

# HP Openview AssetCenter

Software version: 5.02

---

## Release Notes

Document Release Date: 22 November 2007



# Legal Notices

## *Copyright Notices*

© Copyright 1994-2007 Hewlett-Packard Development Company, L.P.

## *Restricted Rights Legend*

Confidential computer software.

Valid license from HP required for possession, use or copying.

Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

## *Warranty*

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services.

Nothing herein should be construed as constituting an additional warranty.

HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

## *Trademark Notices*

- Adobe®, Adobe Photoshop® and Acrobat® are trademarks of Adobe Systems Incorporated.
- Corel® and Corel logo® are trademarks or registered trademarks of Corel Corporation or Corel Corporation Limited.
- Java™ is a US trademark of Sun Microsystems, Inc.
- Linux is a U.S. registered trademark of Linus Torvalds
- Microsoft®, Windows®, Windows NT® and Windows® XP are U.S. registered trademarks of Microsoft Corporation.
- Oracle® is a registered US trademark of Oracle Corporation, Redwood City, California.
- UNIX® is a registered trademark of The Open Group.

---

# Table of Contents

Foreword . . . . .	9
Chapter 1. In this version . . . . .	11
Enhancements and corrections . . . . .	11
New features . . . . .	11
Changes made to the documentation . . . . .	11
Chapter 2. Updates to this guide . . . . .	13
Chapter 3. Installation notes . . . . .	15
Upgrading a previous version of AssetCenter . . . . .	15
Supported DBMSs . . . . .	16
Installing AssetCenter Web if WebSphere Application Server 5.1 is your application server . . . . .	17
Creating the database / License file . . . . .	17
Demonstration database . . . . .	17
Chapter 4. Improvements and corrections . . . . .	19
Chapter 5. Known issues, limitations and workarounds . . . . .	25

Chapter 6. Related documentation and compatibility matrix . . . . .	31
Related documentation . . . . .	31
Compatibility Matrix . . . . .	45
Chapter 7. Additional information and documentation errors . . . . .	47
Installing, configuring, removing and updating AssetCenter Web . . . . .	48
Managing user authentication for the AssetCenter database . . . . .	83
<i>Guest</i> access type - Accessible tables . . . . .	98
Types of controls and properties associated with wizards . . . . .	99
AssetCenter Web and Service Manager Web menu aggregation . . . . .	99
Tag the Web services . . . . .	103
Checking the functional domains associated with the Web services objects . . . . .	108
.ini and .cfg files . . . . .	112
Differences between the Windows and Web clients (actions/wizards) . . . . .	117
Chapter 8. Support . . . . .	119
Peregrine Product Support . . . . .	119
HP Software Support . . . . .	119
Chapter 9. Additional copyright information . . . . .	121

---

# List of Figures

7.1. AssetCenter Web Architecture . . . . .	48
---	----



---

# List of Tables

3.1. Upgrading a previous version of AssetCenter - Operations to perform . . . . .	16
7.1. <i>Guest</i> access type - Tables may be accessed in read-write mode under certain conditions . . . . .	98
7.2. <i>.ini</i> and <i>.cfg</i> files - List of main files . . . . .	112
7.3. <i>.ini</i> and <i>.cfg</i> files - Location of main files . . . . .	113
7.4. [OPTION] section . . . . .	114
7.5. [SQL] section . . . . .	115
7.6. [OPTION] section . . . . .	116
7.7. [OPTION] section . . . . .	116
7.8. <i>amdb.ini</i> file entries . . . . .	117



---

# Foreword

This document gives you a preview of the changes that have been made to AssetCenter in version 5.02. It contains important information that is not included in the guides or the online help.



---

# 1 In this version

---

## Enhancements and corrections

AssetCenter version 5.02 mostly provides product enhancements and corrects certain defects.

▶ [Improvements and corrections](#) [page 19].

---

## New features

AssetCenter version 5.02 does not introduce any new features

---

## Changes made to the documentation

For this version, only the *Release Notes* have been modified.

The [Additional information and documentation errors](#) [page 47] chapter completes or modifies some of the existing manuals.

Some white papers have been added or modified:

Title	File	New or modified document?
AssetCenter Web Client: Performance Hints and Problems Diagnosis	ACWPerformancesHintsAndProblem-Diagnosis.pdf	New
AssetCenter 5.0 High Availability Guidelines	AssetCenter_High_Availability.pdf	New
Common Web Client and Windows NT Authentication	Common_Web_Client_and_NT_Authentication.pdf	New
Implementing Single Sign On for AssetCenter Web: example with Siteminder	ImplementingSSOForAssetCenter-WebSiteminder.pdf	New
Implementing Single Sign On for AssetCenter Web: example with CAMS	ImplementingSSOForAssetCenter-WebCams.pdf	New
Using IP Addresses to Set Asset Location in AssetCenter	AssetCenter_IP_Address_To_Set_Location.pdf	New
Budget, Procurement, and Lease Management Reports	AssetCenter_New_Finance_and_Lease_Reports.pdf AssetCenter_New_Finance_and_Lease_Reports.zip	New
Integrating AssetCenter and PPM	AC50X-PPM71 Integration.pdf AC50X-PPM71 Integration.zip	New
Business Services financial management in AssetCenter	AssetCenter_Business_Services_Financial_Management.pdf AssetCenter_Business_Services_Financial_Management.zip	New
Management of Security in AssetCenter	AssetCenterWebWindowsClientsSecurity.pdf	Modified
AssetCenter sizing guide	AssetCenter_Sizing_Guide.pdf	Modified
Why Upgrade to AssetCenter Version 5.0?	Upgrade_To_AssetCenter_5x.pdf	Modified

For more information about the white papers and where to find them: ► [White papers](#) [page 33].

---

## 2 Updates to this guide

The cover page of these Release Notes contains the following information:

- Software version
- Document Release Date, which changes each time the guide is updated

To find out if a more recent version is available or to make sure you are using the latest version, please visit the following Web site:

[http://ovweb.external.hp.com/lpe/doc\\_serv/](http://ovweb.external.hp.com/lpe/doc_serv/)

---

 **Note:**

Acrobat Reader must be installed on your system to read the PDF files (\* .pdf). You can download Adobe Acrobat Reader from the following site:

<http://www.adobe.com/>

---



---

## 3 Installation notes

Specifications and AssetCenter installation instructions are detailed in the *Installation and upgrade* guide provided in Adobe Acrobat format (.pdf). This document is located on the AssetCenter CD-ROM in this folder:

ac\Program Files\HP OpenView\AssetCenter 5.02 xx\doc\pdf

After the installation, this document can also be found in the following folder:

doc\pdf subfolder of the AssetCenter installation folder (Generally this is Program Files\HP OpenView\AssetCenter 5.02 xx\doc\pdf)



### Note:

Replace *xx* with the two letter language code of your AssetCenter installation.



### Warning:

The *Installing, configuring, removing and updating AssetCenter Web* [page 48] section replaces the *Installation and upgrade* guide, chapter *Installing, configuring, uninstalling and updating AssetCenter Web*.

---

---

## Upgrading a previous version of AssetCenter

The operations to perform to upgrade AssetCenter depend on the previous version number:

**Table 3.1. Upgrading a previous version of AssetCenter - Operations to perform**

Number of the version to be updated	Operations to perform	Documentation to consult
Versions 4.2.x, 4.3.x, 4.4.x or 5.0x	In most cases, a <i>simple upgrade</i> will suffice	<i>Installation and upgrade guide</i> , chapter <i>Upgrading a previous version</i> , section <i>Upgrading AssetCenter version 4.2.x, 4.3.x, 4.4.x or 5.0x - Overview</i>
	If the <i>simple upgrade</i> fails, you will need to perform a <i>simplified migration</i>	<i>Migration guide</i>
Versions 4.1.x or earlier	<i>Full migration</i>	<i>Migration guide</i>

## Supported DBMSs

- Oracle,
- Microsoft SQL Server,
- Sybase Adaptive Server,
- DB2.

### Note:

In Oracle, we highly recommend configuring your database so that it is case-sensitive. To do this, use the Oracle administration tools.

### Note:

Among these supported DBMSs, only those versions currently available at the time of release are supported.

For further information on the supported DBMSs, please refer to the AssetCenter 5.02 Compatibility Matrix.

This matrix is available on the HP support site at the following address:

[www.hp.com/go/hpsoftwaresupport](http://www.hp.com/go/hpsoftwaresupport)

### Note:

You will need a valid login and password to access this site.

Microsoft MSDE is supported for demonstration purposes only.

---

## Installing AssetCenter Web if WebSphere Application Server 5.1 is your application server

If WebSphere Application Server 5.1 is your application server, before executing AssetCenter Web Tier, you need to add manually certain `.class` and `.jar` files to the application's CLASSPATH.

The complete procedure is detailed in a tech note that you can request from HP technical support.

---

## Creating the database / License file

When you create your database using AssetCenter Database Administrator, you need to provide a license file to activate the access rights to the database.

This file conforms to your AssetCenter license. For more information about license files, consult the online help provided with the software or refer to the *Administration* guide, chapter *Creating an AssetCenter database*, section *Selecting a license file*.



### Note:

The availability of certain modules and functions for integration with other software depends on your license. Contact HP technical support.

---

---

## Demonstration database

The *Admin* login provides access to the demonstration database. It does not have a password. When connecting to the demonstration database for the first time, you must provide a license file. To obtain a demonstration license file, contact HP support.



## 4 Improvements and corrections

This chapter describes the main improvements and corrections that have been made to AssetCenter 5.02.

Defect number	Description
AM619203555	<p>Context:</p> <ol style="list-style-type: none"><li>1 Display an employee's detail</li><li>2 Display the <b>Profile</b> tab.</li><li>3 <b>Access type</b> (seLoginClass) field: Select <i>Guest</i>.</li></ol> <p>Problem corrected: The <b>Helpdesk administrator</b> (bHDAdmin) option should not be displayed.</p>

Defect number	Description
AM1016142758	<p>Context:</p> <ol style="list-style-type: none"> <li>1 Create a new contract. <b>Type</b> (seType) field: Select <i>Maintenance</i>.</li> <li>2 Click the <b>Assets</b> tab.</li> <li>3 Add two assets.</li> <li>4 Display the <b>Rents</b> tab.</li> <li>5 Add one assets. <b>Prorate to assets</b> (seProrateRule) field: Select <i>Allocate unit level payments to a selection of assets</i>.</li> <li>6 Display the rents in list-form.</li> <li>7 Display the rent detail.</li> <li>8 Click the <b>Assets</b> button. This starts the <i>Modify the list of assets associated with the rent...</i> (sysLeaseWAddAssetRent) wizard.</li> </ol> <p>Problem corrected: The wizard did not display the list of assets associated with the contract.</p>
AM619204046	<p>Context:</p> <ol style="list-style-type: none"> <li>1 Connect to the AssetCenter database with a user whose access type is <i>Guest</i>.</li> <li>2 Display the employees (<b>Organization/ Employees</b> link on the navigation bar).</li> <li>3 Display an employee's detail</li> <li>4 Display the <b>Cost</b> tab. Grayed out expense lines are displayed. None can be added or deleted.</li> </ol> <p>Problem corrected: A guest user could display the detail of an expense line and modify it. Guest users can no longer display the detail of an expense line.</p>
AM102994255	<p>A user connected to the AssetCenter database as a guest user did not have the appropriate read/write accesses for the assets, computers, telephones, monitors, software installations and portfolio items tables. A guest user now has access to these tables with the access rights described in section <a href="#">Guest access type - Accessible tables</a> [page 98].</p>
AM31514813	Users using an invalid password could connect using LDAP authentication via the Web client.
AM21153537	An error message was displayed when two consecutive records were created for the computers table (Windows client).
AM371642	AssetCenter Database Administrator general protection fault when connecting to a new Oracle database.

Defect number	Description
AM220183447	The <i>Relevance</i> script associated with the buttons was incorrectly evaluated when a list was displayed in <i>List only</i> mode (Windows client).
AM321184155	An error message was displayed when an action to add an asset to a contract was cancelled (Windows client).
AM32215349	The <b>DBLISTBOX</b> control was empty when the list of values was obtained using the <b>COMMANDBUTTON</b> control (Web client).
AM319161253	An error message concerning mandatory fields was displayed when a computer was created even though the mandatory fields in question were populated (Windows client).
AM33075634	The reference to the parent object of a history line was lost (Windows client).
AM312173114	The access restrictions were not taken into account correctly during a multiple selection ( <b>Ctrl+A</b> in the Windows client).
AM316165458	Application froze while backing up help on fields during database migration of customized data (AssetCenter Database Administrator).
AM5912732	Context: <ol style="list-style-type: none"> <li>1 Start a Web client and connect to the AssetCenter database.</li> <li>2 Display the portfolio items.</li> <li>3 Select a portfolio item.</li> <li>4 Refresh the list.</li> </ol> <p>Problem corrected: The list takes too long to refresh. The query sent to Microsoft SQL Server has been optimized.</p>
AM5416042	Context: <ol style="list-style-type: none"> <li>1 Start a Web client and connect to the AssetCenter database.</li> <li>2 Display an asset's detail.</li> <li>3 Click the <b>Fixed Asset</b> tab.</li> <li>4 Click the  icon to the right of the <b>Depreciation type</b> (IDeprSchId) link.</li> <li>5 Select a depreciation type.</li> </ol> <p>Problem corrected: This operation produced an error.</p>
AM14103250	When you displayed a list of records or a detail, the focus was positioned on the contextual actions (Web client).
AM915152142	Authentication was case sensitive for connections using integrated NT authentication for Oracle (Windows client).
AM42017812	An error message was produced for the <i>Yearly TCO</i> (sysCoreAvgYearlyTco) calculated field during migration (AssetCenter Database Administrator).
AM424155647	Comments were truncated by one character when the file was imported (Windows client).
AM5405058	General protection fault when executing the <i>Check definitions of the Web services...</i> (sysCoreWebServiceCheck) wizard.
AM42393322	Cannot display a Crystal report published in Crystal Reports Server if the user did not have administrative rights (Web client).

Defect number	Description
AM57175153	A field no longer appeared as mandatory after a LinkEdit field which made this field appear as mandatory was populated (Web client).
AM413163330	Cannot keep history for the <b>Tick. status</b> (seStatus) field in the <b>Helpdesk ticket</b> (amTicket) table (Windows client).
AM44111047	An error message was displayed when creating the history of a duration type feature (Windows client).
AM530144540	General protection fault when tagging Web service (AssetCenter Database Administrator).
AM523183315	The comment field of the <b>Portfolio items</b> (amPortfolio) table was not backed up (Windows client).
AM529181731	When a work order was created by the <i>Add work order</i> (sysHD-NewWorkOrder) wizard, the <b>Work order number</b> (WONo) was generated by the wizard and not by using the field's default value.
AM529174652	A ticket resolution code was processed as a number instead of a character string by the <i>Ticket closure</i> (sysHDClosure) and <i>Suspension</i> (sysHDOOnHold) wizards.
AM530165957	The work order number is not incremented when the work order is created via the <i>Add work order</i> (sysHDNewWorkOrder) wizard.
AM531135242	The <i>Mandatory</i> and <i>Read only</i> scripts associated with the fields and links were not evaluated correctly for the <b>Work orders</b> (amTicket) table (Windows client).
AM66195720	An error occurred following the second consecutive change of an asset (Web client).
AM51516958	Script type actions that were triggered automatically when connecting were not taken into account (Web client).
AM53119018	Performance was negatively impacted when sorting a list in database running on Microsoft SQL Server (Windows client).
AM6718484	Selections made in a wizard's <i>LinkList</i> type control were lost when returning to a previous page via the browser's <b>Previous</b> button (Web client).
AM116135817	An error message was displayed when adding a comment type field to a table if the <b>Database/ Add a 'Last Modifier' link to all tables</b> (AssetCenter Database Administrator) was selected.
AM710142249	The scripts defined for the <i>LabelLeft</i> property of a wizard's <i>TextEdit</i> type control was not evaluated (Web client).
AM66143141	An error message was displayed when adding an alarm on an asset's <i>Expiration</i> (dWarrEnd) field (Windows client).
AM16171645	A view's hidden tabs appear after migration (AssetCenter Database Administrator).
AM8211584	The last record displayed in a <i>DBQueryBox</i> type list was selected when opening the list (Web client).
AM824183821	General protection fault when tagging a Web service if a user script library was used (AssetCenter Database Administrator).

Defect number	Description
AM83017745	The comment field was not updated if another field was modified simultaneously in the <b>Assets</b> (amAsset) table (client Windows).
AM921174721	Performance issues when executing <i>Irrelevance</i> scripts on the <b>History</b> tab (Windows client).
AM103145743	Pages of the <i>MigratedSys</i> screen set were lost when migrating a multilingual database (AssetCenter Database Administrator).
AM9111679	An error message was displayed when executing a record duplication script for the <b>Portfolio items</b> (amPortfolio) table (Windows client).
AM101012945	An error message was displayed when searching for a computer via the QBE query wizard (Web client).
AM1010144249	Could not connect if the login contained the \n or \r characters (Web client).
AM1016142758	If a column was added after a column displaying icons via the list configuration, then the size of the new column was null (Windows client).
AM1017124722	An error message was displayed when executing the <i>Suspension</i> (sysHDOOnHold) wizard (Windows client).
AM828143631	Improving error messages displayed if the database connection parameters are invalid or if a AssetCenter DLL cannot be loaded (Web client).
AM423175455	Performance was negatively impacted when modifying a computer (Windows client).
AM619195033	List paging buttons are disabled when the user was connected as a guest user (Web client).
AM1026172941	Messages whose subject field contained accented characters were not formatted correctly when sent using the SMTP protocol (Windows client).
AM3755627	<p>A <b>Documents</b> button appears on the contracts detail page.</p> <p>This button was associated with the <i>Add/Modify a document</i> (BstCntrDocument) action.</p> <p>However, this action was only available if the <i>Contracts - Line-of-business data</i> had been imported.</p> <p>This action is now part of the system data. Its SQL name is <i>sysCntrDocument</i>. It is present in all newly created databases or after migrating to version 5.02. Thus, the <b>Documents</b> button will operate correctly in all instances.</p>
AM102516209	A work order could not be returned after it was received in the procurement cycle.



