Software

CentraSite

Importing/Exporting Registry Objects

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Importing/Exporting Registry Objects

This document describes how to import/export objects from one CentraSite registry to another.

The content is organized under the following sections:

Introduction	Describes the purpose of the import/export function.
Exporting and Importing Specific Object Types	Provides information on exporting and importing specific object types.
Exporting and Importing Objects Using CentraSite Control	Describes how to export and import registry objects with CentraSite Control.
Exporting and Importing Objects from the Command Line	Describes how to call export/import functions from a command line shell.
The Import/Export API: Reference Information (Javadoc).	API for exporting to and importing from an archive file.
See the document <i>Javadoc for APIs</i> for the Javadoc-style documentation of this API.	

1 Introduction

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CentraSite enables you to export registry objects from a registry to an archive file on the file system, and import them from the archive file into the same registry or to another instance of CentraSite.

Please note that the import/export feature is designed specifically for exporting selected objects from the registry. If you want to make a copy of an entire instance of the CentraSite registry/repository in order to move it to another machine or for disaster recovery purposes, see the section *Backing up the Database* in the document *Maintaining CentraSite's Internal Database*.



Important: Registry objects should only be imported and exported between CentraSite versions of the same release level; the import/export feature is *not* intended for migration purposes.

Which Objects Can You Export and Import?

The following native CentraSite objects are objects that you can select for export:

- Organizations
 - **Note:** By exporting an organization, it is possible to export and import the associated users, groups, roles and permissions.
- Users, including the groups that contain the users
- Asset Types (definitions) and Virtual Types
- Taxonomies
- Lifecycle Models
- Design-Time Policies
- Assets (instances)
- Run-Time Policies
- Report Templates

In addition, you can select the following asset types belonging to other components of the web-Methods Suite for export:

- BPM Process Project
- IS Package (from the Integration Server).

An Overview of the Export/Import Process

Exporting/importing registry objects and repository items is done in two steps; the exported objects are first copied to an *archive file* (a zip file that contains the exported registry objects and repository items) and at a later stage the contents of the archive file are imported into a target registry (which may be the registry from which the objects were exported or a different one).

- Exporting an Object
- Importing an Object

Exporting an Object

You can export an object using the CentraSite Control user interface, as described in *Exporting and Importing Objects Using CentraSite Control*, or from the command line, as described in *Exporting and Importing Objects from the Command Line*.

Be aware that when you export an object, CentraSite generally exports a number of additional objects besides the one you select. The specific set of objects that CentraSite exports with an object varies by object type (this topic is discussed in more detail below).

To export an object successfully, you must have view permission on the object that you select for export *and* all of the additional objects that CentraSite will export with that object.

After CentraSite completes the export process, it generates a report that identifies each of the objects that it attempted to export and indicates whether or not the object was exported successfully. The export report also identifies all referenced objects that were omitted from the archive file.

The following sections describe how the export process handles various aspects of an object. Review this information before exporting an object to ensure that you create an archive that can be imported successfully.



Important: The following information reflects the behavior of the predefined export handlers that are installed with CentraSite. If your site uses custom export handlers, consult your administrator for information about their behavior.

How the Export Process Handles Object Ownership

An object's ownership attributes are *included* with the exported object. However, this data is imported with an object only if the **Keep current owner** and **Keep current organization** options are enabled at import time. For more information about these options, see *How the Import Process Assigns the Ownership of an Imported Object*.

How the Export Process Handles Instance Level Permissions

The export process *does not* export the instance-level permissions that are assigned to an object.

Objects that CentraSite Includes when it Exports an Object

The additional objects that CentraSite includes in the archive file are determined by the specific export handler that is associated with the exported object's type. Generally speaking, CentraSite includes the following objects with any object that you export:

- The supporting documents that are attached to the object.
- The type definition of the object, if the object type is a custom object type or a modified predefined object type.
- The taxonomy associated with the object type, if the taxonomy is a custom taxonomy or a modified predefined taxonomy.

Additionally, if the object is an instance of a composite type, CentraSite also exports the object's components (shared and non-shared) and required objects. See the document *Object Type Management* for a description of composite types.

For the exact set of objects that CentraSite exports for a given type of object, see *Exporting and Importing Specific Object Types*.

