CA Automation Suite for Clouds

Overview Guide

Release 01.6 SP01

CA Technologies Product References

This documentation set references the following CA Technologies products and components:

- CA Service Catalog

- CA Process Automation

- CA Embedded Entitlements Manager (CA EEM)

- CA Business Intelligence

- CA Server Automation

- CA IT Client Manager

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- Product and documentation downloads

- CA Support policies and guidelines

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Contents

Chapter 1: Introduction

CA Automation Suite for Clouds is a cloud service delivery and management platform that provides automated self-service delivery of virtual and physical infrastructure and application services. CA Automation Suite for Clouds includes a foundation platform and a reference architecture that is made of integrated enterprise IT management and automation products, such as CA Service Catalog and CA Process Automation.

The CA Automation Suite for Clouds platform can be expanded with cloud service containers or modules. Modules allow you to deliver and manage multiple types of cloud services that are based on existing CA products and third-party products or services.

Components

CA Automation Suite for Clouds combines the capabilities of components to provide the integrated, automated cloud capabilities to deliver Infrastructure as a Service.
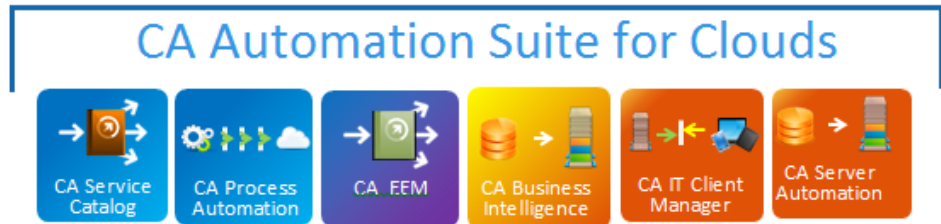
CA Service Catalog

Provides the user interface to onboard users and manage requests.

CA Process Automation

Automates the processes related to service requests and provisioning.

CA Embedded Entitlements Manager

Allows applications to share common access policy management, authentication, and authorization services.

CA Business Intelligence

Provides reporting capabilities related to users and roles.

CA Server Automation

Integrates and automates provisioning processes, and allows you to monitor and manage data center resources.

CA IT Client Manager

Manages and deploys software packages to the enterprise servers.

Base Models

CA Automation Suite for Clouds consists of a base model which includes prebuilt CA Service Catalog content and CA Process Automation workflows. The workflows enable full flexibility of adoption of choices for IaaS services. These models provide opportunities for expansion:

- CA Automation Suite for Clouds Foundation includes CA Service Catalog and CA Process Automation capabilities and provides the:

    - Core functionality of CA Automation Suite for Clouds installation

    - Base for standalone cartridges

    - Ability to use your existing CA Server Automation installations

- CA Automation Suite for Clouds Base Configuration Model includes the capabilities of CA Service Catalog, CA Process Automation, CA EEM, CA Business Intelligence, and CA Server Automation Cartridge.

    This base model is a starter pack if you do not have CA Server Automation but would like to take advantage of its capabilities.

Service Cartridges

A service cartridge provides more functionality to your CA Automation Suite Clouds implementation. A service cartridge is a packaged set of content that is used with one of the base models to deliver a configured cloud IT service offering. A service cartridge includes the connectors, processes, forms, and scripts that are required to deliver a service offering. Each service cartridge individually represents a service offering and is delivered as a singular unit to automate and deliver that service.

Power Packs

A service cartridge can include a power pack, which provides the tools, integration components, and documentation that is required to automate common processes. The CA Process Automation Power Pack includes the CA Process Automation connector, quick starts, and tutorials.

Quick Starts

A quick start contains sample processes for quickly accomplishing real-world tasks such as:

■ Clone a virtual machine

■ Create a virtual machine

They provide example processes that you use with a power pack to shorten the development cycle.

Defined Roles

CA Automation Suite for Clouds uses defined roles to determine the level of access to the solution. Documentation that is delivered for the solution is also role focused. To access the solution, review the following role descriptions and determine your role.

Service Consumer

Specifies the role that requests and consumes the automated IT service offerings that the solution provides.

The Service Consumer is also known as a Cloud consumer, Developer, End User, Employee, or Tenant.

Service Provider

Specifies the business priorities and infrastructure availability for service consumer business requirements.

The Service Provider is also known as a Master Administrator, Super Administrator, Infrastructure Administrator, Cloud Administrator, Enterprise Administrator, or MSP Administrator.

