (*SAP DB Release Upgrade to 7.2.5.B00*) (see also [Note Overview (Page 59)]). We recommend that you upgrade to SAP DB Release 7.3 directly after upgrading to 7.2. For more information on this, see note 397652 (*SAP DB Release Upgrade to 7.3.0 B14/15*).

For up-to-date information about installing SAP Content Server, see note 490877 (*SAP Content Server Installation 6.20*) (see also [Note Overview (Page 59)]).

**Features**

The graphic below illustrates the conceptual structure of the server system.
The Content Server is accessed via HTTP. SAP AG has designed the interface required to do this. SAP also provides a certification procedure. For further information on certification, see http://www.sap.com/csp.

You can find a description of the SAP Content Server Interface in the SAP Library (on the documentation CD or under www./help.sap.com) under SAP Web Application Server → Basis Services → Knowledge Provider → Content Management Service → SAP Content Server HTTP Interface.

If you want to integrate another content server into your network, the new content server must fulfill the requirements of the interface.

The Cache Server serves the following purposes:

- To provide a seamless and transparent caching facility for existing Content Server landscapes
- To drastically reduce client response times
- To ensure that caching requires as little administration work as possible

Cache servers are used in distributed environments to store documents at a location close to the relevant client, and thus to allow faster access to document content. To do this, the Cache Server creates and stores “working copies” of documents from the Content Server. This also reduces network load, as no remote content server has to be accessed when a client requests read access to a document. Cache servers are similar to content servers. However, with cache servers, little administrative input is required, and access protection is maintained. The central document management functions in the SAP System make sure that out-of-date document versions that are still in the cache are no longer accessed and are eventually deleted.

If the client and the Content Server have the same location, the documents do not (usually) need to be cached. In these cases, the requested URL is sent directly to the Content Server and the content is obtained directly from the Content Server.
The installation procedure is available for both Windows NT Server and for Windows 2000 (Advanced) Server. We recommend that you use Windows 2000 (Advanced) Server.

This documentation describes the installation procedure for Windows 2000 Server. The installation procedure for Windows NT is similar.

**Restrictions**

SAP Content Server is **not** an alternative to optical storage systems and other storage media for long-term document archiving.

---

**Points to Consider Before Installation**

**What should you think about before going live?**

To dimension your Content Server as accurately as possible, you should take the following considerations into account before installation:

1. **What types of objects will be involved?**
   - Estimate the existing data volume and compression level
   - By how much is the volume of objects per location likely to increase?
     - Estimate the increase in data volume over a specific period of time

   The results of points 1 and 2 indicate the devspace requirement.

2. **On average, how many users are likely to access the content server at any one time?**

   The answer to this question indicates the size of main memory, and the CPU and log space requirements.

The answers to these questions will help you tailor your content server to best suit your individual requirements.

**What types of objects will be involved?**

When stored on the content server, every file is compressed according to its file type, and occupies a specific amount of storage space (devspace). Therefore, it is important to establish what file types are contained in your legacy data volume. You can use the following percentages to determine your legacy data volume:

| MIME Type | DOC | XLS | PPT | TIFF | GIF | JPG | CAD | ...
|-----------|-----|-----|-----|------|-----|-----|-----|-----
| Compr. approx. | 50 % | 50 % | 30 % | 5 % | 5 % | 5 % | ? | ? |
By how much is the volume of objects per location likely to increase?

The increase in data volume, taking into account the compression levels, has to be estimated for a specific time period. (Make sure that the memory is sufficient for the data volume expected during this period.) Once you have calculated the expected increase in data volume, add this to the legacy data volume.

The result can be termed the “net” devspace required for the time period in question. Then add 20% to 25% more memory space to allow for internal database administration data (headroom). The result is the “gross” devspace requirement.

On average, how many users are likely to access the content server at any one time?

The goal here is to ensure that the transaction buffer is sufficiently large to allow a number of users to access the content server simultaneously. To this end, the log space should be approximately 10% of the calculated devspace. At a minimum, it should be at least twice the size of the largest expected document. This is so that the content server can at least handle two simultaneous accesses.

### Legacy data volume

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>File size * percentage = compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>File1.doc</td>
<td>10 MB</td>
<td>100 MB * 50 % = 50 MB</td>
</tr>
<tr>
<td>File2.doc</td>
<td>10 MB</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File10.doc</td>
<td>10 MB</td>
<td></td>
</tr>
<tr>
<td>File1.ppt</td>
<td>40 MB</td>
<td>130 MB * 30 % = 39 MB</td>
</tr>
<tr>
<td>File2.ppt</td>
<td>10 MB</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File10.ppt</td>
<td>10 MB</td>
<td></td>
</tr>
<tr>
<td>File1.gif</td>
<td>10 MB</td>
<td>100 MB * 5 % = 5 MB</td>
</tr>
<tr>
<td>File2.gif</td>
<td>10 MB</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File10.gif</td>
<td>10 MB</td>
<td></td>
</tr>
</tbody>
</table>