Objects that CentraSite Does Not Include when it Exports an Object

Normally, the export set for an object contains all of the objects referenced by the object (referenced standard objects such as predefined asset types are not included, since these can be expected to exist on the target machine). Nevertheless, you might want to examine the export report for warnings. If there are warnings and they identify objects that will not be present in the target registry at import time (usually indicated by a INMIEW0038 warning in the report), you must do one of the following:

Export the referenced objects separately and import them into the target registry before you import the archive file that you just created.

-OR-

Use the Add to List command to build a list that includes the object that you want to export and all of the objects that are identified by the INMIEW0038 warnings. Then, export the list. Doing

this will produce an archive file that contains the object that you want to export plus all of the objects that it references. See the section "Using the CentraSite Control User Interface " in the document *Logging On and Using the CentraSite UIs and APIs* for information about working with lists.

Exporting Objects that Use Custom Associations

CentraSite does not automatically export the custom association type definitions for objects that contain custom associations. If you export an object that is related to another object through a custom association, CentraSite will export the related object, but will not export the type object that defines the custom association. If that type definition does not exist on the target registry, you must import it beforehand or include it in the archive file with the object that contains the custom association. For ways to do this, see *Objects that CentraSite Does Not Include when it Exports an Object*.

How the Export Process Handles Supporting Documents

When you export an asset, all of the asset's supporting documents are exported with the asset.

Note: The export feature does not provide a way to export supporting documents or other repository items directly. However you can use the **Download** button on the Supporting Document Library page to download documents from one instance of CentraSite and then upload them to another.

How the Export Process Handles Other Versions of an Object

If you export an asset that is versioned, the exported asset will include a reference to the *previous version* of the asset. However, the referenced version itself will not be included in the archive. Unless the referenced version exists on the target machine or you create an archive that includes the referenced version of the asset, the reference is removed on import.

Exporting Objects Between Different Versions of CentraSite

CentraSite does not restrict the transfer of objects between different product versions. However, if for example a user-defined type is exported and already exists on the target machine, the import will fail if the existing type already has instances and the modification of the type due to the different product version is such that the existing instances do not validate with the type any longer. Typically, enhancements of the type with additional fields do not cause any problems, but modification of existing fields may lead to unexpected results.

Importing an Object

You import an object by importing the archive file to which it was previously exported. You can import an object into the same CentraSite registry from which it was originally exported or to a different CentraSite registry.

The import dialog displays the contents of the archive to be imported, and you can select either the entire archive or just a subset of the objects to import.

Note: If the archive contains a registry object with references which cannot be satisfied during import, the import process will continue but this object is not imported.

To import an object, you must have permissions to create that type of object in the target registry. If the object that is to be imported already exists in the target registry, you must have permission to edit the existing object. If you attempt to import an object but do not have the proper permissions, the import process will fail.

To import object types, you should have the role "Asset Type Administrator". To import organizations or users, you must have the role "CentraSite Administrator". Without that role, the importing of user-defined types will fail.

For more information about permissions, see the document Users, Groups, Roles, and Permissions.

When an archive is imported, the importer reads the contents of the archive file and either *adds* its contents to the target registry (if the object does not already exist), or *replaces* existing objects with the objects from the archive. The importer checks the object's UUID to determine whether it already exists; for more information on UUIDs see *Understanding Object Identity*.

An object is *ignored* when the same object with an identical timestamp already exists. If objects are identical but the object to be imported has an older timestamp than the one in the registry, the import is *rejected*. For more information see *What Happens When an Imported Object Already Exists in the Target Registry*?.

In the import dialog you can use the option **Assign new organization** to select a new organization into which the objects will be imported, or you can retain the original organization, in which case the original associations of the assets are maintained if the organization is available on the target; if the organization does not exist on the target, the import will fail and the importer log will record this fact.

In some cases, the original organization will be preserved during import even if you have selected a specific organization in this field. This happens if the object to be imported is any of the following:

- an organization
- a system-wide lifecycle model
- a system-wide policy

Asset types are not owned by any organization, so selecting an organization for such objects has no effect.

If you set the **Allow replace of registry objects** option in the import dialog, the imported object will overwrite the existing object even if it is older than the object in the target registry.

If you set the option **Keep current owner** in the import dialog and the original owner exists on the target machine, the assets will belong to that user after import; as a further requirement, this user on the target machine must have the same UUID as the original owner. If this user does not exist on the target, the import will fail and the importer log will record this fact. The **Keep current owner** option will be disregarded if a conflicting user is ignored at import; in that case the import will succeed and the objects will belong to the importing user.

