

# ACS 4.7.1-24 Installation, Configuration, and Administration

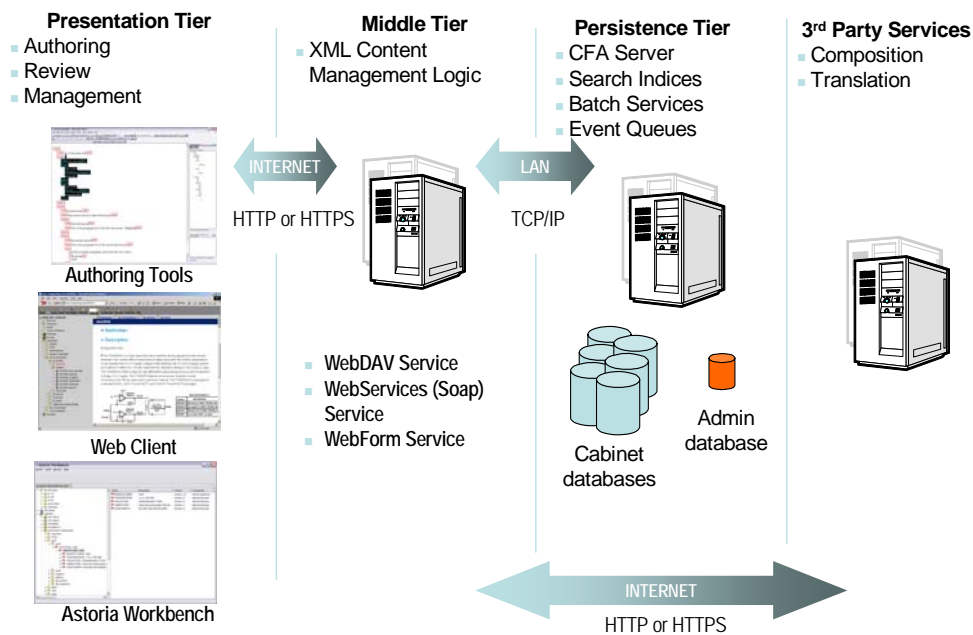
This document describes how to install, configure, and administer Astoria Communications Server 4.7.1-24 (hereafter, ACS). You must be an administrator to perform these tasks.

ACS supports Web Browser clients and WebDAV clients. Each of these capabilities are separately licensed. ACS software can be configured to operate on a single server or on multiple servers depending on the number of users to be serviced.

## ACS Architecture

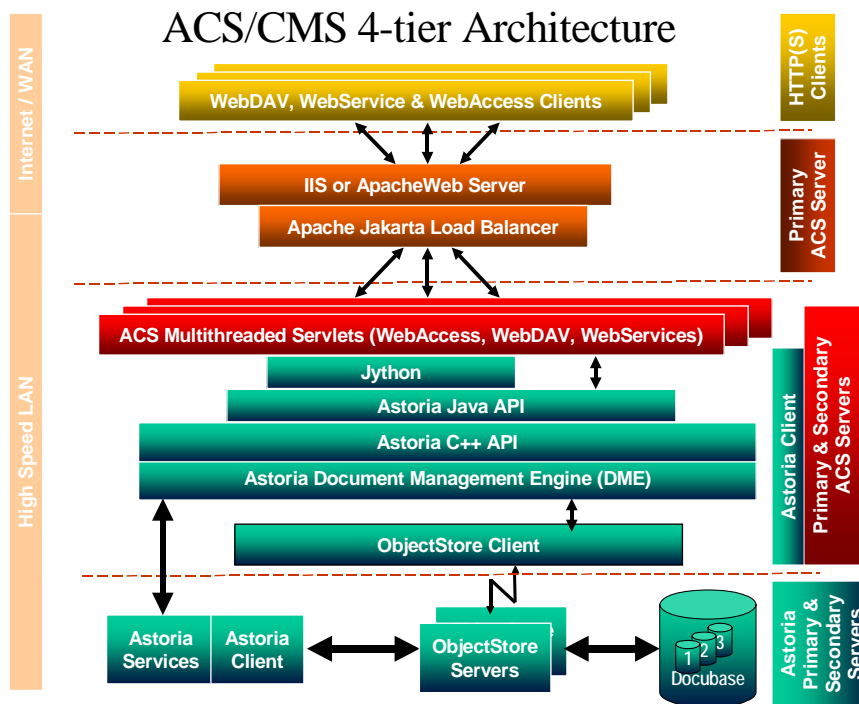
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### Astoria Architecture



ACS utilizes multi-tier architecture to enable scalability and growth. Standard network protocols simplify adoption and administration. Support for IIS and Apache Web Server is configured automatically for easy deployment. In addition, ACS takes advantage of multi-version concurrency control (MVCC) to enable simultaneous readers with a writer of the same data without any blocking. This results in faster, more consistent response.

The Apache Jakarta Tomcat servlet framework routes requests to the worker processes. Multiple servlet worker processes are configured on each Secondary worker node. The Primary server node contains the web server (IIS or Apache). In a small configuration, the Primary server node will be the only worker node. In a large configuration, additional secondary servers on the Astoria LAN are configured to provide greater scalability. License keys are required for all ACS nodes. (In an ACS developer configuration, the Astoria Server and Astoria Communication Server software will be coresident.)



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## New Features

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The following Authoring features were added as part of the ACS 4.7.1-24 release:

- Astoria Workbench has new dialog enabling creation of DITA documents.
- Astoria Workbench now supports drag/drop of items onto the Map Editor, and items within the Map Editor can be rearranged via drag/drop.
- XMAX 5.0 is supported.
- ACS is now supported with Internet Explorer 7.

The following Administration features were added as part of the ACS 4.7.1-24 release:

- Upgrade to latest Java Runtime Environment (JRE 1.5.0\_10) addresses the Daylight Savings Time change.
- ACS is now supported with Internet Explorer 7.

The following features were previously added as part of the ACS 4.7-24 release:

- XLink support allows improved cross-referencing between documents and resources.
- Astoria Chooser dialog now displays lock status in the icons: a red or green lock appears in the upper right corner of the file icon and the filename text matches the color.
- Astoria Chooser has new top-level menu items to display public searches and personal saved searches.
- New Import cascading menu allows importing structured documents, files, or folders.
- Files and folders of files can now be exported via WAN context menus.
- Files can now be checked in via the WAN context menus.
- History menu is improved and exists by right-clicking the object in question. It no longer appears via Expand (+) to avoid inconsistency and confusion.
- New sortable folder column choice has been added to user options: Dependency Status. This displays an icon with mouse-over text for those items that are providers, dependents, or both.
- Floating annotations have been added to user options. This allows customizing annotation viewing for document review.
- Where Used button now appears when viewing a file via Web Access.
- Astoria WAN Bridge for Arbortext now supports recursive edit sessions with the Recursive Edit command.
- Astoria WAN Bridge for Arbortext now supports managing reference attributes in DITA documents with the Edit References command.
- WAN Bridge supports the latest Arbortext Editor version 5.2.

