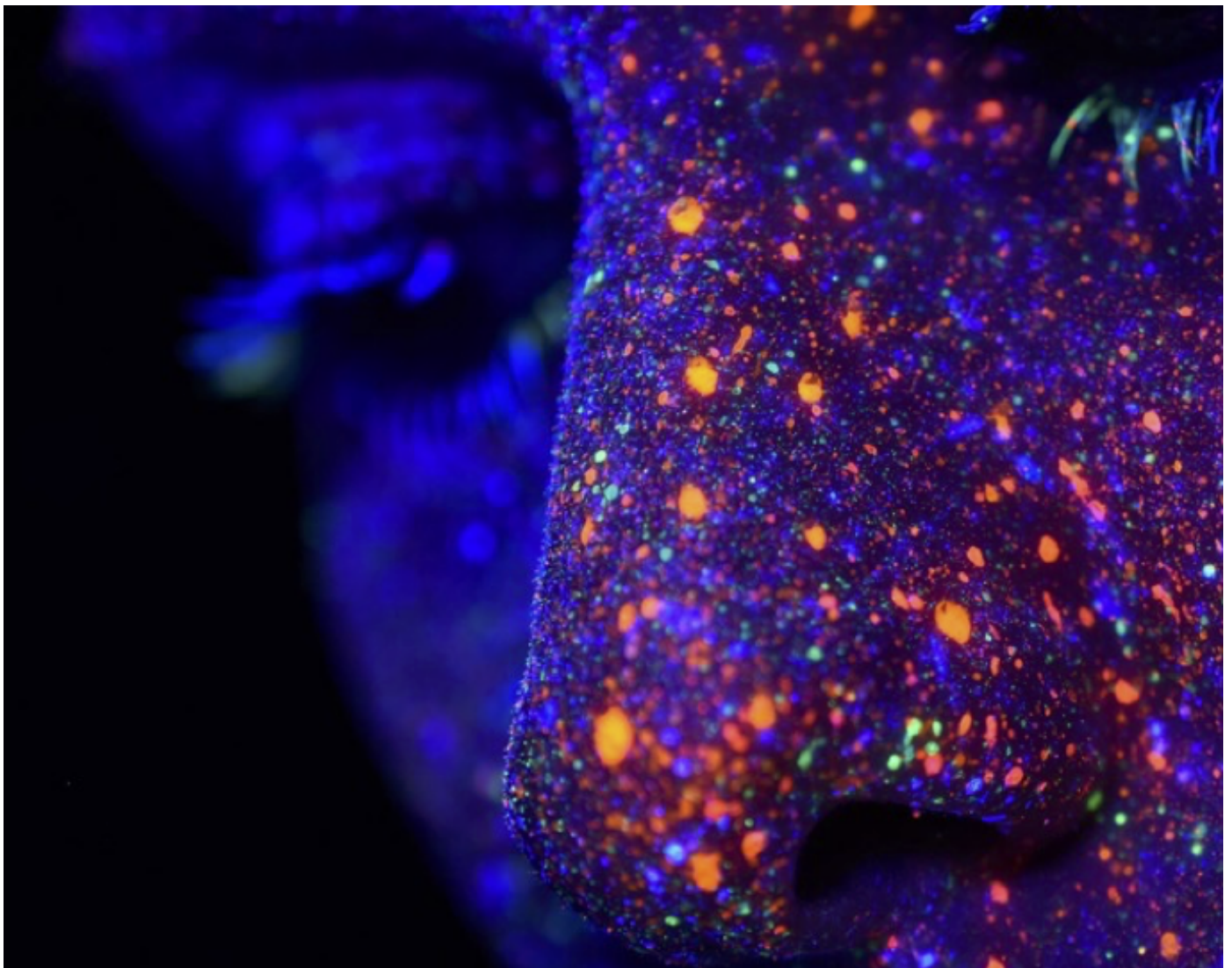


CP4WatsonAIOps CP4WAIOPS v3.3

Demo Environment Installation - Short Track 🚀



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! THIS IS WORK IN PROGRESS

Please drop me a note on Slack or by mail nikh@ch.ibm.com if you find glitches or problems.

Installation

Demo Installation

Those are the steps that you have to execute to install a complete demo environment:

1. [AI Manager Installation](#)
2. [AI Manager Configuration](#)
3. [Slack integration](#)
4. [Demo the Solution](#)

! You can find a PDF version of this guide here: [PDF](#).