Understanding Object Identity

Each registry object is identified by its own unique Universally Unique Identifier (UUID). CentraSite assigns a UUID to an object when it adds the object to the registry. After an object is created, its UUID cannot be changed.

You will sometimes see an object's UUID displayed in the user interface. When the UUID is shown for an object, it appears in the object's Key attribute, and it looks something like this: uddi:2d621948-89f3-11df-851c-a3fb7c9c098e.

During an import/export process the importer uses the UUID to determine whether an imported object already exists in the target registry. If an identical object (i.e., an object with an identical UUID) already exists in the target registry, the timestamps of both the existing object and that to be imported determine whether and in which way the importing process continues. For more information, see *What Happens When an Imported Object Already Exists in the Target Registry*?

What Happens When an Imported Object Already Exists in the Target Registry?

When the user attempts to import an archive and the importer determines that an object in the archive file already exists in the registry, there are different ways for the importer to react, depending on the timestamps of the objects:

- 1. The imported object has a newer timestamp than the existing one. The existing object is *replaced* and the import executes successfully.
- 2. The timestamps are identical. The object is *ignored* and the import executes successfully.
- 3. The imported object has an older timestamp than the existing one. The object is *rejected*, but this does not cause the import process to fail.

If the **Allow replace of registry objects** option has been set in the import dialog, the existing object will be overwritten automatically even if the imported object is older than the object in the target registry. This may be a potential source of problems, because all objects in the registry depending on it will be affected as well.

If you intend to use this functionality to transfer objects between instances of CentraSite, make sure that the system clocks on all of the involved servers are synchronized.

How the Import Process Assigns the Ownership of an Imported Object

The organizational and user ownership information for an exported object is present in the archive file. However, how ownership is assigned to the imported object is determined by 1) whether the object is added to the target registry as a new object or replaces an existing object and 2) whether the **Keep current owner** option is set.

- If the imported object replaces an existing object in the registry, the existing object is replaced, but its **Owner** and **Organization** attributes remain unchanged (i.e., the updated object belongs to the same organization and user as it did before it was replaced by the copy from the archive file).
- If the imported object is added to the registry as a new object, its organizational and user ownership is determined by the following parameters:
 - If Keep current owner is set in the import dialog, and the original owner exists with the same UUID on the target, the objects will belong to that user after import; if the user with the same UUID does not exist on the target, the import fails.

If **Keep current owner** is *not* set in the import dialog, the importing user will be the owner of the object.

If Keep current organization is set in the import dialog, the original associations of the objects are maintained if the organization exists with the same UUID on the target; if the organization with the same UUID does not exist on the target, the import will fail.

How Referenced Objects are Handled During Import

If an object to be imported contains a reference to another object, the importer determines whether the referenced object is contained in the archive file or present in the registry. If the referenced object is present in the archive file, the importer will import it as necessary to resolve the reference.

If the referenced object is not present in the archive file or the target registry, the object containing the reference is not imported.

How Lifecycle State is Handled During Import

If an object to be imported includes state information, the importer checks whether a lifecycle model containing the specified state exists on the target registry.

The option **Keep lifecycle state** in the import dialog determines whether the lifecycle state of assets in the archive should be preserved during the import. If you mark the checkbox, the lifecycle state of each imported asset will be set to the same value as the asset's lifecycle state in the archive being imported.

This operation is available when the lifecycle model itself is in the "productive" or "retired" state.

This operation is only possible for any given asset if the lifecycle model governing the imported asset contains the same lifecycle state as the state in which the asset was originally exported to the archive. If the lifecycle model for the imported asset does not contain the same state as the state of the asset in the archive, the state of the imported asset will be set to the initial state of the lifecycle model that governs the imported asset.

If the target registry has no lifecycle model for the type of object that you are importing, the imported object's lifecycle state information, if present in the archive file, is ignored.

If the target registry uses a different lifecycle model than the one used by the imported object, the object's lifecycle state information, if present in the archive file, is ignored and the object enters the initial state of the lifecycle model that is in effect for its type on the target registry.

Important: If the object you are importing was exported from an instance of CentraSite that has assigned a "stage" to the object's lifecycle state, the object can only be imported to the registry whose address is specified in that stage. For more information about stages, see **Promotion**.

