Oracle® Fusion Middleware

Concepts Guide for Oracle API Catalog

12*c* Release 1 (12.1.3.0)

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Documentation for anyone evaluating or implementing Oracle API Catalog. This guide describes concepts related to governance infrastructure, governed assets, asset types and taxonomies, and the asset lifecycle.

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Oracle Fusion Middleware Concepts Guide for Oracle API Catalog, 12*c* Release 1 (12.1.3.0)

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Preface

Oracle Fusion Middleware Concepts Guide for Oracle API Catalog describes the concepts behind using Oracle API Catalog.

Audience

This document is intended for customers who are implementing or are interested in implementing Oracle API Catalog.

Documentation Accessibility

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Related Documents

For more information, see the following documents in the Oracle API Catalog 12*c* documentation set:

- *Oracle Fusion Middleware Installation Guide for Oracle API Catalog*
- *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog*
- *Oracle Fusion Middleware Developer's Guide for Oracle API Catalog*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 Introducing Oracle API Catalog

This chapter introduces Oracle API Catalog (OAC) and describes basic concepts for using OAC.

This chapter contains the following sections:

- Section 1.1, "Oracle API Catalog Overview"
- Section 1.2, "Understanding Oracle API Catalog Features"
- Section 1.3, "Understanding User Roles in Oracle API Catalog"
- Section 1.4, "Next Steps"

1.1 Oracle API Catalog Overview

Mobile applications increasingly use Application Programming interfaces (APIs) in addition to enterprise systems of record in their development. The number of APIs available grows by the day. Their usage is multiplied by a growing population of mobile devices and computing platforms (Web, tablets, smartphones, TVs, video game consoles, cars, and other household devices--the Internet of Things). As the number of APIs an organization produces and uses increases, the management and visibility of these APIs becomes increasingly important.

Oracle API Catalog (OAC) allows organizations to easily build a catalog of their APIs to provide visibility to those APIs for application development. OAC includes a simple metamodel for an API asset, automation to populate OAC, and the ability for users to search OAC for APIs and understand the details of the APIs to assess their fit in the user's application.

1.2 Understanding Oracle API Catalog Features

This section describes the high-level features included with Oracle API Catalog. This section contains the following topics:

- Section 1.2.1, "Collect Services"
- Section 1.2.2, "Add Metadata to API Assets"
- Section 1.2.3, "Publish API Assets"
- Section 1.2.4, "Discover, Understand, and Use API Assets"

1.2.1 Collect Services

OAC includes a harvester, which is used to create API assets in OAC. The recommended best practice is harvesting the projects at build time. The harvester

introspects deployed services and creates API assets representing the SOA Services and Service Bus proxies, both WSDL-based web services and WADL-based REST services, discovered in the projects.

The created assets are collected in Oracle API Catalog.

See "Configuring and Using Automated Harvesting" in *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog* for more information about collecting services in OAC.

1.2.2 Add Metadata to API Assets

After the API assets are created by the harvester, curators then edit the API assets using a simple editor to provide additional metadata to facilitate the discovery and understanding of the API. Curators can change the name of, add a description to, tag keywords to, or add doc references to the API assets collected in Oracle API Catalog. This metadata simplifies a developer's discovery and understanding of each API asset.

See "Editing Metadata of API Assets in Oracle API Catalog" in *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog* for more information.

1.2.3 Publish API Assets

After the API metadata is edited, curators publish the API, making it visible to developers in OAC.

See "Publishing an API Asset" in *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog* for more information.

1.2.4 Discover, Understand, and Use API Assets

Published assets are available in the Oracle API Catalog console and via the Oracle JDeveloper Oracle Enterprise Repository plug-in. Developers can search OAC to discover APIs that they may want to use. They can review the metadata provided by the curator to learn more about an API.

Upon finding an API that they are interested in using, a developer can add that API to his or her My APIs page. From My APIs developers can rate and review APIs; these ratings and reviews are visible to other OAC users.

See the *Oracle Fusion Middleware Developer's Guide for Oracle API Catalog* for more information about discovering, understanding, and using API assets.

1.3 Understanding User Roles in Oracle API Catalog

Each OAC user is assigned a role. This role determines which OAC features and content are available for each user. There are three predefined roles in OAC:

> **Note:** Oracle API Catalog does not include the ability to create additional roles.

- **developer**: Users with the developer role have the ability to search OAC for published APIs from the OAC console or using the Oracle Enterprise Repository JDeveloper plug-in. The developer can examine the API metadata to better understand the API. The developer also has the ability to declare interest in the API and submit ratings and reviews for an API.

For more information on using Oracle API Catalog as a developer, see the *Oracle Fusion Middleware Developer's Guide for Oracle API Catalog*.

- **curator**: After API assets have been created, curators edit them to update their metadata. The curator also has the ability to publish an API, which makes the API available for discovery by developers.

  For more information about the lifecycle tasks available to users with the curator role, see the "Introducing Asset Lifecycle Administration Tasks" section in the *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog*.

- **admin**: In addition to the capabilities available to the curator and the developer roles, users with the admin role can harvest assets into OAC. Users with this role also have access to the **Admin** page in OAC. From this page users with this role can administer the infrastructure of OAC by editing system settings, creating new users, creating new departments, managing sessions, and using the import/export tool. Users with this role can also configure the security features included with OAC.

  For more information about infrastructure administration tasks available to users with the admin role, see the "Introducing Infrastructure Administration Tasks" section in the *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog*.

  For more information about the security configuration tasks available to users with the admin role, see the "Introducing Security Administration Tasks" section in the *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog*.

1.4 Next Steps

See Chapter 2, "Getting Started with Oracle API Catalog" to get started with Oracle API Catalog.

2

Getting Started with Oracle API Catalog

This chapter describes how to install, configure, and use Oracle API Catalog.

This chapter includes the following sections:

- Installing Oracle API Catalog
- Configuring Oracle API Catalog
- Using Oracle API Catalog

2.1 Installing Oracle API Catalog

Start by installing Oracle API Catalog, connecting OAC to an Oracle Database instance, and deploying OAC to an Oracle WebLogic Server instance.

For more information about installing Oracle API Catalog, see the *Oracle Fusion Middleware Installation Guide for Oracle API Catalog*.

2.2 Configuring Oracle API Catalog

After Oracle API Catalog is installed and running, administrators can configure the OAC infrastructure, configure the harvester, and perform other administration activities, such as creating users and departments.

For more information about configuring Oracle API Catalog, see "Introducing Infrastructure Administration Tasks" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Enterprise Repository*.

2.3 Using Oracle API Catalog

After OAC is installed and configured, curators harvest API assets, edit the metadata of these assets, and publish APIs to OAC, making them discoverable to developers.

For more information about harvesting and publishing APIs, see the "Introducing Asset Lifecycle Administration Tasks" section in the *Oracle Fusion Middleware Adinistrator's Guide for Oracle API Catalog*.

Developers then search OAC for APIs to use in their applications. They can rate each API, providing feedback to curators and other developers using OAC.

For more information about searching for API assets and incorporating them into your applications, see the *Oracle Fusion Middleware Developer's Guide for Oracle API Catalog*.