Implementation Guide:

Cutover and AWS Control Tower & AWS Service Catalog

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Foreword

Cutover is a work orchestration and observability platform helping customers to drive operational excellence. Cutover allows teams to plan, orchestrate, and analyze complex workflows. It integrates with AWS Control Tower to accelerate your migration and beyond, drive effective governance, reduce risk, and support standardization. Cutover’s automation runbooks work with existing toolsets to allow teams to achieve full visibility, control, and streamlined communications across their multi-account environments.

The purpose of this AWS Implementation Guide is to enable every AWS Marketplace customer to seamlessly activate, deploy and configure Cutover in an AWS Control Tower environment while taking full advantage of the resources pre-configured by AWS Control Tower as part of the initialization.
Solution overview and features

Creating new accounts with AWS Control Tower solves the overhead of manually configuring an account, IAM entities, and any services you use. By integrating your AWS Control Tower created accounts with Cutover you can seamlessly allow Cutover services to orchestrate AWS services on-demand in the new account automatically.

Once Cutover has received the AWS Control Tower payload it enables end customers to securely provision access to the many services within AWS via AWS Control Tower. This model also ensures that AWS is communicating with a single entity, streamlining the process, and ensuring simplicity. Using Cutover, you can assign roles and permissions to set secure guardrails for access, governing the duration and services that a user can access. The result is unparalleled flexibility and granular, automated access that is fully governed without slowing down your teams.

With Cutover, you can:

✓ Easily and securely orchestrate AWS activities (such as launching AWS Service Catalog products) directly from the Cutover UI.

✓ Keep Cutover’s service updated with new Accounts created in AWS Control Tower

✓ Directly govern the guardrails that are defined for application teams at scale. And ensure that everything is fully audited.

✓ Provide all stakeholders and team members with live visibility of progress using analytics and live dashboards

Use cases

New AWS Account Creation (Control Tower) -> Cutover

1. Client uses AWS Control Tower to orchestrate/automate the creation of their AWS Accounts with built-in guard rails, security rules, pre-configured services.
2. Account creation automation triggers Cutover service to extract necessary data – account information (ID and name), region (where Control Tower is set up) and the Role created for Cutover to interact with the new account on your behalf.
3. Cutover integrations use the information about this new account, to orchestrate additional AWS Services using AWS Service Catalog
Use case: AWS Services <-> Cutover (Control Tower Integration) Shopping cart approach

1. Cutover AWS integration uses data from AWS Control Tower integration to orchestrate other AWS Control tower integrated services - in this example we have used Service Catalog
2. From within a Cutover runbook, an end user can select from a predefined menu of governed resources. Examples selections of types of software stacks that could be deployed using a Cutover runbook by driving Service Catalog are
   a. Jenkins
   b. SonarQube
   c. deployment of EC2, RDS, EKS
3. Cutover will report back successful deployment (if required) directly into the associated runbook.
4. All deployment tasks are audited

Use case: AWS Service Catalog <-> Cutover (Control Tower Integration) Full Automation

1. Cutover AWS Service Catalog integration tasks uses your Service Catalog Products and Portfolios to orchestrate launching resources in the AWS Cloud with no human intervention.
2. Launch and monitor a Service Catalog product end-to-end from the Cutover runbook.
3. All automated tasks are audited

Architecture diagram
Connecting Cutover with your AWS Control Tower gives an easy and automated way to collect AWS Account metadata and configure role-based access to perform AWS orchestration in your AWS Cloud without your end-users leaving Cutover.

Automated account creation creates the relevant role and metadata, notifying Cutover in one easy step. Integrating this way with Cutover is a simple and secure way to enable Cutover integrations to orchestrate your AWS Services (AWS Service Catalog Products and more) from the Cutover portal.

AWS Control Tower emits a set of EventBridge Events that are called Lifecycle Events. These events mark a completion of management operations in AWS Control Tower and can be used to trigger actions. In this solution, creation of managed AWS accounts will result in these accounts being automatically added to your Cutover environment, allowing you to define runbooks, orchestrations and provisioning of AWS resources using AWS Service Catalog.

The integration automation will create the required IAM Role for use by Cutover and send a registration message to the Cutover backend with information about the new account.

**Pre-requisites**

AWS Control Tower Integration

You require a deployed AWS Control Tower landing zone to use this solution. For further information on setting it up, refer to the [Getting Started with AWS Control Tower](#) page.

To set up the AWS Control Tower Integration you will need a Cutover instance and API key (supplied on setup of the cutover instance).

When a cutover instance is provisioned for you, your Cutover contact will discuss your API key and IAM needs. Subsequently API Keys and IAM roles will be generated and supplied by Cutover as part of your onboarding process.

Different Cutover integrations will use the data contained in the payload to orchestrate AWS Services in your AWS cloud depending on the use case you have in mind and the role or user permissions granted to Cutover’s integrations.
Deployment and Configuration Steps

Step 1: Subscribe to Cutover on AWS Marketplace.


1.2 Click on the **Continue to Subscribe** button.

1.3 You can specify the duration and decide the renewal settings
1.4 Select the desired quantity based on the number of users you want to provision for. You can increase the quantity in case you want to provision for additional users.

1.5 Click on Create Contract to purchase Cutover from AWS Marketplace.
Once you have completed the subscription process, you will receive a welcome email including a URL and links to your Cutover instance, credentials and more. You will receive the email within minutes of completing the subscription.
1.7 You will then receive the following email to instruct you that your global API key will be transmitted by secure means.

1.8 Below we can see all the configuration details that will be prepared and available to you upon logging into your Cutover system as Global Admin. The Runbook called Start Here-Control Tower will present everything that you need.
Step 2: Implementing the Automated Integration in AWS Control Tower

To enable automatic integration of accounts created using AWS Control Tower with your Cutover environment, follow the steps below:

1. Download the integration template from our GitHub repository and save it locally
2. Login to your AWS Control Tower Management Account
3. Navigate to CloudFormation and click “Create Stack”
4. Choose “Template is ready” and “Upload a template file”, point to the template you downloaded in step 1
5. Fill-in the parameters under the “Cutover Configuration” section from your Cutover instance (Step 1.8):
   a. API Key: Step 1.8
   b. External ID: Step 1.8
   c. External Account ID: Step 1.8
   d. For the “Backend Configuration” section, keep the default values
6. Once the Stack deployment is complete, the integration is in place

Step 3: Verify Integration

You can now vend a new Control Tower managed account using the Account Factory, once completed, this account will appear in your Cutover dashboard.

In the below image, a new account named “test” has been vended using the Account Factory:

In Cutover:

This is how the integration it looks in Cutover – to see this information you have to have the login role Global Admin
Once the Integration appears you can attach Control tower tasks into your Cutover runbook:

You can now login to your Cutover instance using the URL you received as part of the welcome email (after subscribing) and initial credentials you configured using it. You are now able to orchestrate resources and runbooks on this new account. Your initial screen will be customized to deliver the following details for you.
Solution Estimated Pricing

Basic integration to AWS Control Tower and Service Catalog is included free of charge with Cutover as described in this document. Additional integration points can be discussed with your Cutover contact and we will evaluate if extra costs will be incurred.

Additional resources

- Cutover - Work Orchestration and Observability platform
- Ideas on helping you accelerate cloud migration
- White paper: How to create an automate-first culture
- Webinar: Every cloud has a silver lining, but is it a ‘silver bullet’ for resilience?

Partner contact information

If you need help, please email AWSSales@cutover.com or contact us.