- DITA DTDs are now supported.
- MathML documents are now supported.
- XML schema support has been improved.
- Change notification supports dependent objects getting notified when provider objects get revised.
- Integration with Antenna House is supported.
- Parallel workflow allows multiple job tickets to be created when an object's status changes. Previously, workflow was sequential: only one job ticket was created each time status was changed by a user.
- Referential Integrity for ID/IDREF connections is supported. Importing IDREFs will automatically import the IDs being referenced. Furthermore, it will preserve the connection between those objects across moves. IDs will display as children of IDREFs in the Navigator, ACS browser, and Workbench. Plus, they will appear on operations such as Show Valid Ancestries and Show Where Used. The only caveat is that Editions do not maintain these connections.
- Roles and Role Groups replace Task Owner and Task Audience documents, which help users manage their Task Sequence documents more easily. When upgrading, the new Roles are automatically created based on the Task Group fields in the obsolete Task Owner/Audience documents.
- The Welcome page can now easily be customized using an XHTML page layout template. The default welcome page appears virtually the same as in prior releases, but is now built using the splash.xhtml layout template residing in the Definitions > System > HTML Templates folder of the Application Cabinet. This file can be cloned, modified, and stored in Definitions > User > HTML Templates Override folder to provide a highly customized welcome page while retaining ACS semantics and localization compatibility.
- WAN applications can now be installed via local media as well as over the network.

The following features were previously added as part of the ACS 4.6.2-23 release:

- Astoria Translation is now offered with ACS.
- SQL Searches may now contain parameters simplifying production of more sophisticated and personalized assembled documents.
- Support for Change Page Pro 05 has been added.
- WAN Bridge supports Arbortext Editor versions 5.2.
- WAN Bridge supports the https protocol with Arbortext Editor 5.2.
- Integration with Arbortext Publishing Engine is supported.
- Large text fields now support class property for CSS customization.
- Creating saved searches with column property modifiers now results in those columns being retained.
- Document Assembly now supports computed parameters and includes extra details for more sophisticated assembled documents.
- WAN Astoria Chooser dialog now provides more lock information at a glance.

- Webform Fields now include a “?” help link to display the Messages Lookup Tool or Function Help Tool, as appropriate.

The following features were previously added as part of the ACS 4.6.1-23 release:

- Microsoft Word 2003 document collaboration includes support for adding version information and support for review and annotations of WordML documents.
- Astoria Workbench includes support for drag/drop and support for parameterized searching.
- Astoria Annotations are mapped to Word Comments on document export.
- Epic WAN Bridge "Show Access Controls" command now displays a dialog which includes role groups.
- WebDAV and Epic editors can be configured for unique editor paths.
- Support for using proxy servers in Windows to enforce network policy, security, etc
- AstoriaWebServicesClient.jar has been enhanced and renamed to AstoriaClient.jar, so any Web Services developers must rename their classpath entries accordingly.

The following features were previously added as part of the ACS 4.5-22 release:

- Support for Microsoft Word 2003 document collaboration.

The following features were previously added as part of the ACS 4.4-21 release:

- Full port/protocol configuration options for all 3 ACS Servlet types, specifiable during ACS phase 1 installation.
- Webform enhancements include new webform document definition properties as well as more versatile field types.
- Jythomator scripting enhancements includes new commands as well as improvements to existing commands.
- Improved Jythomator importFiles command supports recursion to import nested directories and also optionally calls a visitor function for each imported file.
- New online documentation for Jython functions and scriptlets is available by right clicking the help menu in the ACS web access toolbar.
- Document Assembly can optionally shadow the resulting assembled XML document and XSLT transform and/or ftp it.
- Workflow transition sequences can now apply to document elements.
- Additional graphic viewers can be easily configured.
- Apache Web Server can be utilized in lieu of IIS.
- Added support for LDAP authentication.
- Docubase objects in the navigation tree now offer "Backstop Access Control" and "Global Access Control" menu items. Additionally, when viewing inherited access control for any object, the backstop and global contributions will be included.
- Added the ability to create a Table of Contents for Astoria Review.
- Astoria Chooser dialog supports user shortcuts.

- Astoria Workbench replaces Book Level Administrator application with improved functionality. For more information, access Help Contents from the Astoria Workbench Help menu.
- Conflict Resolution performance improvements via Merge Settings command.
- Review Table of Contents provides increased usability and performance via the TOC Settings command.
- More powerful history dialog – includes approval information and compare command.
- XML Validation Report command supports full document and fragments.
- WAN XML document import and export supported.
- WAN connections can specify port and protocol (for example, WAN editor, Workbench).
- Review Mode handles more graphic types.
- Some ACS containers now list their contents sorted.
- My Shortcuts available in Select Object dialog allows for quick access of objects.

The following features were previously added as part of the ACS 4.3.1-20 release:

- Restricting status and approval labels to specific levels is supported for documents, document fragments or files.
- Group information is available with regard to what jobs have been submitted by or assigned to group members.
- Support for CGM and SVG graphics includes the ability to automatically view such file types in the browser, without requiring a third-party application to be launched separately.
- On export or make edition, Astoria optionally exports ObjectIDs as XML attributes on a selected list of elements.
- A new AnnotateUtils.xsl file complements the existing Annotate.xsl and custom templates to help the rendering of documents. Note: Because the formatting changed for ease of use, it may be required to modify existing templates.
- Web Access can now be installed on either a primary or secondary ACS server.
- Platform support for the server includes Windows Server 2003.
- Document branching/merging allows two authors to work concurrently on the same document and merge the changes back to the original, thus preserving version history.
- Merge Back to Branch allows authors using Conflict Resolution to merge changes back to the branch document to preserve version history.
- Effectivity filtering now allows the inventory of objects to be specified anywhere in the document. Previously, it had to be an attribute of the root document element.
- History is now available on the right-click context menu during Astoria Review and Astoria Compare.
- Show History and Show Properties are now available on the right-click context menu for elements and structured documents.
- Tool tips, including information about version, name, and date, are now enabled during Astoria Review and Astoria Compare.

- Paper clips are now available during Astoria Compare.
- Graphics now have approval labels associated with them, which ensures that correct versions of graphics will be used when making editions.
- WAN authoring bridge supported for Epic Editor.

The following features were previously added as part of the ACS 4.2.19 release:

- Scheduled job notification allows users to configure multiple notifications and automated reassignment of overdue jobs.
- Merge tickets can now be grouped by document name, using a new Related Document field that can be sorted.
- Job Folder lists now have distinct column headings.
- New and improved licensing, consisting of new license files, to limit the number of Astoria licenses required by the customer. Users upgrading will need new licenses.
- Support for Object custom attributes has been included.
- Filtered Editions allow filtering of specific information, based on subject matter or approved content, when creating editions.
- Edition enhancements include ability to capture information at a set moment in time.
- Roll Forward capability allows users to choose a previous version of an object and specify it to be the latest version.
- Document assembly now allows selecting a location for the assembled document and performing a replacement checkin of that document.
- Document Assembly Form has a new flavor field, so the newly assembled document can be assigned a "flavor".
- Task Sequence now continues looking up the hierarchy for the specified status.
- Task Sequence documents now allow "none" for TaskOwner, indicating that no one is currently assigned as the next owner.
- Integration with Arbortext E3 is supported.