File size - compression = devspace requirement
<table>
<thead>
<tr>
<th>100 MB - 50 MB = 50 MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 MB - 39 MB = 91 MB</td>
</tr>
<tr>
<td>100 MB - 5 MB = 95 MB</td>
</tr>
</tbody>
</table>

--------
236 MB  "Net" devspace requirement
+ 20 %
47,2 MB
--------
283,2 MB  "Gross" devspace requirement
+ 10 % log space
28,32 MB

However, the largest existing document is 40 MB, or 28 MB when compressed. As we know, the log space has to be at least twice as large as the largest expected document. Therefore, 10% is not enough in this case. The log space should be at least 56 MB.

For the greatest possible data security, we recommend that you mirror your log file. If you do so, then you will need twice the calculated amount of log space; that is, once on the hard disk for the log file, and once on the hard disk for the mirrored log file.

## Installation Prerequisites

Before you start installing SAP Content Server, note the following prerequisites.

### General Prerequisites

- You should save the following SAP Content Server sub-components to **different** hard disks, to ensure maximum performance and data security in the productive system:
  - Data
  - Log file
  - Mirrored log file

  A RAID 5 system with at least 2.5 GB of free hard disk capacity is recommended for storing the data. The hard disks must be set up in NTFS format.

- All users, in particular application servers and workstation PCs, must be able to access the Content Server or Cache Server system via HTTP. A workstation PC without direct HTTP access will not be able to execute individual scenarios, or will only have very limited access to individual scenarios.

- No SAP DB versions lower than 7.2 may be installed on your computer (see also Error Handling [Page 45]).

- All SAP DB instances must be closed.
If you already have a SAP DB installed on your computer system and want to install a new Content Server or Cache Server, you have to manually close the existing database instance(s). To do this, choose Programs → Administrative Tools → Services from the Windows Start menu. Select the service SAPDB:<Instance name> and choose Action → Stop Service from the menu.

**Technical Prerequisites**

**Hardware for a Typical Configuration**

To install the software components, including SAP DB, you need at least 300 MB of hard disk space. You also need as much hard disk capacity as you specified for the data files and the log files for the each partition.

<table>
<thead>
<tr>
<th>Main memory</th>
<th>At least 512 MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Possible: 1 CPU</td>
</tr>
<tr>
<td></td>
<td>Recommended: 2 CPUs (the DB kernel runs on one CPU and the other CPU is used to process accesses to the content server)</td>
</tr>
<tr>
<td>Network protocol</td>
<td>TCP/IP</td>
</tr>
</tbody>
</table>

**Software**

- Operating system:
  - Microsoft Windows 2000 Server (with Internet Information Server) or Microsoft Windows 2000 Advanced Server (with Internet Information Server)
  - Microsoft Windows NT Server Release 4.0, Service Pack 4, including Internet Information Server 4.0

- Windows NT Server Option Pack with the following installation profile:

<table>
<thead>
<tr>
<th>Component</th>
<th>Sub-Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Information Server (IIS) (release 4.0)</td>
<td>World Wide Web server</td>
</tr>
<tr>
<td></td>
<td>Internet Service Manager (HTML)</td>
</tr>
<tr>
<td>Microsoft Data Access Components 1.5</td>
<td>MDAC: ADO, ODBC and OLE DB</td>
</tr>
<tr>
<td>Microsoft Management Console</td>
<td></td>
</tr>
<tr>
<td>NT Option Pack Common Files</td>
<td></td>
</tr>
</tbody>
</table>

**Further Notes**

The operating systems Microsoft Windows 2000 (Advanced) and Microsoft Windows NT Server 4.0 are only available in US English. The installation procedure for SAP Content Server is
likewise only available in US English. The SAP System that you want to link to the SAP Content Server must be at least release 4.5B.

The hardware platform and operating system used in the SAP System do not limit the SAP Content Server in any way. The HTTP interface ensures that the SAP System is platform-independent.

**Technical Prerequisites of the SAP System**

- For the Content Server:
  - Release 4.5B or higher of the SAP system
- For the Content Server:
  - Release 4.6B or higher (4.6B with Support Package 10) of the SAP System or an SAP System with KW 4.0 or higher (KW 4.0 with Support Package 5) (see note 181696, Caching. See also Note Overview [Page 59]).

To be able to perform administrative tasks (transaction CSADMIN), you may need a higher version of the SAP system.

- For the Content Server:
  - At least Release 4.6C or KW 4.0
- For the Content Server:
  - At least Release 4.6C

**Installation**

Prerequisites

- The installation is carried out on Windows NT Server or Windows 2000 (Advanced) Server with all the necessary service packs.
- You have fulfilled the conditions described in Installation Prerequisites [Page 9].

Overview

The following sections describe how to install the Content Server and the Cache Server on a Windows 2000 Server system.

