

AD SWAT



technologies

**CA Continuous  
Delivery  
Director  
Testing Guide**

**CA CDD SAAS**

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**Date: May 2017**

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# CA Continuous Delivery Director SAAS

## Purpose

The purpose of this document is to provide guidance on a new SAAS-based release management and planning tool from CA Technologies. The SAAS version is designed to provide best in class support.

CD Director has broad support for 3<sup>rd</sup> party integrations which are documented in this guide. It is perfectly fine to skip sections that do not apply to your environment.

## SaaS environment

CD Director is a SAAS-based offering from CA Technologies. The URL to sign up or log in is <https://cddirector.io/#/home>

The screenshot shows the landing page for CA Continuous Delivery Director. The header includes the CA Technologies logo, the product name, and navigation links for Education, Blog, Try For Free, and Log In. The main content area features a large illustration of a diverse group of people standing in front of a city skyline, with a speech bubble saying "Get Started — Free!". Below this, the text "Orchestrate Continuous 'Everything'" is displayed. Three key benefits are listed with icons: "Continuously Release" (lightbulb icon), "Continuously Test" (interlocking circles icon), and "Continuously Improve" (download icon).

CA Continuous Delivery Director

Education Blog Try For Free Log In

Continuous delivery orchestration & optimization  
for every team

Get Started — Free!

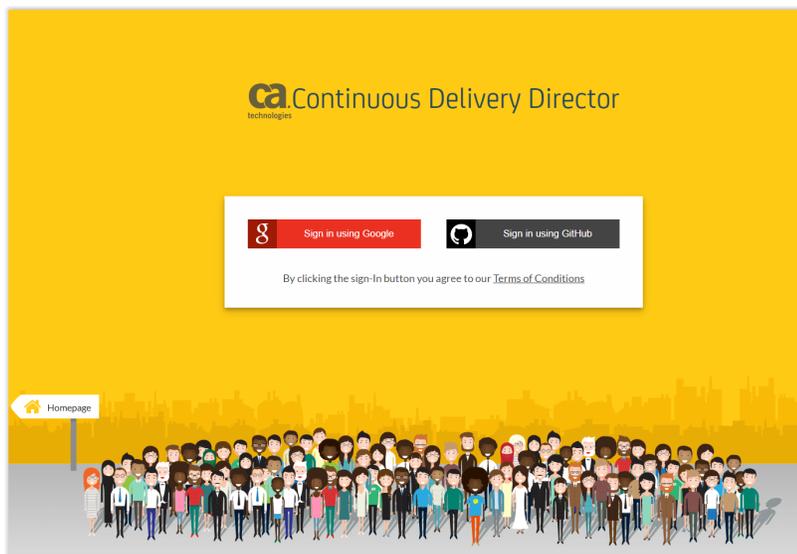
Orchestrate Continuous "Everything"

**Continuously Release**  
Forget the stress, long weekends, and spreadsheets.  
Make releases a non-event.

**Continuously Test**  
Avoid rework and improve app quality by shifting left.

**Continuously Improve**  
Save time and effort to deliver more value to your  
customers regularly.

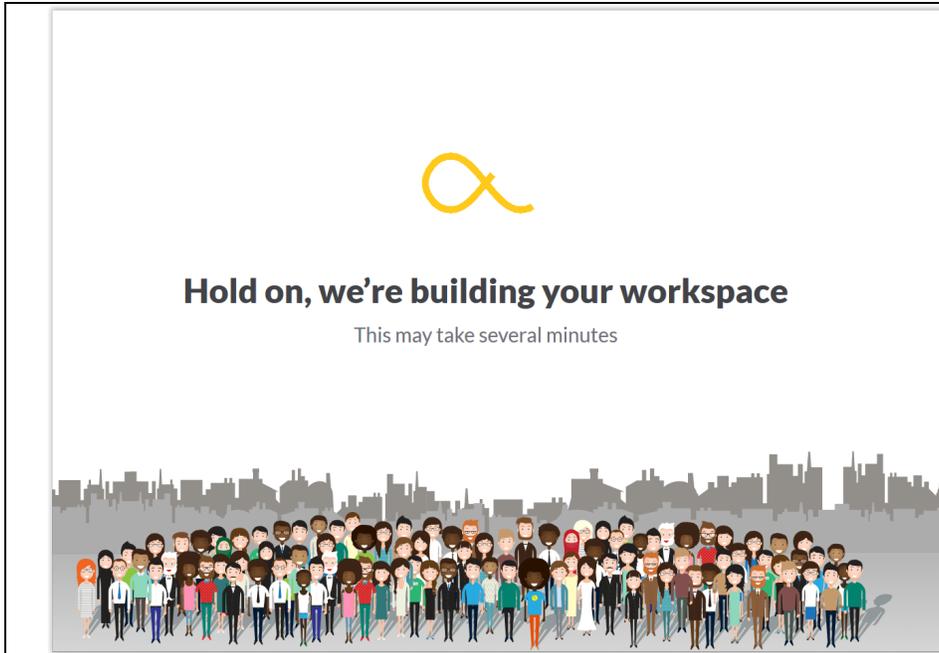
## Accessing the System



Log in with GitHub or GMail.

The image shows a GitHub login overlay. At the top center is the GitHub Octocat logo. Below it is a white box containing the GitHub logo and the text 'Sign into GitHub to continue to Continuous Delivery Director'. Underneath is a text input field labeled 'Username or email address' containing the text 'myuser'. Below that is a password input field labeled 'Password' with a 'Forgot password?' link to its right. The password field contains several black dots. At the bottom of the white box is a green button with the text 'Sign in'. Below the white box is a separate white box containing the text 'New to GitHub? [Create an account.](#)'.

**Enter your login information**

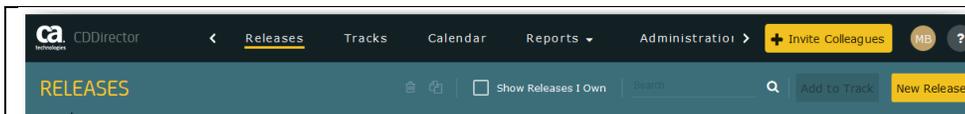


CD Director will create a workspace for you.

CD Director is great but its better with friends.

Invite colleagues and collaborators to share your workspace so that all the stakeholders are in the know.

## Invite Colleagues



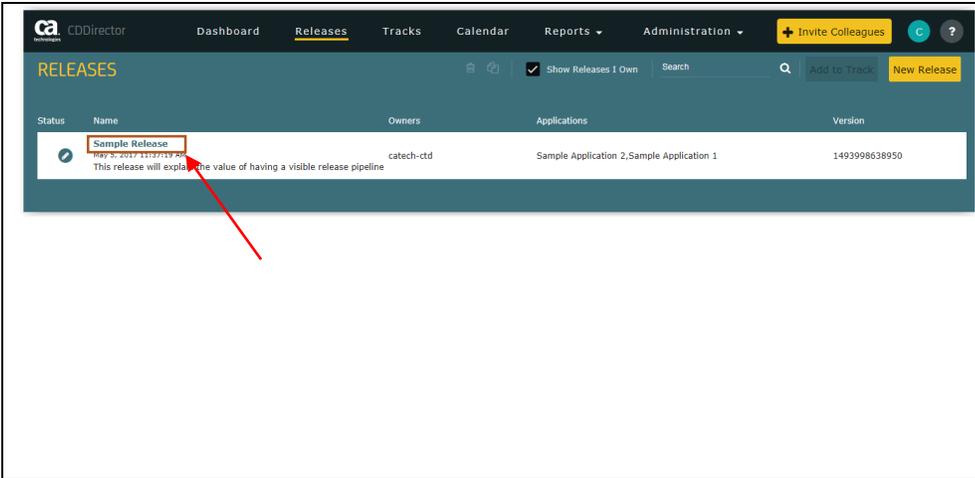
Click + Invite Colleagues to collaborate with your team.

Fill in email and a message.

Use a semi-colon to add multiple addresses.

