

# Web Experience Management Framework

Version 1.0

REST API Resource Reference



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*FatWire Web Experience Management Framework*

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# REST API

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# Overview

FatWire Web Experience Management (WEM) Framework provides a REST API for accessing Content Server's data. REST services are supported on both Content Server and Satellite Server to leverage the Satellite Server cache.

The default location of REST resources is under Content Server's BaseURI:

```
<protocol>://<hostname:port>/<servletPath>/REST/
```

For example, on a local installation the BaseURI could be the following:

```
http://localhost:8080/cs/REST/
```

The <BaseURI>/application.wadl file lists URLs for all resources described in this reference.

## REST Resources

This section lists all supported REST resources. Each resource has two types of views: list and detail.

The list view lists resources of a given type. Each list item presents a resource and an href pointing to the detailed view. For example, the resource <BaseURI>/users returns a list view naming all users in the system, among them fwadmin.

```
<users>

  <href>http://localhost:8080/cs/REST/users/fwadmin</href>
  <name>fwadmin</name>

</users>
```

The fwadmin entry presents an <href> that specifies the URL of the detail view where more information about fwadmin can be found.

This section lists available REST resources, supported REST methods, and error codes that can be returned if the resource does not exist or unforeseen errors occur.

Except for /timezone and /userlocales, all other REST resources are protected. For information about REST resource security, see the WEM Framework developer and administrator guides.



## Asset Type

### All Asset Types

/types

Description	This resource reads the list of asset types in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

### Selected Asset Type

/types/{assettype}

Description	This resource displays detailed information about the specified asset type.
REST Methods	GET, PUT, DELETE
Possible Error Codes	404 if asset type does not exist 500 if unforeseen error occurred

### All Subtypes

/types/{assettype}/subtypes

Description	This resource reads all subtypes of the specified asset type.
REST Methods	GET
Possible Error Codes	404 if asset type does not exist 500 if unforeseen error occurred

### Selected Subtype

/types/{assettype}/subtypes/{subtype}

Description	This resource reads the specified subtype of the specified asset type.
REST Methods	GET
Possible Error Codes	404 if asset type or subtype does not exist 500 if unforeseen error occurred

**Site-Enabled Asset Types**`/sites/{sitename}/types`

Description	This resource lists all asset types on the specified site.
REST Methods	GET
Possible Error Codes	404 if site does not exist 500 if unforeseen error occurred

**Site-Specific Asset Type Search**`/sites/{sitename}/types/{assettype}/search`

Description	<p>This resource supports searches on the specified asset type on the specified site.</p> <p><b>Note:</b> Access to any search is provided by granting <code>LIST</code> privileges on an <code>Asset</code> resource. In this case, search access can be configured per site or for all sites, but not per asset type. All users with access to the search service will be able to search assets of all asset types (in a particular site, if one is specified).</p>
REST Methods	GET
Possible Error Codes	404 if site does not exist

**Global Asset Type Search**`/types/{assettype}/search`

Description	<p>This resource supports searches on the specified asset type.</p> <p>For this resource to work, the asset type index must be configured in Content Server (otherwise, an exception is thrown and the 404 error code is displayed to the user).</p> <p><b>Note:</b> Access to any search is provided by granting <code>LIST</code> privileges on an <code>Asset</code> resource. In this case, search access can be configured per site or for all sites, but not per asset type. All users with access to the search service will be able to search assets of all asset types (in a particular site, if one is specified).</p>
Query Parameters	<p><b>q</b></p> <p>Specify a query String, the search engine-specific query that was specified during the index configuration. (The default search engine is Lucene.)</p>

**Global Asset Type Search** *(continued)*`/types/{assettype}/search`**field: [fieldname] : [Operation]**

Specify a query condition for a field of [fieldname].

[Operation] is optional and can be one of equals, range, startswith, phrase, wildcard, similar, or contains; the default is contains. For the range operation, the value's format is {lower bound} : {upper bound}, e.g., 1:10. Only the first value specified will be used in the search.

**startindex**

Specify the starting index from where the results will be returned.

**count**

Specify the total number of items to be returned.

**sortfield: [fieldname] : [asc/des]**

Specify the field on which the results would be sorted.