## 5 Known issues, limitations and workarounds

- When a long query is cancelled (**Cancel** button in the window displayed during lengthy operations), error messages may be displayed even though the operation was running correctly.
- Editing system screens is limited to the pages and buttons in this version. If you have extra requirements, duplicate the system screen.
- Using AssetCenter in multi-lingual mode is only possible with languages using the same code page (example: iso-latin1). In particular, it is not possible to use AssetCenter in multi-lingual mode with Japanese.
- If you have already installed a BETA version of AssetCenter 5.0 you must uninstall it manually before installing this version.
- Due to an incompatibility between the versions 10.0 and 8.x of Crystal Reports, you must only have one version of the runtime installed on a given computer. This situation might arise when installing different versions of the AssetCenter 5.0 client on the same computer.
- After upgrading from version 4.x, the functional domains might not be correct. You have to verify them.
- For the Get-Answers integration, check that the user has local administrative rights on the machine. Note also that the `jcinst.exe` file mentioned in the documentation should be copied on each client for the integration to work properly. This file is usually located in the following folder:  
c:\Program  
Files\Peregrine\Common\Tomcat4\webapps\oaa\integrations\
- If the Windows *Server* service is stopped, MSDE cannot be installed.

- We recommend to install MSDE with at least one network protocol activated.
- If the *itam* login already exists in the local MSDE/MSSQL instance during the installation, the connection to the demonstration database assumes that the associated password is *password*.
- If a database named *ACDemo50xx* (where *xx* corresponds to the AssetCenter installation language) already exists in the local MSDE/MSSQL instance, the AssetCenter installation will overwrite it with a new demonstration database without any warning.
- The creation of a counter using metering information is limited if the context is not the *amSoftInstall* table. In this case, it is not possible to use the *tsUnused* field.
- After upgrading from a 4.x version and if you have acquired the software asset management module, you will need to import the *software asset management* datakit.
- To copy information from the online documentation in AssetCenter (available via the **F1** key), select the text to copy, right-click, and then select **Copy** from the shortcut menu. The **Ctrl+C** keyboard shortcut does not work.
- When several users execute an operation at the same time which impact the same records, the DBMS may reject the operation for certain users (deadlock).

A rollback is performed for the rejected transaction and the corresponding user receives an error message similar to the following:

```
2005/04/29 11:41:21.687 6 1 [Thrd#:1588] (-2006) ODBC error: [IBM][CLI D
river][DB2/6000] SQL0911N The current transaction has been rolled back
because of a deadlock or timeout.
Reason code \"2\". SQLSTATE=40001\r\n SQLState: 40001.
2005/04/29 11:41:21.703 6 1 [Thrd#:1588] (-2006) SQL statement '<stateme
nt detail>'
```

The data in the database is not corrupted.

The user can retry the same operation if that user is the only user to perform the operation and if the operation has not been performed by the other users.

For example, this type of conflict arises if two users try to receive the same order at the same time.

- For each wizard, AssetCenter Web's WSDL document exposes a method, **START<SQL name of the wizard>**, but the method cannot be called successfully.
- Although most Internet browsers allow you to open a link in a new window, you must not use this feature in conjunction with AssetCenter Web. Instead, simply click the link and the page will open in the correct spot on the Web client's workspace.
- If you use the same instance of Tomcat (application server) to deploy AssetCenter Web Tier and AssetCenter Web Service, you are unable to

control whether the AssetCenter Web Tier `jaas.config` file or the AssetCenter Web Service `jaas.config` file is loaded by Tomcat.

To workaroud this problem, the `jaas.config` files deployed by AssetCenter Web Tier and AssetCenter Web Service are identical.

- AssetCenter Web running on Tomcat 5.0.27 to 5.0.30: A Tomcat limitation (Bug 33743) prevents concurrent connections to the server when the server is started or restarted. To workaroud this, an initial isolated connection must be made before concurrent connections are possible.
- Functional rights (Windows client only): Let's imagine that functional right D refuses access to screen E.

If a user connects with a user profile linked to functional right D, and if screen E is associated with an icon on the toolbar, the user is still able to access screen E via this icon even though the he or she is not authorized to do so.

- Error tagging Web services after AssetCenter migration.

Context: After converting an old version of the database to version 5.02, you tag the database using AssetCenter Database Administrator (**Action/ Tag Web service** menu) or you check the Web services (**Administration/ Check definitions of the Web services...** link on the navigation bar of the Windows or Web client).

Error: The conversion log displays a message similar to the following: *Event 'X' linked to button 'Y' does not exist..*

Cause: The service contains a screen that has a button which is associated with an action that does not exist in the database.

Resulting Consequences: The Web service containing the detail cannot be tagged.

Solution: Delete the button from the detail or import the missing action if possible, then, try to tag the Web services again.

- An error message such as *12:14:29,817 ERROR - org.apache.myfaces.renderkit.html.util.MyFacesResourceLoader - Unparsable lastModified : @lastModified@* may appear in the AssetCenter Web Tier log file.

This does not prevent the proper operation of the application.

- The average total TCO cannot be calculated if the DBMS used for the AssetCenter database is Oracle 8.1.7.

The query is too complex to be supported by this version of Oracle.

- Items that are printed from the Web client do not appear correctly on the page.
- Leasing: In the detail of a contract rent, if you assign the value *Allocate unit level payments to all assets* or *Allocate unit level payments to a selection of*

*assets* to the **Prorate to assets** (seProrateRule) field, the **Value** (mValue) and **Rent** (mPayments) fields cannot be modified by the user.

- **Leasing:** In the detail of a contract, if you assign the value *Yes* to the **Acceptance date** (bFromAcceptDate) field after generating the rent expense lines and assets have not been accepted, the expense lines are not deleted.
- **Leasing:** In the detail of a contract rent, if you assign the value *Prorate and distribute payments to all assets* or *Prorate and distribute payments to a selection of assets* to the **Prorate to assets** (seProrateRule) field, you cannot modify the **Rent** (mPayments) field.
- **Crystal Reports:** When a user displays or prints a report stored in Crystal Reports Server (via the Windows or Web client), the user must authenticate in order to access the AssetCenter database and the Crystal Reports Server. This is true for each new report that the user displays or prints.
- Some features that are available in the Windows client are not available in the Web client.

To learn about the differences between the Windows and Web clients: ► *User Interface* guide, chapter *Differences between the Windows client and the Web client*.

- **Historization of changes** made to a field populated using a system itemized list: the **Previous value** (PreviousVal) and **New value** (NewVal) fields in the **History** (amHistory) table store the displayed value of the system itemized list, as opposed to the value stored in the database, beginning with AssetCenter version 5.00.

Example: In the **Work orders** (amWorkOrder) table, the **Status** (seStatus) field is populated using a system itemized list. One of the entries of this itemized list is displayed as *Notified* and is stored as *0*.

The **Previous value** and **New value** fields store *Notified* and not *0*.

In older versions, AssetCenter used the value stored in the database.

If you convert a database prior to version 5.00 to version 5.02, the **Previous value** and **New value** fields will include both stored and displayed values of system itemized lists.

Objects such as queries and wizards that reference the **Previous value** and **New value** fields must be modified accordingly.

- **Problem:** If you use the **amDbGetListEx** function in wizards and execute these wizards in a Windows or Web client, then *ALL* records are extracted from the table and displayed. This operation may take very long. This is particularly problematic when you use AssetCenter Web because the application server is slowed down, which impacts all users.

*Workarounds:* AssetCenter is installed with a new function:

**AmDbGetLimitedList.**

It is recommended that you replace all instances of **AmDbGetListEx** with **AmDbGetLimitedList** in all existing wizards.

The **AmDbGetLimitedList** function returns, as a list, the result of an AQL query. Unlike the **AmDbGetListEx** function, this function defines the maximum number of records selected by the AQL query and what should be done if the list of records is truncated.

*API syntax:*

```
long AmDbGetLimitedList(long hApiCnxBase, char *strQuery, char *pstrResult, long lResult, char *strColSep, char *strLineSep, char *strIdSep, long lMaxSize, long lErrorType);
```

*Internal Basic syntax:*

```
Function AmDbGetLimitedList(strQuery As String, strColSep As String, strLineSep As String, strIdSep As String, lMaxSize As Long, lErrorType As Long) As String
```

*strQuery:* This parameter contains the AQL query you want to execute.

*strColSep:* This parameter contains the character used as column separator in the result given by the function.

*strLineSep:* This parameter contains the character used as line separator in the result given by the function.

*strIdSep:* This parameter contains the character used as identifier separator in the result given by the function.

*lMaxSize:* This parameter contains the maximum number of records returned by the AQL query, above which the query result is truncated.

*lErrorType:* This parameter contains the behaviour of the function in case the list of selected records is truncated. If the parameter has the value 1, the function returns an error message. If the parameter has the value 2, the function returns a warning message. If the parameter has the value 4, the function returns an information message.

- Returning a received item in the procurement cycle: You must use the Windows client to do this as it cannot be done in the Web client.



## 6 Related documentation and compatibility matrix

---

### Related documentation

This section describes the guides that are provided with AssetCenter.

#### Guides in PDF format (Adobe Acrobat)

► See section [List and description of guides](#) [page 34] for the list of guides.

To display a guide in PDF format:

- 1 Make sure you have installed Adobe Reader.  
Otherwise, download Adobe Reader from the following address:  
<http://www.adobe.com/products/acrobat/readstep2.html>
- 2 Start a Windows Explorer.
- 3 Display the contents of one of the following folders:
  - doc\pdf subfolder of the AssetCenter installation folder (Generally this is Program Files\HP OpenView\AssetCenter 5.02 xx\doc\pdf)
  - ac\Program Files\HP OpenView\AssetCenter 5.02 xx\doc\pdf folder on the AssetCenter installation CD-ROM
- 4 Open the corresponding PDF file (.pdf extension) with Adobe Reader.

## Guides in CHM format (compiled HTML)

- ▶ See section [List and description of guides](#) [page 34] for the list of guides.

To display a guide in CHM format:

- 1 Start a Windows Explorer.
- 2 Display the contents of the `doc\chm` subfolder of the AssetCenter installation folder (Generally this is `Program Files\HP OpenView\AssetCenter 5.02 xx\doc\chm`)
- 3 Open the corresponding CHM file (.chm extension).

## Main online help in CHM format (compiled HTML)

### Windows client

Each of the guides in CHM format are grouped in the main online help.

To display the online Help:

- 1 Start the AssetCenter Windows client.
- 2 Do one of the following:
  - Press **F1**.
  - Access the **Help/ Index** menu

### Web client

This functionality is not available.

## Contextual help for Basic scripts

### Windows client

To display help on a Basic script function:

- 1 Start the AssetCenter Windows client.
- 2 Display the script edit window (field or link configuration script, "Script" type action, wizard script).
- 3 Select the name of the function.
- 4 Press **F1** on the keyboard.

### Web client

This functionality is not available.

## Contextual help on fields and links in the database.

### Windows client

To display help for a field or a link in the database:

- 1 Start the AssetCenter Windows client.
- 2 Display the detail that contains the field or link.
- 3 Select the field or link.
- 4 Do one of the following:
  - Press *Shift* and *F1*
  - **Help on this field** menu
  - **Help/ Help on this field** menu

### Web client

This functionality is not available.

## White papers

The white papers supplied with AssetCenter provide additional technical or business-related information that is not covered in the guides.

The white papers are available in one of the following folders:

- doc\white\_papers subfolder of the AssetCenter installation folder (Generally this is Program Files\HP OpenView\AssetCenter 5.02 xx\doc\white\_papers)
- ac\Program Files\HP OpenView\AssetCenter 5.02 xx\doc\white\_papers folder on the AssetCenter installation CD-ROM

Please read the *About packaged white papers* PDF located in these folders for a summary of the white papers that are provided.

## Information about the database structure

Description files are available in the doc\infos subfolder of the AssetCenter installation folder (In general this is: Program Files\HP OpenView\AssetCenter 5.02 xx\doc\infos):

- database.rtf: List of tables, fields, links and indexes of the standard AssetCenter database in RTF format.  
Use Microsoft Word to display this document.
- database.txt: List of tables, fields, links and indexes of the standard AssetCenter database in TXT format.  
Use a spreadsheet application to display this document.

- `tables.txt`: List of tables of the standard AssetCenter database in TXT format.  
Use a spreadsheet application to display this document.
- `diffxyz.xml`, where *xyz* corresponds to the AssetCenter version number:  
Lists the differences of the standard AssetCenter database structure between versions *xyz* and 5.02 in XML format.  
Use an XML editor display this document.
- `diffxyz.html`, where *xyz* corresponds to the AssetCenter version number:  
Lists the differences of the standard AssetCenter database structure between versions *xyz* and 5.02 in HTML format.  
Use an HTML editor or Internet browser to display this document.

## Online documentation

Additional documentation for AssetCenter 5.02 can be downloaded from the HP support site at the following address:

[www.hp.com/go/hpssoftwaresupport](http://www.hp.com/go/hpssoftwaresupport)

You will need a user name and password to access the site.

## List and description of guides

To locate the guides: ► [Guides in PDF format \(Adobe Acrobat\)](#) [page 31].

---

### Note:

The names of the PDF files given below have this format: *\*<Guide identifier>\**.

The first asterisk (\*) corresponds to the software and software version identifier when guide was produced.

The second asterisk (\*) corresponds to the language identifier of the guide.

For example: *AC502-Installation-EN*.

*AC502-Installation-EN* corresponds to AssetCenter version 502.

*EN* corresponds to English.

---

## Installation

### Installation and upgrade

Name of the PDF file	Name of the CHM file
*Installation*.pdf	installation.chm

This guide explains:

- Which programs are part of AssetCenter.
- In which environments AssetCenter functions.
- How to upgrade a previous version of AssetCenter.
- How to install AssetCenter and AssetCenter Web for the first time.
- How to configure AssetCenter.
- How to tune AssetCenter.

This guide is intended for engineers who need to:

- Install AssetCenter and AssetCenter Web for the first time.
- Upgrade a previous version of AssetCenter.

### Migration

Name of the PDF file	Name of the CHM file
*Migration*.pdf	migration.chm

This guide explains how to:

- Convert your old-format database to the 5.02 format.
- Upgrade AssetCenter programs to version 5.02.

Migration is performed by engineers in charge of:

- Administering the AssetCenter database
- Installing AssetCenter
- Deploying AssetCenter

## Introduction

### Concepts and implementation

Name of the PDF file	Name of the CHM file
*ConceptsAndImplementation*.pdf	concepts.chm

This guide provides an overview of portfolio management and explains how AssetCenter can help you implement it in your organization.

This guide is for anyone who would like an overview of AssetCenter:

- IT manager
- Organizational manager
- Project directors and managers (setup, training, project planning/tracking, Quality Assurance, etc.).
- Integration project managers
- Administrators
- General users

 Note:

Users who will only work with specific modules can refer directly to that module's documentation.

## Product Review Guide

Name of the PDF file	Name of the CHM file
*ProductReviewGuide*.pdf	reviewguide.chm

The purpose of this guide is to give someone with no prior knowledge of AssetCenter an overview of some of the common tasks that can be performed with specific focus on the *Asset Tracking* and *Expense Control* processes.

After reading this guide, the reviewer will have a clear understanding of the key advantages to be gained by using AssetCenter.

This guide will be of interest to anyone evaluating the potential of AssetCenter, such as:

- Journalists
- Industry experts
- Consultants

## Asset Tracking solution

Name of the PDF file	Name of the CHM file
*AssetTrackingSolution*.pdf	actracking.chm

This guide aims to provide answers to the following questions:

- What is the Asset Tracking solution?
- What benefits can be expected from the Asset Tracking solution?
- Who should implement the Asset Tracking solution?

This guide will be of interest to anyone evaluating the potential of AssetCenter, such as:

- Journalists

- Industry experts
- Consultants

## Expense Control solution

Name of the PDF file	Name of the CHM file
*ExpenseControlSolution*.pdf	expensecontrol.chm

This guide aims to provide answers to the following questions:

- What is the Expense Control solution?
- What benefits can be expected from the Expense Control solution?
- Who should implement the Expense Control solution?

This guide will be of interest to anyone evaluating the potential of AssetCenter, such as:

- Journalists
- Industry experts
- Consultants

## Differences between versions 3.x and 4.x

Name of the PDF file	Name of the CHM file
*DifferencesBetweenVersions3xAnd4x*.pdf	differencesbetversions.chm

This guide describes the major changes made to AssetCenter between versions 3.x and 4.0.0

The manual includes:

- A module-by-module comparison between versions 3.x and 4.x
- A description of new concepts
- A description of new features
- The list of new tables

This guide is for:

- Engineers performing AssetCenter version 3.x upgrades
- Module specialists who want to know how AssetCenter has evolved between versions 3.x and 5.02

Changes made to AssetCenter after version 4.0.0 are described in the *Release Notes* guide.

## Basic functions

### User Interface

Name of the PDF file	Name of the CHM file
*UserInterface*.pdf	userinterface.chm

This guide explains how to use AssetCenter:

- Search for records
- Edit records
- Print data
- Connect to a database
- Use wizards
- Send and read messages
- Display history of changes
- Schedule alarms
- Learn about the differences between the Windows and Web clients

This guide is intended for all AssetCenter users.

### Accessibility Options

Name of the PDF file	Name of the CHM file
*AccessibilityOptions*.pdf	accessibility.chm

This guide is for users who encounter difficulties viewing the standard AssetCenter Windows user interface.

This guide explains how to:

- Change the visual aspect of the Windows client
- Use screen reader software
- Navigate without a mouse

### Common tables

Name of the PDF file	Name of the CHM file
*CommonTables*.pdf	commontables.chm

This guide describes the tables used in all AssetCenter modules:

- Departments and employees
- Locations
- Companies
- Floor plans

- Features
- Documents
- News

This guide is intended for all AssetCenter users.

## Portfolio

Name of the PDF file	Name of the CHM file
*Portfolio*.pdf	portfolio.chm

This guide describes how to use the *Portfolio* module:

- Overview
- Organizing a portfolio
- Using the *Portfolio* module
- IT portfolio
- Telephones
- Software
- Work orders and projects
- Adjusting items
- Glossary

This guide is intended for anyone using or implementing the *Portfolio* module.

## Contracts

Name of the PDF file	Name of the CHM file
*Contracts*.pdf	contracts.chm

This guide explains how to manage different types of contracts:

- Insurance
- Lease schedules
- Maintenance
- License
- Application services
- Blanket purchase orders

This guide is intended for anyone using or implementing the *Contracts* module.

## Software assets

Name of the PDF file	Name of the CHM file
*SoftwareAssets*.pdf	sam.chm

This guide explains how to manage, control and protect software assets at each phase of their life cycle.

This guide is intended for users who need to:

- Populate the software contracts database
- Populate the software licenses database (acquisition of rights to use software applications)
- Populate the installations database (consumption of rights to use software applications)
- Monitor that installations comply with licenses
- Manage the software portfolio (installations, updates)

## Financials

Name of the PDF file	Name of the CHM file
*Financials*.pdf	financials.chm

This guide describes how to use the *Financials* module:

- Currencies
- Expenses
- Fixed assets
- Taxes
- TCO (Total Cost of Ownership)
- Chargebacks

This guide is intended for anyone using or implementing the *Financials* module.