Click Invite

## Explore the Sample Release

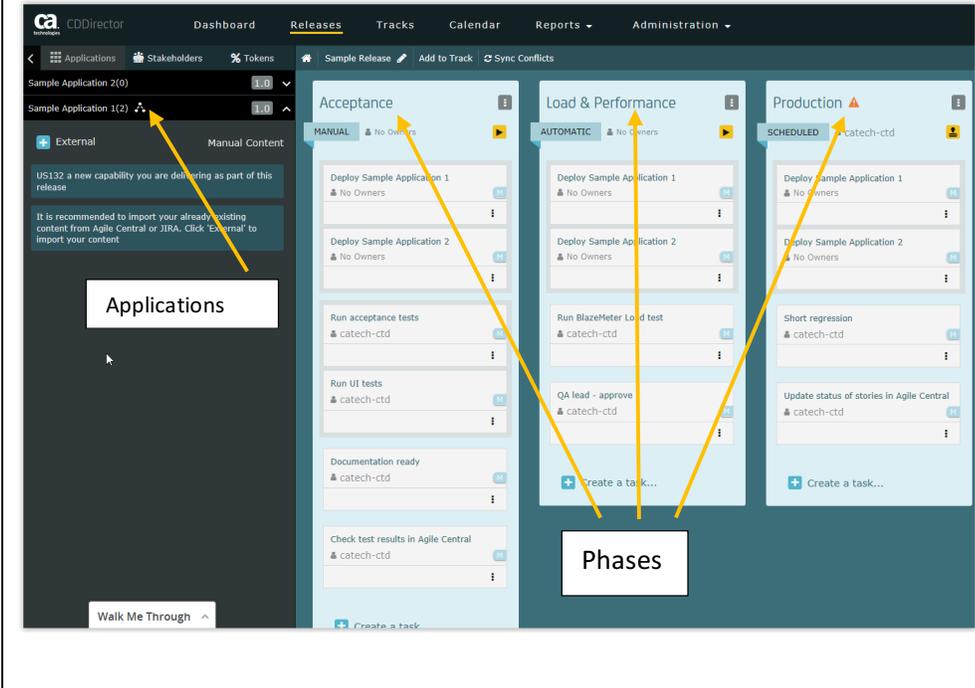


A sample release has been created by default.

The release consists of 2 applications, Sample Application 1 and 2

You are the owner and the version is your tenant ID number.

Click on Sample Release



The Details of the Sample Release are shown.

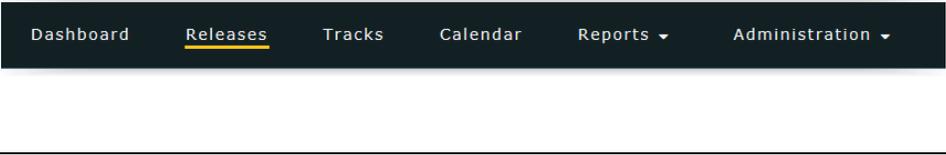
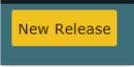
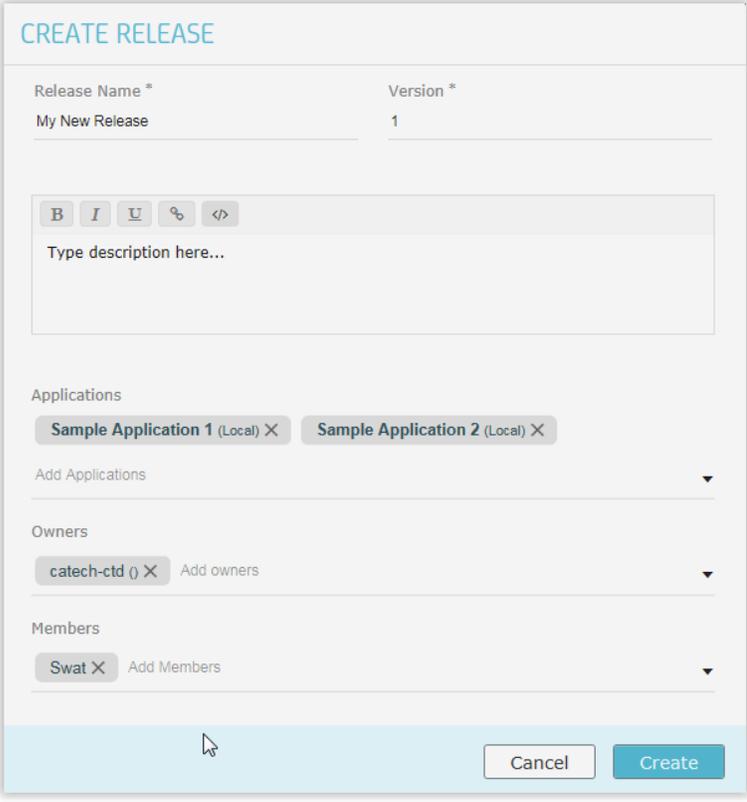
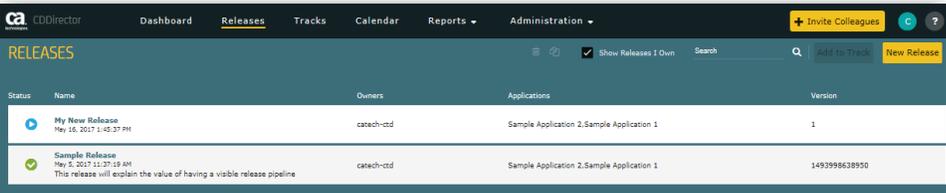
The left hand side shows the applications for the release and the user stories for each.

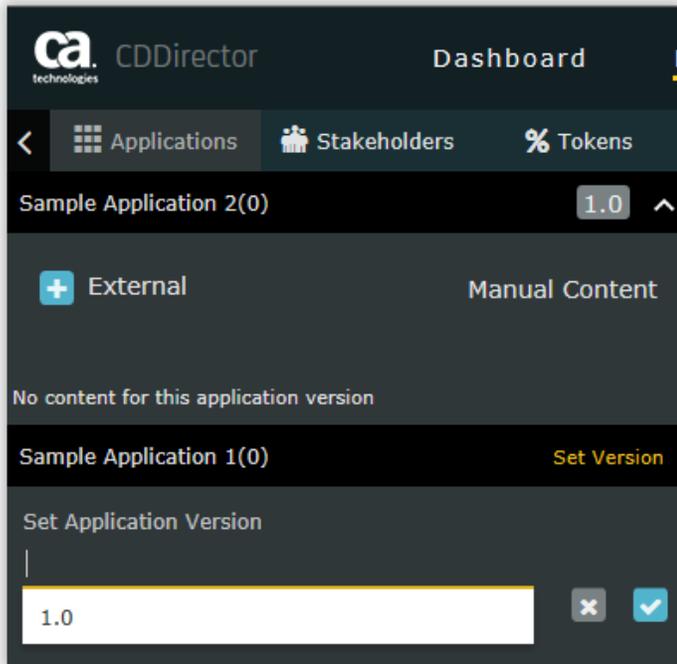
There are 3 phases, Acceptance, Load and Performance and Production.

Each phase is comprised of multiple tasks.

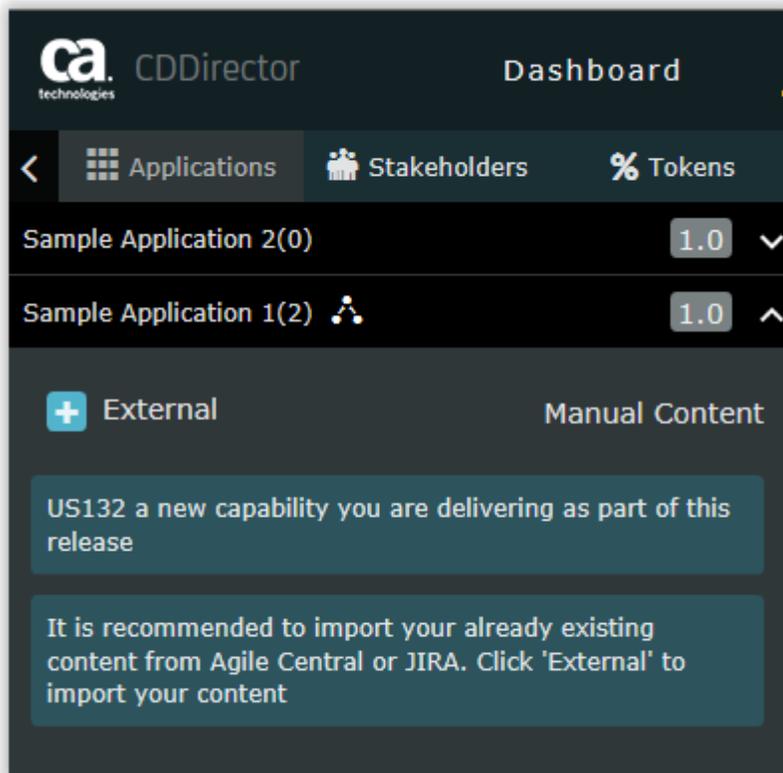
Note – Phases and Tasks have owners.