The following features were previously added as part of the ACS 4.1-18 release:

- WebDAV server support.
- Parameterized search execution.
- Annotation improvements.
- Parameterization of document assembly SQL searches.
- Improved conflict resolution, which allows collaboration between the document creator and customizer by automatically integrating revisions of the same document.
- Remote XML authoring.

The following features were previously added as part of the iEngine 17 release:

- WebDAV client application support.

- All Astoria custom attribute types (date, enumerated, text, numeric) can be created, viewed, and modified.
- Additional installation customization capabilities added.
- Additional message parameters available to Astoria Review messages.
- Various security enhancements.
- Richer more flexible integration APIs.
- Unified "Edit" interface to structured editing including support for WebDAV structured editors.
- Document Assembly improvements.

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## System requirements

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Please confirm that your Astoria server, ACS server, and Astoria client meet the requirements specified in the following sections.

### Astoria CMS server requirements

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If your installation has a separate Astoria server machine, please confirm that you have met the following Astoria server software requirement before you install ACS:

Windows Server requires Astoria Server 4.7.1. Either Windows 2000 (Service Pack 4 with all critical and security updates) or Windows 2003 is needed. Please see "Configuring ACS" on page 15 for server configuration options.

### ACS server hardware requirements

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The hardware requirements for installing ACS on a Windows server are as follows:

- 1 gigabit network adapter recommended (100 mb minimum)
- The ACS server(s) must be co-located on the same network segment as the Astoria CMS server(s).
- 2.4 GHz Pentium 4 processor or greater (dual Xeon processor recommended)
- 1 GB RAM or greater
- CD-ROM drive

### ACS server software requirements

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Before you install ACS, please confirm that you have met the following ACS server software requirements:

- Windows 2000 Service Pack 4 or Windows 2003
- Astoria 4.7.1. Please see the Astoria Installation, Configuration, and Administration Guide

for more information.

**Note:** During CMS installation, you must enter the true hostname of the CMS server (as is displayed in the license file) rather than using a DNS alias.

- Internet Information Services (IIS) 5.0 with latest service and security patches OR Apache HTTP Server 2.0.x.

**Note:** Later versions of Apache, such as version 2.2, will not work with ACS.

- Windows Internet Explorer 6.0 or greater
- MSXML 4.0 SP2 (available in 3rdParty directory on the ACS CD-ROM)
- Minimum Screen Resolution: 1024 x 768 pixels

## Astoria client requirements

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If your installation includes Astoria client users, please confirm that you have met the following Astoria client software requirements before you install ACS:

- Astoria 4.7.1
- Windows Internet Explorer 6.0 or greater

**Note:** The ACS application will not work in Netscape, older versions of Internet Explorer, or on the UNIX or Mac platforms.

## Installing ACS

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After confirming that you have met the software requirements detailed in the “System requirements” section on page 3, make sure that you have a license file as well as a basic database created before you install ACS. There are two phases to the ACS installation:

- **Phase 1:** Base ACS, which installs and configures the Apache Tomcat java servlet containers (the ACS reader and writer services), integrates ACS with either IIS or Apache HTTP Server, and sets up ACS licensing and other configuration information. This phase is required for both Web Browser clients and WebDAV clients.
- **Phase 2:** ACS Applications, which sets up individual ACS applications (where an application can be a standard or custom application), is only used for installation of applications used by web browser clients.

Both phases of the ACS installation must be run in order for ACS web browser clients to work properly.

## Installing ACS user account

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The ACS user account is a specified Windows user that is used when running the ACS Windows Services and provides the following functions:

- If you want ACS to create users on your domain, the credentials of this user must have permission to create users on each of the domains that have access to this server, and on this local server. This functionality allows ACS to create corresponding Windows users for each

ACS user. You can turn this function off or on after ACS is installed with the Application document.

- Even if your site will turn off Windows user creation, the credentials of this user must still be valid in the domains in which ACS users reside since the ACS services must be able to access the various domain controllers in that respective domain.

**Note:** Be sure to grant this account the following rights: “Act as part of operating system”, “Log on as service”, and “Log on as batch”. Please note that the ACS installer cannot test whether the credentials are valid, so be sure to enter information correctly.

**To install ACS user account:**

- 1 Grant special permissions to the ACS userID as follows:
  - Click Start Menu, and then select Programs > Administrative Tools > Local Security Policy. If Administrative Tools does not display in your Start menu, right-click Taskbar > Select Properties > Click Advanced tab > Select Display Administrative Tools > Click OK.
  - Open the Security Settings folder, and then select Local Policies > User Rights Assignment.
  - Double-click the "Act as part of operating system", "Log on as service", and "Log on as batch" policies.
  - Use the "Add..." button to create this user. You will be prompted with a list of users who are machine users. Change the selection drop down to get a full list of available users. The user you select will be the user that connects the ACS Services to your domain(s) for authentication of individual ACS users. You will be prompted during the ACS installation to identify this user and password as part of the installation/configuration procedure. Please see “Installing ACS: Phase 1 (Basic Services)” on page 11.
- 2 Click OK until you end the configuration.

## Installing with https

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ACS supports encryption using https. Before installing, administrators should understand the following issues regarding https:

- Prior to installation, consider carefully whether you want to use https for your communication. For instance, https provides encryption; however, it does so at the expense of performance and processing overhead.
- Prior to installation, you must acquire a digital certificate. Furthermore, you must install it on your web server and ensure that the https connection is functioning properly.
- During Phase 1 installation, you will be prompted for several URLs used to access the ACS server. If you want ACS communications to be encrypted using SSL, ensure that you specify “https” in the URL.

## Installing ACS: Phase 1 (Basic Services)

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### To install base ACS Phase 1:

- 1 On the ACS Server, run Phase 1 of the ACS Setup program, setupwin32.exe, from the phase1 subdirectory of the ACS CD-ROM.
- 2 Click Next to continue with the installation.
- 3 Choose the Approve radio button to accept the license agreement.
- 4 Click Next to acknowledge agreements with 3rd party vendors.
- 5 Specify the directory into which you want to install ACS (e.g., c:\Program Files\Astoria Software).

If you are reinstalling ACS Phase 1, you will not be prompted for an installation directory. Click Yes to replace newer files during file transfers.

- 6 Enter the Astoria user ID (username) and password that will be created in Astoria to use when accessing the Astoria server.

These credentials are used by ACS to open the Astoria database, so these credentials must adhere to your standard Astoria requirements, as well as Windows credential requirements.

This database userID is authenticated by the ObjectStore server. These credentials must be valid for the machine on which the ObjectStore server is running. ACS installation will create a matching Astoria user if one does not already exist and make the user an "Astoria Administrator".

- 7 Specify the location of your ACS license file (e.g., c:\machinename.license.cfg).

If you are reinstalling ACS Phase 1, you will be notified that this license info will replace any existing ACS license info.

- 8 Configure your Astoria Web Access and Astoria WebDAV services.

- Click Add to configure a new server, specifying the number and capacity of the ACS Windows Services on that server.
- Click Edit to modify the configuration of a selected server..
- Click Remove to remove the server configuration from the list.

**Note:** Use the Advanced button only if you are directed to do so by Astoria Support.

- 9 Click Next to acknowledge the configuration settings.