This description of the setup program applies to a complete installation of both components:

- Content Server (including SAP DB)
- Cache Server (including SAP DB)

⚠️

It only makes sense to install a Cache Server in addition to a Content Server if there are other Content Servers at other locations whose content may need to be cached.
Otherwise, no Cache Server is required as all content can be obtained directly from the Content Server.

These components, or parts of components, can be installed separately by choosing one of the two buttons under Complete, as shown in the graphic above. If you choose to install only individual components, for example, only SAP Content Server, some of the installation steps are not necessary.

⚠️ After you complete the installation, you need to make a number of configuration settings. Make sure to make these settings before you start productively using the software. For details, see System Configuration [Page 40].

For a detailed description of the installation, see the section Executing the Setup Program [Page 13].

See also note 490877 (SAP Content Server Installation 6.20) (see also Note Overview [Page 59]).

**SAP Database Manager**

Use the SAP Database Manager to administrate, configure, monitor, and back up the SAP DB. There are two versions of SAP Database Manager: one with a command-line editor (DBMCLI) and one with a graphical user interface (DBMGUI). Install the SAP Database Manager manually. The setup is located on the Server Components 2 CD in the directory \CONTSERV\DBADMIN\DBM73.EXE.
The documentation on both versions of the SAP Database Manager is in the SAP Library under *mySAP Technology Components → SAP DB*.

For information on the SAP DB version, see the *SAP Database Manager*.

For further information on administrating the Content Server and the SAP DB, see note 350067 (Content Server/SAP DB Administration) (see also *Note Overview [Page 59]*).

---

**Executing the Setup Program**

**Prerequisites**

Note the following prerequisites for executing the setup program:

- Start the setup program for the SAP Content Server on the Microsoft Windows Server on which you want to install the components.
- To carry out an installation or an upgrade, you must log on locally with administrator permissions to the operating system Windows 2000 Server.
- Before starting the setup program, close down all other programs.

**Procedure**

1. Insert the *SAP Server Components 2* CD in the CD ROM drive.
   
   The directory structure for SAP Content Server looks like this:

   ```
   CONTSERV
   └── DBADMIN
   └── DOCU
   └── SERVINST
   └── SQLSTD
   ```

2. Start the program `setup.exe` in the directory `\CONTSERV\SERVINST`.
   
   The following screen may appear:

   ![InstallShield](image)

   If this screen does appear, confirm the message by choosing **OK**.

3. A message appears from Windows Installer, informing you that the installation is ready to begin, and the Installation Wizard opens.
4. Choose Next.

A dialog box appears. In this dialog box, you can select the components you want to install. The Content Server is selected by default.
5. Select Complete.

The next dialog box allows you to make the Content Server settings. The following settings are standard:

6. Choose.

The next dialog box allows you to make the Content Server settings. The following settings are standard:
7. You can change the standard settings as you wish.

If necessary, you can change other settings besides the database size, the log drive, and the administration user group. To do this, select **Expert mode**. You can now make changes in all fields:
The standard name of the database instance is \textit{SDB}.
You can change this name if you wish. You will need to use this name later, when you are configuring the system in transaction \texttt{CSADMIN} in preparation for creating repositories (see also \textit{SAP Content Server Settings [Page 41]}).

The values for the database size, log size, and the drives on which the data will be saved are merely suggested values.
You can change these values according to the needs of your system. Note, however, that every document that you want to store in the Content Server must fit completely into the log. For this reason, the database log must be considerably larger than the largest expected document.

By default, the website is created during the installation procedure.
It is recommended that you do not change this option.

The standard HTTP port for the Content Server is \textbf{1090}.
If necessary, you can specify another port number.

Access restriction for Content Server administration is set as standard.
Local administrators always have administrative access.
If you require access control for specific groups, enter the name of an NT group.
You can also enter domain groups.
If you do not require access control, leave the field \texttt{AdminSecurity-group} empty.

8. Choose \textbf{\textit{Next}}.

The next dialog box allows you to make the Cache Server settings. The following settings are standard:

\begin{itemize}
\item \textbf{Create DB Instance}\texttt{.}
\item \textbf{Install Website}\texttt{.}
\item \textbf{HTTP port} \texttt{1095}\texttt{.}
\item \textbf{AdminSecurity-group} \texttt{Administrators}\texttt{.}
\end{itemize}
9. You can change the standard settings as you wish.

See also note 351647 (Cache Server Administration) (see also Note Overview [Page 59]).

You can change the data in all fields, and not just the data for the drives and the administration user groups. To do this, select Expert mode. You can now make changes in all fields:

- The standard name of the database instance is CDB. You can change this name if you wish.
- The values for the database size, log size, and the drives on which the data will be saved are merely suggested values. You can change these values according to the needs of your system.
- By default, the website is created during the installation procedure. It is recommended that you do not change this option.
- The standard HTTP port for the Cache Server is 1095. If necessary, you can specify another port number.
- Access restriction for Content Server and Cache Server administration is set as standard. Local administrators always have administrative access. If you require access control for specific groups, enter the name of an NT group. You can also enter domain groups.
- If you do not require access control, leave the field AdminSecurity-group empty.
10. Choose Next >.