## Create a New Release

	<p>Click Releases tab Select New Release</p> 
	<p>Enter a Name, Version and Description</p> <p>Add Sample Application 1 and Sample Application 2</p> <p>By default you will be the owner.</p> <p><i>Note: The Release owner/s has the overall responsibility for the Release.</i></p> <p>Add any additional Members. <i>Note: Members are stakeholders who are interested in the Release</i></p> <p>Select Create</p>
	<p>Click My New Release link</p>



Set the Versions for the Applications.



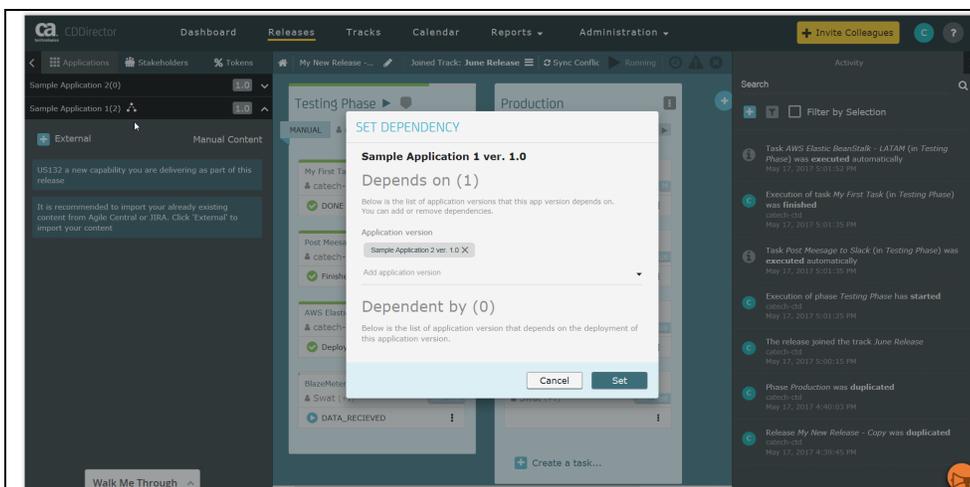
*Note: Sample Application 1 version 1.0 already has user content defined.*

User stories can be defined manually or by integrating with Agile Central or Jira.

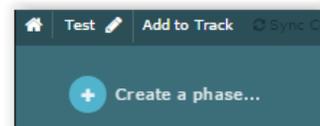


Click on the

Click Cancel



Select **Create a Phase**



Enter a Name

Set the Phase Owner

Select whether the Phase is Manual , Automatic, or Scheduled.

Set the dates for the phase

Give a description

Select the Environment for the phase.

The environments available are the default environments for the Sample Applications.

*Note: Environments and Applications are defined in the Administration tab.*

**CREATE PHASE**

Phase Name \*  
Testing Phase

Owners  
catech-ctd () X Add Owners

CHOOSE HOW YOU WANT THE PHASE TO RUN

Manual When you press run button  
 Automatic When previous phase ends  
 Scheduled According to the estimated time

Tip: set estimated from/to for better insight

From Today at 1:53 PM X To Saturday at 1:53 PM X

B I U ↻ <>

Testing Phase\_\_

Environments  
QA X Add environment

Cancel Create

## CREATE TASK

Task Name \*

My First Task

B I U  

Type description here...

Owners

Add Owners

Task Type

Manual

## CONTENT

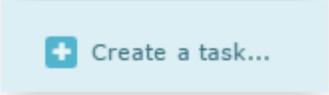
Sample Application 2 (1.0)

Sample Application 1 (2.1)

Cancel

Create

Select Create a Task

 Create a task...

Enter a Name and Description

Set the Owner

Set the Task to Manual

*Note: There are many types of tasks available.*

*Note: Selecting the checkbox for the application in the content dialog maps the task with specific content for an Application. For example, a deployment task can map user stories in the reports by selecting the Sample Application 1 (1.) checkbox*

Select Create

## Testing Phase

MANUAL

 catech-ctd



My First Task

 catech-ctd



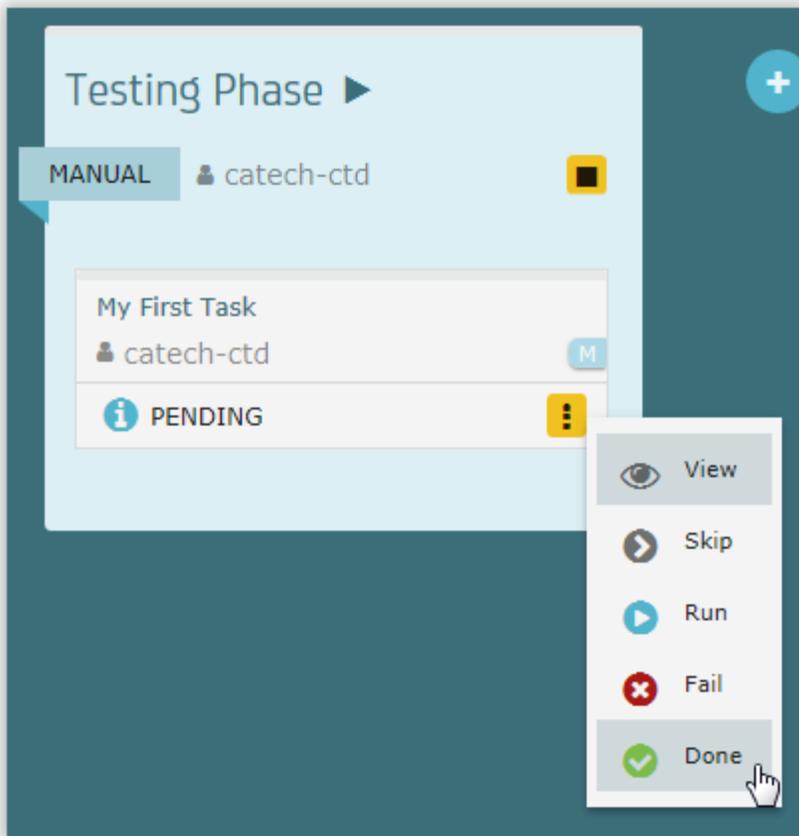
Create a task...



Click the Release.

to start the

++



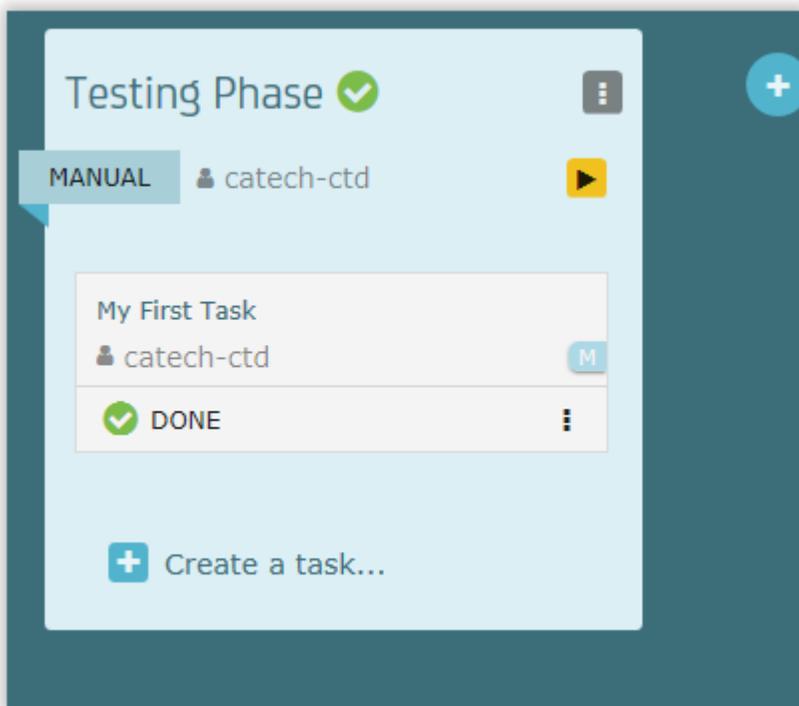
The Phase starts and the Task turns to Pending.

This task is a Manual task.



Click the  to set the Status of the task.

Select Done, to indicate the task is complete.



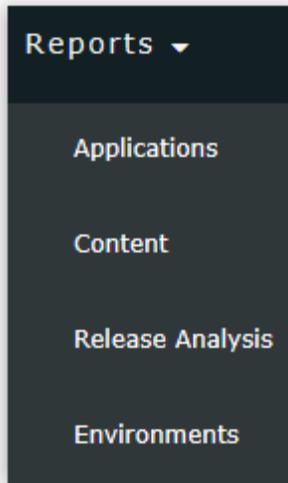
A phase can be run multiple times.



