

# CentraSite

## API Management Solutions

Version 9.5 SP1

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# Preface

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This document describes how to use CentraSite Business UI for API management.

The content is organized under the following sections:

|   |   |
|---|---|
| <b>Introduction to API Management with CentraSite</b> | Gives an overview of the CentraSite's real-time API management solutions.   |
| <b>Getting Started with CentraSite API Management</b> | Briefly describes how to get started with the CentraSite's API Management.  |
| <b>Creating an API in the Catalog</b>                 | Describes how to create an API in the catalog.  |
| <b>Viewing the Details of an API</b>                  | Describes how to view the information stored for APIs in the catalog.   |
| <b>Editing the Properties of an API</b>               | Describes how to view an API's attributes and how to change them.   |
| <b>Configuring the API Key Settings</b>               | Describes how to configure the key settings of an API.  |
| <b>Consumer Onboarding Policies</b>                   | Describes ways you can work with the predefined policies that perform consumer onboarding in the CentraSite.        |
| <b>Approving Onboarding Registration Requests</b>     | Describes how to proceed with the approval process of onboarding registration requests.                             |
| <b>Approving API Key Requests</b>                     | Describes how to proceed with the approval process of API key requests.   |
| <b>Deleting an API</b>                                | Describes how to remove an API from the catalog.  |
| <b>Working with EMail Notifications</b>               | Describes how to use the predefined email templates and also create email templates specific to the API Management. |

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# 1 Introduction to API Management with CentraSite

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A new wave of innovation is revolutionizing enterprises as mobile internet users exceed internet desktop users. Today's enterprises are looking at leveraging their existing and new IT assets across multiple channels that include not only the existing internet based browser-centric model, but more importantly, cater to mobile device users. In addition, new opportunities to leverage these assets with third party sources, allows for innovative solutions and new operating models.

CentraSite's Application Programming Interface (API) Management Solutions enable enterprises to selectively externalize their new and existing assets as APIs across various channels, monitor the interface's lifecycle with an integrated infrastructure, and make sure the needs of developers and application using the API are met.

With an integrated infrastructure, you can securely expose your APIs to external developers and partners (By partners we mean any external entities with which your enterprise interacts, such as suppliers and other vendors, dealers and distributors, customers, government agencies, trade organizations and so forth.), and provide design time and run time governance capabilities to the APIs.

CentraSite's support for API Management enables developers, architects and business developers to:

- Publish the right APIs into their organization's central registry.
- Discover APIs and use them to assemble new applications.
- Manage the entire process of creating, publishing, and retiring APIs.
- Obtain detailed information about an API, including the list of its consumers, technical support contacts, disposition in the development lifecycle, usage tips and performance data.
- Control access to CentraSite and to the metadata for individual APIs listed in the registry.
- Impose mandatory approval processes to ensure that APIs accepted into the SOA adhere to organizational standards and policies.
- Get notifications on the APIs they use.

- Model the lifecycle process associated with each API and specify the events that are to be triggered when an API transitions from one lifecycle state to another.

Related sections of the CentraSite documentation provide the information you need for creating and configuring your API in CentraSite.

## 2 Getting Started with CentraSite API Management

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CentraSite provides a complete API Management solution that ensures success with exposing APIs both within and outside your organization. It provides role focused user interfaces, complies with standards, and delivers on business value.

- Provider users use the CentraSite API Management feature to view and manage their organization's APIs, edit APIs, virtualize APIs, and publish APIs.
- Consumer users use the CentraSite API Management feature to browse or search for APIs, and consume APIs.

CentraSite supports usage of API keys to identify a consumer requesting for the API consumption. The API keys are managed through the CentraSite Business user interface. You'll need to configure an API with the key settings and publish the API for consumption by a consumer.

The following steps outline how to get started with CentraSite for API Management, as soon as a specific API is identified that needs to be exposed in your applications.

1. Create an API asset in the CentraSite catalog. For procedures, see [Creating an API in the Catalog](#).
2. Browse or Search for the API to publish/consume. For procedures, see [Browsing and Searching for APIs](#).
3. View information stored for the API to publish/consume. For procedures, see [Viewing the Details of an API](#).
4. Specify the endpoints for an API. For procedures, see [Editing the Properties of an API](#).
5. Virtualize an API or reconfigure an existing virtual API. For procedures, see [Virtualizing an API](#).
6. Configure API key settings. For procedures, see [Configuring Your API Key Settings](#).
7. Publish an API for consumption. For procedures, see [Publishing an API for Consumption](#).
8. Request an API key for consumption of the API. For procedures, see [Requesting an API Key for Consumption](#).