Approving Manager

Specifies the line-of-business owner who approves or rejects Service Consumer requests as part of the workflow processes in their organization.

The Approving Manager is also known as a Request Manager, Supervisor, or Manager.

Service Administrator (Service Architect)

Specifies a privileged user who is delegated either as an administrator or as a tenant in multi-tenant environment.

The Service Administrator or Service Architect is also known as a Network Administrator, Storage Administrator, Security Administrator, or System Administrator.

Service Delivery Manager

Specifies an elevated privileged account holder who is responsible for defining and rolling out new services and managing the service offerings.

The Service Delivery Manager is also known as a Tenant Administrator or a Business Analyst.

Key Role Responsibilities

The following list is for the most likely related activities and responsibilities for key roles to understand how they use CA Automation Suite for Clouds.

Service Consumer

As a Service Consumer, you are responsible for verifying that virtual machine usage is as efficient as possible. Your responsibilities include the following planning steps that are needed before you reserve a virtual machine:

- Determine the business need for your virtual machine.

- To avoid reservation changes, determine adequate system requirements for your virtual machine reservations.

- To avoid reservation extensions or return requests, determine the appropriate time that you need the virtual machines.

After you complete the planning tasks, perform the following tasks:

- Reserve virtual machines

- Change virtual machine reservations

- View reservations and status

- Return or Extend reservations

Approving Manager

As an Approving Manager, for virtual machine provisioning, you are responsible for ensuring the following items:

- Understanding the business priorities and infrastructure availability for service consumer business requirements

- Virtual machine templates meet business user criteria and are updated to meet changing business requirements. Work with your enterprise administrator to keep all templates current.

You are responsible for approving or rejecting several service consumer requests:

- Virtual machine reservations

- Changes in system requirements for existing virtual machine reservations

- Snapshot creation (if applicable)

Note: Snapshot restoration and deletions do not require your approval; the Solution performs these features automatically when the service consumers request them.

Service Provider

As a Service Provider you are responsible for the business priorities and infrastructure availability for service consumers. The Service Provider has many responsibilities and sub-roles are created as listed:

System Administrator

As a System Administrator, for virtual machine provisioning, you are responsible for verifying the following items:

- Service consumer accounts are mapped in Active Directory to their respective business organizational units created in Reservation Manager

- Virtual Notifications that are sent computer templates meet business user criteria and you update the templates to meet changing business requirements

- Notifications that are sent to approving managers and service consumers are correct and sent at the appropriate time in the workflow

Storage Administrator

As a Storage Administrator, for virtual machine provisioning, you are responsible for verifying the following items:

- Service consumer accounts are mapped in Active Directory to their respective business organizational units created in Reservation Manager

- Understand the business priorities and infrastructure availability for service consumer business requirements

- Virtual machine templates meet business user criteria and are updated to meet changing business requirements

- The back-end infrastructure (VMware) and necessary applications for automation meet change requests

Role-based Tasks

The tasks that are related to a role differ depending on the base model and service cartridges that you have installed. The remaining chapters of this guide provide an overview of the tasks for the following roles:

- Service Consumer:

    - Reserve and Manage VMware ESX Virtual Machines

    - User and Access Management

    For more information, see Service Consumer Guide.

- Approving Manager:

    Monitor and Manage Reservation Requests (see page 13)

- Service Provider:

    Administer Users and Profiles (see page 17)

Note: For detailed information about performing these tasks for your specific implementation of this solution, see [set to your product name] bookshelf.

Chapter 2: Monitor and Manage Reservation Requests

This chapter describes the Approving Managers tasks to manage reservation requests from Service Consumers. As an Approving Manager, you approve or reject requests for virtual resources from Service Consumers.

To understand how requests affect business requirements and priorities, you review reservation requests for yourself and other Approving Managers. You also can generate reports of the resource usage and availability, which are useful for verifying Service Level Agreements.

The Self-Service Portal allows you to monitor and manage reservation requests.

Approve or Reject Requests

As an Approving Manager, you are responsible for reviewing the requests that you receive from a Service Consumer. A request is automatically assigned to you based on the user that opened the reservation. Requests automatically appear in the portal as Requests Pending My Action. You can view all requests and can approve or reject the requests.

You can perform other tasks on reservations such as transfer or delegate requests. For more information, click Help and see the topics under Handle Requests Pending Action.

Follow these steps:

1. Log in to CA Service Catalog.

2. Click Requests.

   The Available Services list appears.