The next screen gives you an overview of the components you selected for installation and the settings you made in each case.

![SAP Content Server - InstallShield Wizard](image)

Ready to Install the Program

The wizard is ready to begin installation.

Install Content Server:
HTTP Port: 1090  Admin:Security: Administrators  DB instance: SDB
Size 1024 MB (D:\), Log 102 MB (E:\ F:\) DUAL

Install Cache Server:
HTTP Port: 1095  Admin:Security: Administrators  DB instance: CDB
Size 1024 MB (C:\), Log 102 MB (E:\) DEMO

Destination: D:\Program Files\SAP\

Click Install to begin the installation.

If you want to change any of your installation settings, click Back. Click Cancel to exit the wizard.

If you want to change any of the settings, choose Back and make the required changes.

11. Choose Install >.

The setup program now executes the installation for the individual components. This may take some time. The screen shown below indicates the progress of each step of the installation process:
First, the programs and the database for the Content Server are installed:

Then the database for the Cache Server is installed:
12. When the installation procedure is finished, you receive the following message:

The *readme* file contains a short overview of the new or changed functions. If you do not want to read this information, deactivate this option.
   The file readme.txt, which you can find on the installation CD in the directory \CONTSERV\SERVINST, is then displayed.

14. The following message appears:
   
   ![SAP Content Server Installer Information]
   
   You must restart your system for the configuration changes made to SAP Content Server to take effect. Click Yes to restart now or No if you plan to restart later.

15. Choose Yes.
   The system then restarts.
   The installation is now complete.

Result
You have installed the Content Server and the Cache Server on your system.

Upgrade
Prerequisites
- You already have a previous version of the Content Server or the Cache Server and want to upgrade to the latest version.
- You have fulfilled the conditions described in Installation Prerequisites [Page 9].

Overview
The following sections describe how to upgrade the components Content Server and Cache Server on a Windows 2000 Server system.

This description of the setup program applies to a complete upgrade of both components:
- Content Server (including SAP DB)
- Cache Server (including SAP DB)

For a detailed description of the upgrade, see the section Executing the Upgrade [Page 23].

💡
Existing database instances are **not** migrated as part of an upgrade.
Notes

- When upgrading, you first need to deinstall the old software. This happens automatically as part of a new installation, when you run the old setup program. If the old setup program instructs you to reboot your computer, do not do this until the new setup program has completed.

- New websites are automatically set up during an upgrade. The old websites are deleted beforehand.

- If your previous version of the Content Server or the Cache Server did not run on a standard port (Content Server: port 1090, Cache Server: port 1095), you need to set the standard port. There are two ways of doing this: You can change the port setting in the Customizing of the SAP System, once you have completed the upgrade. Alternatively, when running the setup program, on the screen Check Settings, you can enter the port that the previous Content Server or Cache Server used. You can do this by running the setup program again after you have completed the upgrade.

  See also Modifications After Installation or Upgrade [Page 35].

- During the upgrade process, the setup program recognizes whether the SAP DB is already installed on your computer system, so that it is not installed unnecessarily.

- If the main setup program terminates for any reason during the upgrade process, the ini files (ContentServer.ini, CSProxyCache.ini) and certificates (in the directory security) are not transferred automatically. Therefore, you have to manually copy the ini files and the certificates from the old to the new directory structure.

  The new directory structure looks like this:

  ![Directory Structure](image)

- A deinstallation is carried out as part of the upgrade. Some files are left in the old directory structure after deinstallation. These files are no longer needed and you can delete them manually after the upgrade procedure has finished.

Upgrade Procedure

Prerequisites

Note the following prerequisites for carrying out the upgrade:

- You have installed an older version of the Content Server or the Cache Server, or both.
• Start the upgrade program for the SAP Content Server on the Microsoft Windows Server on which you want to install the components.

• To carry out an installation or an upgrade, you must log on locally with administrator permissions to the operating system Windows 2000 Server.

• Before starting the upgrade program, close down all other programs.

Procedure

16. Insert the SAP Server Components2 CD in the CD ROM drive.

17. Start the program setup.exe in the directory \CONTSERV\SERVINST.

The following dialog box appears:

![InstallShield Wizard](image)

The following screen may appear:

![InstallShield](image)

If this screen does appear, confirm the message by choosing OK.

18. You now receive a message telling you that an older version of SAP Content Server is already installed on your computer, and that the older version must be deinstalled.

![Question](image)
Confirm this by choosing {Yes}.

19. The following message appears:

![Confirm File Deletion dialog box]

Confirm this by choosing {Yes}.

5. A message appears, telling you that the previous version of SAP Content Server was removed from your computer:

![Remove Programs From Your Computer dialog box]

Confirm this by choosing {OK}.