9. Review and approve the user registration requests (as consumers) for the API. For procedures, see [Approving Onboarding Registration Requests](#).
10. Review and approve the API key requests for consumption of the API. For procedures, see [Approving API Key Requests](#).
11. View the generated API key request. For procedures, see [Viewing an API Key](#).
12. Use the generated API Key for consumption of the API. For procedures, see [Consuming an API Using the API Key](#).

Currently, CentraSite supports the API Management concept for the three basic types of services (Service, REST Service, and XML Service) that can be virtualized and published in general. Instructions throughout the remainder of this guide use the term “API” when referring to all three types in general.

# 3

## Creating an API in the Catalog

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To create APIs in an organization's catalog, you must belong to a role that has the “Create Assets” or “Manage Assets” permission for that organization. To see a list of the predefined roles that include the “Create Assets” or “Manage Assets” permission, see the section *About Roles and Permissions* in the document *Users, Groups, Roles and Permissions*.

## Create an API

Use the following procedure to create an API in the CentraSite catalog.

► **To create an API in the CentraSite catalog**

- 1 In CentraSite Business user interface, click the **Create Asset** activity. This opens the **Create a New Asset** wizard.
- 2 In **Basic Information** panel, specify the following fields:

| In this field...    | Do the following...   |
|---------------------|---|
| <b>Name</b>         | <p><i>Mandatory.</i> Enter a name for the API. An API name can contain any character (including spaces).</p> <p>An API name does not need to be unique within the catalog. However, to reduce ambiguity, you should avoid giving multiple APIs of the same type the same name. As a best practice, we recommend that you adopt appropriate naming conventions to ensure that APIs are distinctly named within an organization.</p>  |
| <b>Type</b>         | Choose the type of API that you want to create in the catalog. The APIs that are supported out-of-the-box are: Service, REST service, XML Service, Virtual Service, Virtual XML Service, and Virtual REST Service.  |
| <b>Organization</b> | Choose the organization in which the API will be created. (The drop-down list will contain the list of organizations in which you are permitted to create APIs.) If you select an organization other than your own organization, you will nevertheless be the owner of the API.   |
| <b>Version</b>      | <i>Optional.</i> Enter an identifier for the initial version of the API. This is the user-defined version, as opposed to the automatically assigned system version. You can enter any string in this field, i.e. the version identifier does not need to be numeric. You can also leave the field blank. You can later create new versions of the API.  |
| <b>Description</b>  | <i>Optional.</i> Enter a comment or descriptive information about the API.  |
| <b>Import File</b>  | <p><i>For a SOAP API.</i> Specify whether the input file will be read from a URL-addressable location on the network (the <b>URL</b> option) or from your local file system (the <b>File</b> option).</p> <ul style="list-style-type: none"> <li>■ If the file you are importing resides on the network, specify its <b>URL</b>.</li> <li>■ If the file resides in your local file system, specify the file name. You can use the <b>Choose</b> button to navigate to the required folder.</li> </ul> |

| In this field...         | Do the following...  |
|--------------------------|--|
| <b>Advanced Settings</b> | <p data-bbox="488 237 682 268"><i>For a SOAP API.</i></p> <ol data-bbox="488 304 1477 682" style="list-style-type: none"> <li data-bbox="488 304 1477 399">1. If you have specified a URL, and the site you want to access via the URL requires user authentication, enter a username and password for authentication at the URL site.</li> <li data-bbox="488 420 1477 682">2. Choose a <b>Resolution</b> strategy, which will allow you to specify how the imported files will be handled. For each of the imported files you have one of these options: <ul data-bbox="519 504 1477 682" style="list-style-type: none"> <li data-bbox="519 504 1477 567">■ <b>Always overwrite:</b> Overwrite the importing file (WSDL or schema) with new content.</li> <li data-bbox="519 588 1477 682">■ <b>Always create versions:</b> Create a new version of the file with the new content (if, for example, you want to modify a schema but want to retain its previous version).</li> </ul> </li> </ol> |

3 Click **Next**.

You will not be allowed to move to the next panel unless all of its required parameters have been set.

4 In the **Preview** panel, review the basic information for API before you actually add to CentraSite.

If necessary, you can click **Previous** to return to the **Basic Information** panel and change your specifications.

5 Click **Save** to create the new API in the catalog.

If at any time you wish to abandon your unsaved API and return to your previous screen, just click the **Cancel** button.

6 Configure the API's extended attributes as described in the section [Editing the Properties of an API](#).



# 4 Viewing the Details of an API

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- View the Details of an API ..... 11

CentraSite provides a summary of details of the API. The details rendered as attributes are grouped together as profiles.

An action bar contains the list of operations that can be performed on that API.