- 10 Enter the Windows UserID, Domain and Password (twice for confirmation) that will be used to run those Windows services associated with ACS.

**Note:** This should be the same user and password as created earlier in "Installing ACS user account" on page 9 (e.g., domain\userName)

These credentials are used when Windows Services are installed to create new Windows users; these credentials are not used to create new Astoria users. These credentials must be in the format domain\userName. For example, on the machine named CENTAUR with user Administrator, you would use CENTAUR\Administrator as the Windows user ID. You can also use '.' to indicate the local machine (e.g., .\Administrator).

- 11 Choose either Windows or LDAP authentication.  
If you chose LDAP authentication, you will be asked to provide your LDAP configuration information.
- 12 If both IIS and Apache are installed, choose which server you'd like to use with ACS.
- 13 Select the desired IIS or Apache website for Astoria Web Access.
- 14 Specify the URL for Web Access standard requests. These are requests other than those containing passwords.  
**Note:** Do not specify https for either the "normal" or "secure" addresses unless your IIS server is configured for https.
- 15 Specify the URL for Web Access sensitive requests. These are requests containing passwords such as the login form and changing user options.  
**Note:** Do not specify https for either the "normal" or "secure" addresses unless your IIS server is configured for https.
- 16 Enter your mail server name, reply e-mail address, and support e-mail address for ACS mail applications.
- 17 Click Next to confirm your Web Access choices.  
If you earlier requested any WebDAV services, you will be asked to provide WebDAV specific information. Otherwise, skip to step 17.
- 18 Select the IIS or Apache website for Astoria WebDAV requests.
- 19 Specify the URL (protocol + hostname:port + path) that users would specify when opening a browser as a web folder to get access to all the Astoria cabinets on the server.  
**Note:** Do not specify https for either the "normal" or "secure" addresses unless your IIS server is configured for https.
- 20 Confirm your WebDAV choices.
- 21 Specify the protocol and host name to be used for SOAP requests.
- 22 Click Next to perform Phase 1 of the ACS Setup program.
- 23 If prompted to reboot, click OK to do so.

## Installing Secondary Servers

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If your Phase 1 installation on your Primary (webserver) node designated additional machines as secondary nodes, you must run Phase 1 install on each secondary node. Fewer questions are present when installing a secondary node since much of the information is common and retained in the repository.

**Note:** If you update the configuration, you should perform updates on the primary node FIRST. Then you should reinstall the secondary nodes.

## Installing ACS: Phase 2 (Applications)

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### To install ACS Phase 2 on primary machines and make site customizations:

- 1 From the phase2 subdirectory of the ACS CD-ROM, run Phase 2 of the ACS Setup program, setupwin32.exe.
- 2 Click Next to continue with the installation.
- 3 Click Next to acknowledge the destination directory for Phase 2 installation.
- 4 Choose the setup type that you would like to perform (e.g., Astoria Review or LiveSite).
- 5 Indicate whether you want to install a new ACS application or upgrade an existing ACS application.
- 6 Specify the following:
  - Enter the application that you would like to install (either Standard or the customizations as selected from the drop-down list).
  - Enter application name (e.g., MYApp). This will create the subdirectory and the URL name.
  - Enter the Astoria cabinet name for the system files (e.g., SysAdmin or AppnameSysAdmin).
  - Enter the application's description (e.g., Foo's Datasheets).
- 7 Identify who should approve requests for new user accounts, and then click Next to continue with installation.
- 8 Click Next to perform Phase 2 of the ACS Setup program.

**Note:** This stage can take between 20-120 minutes depending on the power of the ACS server.
- 9 Click Next when install dialog indicates it is finished creating the ". . . Create\_stdout.txt" log file.
- 10 If there are errors, click Next when install dialog indicates it is finished creating the ". . . Create\_sterr.txt" log file.

**Note:** Creation of the ". . . \_sterr.txt" file does not indicate any errors occurred; it is simply creating the file. Please review the file for error or warning messages; receiving messages about jars being loaded is normal, but anything else should be investigated.
- 11 Click Finish to complete the Phase 2 installation.
- 12 Visit the URL you specified during installation (e.g, <http://foo.com/ief/nameOfYourApp>).

## Installing WAN Applications

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Once ACS is installed, installing WAN applications, such as the Astoria WAN Bridge for Arbortext, is done through the ACS browser.

**Note:** This installation option is available based on your license file.

**To install WAN applications:**

- 1 From the ACS browser toolbar, right-click the Help icon.
- 2 Choose Install WAN Applications.

Depending on your license file, follow the dialogs to install your desired application. For more details, please see the WAN Applications chapter in Administrator Overview help.

**Note:** Since the Astoria WAN Bridge for Arbortext cannot coexist with the regular LAN version of the Arbortext Bridge to Astoria, installation of the WAN bridge will automatically uninstall an existing LAN Arbortext bridge.

**Caution!** Because the WAN installer does not run in the background, installing WAN applications can appear to freeze Internet Explorer during installation.

**Installing WAN Applications Locally**

If you have a slow internet connection, you may prefer to install WAN applications locally to avoid time-consuming downloads.

**To manually install WAN applications (Administrator setup):**

- 1 Browse to the Webforms directory from your install directory (e.g., c:\Program Files\Astoria Software\Webforms).
- 2 Copy **SetupAstoriaWanApps-win32.exe** to a desired local directory or to a CD.
- 3 Instruct users to perform the following steps from their machines.

**To manually install WAN applications (User operation):**

- 1 From the user machine's ACS browser toolbar, right-click the Help icon.
- 2 Choose Install WAN Applications from Local Media.  
The Choose WAN Installation Executable File dialog appears.
- 3 Locate the **SetupAstoriaWanApps-win32.exe** file in the directory or CD that was specified in Administrator setup above.
- 4 Click Install to run the setup application.
- 5 Exit the installer.

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## Upgrading ACS

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Customers running version 23 or later may upgrade to this version of ACS. To do so, follow the installation instructions beginning with Phase 1 Setup. See "Installing ACS: Phase 1 (Basic Services)" on page 11.

After upgrading ACS, all clients must update any WAN applications, such as the Astoria WAN Bridge and Astoria Workbench.

Regarding the Astoria Workbench, each version of ACS may introduce enhancements to the default Presentation Preferences. These enhancements are purely optional. The upgrade

does not install these changes, as this would overwrite changes configured by the administrator since the last upgrade. If you want to update to the most recent Presentation Preferences, you must open the Workbench as an administrator and "Restore Defaults." For detailed instructions, see "Presentation Preferences Settings" in the Workbench help system.

**Caution!** Administrators must not edit **license.cfg** or any other license related files provided by Astoria Software. If it is necessary to update these license files, Astoria Support will inform you of the proper procedures.

**Note:** When upgrading to version 24, your Task Owner and Task Audience documents will be deleted. For each Task Group field in those documents, a Role will be created with a name matching the value of the Task Group field (if the Role does not already exist). The corresponding Role group is added to the folder containing the Task Owner and Task Audience documents.

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## Configuring ACS

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When configuring your ACS installation, we recommend that you install the ACS software on one server and the Astoria server on a different server. Multiple ACS servers can be configured to support an Astoria server. The Astoria and ACS servers must be connected via a fast LAN connection. The only exception to this recommendation is for LiveSite, which can generally reside on one server since there is no full PC client bridge editing with this product.

