Peregrine

AssetCenter Installation

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This edition applies to version 4.0.0 of the licensed program

AssetCenter

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Installation

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PREFACE

Preface

This guide explains:

- Which programs belong to AssetCenter.
- In which environments the AssetCenter programs function.
- How to install AssetCenter for the first time.
- How to create an AssetCenter database.
- Which factors have an impacts on the performances of AssetCenter.

Important: Strictly adhere to the instructions that we provide here.

1 Precautions

CHAPTER

Preserving AssetCenter data integrity

AssetCenter is extremely rich in functionality. This richness relies on a complex database structure:

- The database contains a large number of tables, fields, links and indexes.
- Certain intermediary tables are not displayed by the graphical interface.
- Certain links, fields and indexes are automatically created, deleted or modified by the software.
- You can create additional tables, fields, links and indexes.

Only the interfaces designed for AssetCenter are capable of modifying the **contents** of the database with respect to its integrity.

- Graphical interface
- AssetCenter API
- Import module

- Web interfaces based on Get-It
- Peregrine Systems gateways
- Connect-It software
- AssetCenter Server software

Only the interfaces designed for AssetCenter are capable of modifying the **structure** of the database with respect to its integrity.

- AssetCenter Database Administrator

Warning: You must never modify the structure or the contents of the database by any means other than those intended for use with the software. Such modifications risk to corrupt the database in the following ways:

- Involuntary loss or modification of data or links.
- Creation of "ghost" links or records.
- Serious error messages, etc.

About the setup.pdf file

You will find a **setup.pdf** file next to the **setup.exe** file on the AssetCenter installation CD-ROM.

The **setup.pdf** file is not an Adobe Acrobat file. The **.pdf** file extension corresponds to a Microsoft standard used for Electronic Software Distribution (ESD).

CHAPTER 2 List of AssetCenter programs

Program name	Program's interface
AssetCenter database modules, including AssetCenter Import	Graphic
AssetCenter Export	Graphic
	Command line
AssetCenter Import	Command line
AssetCenter Server	Graphic
AssetCenter Database Administrator	Graphic
	Graphic
AssetCenter API	Non graphic
AutoCAD module	Graphic

Note: The following software applications can be integrated with AssetCenter but are not part of AssetCenter's programs:

- Connect-It
- InfraTools Remote Control
- Knowlix
- Crystal Reports

- AutoCAD

3 Supported operating systems and minimum configuration

CHAPTER

Warning: We do not guarantee the proper functioning of AssetCenter with different versions (even higher versions) of the operating systems and Service Packs described in this chapter.

AssetCenter client programs

In a Windows environment

Windows-supported operating systems (all AssetCenter programs, except AssetCenter Server).

- Windows 95 OS R2
- Windows 98
- Windows ME
- Windows NT 4:
  - Workstation

  - Server
  - Terminal Server (with or without Citrix Frame Server)
- Windows 2000
  - Professional
  - Server
  - Advanced Server with or without Terminal Services)
- Windows XP:
  - Professional Edition
  - Home Edition

Supported Windows operating systems (AssetCenter Serveur)

- Windows NT 4:
  - Workstation
  - Server
  - Terminal Server (with or without Citrix Frame Server)
- Windows 2000:
  - Professional
  - Server
  - Advanced Server with or without Terminal Services)
- Windows XP Professional Edition

Minimal configuration

All programs except AssetCenter Database Administrator

Environment	Windows 95, 98 and ME	Windows NT 4, 2000 and XP
CPU	Pentium 120	Pentium 200
RAM	32 MB	96 MB
Disk space (*)	1 GB	1 GB

(*) The files installed with AssetCenter require around 200 MB disk space (not including the database you use).

AssetCenter Database Administrator

Environment	Windows NT 4, 2000 and XP Professional Edition
CPU	Pentium III
RAM	128 MB reserved for AssetCenter Server
Disk space (*)	2 GB

(*) The files installed with AssetCenter require around 200 MB disk space (not including the database you use).

Recommended configuration

All programs except AssetCenter Database Administrator

Environment	Windows 95, 98 and ME	Windows NT 4, 2000 and XP
CPU	Pentium II 400	Pentium III 500
RAM	96 MB	128 MB
Disk space (*)	20 GB	20 GB

(*) The files installed with AssetCenter require around 200 MB disk space (not including the database you use).

AssetCenter Database Administrator

Environnement	Windows NT 4, 2000 and XP Professional Edition
CPU	Pentium 133
RAM	64 MB reserved for AssetCenter Server
Disk space (*)	540 MB
Network	High speed link with DBMS server. (For example: Ethernet 100 Mbps) and low latency (<5 ms).

(*) The files installed with AssetCenter require around 200 MB disk space (not including the database you use).

AssetCenter database Server

The server may be used with all the operating systems and hardware platforms supported by your DBMS.

To acquire the list of these supported items, refer to the documentation of your DBMS.

CHAPTER 4 Supported DBMSs

Warning: We do not guarantee the proper functioning of AssetCenter with different versions (even later versions) of the DBMSs and Service Packs described in this chapter.

Microsoft SQL Server

Server

AssetCenter supports Microsoft SQL Server versions 7.0 SP3 and 2000.

Client

Access is carried out via ODBC.

The language of the Microsoft SQL Server client is not important as long as it is properly parameterized (e.g. for accented characters to be properly supported).

There are many combinations possible. Not all of them have been tested. Here are some examples of combinations that have been tested with success.

Client Windows version	Microsoft SQL Server version	ODBC version	ODBC driver version
95, 98, 2000, NT 4, ME or XP	7.0 SP3	3.5x	3.5x 32 bits (*)
	2000 SP1	3.5x	3.5x 32 bits (*)

Warning: Do not use the ODBC driver 2.50.121. It can cause major malfunctions when used with AssetCenter.

Network protocols	All network protocols supported by the ODBC driver for Microsoft SQL Server are supported by AssetCenter. In particular: TCP/IP, NetBios (Windows). For a more exhaustive list, please refer to the documentation supplied with Microsoft SQL Server.

(*) These drivers are supplied on Microsoft SQL Server's installation CD (usually in the **<SQL Server>\I386\ODBC** for the 32-bit drivers).

Oracle Workgroup Server

Server	AssetCenter supports Oracle versions 7.3, 8.0.x, 8.1.x (8i) and 9.x (9i) (version 8.0.5 in particular). Since later versions of Oracle are not available at the time of writing, we cannot guarantee the operation of AssetCenter with these.

Warning: You must:

- Use a code page adapted to your language.
- Use the same code page at the level of the database server and client layers.

Client	AssetCenter supports Oracle 7.3, 8.0.x, 8.1.x (8i) and 9.x (9i) clients. These clients use SQL Net 2.x middleware.

Warning: The character set used on the client must be the same as that used on the server.

You can mix different client and server versions of Oracle depending on what is supported by Oracle.

Warning: Warning: Oracle performs a different installation for 16 and 32-bit versions.

Network protocols	All network protocols supported by Oracle SQL Net are supported by AssetCenter. In particular: TCP/IP, SPX/IPX (Novell), NetBEUI (Windows). For a more exhaustive list, please refer to the documentation supplied with Oracle.

Sybase Adaptive Server

Server	AssetCenter supports Sybase Adaptive Server 11.9.2 and 12 and 12.5. If you have Sybase Adaptive Server 11.9.2, you must have installed the Service Pack and the EBF appropriate for your operating system (SWR8454 et EBF8243 for Windows NT, EBF8239 for Solaris). Since later versions of Sybase SQL are not available at the time of writing, we cannot guarantee the operation of AssetCenter with these.
Client	AssetCenter has been validated with the version of Ct/Lib supplied with Sybase Connectivity Library 11.1.1. At the time of writing, later versions have not yet been validated but are likely to function correctly. The language of the Sybase client is not important as long as it is properly parameterized (e.g. for accented characters to be properly supported). You can mix different client and server versions of Sybase SQL depending on what is supported by Sybase SQL.
Network protocols	All network protocols supported by Ct/Lib are supported by AssetCenter. In particular: TCP/IP, NetBios (Windows), IPX/ SPX, etc. For a more exhaustive list, please refer to the documentation supplied with Sybase SQL.