You then receive another message telling you to restart your computer.

![Restart computer message]

Confirm this by choosing {OK}.
The next message tells you that the old software was deinstalled, and that setup is proceeding:

```
Information

Previous version has been removed.
Setup will now continue.

OK
```

22. Confirm this by choosing **OK**.

You now receive a message telling you that an older version of the Cache Server is already installed on your computer, and that the older version must be deinstalled.

```
Question

You must deinstall any existing version of 'SAP Content Server Cache Program' before you can install another version.
The setup program found that 'SAP Content Server Cache Program' is already installed on this computer.
The existing installation has the version '464006'.
The version from this setup program is '6.10.0007'.
Do you want the setup program to deinstall the existing installation now so that you can install the version '6.10.0007'? 

Yes  No
```

23. Confirm this by choosing **Yes**.

The following message appears:

```
Confirm File Deletion

Are you sure you want to completely remove 'SAP Content Server Cache Program' and all of its components?

Yes  No
```

24. Confirm this by choosing **Yes**.

You are then asked whether old files that are no longer used should be deleted:
25. We recommend that you choose [No to All], to avoid any potential problems.

A message appears, telling you that the previous version of the Cache Server was removed from your computer:

26. Confirm this by choosing [OK].

The next message tells you that the old software was deinstalled, and that setup is proceeding:
27. Confirm this by choosing OK.

You now receive a message telling you that a previous version of the SAP Content Server Tool is already installed on your computer, and that the older version must be deinstalled.

28. Confirm this by choosing Yes.

The following message appears:

29. Confirm this by choosing Yes.

You are then asked whether old files that are no longer used should be deleted:
30. We recommend that you choose [No to All], to avoid any potential problems.

A message appears, telling you that the previous version of the SAP Content Server Tool was removed from your computer:

31. Confirm this by choosing [OK].

The next message tells you that the old software was deinstalled, and that setup is proceeding:
32. Confirm this by choosing [OK].

The new installation program now opens:

33. Choose [Next >].

On the next screen, select from the list the components you want to upgrade:
In this example, we have chosen Complete.

34. Choose Next >.

The next screen shows the Content Server settings:
If a version of SAP Content Server is already installed on your computer, do not start any new database instances.

35. Make the settings you require, either in expert mode or in normal mode, and choose Next.

The next screen shows the Cache Server settings:
For more information on the settings you can make here, see Executing the Setup Program [Page 13].

⚠️

If there is a cache server for the SAP Content Server already installed on your computer, do not start any new database instances.

36. Make the settings you require, either in expert mode or in normal mode, and choose Next >.

The next screen shows an overview of the settings you made:
37. Choose **Install**.

   While the individual components are being installed, status information is displayed:

   **Installing SAP Content Server**
   
   The program features you selected are being installed.

   **Please wait while the InstallShield Wizard installs SAP Content Server.**

   **Status:**
   
   Copying new files

38. When the installation procedure is finished, you receive the following message:
The readme file contains a short overview of the new or changed functions. If you do not want to read this information, deactivate this option.


The file readme.txt, which you can find on the installation CD in the directory \CONTSERV\SERVINST, is then displayed.

Result
You have now upgraded the Content Server and the Cache Server.

Modifications After Installation or Upgrade

You can make modifications to an installation at any time, even after the installation or upgrade procedure is finished. This is particularly useful if port numbers or AdminSecurity permissions change after you have finished the installation or upgrade procedure.

1. To make such modifications, choose Add/Remove Programs from the Control Panel.

2. Select SAP Content Server and choose Change.

3. The installation program opens. Choose Next.

   The screen Program Maintenance opens.
4. Choose Modify.

5. Choose Next >.

The following screen appears:
6. Now choose the components whose installation settings you want to change and choose **Next >**.

Now make your changes on the subsequent screens (see also Executing the Setup Program [Page 13]).

---

**Deinstallation**

**Overview**

The following sections describe how to deinstall the Content Server and the Cache Server. Each component has to be deinstalled separately. The description that follows applies to the Content Server, although the procedure for the Cache Server is basically identical.

⚠️ Note that important data can be lost if you deinstall the Content Server.

**Procedure**

1. Using the Windows Start menu, choose *Settings → Control Panel.*
2. Choose Add/Remove Programs.

3. Choose the component you want to deinstall.
4. Choose **Remove**.

The following security message appears:

![Add/Remove Programs](image)

5. Confirm this by choosing **Yes**.

The Content Server and the Cache Server are then deinstalled. After a few moments, the screen **Add/Remove Programs** opens again. **SAP Content Server** no longer appears on this screen.
6. Close the screen *Add/Remove Programs*.

**Result**

You have now deinstalled the Content Server and the Cache Server.