An administrator must edit existing Astoria users' profiles and set their domain fields appropriately.

**Note:** For domain-based users, the ACS server handles the authentication and needs to have a trust relationship with the domain controller of the user's domain. Because of this, when creating such users in ACS, you must explicitly specify the domain using a backslash as follows:

```
myDomain\john.smith
```

**Caution!** For first-time installations, the only administrator who can log into Web Access is the user specified in step 5 of Installing ACS: Phase 1 (Basic Services). Once the administrator logs into Web Access, they can add new Astoria users and/or set the domain of existing Astoria users, which will allow others to log in.

The ACS logon request will succeed only if all of the following conditions are met:

- The specified user name is an Astoria user.
- The Windows domain -- as specified in the domain property of that Astoria user -- contains a user of the same name with the specified password.

Additionally, you must set up Microsoft Windows 2000 server licensing properly to accept the maximum number of concurrent ACS users. If not properly configured, you will quickly run out of concurrent user logins. Each time an ACS user logs in through their Web browser, a Microsoft Client Access License (CAL) is used. Microsoft has two CAL models for customers to choose from: Per Seat mode or Per Server mode. Please consult with your IT group for additional information.

## Configuration Guidelines

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ACS utilizes Java Servlets to process requests. Three types of servlets exist: Web Access, WebDAV, and Web Services. Each servlet process can handle concurrent requests since servlets are multithreaded. Each thread uses an Astoria session (XD\_Session) to access the repository. Sessions are of two types: readonly, and update. At installation time, the administrator running ACS Phase 1 setup can specify the number of processes for each type of servlet as well as the number of sessions (read and update) that each servlet type will use. The following considerations should be kept in mind when configuring these values:

- Make sure you have enough RAM. For example, running ten WebAccess, five WebDAV, and five WebServices on an Astoria Server will cost you well over 2GB of VM. Make sure you have enough pagefile, but more importantly, make sure you have enough RAM.
- Each servlet process can access 512 mb of Object Store Repository space. Each session a process can support divides that total address space. For example, three webdav readers and two webdav writers equals five sessions, limiting each session to accessing about 102 mb in a transaction unless the operation implements checkpointing. Also, each session consumes 64mb of physical RAM. The one WebDAV process in my example therefore would utilize at least 320mb of RAM. You never want to configure the ACS server to require more memory resources than are available in RAM otherwise serious swapping could result.
- The larger the documents being reviewed, the more memory the thread needs. The thread's ostore memory is divided by the number of threads in that process. Suggest no more than about 4-6 threads/process. Specify more server processes to have a big enough pool of sessions available to meet concurrency needs. If more concurrent requests than sessions, delays will occur, but failures should not, unless the sessions are busy for several minutes.
- If concurrency requirements exceed the number of sessions per process and processes per ACS server that are reasonable, utilize secondary ACS servers. The servlet framework will loadbalance the requests among all the servlet processes on all of the ACS servers.
- ACS and CMS should be separate servers.
- For performance reasons, dedicated ACS and CMS servers should modify the following service as follows: Indexing Service set to "Disabled".
- If lots of data is stored in the repository for disparate groups, consider spreading cabinets among multiple CMS servers in a single Docubase.

## Configuring CGM Viewer

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CGM is a popular vector graphic format. The Corel CGM Viewer enables viewing CGM graphics.

If you have a licensed copy of Corel CGM Viewer and you wish to view CGM files within Astoria, then you must copy your Corel **acgm.cab** file into the `\install\Di\WebForms` directory.

## Configuring Content Types

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When ACS needs to map a non-structured doc to a MIME type, the extension of the document is used for the mapping. A set of approximately 300 default mappings are provided by Astoria Software. Additional mappings can be specified in `\install\Di\common.cfg` as follows:

[com.lspeed.util.ContentTypeHelpers]

image/cgm = cgm

**Note:** The value for a particular MIME type entry in this section is a comma separated list of zero or more file extensions.

**Note:** After editing this configuration file, services must be restarted in order for the changes to take effect.

## Configuring Internet Explorer

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There are certain Internet Explorer settings required to allow the browser and Java to work with ACS. In Internet Explorer, please use Tools -> Internet Options to verify the following settings:

### Security Tab

- Select the Web Content Zone that applies to your ACS server.
- Click Custom Level.
- Reset Custom Settings to **Medium**.
- Enable the ActiveX setting: **Initialize and script ActiveX controls not marked as safe**.
- Enable the ActiveX setting: **Run ActiveX controls and plug-ins**.
- Enable all settings in the **Scripting** section.

If Installing WAN Applications from Server, you must also modify the following Security options:

- Select the Trusted Sites icon, and then click Sites.
- In **Add this Web site to the zone**, enter the website from which you are accessing the Install WAN Applications command. For example, **http://myserver.mycompany.com**
- If this is an HTTP connection, clear the **Require server verification (https)** checkbox.
- Click Add and then click OK.
- Select the Trusted Sites icon, and then click Custom Level.
- In the Downloads section, set **Automatic Prompting for File Downloads** to Enabled.

### Privacy Tab

- Set privacy setting to **Medium**.

### Advanced Tab

- Check the Java (Sun) box: **Use JRE x.x for <applet>**.

## Configuring LDAP

---

Lightweight Directory Access Protocol, LDAP, is a network-accessible store of user credentials which can be used to authenticate users for ACS and WebDAV instead of using the standard Windows authentication.

The configuration parameters described below for the LDAP login module provide information about where the LDAP server is and where the user/group information can be found.

## astoria.java.login.config file

Configuring ACS to use the LDAP LoginModule involves modifying the **astoria.java.login.config** file that is registered with the JVM. By default, this configuration file looks something like this:

```
AstoriaLoginModule {
  com.Ispeed.auth.windows.WindowsLightspeedLoginModule required
  trace="true";
};
```

This indicates that the "AstoriaLoginModule" (used by ACS, WebDAV and WebServices) has been initialized to use the WindowsLightspeedLoginModule class, which uses Windows for authentication.

Both the WindowsLightspeedLoginModule and the LDAPLightspeedLoginModule are extensions of the abstract class called LightspeedLoginModule. As such, they share the following parameters:

**trace:** (optional, default: "false") Indicates that a trace log should be generated. The trace log will be sent to the System.out stream. Where it ends up depends on how the process in question was started.

**addTimeStamp:** (optional, default: "true") Specifies whether trace log entries should include a time stamp.

**addThreadStamp:** (optional, default: "true") Specifies whether trace log entries should include a thread stamp.

**timeStampDatePattern:** (optional, default: "EEE MMM dd HH:mm:ss.SSS zzz yyyy") Specifies the format of the time stamp used for log entries.