DB2 UDB

Server	DB2 UDB version 7.1.

	Access to DB2 7.1 OS/390 is not yet operational.
Client	Runtime Client version 7.1 fixpack 2.
Network protocols	All network protocols supported by the ODBC driver for DB2 UDB are supported by AssetCenter. In particular: TCP/IP, NetBios (Windows). For a more exhaustive list, please refer to the documentation supplied with DB2 UDB.

Sybase SQL Anywhere 5.5.4 in stand-alone mode

This DBMS is used for the demonstration database installed with AssetCenter only.

Sybase SQL Anywhere 5.5.4 is not supported in Windows 95 or Window 98 with a local database: The **threading** model used by this operating system imposes a limitation at the local SQL Anywhere level. Using AssetCenter with AssetCenter Server is thus impossible.

5 Installing AssetCenter programs

CHAPTER

This chapter explains how to install AssetCenter for the first time.

Important preliminary remarks

Warning: Certain antivirus programs, when running, disturb the AssetCenter installation program since they block access to the Registry.

Warning: Incorrectly installed or configured Oracle client layers (SQL*Net or Net 8) can affect the handling of accented characters in AssetCenter. This problem appears, for example, when a record containing accented characters is inserted: When you reselect it, the text is not displayed correctly. To solve this problem, verify the configuration of SQL*Net or Net 8.

Before installing AssetCenter: Some questions to ask yourself

Before proceeding with the installation of AssetCenter, determine whether you should install the runtime (limited version) of Crystal Reports and the runtime version of Sybase SQL Anywhere.

Note: If you require such installations, they can be performed using the AssetCenter installation program.

Here is some information that will enable you to make your choice:

Determining if you need to install Crystal Reports runtime

If you have installed a full version of Crystal Reports version:	Here is what you must do:
5.0 or earlier	Install the Crystal Reports 8.0 runtime.
6.0 or 7.0	We recommend that you install the Crystal Reports 8.0. runtime.
8.0 or earlier	It is not necessary to install the Crystal Reports 8.0. runtime.

Note: In any case, the AssetCenter 4.0.0 installation program will only overwrite DLLs which are older and of the same language.

Determining if you need to install Sybase SQL Anywhere runtime

By default, the stand-alone version of AssetCenter is installed. If no version of Sybase SQL Anywhere is found on the machine, the Sybase SQL Anywhere Runtime (limited version) will also be installed with two databases:

- A demonstration database: **Am400.db**, copied in the **AmDemo** sub-folder of the installation folder of AssetCenter.
- A demonstration database supporting AutoCAD integration: **acad400.db**, copied in the **acadi\db** sub-folder of the AssetCenter installation folder.
- An empty database: **Empty400.db**, copied into the installation folder of AssetCenter.

These databases:

- Can be accessed using a license file provided with AssetCenter.

  This file grants access to all or part of the software.
- Must be installed on the same machine as AssetCenter.
- Do not work in client-server mode.
- Can be accessed by AssetCenter Server and AssetCenter Database Administrator.

If you use another DBMS for your working database, you only need to install the Sybase SQL Anywhere runtime to be able to access the demonstration database.

The installation program will only install the runtime version if it does not find the full version of Sybase SQL Anywhere installed on the machine.

Installing under Windows NT 4, 2000 or XP: precautions

If you are using Windows NT 4, 2000 or XP, you need to have administrative rights on the machine to install the software, without which the installation program will not be able to modify the registries.

Installing in Windows NT 4 Terminal Server (with or without Citrix Frame Server): precautions

If you want to install Crystal Reports runtime, you must perform the following operations before executing the AssetCenter installation program:

1 Open a DOS command prompt.
2 Execute the following command:

```
change user /install
```

If you do not perform these preliminary operations, only the user connected at the moment of the Crystal Reports runtime installation will be able to print Crystal Reports reports.

Tip: The error message displayed in case of this type of problem is:

```
PDSODBC.DLL cannot be found
```

Note: These precautions do not apply to Windows 2000 Advanced Server with Terminal Services.

Installation in client-server: steps to adhere to

1 Install the DBMS on the server and the client workstations.
2 Test communications between client and server.
3 Install AssetCenter in one of the following ways:

- Full installation of AssetCenter on each client machine.
- Network installation of AssetCenter on the server, and then network installation of AssetCenter on each client machine.

Manual installation (graphic)

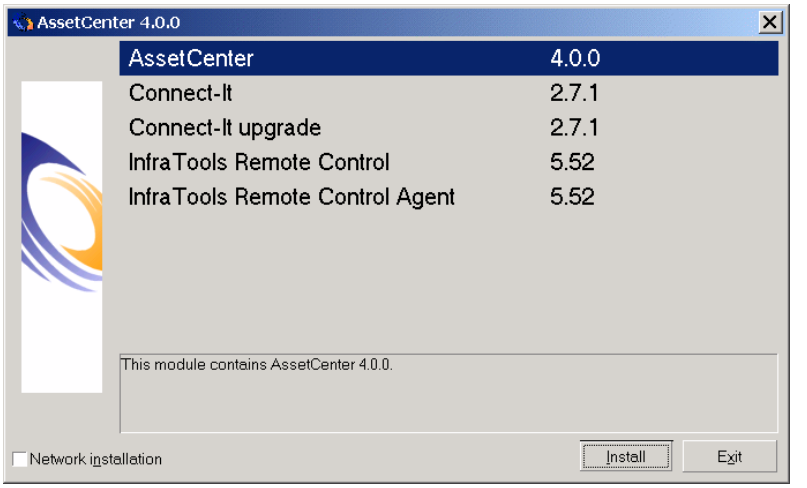
1 Start Windows.
2 Insert the installation CD-ROM.

Note: It is not possible to install to install AssetCenter using diskettes. If necessary, you can copy the contents of the CD-ROM to a hard drive and execute the installation from the hard drive.

3 If the graphical installation program window does not automatically appear when you insert the CD-ROM:
   1 Open the Windows Explorer.
   2 Select the installation CD-ROM.
   3 Select the root of the CD-ROM.
   4 Launch the **Autorun.exe** program.
4 Following the instructions given by the installation program (see below).

Graphical installation steps

The first screen offers to install the software present on the CD-ROM.



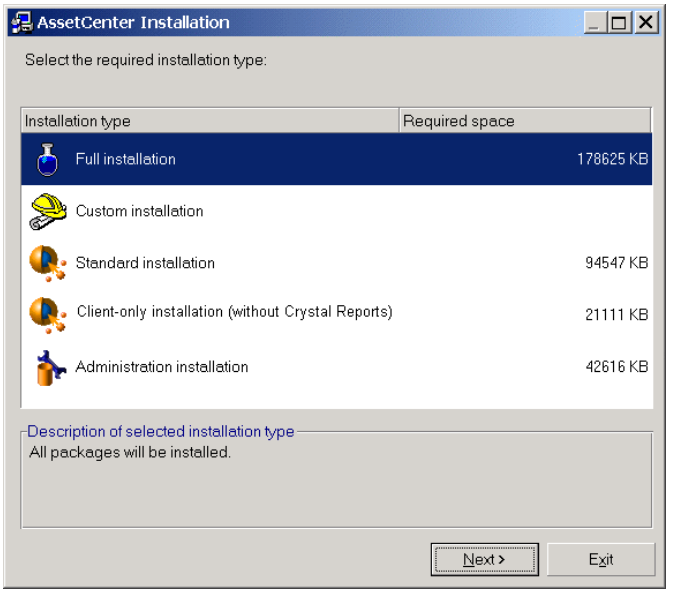
Check the **Network installation** option if you want to install AssetCenter via a server.

Refer to the **Installing AssetCenter programs** chapter, section **Network installation of AssetCenter** of this guide if you selected this option.