TLDR - Fast Track

These are the high level steps that you need to execute to install the demo environment

1. Install AI Manager

```
ansible-playbook ./ansible/00_aimanager-install-all.yaml -e ENTITLED_REGISTRY_KEY=  
<REGISTRY_TOKEN>
```

2. [AI Manager Configuration](#)
3. [Slack integration](#)

In-depth documentation

- Info
 - [Changelog](#)
 - [Demo Architecture](#)
 - [Detailed Prerequisites](#)
 - [Troubleshooting](#)
- Installation
 - [Event Manager Install](#)
 - [Event Manager Configuration](#)
 - [Manual AI Manager Install](#)
 - [Uninstall CP4WAIOPS](#)
- Configuration
 - [Manual Runbook Configuration](#)
 - [Additional Configuration](#)
 - [Service Now integration](#)
 - [Manually train the models](#)
- Install additional components
 - [Installing Turbonomic](#)
 - [Installing ELK](#)
 - [Installing Humio](#)
 - [Installing ServiceMesh/Istio](#)
 - [Installing AWX/AnsibleTower](#)

1 Introduction

This document is a short version of the full [README](#) 🐛 that contains only the essential steps.

This is provided **as-is**:

- I'm sure there are errors
- I'm sure it's not complete
- It clearly can be improved

! This has been tested for the new CP4WAIOPS v3.3 release on OpenShift 4.8 on ROKS

So please if you have any feedback contact me

- on Slack: @niklaushirt or
- by Mail: nikh@ch.ibm.com

2 AI Manager Installation

2.1 Get the code

Clone the GitHub Repository

From IBM internal:

```
git clone https://<YOUR GIT TOKEN>@github.ibm.com/NIKH/aiops-install-ansible-fvt-33.git
```

Or my external repo (this is updated less often than the IBM internal one):

```
git clone https://github.com/niklaushirt/cp4waiops-public.git
```

2.2 Prerequisites

2.2.1 OpenShift requirements

I installed the demo in a ROKS environment.

You'll need:

- ROKS 4.8
- 5x worker nodes Flavor **b3c.16x64** (so 16 CPU / 64 GB)

You **might** get away with less if you don't install some components (Event Manager, ELK, Turbonomic,...) but no guarantee:

- Typically 4x worker nodes Flavor **b3c.16x64** *for only AI Manager*

2.2.2 Tooling

You need the following tools installed in order to follow through this guide:

- ansible
- oc (4.7 or greater)
- jq
- kafkacat (only for training and debugging)
- elasticsearchdump (only for training and debugging)
- IBM cloudctl (only for LDAP)

2.2.1 On Mac - Automated (preferred)

Just run:

```
./10_install_prerequisites_mac.sh
```

2.2.2 On Ubuntu - Automated (preferred)

Just run:

```
./11_install_prerequisites_ubuntu.sh
```

2.3 Pull Secrets

2.3.1 Get the CP4WAIOPS installation token

You can get the installation (pull) token from <https://myibm.ibm.com/products-services/containerlibrary>.

This allows the CP4WAIOPS images to be pulled from the IBM Container Registry.

2.4 Install AI Manager

2.4.1 Start AI Manager Installation

1. Start the Easy Installer with the token from 2.3.1:

```
./01_easy-install.sh -t <REGISTRY_TOKEN>
```

2. Select option  **00** to install the complete **AI Manager** demo environment.

there are options to install only vanilla 'AI Manager'

Or directly run:

```
ansible-playbook ./ansible/00_aimanager-install-all.yaml -e ENTITLED_REGISTRY_KEY=  
<REGISTRY_TOKEN>
```

This takes about one to two hours.
After completion Easy Installer will exit, open the documentation and the AI Manager webpage (on Mac) and you'll have to perform the last manual steps.

You now have a full, basic installation of AI Manager with:

- AI Manager
- Open LDAP
- RobotShop demo application
- Trained Models based on precanned data (Log- and Metric Anomalies, Similar Incidents, Change Risk)
- Topologies for demo scenarios
- AWX (OpenSource Ansible Tower) with runbooks for the demo scenarios
- Demo UI

2.5 Configure AI Manager

There are some minimal needed configurations that you have to do to fully configure the demo environment.

Those are covered in the following chapters.

Minimal Configuration

Those are the manual configurations you'll need to demo the system and that are covered by the flow above.