An LDAP database is basically a large tree structure of objects. The schema used by an LDAP database is end-user configurable and can be set up in an endless number of possible ways. Thus, a lot of information about the structure of a particular customer's LDAP database may be required for the LDAPLightspeedLoginModule to do its job. The LDAPLightspeedLoginModule therefore has the following specific parameters:

**ldapURL:** (required) The URL of the LDAP server (if no port specified, assumes 389)

**usersRDN:** (required) The relative distinguished name specifying the location of the users in the LDAP database

**rolesRDN:** (required, default: no roles specified) The relative distinguished name specifying the location of the roles in the LDAP database

**ldapVersion:** (optional, default: "3") The version of LDAP used by the server

**connectDN:** (optional, default: anonymous connection) The distinguished name used to establish LDAP server connection.

**connectPassword:** (optional, default: empty string) The password of the distinguished name establishing the LDAP server connection.

**userObjectClass:** (optional, default: "person") The name of the user object class

**userChildrenOnly:** (optional, default: "true") Specifies whether just the user children of the users RDN are to be examined, or all descendants.

**userNameAttribute:** (optional, default: "uid") The name of the user name attribute

**userCNAttribute:** (optional, default: "cn") The name of the user common name attribute

**userEmailAttribute:** (optional, default: "mail") The name of the user e-mail attribute

**roleObjectClass:** (optional, default: "groupOfUniqueNames") The name of the role object class

**roleChildrenOnly:** (optional, default: "true") Specifies whether just the role children of the roles RDN are to be examined, or all descendants.

**roleNameAttribute:** (optional, default: "cn") The name of the role name attribute

**roleMemberAttribute:** (optional, default: "uniqueMember") The name of the role member attribute

The specified default values are for the most popular of the LDAP schemas. Most people should use this as the base schema for their server. Here is an example of a login.config entry that uses the LDAPLightSpeedLoginModule:

```
AstoriaLoginModule {
  com.Ispeed.auth.ldap.LDAPLightSpeedLoginModule required
  trace="true"
  ldapURL="ldap://server"
  usersRDN="ou=People,dc=example,dc=com"
  rolesRDN="ou=Roles,dc=example,dc=com"
  connectDN="cn=Manager,dc=example,dc=com"
  connectPassword="secret";
};
```

As can be seen from the Distinguished Names (DNs), these values are very company specific (in this case, Example Inc. whose domain is example.com). This is why they are required and not optional. connectDN and connectPassword attributes are included to show how to specify a particular admin logon when the LDAP server has been set up with access controls. Since most LDAP servers are not set up with such access controls, thus allowing anonymous access, these parameters are optional.

## Configuring Structured Document Update License

---

ACS requires a StructuredDocumentUpdateLicense. This license is checked by the WebDAV server whenever there is a check-out of a previously existing work unit. In addition to the standard client/server/expiry-time checks, it also checks for an authorized user list in the form of an Astoria group.

This group, **com.Ispeed.astoria.StructuredDocumentUpdateLicense**, which is created during installation/upgrade, controls the list of users who can edit structured documents. If you want to specify who can do structured document editing, you must modify the members of this group.

**Caution!** For security reasons, all group-based licenses (such as StructuredDocumentUpdateLicense) require up to 10 minutes to be updated internally following any changes to group members.

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## Administering ACS

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The following sections describe common errors that you may run into and their solutions, as well as uninstallation instructions.

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### Troubleshooting ACS installation

---

**If you run into problems during setup, check the following:**

- Check the standard InstallShield log files (**phase1.log**, **phase2.log**) in the install directory (e.g., **c:\Program Files\Astoria Software**) for error messages.
- Check the custom Astoria install logs in the install directory's log subdirectory (e.g., **c:\Program Files\Astoria Software\setup**) for error messages.
- If any customized IIS properties were reset, be aware that phase 1 Setup resets the IIS properties associated with ACS, including the following:
  - Any filters named "jakarta"
  - Any virtual directories named "jakarta"
  - Any virtual directories named "ief"

You will need to reapply any customizations you may have made to these IIS properties.

- If you receive the *Incompatible JRE - Click OK to uninstall* error, the installation/upgrade must uninstall the existing JRE and install a newer version of JRE which is compatible with the current release of Astoria. To do this, Astoria requires that pop-up blocking be turned off:
  - From Internet Explorer, use Tools/Pop-up Blocker to verify that blocking is turned off.
  - Click OK on the Incompatible JRE dialog.
  - Click Yes to close the window.
  - Click Run on the File Download dialog.

**Note:** If the above dialog doesn't appear, pop-up blocking is causing the installation to fail.

  - Click Run to execute the Astoria Applet Upgrader.
  - Follow the normal installation/upgrade instructions to continue.
- If phase 1 hangs with a *service stopped* dialog, you specified bad service credentials.
- If Installing WAN Applications from Server fails due to a security warning preventing the download, please see the "Configuring Internet Explorer" section on page 17.
- If you receive the *ProductException: (error code = 200; message="Java error"; exception = [ServiceException: (error code = -120000; message = "The security context could not be established due to a failure in the requested quality of service (e.g. mutual authentication or delegation)* error, you specified a bad userID/password combo. Check that the account is valid, not locked out, has proper perms, etc., that you are using the proper credentials, and rerun Setup.
- If you receive the *Open Astoria DB Wizard Action (testDatabaseOpenAction) says: The*

*database cannot be found* error, then the administrator installed the Astoria server but never created a database. Run **sysadmin.exe**, then install again.

- If you receive the *Error 1606: Could not access network location* error when downloading the Java Runtime Environment (JRE), either the server is too busy or the network is too congested. Click the Retry button on the error dialog. If that fails, wait for several minutes, reload the webpage, and retry the JRE installation.

**If setup succeeded but you are running into other problems, check the following:**

- If you are having trouble with your SGML documents, be aware that ACS supports XML. Many SGML documents will work fine, but some won't. ACS uses the Xerces XML parser. SGML syntax and semantics which differ from XML will cause problems.

- If you try to connect to an ACS server and the browser hangs with the following message:  
*loading ...*

This can occur when Internet Explorer tries to download the required java plug-in for the first time. Depending on your internet security settings, this operation may fail. Modify your Internet Explorer settings as follows:

- From Internet Explorer, choose Tools/Internet Options.
- Click on the Security tab, select the Trusted Sites icon, and then click Sites.
- In *Add this Web site to the zone*, enter **http://java.sun.com**
- Click Add.
- Close all dialogs and retry the operation.

- If a Tomcat Service ({Read/Write}\_{Number}) fails to start, check the tomcat logs at *\install-Di\jakarta\logs*.
- If IIS is missing the jakarta filter, the jakarta virtual dir, or the ief virtual dir, check the install log at *\install\Di\setup\ConfigureIIS.html*.
- Check that obsolete files from a previous install are not hanging around in JRE/lib/ext, perhaps **eclipse.jar**.
- If you receive the following error:

*Unable to install or run the Java2 plugin.*

ACS could not install the required Java2 plugin applet. This can occur when you do not have permission to install this applet, perhaps because you are not an administrator of the local computer. Ensure you have proper system permissions before running ACS again.

- If you try to start the ACS services and receive the following error:

*Microsoft Management Console Could not start the Read\_1 service on Local Computer. Error 1069: The service did not start due to a logon failure. [OK].*

You must grant special permissions to the userID.

- If you visit <http://localhost/ief/>, click on the link, and receive the following error:

*Error: 503 Location: /ier/foo.r Problem processing request: com.chrystal.asp.XD\_Exception: A user with a name of 'AstoriaGuest' could not be found.*

This is a temporary issue until you create an AstoriaGuest userID.