To find out which applications you will need, refer to this guide's chapter **After having installed the AssetCenter programs** , in sections:

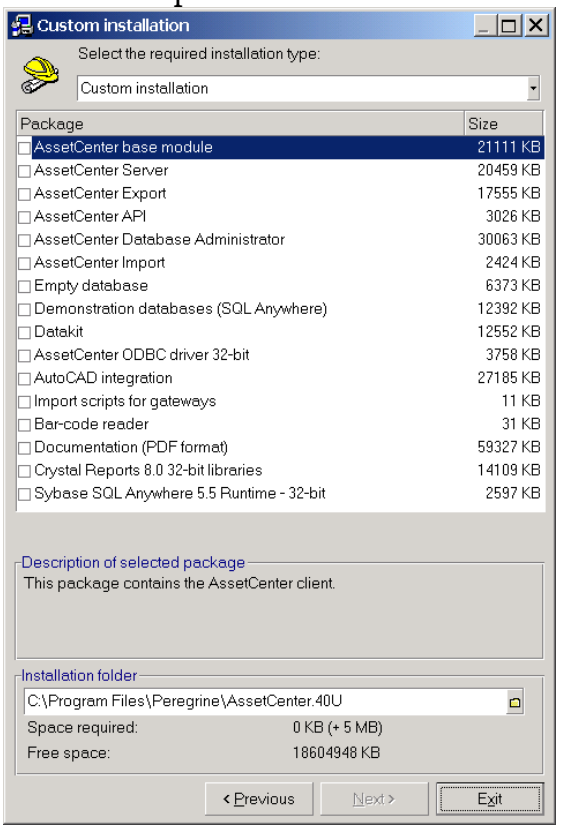
- **To be able to scan remote computers**
- **To integrate AssetCenter with Connect-It**
- **To integrate AssetCenter with InfraTools Remote Control**

The second screen asks you to choose from several types of installations:



- Full installation

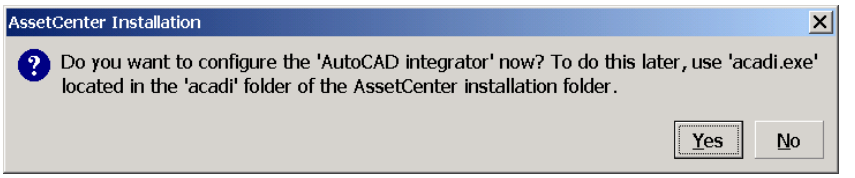
- Custom installation: Select the components that you want to install as well as the installation path.



- Standard installation
- Administrator installation

Note: The complete installation of AssetCenter creates an important volume of files and installs other software besides just AssetCenter. We recommend that you know ahead of time whether or not you really want to install everything.

At the end, the installation program asks if you want to configure the AutoCAD module.



This questions only concerns those users wanting to integrate AutoCAD with AssetCenter.

If you click **Yes**, the installation program executes the **acadi.exe** program, which adds information to the Windows Registry. This information adds AssetCenter integration menus to the graphical interface of AutoCAD.

Note: If you click No, you can perform this configuration by executing the acadi.exe program in a DOS command prompt. This program is located in the acadi sub-folder of the AssetCenter installation folder.

Network installation of AssetCenter

If you wish to install AssetCenter with the minimum amount of files on client workstations, you have the option of first installing AssetCenter on the server and performing a **minimum** installation on the clients.

Server installation

You carry out a network installation of AssetCenter on the server, all the files necessary for the functioning of AssetCenter are copied to the client, but if you want to execute AssetCenter directly, you need to perform a network installation on the client machines.

During the network installation of the server, the installation program only copies the files. No paths, configuration files, or program groups are created or modified.

1 Insert the AssetCenter installation CD-ROM.

2 If the graphical installation program window does not automatically appear when you insert the CD-ROM:

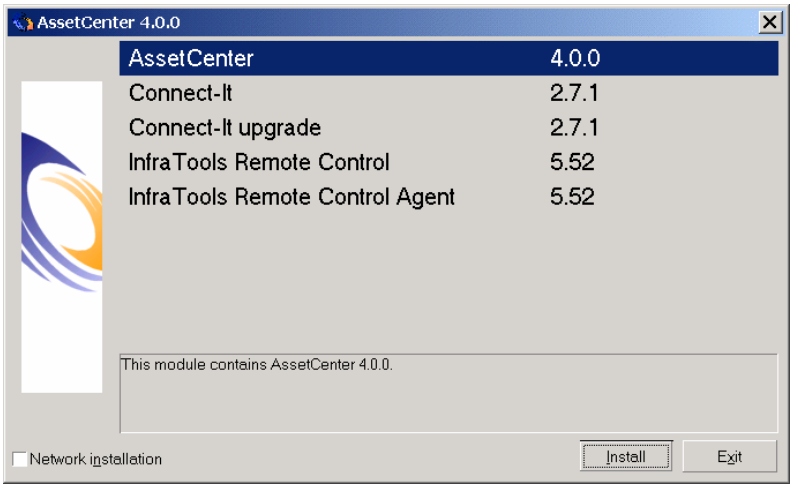
   1 Open the Windows Explorer.

   2 Select the installation CD-ROM.

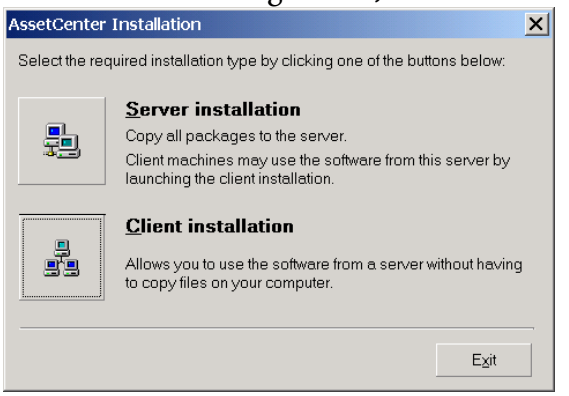
   3 Select the root of the CD-ROM.

   4 Launch the **Autorun.exe** program.

3 When you encounter the following screen, select **Network installation**:

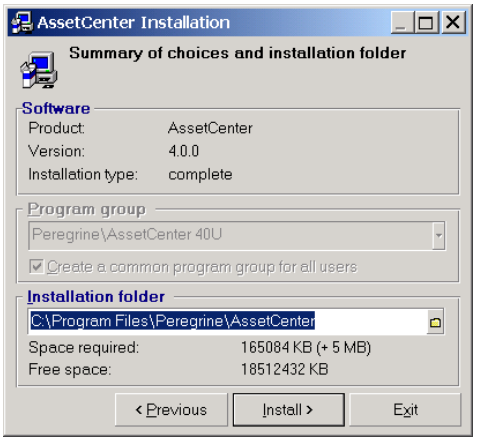


4 When you encounter the following screen, select **Server installation**:



5 Indicate an installation file that is read-accessible by all client workstations.

When you encounter the following screen, select **Server installation**:



Client installation

1 Insert the AssetCenter installation CD-ROM.

2 If the graphical installation program window does not automatically appear when you insert the CD-ROM:

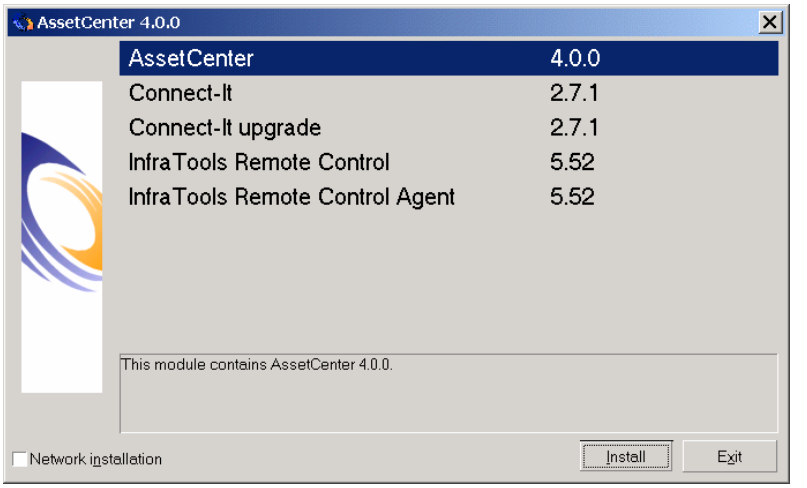
   1 Open the Windows Explorer.