3. Click Pending My Action.

   The requests that await review and approval or rejection appear.

4. Click Actions for a request, then click Approve/Reject.

   The Approve Request page opens.

5. Click Show Details and review the reservation details.

6. Select Approved or Rejected from the Item Status drop-down list.

7. Click Save.

    A confirmation dialog appears.

8. Click Yes.

    The Request Details page opens showing the updated status of the request.

    After you approve the application request, CA Automation Suite for Clouds fulfills the request. The Service Consumer who opened the reservation request receives an email notification.

Chapter 3: Access and Run Reports

Reports can assist with request approvals by giving you a picture of resource usage and availability. You also can generate service accounting reports and query data within a range to generate reports for stakeholders or verify compliance with Service Level Agreements.

You can run available reports from InfoView directly from CA Service Catalog.

Follow these steps:

1. Log in to CA Service Catalog.

2. Click Reports.

3. Click InfoView.

    The BusinessObjects InfoView page opens.

4. Click Document List and navigate to Public Folders, CA Reports, CA SLCM.

    The CA SLCM folder contains two folders:

    Admin Reports

    Provides reports of interest to Approving Managers and Service Providers.

    User Reports

    Provides reports of interest to service consumers, such as the User Requests report. This report provides details about requests that were opened, approved, or fulfilled within specific time periods.

    Note: Your access to folders and reports depends on your access privileges.

5. Double-click a report.

    The Prompt dialog opens.

6. Type specific parameters to generate the report.

7. Click Run Query.

    The report generates and opens.

Review Reservation Requests

As an Approving Manager, you need to understand how requests affect business requirements and business priorities. You must understand the options available to process requests and what users are requesting. By reviewing the requests that service consumers generate, you can understand better the business requirements and business priorities.

Reviewing reservation requests also helps you to create effective policies for automatically assigning tasks in the request lifecycle to users. Policies are commonly used to expedite requests and assign a specific approver to a specific service or service option. You can also assign approval or rejection duties to users other than the manager of the requester.

Follow these steps:

1. Log in to CA Service Catalog.

2. Click Requests.

3. In the Request Lookup pane, select one of the following options:

   ■ Open Requests to review all outstanding requests for approving managers.

   ■ Completed Requests to review recently processed requests.

   ■ Pending My Action to review requests that you are responsible for processing or delegating.

4. Review requests with the on-screen navigation options.

5. (Optional) Click Home to return to the CA Service Catalog home page.

   You can view requests pending action for all approving managers.

Chapter 4: Administer Users and Profiles

As a Service Provider, you manage users and their profiles in the system. Before you can manage users and their profiles, you must import users from CA EEM or other external directories. You can use the syncuputil.bat file to import users in bulk. You need to import users only one time.

For more information about running the utility, see the section Specify the Configuration File Properties, in the CA Service Catalog Integration Guide.

After you import users, you can manage the service groups to which the users are assigned. By default, only Service Providers and Approving Managers have rights to edit user profiles (other than their own) and to add users to groups.

The self-service portal allows you to manage users, profiles, and service groups. The portal is accessible from CA Service Catalog with the URL and your credentials.

Use the self-service portal to navigate to User and Access Management.

Follow these steps:

1. Log in to CA Service Catalog.

2. Click Requests.

   The available services list opens.

3. Click Foundation Management Services, User and Access Management.

   The User and Access Management page opens.

The following diagram illustrates how a provider can manage users.
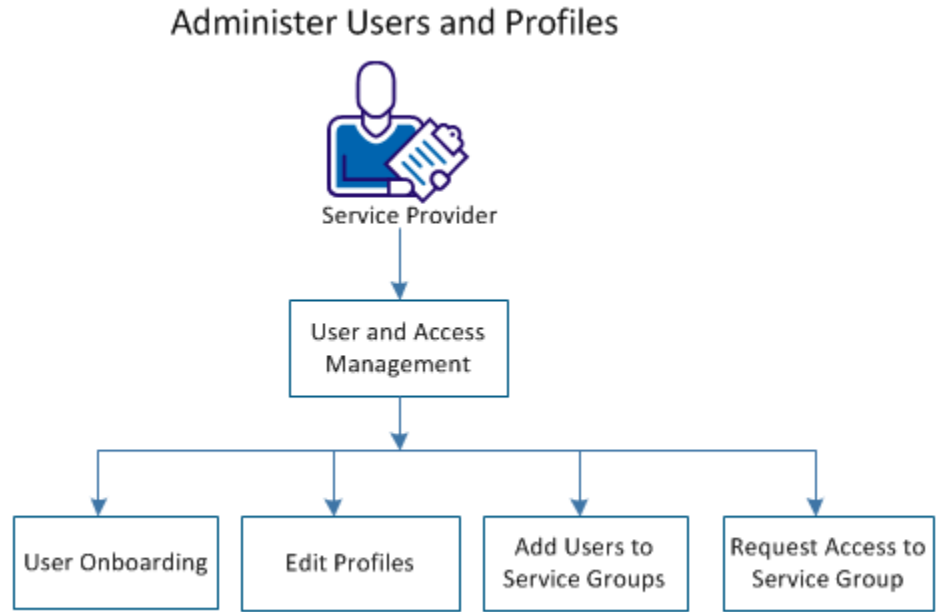
Perform the following functions:

- User Onboarding (see page 18)
- Edit Profiles (see page 19)
- Add Users to Service Groups (see page 20)
- Request Access to Service Groups (see page 20)

User Onboarding

You add users to CA Automation Suite for Clouds using the User Onboarding form.

Follow these steps:

1. Access User and Access Management.

2. Click User Onboarding.

   The User Onboarding form opens.

3. Complete the User, Contact, and Organization Details and verify that you completed the required fields at a minimum.

   Note: The Organization that you select determines the templates available to the user.

4. Click Add to Cart and Check Out.

   The Cart Check Out page opens and the reservation cost displays in the My Selections pane.

5. Click the reservation and verify the reservation details before submitting your reservation.

6. Click Save and Submit Cart.

   A confirmation displays indicating that your request was submitted successfully. The My Recent Requests pane updates showing your new and previous reservations. This update can take several seconds.

   This request does not require approval.

Edit Profiles

You can edit the profiles of other users. By default, only Service Providers and Approving Managers have rights to edit user profiles and to add users to groups. You can edit your own profile using the Edit My Profile link.

Follow these steps:

1. Access User and Access Management.

2. Click Edit User Profile.

   The Edit User Profile form opens.

3. Click the magnifying glass icon to search a user and enter the User ID in the Lookup User field.

   A list of users appears.

4. Select a user and click OK.

   The Edit User Profile form updates with the selected user information.

5. Update the fields.

   Note: You cannot edit the First Name, Last Name, User ID, or Organization of the user.

6. Click Add to Cart and Check Out.

   The Cart Check Out page opens and the reservation cost displays in the My Selections pane. Click the reservation and verify the reservation details before submitting your reservation.

7. Click Save and Submit Cart.

   A confirmation displays indicating that your request was submitted successfully. The My Recent Requests pane updates showing your new and previous reservations.

User profile changes do not require approval and your changes take effect immediately.

Add Users to Service Groups

Service groups determine to which services the users in that service group can access.

Refer to the group_service.properties located in %USM_HOME% folder for all offerings to groups mapping.

Follow these steps:

1. Access User and Access Management.

2. Click Add User to Service Group.

    The User to Service Group form opens.

3. (Optional) Select the Starts With or Wildcard option and type the search string in the Select User field. This filters the users that appear in the Select User drop-down list.

4. Select a user from the drop-down list.

    The Subscribed Groups and Subscribe to Group panes populate.

5. Add or remove the user from service groups using the arrows.

6. Click Add to Cart and Check Out.

    The Cart Check Out page opens and the reservation cost displays in the My Selections pane.

7. Click the reservation and verify the reservation details before submitting your reservation.

8. Click Save and Submit Cart.

    A confirmation displays indicating that your request was submitted successfully. The My Recent Requests pane updates showing your new and previous reservations.

    Adding users to service groups does not require approval. Your changes take effect immediately.

Request Access to Service Groups

Service groups determine to which services the users in that service group can access.

Follow these steps:

1. Access User and Access Management.

2. Click Request Access to Service Group.

   The Request Access to Service Group page opens with the User ID field populated with your ID. The Belongs to Group(s) field displays the groups that you currently belong to.

3. Add or remove yourself from service groups using the arrows.

4. Click Add to Cart and Check Out.

   The Cart Check Out page opens and the reservation cost displays in the My Selections pane. Click the reservation and verify the reservation details before submitting your reservation.

5. Click Save and Submit Cart.

   A confirmation displays indicating that your request was submitted successfully. The My Recent Requests pane updates showing your new and previous reservations. This update can take several seconds.