What Policies are Triggered During an Import

When the import process adds a new object to the registry, CentraSite will apply relevant PreCreate and PostCreate policies in the same way as if you had created the object manually.

If the import process replaces an existing object in the registry, CentraSite will likewise trigger the applicable PreUpdate and PostUpdate policies.

Note, however, that these policies are *not* activated when a complete organization is imported.

For more information on Policies, see the document Working with Design/Change-Time Policies.

Promotion

CentraSite supports configurations where different CentraSite instances are used to represent lifecycle stages or usages. So CentraSite could for example be set up with two instances **development** and **production** to represent the different phases in a software development lifecycle; it could also be set up with instances differentiating between asset creation and asset consumption aspects. For more information on lifecycle models, see the section *Choosing a Deployment Strategy* in the document *CentraSite Implementation Concepts*.

Promotion refers to the capability to copy an asset, a lifecycle model or a policy from one lifecycle stage to another; this is done by exporting the object from its current registry and importing it into the registry that hosts the next phase of its lifecycle.

A stage definition in CentraSite is managed by a lifecycle stage object which describes a CentraSite instance by name and configuration information.

Those stages are assigned to lifecycle model states to define the allowed promotion paths for objects in a certain lifecycle state. To promote an object from one lifecycle stage to another, the object is exported (and optionally deleted) from the source registry and then imported in the target registry.

When any object from the source registry is in an end state, one or more registries can be defined to which the object can be imported; attempting to import it into any other target will subsequently fail.

On import, the registry object keeps its lifecycle state if its lifecycle model is available in the target registry; if the model does not exist, the object is set to the initial state in the default lifecycle model.

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This section covers the following information:

Important: These sections describe the export sets produced by the predefined export handlers installed with CentraSite. If your site has installed custom export handlers for certain object types, consult your administrator for information about the export sets that they produce.

Organizations

When you export an Organization, the export set consists of:

- The definition of the organization itself
- The contents of the Supporting Documents library of the organization

Additionally, you can optionally export the following objects with the organization:

- Lifecycle models
- Policies
- Child organizations with their related objects
- Assets belonging to the organization
- Definitions of users, groups and roles, together with their associated permissions.

Notes:

- 1. Groups, Roles and Permissions objects cannot be directly exported. You can only export these kinds of objects by exporting the organization to which they belong.
- 2. If lifecycle models and policies are selected to be exported with the organization, users are automatically selected for export also. If lifecycle models and policies are not included in the export, you have the option to select the users for export.
- 3. If the organization is exported with users and a user is a member of one of the organization's groups without being related to the organization itself, then this user will not be exported with the organization. This is true even if the user is the Organization Administrator.
- 4. If the organization was exported without users or if the Organization Administrator belongs to a foreign organization, the Organization Administrator will be set to the importing user on import; otherwise the Organization Administrator will not change. An organization's Primary Contact will always be the importing user.
- 5. If the replace option was set and the imported organization is already present in the target registry, its associated groups and users will be updated. Furthermore, if the export included users, the groups are entirely replaced with the corresponding information of the export set,

i.e., users may be added to or deleted from the organization and the groups. However, if the export did not include users, the organization and its groups will retain their users.

6. If an archive with one or more organizations is imported, then the **Keep current organization** option is implicitly switched on, thereby ensuring that all objects will be imported to their original organization.

Users

When you export a user, the export set consists of:

- The user object itself.
- All groups that contain the user.

If an organization with users is imported where the user is already present in the target registry, the import of the user object is ignored and the object is not replaced. This is also true when only the user name but not its Key attribute are identical; in this case the conflicting user will be ignored at import and a warning message is displayed. The user is removed from its group and any **Keep current owner** settings referring to this user are ignored.

If a user was not already present in the target registry, the organization of the user in the target registry is decided as follows:

- If "Keep Organization" is selected during the import and the corresponding organization is not available in the target registry, then the import fails.
- If you select a new organization during the import, then the user is assigned to the selected organization in the target registry.
- The same rules apply for imported groups.

Asset Types and Virtual Types

When you export an asset type or a virtual type, the export set consists of:

- The type definition.
- The XSD file that contains the type definition.
- Optionally, all instances of the asset type or virtual type.
- The user defined or customized predefined type definitions of all types and association types that are referred to by the asset type or virtual type being exported. This applies recursively, i.e., if a referenced asset type also contains such references, then these are also included in the export set. The instances of such referenced types are NOT included in the export set, even if the option **Include instances** is set.