   2 Select the installation CD-ROM.

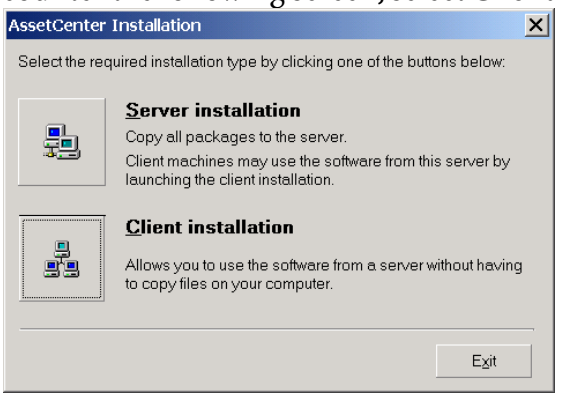
   3 Select the root of the CD-ROM.

4 Launch the **Autorun.exe** program.

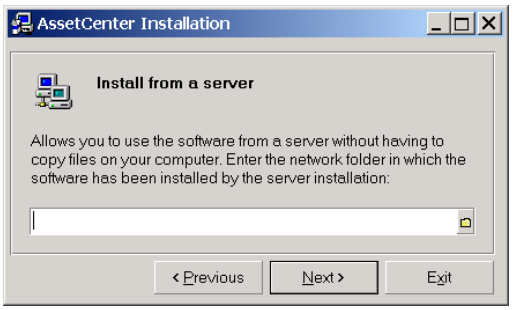
3 When you encounter the following screen, select **Network installation**:



4 When you encounter the following screen, select **Client installation**:



5 When you encouter the following screen, specify in which network directory AssetCenter has been installed:



6 From now on, the installation does not differ from the normal manual graphic installation (see the above paragraph). Only the necessary files are copied to the client machine and the installation program modifies all the necessary configuration files, creates the icons and program groups, etc.

Fully uninstalling a graphic client

To remove AssetCenter fully from a machine, use the `Add/ Remove programs` icon in the Windows Control Panel.

The installation program:

- Removes all the files and program groups that have been installed.
- Modifies the configuration files to remove the modifications made by AssetCenter's installation program.
- Updates the registry.
- Removes the AssetCenter integration menus from the AutoCAD graphical interface.

Automatic installation (command line)

You have the option of installing AssetCenter without having to use the graphical interface. This is useful for administrators since it allows automation of the installation process on several different machines.

Note: Automatic installation cannot be used to upgrade an earlier version of AssetCenter.

To do this, use a text editor to create an installation script. You are free to choose its name. This file must conform to the following format:

```
.ans
```

and have the following form:

```
[Install]
Path = <value>
Group = <value>
UserGroup= <value>
Type = <value>
Packages = <value>
ReplaceDLL = <value>
Reboot = <value>
OverwriteReadOnlyFile = <value>
```

Syntax to be used in the installation script

Variable	Description	Possible values	Default value
Path (see note 1)	Complete path of the AssetCenter installation folder.		**C:\Program Files\Peregrine\AssetCenter**
Group	Installation group		**Peregrine\AssetCenter**

Variable	Description	Possible values	Default value
UserGroup	Used only in Windows NT. Allows you to determine which users have access to the program group.	• 0: program group accessible to all users. • 1: program group accessible only to its user.	0
Type	Installation type	• Maximal: full installation • Minimal: minimum installation • Custom: custom installation	Maximal
Packages (see note 2)	List of components to install.	• exe • amsrv • export • import • admin • amdemo • scan • cr80 • rtany • api40 • emptydb • datakit • adbc • acadi • doc	
ReplaceDll (see note 3)	Replace/ Do not replace the DLLs already installed in another language.	• y : replace • n : do not replace	n
Reboot	Reboot the machine at the end of installation (without confirmation).	• y : reboot • n : do not reboot	n
OverwriteReadOnlyFile	Replaces the read-only files if they exist already.	• y : replace • n : do not replace	n

Variable	Description	Possible values	Default value
DeleteReadOnlyFile	Deletes the read-only files during removal if they exist already	• y : delete • n : do not delete	n

Remarks on certain variables in the installation script

Note 1: Path

If the installation folder selected by the installation program already exists on the disk, it creates a sub-folder. The sub-folder is named using the AssetCenter build number or a random alphanumeric string.

Note 2: Packages

The **Packages** variable is only used if you have set the **Type** attribute to **Custom**.

A comma and a space must separate each value.

Example

```
Packages=exe, amsrv, export
```

Information on the values that a variable can take:

- exe: AssetCenter core modules
- amsrv: AssetCenter Server monitoring program
- export: AssetCenter Export (graphic and online versions)
- import: Import module (online version)
- admin: Administration tools (import scripts for AssetCenter databases and AssetCenter Database Administrator program)
- amdemo: SQL Anywhere demonstration database
- scan: Barcode module
- img: images and icons to illustrate the database
- cr80: Crystal Reports runtime
- rtany: Sybase SQL Anywhere runtime
- api40: AssetCenterAPI;

- emptydb: empty database
- datakit: set of importable database data
- adbc: ODBC driver
- acadi: AutoCad integration and database components
- doc: **.pdf**, **.chm**, **.htm**, **.txt**, etc. files.

Note: On detection of SQL Anywhere: The installation program recognizes that the full version of SQL Anywhere has already been installed if it finds its full version in the the PATH of the Dbeng50.exe file.

Note 3: ReplaceDll

When the installation program tries to copy a DLL that is already present:

- If the language of the DLL is the same, the installation program automatically replaces the file if its version is more recent. Otherwise it leaves the file as is.
- If the language of the DLL is different, the installation program asks whether it should replace the DLL or not.

The options of the **ReplaceDll** variable allow you to determine what the installation program should do when it encounters an installed DLL of a different language. If you choose the value **n**, it does not replace the DLL. If you choose the value **y**, it replaces the DLL without asking for confirmation.

Installation scripts supplied by default

In the **Disk1** folder of the installation CD, you will find three example installation scripts:

- Custom.ans
- Maximal.ans
- Minimal.ans

Executing the unattended installation

Place the **script.ext** script file next to the command line installation program **setupl.exe**. This presupposes that you have already copied the relevant files to your hard disk or carried out a network installation on the server.

To launch the installation, execute the following command on the machine where the installation is to made:

```
setupl.exe -a:Script.ans
```

Unattended network installation of the server

The installation script **Server.ans** (you choose the name) must be reduced to the following lines:

```
[Install]
Path=<Full path of installation folder on the
server>
```

The installation program must be executed as follows:

```
setupl -a:serveur.ans -ns
```

Unattended network installation of a client

The installation script **Client.ans** (you choose the name) must start with the following lines:

```
[Install]
ServerPath=<Full path of installation file on the
 server>
```

Next, the lines are the same as for a classic unattended installation (see above).

The name of the installation folder path takes the following form:

```
\\Serv\C\Acinst
```

The installation program must be executed as follows:

```
setupl -a:client.ans -nc
```

Unattended removal of a client

The installation program must be executed as follows:

```
setupl -u
```

It is not possible to perform a partial removal from the command line.

If you used an installation script, use it again for the removal. Adjust the value of the **DeleteReadOnlyFile** variable if necessary.

The command is then:

```
setupl.exe -a:Script.ans -u
```

List of files installed

If you wish to see the list of files installed and their installation folder, refer to the **Setup.inf** file which can be found in the installation folder of AssetCenter and the **Disk1** folder on the installation CD-ROM. Search for occurrences of **FILENAME=** to find information on which files are likely to be installed. Additionally, the installer modifies the Registry (the **Setup.inf** file details these modifications).

Note: The Setup.inf file is used by the installation program. It was not designed to be user-friendly in the way it is formatted. Nevertheless, it allows you to obtain useful information.

Hint to save time when installing client machines

Certain options must be configured on each client machine. These options are stored in **.ini** files:

- User options: **Aamapi40.ini**, **AmDba.ini**, **AmExp.ini**.

- Display options: **AamDsk40.ini**
- List of database connections: **AmDb.ini**

Rather than defining these options via the user interface on each client machine, you can define them on one machine and copy the **.ini** files to each client machine.

The structure of the **.ini** files is described in **Administration** guide, chapter **INI files**.