**Notes**

- *ini* files and security information remain in the corresponding directories after deinstallation.
- Neither the SAP DB database software nor the database instances are removed from the computer as part of the deinstallation. If you want to deinstall the entire SAP DB, follow the procedure described in note 310218 (*Delete SAP DB Installation*) (see also *Note Overview [Page 59]*).
System Configuration

Use
Before you store data on SAP Content Server and start using the system productively, you have to make the system settings described in this section. You can make these settings directly in the SAP System.

Prerequisites
You have to fulfil the technical prerequisites described in Installation Prerequisites [Page 9].

Overview
Make the system settings described in the following sections:

- Content Server Settings [Page 41]
- Cache Server Settings [Page 43]

The system settings are mainly Customizing settings.

You make the Customizing settings in the SAP System in the Implementation Guide (IMG). The individual Customizing activities are described in the SAP reference IMG under SAP Web Application Server → Basis Services → Knowledge Provider.

In the IMG, simply choose Execute to go to the transaction in question. For online help, choose Documentation. Also, for detailed documentation on SAP Content Server, see the SAP Library under SAP Web Application Server → Basis Services → Knowledge Provider → Content Management Service and its sub-sections. As the settings are described in detail in SAP Library, they are only mentioned briefly here.

Content Server Settings
Once you have installed your new Content Server, you need to create content repositories where you can store your content.

Testing the Connection to the Content Server
1. Open a Web browser on a host that is connected to your local network.
2. Navigate to the following URL:
   http://<host name>:<port no.>/ContentServer/ContentServer.dll?serverInfo
   
   Note that the URL is case-sensitive.
   
   The information on the Content Server that is the result of the test is then displayed. In this information, the status should be “running”.

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Creating Content Repositories

1. In transaction **CSADMIN**, create at least one content repository for your Content Server.

   ![Warning]

   Make sure that you change the pre-set **ContentStorageName** from **SDB** to the name of the database instance you set during the installation procedure.

2. Send a certificate to your repository and activate the certificate.

3. From the tab page **Detail**, call up transaction **OAC0**, so that you can make the repository known in the SAP System.

   ![Tip]

   From Release 4.6D, you can use the Customizing icon (a blue arrow) in change mode to jump from transaction **CSADMIN** to transaction **OAC0**. In **OAC0**, you can simply accept the pre-set entries and save them.

   ![Tip]

   For more information on administrating the Content Server, see the SAP Library under **SAP Web Application Server → Basis Services → Knowledge Provider → Content Management Service → Content Server and Cache Server Administration.**

Testing the Content Repositories

1. In transaction **SE38**, execute the report **RSCMST**.

2. Enter the name of one of your content repositories and execute one or more test runs.

   The traffic light symbols show you whether or not the tests were successful. You can also read the test logs at this point.

Switching Off Access Control for Content Server Administration

**AdminSecurity** is activated by default.

This means that only members of specified groups (and local administrators) can execute administrative commands. To do this, they have to enter their user name and password.

You can change this setting at any time by choosing **Add/Remove Programs**, activating **Setup AdminSecurity** (see graphic), and specifying the relevant NT group.

If you do not specify any group, **AdminSecurity** is deactivated.

![Tip]

After you activate and deactivate **AdminSecurity**, you have to restart the Internet Information Server (IIS) to activate your changes.
Testing the Connection to the Cache Server

1. Open a Web browser on a host that is connected to your local network.
2. Enter the following URL in the address field and choose Return:
   http://<host name>:<port no.>/Cache/CSP\ProxyCache.dll?serverInfo

Note that the URL is case-sensitive.

The information on the Cache Server that is the result of the test is then displayed. In this information, the status should be "running" (serverStatus="running").
Making the Cache Known to the SAP System

1. In transaction **SCMSCA**, maintain the entries for your Cache Server.
2. If you are using distributed cache servers, you need to make additional entries.
   
   For information on this, see both the installation guide (IMG) under *SAP Web Application Server → Basis Services → Knowledge Provider → Distribution* and the SAP Library under *SAP Web Application Server → Basis Services → Knowledge Provider → Content Management Service → Distribution*.

   For more information on administering the Cache Server, see the SAP Library under *SAP Web Application Server → Basis Services → Knowledge Provider → Content Management Service → KPro and Caching*.

   For more information on caching and the required system settings for previous releases, see note 216419 (*Multi-Level Caching and Content Server Proxies*; see also [Note Overview](Page 59)).

Testing the Caches

You can test the cache independently of the Customizing settings described above. To do this, use the test report **RSCMST** to set that a specific cache should be used for access, regardless of the Customizing settings.

1. In transaction **SE38**, execute the report **RSCMST**.
2. Specify the name of your cache in the following format:
   `<host name>:<Port>/Cache/CSProxyCache.dll`
   
   For example: `p21032:1095/Cache/CSProxyCache.dll`.
3. Execute the test.
4. Execute the test run **RSCMSTH0** or **RSCMSTAC**.
   
   The traffic light symbols show you whether or not the tests were successful. You can also read the test logs at this point.
   