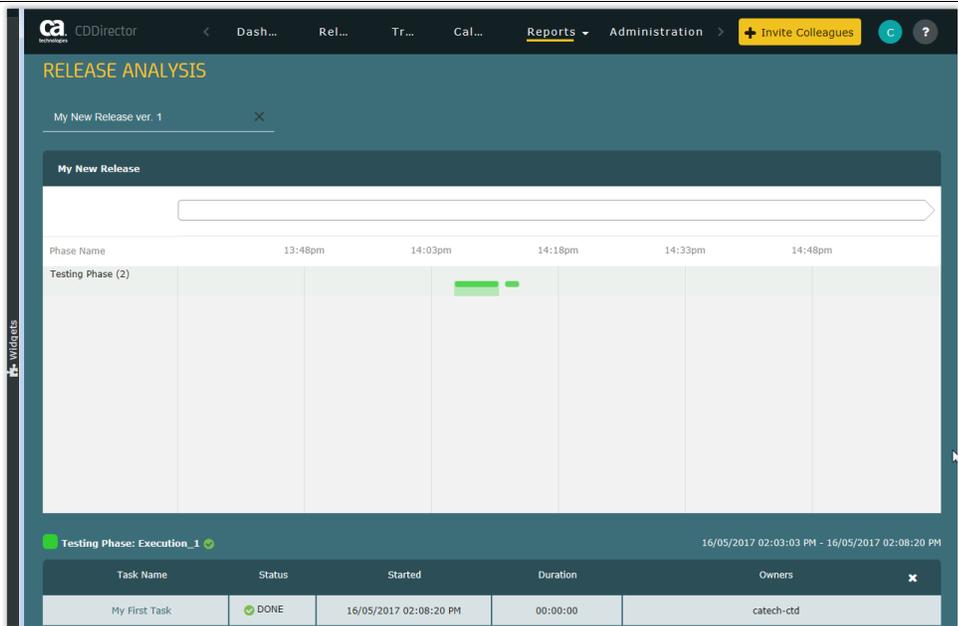
Click the  to re- run the phase.

*Note: This is especially helpful during the Dev/ Test cycle when failures are more common.*

Set the task to Done.



Select Reports  
Select Release Analysis



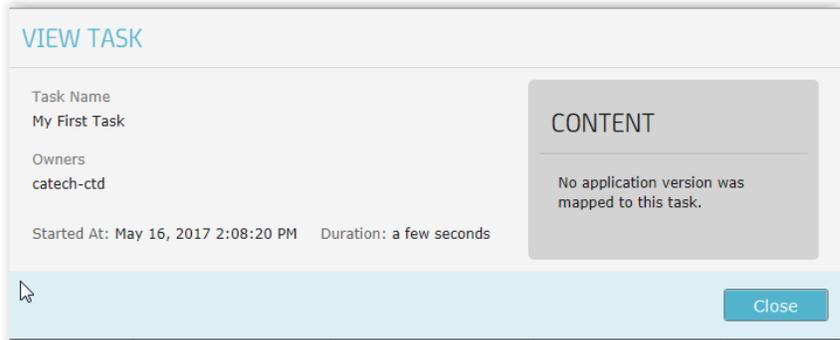
Enter the Release Name  
The Release Analysis Report is displayed.

The Test Phase is shown.

*Note: Each bar represents a phase run.*

Click on one of the colored bars to see Task Details.

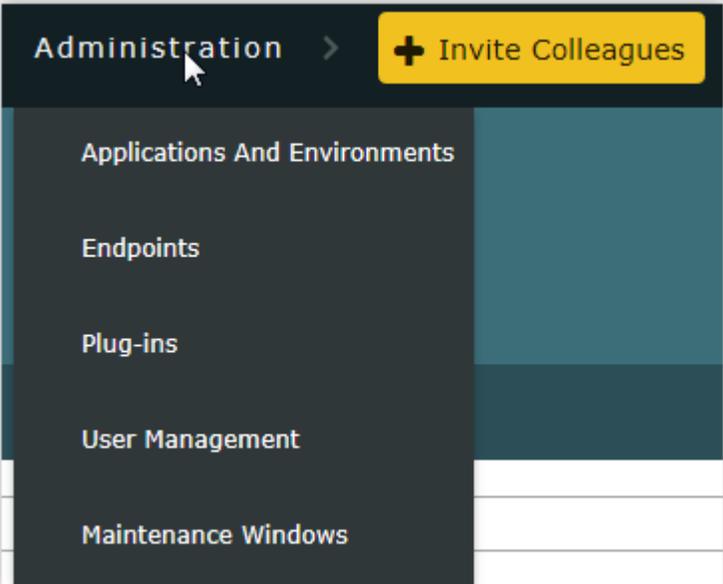
Click on the Task Name to see Task Details



Click Close

# Plug-Ins

Plug-ins enable integration with remote components, such as AWS CodeDeploy, BlazeMeter, and SauceLabs. All available plug-ins from CA Technologies are pre-registered in the SaaS version of CA Continuous Delivery Director. CD Director provides the ability to create custom plugins which can be registered in the Plug-Ins screen.



Click Administration

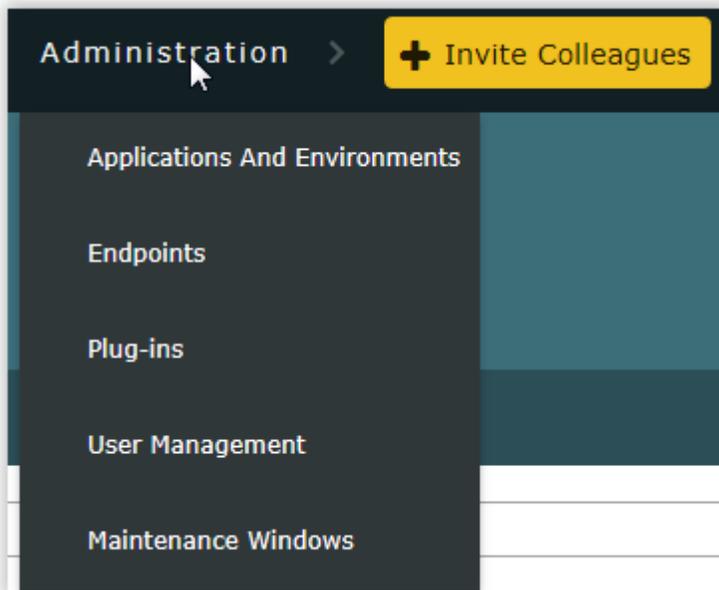
Click Plug-ins

PLUG-INS							Search
Plug-in Name	Version	Vendor	Application Model	Content	Connectivity Test	Tasks	
 REST 1.0	1.0	CA Technologies				1	
 BlazeMeter	1.0	CA Technologies			✓	2	
 ServiceNow	1.0	CA Technologies			✓	5	
 Jira	1.0	CA Technologies		✓	✓	3	
 Rally Platform	2.0	CA Technologies		✓	✓	2	
 AWS ElasticBeanstalk	1.0	CA Technologies			✓	1	
 AWS CodeDeploy	1.0	CA Technologies			✓	1	
 SauceLabs	1.0	CA Technologies			✓	1	
 Slack	1.0	CA Technologies			✓	1	

All of the Plug-ins available for CD Director are shown here.

Plug-ins are integrations with third-party systems

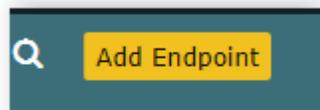
## Configure Endpoints



Select Administration | Endpoints

*Note: Endpoints are specific connections to plugins. For example, an endpoint to AWS Elastic Beanstalk includes all the information needed for the AWS account including the, Access Key and Secret Key.*

Once an endpoint is configured, you will be able to run tasks for that system.



Select Add Endpoint

A screenshot of a web form titled 'ADD ENDPOINT'. The form has a light blue header and a white body. It contains a text area with instructions: 'An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.' Below this are two input fields: 'Name \*' (with a red asterisk and 'Required' text below it) and 'Description'. There is a section for 'AUTHORIZED USERS' with a dropdown menu. Below that is a 'Select plugin \*' dropdown menu with a list of options: 'REST Endpoint', 'BlazeMeter', 'ServiceNow Endpoint', 'Rally Platform', 'Jira EndPoint', 'AWS CodeDeploy Endpoint', and 'AWS ElasticBeanstalk Endpoint'. The 'REST Endpoint' option is selected and highlighted in light blue. At the bottom of the form, there are 'Cancel' and 'Add' buttons.