6 After having installed the AssetCenter programs

CHAPTER

After having installed the AssetCenter programs, you just need to perform a few more tasks, which depend on the modules and applications that you want to use or integrate with AssetCenter.

This chapter explains these supplementary operations.

Loading Oracle DLL files

There are several versions of DLLs that can be used to access Oracle. AssetCenter tries to load the supported versions dynamically, starting with the most recent version and working toward the oldest version supported, i.e.:

1. **oraclient9.dll**
2. **oraclient8.dll**
3. **ora805.dll**
4. **ora804.dll**
5. **ora803.dll**

6 **ora73.dll**

However, you can however override this order to load a particular DLL by adding the following entry in **Aam.ini**:

```
[DLL]
orcl = <xxx>.dll
```

To use the import module

If you are using ODBC to import a database, you must install ODBC version 2.0 or 3.0 with a level 2 driver.

Microsoft Access 2.0, 95 and 97, Excel and DBase drivers have been tested with success.

To use the messaging system

Supported messaging standards

AssetCenter supports the following standards:

- VIM
- Extended MAPI
- SMTP

Note: Simple MAPI is not supported.

Identifying the standard of your messaging system

The following are some examples of messaging systems with their corresponding standards:

Messaging	Standard
Lotus Notes	**VIM**
Lotus cc:Mail	VIM
Microsoft Exchange	Extended MAPI
Microsoft Mail	Extended MAPI
Novell GroupWise 4.1	Simple MAPI (not supported)
Novell GroupWise (version 5 and later)	Extended MAPI

Versions of messaging systems supported

Messaging	Versions successfully tested	Unsupported versions
Lotus cc:Mail	**Server 6.0x** **Client 7.0x (32 bits)**	
Microsoft Exchange	5.0	
Microsoft Mail	Versions 32 bits	
Novell GroupWise	5.x	4.x

Installation of the external messaging system

For the external messaging system to function correctly with AssetCenter, the following conditions must be met:

Messaging system standard	Required conditions
VIM	The **PATH** environment variable of your system must point to the folder containing the DLL files. Example: In general, the Lotus Notes DLLs are installed in the same folder as Notes and are not included in the PATH.
Extended MAPI	The **PATH** environment variable of your system must point to the folder containing the DLL files. Example: The DLLs of Microsoft Exchange and Microsoft Outlook are usually included in the PATH. If this is not the case, reinstall Microsoft Exchange or modify the PATH.
SMTP	The TCP/IP layers must be installed. This is usually the case when an SMTP messaging system has been installed correctly.

	Example: To verify the TCP/IP layers under Windows NT or Windows 2000, display the Windows Control Panel, `Network` applet, **Protocols** tab, **TCP/IP protocol** entry. SMTP messaging systems are integrated in the 32-bit versions of Windows; the installation of TCP/IP layers doesn't normally need to be verified.

Preparing AssetCenter to send messages to the external messaging system

To make the most of the functionality available in your messaging system, you need to carry out the following tasks:

Task to be carried out	Documentation to consult
Populate the messaging addresses of administrators and other users.	**Administration** guide, chapter **Managing messages**, section **Configuring AssetCenter to use messaging systems.**
Create **Messaging** type actions to used by procurement, helpdesk, alarms, etc.	**Administration** guide, chapter **Defining actions**, section **Creating an action**, sub-section **Populating the Messaging tab.**
Configure AssetCenter Server to send messages linked to procurement, helpdesk, alarms, etc	**Administration** guide, chapter **Managing deadlines with AssetCenter Server.**
Execute AssetCenter Server.	**Administration** guide, chapter **Managing deadlines with AssetCenter Server.**
Troubleshooting	**Administration** guide, chapter **Managing messages**, section **Common connection problems.**

The utilization of messaging systems is dealt with in more detail in the **Administration** guide, chapter **Managing messages.**

To use AssetCenter Server

To be able to use this program you must install at least one client workstation.

AssetCenter Server is a program independent of AssetCenter which monitors alarms; messages and actions to be triggered within the

domains of procurement, stocks, history, leasing; calculates the values of certain fields, etc.

In order for these functions to work properly, you must execute AssetCenter Server on at least one machine permanently and connect it to your working database.

AssetCenter Server is installed to be executed:

- On demand via the program manager.
- Automatically as a service.

Note: We recommend that you launch AssetCenter Server via the Services applet in the Windows (NT, 4, 2000 or XP) Control Panel.

By default, the service is configured to be launched automatically. You can modify this.

The **Services** applet in Control Panel allows you to start, stop, and configure services available on the machine:

- In Windows NT 4, for example:
  - **Start** button: Starts a service that has not been started. In the case of AssetCenter Server, we advise against entering the startup parameters in the **Startup Parameters** field.
  - **Stop** button: Stops an active service.
  - **Startup** button: This button is very useful since it allows you to configure a service in order for it to be:
    - Automatic: The NT service is launched each time Windows NT is launched.
    - Manual: The NT 4 service must be launched manually by clicking on the **Start** button in the Services applet.
    - **Disabled**: The service cannot be launched.
- In Windows 2000, for example:
  - : starts a stopped service.

- ■: stops the service.
- ■▸: reboots the service.
- ⏸: interrupts the service.

To start the AssetCenter Server service in automatic mode:

- Select the AssetCenter Server service in the services window.
- Right-click and select **Properties** in the shortcut menu.
- In the **Startup type** column, select **Automatic**.

Note: In practice, once AssetCenter Server is operational, we recommend setting the startup mode to Automatic, so that it is launched whenever Windows is started.

Note: By default, the services use the system account. If AssetCenter Server cannot connect to a database, click Startup to configure the service so that it uses an account that can access the database.

For further information on AssetCenter Server, please refer to the AssetCenter **Administration** guide, chapter **Managing deadlines with AssetCenter Server**.

Warning: The AssetCenter Server modules use Connect-It and its connectors for all automatic data imports, like in the following examples:

- Inventories performed by the InfraTools Desktop Discovey installed with AssetCenter.
- Data imports from external applications.

To use the Crystal Reports reports

General overview

AssetCenter makes use of Crystal Reports reporting software. These reports have the file extension **.rpt**.

Note: Crystal Reports accesses the AssetCenter database differently from AssetCenter.

You do not need to have Crystal Reports to print existing reports

If you check the appropriate option during the AssetCenter installation, it is supplied with a **runtime** version of Crystal Reports.

It enables you to view and print existing reports directly from AssetCenter, no matter what DBMS is used for the AssetCenter database.

AssetCenter installs all the requied items itself.

You need to have Crystal Reports to modify existing reports or to create new ones

AssetCenter cannot let you create these reports directly.

To do this, however, you need to acquire the full version of Crystal Reports. The constraints to be taken into consideration are described below:

Versions of Crystal Reports supported	Versions 7.x and 8.0 Japanese version: 7.0
Languages of Crystal Reports supported	• French • English • German • Spanish • Italian • Japanese • Polis

	You may use different languages for Crystal Reports and AssetCenter.
ODBC drivers supported by Crystal Reports	ODBC AssetCenter driver.

Installing the full or runtime version of Crystal Reports

AssetCenter's installation program lets you install a limited version of Crystal Reports. This can be used to print the existing reports. For this, you need to select the appropriate option during the custom installation.

If you have already installed, or if you plan to install a full version of Crystal Reports, you do not need to install the limited version supplied with AssetCenter.

Installing preconfigured Crystal Reports in your database

AssetCenter is supplied with preconfigured reports. These are already installed in the demonstration database, however, you still need to insert them in your working database.

Note: The preconfigured reports are not provided with the following versions of AssetCenter:

- Japanese version
- Polish version

To insert the reports one by one:

1 Launch AssetCenter.
2 Open your working database.
3 Use the **File/Reports** menu item.
4 Create a new report.
5 Click **Import**.

6 Select in the **\datakit\standard\reports\rpt** sub-folder, located in the AssetCenter installation folder, the **.rpt** file corresponding to your needs.

To import the reports as a block:

1 Launch AssetCenter.
2 Connect to the appropriate database.
3 Use the **File/Import** menu item.
4 Select the **Execute a script** option.
5 Select the **reports.scr** import script (in the **datakit\standard** sub-folder of the AssetCenter installation folder).
6 Click **Import**.