- If you visit `http://localhost/ief/`, click on the link, and receive the following error:  
*Error: 503 Location: /ier/foo.r Problem processing request: com.chrysal.asp.XD\_Exception: Object not found.*  
 Ensure that custom attributes are present.
- If you reboot the machine and Event Viewer states the following:  
*One or more services failed to start.*  
 Verify that you are able to start the services manually. If you can, the machine's performance may be insufficient. You should be using a server-class machine with sufficient physical memory.
- If your right-click menus seem to be getting truncated:  
 In rare cases, certain video cards may not properly display the right-click menus at higher resolutions. You must modify your video card's DPI (dots per inch) display to a lower resolution. To do this, right-click on the screen background, choose Properties, choose the Settings tab. Depending on the video card, you may also need to click the Advanced button to modify the screen's DPI to a lower resolution.
- If you receive the following error:  
*Internal error: Session Handle not provided*  
 Set your browser to accept cookies.
- If you receive the following error:  
*Internal error: Can't load application named nameOfYourApp. Exception: Traceback (innermost last): File "", line 1, in ? ImportError: no module named webformsOperations*  
 Check your `python.path` in your python registry.
- If you receive the following error:  
*A user with a name of 'foo' could not be found*  
 Make sure that there is a corresponding Astoria userID 'foo'.
- If Astoria WebDAV does not seem to be working, check the WebDAV log files found in the `Astoria Software\WebDAV\logs` directory. You may see a log entry toward the bottom of the file with the following error:  
*Unable to locate a login configuration.*  
 Verify the user whose credentials are being used to run the `AstoriaWebDAV_1` service has read access to the `c:\astoria\jrelastoria.java.login.config` file.
- If you're getting errors while using Arbortext when editing with WebDAV, please perform the following steps in your Arbortext Editor:
  - From the Tools menu, choose Preferences.
  - Select the Save category.
  - Uncheck the Write Recovery File checkbox.
  - Click Advanced.
  - From the Advanced Preferences dialog, select `saverenames`.

- Click Edit.
- From the Edit Preference dialog, choose Off.
- Click OK, to save the changes.
- Click Close to close the Advanced dialog
- Click OK to save all changes and to close the Preferences dialog.

**Additionally, here are some general troubleshooting tips:**

- The standard InstallShield setup logs are stored to *installDir\phase1.log* and *install-Di\phase2.log*. Check both these logs for errors (look for " wrn," or " err,").
- Check the IIS logs, which are typically located in *%WinDir%\System32\LogFiles*.
- Check each ACS application's logs in *installDir\WebDAV\logs*, *installDir\WebForms\logs*, and *installDir\WebServices\logs*.
- Check *c:\astoria\logs\xd\_err.txt* for error messages.
- Use Event Viewer (Start Menu/Programs/Administrative Tools/Event Viewer) to check for unexpected events.
- Additional log files are stored in the directory *installDir\setup*. Browse to this directory, and sort it by file extension. Note that there are a number of files with the extension ".stderr". These are text files. Check the contents of any .stderr file that has a non-zero size. You can ignore any messages about "processing new jar file", but any other message may indicate an issue.
- When using an integrated editor to edit from ACS, the ACS login name must match the name used to login to the machine.

## Uninstalling ACS

The following procedure describes how to remove ACS from your system.

**To uninstall ACS:**

- 1 Save a copy of your *installDir\license.cfg* file.  
This file contains license details.
- 2 From Add/Remove Programs in the Control Panel, select Astoria Communications Server Phase 2, and then click Add/Remove to proceed with uninstall.
- 3 From Add/Remove Programs in the Control Panel, select Astoria Communications Server, and then click Add/Remove to proceed with uninstall.
- 4 Delete the installation directory (e.g., *c:\Program Files\Astoria Software*).

**Note:** The files that remain in this directory were customized either by you or ACS.

## Schema Support Limitations

---

In theory, Schema declarations can appear on any element in a document. All schemas are in effect from the point at which they are declared until the end of the document.

In practice, schemas are declared on the root element of a document and nowhere else. In fact, many parsers (including Xerces) ignore all schema declarations unless they appear on the root element.

---

## WebDAV server support

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WebDAV Server, a licensed component of ACS, provides WebDAV clients secure access to documents and content within the Astoria content management system. This includes the following support:

- Astoria CMS access is supported from Microsoft Windows 2000/XP desktops as a “My Network Places” Web Folder icon, Internet Explorer Web Folder, or Mapped Network Drive. It is also accessible from the Mac OS X 10.2 desktop UI.
- All Astoria cabinets, folders and documents appear within the Windows Explorer window. WebDAV client applications can also open Astoria documents using the File Open... or similar processes without Astoria software installed on the WebDAV client.
- Conventional Windows file management, such as multi-document select, delete, copy, and move is supported.
- Astoria access controls apply to the actions available to the user.
- Supports reuse of both graphics and document content found in different locking units. It does so through use of the standard entity declaration and reference mechanism of XML.

---

## Providing HTML links to access Astoria CMS

---

If you would like to provide a link on an HTML page that will connect your users to the Astoria CMS using Windows Explorer, you can do so using Microsoft specific information. Add a style section to the head of the page as follows:

```
<HEAD>
  <STYLE>
    A {behavior: url(#default#AnchorClick);}
  </STYLE>
</HEAD>
```

Also, use a FOLDER attribute on the anchor tag (<a>) such as in the following example:

```
<HTML>
  <HEAD>
    <STYLE>
      A {behavior: url(#default#AnchorClick);}
    </STYLE>
  </HEAD>
  <BODY>
    <P>Welcome to Astoria, version 4.1.0-18-20031203.</P>
    <P>Test <A HREF="/AstoriaObjectProperties-jaxrpc/AstoriaObjectProperties">
      Web Services</A>.</P>
    <P>Test <A HREF="http://machine.corp.astoriasoftware.com/astoria"
      FOLDER="http://machine.corp.astoriasoftware.com/astoria">WebDAV</A>.</P>
```

```
</BODY>
</HTML>
```

The above will open an explorer window to the Astoria CMS on [dragonfire.corp.astoriasoftware.com](http://dragonfire.corp.astoriasoftware.com). Note that a sample page containing the above link is created for your server during ACS phase 1 installation. It is accessible at [\install\Di\ief\index.html](#).