   - **RSCMSTH0**
     
     URLs that contain the `forward` parameter are **get** URLs that are transferred via the cache that you specified.
   
   - **RSCMSTAC**
     
     If data is found in the cache, `[cache]` is output after each `get` request.
Switching Off Access Control for Content Server / Cache Server Administration

AdminSecurity is activated by default.

This means that only members of specified groups (and local administrators) can execute administrative commands. To do this, they have to enter their user name and password.

You can change this setting at any time by choosing Add/Remove Programs, activating Setup AdminSecurity (see graphic), and specifying the relevant NT group.

If you do not specify any group, AdminSecurity is deactivated.

💡

When activating and deactivating AdminSecurity, you have to restart the Internet Information Server (IIS) to make your changes active.
Error Handling

In the main Content Server installation, you can install one or more components: Content Server, Cache Server, or both.

If an error occurs during installation or upgrade, the system displays the relevant error message.

During the installation or upgrade procedure, you can either terminate the procedure by choosing Cancel or go back a step if you want to change or review your entries by choosing < Back.

Even if all the components were successfully installed, errors can still occur. For example, there could be a problem with the connections between the servers.

Therefore, make sure that you type input parameters exactly as they are specified. The system sometimes differentiates between upper-case and lower-case characters.

Also, if errors occur, you can re-install the components in question, or repair the installation (see Repairing the Installation [Page 47]).

For additional information on the Content Server and the Cache Server, see Checking the ISM Settings [Page 52] and Additional Information on the Internet Service Manager [Page 58].

Possible Problems in SAP DB Installation

The following problems can occur during an SAP DB installation procedure:

- For releases lower than SAP DB 7.2 you cannot run databases of different releases on one computer at the same time. Therefore, if a database of a version lower than 7.2 is installed on your computer, you cannot create any more database instances. Otherwise, data may be lost.
  Of course, you can still install the Content Server software.

- If you try to install another database instance when one or more database instances are already installed and running on your computer, you may get the following message:

  Close the existing database instances manually. To do this, choose Settings → Control Panel → Administrative Tools → Services from the Windows Start menu. Select the service SAPDB:<Instance name> and from the menu choose Action → Stop Service. Then choose Retry in the dialog box above.

If problems occur when you are installing the SAP DB, see the following log files for information:

- Lcinst_<Instance name>.log
This log file is located in the standard installation directory <Disk drive>:\Program Files\SAP\SAPDB CS Setup\Lcinst_<Instance name>.log.

- Xcmdout.log
  This log file is located in the standard installation directory <Disk drive>:\Program Files\SAP\SAPDB CS Setup\Xcmdout.log

Repairing the Installation

Use
If errors occur during the installation procedure, you can implement the Repair function.

Procedure
1. In the Windows Start menu, choose Settings → Control Panel.
2. Choose Add/Remove Programs.
3. Choose the component you want to repair.
4. Choose **Change**.

   The installation setup program opens.
5. Choose the next button.
6. On the screen *Program Maintenance*, choose *Repair*.

- **Modify**: Change which program features are installed. This option displays the Custom Selection dialog in which you can change the way features are installed.
- **Repair**: Repair installation errors in the program. This option fixes missing or corrupt files, shortcuts, and registry entries.
- **Remove**: Remove SAP Content Server from your computer.
7. Choose **Next >**

The following screen appears:

![SAP Content Server - InstallShield Wizard](image)

**Ready to Repair the Program**

The wizard is ready to begin installation.

Click **Install** to begin the installation.

If you want to change any of your installation settings, click **Back**. Click **Cancel** to exit the wizard.

8. Choose **Install**

The following screen appears:
9. When the installation routine is finished, the following screen appears:


You are then taken back to the screen Add/Remove Programs.
Testing the Internet Services Manager Settings

Use
If connection errors occur, you can check the settings for the Content Server and the Cache Server in the Internet Service Manager (ISM), as described below.

Alternatively, you can simply re-install the component.

The procedure for testing the ISM settings for the Content Server is described here. The procedure for the Cache Server is basically the same. Where settings for the Cache Server are different, this is specifically mentioned.

Access control for the Content Server and the Cache Server administration is activated by default.

Procedure
1. Start the Internet Services Manager by choosing Start → Programs → Administrative Tools → Internet Services Manager or My Computer → Manage → Services and Applications → Internet Information Server.
2. Select the entry Content Server. For the Cache Server, select the entry Cache under SAP_Cache_Server.

3. From the menu Action, choose the sub-menu Properties.

4. On the tab page Virtual Directory, check the following settings:
   - Enter `<Installation directory>\Content Server` or `<Installation directory>\Cache` in the input field Local Path, as shown in the two graphics below.
- The local path of the SAP Content Server program is therefore `C:\Program Files\SAP\Content Server`.