Other user defined or customized predefined objects (taxonomies etc.) that are referred to by the type being exported.

See also the section Asset Instances for details of the information that is exported for asset instances.

Taxonomies

When you export a taxonomy, the export set consists of:

- The taxonomy object
- All categories belonging to the taxonomy (the entire dependency tree)
- Repository resources (icons)
- Optionally, all objects classified by categories of this taxonomy.

Lifecycle Models

When you export a lifecycle model, the export set consists of:

- The lifecycle model object itself.
- Optionally, all objects governed by the lifecycle model.
- All references to lifecycle state permissions. During the import of the archive in the target registry, if the user/group referenced in the lifecycle state permission exists in the target registry, then the permissions will be saved, otherwise the references will be removed during the import.

Design/Change-Time Policies

When you export a design-time policy, the export set consists of:

- The design/change time policy
- Policy actions that the policy uses

For detailed information about exporting and importing design/change-time policies see the section *Exporting and Importing Design/Change-Time Policies* in the document *Working with Design/Change-Time Policies*.

Asset Instances

When you export an instance of an asset, the export set consists of:

- The asset object itself.
- All supporting documents associated with the asset.
- The asset's type definition, if the type is a custom type or a modified predefined type.
- The taxonomy associated with the asset type, if the taxonomy is a custom taxonomy or a modified predefined taxonomy.
- All referenced objects to which the asset has an association.
- For each exported asset instance, the export set contains all referenced asset types and association types. This means that when the export set is imported on the target machine, imported assets have no unsatisfied references.
- Assets that are referenced by the assets that you wish to export (if you select the option Include assets referenced by selected assets). If referenced assets themselves reference other assets, also those assets will be included; this selection process is repeated until all asset references are satisfied.

Note: This option can cause the size of the export set to be very large.

- **Note:** When you export a service asset that refers to XML Schemas, the referenced XML Schemas are also exported automatically, provided that you have permission to export them. If you do not have permission to export a referenced XML Schema, the referenced XML Schema will not be exported and a warning message will be logged.
 - Note:

If the asset is an instance of a composite asset, the export set will also include:

- All components (shared and non-shared) associated with the asset.
- All required objects associated with the asset.

For the list of shared and non-shared components associated with the predefined composite types installed with CentraSite, see the section *Working with Composite Types* in the document *Object Type Management*.

Report Templates

When you export a report template, the export set consists of:

- The report template itself.
- The associated RPT design file from the repository.

BPM Process Project

The asset type "BPM Process Project" is one of the webMethods Suite asset types for which CentraSite provides an export function.

When you export an instance of a BPM Process Project, the export set consists of:

- The BPM Process Project asset itself.
- The BPM Process Project's type definition, if the type is a custom type or a modified predefined type.
- All components (shared and non-shared) associated with the asset.

For the list of shared and non-shared components associated with the predefined composite types installed with CentraSite, see the section *Working with Composite Types* in the document *Object Type Management*.

All required objects associated with the asset.

Integration Server Assets

The asset type "IS Package" is one of the webMethods Suite asset types for which CentraSite provides an export function.

When you export an instance of an IS Package, the export set consists of:

- The asset itself.
- The asset's type definition, if the type is a custom type or a modified predefined type.
- All components (shared and non-shared) associated with the asset.

For the list of shared and non-shared components associated with the predefined composite types installed with CentraSite, see the section *Working with Composite Types* in the document *Object Type Management*.

IS Server assets that are referenced by the assets that you wish to export (if you select the option Include Assets referenced by selected Assets). If referenced assets themselves reference other assets, also those assets will be included; this selection process is repeated until all asset references are satisfied.

Exporting and Importing Objects Using CentraSite Control

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This section describes how to export and import objects using CentraSite Control.

Exporting Objects Using CentraSite Control

With CentraSite Control, you can export one or more objects in each export operation. To export an object, you typically select it in the navigation view and then specify which related objects you would like to export along with it.

The export operation creates an archive file on the file system. The archive file contains a copy of the objects that you have exported. The archive file can be imported afterwards into the same CentraSite registry or into a new registry. See the section **Importing Objects from an Archive Using CentraSite Control** for details of the import operation.