## General

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When you view the details of an API in CentraSite catalog, keep the following points in mind:

- The set of APIs that are available to you are the APIs on which you have View permission. You can obtain View permission on an API in the following ways:
  - By belonging to a role that includes any of the following permissions.

| This permission... | Allows you to...  |
|--------------------|---|
| View Assets        | View all APIs within a specified organization.  |
| Modify Assets      | View and edit all APIs within a specified organization.   |
| Manage Assets      | View, edit and delete all APIs within a specified organization, and set instance-level permissions on those APIs. This permission also allows you to create APIs. |
| Create Assets      | Add new APIs to a specified organization. You automatically receive Full permission (which implies Modify and View permission) on all APIs that you create.       |

- By having View, Modify or Full instance-level permissions on a particular API.
- By default, all CentraSite users belong to the Asset Consumer role. This role includes the “View Assets” permission for the organization to which a user belongs.

Having the Asset Consumer role gives you implicit view permission on all the APIs in your organization. You can view APIs from other organizations only if you are given permission to do so through the assignment of additional role-based or instance-level permissions.

- In rare instances, an administrator might not grant view permissions to all of the users in an organization. If the administrator of your organization has done this, you will need instance-level permissions on an API in order to view it.

For more information about permissions, see the CentraSite online documentation section *About Roles and Permissions* in the document *Users, Groups, Roles and Permissions*.

## The API Profiles

| Profile                     | Description   |
|-----------------------------|---|
| <b>Basic Information</b>    | Provides basic information about the API. This profile shows individual characteristic such as the API version, type, owner, organization and description. If you are having users watching or consuming this API, CentraSite displays that information on this profile. This profile also contains controls for approving requests placed on this API. |
| <b>Advanced Information</b> | Provides additional information about the API. This profile shows the technical specifications, and the list of providers and consumers for the API.  |
| <b>Technical Details</b>    | Provides technical information about the API. For a SOAP API, this profile includes the WSDL URL and a list of the operations and bindings. For an XML/REST API, the profile includes the schema URL and a list of the resources.   |
| <b>Provider Overview</b>    | Displays the list of native and virtual endpoints. In this profile, a native endpoint is represented by the <i>Binding</i> , and a virtual endpoint is represented as an <i>Alias</i> that identifies a specific Access URI (i.e., address where the virtual API is published).   |
| <b>Runtime Metrics</b>      | <i>For SOAP, XML &amp; REST APIs.</i> Displays the run-time performance metrics associated with the API. If you are using webMethods Mediator, webMethods Insight or another run-time monitoring component to log performance metrics for an API, CentraSite displays those metrics on this profile.  |
| <b>Runtime Events</b>       | <i>For SOAP, XML &amp; REST APIs.</i> Displays the run-time events associated with the API. If you are using webMethods Mediator, webMethods Insight or another run-time monitoring component to log run-time events for an API, CentraSite displays those events on this profile.  |

## View the Details of an API

Use the following procedure to view the details for an API.

### ► To view details for an API

- 1 In CentraSite Business UI, use either the *Browse* or *Search* feature to locate an API that you want to view. If you need information on how to browse or search the CentraSite catalog, refer to the section *Browsing the CentraSite Catalog* or *Searching the CentraSite Catalog* in the document *Managing the CentraSite Catalog*.
- 2 Click the API's hyperlinked name.
- 3 On the APIs' details page, examine the attributes as necessary. CentraSite will display the attributes for this API.

Remember that you will only see the profiles for which you have View permission. If you have Modify permission on the API, you can edit the API's attributes. For procedures, see [Editing the Properties of an API](#).

### Viewing a Native/Virtual Endpoint

The **Provider Overview** profile shows a list of the native and virtual endpoints for this API. In this profile, a native endpoint is represented by the *Binding*, and a virtual endpoint is represented as an *Alias* that identifies a specific Access URI (i.e., address where the virtual API is published).

▼ Provider Overview

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Native Endpoint(s)

http://www.websvcex.net/AustralianPostCode.asmx  
AustralianPostCodeSoap  
http://www.websvcex.net/AustralianPostCode.asmx  
AustralianPostCodeHttpPost  
http://www.websvcex.net/AustralianPostCode.asmx  
AustralianPostCodeHttpGet

Virtual Endpoint(s)

localhost  
http://127.0.0.1:5555/ws/AustralianPostCode\_V5

# 5 Editing the Properties of an API

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- Edit the Attributes of an API ..... 14

This section describes how to view an API's attributes and how to change them.

## General

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When editing the properties of an API, keep the following general points in mind:

- If you are not the owner of the API, you cannot edit the API unless you have Modify permission on the API (granted through either a role-based permission or an instance-level permission).
- When you view the details for the API, you will only see profiles for which you have View permission. You will only be able to edit the profiles on which you have Modify permission.
- Some attributes accept only specific types of information. For example, if the asset type includes a URL type attribute, you must supply a URL when you edit that attribute. Other attribute types that require a specific type of value include Date attributes and Email attributes. For a list of the attributes types that an API in the catalog can include, see *Attribute Data Types* in the document *Managing the CentraSite Catalog*.
- Some attributes are designed to be read-only and cannot be edited even if they appear in an API on which you have Modify permission.