Note: The commented list of available reports is available in the Reports.txt file of the datakit\standard\reports sub-folder, located in the AssetCenter installation folder.

To integrate AssetCenter with InfraTools Remote Control

AssetCenter is provided with the complete InfraTools Remote Control software application and its corresponding documentation.

You will need to use InfraTools Remote Control in the following cases:

- To take control of a remote computer directly from AssetCenter: a Manager on the computer from which you take control; an Agent on the remote computer to be controlled.
- To trigger the automatic scan of a remote computer directly from AssetCenter: a Manager on the computer that triggers the scan; an Agent on the remote computer to be scanned.

- To perform an automatic scan on a set of remote computers using Connect-It and AssetCenter Server: the SDK InfraTools Remote Control on the Connect-It computer and AssetCenter Server.

To find our which environements are supported by InfraTools Remote Control, and to learn how to install InfraTools Remote Control, refer to its documentation.

To learn how to integrate InfraTools Remote Control with AssetCenter, refer to the AssetCenter **Administration** guide, chapter **Integrating external applications**, section **InfraTools Remote Control**.

To integrate AssetCenter with Connect-It

AssetCenter is provided with the complete Connect-It software application and its corresponding documentation.

Required Connect-It versions

Integrating Conenct-It with AssetCenter requires that you use the 2.7.1 version of Connect-It.

Warning: You must also install the Update Connect-It 2.7.1 component from the AssetCenter installation CD-ROM.

Utility of Connect-It

You will need to use Connect-It to perform certain automatic actions, which are triggered by AssetCenter Server, such as:

- Adding NT users to the database (practical for using NT security during an AssetCenter database connection).
- Performing an automatic inventory (scan) on a set of remote computers.
- Integrating AssetCenter with AutoCAD.

To find our which environments are supported by Connect-It, and to learn how to install Connect-It, refer to its documentations.

To learn how to integrate Connect-It with AssetCenter Server, refer to the AssetCenter **Administration** guide, chapter **Managing deadlines with AssetCenter Server**, section **Configuring the modules monitored by AssetCenter Server**.

To be able to scan remote computers

With AssetCenter, you can scan remote computers in several different ways:

- You can trigger a scan from the detail of a remote computer in AssetCenter, and you see its result displayed there as well.

  This kind of scan requires that you install InfraTools Remote Control (version 5.52 or later) as well as configure certain parameters.

  All this is outlined in the AssetCenter **Administration** guide, chapter **Integrating external applications**, section **InfraTools Desktop Discovery**.
- You can configure AssetCenter Server to regularly perform an automated scan on a set of remote computers listed in the AssetCenter database.

  This kind of scan requires that you install InfraTools Remote Control (verison 5.52 or later), Connect-It (version 2.7.1 or later) and AssetCenter Server.

  All this is outlined in the AssetCenter Administration guide, chapter **Managing deadlines with AssetCenter Server**, section **Configuring the modules monitored by AssetCenter Server/Send the scanner to the computers module (SendScan)**.

To integrate AssetCenter with AutoCAD

This section is for those users who have acquired AutoCAD.

Enviornments supported by AutoCAD and how to install AutoCAD

To find our which environments are supported by AutoCAD, and to learn how to install AutoCAD, refer to its documentation.

Supported AutoCAD versions

Integrating AutoCAD requires the following applications:

- AutoCAD version R14
- Connect-It version 2.7.1

Creating an AssetCenter database compatible with AutoCAD

Note: An AssetCenter demonstration database supporting AutoCAD is created when you install AssetCenter. This database is located in the acadi\db sub-folder of the AssetCenter installation folder.

AssetCenter Database Administrator enables you to create an AssetCenter database supporing AutoCAD integration.

To create a database supporing AutoCAD:

1. Open a **dbb** description file.
2. Select the **Action/ Create database** menu item.
3. Perform the steps described in the AssetCenter **Database Administrator** guide, chapter **Creating a database**, section, **Creating an empty AssetCenter database** by selecting the **Use AutoCAD integration** option.

To make an existing database compatible with AutoCAD.

Perform the following steps:

1. Execute AssetCenter Database Administrator.
2. Select the **File/ Open** menu item.

3 Select the **Open database description file - create new database** option.
4 Select the **gbbase.dbb** file, which can be found in the **config** sub-folder of the AssetCenter installation folder.
5 Select the **Action/ Create database** menu item.
6 Unselect the **Create database** option.
7 Select the **Use AutoCAD integration** option.
8 Click **Create**.

Integrating AutoCAD, Connect-It and AssetCenter

To learn how to integrate Connect-It with AssetCenter, refer to the AssetCenter **Administration** guide, chapter **Integrating external applications**, section **AutoCAD integration**.

You will noteably find information on how to use Connect-It with the AutoCAD integration module.

To integrate AssetCenter with Knowlix

This section is for those users who have acquired Knowlix.

To find our which environements are supported by Knowlix, and to learn how to install Knowlix, refer to its documentation.

To learn how to integration Knowlix with AssetCenter, refer to the AssetCenter **Administration** guide, chapter, **Integrating external applications**, section **Knowlix**.

7 Creating an AssetCenter database

CHAPTER

Warnings and recommendations

Creating a database requires specific skills

Creating a database correctly is not an easy task and requires a high level of database administration skills.

We cannot explain all the various aspects of creating a database here; this falls within the domain of the documentation of the DBMS. On the other hand, we have included some items of information that will prove useful to skilled database administrators.

Warning: If you are not fully competent in the use of your DBMS, you must use the services of a specialized consultant. The way in which you configure the database has a direct impact on data security, the performance of AssetCenter and the scalability of your architecture.

There is no one single correct way to create a database. This depends on several factors:

- Your business rules.
- The database administration tools you usually use.

Note: The examples and rough estimates of size are made on the basis of the graphical administration tools supplied with the DBMS (other third-party tools are available).

If the database will be used by several, simultaneous users

If the database will be used by numerous users at the same time, you should optimize the DBMS performances (at the level of the counters and the generation of identifiers). These operations must be performed by the database administrator, who should contact Peregrine Systems technical support to obtain the necessary instructions.

Database server and number of services

We advise you not to install a DBMS on a server already host to a number of services (for example, a domain controller, a DHCP controller, a DNS, a messaging service, etc.)

Configuring the database server

By default, select a **RAID 10** configuration. If this isn't possible, or if the server is composed of several clusters of **RAID** disks, you can distribute the databases to several disks or disk clusters.

You can do this with the DBMS by creating data files on different logical volumes and by creating file groups.

To use the DBMS correctly, the read and write load should be balanced on all hard disks.

If the hard disks do not have the same speed, it is better to store the indexes on the fastest disks.

RAID 0 is the easiest way to distribute equally inputs and outputs on hard disks.

Comparative measures of performance of MS SQL Server can be obtained on machines with several GB of memory and with several **RAIDS 10** clusters.

Systematically use **RAID 1** and **RAID 10** for the disks that contain log files (**.log**), instead of using **RAID 5**.

RAID 5 is good if the **data** is stored on more than 6 hard disks. However, the performance will be inferior to that obtained with **RAID 10**.

Steps in creating an AssetCenter database

Note: While Microsoft SQL Server, Sybase Adaptive Server and UDB DB2 use the term database, Oracle uses the term schema.

Steps	Documentations to consult
Create a database with your database manager.	Documentation of the DBMS. Information below.
Create an AssetCenter database and customize it with AssetCenter Database Administrator.	**Database administrator** guide, chapter **Creating a database**.
Create a database connection in AssetCenter.	**Administration** guide, chapter **Connecting to an AssetCenter database**.

Reserve space for the database at the DBMS level

Steps in the creation of the database with the DBMS

The creation of the database is carried out in several steps:

1 Creating and reserving space for the database.

2 Creating a login at DBMS level.

3 Attributing rights to one or several users. At DBMS level, one login is enough. Nevertheless, you can create other DBMS logins that will be used in the AssetCenter connections. In this case, you must define update rights at the level of each table of the AssetCenter database.