You can add Endpoints for

REST  
BlazeMeter  
ServiceNow  
Agile Central (Rally)  
Jira  
AWS CodeDeploy  
AWS ElasticBeanstalk  
Protractor (SauceLabs)  
Slack

## Configure Slack

Description

### ADD ENDPOINT

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description
Slack	cdswat slack

AUTHORIZED USERS

Swat × Add authorized users

Select plugin \*

Slack

**Input Parameters**

Webhook URL

oaks.slack.com/services/T5CD5HQQN/B5BK6NZC2/OI24hUNY1b7D2QKh6vP5Bc1x i

Connected

Cancel Test connection Add

### Create a Slack Endpoint

Enter Name and Description

Enter Authorized User/s

Select Slack plugin

Enter the webhook URL for the Slack channel.

*Note: The webhook url can be found in Slack.*

Click Test Connection

Click Add

## Configure AWS Elastic BeanStalk

**ADD ENDPOINT**

AUTHORIZED USERS

catech-ctd  Add authorized users

Select plugin \*

AWS ElasticBeanstalk Endpoint

**Input Parameters**

Access Key ID  
AA11A1111111AAAAAA

Secret Access Key  
.....

Region  
us-west-1

S3 Bucket  
elasticbeanstalk-us-west-1-111111111111

### Add AWS Elastic Beanstalk Endpoint

Enter Name and Description  
(Not shown)

Enter Authorized User/s

Select AWS Elastic BeanStalk plugin  
*Note: For information on AWS Access and Secret Keys go here:*

<http://docs.aws.amazon.com/general/latest/gr/aws-sec-cred-types.html>

<http://docs.aws.amazon.com/general/latest/gr/managing-aws-access-keys.html>

Enter Access Key ID  
Enter Secret Key  
Enter Region  
Enter S3 Bucket  
Click Test Connection  
Click Add

## Configure Agile Central

### ADD ENDPOINT

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description
Agile Central - MIMI	Mimi AC

AUTHORIZED USERS

catech-ctd () X Add authorized users

Select plugin \*

Rally Platform

#### Input Parameters

URL

<https://rally1.rallydev.com> X i

Workspace Name

MyWorkspace

API Key

\_aa

Cancel Test connection Add

### Create an Agile Central endpoint

Enter Name and Description.

Add authorized user/s

Select Rally Platform

Use the Agile Central url:

<https://rally1.rallydev.com>

Enter the workspace

Enter the API Key

*Note: For information on how to get the API key:*

<https://help.rallydev.com/rally-application-manager>

Click Test Connection

Click Add

## Configure SauceLabs

### ADD ENDPOINT

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description	
SauceLabs - Swat	Swat Team Account	X

**AUTHORIZED USERS**

catech-ctd () X Add authorized users

Select plugin \*

Protractor Endpoint

**Input Parameters**

Sauce Labs User Name  
SauceLabs User *i*

SauceLabs User Key  
..... *i*

Git Project URL  
https://github.com/angular/protractor.git *i*

GitHub User Name  
github user *i*

GitHub User Password  
..... *i*

Cancel Test connection Add

### Create a SauceLabs Endpoint

Enter Name and Description

Add authorized user/s

Select Protractor Endpoint

Enter Username

Enter User Key

Enter Git Project URL

*Note: The repo where the SauceLab tests live*

Enter GitHub User

Enter Github Password

Click Test Connection

Click Add

## Configure AWS Code Deploy

### ADD ENDPOINT

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description
AWS Code Deploy	Dev TEam

**AUTHORIZED USERS**

catech-ctd () X Add authorized users

Select plugin \*

AWS CodeDeploy Endpoint

**Input Parameters**

Region  
eu-west-1

Access Key ID  
AAAAAAAAAAAAAAAAAAAA

Secret Access Key  
.....

GitHub Repository Owner  
repoOwner

GitHub Repository  
JavaScript-Sample-Application

GitHub User Name  
gitHUBUser

GitHub Password  
.....

Cancel Test connection Add

### Create an AWS Code Deploy Endpoint

Enter Name and Description

Add authorized user/s

Select AWS CodeDeploy Endpoint

Enter AWS Region

*Note: Information on Access and Secret Keys can be found here:*

<http://docs.aws.amazon.com/general/latest/gr/aws-sec-cred-types.html>

<http://docs.aws.amazon.com/general/latest/gr/managing-aws-access-keys.html>

Enter Access Key ID

Enter Secret Key

Enter GitHub Repository Owner

Enter Github Repository

Enter GitHub UserName

Enter GitHub Password

Click Test Connection

Click Add

## Configure ServiceNow

### ADD ENDPOINT

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description
ServiceNow	Helsinki

AUTHORIZED USERS

catech-ctd () X Add authorized users

Select plugin \*

ServiceNow Endpoint

#### Input Parameters

Server URL

https://myservicenow:443 i

Username

snuser

Password

\*\*\*\*

Proxy Url

Proxy Username

Proxy Password

 Cancel Test connection Add

### Create A ServiceNow Endpoint

Enter Name and Description

Add authorized user/s

Select ServiceNow Endpoint

Enter ServiceNow Url

Enter Username

Enter Password

If necessary, Enter Proxy server, user and password

Click Test Connection

Click Add

## Configure JIRA

**ADD ENDPOINT**

Name *	Description
Jira	Mimi

**AUTHORIZED USERS**

catech-ctd () X Add authorized users

Select plugin \*

Jira EndPoint

**Input Parameters**

URL  
https://carademo.atlassian.net/ ⓘ

User Name  
myUser

Password  
.....

Proxy Host ⓘ

Proxy Port ⓘ

Proxy Username ⓘ

Proxy Password ⓘ

HTTPS Enable

Cancel Test connection Add

### Create a JIRA Endpoint

Enter Name and Description

Enter Authorized User/s

Select Jira Plugin

Enter Username

Enter Password

If necessary, Enter Proxy host, username and password

Set Enable https to true

Set the timeout, if desired (not shown)

Click Test Connection

Click Add

## Configure BlazeMeter

**ADD ENDPOINT**

An endpoint is a connection to a specific system. You can define multiple endpoints to different systems of the same type like connecting to two Release Automation systems.

Name *	Description
BlazeMeter	Mimi

**AUTHORIZED USERS**

catech-ctd () X Add authorized users

Select plugin \*

BlazeMeter

**Input Parameters**

Url

https://a.blazemeter.com

API Key

aaaaaaaaaaaaaaaaaaaa2202

Cancel Test connection Add

### Create a Blazemeter Endpoint

*Note: For awesome performance testing, sign-up for BlazeMeter:*

<https://a.blazemeter.com/app/sign-up>

Enter Name and Description

Enter Authorized User/s

Select BlazeMeter Plugin

Enter BlazeMeter URL

<https://a.blazemeter.com>

*Note: Information on the BlazeMeter API key can be found here:*

<https://guide.blazemeter.com/hc/en-us/articles/115002213289-BlazeMeter-API-keys->

Enter API Key

Click Test Connection

Click Add

## Adding New Tasks to the Release

Now that we have configured our endpoints, we can use the built-in tasks to interface with our 3<sup>rd</sup> party systems. For example, we can post messages to a Slack Channel, Deploy to AWS CodeDeploy or Elastic BeanStalk or Run a BlazeMeter Performance Test. The following are some examples on how to create tasks.

## Create a Slack Task

**CREATE TASK**

Task Name \*  
Post Message to Slack

Type description here...

Owners  
cotech-ctd

Add Owners

Task Type

- SAUCELABS**
  - Run Protractor Test
- SERVICENOW**
  - Create Change Task
  - Update Change Task
  - Create Change Request
  - Update Change Request
  - Wait For Approval
- SLACK**
  - Post message

CONTENT

- Sample Application 1 (1.0)
- Sample Application 2 (1.0)

Cancel Create

Navigate to Releases | My New Release

Click Create A Task

Enter in Task Name

Enter Owners

Set Task Type to Slack Post Message

Select the Slack Endpoint

Post to Channel

Leave it empty to post to the default slack channel

*Note: use @ to post to a specific user and use #channel to post to a specific channel*

Enter Sender

Enter Message

Click Create

## Create an AWS Elastic BeanStalk Task

**CREATE TASK**

Task Name \*  
Deploy to Elastic BeanStalk

**B I U % </>**  
Deploy Application to **EBS** Production environment

Owners  
Mimi (Marta.Benach@ca.com) X  
Add Owners

Task Type: Deploy  
Endpoint: Elastic Beanstalk - SWF

**Input Parameters**

Environment Name: Production

S3 Key: Raffle.zip

Application Name: Raffle

Build Number: 123

Description: |

**CONTENT**

Sample Application 2 (1.0)

Sample Application 1 (2.1)

Cancel Create

Navigate to Releases | My New Release

Click Create A Task

Enter Name and Description

Select Owner

Select AWS Elastic Beanstalk Deploy

Select the EndPoint

Select the Application.  
Note: Use @ to get a list of applications, Use % to use tokens

Enter the Environment

Enter the S3 Key  
*Note: S3 is Amazons storage bucket. These are the artifacts that will be deployed.*

Enter the build number

Enter a Description

Enter Application URL

*Note: This is the url for the web application*

If this task deploys content for an Application, check the content checkbox.