## Edit the Attributes of an API

---

Use the following procedure to edit the attributes associated with an API.

### ▶ To edit the attributes of an API

- 1 In CentraSite Business UI, display the detail page of the API whose attributes you want to edit. If you need procedures for this step, see [Viewing the Details of an API](#).
- 2 On the API's actions menu, click **Edit** ().
- 3 To edit an API's **Name**, **Description** or **Version** number, place the cursor in the appropriate field and modify the text as required.
- 4 To modify the extended attributes associated with the API, do the following:
  1. Select the profile that contains the attribute(s) that you want to modify.
  2. Edit the attributes on the profile as necessary.

### Specifying an Input File

Certain APIs contain one or more associated files. For example, the SOAP API includes a WSDL file and the XML / REST API includes a schema file. You can upload a new file or update an existing file for the API accordingly.

- *For an instance of a SOAP API only.* Attach the WSDL file to the catalog entry using **Attach** () in the API's actions menu.
- *For an instance of a XML or REST API only. Optional.* Attach the schema file to the catalog entry using **Attach** () in the API's actions menu.

### Specifying a Native Endpoint

APIs (Service, XML service and REST service) can contain one or more operations or resources.

- *For an instance of a SOAP API only.* If you are using WSDLs along with your SOAP API, attach the WSDL file to the catalog entry using **Attach** () in the API's actions menu.

CentraSite automatically populates the WSDL URL and the associated operations in the **Technical Details** profile.

- *For an instance of a XML or REST API only.* If you are using XML schemas along with your XML / REST API, attach the schema file to the catalog entry using **Attach** () in the API's actions menu.

CentraSite automatically populates the schema URL and the associated resources in the **Technical Details** profile.

After you have specified a schema, specify the following:

| Attribute          | Description  |
|--------------------|--|
| <b>Endpoint</b>    | An endpoint for the API that allows consumers of the API to find and communicate with the API. |
| <b>Namespace</b>   | A binding namespace for the endpoint.  |
| <b>Resource</b>    | A name for the resource. You can specify multiple resources for an endpoint.                   |
| <b>HTTP Method</b> | HTTP request method(s) for bridging protocols (GET, POST, PUT, DELETE).                        |

3. Repeat steps [3.a](#) and [3.b](#) for each profile that you want to edit.

5

When you have finished making your edits, click **Save** ()



**Note:** If at any time you want to abandon your unsaved edits, click **Close** ().  
CentraSite will ask you if you want to save your edits. Click **No** to abandon your edits and return the API's attributes to their previous settings.

# 6 Configuring the API Key Settings

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- Configure the API Key Settings ..... 18

An *Application Programming Interface* (API) key is generated by the CentraSite to identify the API, its provider, or its consumer.

The API key acts as both a unique identifier and a secret token for authentication, and will generally have a set of access rights on the API associated with it.

## General

---

When configuring the API key settings, keep the following points in mind:

- If you are a registered user and accessing CentraSite using the logon credentials, to configure the key settings of an API, you must have Modify permission on the API. If your user account belongs to a role that has either the “Manage Assets”, “Create Assets” or “Modify Assets” permission for an organization, you automatically have permission to configure the key settings of all APIs in that organization.
- If you are a registered user and accessing CentraSite as a guest, to configure the key settings of an API, you must at least have the instance-level Modify permission on the API.
- This action is *not visible* for the following conditions:
  - Unless you have a minimum of "Modify" permission on the API.
  - If the API does not belong to the type "Service".

## Configure the API Key Settings

---

Use the following procedure to configure the key settings for an API.

### ▶ To configure your API key settings

- 1 In CentraSite Business UI, display the details page for the API whose key settings you want to configure. For procedures, see the section *Viewing Details of an API*.
- 2  On the API detail page, click **API Key Settings** (  ). This opens the **API Key Settings** dialog.
- 3 Enable the **Activate Key Check** checkbox to activate the key generator for this API. The generated API key can be used in each further request until it expires or is revoked by the API Provider.

But, if you choose to disable this checkbox for an API, the generated API key is available for an unlimited usage. CentraSite automatically disables the other expiration and approval options.

By default, this checkbox is enabled.

- 4 In the **Expiration Interval** field, type the time period that an API key can remain active until it reaches its expiry date.

Type the time period in the following format: years (y) weeks (w) days (d) hours (h) minutes (m). For example, 1y 4w 3d 5h 30m expires the API key after 1 year, 4 weeks, 3 days, 5 hours, and 30 minutes of activity.

- 5 Enable the **Require Approval** checkbox to initiate an approval workflow for activating the API key.