## Cable and Circuit

Name of the PDF file	Name of the CHM file
*CableAndCircuit*.pdf	cable.chm

This guide describes how to use the *Cable* module:

- Overview
- Practical case
- Implementation
- Creating termination fields, cable devices, cables and connections
- Viewing the traces

- Glossary
- Reference information

This guide is intended for anyone using or implementing the *Cable* module.

### Integration with software distribution tools

Name of the PDF file	Name of the CHM file
*IntegrationWithSoftwareDistribution-Tools*.pdf	softdist.chm

This guide explains how to integrate AssetCenter with software distribution tools.

In this type of integration:

- 1 AssetCenter is used to *create* scheduled tasks.



Note:

A scheduled task is used to distribute a software package to or execute a script on a set of target computers.

- 2 The distribution tool is used to *execute* the scheduled tasks defined in AssetCenter.

This guide should be read by IT team members in charge of software distribution.

### Procurement

Name of the PDF file	Name of the CHM file
*Procurement*.pdf	procurement.chm

This guide explains how to manage the procurement of goods and services using AssetCenter:

- Portfolio items
- Work orders
- Contracts
- Contract utilizations
- Training
- Cables

This guide is intended for anyone using or implementing the *Procurement* module.

## Advanced functions

### Advanced use

Name of the PDF file	Name of the CHM file
*AdvancedUse*.pdf	advanceduse.chm

This guide explains how to use AssetCenter's advanced functions:

- Itemized lists
- Historization
- AQL queries
- Forms
- Crystal Reports
- Dashboards
- Actions
- Messaging
- Workflow
- Data export
- Scripts
- Calendars
- Time zones
- Calculated fields
- Wizards
- News

This guide is intended for advanced users.

The *Administration* guide complements this guide.

### Administration

Name of the PDF file	Name of the CHM file
*Administration*.pdf	administration.chm

This guide explains how to:

- Use AssetCenter Database Administrator
- Create, modify or delete a database
- Access databases
- Archive data
- Denormalize data
- Import data
- Control access to the database

- Use AssetCenter Server
- Use messaging
- Use AssetCenter as a DDE server

This guide is intended for AssetCenter administrators and advanced users.

## Tailoring

Name of the PDF file	Name of the CHM file
*Tailoring*.pdf	tailoring.chm

This guide explains how to customize AssetCenter:

- Customize the interface of the client workstation
- Customize the database

This guide is intended for all AssetCenter users and administrators.

## Reconciliation

Name of the PDF file	Name of the CHM file
*Reconciliation*.pdf	reconciliation.chm

This guide explains how to update records in the AssetCenter database using data obtained from external tools.

This process is based on the following question: "Does the incoming data already exist in the target application?"

- If the answer is "no", the input data is inserted.
- If the answer is "yes", the existing data is updated according to the information contained in the input data.

This guide is for:

- AssetCenter administrators who want to automate database updates.
- Users designated to process reconciliation proposals in AssetCenter.

## Programmer's Reference

Name of the PDF file	Name of the CHM file
*ProgrammersReference*.pdf	progref.chm

This chapter explains how to use AssetCenter's programming libraries.

The reference includes:

- A detailed description of each function
- An index of functions by domain (for example, *Procurement*)
- How to use the functions

This guide is intended for anyone planning to program in the Windows environment to:

- Use the AssetCenter APIs
- Create configuration scripts for fields or links
- Create *Script* action types
- Create wizards

## Tuning

Name of the PDF file	Name of the CHM file
*Tuning*.pdf	tuning.chm

This guide describes AssetCenter tuning strategies.

In particular, it deals with certain techniques to reduce bottlenecks caused by:

- The network
- The database server
- The AssetCenter client
- The database engine

This guide is intended for AssetCenter administrators.

## Automatic software mechanisms

Name of the PDF file	Name of the CHM file
*AutomaticSoftwareMechanisms*.pdf	autosoftmechan.chm

This guide describes the automatic software mechanisms used to process data in AssetCenter.

The guide is intended for:

- Database administrators
- Persons in charge of implementing and/or customizing the AssetCenter database

## Physical data models

Name of the PDF file	Name of the CHM file
*PhysicalDataModels*.pdf	Not available

This guide presents diagrams of the physical data models.

Each of these diagrams contains one or more tables used by the AssetCenter modules.

Understanding the database structure can help you:

- Create queries
- Customize the database
- Define user profiles
- Access the database without using the AssetCenter user interface
- Import or export data

This guide is intended for anyone who needs to learn about the structure of the database.

### Database structure

Name of the PDF file	Name of the CHM file
Not available	dbstructure.chm

This guide describes the entire structure of the standard AssetCenter database (available in .chm format only):

- Tables
- Fields
- Links
- Indexes
- Automatic background processes

---

## Compatibility Matrix

A compatibility matrix detailing required hardware and software components for use with AssetCenter 5.02 is available on the HP support site at:

[www.hp.com/go/hpsoftwaresupport](http://www.hp.com/go/hpsoftwaresupport)

You will need a user name and password to access the site.



## 7 Additional information and documentation errors

This chapter contains important information that has not been provided in the guides or that replaces existing information.

The following guides are impacted:

- *Installation and upgrade* guide, chapter *Installing, configuring, uninstalling and updating AssetCenter Web*.
  - ▶ [Installing, configuring, removing and updating AssetCenter Web](#) [page 48]
- *Administration* guide, chapter *Controlling access to the database*, section *Managing passwords*
  - ▶ [Managing user authentication for the AssetCenter database](#) [page 83]
- *Administration* guide, chapter *Controlling access to the database*, section *Managing user connections / Database access types*
  - ▶ [Guest access type - Accessible tables](#) [page 98]
- *Advanced use* guide, chapter *Wizards*, section *Types of controls and associated properties / The DBQUERYBOX control*
  - ▶ [Types of controls and properties associated with wizards](#) [page 99]
- *Tailoring* guide, book *Customizing Web clients*
  - ▶ [Aggregate the navigation bars of the AssetCenter and Service Manager Web clients](#) [page 100]
- *Tailoring* guide, chapter *Customizing the database*, section *Development best practices*
  - ▶ [Tag the Web services](#) [page 103]

- ▶ Checking the functional domains associated with the Web services objects [page 108]
- *Tailoring* guide
  - ▶ .ini and .cfg files [page 112]
- *User Interface* guide, chapter *Differences between the Windows client and the Web client*, section *Differences between the clients/ Actions (including wizards)*
  - ▶ .ini and .cfg files [page 112]

---

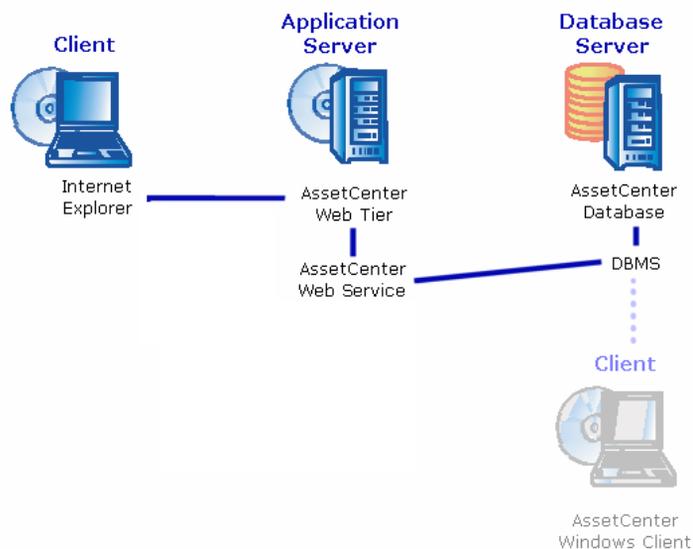
## Installing, configuring, removing and updating AssetCenter Web

 **Important:**

This section replaces the *Installation and upgrade* guide, chapter *Installing, configuring, uninstalling and updating AssetCenter Web*.

### AssetCenter Web Architecture

Figure 7.1. AssetCenter Web Architecture



- Internet explorer enables users to access AssetCenter.
- AssetCenter Web Tier receives requests from Internet explorer and sends them to AssetCenter Web Service.
- AssetCenter Web Service consults or modifies the AssetCenter database using APIs.
- AssetCenter Web Service sends data from the database to AssetCenter Web Tier.
- AssetCenter Web Tier sends the pages to display to Internet explorer.
- AssetCenter Web Tier, AssetCenter Web Service can be hosted on different application servers.
- In order to improve system performance, the number of AssetCenter Web Tier and AssetCenter Web Service instances can be increased as the number of web clients connecting to AssetCenter Web Tier increases.
- The clients and application servers communicate using the HTTP protocol.

## Practical case

### Warning:

This section provides an example of AssetCenter Web installed on a local test machine running Tomcat 5.0.28 as the application server.

This practical case does not attempt to optimize the performance of AssetCenter Web.

Tomcat 5.0.28 and J2SE v 1.4.2\_13 SDK do not necessarily correspond to the software applications to be used or supported in production mode.

Refer to the compatibility matrix at: [www.hp.com/go/hpsupport](http://www.hp.com/go/hpsupport) for more information about supported software.

For information about installing in a production environment: ► [Installing AssetCenter Web](#) [page 53].

- 1 Install Internet Explorer 6.0.
- 2 Start Internet Explorer 6.0.
- 3 Configure Internet Explorer 6.0 (**Tools/ Internet Options** menu, **Security** tab) allowing it to:
  - Execute JavaScript
  - Display pop-up windows
  - Accept cookies
- 4 Install AssetCenter in the Program Files\HP OpenView\AssetCenter 5.02\_xx folder, where xx is replaced by the two letter language code of your AssetCenter installation (► *Installation and upgrade guide*, chapters *Before installing AssetCenter* and *Manual installation (graphical)*).

Select the *Custom installation* mode.

Select the following components:

- AssetCenter Client (Windows client)
- AssetCenter API
- Demonstration database
- Web Service and Web Client

- 5 Start the AssetCenter Windows client (**Programs/ HP OpenView/ AssetCenter 5.02 xx/ AssetCenter** Windows menu where *xx* is replaced by the two letter language code of your AssetCenter installation).
- 6 Connect to the demonstration database by populating the following fields in the connection window:

Field	Value
Connection	ACDemo50en
Login	Admin
Password	Leave this field empty

- 7 Enter the license that you received with AssetCenter to use the demonstration database.
- 8 Exit the Windows client.
- 9 Install J2SE v 1.4.2\_13 SDK in the C:\j2sdk1.4.2\_13 folder from this site: <http://java.sun.com/j2se/1.4.2/download.html>.
- 10 Add or modify the *JAVA\_HOME* system variable to have it point to the J2SE v 1.4.2\_13 SDK installation folder (in Windows click **Start/ Settings/ Control Panel**. Double click the *System* tool and then click the **Advanced** tab followed by the **Environment Variables** button, **System variables** frame).

Value to use:

- 11 Install Tomcat 5.0.28 in the C:\Tomcat50 folder from this site: <http://tomcat.apache.org/download-55.cgi#5.0.28>  
Download *Windows Service Installer (pgp, md5)*.  
Accept the options that are provided by default by the installation program except for the following:
  - The installation folder must be: C:\Tomcat50
  - Clear the box that asks to start Tomcat when the installation is complete.
- 12 Start the Tomcat configuration console (In Windows click **Start/ Programs/ Apache Tomcat 5.0/ Configure Tomcat**).
- 13 Click the **Java** tab.

## 14 Populate the following fields:

Field	Value
Java Classpath	C:\j2sdk1.4.2_13\lib\tools.jar;C:\Tomcat50\bin\bootstrap.jar
Java Options	Add this line:  -Djava.library.path=Program Files\HP OpenView\AssetCenter 5.02 xx\bin  where <i>xx</i> is replaced by the two letter language code of your AssetCenter installation.
Initial memory pool	512 (or another value adapted to your computer)
Maximum memory pool	1024 (or another value adapted to your computer)

- 15 Close the Tomcat configuration console.
- 16 Copy the `ac-constants-50.jar` and `ac-jni-50.jar` files (located by default in the `Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\lib` folder where *xx* is replaced by the two letter language code of your AssetCenter installation).  
Paste them in `C:\Tomcat50\shared\lib`.
- 17 Stop Tomcat.
- 18 Copy the `Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\config\AssetCenter.xml` file where *xx* is replaced by the two letter language code of your AssetCenter installation.  
Paste it in `C:\Tomcat50\conf\catalina\localhost`.
- 19 Copy the `Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\config\AssetCenterWebService.xml` file where *xx* is replaced by the two letter language code of your AssetCenter installation.  
Paste it in `C:\Tomcat50\conf\catalina\localhost`.
- 20 Start Tomcat:
  - a Start the Tomcat monitoring console (In Windows click **Start/ Programs/ Apache Tomcat 5.0/ Monitor Tomcat**).
  - b Right click the Tomcat icon in the lower-right corner of the Windows taskbar.
  - c Select the **Start service** menu item.
  - d Wait until the red square becomes a green triangle pointing to the right.
- 21 Test to see if the AssetCenter Web Service deployment has been successful:
  - 1 Start Internet Explorer 6.0.
  - 2 Go to the following URL:

`http://localhost:8080/AssetCenterWebService`

 **Warning:**

Text is case sensitive.

- 3 If deployment has been successful, the page located at the URL will display a header similar to the following:

```
Database
Database: ACDemo50en
User: Admin
Version: 5.02 - build XXXX
```

 **Tip:**

If this header is displayed but is followed by an error, try redefining the application server's memory settings.

Example for Tomcat 5.0: *Initial memory pool* and *Maximum memory pool* settings.

- 22 Go to the following URL:

```
http://localhost:8080/AssetCenter
```

 **Warning:**

Text is case sensitive.

This displays the connection page.

- 23 Populate the following fields:

Field	Value
Login	Admin

Field	Value
Password	Leave the password empty.

## Installing AssetCenter Web

### Important:

It is recommended that AssetCenter Web be only installed by persons with the skills required to properly configure the Web and application servers that will be used to run AssetCenter Web.

This guide does not explain how to install and configure application and Web servers. This is not the object of this guide.

Please consult the guides of the application and Web servers that you will be using for more information on how to use them.

## Prerequisites

### Components to install

## For all application servers

Before installing AssetCenter Web, you must install, configure and start the components listed below and do so following the recommendations provided by each of the components' editors.

- AssetCenter database on the database server.
- AssetCenter Server, on any server from which AssetCenter Server can access the AssetCenter database

The following actions are required before a Web client can access the database:

- AssetCenter Server must be running and connected to the database
- The AssetCenter Server *Signal presence of database server* (UpdateToken) module must be activated and scheduled to execute at least once per week.
  - ▶ *Administration Guide*, chapter *AssetCenter Server*, section *Configuring the modules monitored by AssetCenter Server*.
- Application servers.

The application servers must be protected by your network infrastructure (firewall, proxy, etc.) but allow connections from an Internet browser.

---

 **Note:**

The computers hosting the application servers must be able to access the database. This requires that the client layers of the DBMS for the AssetCenter database be installed on these computers.

- The following AssetCenter components, which can be installed via the AssetCenter installation program, on the computers hosting the application servers:
  - Web Service and Web Client
  - AssetCenter API
  - LDAP authentication, if you plan on implementing this functionality

---

 **Important:**

Install the language version of AssetCenter that you want displayed by the Web clients.

The AssetCenter database, which can be multilingual, must include this language. If you have installed several language versions of the Web client, you must install the same number of AssetCenter Web instances (AssetCenter Web Service and AssetCenter Web Tier).

These instances can all point to the same database if the database includes the languages being used.

Different URLs will enable users to select the display language used by their Web client.

► *Administration guide, chapter [Creating, modifying and deleting an AssetCenter database](#), section [AssetCenter client display languages](#).*

---

 **Important:**

Refer to the compatibility matrix at: [www.hp.com/go/hpssoftwaresupport](http://www.hp.com/go/hpssoftwaresupport) to know which versions of the following components are supported:

- Application servers
  - Web servers
- 
- If you install AssetCenter Web Tier on a UNIX server, you must configure the Java Virtual Machine (JVM) to not use the UNIX graphics resources. To do this, add the following parameter:

```
-Djava.awt.headless=true
```
  - If you install AssetCenter Web Service on a UNIX server, make sure you follow the instructions in the *Installation and upgrade* guide, chapter *Installing and configuring in Unix (except AssetCenter Web)*, sections

*Installing AssetCenter and Accessing the AssetCenter database using the API.* Please pay particular attention to the details concerning the .so files.

## If Tomcat is your application server

- ◆ J2SE Software Development Kit (SDK) must be installed with the TOMCAT application servers that you are going to use.

### Important:

Refer to the compatibility matrix at: [www.hp.com/go/hpssoftwaresupport](http://www.hp.com/go/hpssoftwaresupport) to find out which Java Development Kit versions are compatible with the application server that you plan on using.

Tomcat must be properly configured in order to achieve maximum performance with AssetCenter Web.

For information on how to configure Tomcat, please refer to the Tomcat documentation.

Below is a sample configuration that was successfully tested using Windows Server 2003 Enterprise Edition on a four-processor, 3.16 GHz (multi-thread deactivated) machine with 4 GB of RAM, and with AssetCenter Web Tier and AssetCenter Web Service running on separate Tomcat instances:

- Tomcat configuration used by AssetCenter Web Tier:

```
<Connector acceptCount="575" connectionTimeout="900000" disableUploadTimeout="true" port="8080" redirectPort="8443" maxThreads="550" minSpareThreads="200" maxSpareThreads="200" maxKeepAliveRequests="5" />
<Connector port="8009" protocol="AJP/1.3" protocolHandlerClassName="org.apache.jk.server.JkCoyoteHandler" redirectPort="8443" />
```

- Tomcat configuration used by AssetCenter Web Service:

```
<Connector port="8081" maxThreads="150" minSpareThreads="49" maxSpareThreads="100" enableLookups="false" redirectPort="8443" acceptCount="745" debug="0" connectionTimeout="9000000" disableUploadTimeout="true" maxKeepAliveRequests="0" />
```

- JVM configuration used by AssetCenter Web Tier:

```
set JAVA_OPTS=-Xms1260m -Xmx1260M -XX:+UseTLAB -XX:+UseParNewGC -XX:+UseConcMarkSweepGC -XX:NewSize=256m -XX:MaxTenuringThreshold=0 -XX:SurvivorRatio=128 -server -Xloggc:c:\tomcat\logs\WTGC.log -Dcatalina.home=c:\tomcat -Djava.endorsed.dirs=C:\Tomcat\common\endorsed -Djava.io.tmpdir=c:\tomcat -Djava.library.path=C:\Tomcatws\shared\lib
```

- JVM configuration used by AssetCenter Web Service:

```
set JAVA_OPTS=-Xmx600M -Xms600M -Xloggc:c:\tomcat\logs\wsGC.log -XX:MinHeapFreeRatio=3 -XX:MaxHeapFreeRatio=20 -XX:NewSize=256m -XX:MaxNewSize=256m -XX:+UseConcMarkSweepGC -XX:+UseTLAB -XX:MaxTenuringThreshold=0 -Dcatalina.home=C:\Tomcatws -Djava.endorsed.dirs=C:\Tomcatws\common
```

```
s\endorsed -Djava.io.tmpdir=C:\Tomcatws -Djava.library.path=C:\Tomcatws\shared\lib
```

## If WebSphere Application Server is your application server

- ◆ You must use a J2SE version that is compatible with the WebSphere application server that is installed. Refer to the compatibility matrix at: [www.hp.com/go/hpsoftwaresupport](http://www.hp.com/go/hpsoftwaresupport).