**Note:** For Lucene, sorting is possible only fields that were indexed as "not tokenized".

**Example:**

```
http://localhost:8080/cs/REST/types/Content_C/
search?field:name:contains=FSII&startindex=
5&count=3
```

REST Methods

GET

Possible Error Codes

404 if the indexing configuration does not exist  
500 if unforeseen errors occurred

## Asset

### Selected Asset, Selected Site

/sites/{sitename}/types/{assettype}/assets/{id}

Description	This resource provides developers with Create, Edit, Update, Delete (CRUD) functions for operating on the specified asset. {id} is in the long asset id format.
REST Methods	HEAD, GET, POST, PUT, DELETE
Possible Error Codes	404 if site does not exist 404 if asset type does not exist 404 if asset does not exist 500 if unforeseen error occurred

### All Asset Associations, Selected Site

/sites/{sitename}/types/{assettype}/assets/{id}/associations

Description	This resource lists all asset associations on the specified site.
REST Methods	GET
Possible Error Codes	404 if site does not exist 404 if asset type does not exist 404 if asset does not exist 500 if unforeseen error occurred

### Selected Asset Association and Site

/sites/{sitename}/types/{assettype}/assets/{id}/associations/{assocName}

Description	This resource lists the specified asset association on the specified site.
REST Methods	GET
Possible Error Codes	404 if site does not exist 404 if asset type does not exist 404 if asset does not exist 500 if unforeseen error occurred

## Site-Specific Assets Search

/sites/{sitename}/search

Description	<p>This resource supports searches on all assets on the specified site.</p> <p><b>Note:</b> Access to any search is provided by granting <code>LIST</code> privileges on an <code>Asset</code> resource. In this case, search access can be configured per site or for all sites, but not per asset type. All users with access to the search service will be able to search assets of all asset types (in a particular site, if one is specified).</p>
REST Methods	GET
Possible Error Codes	404 if site does not exist

## Global Assets Search

/search

Description	<p>This resource supports global searches on assets.</p> <p><b>Note:</b> REST does not restrict the types of assets that are returned. As a result, assets of a certain type can be returned to a user who may otherwise not have permission to access the asset type.</p> <p><b>Note:</b> Access to any search is provided by granting <code>LIST</code> privileges on an <code>Asset</code> resource. In this case, search access can be configured per site or for all sites, but not per asset type. All users with access to the search service will be able to search assets of all asset types (in a particular site, if one is specified).</p>
Query Parameters	<p><b>q</b> Specify a query String, the search engine-specific query that was specified during the index configuration. (The default search engine is Lucene.)</p> <p><b>field: [fieldname] : [Operation]</b> Specify a query condition for field of [fieldname] with the specified operation. [Operation] is optional and can be one of equals, range, startswith, phrase, wildcard, similar, or contains; the default is contains. For the range operation, the value's format is {lower bound} : {upper bound}, e.g., 1:10.</p> <p><b>startindex</b> Specify the starting index from where the results will be returned.</p> <p><b>count</b> Specify the total number of items to be returned.</p>

**Global Assets Search** *(continued)*`/search`

	<b>sortfield: [fieldname] : [asc/des]</b> Specify the field on which the results would be sorted. <b>Note:</b> For Lucene, sorting is possible only fields that were indexed as “not tokenized”.
	<b>Example:</b> <code>http://localhost:8080/cs/REST/types/Content_C/ search?field:name:contains=FSII&amp;startindex= 5&amp;count=3</code>
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

## Index

### Indexing Configurations

/indexes

Description	This resource lists configurations for global and asset type-based indexing. Global indexing produces a single index of asset types. Asset type indexing produces one index per asset type.
REST Methods	GET, PUT, POST, DELETE
Possible Error Codes	404 if indexing configuration does not exist 500 if unforeseen error occurred

### Indexing Configuration

/indexes/{source}

Description	<p>This resource supports the configuration of global indexing and provides CRUD functions for operating on global and per asset type indexing configurations. Global indexing produces a single index of asset types. Asset type indexing produces one index per asset type.</p> <p><b>Note:</b> In this resource's URL, source is either <code>Global</code> (for the global index) or the name of the asset type (for each asset type-based index). For asset type-based indexing, the indexing process will be also started, stopped, paused, or resumed automatically depending on your choice of HTTP method (<code>PUT</code>, <code>POST</code>, <code>DELETE</code>) and index status (<code>ENABLED</code>, <code>PAUSED</code>). Global indexing is enabled for all asset types by default, although the configuration may not exist.</p>
REST Methods	GET, POST, PUT, DELETE
Possible Error Codes	404 if indexing configuration does not exist 500 if unforeseen error occurred