When the API has an approval workflow associated with the activation of the API key, CentraSite will not activate the API key generator until the required approvals are obtained.

By default, the Require Approval checkbox is enabled for APIs. However, if you choose to disable this checkbox for an API, CentraSite automatically displays the consumer notification options. If so, skip to step e. For more information about approval workflow, see the CentraSite online documentation section *Using Approval Policies* in the document *Working with Design/Change-Time Policies*.

- 6 If you choose to initiate an approval workflow to activate the API key generator, specify the following:

| Field               | Description   |   |
|---------------------|---|---|
| Approval Workflow   | <b>All</b>  | The request must be approved by all users specified in Approver Group. (It does not matter in which order the approvals are issued.) A single rejection will cause the request to be rejected.  |
|                     | <b>Any</b>  | <i>Default.</i> The request can be approved or rejected by any single user in Approver Group. In this mode, only one user from the set of authorized approvers is required to approve or reject the request.  |
| Approver Group      | Specify the approver group. You can specify multiple approver groups. |   |
| Email Notifications | <b>Subject</b>  | The text that will appear on the subject line of the email.   |
|                     | <b>Template</b>   | <p>The template that will be used to generate the body of the email message to the approvers in the <i>Approver Group</i>.</p> <p>For information about using email templates, see the section <i>Specify Email Templates for Workflow Notifications</i>.</p> <p>To specify another template, use the plus button to add additional rows.</p> |

| Field | Description   |   |
|-------|---------------|---|
|       |               | <b>Important:</b> CentraSite sends notifications about a request status to the consumer requesting for an API Key; only if the consumer has enabled the <b>Email</b> notifications option in the User Preferences page. |
|       | <b>Action</b> | Specify the approval action. <ul style="list-style-type: none"> <li>■ Approval Request</li> <li>■ <i>Default.</i> Approved</li> <li>■ Rejected</li> </ul>   |

Or:

Alternatively, if you choose not to initiate an approval workflow to activate the API key generator, specify the following:

| Field                            | Description     |   |
|----------------------------------|-----------------|---|
| <b>Notify Consumer via Email</b> | <b>Subject</b>  | The text that will appear on the subject line of the email.   |
|                                  | <b>Template</b> | <p>The template that will be used to generate the body of the email message to the approvers in the <i>Approver Group</i>.</p> <p>For information about using email templates, see the section <i>Specify Email Templates for Workflow Notifications</i>.</p> <p>To specify another template, use the plus button to add additional rows.</p> <p><b>Important:</b> CentraSite sends notifications about a request status to the consumer requesting for an API Key; <i>only if</i> the consumer has enabled the <b>Email</b> notifications option in the User Preferences page.</p> |

7 Click the **Configure** button.

Or:

Else, if at any time you wish to terminate this operation, just click the **Cancel** button.

# 7 Consumer Onboarding Policies

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CentraSite's approval-management framework enables you to configure policies that trigger approval processes when guest users (i.e. users without a valid CentraSite user account) try to access and register as consumers of APIs.

When users request to consume APIs (as described in *Requesting an API for Consumption*), the policy is triggered and the "User Registration" or an "Organization with User Registration" request is submitted to all members of the approval list specified in the "Initiate Approval" action. Then, the approvers can either approve or decline the request. If the approvers approve the request, the users will be registered as consumers, and appropriate permissions will be assigned to users.

To use the CentraSite's consumer-onboarding feature, you *must configure* the "Global Onboarding Policy" and every organization's "User Onboarding Policy".



**Note:** You do not need to explicitly activate the onboarding policies.

## Global Onboarding Policy

---

The *Global Onboarding Policy* enables an automated onboarding to address the following scenarios:

- If the user does not explicitly specify an organization, the policy onboards the user in the organization defined in the "Onboarding Organization" action of the policy. By default, it is set to "Default Organization".
- If the user specifies an organization which does not currently exist in the CentraSite registry, the policy creates the new organization, and onboards the user in the new organization with an "Organization Administrator" role.

On successful onboarding of a user within the specified organization, CentraSite performs the API consumption process that has already been initiated.

The *Global Onboarding Policy* has input parameters that you must set to enforce the consumer onboarding.

### ▶ To configure the input parameters for Global Onboarding Policy

- 1 Display the Global Onboarding Policy Details page whose actions you want to configure. If you need procedures for this step, see *Viewing or Changing a Policy*.
- 2 On the **Actions** tab do the following:
  1. *Mandatory.* To configure the **Initiate Approval** action, set the following parameters:
    - *Mandatory.* **Approver Group:** Specify the designated group of approvers.
    - *Mandatory.* **Approval is needed from:** Specify an approval mode "All" or "Anyone".

Click **Save** to update the parameter settings.