Click Create

## Create a BlazeMeter Task

**CREATE TASK**

Task Name \*  
BlazeMeter

Type description here...

Owners  
cstech-ctd () X Swat X

Add Owners

Task Type: Run Test  
Endpoint: BlazeMeter

**Input Parameters**

Workspace: Workspace Playground  
Project: Project Playground  
Test: Test\_UC14

**CONTENT**

Sample Application 1 (1.0)  
 Sample Application 2 (1.0)

Cancel Create

Enter Name and Description

Select Owner

Select BlazeMeter Run Test

Select the EndPoint

Select the Workspace.  
Note: Use @ to get a list of applications, Use % to use tokens

Select the Project

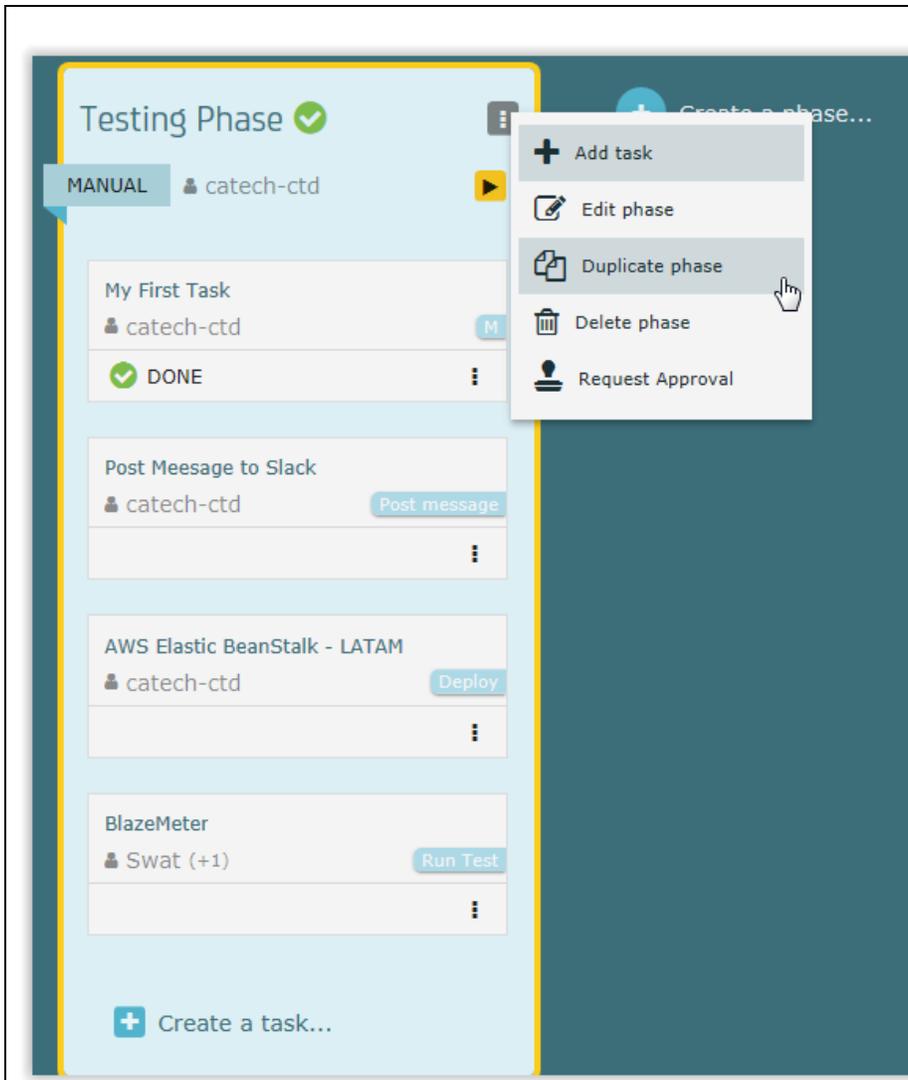
Select the BlazeMeter Test  
Note: This test must already exist. For info on how to create a test:

<https://guide.blazemeter.com/hc/en-us/articles/207420525-Creating-a-test>

Click Create

## Duplicate a Phase

Now that we have the first phase of our release built, we can duplicate it to create the next phase in our application development life cycle.



Click the 3 dots

Select Duplicate Phase

**DUPLICATE PHASE**

Phase Name \*  
Production

Owners  
catech-ctd (j) X Add Owners

CHOOSE HOW YOU WANT THE PHASE TO RUN

Manual  
When you press run button

Automatic  
When previous phase ends

Scheduled  
According to the estimated time

**i** Tip: set estimated from/to for better insight

From  X To  X

**B I U**

Testing Phase\_\_

Environments  
Production X Add environment

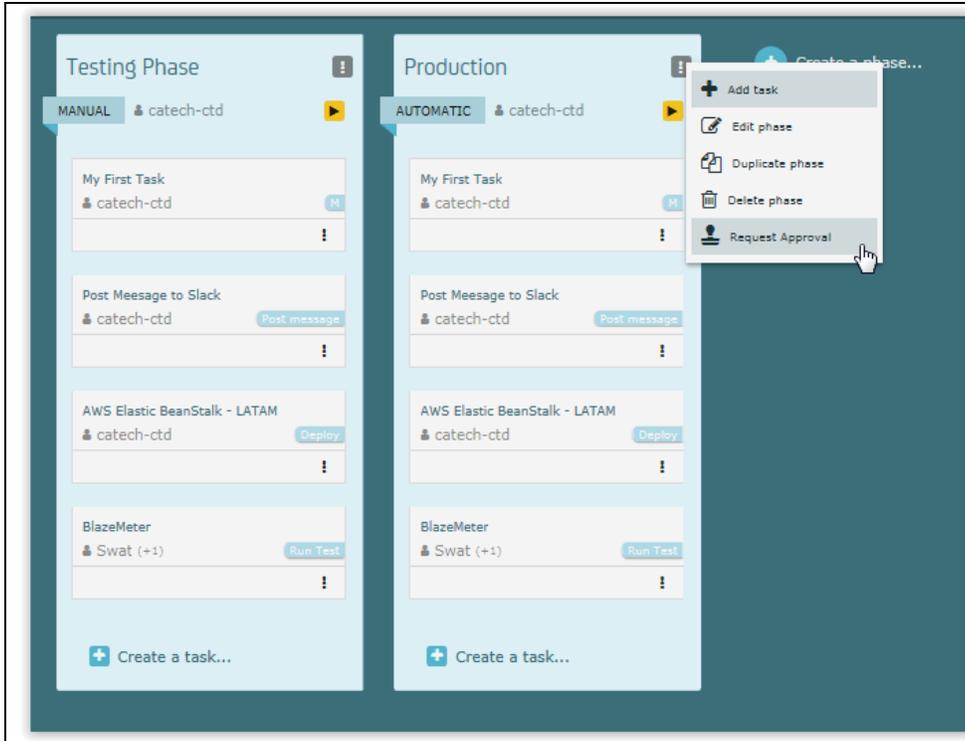
Change the Name

Set the Dates for the Phase

Set the Phase to Automatic

Change the Environment to Production

Click Duplicate



Click the 3 dots

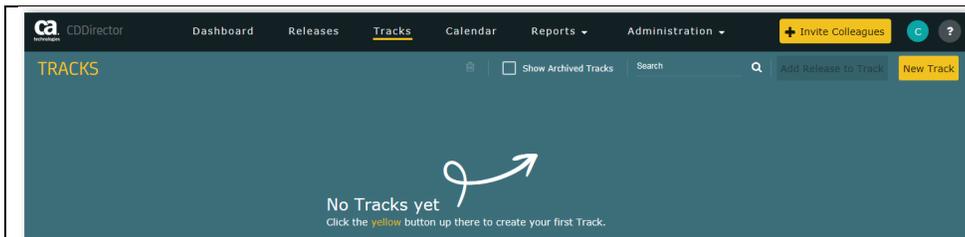
Select Request Approval

*Note: Setting the Approval Request means the phase wont start until Approval is granted.*

*Note: If you have a deployment task, you may want to change the Environment*

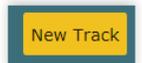
## Tracks

Release tracks bundle multiple releases into the same production deployment. Tracks increase the ability to monitor the progress and quality of releases in the track.