## Site

### All Sites

/sites

Description	This resource lists all sites in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

## Role

### All Roles

/roles

Description	This resource reads the list of roles that are stored in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

### Selected Role

/roles/{rolename}

Description	This resource provides CRUD functions for operating on the specified role.
REST Methods	GET, POST, PUT, DELETE
Possible Error Codes	404 if role does not exist 500 if unforeseen error occurred

### Selected Site

/sites/{sitename}

Description	<p>This resource provides developers with CRUD functions for operating on the specified site.</p> <p>To perform CRUD operations on a site, the user must have either the GeneralAdmin or SiteAdmin role on that site in addition to the privileges granted via groups. To manage AdminSite, a user must have the GeneralAdmin role.</p>
REST Methods	HEAD, GET, POST, PUT, DELETE
Possible Error Codes	404 if site does not exist 500 if unforeseen error occurred



## Application

### All Applications

/applications

Description	This resource lists registered applications.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

### Selected Application

/applications/{applicationid}

Description	This resource registers the specified application by performing CRUD operations on the application's FW_View and FW_Application assets. More information about application registration is available in the <i>WEM Framework Developer's Guide</i> .
REST Methods	GET, PUT, POST, DELETE
Possible Error Codes	404 if application does not exist 500 if unforeseen error occurred

## User

### All Users

/users

Description	This resource lists all users that are defined in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

### Selected User

/users/{username}

Description	This resource provides CRUD functions for operating on the specified user. If the user profile contains an image, a 90 x 90 pixel thumbnail image is returned by the service. If the thumbnail image is required in a different size, the request can be made with the following parameters: <code>imageHeight</code> and <code>imageWidth</code> (in pixels); the thumbnail image is then returned at the specified size. The actual uploaded image is always returned in its original size when user information is requested. To restrict the user service to return only the thumbnail image and not the actual image, set the <code>thumbOnly</code> parameter to <code>true</code> .
REST Methods	HEAD, GET, POST, PUT, DELETE
Possible Error Codes	404 if user does not exist 500 if unforeseen error occurred

### All Site Users

/sites/{sitename}/users

Description	This resource lists the roles of all users on the specified site.
REST Methods	GET
Possible Error Codes	404 if site does not exist 500 if unforeseen error occurred

### Selected Site User

/sites/{sitename}/users/{username}

Description	This resource lists the roles of the specified user on the specified site and supports the REST methods listed below.
REST Methods	GET

**Selected Site** *(continued)* **User** *(continued)*`/sites/{sitename}/users/{username}`

Possible Error Codes	404 if site does not exist 404 if user does not exist 500 if unforeseen error occurred
----------------------	--

## User Locale

The `/userlocales` resource is not protected

**User Locales**`/userlocales`

Description	This resource lists all locales that are defined in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

## User Definition

**User Def**`/userdef`

Description	This resource reads attributes in the user profile. When the database is used for authentication, only the Content Server predefined user attributes are returned. If LDAP is used, the service returns the attributes that are defined in the <code>requiredPeopleAttrs</code> property of the <code>dir.ini</code> file, along with the predefined Content Server attributes.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

## ACLs

<b>ACLs</b> <code>/acls</code>	
Description	This resource lists all ACLs that are defined in Content Server.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

## Groups

<b>All Groups</b> <code>/groups</code>	
Description	This resource lists all REST security groups in the system.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred

<b>Selected Group</b> <code>/groups/{groupname}</code>	
Description	This resource provides the security privilege configuration of the specified group.
REST Methods	GET
Possible Error Codes	404 if requested group is not found

## Geographical Location

The `/timezone` resource is not protected.

<b>Time Zone</b> <code>/timezone</code>	
Description	This resource returns the server's time zone.
REST Methods	GET
Possible Error Codes	500 if unforeseen error occurred