2. For more information about configuring the Initiate Approval action, see the section *Initiate Approval* in the document Built-In Design/Change-Time Actions Reference.
3. To configure the **Onboarding Organization** action, set the following parameters:
  - *Mandatory. Onboarding Organization:* Specify the organization to which you want to onboard the user as a consumer, when user requesting for an account has not specified any organization. By default, "Default Organization".
  - **Onboarding Success Message:** Specify a notification template for the consumer onboarding success message. By default, "OnboardingSuccessMessage.html".
4. Click **Save** to update the parameter settings.

## User Onboarding Policy

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The “User Onboarding Policy” of an organization enables an automated onboarding of user for that organization. On successful onboarding, performs the API consumption process that has already been initiated. If the API consumption includes an approval workflow, on approval, CentraSite generates the API key. On the other hand, if the API consumption does not include an approval workflow, CentraSite generates the API key immediately.

The *User Onboarding Policy* has input parameters that you must set to enforce the consumer onboarding.

### ▶ To configure the input parameters for User Onboarding Policy

1. Display the User Onboarding Policy Details page whose actions you want to configure. If you need procedures for this step, see *Viewing or Changing a Policy*.
2. On the **Actions** tab do the following:
  1. On the **Initiate Approval** action, set the parameters:
    - *Mandatory. Approver Group:* Specify the designated group of approvers.
    - *Mandatory. Approval is needed from:* Specify an approval mode "All" or "Anyone".
    - Click **Save** to update the parameter settings.
  2. On the **Onboarding User** action, set the parameters:
    - **Onboarding Organization:** Specify the organization to which you want to onboard the user as consumer. By default, "Default Organization".
    - **Onboarding Success Message:** Specify a notification template for the consumer onboarding success message. By default, "OnboardingSuccessMessage.html".
    - Click **Save** to update the parameter settings.



## 8 Approving Onboarding Registration Requests

---

The onboarding requests for *an user* or *an organization with user* is tracked in the following ways:

- If the user has specified an existing organization in the CentraSite registry, the user onboarding request is visible in the details page of the organization that is configured in the specified organization's "User Onboarding" policy.
- If the user has specified an organization that does not exist in the CentraSite registry, the organization with user onboarding request is visible in the Default Organization's details page.
- If the user has not specified any organization, the user onboarding request is visible in the details page of the organization that is configured in the "Global Onboarding" policy.

Users with the "Manage Organizations" system-level permission (such as the users with the role "CentraSite Administrator") can view and approve onboarding requests for any organization. Users with the "Organization Administrator" organization-level role for a given organization can perform view and approve onboarding requests on that organization.

Use the following procedure to view and approve the consumer (user) registration requests that are waiting for your approval.

### ▶ To approve a consumer registration request

- 1 In CentraSite Business UI, display the details page of the organization whose user registration request you want to review and approve.
- 2 You will see the pending user registration requests () in the description area of the **Basic Information** profile, for example, "N user registration requests are pending".  
  
If there are no pending approval requests for the organization, this is displayed as "0".
- 3 Click the hyperlinked number ("N") to open the **Pending User Registration Requests** dialog. This dialog contains a list of all requests that have been submitted for the particular organization, including requests that were auto-approved.

- 4 Choose the user registration request that you want to review and approve by clicking its hyperlinked name.

The details for the request will appear in the **User Registration Request** dialog.

- 5 In the **Comment** text box, type a comment. (e.g., *"Request rejected. Add required specifications to this user and resubmit"*.)
- 6 Click the **Accept** or **Reject** button as appropriate to approve or reject the request.

# 9 Approving API Key Requests

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When a user requests for API consumption that triggers an approval, CentraSite initiates an approval workflow and submits the user's request to the designated group of approvers. Approvers receive the approval request in their Inbox in CentraSite Business user interface. Approvers whose user account includes a valid e-mail address also receive an email message informing them that a request is awaiting their approval.

### Prerequisites

- CentraSite communicate information to users using email. This facility will not function properly until you configure CentraSite's email settings. These settings specify the Simple Mail Transport Protocol (SMTP) server that CentraSite is to use for sending outgoing email messages. For information, see the section *Configuring the Email Server Settings* in the document *Basic Operations*.

CentraSite does not generate the user's requested API key until it obtains the necessary approvals. If an approver rejects the request, CentraSite notifies the requestor and an API key is not generated.

Approvers use the API details page to review and authorize API key requests that are waiting for your approval.

Points to consider when approving or rejecting an API key request for consumption:

- If the user who requests an API key is also an authorized approver for the requested operation, the request is auto-approved. (In other words, the requestor's approval is granted implicitly.)
- If the API provider has chosen for "Anyone" approval mode, only one user in the group is required to approve or reject the request. This is the default mode.
- If the API provider has chosen for "All" approval mode, the request must be approved by all users in the approver group (it does not matter in which order the approvals are obtained). A rejection by any approver in the group will cause the request to be rejected.