Select Tracks

Click New Track



Track Name \*

July Production Release

**B** **I** **U**  

Description

Owners

Mimi (Marta.Benach@ca.com) X

Add owners

\* Production Time Frame 

 Jul 21st 2017, 3:37 p... X

 Jul 23rd 2017, 4:37 p... X

Milestones(2) 

 Add Milestone

UAT

 Jun 9th 2017, 3:37 pm X

Load Testing

 Jun 13th 2017, 3:37 ... X

Enter Track Name and Description

Set the Owner

Set the Production Timeframe

Create a Milestone for the Track

Enter the Milestone Name and Due Date

*Note: Milestones are checkpoints in the Release that is mapped to a phase in a release*

Click Create

## ADD RELEASE TO TRACK

Release list \*

CA Raffle System - Win environment - MB500 ver. 1

### \* Production Time Frame ?

From	To	Map To Phase
Jul 21, 2017 3:37:03 PM	Jul 23, 2017 4:37:03 PM	Deploy to Amazon <span>▼</span>

### Milestones(2) ?

Milestone Name	Due Date	Map To Phase
UAT	Jun 9, 2017 3:37:00 PM	GUI Functional Testing <span>▼</span>
Load Testing	Jun 13, 2017 3:37:00 PM	Performance Testing <span>▼</span>

Cancel Add

Highlight the Track and Select Add Release to Track

Add Release to Track

Enter the name of your Release.

*Note: Start Typing the first few letters of the Release Name to see a list of releases*

Select the Phase of the Release to map to the Production Milestone

Select the Phase of the Release to Map to the Integration Testing Milestone.

Click Add

The Release will be displayed as part of the track

Click on the Release name link

## TRACK

June Release ? Add Release to Track

Release Name

My New Release - Copy

02/06

16/06 - 18/06

Testing Phase ? Production ?

MANUAL ? catech-ctd ? SCHEDULED ? catech-ctd ?

My First Task ? catech-ctd ? My First Task ? catech-ctd ?

Post Message to Slack ? catech-ctd ? Post Message to Slack ? catech-ctd ?

AWS Elastic BeanStalk - LATAM ? catech-ctd ? AWS Elastic BeanStalk - LATAM ? catech-ctd ?

BlazeMeter ? Swat (+1) ? BlazeMeter ? Swat (+1) ?

Run phase ? Run Test ?

Create a task... ? Create a task... ?

Activity

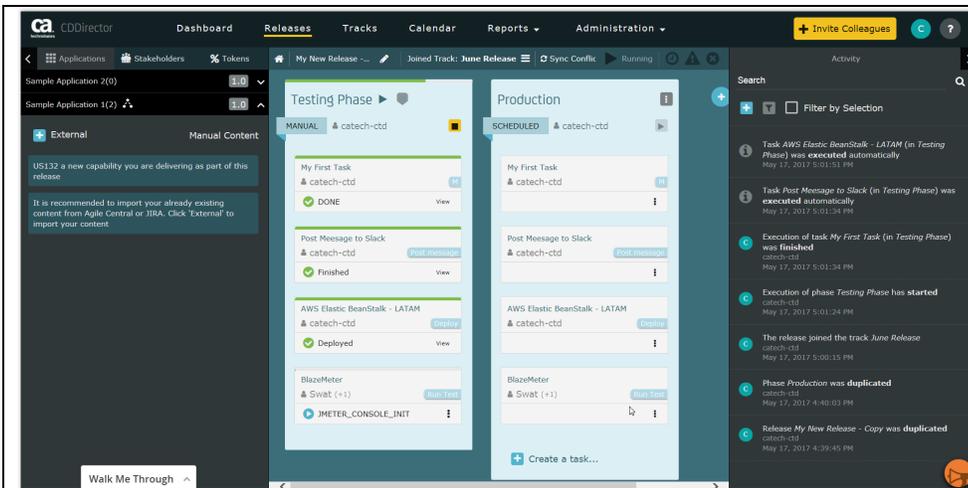
The release joined the track June Release ? catech-ctd ? May 17, 2017 5:00:15 PM

Phase Production was duplicated ? catech-ctd ? May 17, 2017 4:40:03 PM

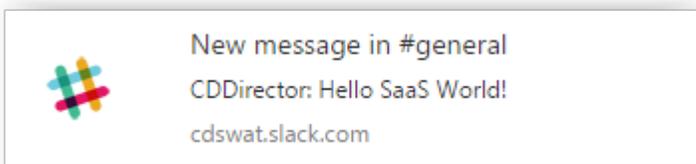
Release My New Release - Copy was duplicated ? catech-ctd ? May 17, 2017 4:39:45 PM

Click the Start button to run the Release

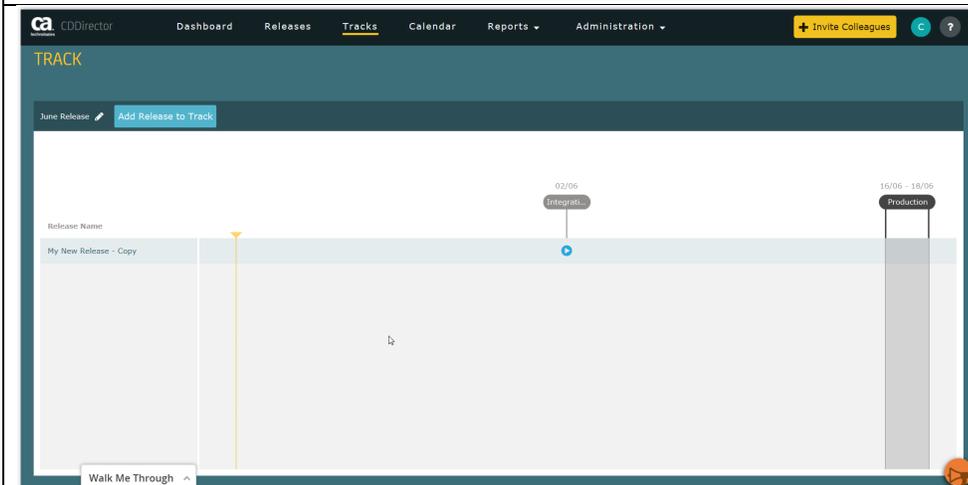




As the Release is running, the tasks start and show their status.



Check Slack to see your message posted.

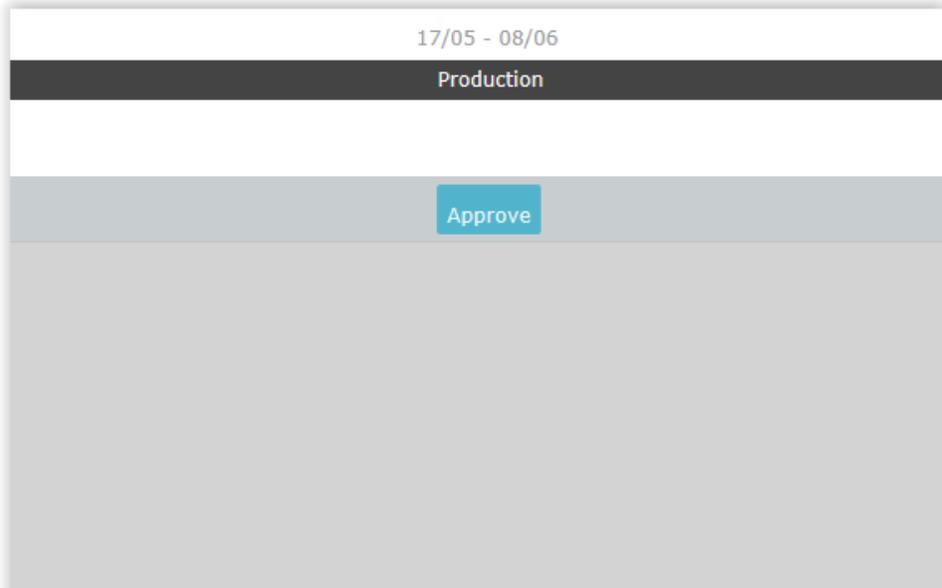


Return to the Tracks tab

The release now displays it's milestone status.