Objects can be exported either by right-clicking the object you wish to export and choosing **Export** on the context menu, *or* by using the **Actions > Export** menu entry, *or* by clicking the **Export** icon. The **Actions > Export** menu entry and the **Export** icon allow you to export multiple objects in one step whereas the context menu only allows you to export a single object.

If you have created a list in your **My Favorites** area, you can export the set of objects in the list by using the **Export** option in the list's context menu. See the topic *Working with My Favorites* in the document *Logging On and Using the CentraSite UIs and APIs* for information on defining lists.

Some objects in the registry do not support all of the export methods; check the user interface to see which controls are available for the type of object you want to export.

Note: You must have *view* permission for the assets you want to include in the export set.

To export an object or a set of objects

- 1 In CentraSite Control, go to the page that contains the object or the set of objects that you want to export. For example, if you want to export a taxonomy, go to the Administration > Taxonomies page, or if you want to export the contents of a list, go to Home > My CentraSite > My Favorites to see your defined lists.
- 2 Locate the object or the set of objects you want to export and choose **Export** from the context menu,

Or:

If the **Actions** menu is visible, select the object or set of objects you want to export and choose the **Actions > Export** menu entry.

Or:

If the **Export** icon is visible, select the object or set of objects you want to export and click the **Export** icon.

3 The export dialog shows the selected objects and all dependent objects. The colored icon beside each object indicates whether the object is one of the selected objects or a dependent object.

The checkbox beside each object indicates whether or not the object should be included in the export set. By default, all displayed objects are included in the export set.

If you wish to remove an object from the export set, unmark its checkbox. This removes the object and all of its dependent objects (if any) from the export set.

4 For some object types, additional export options are available. In this case, the button **Export Options** is activated, and when you click this button, a dialog opens that shows these additional export options. If you are exporting objects that are contained in a list, and the list contains more than one object type, you will see several tabs, with one tab per object type.

Object type	Available export options
Asset	Include assets referenced by selected assets If the selected assets contain references to other assets, then include the referenced assets also in the export set. This selection process is repeated recursively until all asset references are satisfied.
Lifecycle Model	Include assets for selected lifecycle models Include all assets that are governed by the lifecycle model.
	Include assets referenced by selected assets If the assets that are selected by the option Include assets for selected lifecycle models contain references to other assets, then include the referenced assets also in the export set. This selection process is repeated recursively until all asset references are satisfied.
Taxonomy	Include assets for selected categories Include all assets that are classified by categories of the taxonomy.
	Include assets referenced by selected assets If the assets that are selected by the option Include assets for selected categories contain references to other assets, then include the referenced assets also in the export set. This selection process is repeated recursively until all asset references are satisfied.
Asset Type	Include assets for selected asset types Include all assets that are instances of the asset types.
	Include assets referenced by selected assets If the assets that are selected by the option Include assets for selected asset types contain references to other assets, then include the referenced assets also in the export set. This selection process is repeated recursively until all asset references are satisfied.

The available options depend on the type of object you wish to export.

Object type	Available export options
Organization	Include users Include all users who belong to the organization.
	Include child organizations Include all organizations that are child organizations of the organization. If the option "Include assets of organization" is selected, include also all assets that belong to the child organizations.
	Include lifecycle models and policies Include all lifecycle models and policies that have been define for the organization.
	Include assets of organization Include all assets that belong to the organization.
	Include assets referenced by selected assets If the assets that are selected by the option Include assets of organization contain references to other assets, then include the referenced assets also in the export set. This selection process is repeated recursively until all asset references are satisfied.

Click **OK** to complete the object selection.

- 5 Click **OK** to start the export.
- 6 Specify a name for the archive file when prompted to do so.
- 7 When the export is complete, examine the export report to verify that the objects were exported successfully.

A confirmation message appears when the export is complete. Here, you have the possibility to view the export log, in order to verify that the objects were exported successfully. To do this, click on the **Export Log** link.



Important: If the report indicates that certain associated objects have been omitted from the archive, you will need to make sure that these objects are either present in the target registry when the archive is imported or create an archive that includes them. For additional information about exporting associated objects, see *How the Export Process Handles Associated Objects*.

Importing Objects from an Archive Using CentraSite Control

This section describes how to import objects from an archive file that was previously created by using the CentraSite export feature. The archive you wish to import must reside in the file system of the computer where your browser is running.