## Approving an API Key Request

---

If you are an approver, CentraSite places approve requests (i.e., any API key request whose approver group included you as a member) in the API details page for you to review and authorize API key requests.

Use the following procedure to review and approve the API key requests that are waiting for your approval.

### ▶ To view and approve an API key request

- 1 In CentraSite Business UI, display the details page of the API whose API key request you want to review and approve.

- 
- 2 You will see the pending approval requests () for an API key in the description area of the **Basic Information** profile, for example, "N number of pending approvals".

If there are no pending approval requests for the API, this is displayed as "0".

- 3 Click the hyperlinked number ("N") to open the **Pending Approval Requests** dialog. This dialog contains a list of all API key requests that have been submitted for the particular API, including requests that were auto-approved.
- 4 Choose the API key request that you want to review and approve by clicking its hyperlinked name.

The details for the request will appear in the **API Key Request** dialog.

- 5 In the **Comment** text box, type a comment. (e.g., *"Request rejected. Add required specifications to this asset and resubmit".*)
- 6 Click the **Accept** or **Reject** button as appropriate to approve or reject the request.



# 10

## Deleting an API

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Deleting an API permanently removes the API from the CentraSite registry.

## General

---

When you delete an API, CentraSite removes the registry entry for the API (that is, it removes the instance of the API from CentraSite's object database). Also note that:

- You cannot delete the predefined APIs (not even if you have the default permissions associated with the "CentraSite Administrator" role).
- If you are not the owner of the API, you cannot delete the API unless you have "Manage Assets" permission (granted through a role-based permission) or at least Full permission on the API (granted through an instance-level permission).
- You cannot delete an API that is in pending state (e.g., awaiting approval).
- You cannot delete an API if any user in your CentraSite registry is currently modifying the API.
- Deleting an API will not remove the supporting documents that are attached to it.

## Delete an API

---

You can delete a single API or a selected set of APIs. The descriptions in this section give you details on how to do this.

To delete any given API, you must belong to a role that has the "Manage Assets" permission for the organization in which the API resides.

The following sections describe how to delete APIs.

- [Deleting a Single API](#)
- [Deleting a Set of APIs](#)

### Deleting a Single API

Use the following procedure to delete a single API.

#### ▶ To delete an API

- 1 In CentraSite Business UI, display the details page for the API that you want to delete. If you need procedures for this step, see the section [Viewing the Details of an API](#).
- 2 On the API's actions menu, click **Delete** (  ).
- 3 When you are prompted to confirm the delete operation, click **Yes**.

---

The API is permanently removed from the CentraSite registry.

### Deleting a Set of APIs

You can delete multiple APIs in a single step. The rules described above for deleting a single API apply also when deleting multiple APIs.

 **Important:** If you have selected several APIs where one or more of them are predefined APIs, only those APIs you have permission for will be deleted. The same applies to any other APIs for which you do not have the required permission.

Use the following procedure to delete a set of APIs.

#### To delete multiple APIs in a single operation

- 1 In CentraSite Business UI, use either the *Browse* or *Search* feature to select a set of APIs you want to delete. If you need information on how to browse or search the CentraSite catalog, refer to the section *Browsing the CentraSite Catalog* or *Searching the CentraSite Catalog* in the document *Managing the CentraSite Catalog*.
- 2 Mark the checkbox next to the name of each API you want to delete.
- 3 In the actions menu, click **Delete** ().

 **Note:** If one or more of the selected APIs is in pending state (e.g., awaiting approval), an error message will appear and no APIs will be deleted.



# 11 Working with EMail Notifications

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- Custom Email Template ..... 39

You can configure the approval workflow system so that users receive email notifications when workflow-related events occur. Notifications can be sent to users who have requests to approve. You can use predefined email templates for workflow notifications, or you can use a custom email template for each workflow that you create. For example, if you have an approval request workflow, you can use an email template that was written specifically for approval request.

## Predefined Email Templates Installed with CentraSite

The following predefined email templates are installed with CentraSite. These templates are provided for you to use with the API Management workflow listed below if you do not want to create your own email templates.