- Similarly, the local path of the Cache Server program is therefore `C:\Program Files\SAP\Cache Server`.
  - The **Application name** is `SAP_Content_Server` or `SAP_Cache_Server`.
  - Choose the option **Scripts and Executables** for **Execute Permissions**.

![SAP_Content_Server Properties](image)
5. On the tab page **Directory Security**, in the area **Anonymous access and authentication control**, choose **Edit**. The dialog box **Authentication Methods** appears. Now check the following settings:
Under Anonymous access, choose Edit.

The following dialog box appears:

- Ensure that the correct host name is entered after the prefix “IUSR_” in the input field Username.
  
  In the example in the graphic above, the host name is P20777.

  ° Note: the details of the user in question must have been entered in the User Manager for Windows 2000 Server.

- Choose OK.
  
  This takes you back to the previous dialog box.

Under Authenticated access, choose Edit beside the option Basic authentication.

The following dialog box appears:
You specify the standard domains here. If you do not enter any domain when entering your password, the domain specified here is used. Usually, when entering your password, you can specify a domain in the format `<Domain>\<User>`. In the dialog box, enter the name of the administrator's domain and choose OK.

6. Now check the settings for `SAPDB:<Content Server Name>` and `SAPDB:<Cache Server Name> Services`:

   a. From the Windows Start menu, choose `Programs` → `Administrative Tools` → `Services`.

   The following screen appears:

```
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Status</th>
<th>Startup Type</th>
<th>Log On As</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Scheduler</td>
<td>Enables a ...</td>
<td>Started</td>
<td>Automatic</td>
<td>LocalSystem</td>
</tr>
<tr>
<td>System Event Notify...</td>
<td>Tracks system...</td>
<td>Started</td>
<td>Automatic</td>
<td>LocalSystem</td>
</tr>
<tr>
<td>SNMP Trap Service</td>
<td>Receives tr...</td>
<td>Manual</td>
<td>LocalSystem</td>
<td></td>
</tr>
<tr>
<td>SNMP Service</td>
<td>Includes a...</td>
<td>Started</td>
<td>Automatic</td>
<td>LocalSystem</td>
</tr>
<tr>
<td>Smart Card Helper</td>
<td>Provides s...</td>
<td>Manual</td>
<td>LocalSystem</td>
<td></td>
</tr>
<tr>
<td>Smart Card</td>
<td>Manages a...</td>
<td>Manual</td>
<td>LocalSystem</td>
<td></td>
</tr>
<tr>
<td>Security Accounts</td>
<td>Provides R...</td>
<td>Started</td>
<td>Automatic</td>
<td>LocalSystem</td>
</tr>
<tr>
<td>SAPDB: 5DB</td>
<td>Started Automatic</td>
<td>LocalSystem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAPDB: CDB</td>
<td>Started Automatic</td>
<td>LocalSystem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

7. Now check the startup type for `SAPDB:<Content Server Name>` and `SAPDB:<Cache Server Name>` and if necessary, change it to Automatic.

**Timeout**

Occasionally, a document call may result in a timeout message. A full log is often the cause of this problem.

If you get a timeout message, check the log file for the SAP DB. The pre-set log mode is *single/dual*. This means that the database postpones all transactions that cannot be logged.
Change the log mode to *autosave*. When this is set, data in the log file is stored to other files at regular intervals, which creates more space in the log file. Note that before you can activate *autosave*, you must make a full backup of the database first. This means that at every subsequent full backup, the old log backups can be discarded.

You can find documentation on the database, and information on the SAP DB tools, administration, and backup mechanisms in the SAP Library under *mySAP Technology Components: SAP DB*.

### Notes on the Internet Service Manager

1. After you have started the program *Internet Service Manager* and made your changes to the configuration, choose *Action → Refresh* to display the latest settings.

2. Check the settings for the *IIS Admin Service*.
   - From the Windows Start menu, choose *Programs → Administrative Tools → Services*.
   - Choose *IIS Admin Service*.
   - Check the startup type for *IIS Admin Service* and change it to *Automatic* if necessary.
<table>
<thead>
<tr>
<th>Note</th>
<th>Topic</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Multi-Level Caching and Content Server Proxies</td>
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<td>Delete SAP DB Installation</td>
<td><a href="http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700007208382000E">http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700007208382000E</a></td>
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<td>SAP DB Release Upgrade to 7.2.5 B00</td>
<td><a href="http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700001416612000E">http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700001416612000E</a></td>
</tr>
<tr>
<td>397652</td>
<td>SAP DB Release Upgrade to 7.3.0 B14/15</td>
<td><a href="https://www011.sap-ag.de/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700009063532000E">https://www011.sap-ag.de/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=011000358700009063532000E</a></td>
</tr>
<tr>
<td>329473</td>
<td>Description of File ContentServer.INI</td>
<td><a href="http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=0T1000358700009063532000E">http://service.sap.com/~form/sapnet?_FRAME=CONTAINER&amp;_OBJECT=0T1000358700009063532000E</a></td>
</tr>
</tbody>
</table>