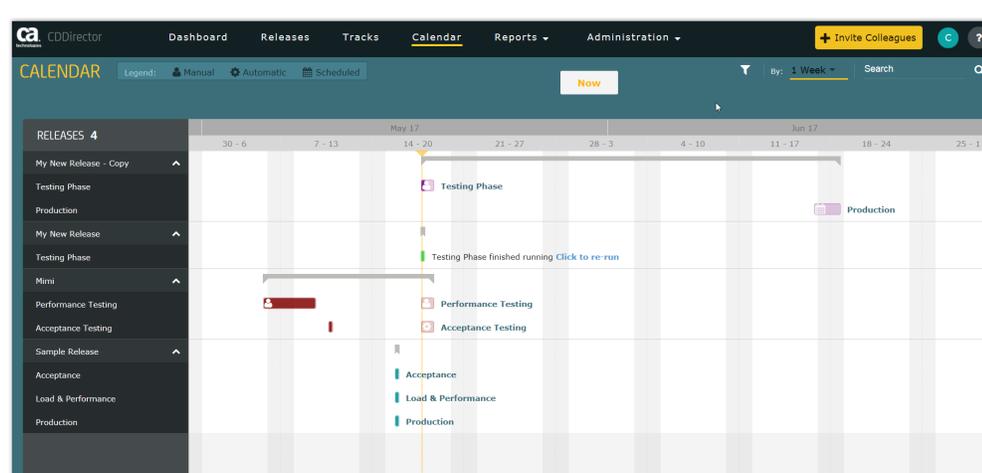


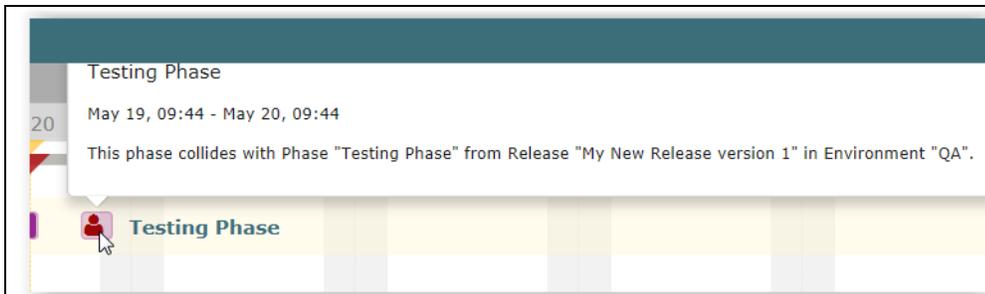
Once the phase is complete the status will update.

	<p>When the Production timeframe starts, the Approve button will appear, provided the milestones were successful.</p> <p>Click Approve</p> <p>The Production Phase of the release will start</p> <p>Click on the Release Name hyperlink to view the running release</p>
	<p>Once the Release is complete, Select Mark as Done</p>

## Calendar

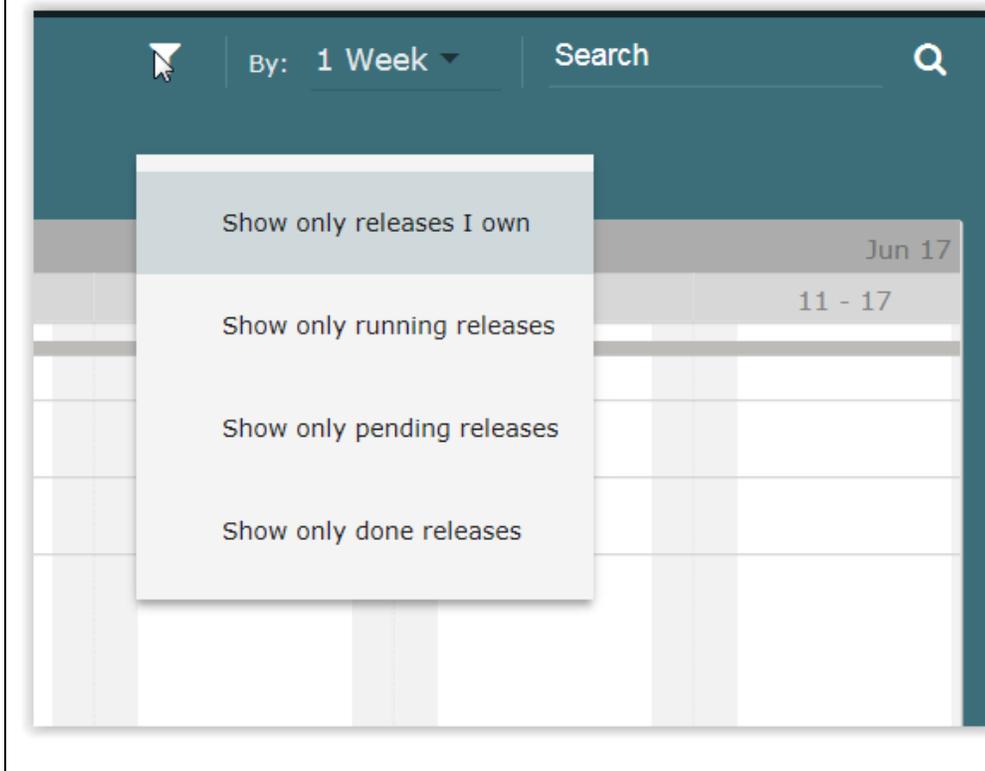
The Release calendar provides a high-level interactive view of all planned and running releases. It shows information including real-time release scheduling, release progress, maintenance windows, and conflicts.

	<p>Select the Calendar tab</p> <p>The Releases are on the left.</p> <p>Click the arrow to expand the release information</p> <p>Hover over the colored bars to see phase date information</p> <p>You can move phases that haven't yet been run and re-run phases</p>
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Conflicts are indicated by the red triangle

Hover over the Phase to see the conflict information.

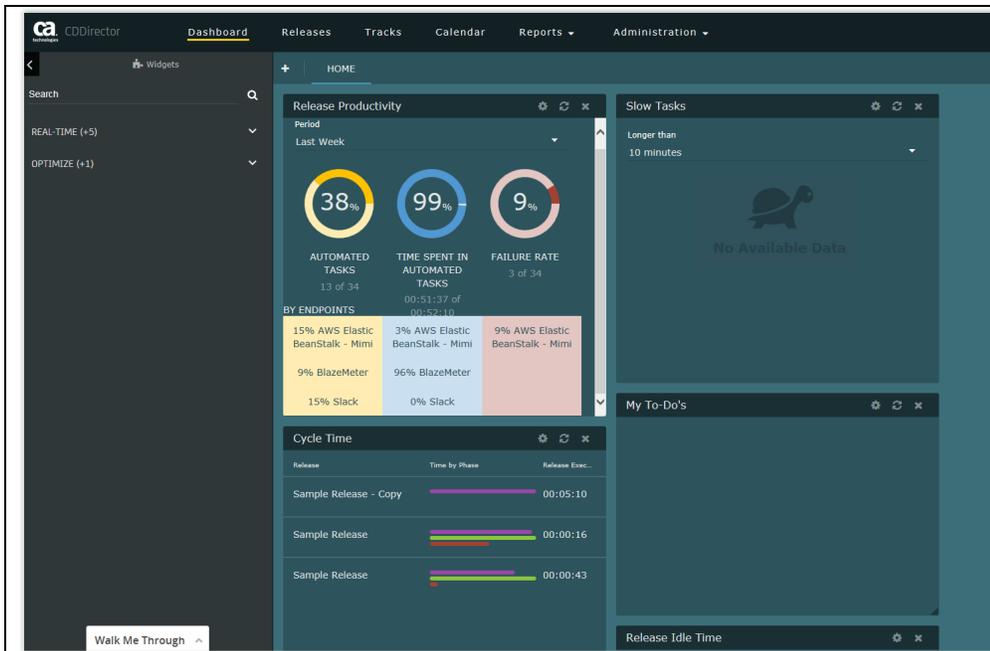


Filter the calendar to show specific releases.

Filter the calendar by time by clicking on the By: 1 Week drop down

## Dashboard and Reporting

The dashboard and reporting features help you track and troubleshoot release trends over time.



Click on the Dashboard tab

Check out the different widgets available.

*Note: The widgets are in the black panel on the left hand side. You can create multiple customized dashboard views by clicking the + sign.*