### Note:

For security purposes, make sure there is no other JDK installed on your WebSphere Application Server other than the JDK supplied by IBM in your WebSphere Application Server installation package.

## If WebLogic is your application server

- ◆ The JRockit or Sun SDK provided with BEA in the WebLogic installation package must be used.

BEA recommends using JRockit for a WebLogic domain in *Development mode* and the Sun SDK for a WebLogic domain in *Production mode*. For more information, please consult the WebLogic server documentation.

### Note:

For security purposes, make sure there are no other JDKs installed on your server other than the JDK supplied by BEA.

### Licenses to acquire

You do not need a specific license to access the AssetCenter database via AssetCenter Web (via AssetCenter Web Tier + AssetCenter Web Service).

AssetCenter Web is handled in the same way as the Windows client.

The number of named, guest or floating accesses used to connect to the AssetCenter database, whether via the Windows client or AssetCenter Web Tier, is set by your AssetCenter license.

However, if you want to access the AssetCenter database by another method in addition to the AssetCenter Windows client and AssetCenter Web, and this method uses AssetCenter Web Service, you must acquire a specific AssetCenter Web Service license.

### Preparing your AssetCenter Web installation

#### Obtain required encrypted passwords

During the installation, you will need to enter certain passwords:

- Password associated with the Login for a user connecting to the AssetCenter database.
- Password associated with the MSSQL User, DB2 User, Oracle Account or Sybase Account of the AssetCenter database.

Passwords were not encrypted when you entered them.

You need to generate the encrypted version of these passwords since they must be entered in the `web.xml` file that you will configure when installing AssetCenter Web Service:

- 1 Open a DOS command prompt.
- 2 Go to the Program Files\HP OpenView\AssetCenter 5.02 `xx\websvc\password` folder where `xx` is replaced by the two letter language code of your AssetCenter installation.
- 3 Execute the command:

```
<J2SE SDK installation folder>\bin\java.exe -jar ac-pwd-encrypt-50.jar <Decrypted password>
```

- 4 Note the encrypted value of these passwords.

### Tag the Web services

To ensure that AssetCenter Web is deployed successfully, tag the Web services before deploying AssetCenter Web Service.

- ▶ [Tag the Web services \[page 103\]](#).

### Important:

If you re-tag the Web services after deploying AssetCenter Web Service

Check the consistency of the functional domains associated with the Web services

If you have modified some data in the functional domains, make sure that the Web services have not been impacted.

- ▶ [Checking the functional domains associated with the Web services objects \[page 108\]](#).

If this is not the case, you will get an error message similar to: *No such operation 'XXX'*.

## Installing AssetCenter Web Service

If Tomcat is your application server

- 1 Stop Tomcat.
- 2 Change to the Program Files\HP OpenView\AssetCenter 5.02 `xx\websvc` folder.

- 3 Decompress the AssetCenterWebService.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build folder.
- 4 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build\WEB-INF\web.xml file.
- 5 Modify the following parameters:
  - *AssetCenter.DB.Name*

*Value*

```
[<Engine>;<Data source or Server>;<User or Account>;<Encrypted password associated with the User or Account>;<Enable cache >;<Local cache directory>;<Cache size (in KB)>;Owner=<Owner>;AmApiDll='<Complete path of aamapi50.dll>']
```

With:

- Engine:
  - MSSQL
  - Oracle
  - Sybase
  - DB2
- Encrypted password: ► [Obtain required encrypted passwords \[page 56\]](#)
- Enable cache:
  - 0 : Cache disabled
  - 1 : Cache enabled
- Cache size (in KB): Do not specify unit
- Owner: If there is not one, do not use this parameter (do not leave this parameter with an empty value)
- AmApiDll: The aamapi50.dll file is located by default in the Program Files\HP OpenView\AssetCenter 5.02 xx\bin folder where xx is replaced by the two letter language code of your AssetCenter installation. Use the / character and not the \ character in the path.

The other parameters correspond exactly to the parameters that appear in the connection details (**File/ Manage connections** menu of the Windows client).

► *User interface guide, chapter Reference information, section Connections/ To create a connection to a database.*

---

<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;AssetCenter Database name&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.DB.Name&lt;/env-entry-name&gt; &lt;env-entry-value&gt;[MSSQL;ACDemo50en;itam;Hk9pv/o71A3mlV1/7cz3A w==;0;c:/tmp;0;AmApiDll='C:/Program Files/HP Software/AssetCe nter 5.02 en/bin/aamapi50.dll']&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>
----------------	---

---

- *AssetCenter.DB.UserLogin*

<i>Value</i>	Login name to use to connect to the AssetCenter database
<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;AssetCenter UserLogin for WebService impersonati on&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.DB.UserLogin&lt;/env-entry-name&gt; &lt;env-entry-value&gt;Admin&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>

---

- *AssetCenter.DB.UserPwd*

<i>Value</i>	Encrypted password for the Login used to connect to the AssetCenter database.
<i>Example</i>	<p>▶ <a href="#">Obtain required encrypted passwords</a> [page 56]</p> <p>If the password is empty:</p>

---

```

<env-entry>
<description>AssetCenter password for WebService impersonatio
n</description>
<env-entry-name>AssetCenter.DB.UserPwd</env-entry-name>
<env-entry-value>bmKbcCAZLK4=</env-entry-value>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>

```

---

- 6 Save the web.xml file.
- 7 Browse to the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build folder.
- 8 Select all files and folders.
- 9 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build\AssetCenterWebService.war file.
- 10 Copy the file.
- 11 Paste it in Tomcat's webapps folder.
- 12 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build folder.

### 13 Enter the Java properties for Tomcat:

Property	Value
Java Classpath	<p>Add the complete path to the following file:</p> <ul style="list-style-type: none"><li>◆ <code>tools.jar</code> from the J2SE SDK (located by default in the <code>lib</code> sub-folder of the J2SE SDK installation folder)</li></ul> <p>Each of the paths are on the same line and are separated by a semi-colon ;.</p>
Java Options	<p>Add the complete path to the folder containing the <code>acjni50.dll</code> file (located by default in the <code>Program Files\HP OpenView\AssetCenter 5.02 xx\bin</code> folder where <code>xx</code> is replaced by the two letter language code of your AssetCenter installation).</p> <p>Parameter example:</p> <pre>-Djava.library.path=Program Files\HP OpenView\AssetCenter 5.02 xx\bin</pre>

14 Copy the `ac-constants-50.jar` and `ac-jni-50.jar` files (located in the `Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\lib` folder).

Paste them in Tomcat's `shared\lib` folder.

15 Start Tomcat.

16 Test to see if deployment has been successful.

For example, you can do the following:

- 1 Start Internet Explorer.
- 2 Go to the following URL:

```
http://<Name or IP address of the AssetCenter Web Service server>:<A  
ssetCenter Web Service port>/AssetCenterWebService
```

For example: `http://localhost:8080/AssetCenterWebService`



#### Warning:

Text is case sensitive.

- 3 If deployment has been successful, the page located at the URL will display a header similar to the following:

```
Database Base: Name ACDemo50en  
Engine MSSQL  
User itam  
AmApiDll 'C:/Program Files/HP Software/AssetCenter 5.02 en/bin/aama  
pi50.dll'  
User: Admin  
Version: 5.02 - build <AssetCenter build number>
```



#### Tip:

If this header is displayed but is followed by an error, try redefining the application server's memory settings.

Example for Tomcat 5.0: *Initial memory pool* and *Maximum memory pool* settings.

### If WebSphere Application Server is your application server

This section explains how to install AssetCenter Web Service separately from AssetCenter Web Tier.

To install AssetCenter Web Service and AssetCenter Web Tier at the same time: ► [To install AssetCenter Web Tier and AssetCenter Web Service at the same time](#) [page 79].

- 1 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere folder.
- 2 Decompress the AssetCenter-webservice.ear file in the folder named Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webservice.ear\_build.
- 3 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webservice.ear\_build folder.
- 4 Decompress the AssetCenterWebService.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenterWebService.war\_build folder.
- 5 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenterWebService.war\_build\WEB-INF\web.xml file.
- 6 Delete the following paragraphs:

#### Paragraphs to delete

```
<env-entry>
<description>AssetCenter Jaas configuration file</description>
<env-entry-name>acws.jaas.config.location</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
<env-entry>
<description>Keystore path for Single Sign-On</description>
<env-entry-name>security.keystorePath</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
<env-entry>
<description>Single Sign-On keystore user password</description>
<env-entry-name>security.keystoreUserPassword</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

## Paragraphs to delete

```
<env-entry>
<description>Single Sign-On keystore user alias</description>
<env-entry-name>security.keystoreUserAlias</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

### 7 Modify the *AssetCenter.DB.Name* parameter:

#### Value

```
[<Engine>;<Data source or Server>;<User or Account>;<Encrypted password associated with the User or Account>;<Enable cache>;<Local cache directory>;<Cache size (in KB)>;<Owner=<Owner>;AmApiDll='<Complete path of aamapi50.dll>'>]
```

With:

- Engine:
  - MSSQL
  - Oracle
  - Sybase
  - DB2
- Encrypted password: ► [Obtain required encrypted passwords \[page 56\]](#)
- Enable cache:
  - 0: Cache disabled
  - 1: Cache enabled
- Cache size (in KB): Do not specify unit
- Owner: If there is not one, do not use this parameter (do not leave this parameter with an empty value)
- AmApiDll: The aamapi50.dll file is located by default in the Program Files\HP OpenView\AssetCenter 5.02 xx\bin folder. Use the / character and not the \ character in the path.

The other parameters correspond exactly to the parameters that appear in the connection details (**File/ Manage connections** menu of the Windows client).

► *User interface guide, chapter Reference information, section Connections / To create a connection to a database.*

#### Example

```
<env-entry>
<description>AssetCenter Database name</description>
<env-entry-name>AssetCenter.DB.Name</env-entry-name>
<env-entry-value>[MSSQL;ACDemo50en;itam;Hk9pv/o7lA3mlV1/7cz3Aw=;0;c:/tmp;0;AmApiDll='C:/Program Files/HP Software/AssetCenter 5.02 en/bin/aamapi50.dll']</env-entry-value>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

### 8 Edit the *AssetCenter.DB.UserLogin* parameter:

<i>Value</i>	Login name to use to connect to the AssetCenter database
<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;AssetCenter UserLogin for Webservice impersonation &lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.DB.UserLogin&lt;/env-entry-name&gt; &lt;env-entry-value&gt;Admin&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>

## 9 Edit the *AssetCenter.DB.UserPwd* parameter:

<i>Value</i>	Encrypted password for the Login used to connect to the AssetCenter database.
	► <a href="#">Obtain required encrypted passwords [page 56]</a>
<i>Example</i>	<p>If the password is empty:</p> <pre> &lt;env-entry&gt; &lt;description&gt;AssetCenter password for Webservice impersonation&lt; /description&gt; &lt;env-entry-name&gt;AssetCenter.DB.UserPwd&lt;/env-entry-name&gt; &lt;env-entry-value&gt;bmkBcCAZLK4=&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>

- 10 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenterWebService.war\_build folder.
- 11 Select all files and folders.
- 12 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenterWebService.war\_build\AssetCenterWebService.war file.
- 13 Copy it.
- 14 Paste it in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webservice.ear\_build folder (overwrite the previous file).
- 15 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenterWebService.war\_build folder.
- 16 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webservice.ear\_build folder.
- 17 Select all files and folders.
- 18 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webservice.ear\_build\AssetCenter-webservice.ear file.
- 19 Start WebSphere Application Server.

- 20 Start Internet Explorer.
- 21 Open the following URL:

http://<Name or IP address of the AssetCenter Web Service server>:<WebSphere port>/admin

For example: `http://127.0.0.1:9060/admin`

- 22 Enter your user ID:
- 23 In the menu on the left, click **Security/ JAAS configuration/ Application Logins**.
- 24 Click **New** and create a new alias named *ACWebServiceLoginContext*.
- 25 Click **JAAS login modules** in the table under the **Additional Properties** section.  
This displays the JAAS login module for the *ACWebServiceLoginContext* alias.
- 26 Click **New** and enter the Module Classname:  
*com.peregrine.ac.auth.ACAPILoginModule*.
- 27 Make sure the *Authentication strategy* is **REQUIRED**.
- 28 Select the **Use connection module proxy** option.
- 29 Click *Apply*.
- 30 Under the *Additional Properties* section, there is a *Custom properties* link.
- 31 Click this link.
- 32 Click **New** and create new variables with the following values:

Variable	Value
FunctionalRights	7/WebService/WSDeveloper
ServiceRights	Head
AuthenticationService	ACWSRoot

- 33 Display the **JAAS login modules** page again.
- 34 Create a new module named *com.hp.ov.cwc.security.jaas.PkiLoginModule*.  
Make sure the *Authentication strategy* is **OPTIONAL**.
- 35 Select the **Use connection module proxy** option.
- 36 Click *Apply*.
- 37 Return to the **JAAS login modules** page, you should see tables similar to the following:  
Module Classname: *com.hp.ov.cwc.security.jaas.PkiLoginModule*

Authenticati- on strategy	Module order	Property	Value
OPTIONAL	1	delegate	com.hp.ov.cwc.security.jaas.PkiLoginModule

Authenticati- on strategy	Module or- der	Property	Value
RE- QUIRED	2	Functional- Rights	7/WebService/WSDeveloper
		Service- Rights	Head
		Authentica- tionService	ACWSRoot
		delegate	com.peregrine.ac.auth.ACAPILoginModule

Module Classname: *com.peregrine.ac.auth.ACAPILoginModule*

 **Warning:**

Make sure the modules are in the correct order.  
If this is not the case, correct it.

 **Note:**

Connection alias: *ACWebServiceLoginContext*.

- 38 These configuration steps specific to WebSphere Application Server are required before preparing the import of the `AssetCenter-webservice.ear` file.
- 39 In the menu on the left, click *Applications / Install New Application*.
- 40 Populate the following fields:

Parameter	Value
Local path	Path to the <code>AssetCenter-webservice.ear</code> file.

- 41 Start the installation.
- 42 If everything functions properly, you should see a page with a table containing the following lines in this order:
  - Replace
  - Virtual Host
  - Specific bindings file
- 43 Click **Next**.

- 44 WebSphere Application Server displays the WebSphere Application Server.policy file.
- 45 Click **Next**.
- 46 Click **Next** for the next four **Install New Application** screens.
- 47 Click the appropriate link to save your changes.
- 48 In the navigation bar, select **Enterprise Application**.
- 49 Select **AssetCenterWebService** from the list of applications.
- 50 Note the value of the **Application binaries** field.  
This value has the following format:  $\$(APP\_INSTALL\_ROOT)/\langle Name\ of\ the\ cell\rangle/AssetCenterWebService.ear$ .  
You will need this value to populate the **Generic JVM arguments** field in a later step.
- 51 In the navigation bar, select **Servers/ Application Servers**.
- 52 Select your server in the right pane.
- 53 In the center page, select the **Process Definition** option at the bottom of the table.
- 54 On the next page, click **Java Virtual Machine** (first line of the table).
- 55 On the new page, populate the **Generic JVM arguments** field as follows:

*Value* `-Djava.library.path=\$(APP_INSTALL_ROOT)/<Name of the cell>/AssetCenterWebService.ear`

**Note:**

$\$(APP\_INSTALL\_ROOT)/\langle Name\ of\ the\ cell\rangle/AssetCenterWebService.ear$  is the value of the **Application binaries** field that you noted in a previous step.

---

*Example* `-Djava.library.path=\$(APP_INSTALL_ROOT)/PC1Node01/AssetCenterWebService.ear`

- 
- Saving changes*
- 1 Click **Apply**.  
This reloads the page.
  - 2 Click **Save** in the **Message** box that appears at the top of the page.
  - 3 On the next page, click **Save**.
- 

- 56 Stop the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Stop the server** menu).
- 57 Start the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Start the server** menu).
- 58 Test to see if deployment has been successful.  
For example, you can do the following:

- 1 Start Internet Explorer.
- 2 Go to the following URL:

```
http://<Name or IP address of the AssetCenter Web Service server>:<AssetCenter Web Service port>/AssetCenterWebService
```

For example: `http://localhost:9060/AssetCenterWebService`

 **Warning:**

Text is case sensitive.

- 3 If deployment has been successful, the page located at the URL will display a header similar to the following:

```
Database Base: Name ACDemo50en
Engine MSSQL
User itam
AmApiDll 'C:/Program Files/HP Software/AssetCenter 5.02 en/bin/aama
pi50.dll'
User: Admin
Version: 5.02 - build <AssetCenter build number>
```

 **Tip:**

If this header is displayed but is followed by an error, try redefining the application server's memory settings.

Example for Tomcat 5.0: *Initial memory pool* and *Maximum memory pool* settings.

### If WebLogic is your application server

- 1 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc folder.
- 2 Decompress the AssetCenterWebService.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build folder.
- 3 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build\WEB-INF\web.xml file.
- 4 Enter the following parameters:
  - *AssetCenter.DB.Name*

*Value* [`<Engine>;<Data source or Server>;<User or Account>;<Encrypted password associated with the User or Account>;<Enable cache>;<Local cache directory>;<Cache size (in KB)>;Owner=<Owner>;AmApiDll='<Complete path of aamapi50.dll>'`]

With:

- Engine:
  - MSSQL
  - Oracle
  - Sybase
  - DB2
- Encrypted password: ► [Obtain required encrypted passwords \[page 56\]](#)
- Enable cache:
  - 0 : Cache disabled
  - 1 : Cache enabled
- Cache size (in KB): Do not specify unit
- Owner: If there is not one, do not use this parameter (do not leave this parameter with an empty value)
- AmApiDll: The `aamapi50.dll` file is located by default in the `Program Files\HP OpenView\AssetCenter 5.02 xx\bin` folder where `xx` is replaced by the two letter language code of your AssetCenter installation. Use the `/` character and not the `\` character in the path.

The other parameters correspond exactly to the parameters that appear in the connection details (**File/ Manage connections** menu of the Windows client).

► *User interface guide, chapter Reference information, section Connections/ To create a connection to a database.*

---

*Example*

```
<env-entry>
<description>AssetCenter Database name</description>
<env-entry-name>AssetCenter.DB.Name</env-entry-name>
<env-entry-value>[MSSQL;ACDemo50en;itam;Hk9pv/o71A3m1V1/7cz3Aw==;0;c:/tmp;0;AmApiDll='C:/Program Files/HP Software/AssetCenter 5.02 en/bin/aamapi50.dll']</env-entry-value>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

---

- *AssetCenter.DB.UserLogin*

---

*Value* Login name to use to connect to the AssetCenter database

---

*Example*                   <env-entry>  
                          <description>AssetCenter UserLogin for WebService impersonati  
                          on</description>  
                          <env-entry-name>AssetCenter.DB.UserLogin</env-entry-name>  
                          <env-entry-value>Admin</env-entry-value>  
                          <env-entry-type>java.lang.String</env-entry-type>  
                          </env-entry>

---

■ *AssetCenter.DB.UserPwd*

*Value*                    Encrypted password for the Login used to connect to the AssetCenter  
                          database.