These steps are described below for each supported DBMS:

Information to be taken into account

The AssetCenter database is made up of about:

- 350 tables
- 1400 indexes

Tip: The parameter defining the number of open objects must be sufficient to handle to databases that you are going to create with AssetCenter Database Administrator.

Oracle

Important parameters at the server level when creating an Oracle instance

Parameter	Recommended value
Character set	For Latin code-page category langues (English, French, German, Italian, Spanish, etc.), we recommend the **WE8ISO8859P15** character set. With certain Oracle versions, this parameter cannot be modified once the database is created.
db_block_size	This parameter is expressed in bytes. We recommend using the value **8192**. With certain versions of Oracle, this parameter cannot be modified once the database is created.
db_block_buffers	Size of the database memory cache. This size is expressed in units of **db_block_size**.

	Examples to obtain a **200 MB** cache: • `db_block_buffers = 25000` si `db_block_size = 8192` • `db_block_buffers = 100000` si `db_block_size = 2048` For a medium-sized server, the memory reserved for the database cache should represent 20% to 25% of the server's total memory. This recommendation must be adjusted if several users simultaneously access the system (the database cache can be slightly reduced in a way that the server's memory does not swap).
Parameter	**Recommended value**
shared_pool_size	**9 000 000** to **1 5000 000** bytes on an Oracle 8.0.x according to the number of users (10 to 50). If the user is installed in the multi-threaded MTS, then this parameter is much higher (together with the **large_pool_size** on Oracle 8i).
log_buffer	This parameter is expressed in bytes. We recommend using the value **163840**.
processes	`Number of simultaneous users + Oracle process systems.` **50** is acceptable for 10 users maximum. To define according to the rights granted by the Oracle license
dml_locks	**500**
open_cursors	`Number of simultaneous users * Max [30; maximum number of records updated in multiple selection].`
optimizer_mode	Use the **RULE** mode during initial import, then the **FIRST_ROWS** or **ALL_ROWS** mode as soon as the DB has been imported and statistics concerning tables and indexes calculated. (It is a function of the AssetCenter server.) This setting can also be specified individually at each pair level **(machine, DB used)** by adding `PostconnectSql = "Alter session set optimizer_goal = first_rows"` in the connection description in the **amdb.ini** file. (Refer to the **Administration** guide to learn more).
sort_area_size **sort_area_retained_size**	On non-MTS servers, **sort_area_size** corresponds to the number of bytes, dedicated for sorts in memory. **Sort_area_retained_size** corresponds to the memory conserved at the end of the memory sort. As a basic guideline, you can set it to **65256**, then increase it if necessary according to use.

On an MTS server, the sort area is global for all multiplexed user connections, and sorts are done in the same space. Start with `65536*number of concurrent users`, then increase it if necessary according to use.

Verifications before creating the database with AssetCenter

1. Go to the Oracle server.
2. Using one of the Oracle utilities (Database Expander, Storage Manager, or DBA Studio, for example), make sure that there is enough free space in the tablespace to create an AssetCenter database. For example, if you install AssetCenter in a single tablespace for which the values of the **Storage** clause are set to **INITIAL 10K,NEXT 10K**: Anticipate about **150 MB** for a small database and **450 MB** for a database of 5,000 assets.
3. The **rollback segments** must be greatly extendable. We recommend a **rollback segment** for every 4 concurrent users. Each **rollback segment** must be extendable to about **25 MB**. The value of **initial** and **next** can vary between **256 KB** (with **5 MB** for **optimal**) and **10 MB** (with **20 MB** for **optimal**). This indication can be adapted according to your business rules and the size of the AssetCenter database.
4. Configure the Oracle instance so that it uses at least 30 MB of memory cache for the database.

Microsoft SQL Server

Preparing Microsoft SQL Server 7.0 or 2000

Use the Microsoft SQL Enterprise Manager utility:

Important parameters at the level of the server and database

Parameter	Default value	Recommended value
max server memory	OS memory	Keep some OS memory for the OS kernel and processes (at least 64 MB on Windows NT4, 128 MB with 250 concurrent users), and 128 to 256

		MB with Windows 2000. The system must not swap.
Parameter	**Default value**	**Recommended value**
auto create statistics	As set in model database at database creation.	Database setting, to be turned on for all AssetCentr Databases.
auto update statistics	As set in model database at database creation.	Database setting, to be turned on for all AssetCenter databases.

To create the Microsoft SQL Server 7.0 database

1 Create a database with the name of your choice using a database file large enough for an AssetCenter database (at least **150 MB** of **DATA** for a small AssetCenter database, and **20 MB** of **LOG**).

2 Grant connection rights in the login detail.

Tip: In doubt, we recommend that you assign the role of Database Owner to the login of the user.

3 Display the database properties and the:

- Permissions tab: Assign the necessary rights to the logins of your choice (at least **Create Table** and **Create Stored Procedures**).
- **Options** tab: Check the **Truncate Log on Checkpoint** option if you don't want to keep log files. If you want to keep them, you need to implement a procedure that will prevent you from skipping disk space.

4 Make sure the temporary space database, **tempdb**, is set to at least **20 MB**.

Configuring the database options

The following database options are recommended to avoid overloading the log file (**trunc. log on chkpt**) and to enable you to create the table-creation script with SQL Query Analyzer (**ANSI null default**):

- `Sp_dboption <dbname>,'trunc. log on chkpt', true`

- `Sp_dboption <dbname>,'ANSI null default', true`
- `Sp_dboption <dbname>,'auto create statistics', true`
- `Sp_dboption <dbname>,'auto update statitics', true`

Recovering the standard server configuration

The standard configuration of the server can be recovered by using the following SQL query (to be executed in SQL Query Analyzer, for example):

- `Sp_configure`

  Recover the standard configuration (alloted memory, etc.).
- `Select @@version`

  Recover the server version.
- `Sp_helpsort`

  Recover the sort order physically used by the indexes.

Preparing client machines

Install the SQL Server client layers (SQL Server ODBC driver) on each client machine.

Sybase Adaptive Server

Important parameters at the server level

Parameter	Default value	Recommended value
memory	7,500	This setting determines the total size of the memory cache (the cache that stores data and procedures, in particular). This value is expressed in 2KB blocks. With 512 MB of RAM on the server, a 384 MB of cache is a good value (which yields a value of **192000** for this setting).

Parameter	Default value	Recommended value
procedure cache	30	Cache memory area allocated for the storage of parsing and SQL queries. This setting is expressed in %. It should be reduced as the size of the cache memory increases. For a 384 KB cache memory, it should be defined around 3 to 10 percent.
maximum network packet size	512	8 192
default network packet size	512	512
additional netmem	0	`Number of user connections * 3 * (maximum network packet size - default network packet size)`
extent i/o buffers	0	`(Memory; / 8 Mo +1) * 10`
tempdb	2 MB	**20 MB** at the least; increase if necessary.

To create the database

1. Go to the Sybase Adaptive Server.
2. Launch Sybase Central for example.
3. Reserve a **database device** large enough to create a Sybase database (at least **150 MB** for a small AssetCenter database).
4. Create a Sybase database with a **DATA** segment of at least **150 MB** (for a small database). After creating, select the **Truncate Log on Checkpoint** check box in the database options. If you use the **LOGs**, reserve about **20 MB** for them, whether they are on a separate segment or added to a **DATA** segment.
5. Make sure the temporary space database, **tempdb**, is set to at least **20 MB**.
6. Configure Sybase so that it uses at least **30 MB** of memory cache. We recommend maximizing this value in relation to the memory available on the server. Performance will be greatly improved as long as the server does not swap.

Locking mode after creating database with AssetCenter

If you use the 11.9 version, we highly recommend that you take advantage of **Data Only Locking** and, in particular, **Row-Level Locking**, which reduces conflict problems. To perform this task, the database administrator must reconfigure all the AssetCenter tables after they have been created: (for each table: `alter table <table> lock datarows`).

If you notice that the performances associated with the queries on large tables (such as the Histories or Comments tables) are degenerating, you need to implement identified caches for these tables. Then, wehen you perform a query on these tables, data from the other tables won't be overwritten in the cache by the data from the large tables. This is sometimes an important factor in the regulation and conservation of your performances.