## Differences between WebDAV and Astoria

---

There are some differences to be aware of when using WebDAV support compared with using standard Astoria. These differences are described here:

- **Save/Checkin** -- When using an XML editor, setting a version note at checkin time is different with WebDAV. Authors should use the ACS Web Access "Checkout Comment" field available on the property sheet of checked out documents, document elements, and files. Setting this field before closing the document window in the WebDAV client will cause the comment to be used as the version note.
- **Adding Elements** -- When using an XML editor, the WebDAV save function does not take into account any locking unit boundaries, set on elements in the DTD, when creating new locking units. Locking units will currently only be created for external document content referenced by an entity.
- **Drag/Drop XML Files** -- Dragging and dropping an XML file into a web folder referencing Astoria results in a new imported document. But it will not be partitioned into locking units, even if the associated dtd for that document specifies locking units and resides in our CMS.
- **Differencing** -- WebDAV differencing is not as sophisticated as that used by our warm integrated editors. Certain editing operations, such as rearranging the order of certain tags, may result in all sibling tags being versioned, as opposed to just the parent tag.
- **Creating Cabinets** -- WebDAV implementation does not currently support creating cabinets.
- **Editing (general)** -- It is recommended that you initiate editing sessions for database documents using ACS rather than using the File/Open command of the editor and accessing the database via My Network Places. Using File/Open does not ensure that the object will be locked while you are making edits.
- **Editing with FrameMaker** -- WebDAV implementation is not supported with FrameMaker.
- **Editing with Epic**

When using Epic with WebDAV, you must change the way that Epic saves files. By default, Epic will save the file using a temporary name, delete the original, and rename the temp to match the original. Unfortunately, this method removes any important references in the original document and destroys any version history for the elements affected. To avoid deleting the original when saving a file, you must perform the following steps in your Epic Editor:

- From the Tools menu, choose Preferences.
- Click Advanced.
- From the Advanced Preferences dialog, select *saverenames*.
- Click Edit.
- From the Edit Preference dialog, choose Off.

- Click OK, to save the changes.

- Editing with XMetaL

When using XMetaL with WebDAV, you must make sure the XMetaL application is closed before beginning a WebDAV edit session.

When using XMetaL with WebDAV, do not use the Choose button in XMetaL to reuse a graphic as that will cause a duplicate graphic to be imported. Instead, please use the following steps:

- From the navigation tree in ACS, right-click on the graphic file you wish to reuse, and then click Tag.
- From the XMetaL Tools menu, choose Graphic Entities.
- In the File URL field, right-click, and then choose Paste.
- Fill in the Graphic Entities dialog.
- Click New to declare the graphic.

---

## Fixed reported problems

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The following reported problems have been fixed as part of the ACS 4.7.1-24 release:

- Duplicate Emails sent when using parallel workflow (CID# 5294)
- No “splash page” Global Message after failed login (CID# 5295)
- Export Folder fails if folder contains several large files (CID# 5304)
- Unclear requirements to install the WAN apps (CID# 5328)
- Workbench map editor validation issues (CID# 5349)
- Web Access requires restart when changing message keys
- Web Client properties on element shows incorrect approval information
- Selecting “All Checkouts” in the nav tree takes a long time with some docubases
- Support for XMAX 5.0 needed

The following reported problems have been fixed as part of the ACS 4.7-24 release:

- Web services search failes on user 104 (CID# 3880)
- Under https, some URLs still use http (CID# 3945)
- Epic WAN Bridge: Save As should not have enabled menus (CID# 4116)
- ACS should auto recover upon ObjectStore or Astoria Server restart (CID# 4192)
- Epic WAN bridge does not install if user has Epic Styler installed (CID# 4239)
- Location and View mailnotes don't work when Workbench is open (CID# 4287)
- Astoria Menu disappears after "save" "checkin" in non-english versions of EPIC WAN Bridge (CID# 4301)
- Installation of ACS Phase 1 fails when password contains \$-characters (CID# 4305)
- WebDAV should produce message when AstoriaWebDAVLicense is not available (CID# 4326)
- Element Properties SOAP dialog should display full context (CID# 4365)
- ACS should remember last login (CID# 4371)
- ACS edit attempt blocks the LAN edit user (CID# 4374)
- IE windows blocked during certain operations (CID# 4381)
- Confirmation for "Delete" is inconsistent (CID# 4392)
- WebDAV: structured doc export fails because of DTD access (CID# 4410)
- ACS Services should exit when fatal errors occur (CID# 4416)
- FilteredExport doesn't filter if approval is on the structured document (CID# 4467)
- FileXMLExporter does not honor XD\_EXPGRAN\_SINGLE (CID# 4474)

- Potential security issues when using JRE installer (CID# 4507/4869)
- ACS reports history based on root element - should be XD\_Workunit (CID# 4535)
- Export via SOAP does not create extension for local exported external objects/linked graphics (CID# 4536)
- Export "Extract by date" doesn't work (CID# 4567)
- Export of objects with special chars results in invalid ZIP (CID# 4585)
- Issues in webformsOperations.py (CID# 4591)
- Approval Format: default mismatch: GUI / Java implementation (CID# 4610)
- No error message shown when an Export operation is not successful (CID# 4622)
- Error when committing property sheets for users without delete privilege (CID# 4625)
- Working directory location should not be requested (CID# 4667)
- Counting AstoriaWebDavLicense crashes w/ err 422 (CID# 4776)
- Log file configuration settings in cfg files and web.xml files should be described (CID# 4816)
- SOAP Dialogs too slow over WAN (CID# 4857)
- Error messages miss IP Address (CID# 4989)

The following reported problems have been fixed as part of the ACS 4.6.2-23 release:

- Workbench Preferences Editor Location should accept arguments
- Problems with LDAP authentication
- Erroneous permission messages seen during login
- Access denied errors occurring due to http/https mismatch
- Modified By column only displays changes made to the root element

The following reported problems have been fixed as part of the ACS 4.6.1-23 release:

- XMAX Editor browser plugin causes null pointer error
- Need ability to add version information with WordML
- Need to use proxy servers in Windows
- Update Entity Map fails if LogFile value is invalid

The following reported problems have been fixed as part of previous ACS releases:

- Need to support WordML
- Need to support authentication when sending email
- Need to limit resource consumption of large operations on the ACS server
- Compare reports a change to the word preceding a new tag insertion

- Must provide a list of attributes which can be used within .xsl
- doOperation should catch aborted transactions and send message to retry
- ACS-JobReviewAudience document opens slowly
- Need more messages to diagnose WebDAV problems
- Batch job error messages are not helpful or informative
- Need a way to show valid ancestries via WAN bridge
- Error in ACS sample code documentation
- Installer should validate the Windows credentials
- WebAccess doesn't enable a user to export all types of files
- Some custom attributes should not be automatically indexed
- Syntax for HTML tags in the Global Message should be simpler
- Cannot handle spaces in file names used by iENGINE when launching integrated editors
- Sorted Search appears sorted only in the content frame. Search results now appear in the navigation tree in sorted order
- Create Date not displaying correctly on property sheets
- Moving and copying folder items too restrictive
- Cannot easily revise checkout comment of structured document's non-root workunit
- Empty files do not import during create folder
- For multiple instances of a custom attribute on a object, the values were not displayed in the folder/column view. They are now displayed and separated by colons, as in "value1 : value2 : value3"
- Problems with access controls for annotations and groups
- Ticket type-in field in toolbar should treat enter key as "view" accelerator
- Should be able to target operations to new window
- iENGINE services shut down when user logs off of server
- Non-administrators cannot save searches
- Inadequate message when linking to iENGINE view link if the object no longer exists
- Login error message not informative
- Left-click on history of a document launches edit, not view
- Search using too much OS\_AS\_SIZE
- Get ('>ProductComponent',) when running a report
- Run out of address space when shadowing a cabinet
- Sort not working
- iENGINE installer needs improved logging
- g\_DefaultDomain needs to be removed from installed