► [Obtain required encrypted passwords \[page 56\]](#)

*Example*                   If the password is empty:

```
<env-entry>
<description>AssetCenter password for WebService impersonatio
n</description>
<env-entry-name>AssetCenter.DB.UserPwd</env-entry-name>
<env-entry-value>bmkBcCAZLK4=</env-entry-value>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

---

- 5 Save the changes made to the web.xml file.
- 6 Browse to the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterwebservice.war\_build folder.
- 7 Select all files and folders.
- 8 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterWebService.war\_build\AssetCenterWebService.war file.
- 9 Copy the file.
- 10 Paste it in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc folder (overwrite the previous file).
- 11 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\AssetCenterwebservice.war\_build folder.
- 12 Copy the aamapi50.dll and acjni50.dll files located in the Program Files\HP OpenView\AssetCenter 5.02 xx\bin folder.
- 13 Paste them in the <jdk\_weblogic>\jre\bin folder where <jdk\_weblogic> corresponds to the path to the JDK folder associated with the WebLogic domain in which you want to install AssetCenter Web Service.  
For example: C:\bea\jrockit90\_150\_06\jre\bin.
- 14 Copy the ac-constants-50.jar and ac-jni-50.jar files (located in the Program Files\HP OpenView\AssetCenter 5.02 xx\websvc\lib folder).

15 Paste them in:

- The `<jdk_weblogic>\jre\lib\ext` folder where `<jdk_weblogic>` corresponds to the path to the JDK folder associated with the WebLogic domain in which you want to install AssetCenter Web Service.

For example: `C:\bea\jrockit90_150_06\jre\lib\ext`.

- The `lib` folder of the WebLogic domain in which you want to install AssetCenter Web Service.

For example: `C:\bea\user_projects\domains\<domain_name>\lib`.

16 Go to the `config` folder of the WebLogic domain in which you want to install AssetCenter Web Service (For example:

`C:\bea\user_projects\domains\<domain_name>\config`).

17 Edit the `config.xml` file.

18 Add the following sub-entry:

```
<enforce-valid-basic-auth-credentials>false</enforce-valid-basic-auth-credentials>
```

At the end of the `<security-configuration>` entry.

19 Save the changes made to the `config.xml` file.

20 Start Admin Server for WebLogic Server Domain for the WebLogic domain in which you want to install AssetCenter Web Service.

21 Start Internet Explorer.

22 Open the following URL:

```
http://<Name or IP address of the AssetCenter Web Service server>:<WebLogic domain port>/console
```

For example: `http://localhost:7001/console`

The WebLogic administration console will be displayed.

23 Identify yourself.

24 In the menu on the left:

- 1 Click **Lock & Edit** (**Change Center** frame).
- 2 Click the **Deployments** link (**Domain Structure** frame).

25 In the main window, **Control** tab, click the **Install** button.

The application installation wizard will start.

26 Select the `AssetCenterWebService.war` file in the `Program Files\HP OpenView\AssetCenter 5.02 xx\websvc` folder, then click **Next**.

27 Select the *Install this deployment as an application* option, then click **Next**.

28 Populate the other pages of the wizard then validate by clicking **Finish**.

29 In the menu on the left:

- 1 Click **Activate changes** (**Change Center** frame).
- 2 Click the **Deployments** link (**Domain Structure** frame).

- 30 In the main window, **Control** tab, select the checkbox corresponding to the AssetCenter Web Service deployment. If the installation has completed correctly, the status of the application will be *Prepared*.
- 31 Select the **Start/ Servicing all requests** menu item.  
The application activation wizard will start.
- 32 Click **Yes** to confirm activation. The status of the application changes to *Active*.
- 33 Test to see if deployment has been successful.  
For example, you can do the following:
  - 1 Start Internet Explorer.
  - 2 Go to the following URL:

```
http://<Name or IP address of the AssetCenter Web Service server>:<AssetCenter Web Service port>/AssetCenterWebService
```

For example: `http://localhost:7001/AssetCenterWebService`



**Warning:**  
Text is case sensitive.

- 3 If deployment has been successful, the page located at the URL will display a header similar to the following:

```
Database Base: Name ACDemo50en
Engine MSSQL
User itam
AmApiDll 'C:/Program Files/HP Software/AssetCenter 5.02 en/bin/aama
pi50.dll'
User: Admin
Version: 5.02 - build <AssetCenter build number>
```

## Installing AssetCenter Web Tier

If Tomcat is your application server

- 1 Stop Tomcat if it is started.
- 2 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder.
- 3 Decompress the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 4 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\WEB-INF\web.xml file.
- 5 Enter the following parameters:
  - *AssetCenter.WS.EndPoint*

<i>Entry value</i>	<AssetCenter Web Service URL>/services/
<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;Web service url&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.WS.EndPoint&lt;/env-entry-name&gt; &lt;env-entry-value&gt;http://localhost:8080/AssetCenterWebService/ services/&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>

- *AssetCenter.WS.Version*

This entry is used to force AssetCenter Web Service to use a given version of the Web services instead of the current version.

<i>Entry value</i>	Identifier of the AssetCenter database (structure and contents) that AssetCenter Web Tier must use. The <i>HEAD</i> value represents the current status of the database when the query was sent by AssetCenter Web Tier.
--------------------	---

<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;Web service version name&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.WS.Version&lt;/env-entry-name&gt; &lt;env-entry-value&gt;Head&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>
----------------	---

- 6 Save the web.xml file.
- 7 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 8 Select all files and folders.
- 9 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\AssetCenter.war file.
- 10 Copy the file.
- 11 Paste it in Tomcat's webapps folder.
- 12 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 13 Start Tomcat.
- 14 Test to see if deployment has been successful.

For example, you can do the following:

- 1 Start Internet Explorer.
- 2 Go to the following URL:

```
http://<AssetCenter Web Service server name>:<AssetCenter Web Service port>/AssetCenter
```

For example: http://localhost:8080/AssetCenter



**Warning:**

Text is case sensitive.

- 3 If deployment has been successful, the URL above will display the connection page.

If WebSphere Application Server is your application server

This section explains how to install AssetCenter Web Tier separately from AssetCenter Web Service.

To install AssetCenter Web Service and AssetCenter Web Tier at the same time: ▶ To install AssetCenter Web Tier and AssetCenter Web Service at the same time [page 79].

- 1 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere folder.
- 2 Decompress the AssetCenter-webtier.ear file in the folder named Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build.
- 3 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder.
- 4 Decompress the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 5 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build\WEB-INF\web.xml file.
- 6 Enter the following parameters:
  - *AssetCenter.WS.EndPoint*

<i>Entry value</i>	<code>&lt;AssetCenter Web Service URL&gt;/services/</code>
<i>Example</i>	<pre> &lt;env-entry&gt; &lt;description&gt;Web service url&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.WS.EndPoint&lt;/env-entry-name&gt; &lt;env-entry-value&gt;http://localhost:9080/AssetCenterWebService/ services/&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt; </pre>

- *AssetCenter.WS.Version*

This entry is used to force AssetCenter Web Service to use a given version of the Web services instead of the current version.

*Entry value* Identifier of the AssetCenter database (structure and contents) that AssetCenter Web Tier must use.  
 The *HEAD* value represents the current status of the database when the query was sent by AssetCenter Web Tier.

---

*Example*

```
<env-entry>
<description>Web service version name</description>
<env-entry-name>AssetCenter.WS.Version</env-entry-name>
<env-entry-value>Head</env-entry-value>
<env-entry-type>java.lang.String</env-entry-type>
</env-entry>
```

---

- 7 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 8 Select all files and folders.
- 9 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build\AssetCenter.war file.
- 10 Copy the file.
- 11 Paste it in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder (overwrite the previous file).
- 12 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 13 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder.
- 14 Select all files and folders.
- 15 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build\AssetCenter-webtier.ear file.
- 16 Open an administration console.
- 17 Click **Applications/ Install New Application**.  
 Enter the following data:

Parameter	Value
Local path	Specify the path to the AssetCenter-webtier.ear file.
Example	Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear_build

- 18 If everything functions properly, you should see a page with a table containing the following lines in this order:
  - Replace

- Virtual Host
- Specific bindings file

Click **Next**.

- 19 WebSphere Application Server displays the WebSphere Application Server.policy file.
- 20 Click **Next**.
- 21 Click **Next** for the next four **Install New Application** screens.
- 22 Click **Applications /Enterprise Applications** in the navigation bar on the left.
- 23 Click *AssetCenter*.
- 24 In the last table named *Related Items*, select *Web Modules*.
- 25 Select *AssetCenter.war*.
- 26 In the *General Properties* table, select *PARENT\_LAST* for the *Classloader mode* parameter.
- 27 In the menu on the left, click **Security/ JAAS Configuration/ Application Logins**.
- 28 Click **New** and create a new alias named *AssetCenterWeb*. Click **Apply**.
- 29 Click *JAAS login modules*, then **New**.
- 30 Create *com.peregrine.ac.auth.ACWSLoginModule*.  
Make sure the *Authentication strategy* is *REQUIRED*. Click *Apply*.
- 31 Select the **Use connection module proxy** option.
- 32 Click *Custom properties*.
- 33 On the new screen called *Application login configuration*>  
*AssetCenterWeb* > *JAAS login modules* >  
*com.peregrine.ac.auth.ACWSLoginModule* >, create the following Custom properties:

Name	Value
AssetCenter.WS.AuthService	ACWSRoot
FunctionalRights	True
ProfileRight	True
AssetCenter.WS.Version	R50

- 34 Return to the *JAAS login modules* page.
- 35 Click **New** and create a second module named *com.hp.ov.cwc.security.jaas.PkiLoginModule*.  
Make sure the *Authentication strategy* is *OPTIONAL*. Click *Apply*.
- 36 Select the **Use connection module proxy** option.
- 37 Click *Apply*.

- 38 Return to the *JAAS login modules* screen and check that the tables contain the following information:

Module Classname: *com.hp.ov.cwc.security.jaas.PkiLoginModule*

Authentication strategy	Module order	Property	Value
FACULTATIVE	1		
		delegate	com.hp.ov.cwc.security.jaas.PkiLoginModule

Module Classname: *com.peregrine.ac.auth.ACWSLoginModule*

Authentication strategy	Module order	Property	Value
REQUIRED	2		
		Functional-Rights	True
		ProfileRight	True
		delegate	com.peregrine.ac.auth.ACWSLoginModule
		AssetCenter.WS.Version	R50
		AssetCenter.WS.Auth-Service	ACWSRoot

- 39 Click the appropriate link to save your changes.
- 40 Stop the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Stop the server** menu).
- 41 Start the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Start the server** menu).
- 42 Test to see if deployment has been successful.

For example, you can do the following:

- 1 Start Internet Explorer.
- 2 Go to the following URL:

```
http://<AssetCenter Web Service server name>:<AssetCenter Web Service port>/AssetCenter
```

For example: `http://localhost:9060/AssetCenter`



**Warning:**

Text is case sensitive.

- 3 If deployment has been successful, the URL above will display the connection page.

#### If WebLogic is your application server

- 1 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder.
- 2 Decompress the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 3 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\WEB-INF\web.xml file.
- 4 Enter the following parameters:
  - *AssetCenter.WS.EndPoint*

<i>Entry value</i>	<AssetCenter Web Service URL>/services/
<i>Example</i>	<pre>&lt;env-entry&gt; &lt;description&gt;Web service url&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.WS.EndPoint&lt;/env-entry-name&gt; &lt;env-entry-value&gt;http://localhost:7001/AssetCenterWebService/ services/&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt;</pre>

- *AssetCenter.WS.Version*

This entry is used to force AssetCenter Web Service to use a given version of the Web services instead of the current version.

<i>Entry value</i>	<p>Identifier of the AssetCenter database (structure and contents) that AssetCenter Web Tier must use.</p> <p>The <i>HEAD</i> value represents the current status of the database when the query was sent by AssetCenter Web Tier.</p>
<i>Example</i>	<pre>&lt;env-entry&gt; &lt;description&gt;Web service version name&lt;/description&gt; &lt;env-entry-name&gt;AssetCenter.WS.Version&lt;/env-entry-name&gt; &lt;env-entry-value&gt;Head&lt;/env-entry-value&gt; &lt;env-entry-type&gt;java.lang.String&lt;/env-entry-type&gt; &lt;/env-entry&gt;</pre>

- 5 Save the changes made to the web.xml file.
- 6 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 7 Select all files and folders.
- 8 Compress them in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\AssetCenter.war file.

- 9 Copy the file.
- 10 Paste it in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder (overwrite the previous file).
- 11 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 12 Start Admin Server for WebLogic Server Domain for the WebLogic domain in which you want to install AssetCenter Web Tier.
- 13 Start Internet Explorer.
- 14 Open the following URL:

```
http://<Name or IP address of the AssetCenter Web Tier server>:<WebLogic domain port>/console
```

For example: `http://localhost:7001/console`

The WebLogic administration console will be displayed.

- 15 Identify yourself.
- 16 In the menu on the left:
  - 1 Click **Lock & Edit** (**Change Center** frame).
  - 2 Click the **Deployments** link (**Domain Structure** frame).
- 17 In the main window, **Control** tab, click the **Install** button.
- 18 The application installation wizard will start.
- 19 Select the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder, then click **Next**.
- 20 Select the *Install this deployment as an application* option, then click **Next**.
- 21 Populate the other pages of the wizard then validate by clicking **Finish**.
- 22 In the menu on the left:
  - 1 Click **Activate changes** (**Change Center** frame).
  - 2 Click the **Deployments** link (**Domain Structure** frame).
- 23 In the main window, **Control** tab, select the checkbox corresponding to the AssetCenter Web Tier deployment. If the installation has completed correctly, the status of the application will be *Prepared*.
- 24 Select the **Start/ Servicing all requests** menu item.

The application activation wizard will start.
- 25 Click **Yes** to confirm activation.

The status of the application changes to *Active*.
- 26 Test to see if deployment has been successful.

For example, you can do the following:

  - 1 Start Internet Explorer.
  - 2 Go to the following URL:

```
http://<AssetCenter Web Service server name>:<AssetCenter Web Service port>/AssetCenter
```

For example: `http://localhost:7001/AssetCenter`



#### Warning:

Text is case sensitive.

- 3 If deployment has been successful, the URL above will display the connection page.

To install AssetCenter Web Tier and AssetCenter Web Service at the same time

If WebSphere Application Server is your application server

The following sections explain how to install AssetCenter Web Tier and AssetCenter Web Service separately.

- [If WebSphere Application Server is your application server \[page 61\]](#)
- [If WebSphere Application Server is your application server \[page 73\]](#)

You can also install AssetCenter Web Tier and AssetCenter Web Service at the same time.

To do this, use the `Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.ear` file and complete the tasks as for separate installations.

## Configuring AssetCenter Web

- ▶ [Managing user authentication for the AssetCenter database \[page 83\]](#).

## Accessing AssetCenter using Internet Explorer

- ▶ *User Interface* guide, chapter *First steps with AssetCenter*, section *Start AssetCenter/ Web client*.

## Optimizing AssetCenter Web

### Warning:

This section cannot replace the guides for the application and Web servers that you will be using.

Only those guides, combined with your knowledge and experience will enable you to optimally install and configure the application and Web servers.

This section provides you with some tips and should not be considered an exhaustive list.

### Important:

We recommend that you read the *AssetCenter Web Client: Performance Hints and Problems Diagnosis* white paper.

This white paper is supplied as an Acrobat file (ACWPerformancesHintsAndProblemDiagnosis.pdf).

For more information about the white papers and where to find them: ► [White papers](#) [page 33].

### Tomcat log files

If you configure Tomcat to produce very verbose log files, thousands of useless lines may be logged.

This can only decrease the performance of AssetCenter Web.

Example showing how to configure Tomcat to avoid this inconvenience:

- 1 Go to Tomcat's webapps folder.
- 2 Delete the AssetCenter folder if it exists.
- 3 Decompress the AssetCenter.war file in the webapps\AssetCenter.war\_build folder.
- 4 Create a new configuration file to replace log4j.properties (located in the AssetCenter.war\_build\WEB\_INF\classes folder).  
For example: log4jnew.properties.
- 5 Modify the *log.properties* entry of web.xml (located in AssetCenter.war\_build\WEB\_INF) to reference the new log4jnew.properties file.
- 6 Open the new file, log4jnew.properties.
- 7 Enter the setting to have only fatal errors logged.

For example:

```
log4j.rootLogger=FATAL, A1
log4j.appender.A1=org.apache.log4j.ConsoleAppender
```