If you want your data access plans to be efficient, you need to perform statistics on the tables using AssetCenter Server or SQL scripts.

DB2 UDB

The information that follows should be considered after you configure the DBMS, but before you create the AssetCenter in the DBMS.

The following operations are required for AssetCenter to function correctly with DB2 UDB.

The following orders correspond to the Command Line Center syntax of DB2 UDB. You can adapt if if you want to the following solutions:

- Cession DOS
- Command Center de DB2 UDB

Preparing the database on the server

We recommend that proper configuration of the database is performed by a database administrator. However, it is good idea to increase the **APPLHEAPSZ** and **APP_CTL_HEAP_SZ** parameters of the database using the following SQL statements (example taken from Windows NT 4):

- ```
  CREATE DATABASE <Database name>
  ```
- ```
  Update database configuration for <Database name>
   using APPLHEAPSZ 2048
  ```
- ```
  Update database configuration for <Database name>
   using APP_CTL_HEAP_SZ 2048
  ```
- ```
  Update database configuration for <Database
  name>; using DBHEAP 4096
  ```
- ```
  Update database configuration for <Database
  name>; using LOGFILSIZ 500
  ```
- ```
  Update database configuration for <Database
  name>; using DFT_QUERYOPT 2
  ```
- ```
  CATALOG TCPIP NODE
  <DB2_NT|SUN_NODE|AIX_NODE|Etc.> REMOTE <Server
  name> SERVER 50000 REMOTE_INSTANCE DB2 SYSTEM
  <Server name> OSTYPE <NT|SUN|AX|Etc.>
  ```
- ```
  CATALOG DATABASE <Database name>; AT NODE
  <DB2_NT|SUN_NODE|AIX_NODE|Etc.>
  ```

Preparing the application counter server

To replace the **SEQUENCE** service, which available in ORACLE but not in DB2 UDB, an application server for counters can be installed on DB2 UDB servers.

This is recommended if many users need to simultaneously access the database.

Note: Installation of this service is optional and requires you to use a database administrator with knowledge of Java. If it is not carried out, two physical connections of the AssetCenter client are needed for each logical connection.

Preparing the clients

Start by installing DB2 client layers (DB2 Cli).

It is not necessary to create an ODBC source for the DB2 connection. However, if an ODBC source needs to be declared for another application, make sure it is a **system data source** and not a **user data source**. In the latter case, certain required optimizations are canceled by the **user data source** access type.

The following commands should be taken into account when creating your connection without using an ODBC datasource:

- `CATALOG TCPIP NODE`
- `CATALOG DATABASE`
- `db2icrt`

Example

Your database server is installed on a Windows NT server called **CALIFORNIUM** and the database itself is held in the **INST_1** instance (DB2 manages several concurrent instances) and is called **SAMPLE**. Here are the commands to execute before accessing this database (In the `DB2 Command Line Processor`):

```
CATALOG TCPIP NODE MyNode REMOTE CALIFORNIUM SERVER
 50000 REMOTE_INSTANCE INST_1 SYSTEM CALIFORNIUM
OSTYPE NT
```

Then:

```
CATALOG DATABASE SAMPLE AS SAMPLE AT NODE MyNode
```

Then from a standard command prompt:

```
db2icrt MyNode
```

Tip: If your server is not configured in Windows NT 4, please consult your database administrator.

Runtime Sybase SQL Anywhere

The Sybase SQL Anywhere **runtime** supplied with AssetCenter is automatically offered when you install AssetCenter. If you intend to install separately a client-server version of Sybase SQL Anywhere you do not have to install the runtime.

If you have installed the Sybase SQL Anywhere **runtime** and you want to create an empty database, use the following procedure:

1 Create a new folder on your hard drive (optional).
2 Copy the **Empty400.db** file, which can be found in the AssetCenter installation folder.

Tip: You can rename this file.

3 Launch AssetCenter.
4 Select **File/ Manage connections**.
5 Click **New**.
6 In the **Name** field, enter a name for this connection.
7 Select **Sybase SQL Anywhere** as your engine.
8 Click the icon, which can be found on the far right of the **Data Source** field:
    1 Populate the **Database File** field: Indicate the path and the file name of the **Empty400.db** file that you have just copied. You can use the **Browse** button for this. Select **Custom** from among the possible values.
    2 Give the value of your choice to the **Data Source Name** field.
    3 Click **Options**.
    4 Enter **Rtdsk50.exe** in the **Start Command** field.
    5 Leave the **Database Switches** field empty and the **Autostop Database** option selected.
    6 Click **OK** to confirm.

7 Click **OK** to close the ODBC configuration window.

9 In the **User** field, enter **itam**. In the **Password** field, enter **password**.

10 Click **Create**.

11 Click **Test** to test the connection.

Creating the DBMS login

All users of AssetCenter can share the same DBMS login. AssetCenter handles access rights via user profiles.

It is also possible to configure AssetCenter to use several DBMS logins having restricted database rights. This makes it possible to control access to the database using external tools. The use of multiple logins is not documented.

Oracle example

Declare an Oracle login with at least **CONNECT**, **RESOURCE** and **CREATE SESSION** rights. If you have already created an AssetCenter database under Oracle, you need to create a new **schema** for the new database.

Example of Oracle SQL script to create the **schema**:

```
connect system@ORASERV;
create user AssetCenter identified by <password>
default tablespace <asset> temporary tablespace
<temporary_data> profile default;
grant connect, resource, create session to
AssetCenter;
```

Changing the DBMS used with AssetCenter

If you decide to change the DBMS, you must first acquire the appropriate version of AssetCenter, then import the database using the Import module.

Destroying an AssetCenter database

For reasons of security, AssetCenter does not have a command, which lets you destroy a database. You must do this outside of AssetCenter.

Destroying an AssetCenter database is performed in several steps:

1 Destroying the database itself:

Use the administration tool of the DBMS.

- Example for Sybase Adaptive Server: **SQL Server Manager**.
- Example for Microsoft SQL Server 7.0: **Microsoft SQL Enterprise Manager**.
- Example for Oracle: **Oracle User Manager**.

2 Delete connections defined at the level of AssetCenter on each client machine.

3 With Microsoft SQL Server: Delete ODBC connections on each client machine.

License rights and available functions

AssetCenter is a complete system for managing information technology with totally integrated functions, based on a shared repository:

- Portfolio
- Procurement
- Contracts
- Financials
- Cable and Circuit

Its **integrated** dimension allows you to access all functionality via a unified interface and using a single database, thus avoiding data redundancy.

Note: The list of available functions depends on the license rights you have acquired.

Its **functional** dimension allows you to adapt the user interface according to your needs. You may simplify the interface by selecting only those areas of functionality you wish to use.

Note: Functions are activated individually for each client machine using the File/ Activate modules menu item.

8 Optimizing AssetCenter performances

CHAPTER

Overview

AssetCenter's performance depends on several factors:

- The performance of the DBMS itself.
- The tuning of the DBMS. This task is important but very tricky and requires the skills of a database administrator. It is not uncommon to double the performance of AssetCenter with proper tuning of the the DBMS. It is important to pay close attention to the amount of RAM allocated to the database server.
- The capabilities of the DBMS (taking into account the way in which AssetCenter interacts with the DBMS) and its middleware (support of advanced functionality such as retrieving groups of lines in one single network packet).
- The server's hardware performance: RAM, disk sub-system (disk, controller board, the system's administration of these, number of processors, etc.), use of separate storage devices for tables and indexes.

- The client's hardware performance: RAM, graphics performance (we recommend the use of a graphics accelerator board). AssetCenter is not a CPU-intensive application.
- The network's speed and latency of network (to improve response times, increase the speed and reduce the latency of the network).
- The number of records stored in your database.

Tuning performance on low-speed networks, busy high-speed networks and WANs

For information on this subject, refer to the **Administration** guide, chapter **Tuning AssetCenter for use in a WAN environment**.

Locking of records in the AssetCenter database by external applications

Certain external tools lock records, even when consulting them.

This can impact the performance of AssetCenter. We recommend that you avoid record locking.

With Sybase SQL Server and Microsoft SQL Server, for example, it is preferable to use **dirty read** access.