For general information about what happens during the import operation, see the section *Importing an Object*.

To import objects from an archive file

1 In CentraSite Control, go to any page that displays the **Import** button. Examples of pages that include this button are:

Asset Catalog > Browse Policies > Design/Change-Time Administration > Taxonomies

2 Click the **Import** button. This activates the import dialog.

In the field **Import as**, select **Archive** from the drop-down list. When you select this option, the layout of the wizard changes to show just the fields that are required for importing an archive.

In the field **File**, supply the name of the file that contains the archive.

Click Finish. The Import Preview page is now displayed.

- **Note:** If the archive you wish to import was created with CentraSite 8.2 or earlier, the **Import Preview** page is not available. In this case, when you click **Finish**, the import operation continues with the **Import Options** dialog in step 4.
- 3 The **Import Preview** page displays the names of the top-level objects contained in the export archive. If the archive contains related objects that the top-level objects require for completeness, the related objects are not displayed, but they will be imported automatically along with the top-level objects. For example, an exported web service requires a related schema, so the archive file will contain both the web service and the schema, and an import of the web service will cause the related schema to be imported also.

By default, all displayed top-level objects are selected for import; this is indicated by the marked checkbox beside the name of each object.

You can exclude objects from the import by unmarking their checkboxes.

Note: In some cases, there may be a dependency between top-level objects (for example, a web service that refers to a taxonomy), and the import operation ensures that such dependencies are retained. This means that if you unmark the checkbox of a top-level object that is required by another top-level object, CentraSite will ensure that the required object is nevertheless included in the import.

Additional options are available that allow you to choose how the imported objects will be created. To access these options, click **Import Options**.

4 In the **Import Options** dialog, set the following options.

Option	Meaning
Keep current organization / Assign new organization	When you import objects, you can import them into the same organization in the target registry as in the source registry from which they were exported, or you can assign a new owning organization.
	Choose Keep current organization to import the objects into the same organization. The organization in the target registry must have the same name and UUID as in the source registry.
	Choose Assign new organization to import the objects into a new organization. If you choose this option, you can select the new organization via the Select Organization button.
	In some cases, the original organization will be preserved during import even if you have selected a specific organization in this field. This happens if the object to be imported is any of the following:
	an organization
	a system-wide lifecycle model
	a system-wide policy
	Asset types are not owned by any organization, so selecting an organization for such objects has no effect.
Keep current owner / Assign new owner	The imported objects can be assigned to the same owner as in the source registry, or you can assign a new owner.
	Choose Keep current owner to assign the imported objects to the same owner as in the source registry. The owner in the target registry must have the same name and UUID as in the source registry.
	Choose Assign new owner to assign the imported objects to a new owner. If you choose this option, you can select the new owner via the Select Owner button.
Keep lifecycle state	This option determines whether the lifecycle state of the imported assets is preserved. Enable the option to retain the lifecycle state of the assets being imported.
	For more information, see <i>How Lifecycle State is Handled During Import</i> .
Allow replace of registry objects	Choose this option to specify that existing objects with the same name in the target registry will be overwritten, even if the object in the archive is older than the one in the target registry. For more information about this option, see <i>What Happens When an Imported Object Already Exists in the Target Registry</i> ?
Import groups that the user belongs to	When you import a user, you can specify whether you want to also import the groups that the user belongs to. This applies only to user-defined groups; system-defined groups are not imported.
	Choose this option to import the user-defined groups that the user belongs to.

5 Click **OK** to leave the **Import Options** dialog.

If you are importing an archive that was created with CentraSite 8.2 or earlier, the import now starts.

If you are importing an archive that was created after CentraSite 8.2, the **Import Preview** dialog is displayed again. Now click **OK** to start the import.

6 When the import operation completes, the import wizard informs you if the import was successful or if there were any errors.

You can click **OK** here to terminate the import wizard without viewing the import log.

Alternatively, to see details of the objects that were imported, the wizard offers you a link to view the import log. When you click this link, the import log lists each top-level object and indicates whether or not it was successfully imported. The import log also lists the import status of any related objects that were contained in the archive (i.e. objects in the archive that are not top-level objects).

In the import log view page, click **OK** to terminate the import wizard.