```
log4j.appender.A1.layout=org.apache.log4j.PatternLayout
log4j.appender.A1.layout.ConversionPattern=%d{ABSOLUTE} %-5p %c{1} : %m
%n
log4j.logger.org.apache=FATAL
```

- ▶ [Apache log4j documentation.](#)
- 8 Open the webapps\AssetCenter.war\_build folder.
- 9 Select all files and folders.
- 10 Compress these files and folders in the webapps\AssetCenter.war\_build\AssetCenter.war file.
- 11 Copy the file.
- 12 Paste it in the webapps folder (overwrite the previous file).
- 13 Delete the webapps\AssetCenter.war\_build folder.

### Time required to display pages generated by Tomcat

You may notice that some time is required to display Web client pages in Internet explorer the first time the pages are accessed.

This is due to the following:

When a user requests a page that has not yet been described in Tomcat's work folder (for example, the list of locations), AssetCenter Web Tier creates a .jsp file and a .class file which is compiled from the .jsp file. These files describe the page to display.

This operation takes some time.

When a user requests a page that has already been described in Tomcat's work folder, AssetCenter Web Tier recreates the corresponding .jsp and .class files only if the description of the page has changed in the structure of the AssetCenter database.

If the page has not changed, it is displayed more rapidly in Internet explorer.

#### Important:

In order to speed the display of pages, it is recommended to configure Tomcat to maintain the .jsp and .class files in its work folder when it is shut down.

Please read the Tomcat documentation to learn how to do this.

### Network performance

The Web client was tested successfully on 256 kbit/s networks with a ping of 400 ms (200 ms of network latency).

Below is a list of various load times:

Action	Load
Display a list	40 KB

Action	Load
Display a detail	Between 50 and 100 KB depending on the complexity (Examples: employee or department = 50 KB, portfolio item = 90 KB)
Selection in lists	1.2 MB
For example: Modifying the following fields and links of a portfolio item's detail:	
<ul style="list-style-type: none"> <li>■ <b>Assignment</b> (seAssignment)</li> <li>■ <b>User</b> (User)</li> <li>■ <b>Location</b> (Location)</li> <li>■ <b>Supervisor</b> (Supervisor)</li> </ul>	
Creating a purchase request	530 KB (6 KB from the client to the server, the remainder from the server to the client)
Duplicating a portfolio item, then selecting a location, user and supervisor by browsing lists	1.8 MB (10 KB from the client to the server, and 23 round-trips)

## Uninstalling AssetCenter Web

If Tomcat is your application server

For each Tomcat instance on which AssetCenter Web Service or AssetCenter Web Tier has been deployed:

- 1 Remove the AssetCenter Web Service or AssetCenter Web Tier deployment.
- 2 Stop Tomcat.



### Warning:

If you do not stop Tomcat, you will not be able to delete certain AssetCenter Web Service and AssetCenter Web Tier files.

This is a known error in Tomcat.

► <http://tomcat.apache.org/faq/windows.html#lock>

- 3 In Tomcat's work and webapps folders, manually delete the AssetCenter and AssetCenterWebService folders.

## Problems

AssetCenter Web Tier running on Tomcat

### Problem

Tomcat was not stopped properly.

Tomcat is unable to start the Web client.

## Solution

- 1 Stop Tomcat
- 2 Delete the subfolder `work\Catalina\localhost\AssetCenter` located in Tomcat's installation folder
- 3 Start Tomcat

If this does not work, redeploy AssetCenter Web Tier.

## Updating AssetCenter Web

To update AssetCenter Web:

- 1 Remove AssetCenter Web.
  - ▶ [Uninstalling AssetCenter Web](#) [page 82].
- 2 Install AssetCenter Web 5.02.
  - ▶ [Installing AssetCenter Web](#) [page 53].

---

## Managing user authentication for the AssetCenter database

### Important:

This section replaces the *Administration* guide, chapter *Controlling access to the database*, section *Managing passwords*.

This section explains how to manage user access to the AssetCenter database via different authentication systems.

Some of these systems enable AssetCenter Windows and Web clients to access the AssetCenter database using authentication information that they have already provided when accessing another system, and do not require users to re-authenticate.

### Note:

*Single Sign-On (SSO) definition* A directory-based software solution that provides an organization's network users seamless access to all authorized resources after users have completed a single network authentication procedure.

A single password lets a user access all multi-platform applications and systems in the organization. Once the user has entered his or her password during initial authentication, the directory (for example, Active Directory under Windows) sends the password automatically to all other applications that require it without requesting the password information from the user again.

---

 **Warning:**

To implement Single Sign-On, the Windows and Web clients must be specially configured for use with Single Sign-On.

If single sign-on is not used, users must enter their *login* and *password* when AssetCenter starts.

In this case, the password that controls user access to the AssetCenter database can be stored in several ways:

## Particular case of the *Admin* login

The *Admin* login is always stored in the AssetCenter database, whether the other passwords are stored in the AssetCenter database or in the LDAP directory.

---

 **Warning:**

Do not confuse the *Admin* login with a user with *Administration rights*.

---

### How the *Admin* login works

The record of the *Admin* login is very important:

- 1 For the first installation of AssetCenter, this is the only login name available for accessing the AssetCenter database for all administrative operations.
- 2 You can subsequently assign administrative rights to other records in the table of departments and employees. However, the *Admin* login record cannot be deleted.

It is your only solution if you cannot connect using another *Login* name that also has administrative rights.

The password associated with the *Admin* login is therefore critical, because it gives all rights to the AssetCenter database.

---

 **Warning:**

Warning: Do not forget the password for the *Admin* login. Should this happen, you will have no other means of administering the database if the other administrative-rights records in the table of departments and employees are damaged.

---

---

 **Warning:**

Warning: Anyone who knows the *Admin* password can perform any operation on the AssetCenter database and can access all the database information with no restrictions. Make sure you do not tell this password to any unauthorized employees.

---

## Modifying the password for the Admin login

You can modify the password for the *Admin* login record by opening the database with this login name and using the *Tools/ Change password* menu.

## Admin login password

If despite the precautions specified above you forget this password, there is no way of recovering it using AssetCenter. Call HP support.

## AssetCenter Windows and Web clients: Authentication is handled entirely by AssetCenter

This section explains how to set up AssetCenter to manage all aspects of user authentication.

In this mode, user information is only stored in the AssetCenter database.

Users must enter their *login* and *password* each time they connect to the AssetCenter database.

## Configure password management

### Enter database options related to passwords

- 1 Start the AssetCenter Windows or Web client.
- 2 Connect to the AssetCenter database using a user login that has administration rights.
- 3 Select the **Administration/ Password management...** link.
- 4 Populate the *Password management...* (sysCorePassMgt) wizard.

This wizard enables you to define basic options concerning a password (validity, notification before expiration) as well as the options called by the script library (minimum password length, minimum number of different characters).

The wizard has a set of default values. These values are saved in the Options table and may be modified.

The wizard automatically loads the script library defined in the database options and saves the values populated in the Options table.

### Define password format constraints

Password format constraints are defined in a script library. The default library is called **PasswordLib**. This library can be modified via the **Administration/ Script libraries** link on the navigation bar.

 **Important:**

The Basic function used in the script in the library must have the same name as the library itself.

The default script imposes the following rules on users registering passwords:

- The password must contain a minimum number of characters
- The password may not contain several times the same letter
- The password may not contain the user name

### Create a user who can connect to the AssetCenter database

- 1 Start the AssetCenter Windows or Web client.
- 2 Connect to the AssetCenter database using a user login that has administration rights.

 **Note:**

Enable the **Administration rights** (bAdminRight) option on the profile tab of an employee detail page to enable these rights.

- 3 Display the employees (**Organization/ Employees** link on the navigation bar).
- 4 Create the employee if she/he does not already exist.
- 5 Populate the information on the **Profile** tab.
- 6 Populate the **User name** (UserLogin) and **Password** (LoginPassword) fields.

The values used for these fields are required when connecting to the database.

### Modify a password

#### Modifications performed by the user

- 1 Start the AssetCenter Windows or Web client.
- 2 Connect to the AssetCenter database with your current user name and password.
- 3 Select the **Administration/ Change password...** link.
- 4 Populate the wizard.

#### Modifications performed by the administrator

User passwords can be modified by users whose administrative rights option is enabled on the *Profile* tab of their employee detail page. This erases the old password.

### Locking out a user

- 1 Start the AssetCenter Windows or Web client.
- 2 Connect to the AssetCenter database using a user login that has administration rights.
- 3 Display the employees (**Organization/ Employees** link on the navigation bar).
- 4 Select the employee.
- 5 Display the **Profile** tab.
- 6 Set the **Status of the user account** field (seLoginStatus) to *Locked*.

### Defining an access validity period for a user

- 1 Start the AssetCenter Windows or Web client.
- 2 Connect to the AssetCenter database using a user login that has administration rights.
- 3 Display the employees (**Organization/ Employees** link on the navigation bar).
- 4 Select the employee.
- 5 Display the **Profile** tab.
- 6 Populate the information in the **Time-based access control** frame.

### Lost passwords

AssetCenter does not display passwords in a readable format. If an AssetCenter user loses or forgets their password, an administrator must create a new one in the employee's **Profile** tab. This erases the old password.

## AssetCenter Windows and Web clients: Authentication is handled entirely by LDAP

### Reminders about LDAP

LDAP (Lightweight Directory Access Protocol) is a directory-interrogation protocol.

Certain messaging servers, such as Microsoft Exchange, use this protocol to expose their directory.

### General rules about stocking passwords in an LDAP directory

If your company manages its employees' passwords centrally in an LDAP directory, you might find it useful to use the directory to control access to the AssetCenter database.

You will also be able to take advantage of other password management features offered by the LDAP directory, such as:

- Mandatory periodical modification.
- Verification of format and number of characters.
- Etc.

### Implementing an LDAP directory

- 1 Make sure that all AssetCenter users can access the LDAP directory.
- 2 Create the AssetCenter users in the LDAP directory and assign them a login and password.
- 3 Deactivate the *Anonymous* access to the LDAP directory.
- 4 Launch AssetCenter.
- 5 Start the AssetCenter Windows client.
- 6 Connect to the working database via the **File/Connect to database** menu.
- 7 Display the database options via the **Administration/Database options** menu.
- 8 Populate the options having the section name *LDAP authentication*.
- 9 Create or modify the users of the **Employees** table (amEmplDept) by populating the fields in the **Profile** tab.

In particular, populate the following fields:

- **User Name** (UserLogin): Login to use to connect to the AssetCenter database.
- Possibly the field that stores the corresponding LDAP login, if it's different from the **UserLogin** field.

Examples of LDAP logins:

- Microsoft Exchange: *CN=<identifier>, CN=<DOMAIN NAME> or DC=<DOMAIN NAME>, CN=<identifier>*
- Lotus Domino: *<FirstName> <Name>/<DOMAIN NAME>*



#### Tip:

You can import the LDAP directory using Connect-It.

- 10 Make sure that the LDAP DLLs are installed on the AssetCenter user computers.  
This is the case if you selected the *Full installation* option when you installed the AssetCenter client.  
This is also the case if you selected the *Customized installation* option, and chose *LDAP authentication*.  
This is not the case, however, if you selected the *Standard installation* option.

- 11 Have the users reconnect to the database in order for the new options to be taken into account at the level of their AssetCenter client.

### LDAP connection to the AssetCenter database

After you implement the LDAP authentication in the AssetCenter database, the users will connect by:

- 1 They start an AssetCenter Windows or Web client.
- 2 They connect to the production database:
  - User name: User name that is stored in the **Employees** table (amEmplDept) in the **User name** (UserLogin) field of the user's detail. AssetCenter finds the login in the LDAP directory. It can do this because of its settings, configured via the **Administration/Database options** menu.
  - Password:
    - Microsoft Exchange: Windows password.
    - Lotus Domino: Internet password defined in Domino.The validity of this password is verified through the LDAP server.

### Secure connection (SSL) to the LDAP server

To secure access to the LDAP server, two options are available in AssetCenter.

- 1 LDAPCertFile: This option requires a single OpenLDAP server and uses a single authentication certificate.

To enable this option, the LDAPCertFile file must point to a text file containing a certificate in the *PEM* with the following syntax:

```
-----BEGIN CERTIFICATE-----  
... (CA certificate in base64 encoding) ...  
-----END CERTIFICATE-----
```

- 2 LDAPCertDir: This option, which is more complex, requires multiple OpenLDAP servers and uses multiple authentication certificates.

#### Note:

This option is used more often for Connect-It.

To enable this option, the LDAPCertDir file must point to a directory containing certificates whose names are based on the hash code. Each file in the folder must be in the *PEM* format and contain the subject of each certificate:

Use the `c_rehash` command to enable the hash function in the current directory and create links in Unix.

 **Warning:**

Enabling a secure connection to the LDAP server requires all computers to be configured before connection.

## AssetCenter Windows clients: Implementing Single Sign-On using Active Directory

This section explains how to use Active Directory to define AssetCenter Windows client users.

Thanks to Windows integrated authentication, a user that authenticated when Windows started does not need to authenticate when the AssetCenter Windows client is started.

Rights that users have in AssetCenter are defined in the AssetCenter database (user roles).

You must synchronize authentication information between AssetCenter and Active Directory to ensure that Single Sign-On works properly.

With this synchronization:

- You automatically import the list of Active Directory users into the AssetCenter database.
- Users who connect to an AssetCenter database don't have to populate the **Login** and **Password** fields when connecting to the database.

### General overview

Synchronization between AssetCenter and Active Directory is performed in one of the following ways:

#### Synchronizing all Active Directory users

- Synchronization is performed via a Connect-It scenario.
- The Connect-It scenario that performs this task is programmed and launched by AssetCenter Server.
- Connect-It uses the following combination of fields to identify persons in the AssetCenter database:
  - **Name** (Name)
  - **First name** (FirstName)
  - **User Name** (UserLogin)
- A user is authorized to connect to the AssetCenter database using Windows integrated security with a given login if the following items have the same value:
  - **SID** (Identifier) field of the AssetCenter user.

- Active Directory **SID** field.

### Synchronizing a user in the AssetCenter database

On the users detail page, click the **NT user** button to start the wizard.

### Main steps to implement full synchronization

Here are the main steps you need to take to implement this system. We will elaborate on each one of these steps later on in the guide.

- [Step 1: Create users and groups in Active Directory \[page 91\]](#)  
Objective: Prepare the information to transfer to AssetCenter.
- [Step 2: Configure AssetCenter Server and Connect-It \[page 92\]](#)  
Objective: Define which *NT* domains should be retained and plan the transfers.
- [Step 3: Activate the updating process for the first time \[page 92\]](#)  
Objective: Transfer the information for the first time and test the login.
- [Step 4: Complete the description of the employees in the AssetCenter database \[page 92\]](#)
- [Step 5: Activate the automatic triggering of the AssetCenter Server modules \[page 92\]](#)

### Step 1: Create users and groups in Active Directory

The fields to populate are:

- For the users:
  - The **Full name** field:



Tip:

When you create users in the AssetCenter database, AssetCenter Server takes the value of the **Full name** field from Active Directory and searches for the first *space* character starting on the left. Everything it finds to the left of the first space is used to create the **First name** field; everything to the right of the first space creates the **Name** field. If there is no space, only the **Name** field will be populated.

You must not use a space for first names that are actually combined of two or more names. If you wish, you can use a hyphen instead.

- **Description** field:  
This field is used to populate the **Comment** field (Comment) in the AssetCenter database.
- For groups: The **Name** field.

This field is used to populate the **Name** field (Name) in the AssetCenter database.

#### Step 2: Configure AssetCenter Server and Connect-It

► *Administration Guide*, chapter *AssetCenter Server*, section *Configuring the modules monitored by AssetCenter Server*, sub-section *Add NT users to the database module (AddUser)*.

#### Step 3: Activate the updating process for the first time

- 1 Select the **Action/ Activate** menu.
- 2 Select the option corresponding to the **Add NT users to the database** task.
- 3 Click **OK**.  
AssetCenter begins the update.

---

 **Note:**

If the number of users concerned by this operation exceeds the number of *Named* logins authorized by your license, AssetCenter Server declares the users as having *Floating* type logins.

---

#### Step 4: Complete the description of the employees in the AssetCenter database

Your database now contains one employee per NT user detected on the chosen domain. Their login is in the form:

[domain]\[user]

The users created do not have a valid password.

---

 **Note:**

Following this operation, we advise you to verify that all the records created in the Departments and Employees table correspond to an AssetCenter user. You must notably re-enter the value of the **Password** field.

---

#### Step 5: Activate the automatic triggering of the AssetCenter Server modules

- 1 Select the **Tools/ Configure modules** menu item.
- 2 Select the **Add NT users to the database** module.
- 3 Populate the fields of the **Verification schedules** frame.
- 4 Check the **Enabled** box.
- 5 Click **Modify**.

## AssetCenter connection

Once the previous operation is completed, the NT users can directly access AssetCenter. During their first connection, all they need to do is select the **Use integrated NT security** option, then click **Open**.



No other authentication information will be asked for the next connections. If a user wants to connect using another login, however, they can always do so by activating the connection box via the **File/ Connect to database** menu.

## Rules applied by AssetCenter during the creation/modification of users

- The AssetCenter login is created by concatenating the Windows **Domain** name and **User name** in the form of: *<Domain name>\<User name>*
- The following set of fields are used as the reconciliation key for the users of the AssetCenter database:
  - **Name** (Name)
  - **First name** (FirstName)
  - **User Name** (UserLogin)
- When a user is imported, the user is only created if the reconciliation key does not yet exist in the database. All the fields corresponding to the Connect-It scenario are then populated.

If a record corresponding to the reconciliation key already exists, then all the fields in the Connect-It scenario will be updated except those constituting the reconciliation key.

### Note:

The **Password** field is populated with a special character that prohibits the user to access the AssetCenter database via any other means than the automatic login. You thus must populate this field manually if you want to authorize this user to access the database using a manual login (especially if the user wants to login on a different computer).

- Remember that there is an index in AssetCenter composed of the **Bar code** field. This index must be unique. You also need to verify that the **Bar code** field is populated with a different value for each user. This way, you can

create different users who might share the very same name. For this, you can use the default value calculation script installed by AssetCenter.

## AssetCenter Web clients: Implementing Single Sign-On using Active Directory

Using Single Sign-On to access AssetCenter Web can be handled in several ways depending on the environment you are using.

This document does not describe all possibilities and is limited to a description of Single Sign-On authentication using Active Directory.

### Note:

You can use a Single Sign-On system other than Active Directory.

You can adapt the example provided using Active Directory and tailor it to your needs.

IIS (Internet Information Services) is the only Web server that correctly supports Single Sign-On on Windows. However, you can use different application servers (Tomcat, WebSphere, etc), given that they are correctly configured to communicate with IIS.

The installation and configuration of Single Sign-On with Tomcat as the application server is described in this section.

The steps to perform on the machines where you have installed AssetCenter Web Service and AssetCenter Web Tier are listed below (if they have been installed on different machines, each of the steps needs to be performed on each machine).

### Prerequisites

Before starting, make sure that you have the following:

- An operational Active Directory implementation on your network.  
The steps in this section describe an implementation using the Active Directory version provided with Windows Server 2003 R2, but are also valid for previous versions of Active Directory.
- An operational DNS (Domain Name Service) server. To check this, at the command line (command prompt window) enter the following:

```
ipconfig
```

Then:

```
nslookup < IP address of the DNS server>
```

- AssetCenter Web using Tomcat as application server.
- IIS (Web server provided with Windows).

## Install the Jakarta ISAPI 1.2.15 redirector

You must first establish a connection between *IIS* (which, by default, listens on port 80) and *Tomcat* (which listens on port 8080). An *ISAPI connector* (Internet Server Application Programming Interface) needs to be implemented to enable the port transfer.

Download and execute the Jakarta ISAPI 1.2.15 redirector

`isapi_redirect.msi` that can be found at the following address:

[archive.apache.org/dist/tomcat/tomcat-connectors/jk/binaries/win32/jk-1.2.15/isapi\\_redirect.msi](http://archive.apache.org/dist/tomcat/tomcat-connectors/jk/binaries/win32/jk-1.2.15/isapi_redirect.msi)



### Note:

Versions more recent than 1.2.15 may be available, but may require manual changes in the Windows directory structure.

## Configure ISS

- 1 On the desktop, right click *My Computer*.
- 2 Click *Manage*.
- 3 Expand the *Services and Applications / Internet Information Services / Web Sites / Default Web Site* branch.
- 4 Right click *jakarta* then click *Properties*.
- 5 Click the *Virtual Directory* tab and check the parameters.

The following items must be enabled:

- When connecting to this resource, the content should come from: *A directory located on this computer*.
  - *Local Path* section:
    - Script source access
    - Read
    - Log visits
  - *Application Settings* section:
    - Execute Permissions: *Scripts and Executables*
    - Application Protection: *Medium (Pooled)*
- 6 Next, check the *Default Web Site* properties.

On the *ISAPI Filters* tab, you should see the *jakarta* filter with a green arrow pointing up, which indicates that the filter is functioning correctly.

If this is not the case:

    - a Click *Add*.
    - b *Filter Name* field: Type *Jakarta*.
    - c *Executable* field: Browse to the `isapi_redirect.dll` file located in the *bin* subfolder of the folder where you installed the Jakarta ISAPI redirector.

For example: C:\Program Files\Apache Software Foundation\Jakarta Isapi Redirector\bin\isapi\_redirect.dll

If the installation folder of the Jakarta ISAPI redirector is different on your machine, replace C:\Program Files\Apache Software Foundation\Jakarta Isapi Redirector\ with the path to the correct installation folder.

This installation folder example will be used throughout this guide.

- d Click **OK**, then click **OK** again on the Default Web Site properties page.
- e Re-open the properties page.

You should see the green arrow pointing up in front of the Jakarta filter.

- 7 Still in the *Default Web Site Properties* window, click the *Directory Security* tab.
- 8 In the *Anonymous access and authentication control* section, click **Edit...**
- 9 Clear *Anonymous access* option.
- 10 Enable the *Digest authentication for Windows domain servers* and *Integrated Windows authentication* options.
- 11 Make sure your domain name appears in the **Domain** field.

### Configure the port transfer

- 1 The objective is to transfer the port between *IIS* (which, by default, listens on port 80) and *Tomcat* (which listens on port 8080) and to tell Tomcat not to display a login window requesting authentication.

To do this, open C:\Tomcat\conf\jk2.properties (the location of this file may be different depending on your Tomcat installation folder. This example will continue to use this path.) with a text editor and add the two following lines to the end of the file:

```
request.tomcatAuthentication=false  
request.registerRequests=false
```

- 2 To check that the port transfer works correctly, perform the following test: Open the default Tomcat application and enter the following URL:  
<http://localhost:8080/jsp-examples/>.



#### Note:

If it does not work, make sure that you have launched Tomcat.

Now, open the following URL in your browser:

<http://localhost/jsp-examples/>.

You should see the same page as before. This confirms that the port transfer has been correctly configured.

- 3 Next, you must instruct Jakarta to manage the Tomcat default application and AssetCenter.

To do this, open `C:\Program Files\Apache Software Foundation\Jakarta Isapi Redirector\conf\uriworkermap.properties` in a text editor and add the following lines to the appropriate section:

- On machines where AssetCenter Web Service has been installed, add the following line in the file:

```
/AssetCenterWebService/*=wlb
```

- On the machine where AssetCenter Web Tier has been installed, add the following line to the file:

```
/AssetCenter/*=wlb
```



If AssetCenter Web Service and AssetCenter Web Tier are installed on the same machine, add the lines given above to the appropriate section of the `C:\Program Files\Apache Software Foundation\Jakarta Isapi Redirector\conf\uriworkermap.properties` file.

Restart Tomcat.

- 4 If you are connected as a Windows user, you should be able to access the AssetCenter Web client without having to authenticate again.
- 5 However, if a login screen still appears, restart your system.

If the problem persists, open the `C:\Tomcat50\conf\server.xml` file in write mode and remove the comment characters (`<!--` and `-->`) for the following line:

```
<Valve className="org.apache.catalina.valves.RequestDumperValve"/>
```

This forces Tomcat to generate an additional log file named: `catalina_log.YYYY-MM-DD.txt`.

Open the log file and check the entries for the following parameters:

```
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: queryString=null
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: remoteAddr=192.178.0.
1 (type your IP address here)
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: remoteAddr=192.178.0.
1 (type your IP address here)
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: remoteUser=<Domain na
me>\<User name>
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: requestedSessionId=nu
ll
YYYY-MM-DD HH:MM:SS RequestDumperValve[Catalina]: scheme=http
```

This example indicates that Single Sign-On is operating correctly. IIS transmits all of the user's Windows authentication certificates. Tomcat then authenticates the user. If the *remoteUser* field is empty, make sure that all the previous steps have been correctly completed.

## AssetCenter Web clients: Implementing Single Sign-On using SiteMinder

▶ <AssetCenter installation folder>\doc\white\_papers\ImplementingSSOForAssetCenterWebSiteminder.pdf.

## AssetCenter Web clients: Implementing Single Sign-On using CAMS

▶ <AssetCenter installation folder>\doc\white\_papers\ImplementingSSOForAssetCenterWebCams.pdf.

---

## Guest access type - Accessible tables

### Important:

This section details errors that exist in the *Administration* guide, chapter *Controlling access to the database*, section *Managing user connections/ Database access types*.

The following database tables are not in the correct table. Below are the read/write rules that apply:

**Table 7.1. Guest access type - Tables may be accessed in read-write mode under certain conditions**

SQL name of the table	Read condition	Write condition
amPhone	Unconditional read access	CurrentUserId() IN (PortfolioItem.User,PortfolioItem.User.Supervisor)
amPort	Unconditional read access	CurrentUserId() IN (User,User.Supervisor)
amSoftInstall	Unconditional read access	CurrentUserId() IN (Portfolio.User,Portfolio.User.Supervisor)

SQL name of the table	Read condition	Write condition
amAsset	Unconditional read access	CurrentUserId() IN (PortfolioItem.User,PortfolioItem.User.Supervisor)
amComputer	Unconditional read access	CurrentUserId() IN (Portfolio.User,Portfolio.User.Supervisor)
amMonitor	Unconditional read access	CurrentUserId() IN (PortfolioItem.User,PortfolioItem.User.Supervisor)

## Types of controls and properties associated with wizards

### Important:

This section completes the *Advanced use* guide, chapter *Wizards*, section *Types of controls and associated properties/ The DBQUERYBOX control*.

By default, the maximum number of records returned by the **DBQUERYBOX** control's query is set to *200*.

This prevents the performance of the Web client from being negatively impacted when the number of records that could be returned is high.

If the maximum number of records has been reached, a message is displayed for the user.

To modify the default value:

- 1 Edit the `aamapi50.ini` file on each of the AssetCenter Web Service servers.
- 2 In the *[Option]* section, modify or add the following line:

```
/ACWeb/WizQueryBoxMaxLoad=1|<Maximum number of records>
```

## AssetCenter Web and Service Manager Web menu aggregation

### Important:

This section completes the *Tailoring* guide, section *Customizing client computers*.

As is the case for numerous software applications distributed by HP Software, both AssetCenter and Service Manager use the same technology for their Web clients.

This enables you to have a coherent and simplified interface across all HP Software software applications by including the menu items from each of the applications in one, single navigation bar. This also enables simplified authentication for several applications using integrated Windows authentication.

This chapter explains how to aggregate the navigation bars of the AssetCenter and Service Manager Web clients.

After this is performed, we recommend that you use integrated authentication for both applications. ► [Using Integrated Windows authentication](#) [page 102]

## Aggregate the navigation bars of the AssetCenter and Service Manager Web clients

In this section you will learn how to:

- Add the AssetCenter Web menu to the Service Manager Web menu
- Add the Service Manager Web menu to the AssetCenter Web menu

This section describes the configuration to implement when using *Tomcat* as the application server. The examples will assume that Tomcat is installed in C:\Tomcat\ (if this is not the case, replace the path in the examples with the path that you use).

### Add the AssetCenter Web navigation bar to the Service Manager Web navigation bar

- 1 On the machine where you installed Service Manager Web Tier, open the C:\Tomcat\webapps\webtier-7.00\WEB-INF\web.xml file with a text editor and add the text provided below to the section where the `<context-param>` are defined:

```
<context-param>
<param-name>aggregatedContexts</param-name>
<param-value>local,ac</param-value>
</context-param>
```

- 2 Next, add the text provided below to the section where the `<filter>` are defined:

```
<filter>
<filter-name>Navigator forwarder</filter-name>
<filter-class>com.hp.ov.cwc.web.navMenu.CwcNavFilter</filter-class>
<init-param>
<param-name>local:label</param-name>
<param-value>Catalogue</param-value>
</init-param>
<init-param>
<param-name>ac:label</param-name>
<param-value>AssetCenter</param-value>
</init-param>
<init-param>
<param-name>ac:url</param-name>
```

```
<param-value>/AssetCenter</param-value>
</init-param>
</filter>
```

 **Note:**

If AssetCenter and Service Manager are not installed on the same server, replace this line:

```
<param-value>/AssetCenter</param-value>
```

with:

```
<param-value><Absolute URL address to AssetCenter></param-value>
```

For example, for this URL address: *http://<server>:<port>/AssetCenter/*

- 3 Next, add the text provided below to the section where the *<filter-mapping>* are defined:

```
<filter-mapping>
<filter-name>Navigator forwarder</filter-name>
<url-pattern>/cwc/nav.menu</url-pattern>
</filter-mapping>
```

- 4 Restart your Tomcat application server.
- 5 Open Internet Explorer to Service Manager Web and click the AssetCenter links on the navigation bar.

Next, navigate through the navigation bar's Service Manager links.

You should see the Service Manager and AssetCenter links.

### Add the Service Manager Web menu to the AssetCenter Web menu

- 1 On the machine where you installed AssetCenter Web Tier, open the C:\Tomcat50\webapps\AssetCenter\WEB-INF\web.xml file with a text editor and add the text found below to the section where the *<context-param>* are defined:

```
<context-param>
<param-name>aggregatedContexts</param-name>
<param-value>local, sm</param-value>
</context-param>
```

- 2 In the same file, add the text provided below to the section where the *<filter>* are defined:

```
<filter>
<filter-name>Navigator forwarder</filter-name>
<filter-class>com.hp.ov.cwc.web.navMenu.CwcNavFilter</filter-class>
<init-param>
<param-name>local:label</param-name>
<param-value>AssetCenter</param-value>
```

```
</init-param>
<init-param>
<param-name>sm:label</param-name>
<param-value>Catalogue</param-value>
</init-param>
<init-param>
<param-name>sm:url</param-name>
<param-value>/sm</param-value>
</init-param>
</filter>
```

 **Note:**

If AssetCenter and Service Manager are not installed on the same server, replace this line:

```
<param-value>/sm</param-value>
```

with:

```
<param-value><Absolute URL address to Service Manager></param-value>
```

For example, for this URL address: *http://<server>:<port>/Service Manager/*

- 3 Next, add the text provided below to the section where the *<filter-mapping>* are defined:

```
<filter-mapping>
<filter-name>Navigator forwarder</filter-name>
<url-pattern>/cwc/nav.menu</url-pattern>
</filter-mapping>
```

- 4 Restart your Tomcat application server.
- 5 Open Internet Explorer with AssetCenter Web Web and click the Service Manager links of the navigation bar.

Next, navigate through the navigation bar's AssetCenter links.

You should see the Service Manager and AssetCenter links.

## Using Integrated Windows authentication

 **Warning:**

For AssetCenter Web and Service Manager Web menu aggregation to work properly, you must use the same single sign-on system for both applications. Our examples detail the use of integrated Windows authentication using Active Directory.

### With AssetCenter Web

- ▶ [AssetCenter Web clients: Implementing Single Sign-On using Active Directory \[page 94\]](#).

## With Service Manager Web

► Service Manager documentation: [http://<Service Manager documentation server>/help/index.jsp?topic=/security/concepts/example\\_enabling\\_trusted\\_sign-on.htm](http://<Service Manager documentation server>/help/index.jsp?topic=/security/concepts/example_enabling_trusted_sign-on.htm)

---

## Tag the Web services

### Important:

This section completes the *Tailoring* guide, chapter *Customizing the database*, section *Development best practices*.

---

## In which cases should you tag the Web services?

### Important:

Usually, you must tag the Web services. Few exceptions apply.

*Example of an exception:* AssetCenter has not yet been put into production, you are currently customizing/developing the application, each developer runs his/her tests on his/her own database or few developers share the same test database. In this case, using *HEAD* tagged Web services to access the database makes it possible to instantly test objects that are being developed with the Web client.

---

## Reasons why you must tag the Web services

The main reasons why you must tag Web services are the following:

- If you use *HEAD* tagged Web services, modifying objects manipulated by Web services causes the information stored by the Web services to be automatically regenerated when they are called for the first time by a user after the object was modified.

This operation can take some time and therefore penalize the user.

- Tagging is done in order to track the state of the objects manipulated by the Web services at a given moment in time.

Using tagging, you can force applications that access the database, but do not do so via the Windows client, to use objects that correspond to the state of the database at a given moment in time.

*Example:*

You create the queries in the current database.

These queries are transmitted to the Web services (WSDL document tagged *HEAD*).

If you configured AssetCenter Web to access the database via the Web services tagged as *HEAD*, users will have immediate access to the query that you have just created.

If execution time for this query is very long, you may hinder the performance of the Web client.

If you configured AssetCenter Web to access the database via the Web services that were tagged when the database was stable, users will be able to access the database in a more stable state.

## How applications other than the Windows client access the AssetCenter database

The Web services let applications other than the AssetCenter Windows client to query or modify the contents of the AssetCenter database.

These applications (AssetCenter Web, or tailored applications) interact with the database via functions provided by the Web services.

These functions are described in a WSDL document.

### Note:

WSDL (Web Services Description Language) is a language that describes how to access an application's Web services.

A WSDL document describes each of the available services in XML format: Operations that can be performed, messages used, data types used, and communication protocols used.

The WSDL document is generated on the fly (it is not saved as a viewable file).

An application can read the WSDL document to determine which functions are available on the server.

This application can then use SOAP to call one of the functions listed in the WSDL document.

The WSDL document exposes the current database functions as well as the functions that were available at specific moments if the database was tagged at those specific moments.

## What are the prerequisites for accessing the WSDL document?

- A valid license is required to access the Web services.
- AssetCenter Server must be started and the *Signal presence of database server* module (UpdateToken) must be enabled.

## What objects are manipulated by the Web services?

The Web services functions can manipulate the following objects:

- Fields, links, indexes and screens of the database's tables
- Script and wizard type actions
- Filter queries for database table records

## What tag identifier is used for the current version of the Web services?

The current version is identified as *HEAD*.

## How do I tag the Web services at a given moment in time?

Once the structure of the database is in a state that you want to save:

- 1 Start AssetCenter Database Administrator.
- 2 Connect to the database (**File/ Open.../ Open existing database** menu).
- 3 Tag the Web services (**Action/ Tag web service...** menu).
- 4 If any error messages indicate that inconsistencies exist between the objects manipulated by the Web services and the database structure, correct these inconsistencies and then try to tag the version again.

Correcting inconsistencies requires you to perform one of the following operations:

- Modify objects that are not consistent with the database structure
  - Modify the structure of the database that is not consistent with the objects
- 5 ▶ Perform the operations described in section [How to ensure that the tagged Web services are not corrupt in relation to the database structure](#) [page 105].
  - 6 ▶ Perform the operations described in section [How can make an application use another tagged version of the Web services?](#) [page 107].

Tagging lets you track the state of the database in the WSDL document and assign an identifier to this state.

The AssetCenter Web Service instances generate a WSDL document automatically when they access the AssetCenter database.

## How to ensure that the tagged Web services are not corrupt in relation to the database structure

- 1 Start the AssetCenter Windows client.
- 2 Connect to the database.

- 3 Start the *Check definitions of the Web services...* wizard (sysCoreWebServiceCheck) (**Administration/ Check definitions of the Web services...** link on the navigation bar).
- 4 Select a functional domain.
- 5 Click **Finish**.
- 6 If any error messages preceded by the  icon appear, correct them.
- 7 Restart the *Check definitions of the Web services...* wizard for the remaining functional domains and correct any errors if necessary.
- 8 Once all functional domains have been tested and no errors are produced, tag the Web services again ([▶ How do I tag the Web services at a given moment in time?](#) [page 105]).

Examples of errors that may be detected by the wizard:

- A button that is part of a screen referencing a non-existent action: Add the action or modify the button
- A page that contains a field or link that no longer exists: Add the field or link or modify the page
- For the same page, there are several instances of the **LinkEdit** control, and the same link is used by more than one of these instances: You need to distinguish them using the **ApiName** parameter
- An *AQL* type calculated field (supported by the Windows client but not the Web client)
- A page that is visible associated with a functional domain that is not exposed: In the detail of the functional domain or of its parent functional domains, the value of the **WEB service** (seWebService) fields prevents the functional domain from being exposed in the Web services.

## How to ensure that the tagged Web services will operate properly

- 1 The operations in the following sections must have been performed without any errors, immediately one after the other (in the order that you choose):
  - [How to ensure that the tagged Web services are not corrupt in relation to the database structure](#) [page 105]
  - [How do I tag the Web services at a given moment in time?](#) [page 105]
- 2 Start an instance of the Web client and check to see if you can connect with a full navigation bar.

## Where is tagged version saved?

All tagging information is stored in the **Configurations and preferences** (amSysConfig) table of the AssetCenter database.

The WSDL document can be automatically generated from this information when AssetCenter Web Service accesses the database.

## How can make an application use another tagged version of the Web services?

Once you have tagged the Web services with AssetCenter Database Administrator, if you want AssetCenter Database Administrator to use this tagged version to access the AssetCenter database:

### If you are using AssetCenter Web

Configure the AssetCenter Web Tier instances to communicate with the AssetCenter Web Service using the tagged version that you have chosen.

Modify the *AssetCenter.WS.Version* parameter in the *web.xml* by following the instructions in the *Installation and upgrade* guide, chapter *Installing, configuring, removing and updating AssetCenter Web*, section *Installing AssetCenter Web Tier*.

### If you are using an application that you have developed

Generate new stubs from the given tagged version's WSDL document and modify your application as needed if it uses objects manipulated by the Web services that were modified.

## In what instances can using a tagged version of the Web services be problematic?

If the changes to the database since the last tagging operation involve:

- The modification of a field type
- The deletion of a table, field, link, index, itemized list value, page, screen or query

And the Web service tries to access one of these objects, an error will occur and the user will be notified.

## In what instances should the version be tagged as *HEAD*?

When you develop query filters or actions, for example, it is useful to use the *HEAD* tag in order for these queries or actions to be automatically available via the Web client for you to test them.

## Displaying the WSDL document

- 1 Start Internet Explorer.
- 2 Go to the following URL:

```
http://<Name or IP address of the AssetCenter Web Service server>:<AssetCenter Web Service port>/AssetCenterWebService
```

For example: `http://MyServer:8080/AssetCenterWebService`

- 3 Internet Explorer displays available tagged versions, available functional domains for each version and operations that can be performed on the database for each functional domain.

Here is another, however less legible, way to view the tags:

- 1 Start the AssetCenter Windows client.
- 2 Connect to the database.
- 3 Display the **Configurations and preferences** (amSysConfig) table (**Administration/ List of screens...** menu).
- 4 Records whose **Section** (CfgSection) field is equal to *DocumentDesc* describe the functions of the Web services for each "functional domain/tag/language" group.

---

## Checking the functional domains associated with the Web services objects

### Important:

This section completes the *Tailoring* guide, chapter *Customizing the database*, section *Development best practices*.

The Web services objects are associated with a functional domain.

Some objects are called when a client connects to the database or when the associated screen is first displayed. These objects are linked to a functional domain using a parameter from the `web.xml` file associated with AssetCenter Web Tier.

These objects call a screen or a wizard from the database and expect the screen or wizard to be linked to the same functional domain as the one linked to the object.

If the screen or the wizard is not found in the expected functional domain, then an error occurs.

This is the case if a screen or a wizard is linked to another functional domain after one of the following modifications:

- In the detail of a functional domain, you modify the **Web service** (seWebService) or the **SQL name** (SQLName) field
- With AssetCenter Database Administrator, you modify the **Domain** field of a screen

You must apply these changes to the AssetCenter Web Tier `web.xml` file:

- 1 Edit the AssetCenter Web Tier `web.xml` file: ▶ [To modify the AssetCenter Web Tier `web.xml` file: \[page 109\]](#).
- 2 Search for the SQL name of the screen whose functional domain was changed.

This name is found in the *description* property of the object to modify.



**Tip:**

By default, the objects to search for are located in the *env-entries using screens that need to be associated to the same functional domain as the env-entry* section of the `web.xml` file.

- 3 Modify the *env-entry-value* property: Replace the previous SQL name of the functional domain with the new SQL name.

For instance, replace

```
<env-entry>
<description>Currency service provider - Uses the amCurrency screen in
the amCurrency table</description>
<env-entry-name>AssetCenter.WS.CurrencyService</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
<env-entry-value>Currency</env-entry-value>
</env-entry>
```

with

```
<env-entry>
<description>Currency service provider - Uses the amCurrency screen in
the amCurrency table</description>
<env-entry-name>AssetCenter.WS.CurrencyService</env-entry-name>
<env-entry-type>java.lang.String</env-entry-type>
<env-entry-value>Finance</env-entry-value>
</env-entry>
```

To modify the AssetCenter Web Tier `web.xml` file:

If Tomcat is your application server

- 1 Access the AssetCenter Web Tier application server.
- 2 Stop Tomcat, if it isn't configured to automatically restart when an option for an application has changed.
- 3 Go to Tomcat's `webapps` folder.
- 4 Delete the `AssetCenter` folder if it exists.
- 5 Decompress the `AssetCenter.war` file in the `webapps\AssetCenter.war_build` folder.
- 6 Edit the `webapps\AssetCenter.war_build\WEB-INF\web.xml` file.

- 7 *Modify the parameter.*
- 8 Save the web.xml file.
- 9 Open the webapps\AssetCenter.war\_build folder.
- 10 Select all files and folders.
- 11 Compress these files and folders in the webapps\AssetCenter.war\_build\AssetCenter.war file.
- 12 Copy the file.
- 13 Paste it in the webapps folder (overwrite the previous file).
- 14 Delete the webapps\AssetCenter.war\_build folder.
- 15 Start Tomcat if you stopped it.

### If WebSphere Application Server is your application server

- 1 Access the AssetCenter Web Tier application server.
- 2 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere folder.
- 3 Decompress the AssetCenter-webtier.ear file in the folder named Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build.
- 4 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder.
- 5 Decompress the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 6 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build\WEB-INF\web.xml file.
- 7 *Modify the parameter.*
- 8 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 9 Select all files and folders.
- 10 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build\AssetCenter.war file.
- 11 Copy the file.
- 12 Paste it in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder (overwrite the previous file).
- 13 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter.war\_build folder.
- 14 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build folder.

- 15 Select all files and folders.
- 16 Compress these files and folders in the Program Files\HP OpenView\AssetCenter 5.02 xx\websphere\AssetCenter-webtier.ear\_build\AssetCenter-webtier.ear file.
- 17 Stop the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Stop the server** menu).
- 18 Start the WebSphere Application Server (**Start/ Programs/ IBM WebSphere/ Start the server** menu).

If WebLogic is your application server

- 1 Access the AssetCenter Web Tier application server.
- 2 If it is started, stop Admin Server for WebLogic Server Domain for the WebLogic domain in which you installed AssetCenter Web Tier.
- 3 Change to the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder.
- 4 Decompress the AssetCenter.war file in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 5 Edit the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\WEB-INF\web.xml file.
- 6 *Modify the parameter.*
- 7 Open the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 8 Select all files and folders.
- 9 Compress them in the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build\AssetCenter.war.
- 10 Copy the AssetCenter.war file to the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier folder (overwrite the previous file).
- 11 Delete the Program Files\HP OpenView\AssetCenter 5.02 xx\webtier\AssetCenter.war\_build folder.
- 12 Start Admin Server for WebLogic Server Domain.

## .ini and .cfg files

### Important:

This section completes the *Tailoring* guide.

Programs belonging to the AssetCenter suite are associated with configuration files (.ini and .cfg extensions).

### Available .ini and .cfg files

The following is a list of the main available .ini and .cfg files:

**Table 7.2. .ini and .cfg files - List of main files**

Program (add .exe or .dll in Windows, or possibly .so in Unix)	.ini or .cfg file	Description
AssetCenter am	aam-dsk50.ini am.ini	User display options. You can delete this file if you want to revert to the default screen display options. AssetCenter user options.
AssetCenter Database Administrator amdba amdbal	amdba.ini amdbal.ini	AssetCenter Database Administrator user options. User display options.
AssetCenter Export amexp amexpl	amexp.ini amexpl.ini	AssetCenter Export user options. User display options.
AssetCenter Import amimpl	amimpl.ini	AssetCenter Import user options. User display options.
AssetCenter Script Analyzer amsg	amsg.ini	AssetCenter Script Analyzer user options. User display options.
AssetCenter Server amsrv amsrvl	amsrv.ini amsrv.cfg amsrvl.ini amsrvcf.ini	AssetCenter Server user options. User display options. Parameters for AssetCenter Server running as a web server
AssetCenter API aamapi43	aamapi50.ini	Program options.

Program (add .exe or .dll in Windows, or possibly .so in Unix)	.ini or .cfg file	Description
All programs mentioned above	amdb.ini mail.ini	List of database connections. AssetCenter messaging system configuration.

**Table 7.3. .ini and .cfg files - Location of main files**

.ini or .cfg file	Location
aamdisk50.ini	<i>In Windows 9x or ME:</i> Windows root installation folder
am.ini	<i>In Windows (NT family):</i> \<Documents and Settings>\<Windows user> folder
amdba.ini	<i>In Unix:</i> ~/HP Software/ folder
am.ini	
amdba.ini	
amdbal.ini	
amexp.ini	
amexpl.ini	
amimpl.ini	
amsg.ini	
amsrv.ini	
amsrvl.ini	
aamapi50.ini	
amsrvcf.ini	Same folder as the amsrv executable
amsrv.cfg	Same folder as the amsrv executable
	<p><b>Note:</b></p> <p>If you have upgraded from an older version of AssetCenter, amsrv.cfg might still be located in the parent folder of the amsrv executable. This also functions.</p>
amdb.ini	<p><i>In Windows 9x or ME:</i> Windows root installation folder</p> <p><i>In Windows (NT family):</i></p> <ul style="list-style-type: none"> <li>■ <i>system connections:</i> Windows root installation folder</li> <li>■ <i>user connections:</i> \&lt;Documents and Settings&gt;\&lt;Windows user&gt; folder</li> </ul> <p><i>In Unix:</i></p> <ul style="list-style-type: none"> <li>■ <i>System connections:</i> /etc/HP Software/ folder</li> <li>■ <i>User connections:</i> ~/HP Software/ folder</li> </ul>
mail.ini	<i>In Unix:</i> ~ folder

## Modification of .ini files

Entries in the *.ini* files can be modified:

- By the software: They are saved either when modifications are validated or when the user exits the application. If the user exits the application without using the *File/ Exit* command, modifications are not saved.
- And/ Or manually.

Whenever possible, we recommend modifying the *.ini* file entries using AssetCenter and its associated programs.

However, certain *.ini* file entries can only be created and modified manually.

### Note:

Manual modifications of the *.ini* files are not trivial and should only be carried out only by knowledgeable users.

The following tables describe the *.ini* file entries you may wish to modify. Those entries can only be modified manually.

### Note:

Those tables only describe a selection of *.ini* files entries. They are not meant to be exhaustive. The sections and entries not described in this document must not be modified manually.

Boolean entries are described either by "1" or "0". Alternatively, you can also use "True" or "False".

### am.ini file entries

#### [OPTION] section

**Table 7.4. [OPTION] section**

Entry	Description
bSaveOptionOnExit	Set this entry to "0" if you do not want to save modified entries in the [option] section when you exit AssetCenter. By default, modifications are saved.
g_bAllowFlyCreate	Enables or disables the creation of linked records on the fly: <ul style="list-style-type: none"><li>■ 0: Do not allow creation on-the-fly.</li><li>■ 1: Allow creation on-the-fly.</li></ul> Default value: 1.
CmdComboLines	Limits the number of lines displayed in the views and actions lists you can access via the toolbar.

Entry	Description
CNTbkTabCfg.bShowFlyby	Displays ToolTips for tabs in detail screens: <ul style="list-style-type: none"> <li>■ 0: No.</li> <li>■ 1: Yes.</li> </ul>
KeyIniFileName	Specifies the path of the aamdsk50.ini file. <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">KeyIniFileName=aamdsk50.ini</div> <p>Example:</p> <p>AssetCenter uses a file, aamdsk50.ini, that may be located on a network drive. In this case, it is possible to configure this file as read-only and users will not be able to modify their configuration.</p>
NewMailLastCheck	Time when the AssetCenter messages were last read. Unit: Seconds since the January 1, 1970 at 00:00.
opt_bAskForConcurrentModifications	This entry determines whether AssetCenter displays a confirmation dialog box or not when a user clicks the <b>Modify</b> button while an other user is modifying the same record: <ul style="list-style-type: none"> <li>■ 1: Display a confirmation dialog box</li> <li>■ 0: Do not display the confirmation dialog box and save the modifications automatically.</li> </ul>
opt_bCommitDeletesOneByOne	This option is useful when deleting a set of records. If it is activated, AssetCenter erases one record after an other (one transaction per record.) Otherwise AssetCenter erases the records in a single transaction. Default value: 0.
opt_ImportCacheSize	When data is imported using reconciliation keys, this sets the value for the cache memory used to increase import performance. Unit: Number of records found. Default value: 100.
StartSunday	Sets the beginning of a week on Monday (StartSunday=0) or Sunday (StartSunday=1). This option is used with calendars.

[SQL] section

**Table 7.5. [SQL] section**

Entry	Description
OracleDLL	Sets the name of the Oracle DLL to load in order to dialog with Oracle.

## amsrv.ini file entries

### [OPTION] section

**Table 7.6. [OPTION] section**

Entry	Description
MaxRentPerTrans	This entry is used for the generation of rent values.  It sets the maximum number of rent calculations per transaction.  Default value: 200.
MaxMsgInList	Sets the number of displayed lines in the AssetCenter Server main window list.  Default value: 5000.
<Module>LastCheck Where <module> may be set to any of the following values: Alarms, CostCenter, HDAlarms, History, LostVal, Rent, Stats, Stock, TimeZone, UpdateToken, WkGroup, WkGroup <xxx>, WorkflowFinder	The lines suffixed with "LastCheck" correspond to the date of the last module execution.  They allow the calculation of the next module execution when AssetCenter Server restarts.  It may be useful to erase a line "WkGroup <xxx> LastCheck" (or the "WkGroupLastCheck" line) if an execution group <xxx> does no longer exist (or if a workflow scheme does not exist without an execution group) as the program will not do it automatically.

## amsrvf.ini file entries

*amsrvf.ini* file entries are self-described in the file created with the installation.

## amexp.ini file entries

### [OPTION] section

**Table 7.7. [OPTION] section**

Entry	Description
MaxOldDoc	Maximum number of previous documents displayed in the <b>File</b> menu.

## amdb.ini file entries

You may have to modify the following entries for each section describing an AssetCenter connection:

**Table 7.8.** `amdb.ini` file entries

Entry	Description
AmApiDll	Sets the path to the <code>aamapi50</code> API DLL for AssetCenter. This entry is useful with Connect-It and OAA.
FetchingArraySize	Number of lines to retrieve by packets when executing SQL orders. Default value: 30.
OdbcLockingTime	In the case of a Microsoft SQL Server database (MSDE included), sets the time after which a record is to be considered as locked by another user. Unit: Seconds. Default value: 60. <b>Warning:</b> If the value is too low, the import process may be interrupted when run on an overloaded server.
OldStyleCatalog	With an Oracle database, this entry enables you to force the use of the "Tab" view instead of the default "All_Catalog" view. This entry can be set to one of two values: <ul style="list-style-type: none"><li>1: "Tab" use</li><li>0: "All-Catalog" use</li></ul>

### Controlling the modification of the `.ini` files

The `.ini` files are automatically modified by their respective applications when an option is changed.

When multiple executables or instances of an executable are associated with the same `.ini` file, the last executable to save the modifications wins out.

If you wish to keep control over these modifications, we recommend making the `.ini` read-only.

This is particularly true for the `aamapi50.ini` file.

---

## Differences between the Windows and Web clients (actions/wizards)

### Important:

This section completes the *User Interface* guide, chapter *Differences between the Windows client and the Web client* chapter, section *Differences between the clients/ Actions (including wizards)*.

---

Desired action	Using the Windows client	Using the Web client
Using the <b>XOFFSET</b> and <b>YOFFSET</b> properties in a wizard	This property is implemented	This property is not implemented
Use the <b>SERIALIZE</b> property	This property is implemented	This property is not taken into account locally. By extension, it is not usable.
Use the <b>EDITABLE</b> property of the <b>LISTBOX</b> control	This property can be used	This property cannot be used correctly
Use the <b>FILEEDIT</b> control	This control can be used	This control cannot be used. In the Web client, this control displays like an <b>EDIT</b> control that cannot be populated. No icon can be used to start a file explorer.
Using the <b>DBEDIT</b> control	This control can be used	When the control is used for a field, it can be used with the following restriction (no restriction for links): The magnifying glass used to search for an existing value in the database is not displayed.
Using the <b>AmActionDde</b> API in a wizard script	This API can be used	This API cannot be used

# 8 Support

---

## Peregrine Product Support

You can obtain support information for products formerly produced by Peregrine as follows:

- If you work with an *HP Software Services Integrator* (SVI) partner ([www.hp.com/managementsoftware/svi\\_partner\\_list](http://www.hp.com/managementsoftware/svi_partner_list)), contact your SVI agent.
- If you have an active HP Software support contract, visit the *HP Software Support* site and use the *Self-Solve Knowledge Search* to find answers to technical questions.
- For the latest information about support processes and tools available for products formerly produced by Peregrine, we encourage you to visit the HP-Peregrine Software Support web site at: [www.hp.com/go/hpssoftwaresupport](http://www.hp.com/go/hpssoftwaresupport).  
The *Customer Support Handbook* is available for download on the site.
- Contact your HP Software Sales Representative if you have additional questions.

---

## HP Software Support

You can visit the HP Software Support web site at:

[www.hp.com/go/hpsoftwaresupport](http://www.hp.com/go/hpsoftwaresupport).

This Web site provides a list of contacts and information about products, services and support provided by HP Software.

HP Software online software support provides users with self-healing services to help them resolve their problems. It also provides a quick and efficient means to access interactive technical support tools to manage specific issues. As a technical support customer, you can use the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP Software support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an *HP Passport* user and sign in. Many also require a valid support contract. To find more information about support access levels, go to:

[www.hp.com/managementsoftware/access\\_level](http://www.hp.com/managementsoftware/access_level)

To register for an *HP Passport ID*, go to:

[www.managementsoftware.hp.com/passport-registration.html](http://www.managementsoftware.hp.com/passport-registration.html)

## 9 Additional copyright information

AssetCenter uses portions of third-party software products, some of which are subject to specific software licenses. This sections reproduces this license and copyright information in full.

Note: If the license for a third-party component (for example, LGPL or CDDL) specifies that the source code must be made available if an executable is distributed, you can request to receive it from HP technical support.

### Sablotron

Sablotron is distributed under the terms of the MPL 1.1 and the source code is available at [www.gingerall.com](http://www.gingerall.com) (MPL 1.1: [www.mozilla.org/MPL/MPL-1.1.html](http://www.mozilla.org/MPL/MPL-1.1.html))

### Expat

AssetCenter Database Administrator uses Expat to perform migrations.

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR

PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

#### OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

#### Dynamic libraries

AssetCenter uses the ODBC and Visual C++ dynamic libraries.

#### Crystal Reports RTE

Crystal RTE software © 2001 Crystal Decisions, Inc., all rights reserved.

#### Cypress Basic

Basic Scripting provided by Cypress Software Inc., Copyright 1993-2004, all rights reserved.

#### OpenLDAP

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

All rights reserved, LDAP, openLDAP

#### Facelets

The original code has been modified in order to replace the `com.sun.facelets.impl.DefaultFaceletFactory` class with a class that follows the original implementation with the exception of the member variable "facelets". In this variable, `HashMap` has been replaced with `Map` which implements the LRU cache management strategy in order to control consumed memory. The code modification and the original source code are available from HP support.

#### Bar-code font

The font used by the Barcode module is the font named C39T30Lfz from Quartet Systems.

#### MSDE

The demonstration database uses the MSDE database engine, which is redistributed with AssetCenter. For legal information concerning MSDE, refer to the `readme.txt` and `licence.txt` files, which are located in the MSDE folder of the AssetCenter installation CD.

#### OSCache

This product includes software developed by the OpenSymphony Group  
(<http://www.opensymphony.com/>).

WSDL4J

The JAVA API specifications for WSDL can be found at the following address:  
<http://www.jcp.org/en/jsr/detail?id=110>