| Template Name                         | Description  | Meant to be used with...   |
|---------------------------------------|--|--|
| ApprovalNotification.html             | Default email template used when an approval request is approved. See the sample template below.   | The Approved action in the API key settings.   |
| PendingNotification.html              | Default email template used when an approval request is submitted to approvers. See the sample template below.   | The Approval Request action in the API key settings.   |
| RejectApprovalNotification.html       | Default email template used when an approval request is rejected. See the sample template below.   | The Rejected action in the API key settings.   |
| NotifyAPIKeyGenerationToConsumer.html | Default notification template used for notifying a consumer that a request for API key consumption has been processed successfully. See the sample template below. | The Approved action in the API key settings.   |
| OnboardingSuccessMessage.html         | Default notification template used for notifying a consumer that a request for consumer onboarding has been processed successfully. See the sample template below. | <ul style="list-style-type: none"> <li>■ The Onboarding Organization action in the Global Onboarding Policy.</li> <li>■ The Onboarding User action in the User Onboarding Policy.</li> </ul> |
| APIKeyDeployFailed.html               | Default notification template used for notifying a provider that an API key generation has failed. See the sample template below.                                  | Internal.  |

## Samples

- [ApprovalNotification.html](#)
- [PendingNotification.html](#)
- [RejectApprovalNotification.html](#)
- [NotifyAPIKeyGenerationToConsumer.html](#)
- [NotifyAPIKeyGenerationToProvider.html](#)
- [APIKeyDeployFailed.html](#)

### ApprovalNotification.html

```
<html>
  <h4>Approval Notification<br/>-----</h4>
  <b>${entity.type}  ${entity.name}</b> has been approved by user ↵
<b>${entity.approver}</b>
  <h5>Approver Comments<h5>
  <b>${entity.approvercomments}</b>
</html>
```

### PendingNotification.html

```
<html>
  <h4>Pending Approval Notification<br/>-----</h4>
  Please approve the request from user <b>${user.displayname}</b> for ↵
<b>${entity.type}  <a href="${entity.BUIapprovalURL}"> ${entity.name} </a></b>
</html>
```

### RejectApprovalNotification.html

```
<html>
  <h4>Rejection Approval ↵
Notification<br/>-----</h4>
  <b>${entity.type}  ${entity.name}</b> has been rejected by user ↵
<b>${entity.approver}</b>
  <h5>Approver Comments<h5>
  <b>${entity.approvercomments}</b>
</html>
```

### NotifyAPIKeyGenerationToConsumer.html

```
<html>
  Congratulations! ${policycontext.consumer.name},<br/><br/>
  Your Consumption Request for the API ${entity.name} on ${request.date} has been ↵
processed successfully. <br/>
  You can now access the API using the API Key - <b> ${policycontext.apikey} </b>. ↵
The key expires on <b> ${apikey.expirationdate} </b><br/><br/>
  <b>Information about API usage:</b>
  <br>${api.usage}</br>
</html>
```

### NotifyAPIKeyGenerationToProvider.html

```
<html>
  <b>Congratulations ${user.displayname}!</b><br><br>

  Your account request has been approved. Please use the following link to see ↵
your account profile.<br>

  ${entity.bui.userpreferences.url}<br><br>

  Your API consumption request is now being processed.<br><br>

  Best Regards,<br>

  Your Software AG API Provider Team<br>
</html>
```

### APIKeyDeployFailed.html

```
<html>
  <h4>Deployment of the API Key has failed<br/></h4>
  Hi,<br/><br/>
  This is an auto-generated mail. The deployment of API Key for API ↵
(<b>${entity.name}</b>) has failed for Consumer <b>${user.name}</b>. Kindly get in ↵
touch with your Admin to resolve this. The errors are mentioned below.<br/><br/>
  Thanks,<br/>
  CentraSite System<br/><br/><br/>
  <b>Errors</b><br/>
  ${deploy.exception.string}
</html>
```

## Custom Email Template

You can use a custom email template for each workflow that you create. To write an email template for a workflow, see the instructions in [Create Email Templates for Workflow Notifications](#) below.

### Create Email Templates for Workflow Notifications

You can use a specific email template for each workflow that you create. For example, if you have an API Consumption Approval workflow, you can use an email template that was written specifically for the API consumption approval.

Complete the following procedures to create a custom email template.

1. Create your own custom HTML email template.

Your HTML document should include the `<html>` and `<label>` tags as shown in the example below.

#### Example of a Notify API Key Generation Email Template

```
<html>
  Congratulations! ${policycontext.consumer.name},<br/><br/>
  Your Consumption Request for the API ${entity.name} on ${request.date} has
  been processed successfully. <br/>
  You can now access the API using the API Key - <b> ${policycontext.apikey}
  </b>. The key expires on <b> ${apikey.expirationdate} </b><br/><br/>
  <b>Information about API usage:</b>
  <br>${api.usage}</br>
</html>
```

2. Specify the key parameters.

| Set this parameter...         | To specify...                            |
|-------------------------------|--|
| {policycontext.consumer.name} | Name of the consumer.                    |
| {entity.name}                 | Name of the API.                         |
| {request.date}                | Date of the request for API consumption. |
| {policycontext.apikey}        | The API key.                             |
| {apikey.expirationdate}       | Expiration date of the API key.          |
| {api.usage}                   | Usage tips for the API key.              |