Hints for Importing

Handling of Missing Required Attributes of Assets when Importing

It is possible that an asset type definition in the source registry is different from an asset type definition with the same name in the target registry. This could happen if, for example, the asset type in the target registry represents an updated version of the asset type with different attribute definitions.

If an asset type has an attribute that is required in the target registry but not in the source registry, such a mismatch will occur.

The way CentraSite handles this situation on the target registry depends on the attribute type:

- If the attribute type is one that has a default value, such as "slot" or "classification", CentraSite assigns the default value to the attribute when the asset is imported.
- If the attribute type is one that does not have a default value, for example an attribute type that represents a file name or relationship, an error will occur during the import of the archive, because the target registry requires a value for the attribute. Under such circumstances, the affected asset will not be imported and the import log will contain appropriate error messages. In such cases, you need to ensure that a value is supplied for the attribute before the asset is exported from the source registry.



Exporting and Importing Objects from the Command Line

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Registry objects can be exported from and imported into CentraSite by using a command line interface. This section describes the calls and the parameters. In either case (exporting and importing), you must include the CentraSite JAR files in your Java classpath. It is usually convenient to include all the JAR files that are in the CentraSite *redist* folder (typically *C:\SoftwareAG\CentraSite\redist*).

Exporting Objects from the Command Line

The syntax of the export call is as follows:

```
com.centrasite.importexport.ExportOperation [-noinstances]
    [-deleteafterexport]
    [-orgnorelated]
    [-orgwithpolicyandlifecycle]
    [-orgnochildorganization]
    <CentraSite_URL>
    <archive_filename>
    <user>
    <password>
    { <concept> | <guid> }...
```

The meanings of the parameters are as follows:

-noinstances

When exporting a CentraSite asset type (represented by a Concept object) or a taxonomy (represented by a Classification Scheme object), no instances of them are exported.

For other objects, this option is ignored.

-orgnorelated

When exporting an organization, related registry objects, that is users, groups, roles and permissions, will not be exported.

-orgwithpolicyandlifecycle

When exporting an organization, its related policies and lifecycles will also be exported.

-orgnochildorganization

When exporting an organization, its child organizations will not be exported.

<CentraSite_URL>

The URL of the CentraSite registry/repository; typically http://localhost:53307/CentraSite/CentraSite.

<archive_filename>

The name of the export archive file (ZIP file).

<user>

The user-ID of the CentraSite user to be used for the import operation.

<password>

The user's password.

<concept>

The name of a JAXR-based concept to be exported.

<guid>

The GUID of a CentraSite registry object to be exported, prefixed by "uddi:", for example: "uddi:207ff1cc-25c5-544c-415c-5d98ea91060c".

Importing Objects from an Archive using the Command Line

The syntax of the import call is as follows:

```
com.centrasite.importexport.ImportOperation [-setreplace]
    [-importorg <org_key>]
    [-keepowner]
    [-keeporganization]
    <CentraSite_URL>
    <archive_filename>
    <user>
    <password>
```

The meanings of the parameters are as follows:

-setreplace

When an object is to be imported, the timestamp of the object in the import archive file is compared with the timestamp of the corresponding object with the same GUID in the registry, if the latter exists. If the timestamps are equal, the object is not imported. If the archive timestamp is older than the registry timestamp, the object is only imported if this optional parameter is present; otherwise, it is skipped.

-importorg <org_key>

By default, objects are imported into the current user's organization. Use this optional parameter if you want to specify a different organization into which the objects should be imported. The keyword is followed by the organization's GUID, prefixed by "uddi:", for example: "uddi:207ff1cc-25c5-544c-415c-5d98ea91060c". Note that this parameter has no effect if the -keeporganization parameter is set.

-keepowner

This option will maintain the original owner of the importing objects. This requires the original owner to exist with the same UUID on the target machine.

If this parameter is not set, the importing user will be owner of the objects.

-keeporganization

This option will maintain the original organization of the importing objects. This requires the original organization to exist with the same UUID on the target machine.

Note: If an organization is imported with its assets, this option is activated automatically.

<CentraSite_URL>

The URL of the CentraSite registry/repository; typically http://localhost:53307/CentraSite/CentraSite.

<archive_filename>

The name of the export archive file. The archive file can contain an organization with its assets or can contain a set of objects that were exported from one or more organizations.

<user>

The user-ID of the CentraSite user to be used for the import operation.

<password>

The user's password.