Basic Configuration

1. Configure LDAP Logins

Advanced Configuration

1. Enable Story creation Policy
2. Create AWX Connection
3. Create Runbook Policy

Configure Topology

1. Re-Run Kubernetes Observer

Configure Slack

1. Setup Slack

3. AI Manager Configuration

! Make sure the playbook `00` has completed before continuing

You have to do the following:

1. Login to AI Manager
2. Add LDAP Logins to CP4WAIOPS
3. Enable Story creation Policy
4. Publish Runbook
5. Create Runbook Policy
6. Re-Run Kubernetes Observer
7. Now you can create the Slack Integration

3.1 First Login

After successful installation, the Playbook creates a file `./LOGINS.txt` in your installation directory.

i You can also run `./tools/20_get_logins.sh` at any moment. This will print out all the relevant passwords and credentials.

- Open the `LOGINS.txt` file that has been created by the Installer in your root directory

```
*****
***** CloudPak for Watson AI0ps *****
*****
-----
AI Manager
-----
AI Manager
URL: https://cpd-cp4waiops.itzroks-270003bu3k-q580lw-6ccd7f378ae819553d37d5f2ee142bd6-0000.eu-gb.containers.appdomain.cloud
User: demo
Password: P4ssw0rd!
User: admin
Password: XoFT1bfIu5Ng4EUJWEM7Mq8rIAi1QIHN
```

- Open the URL from the `LOGINS.txt` file
- Click on `IBM provided credentials (admin only)`

Log in to IBM Cloud Pak

Select your authentication type:

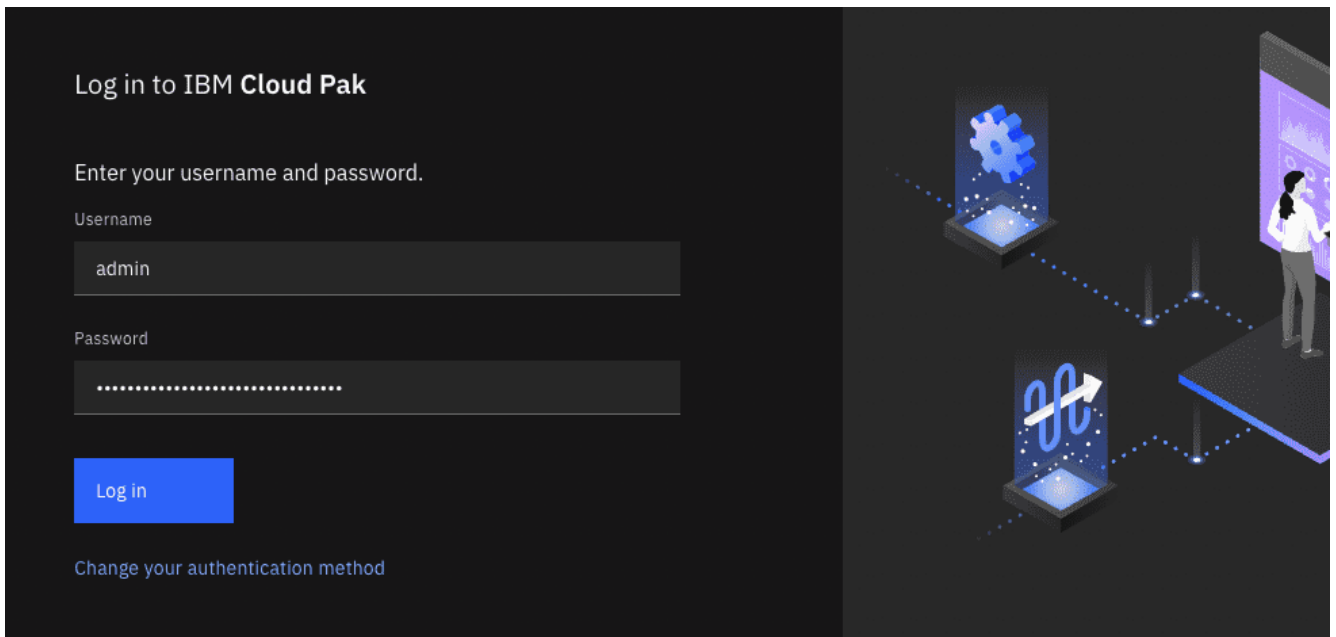
Enterprise LDAP

OpenShift authentication

IBM provided credentials (admin only)

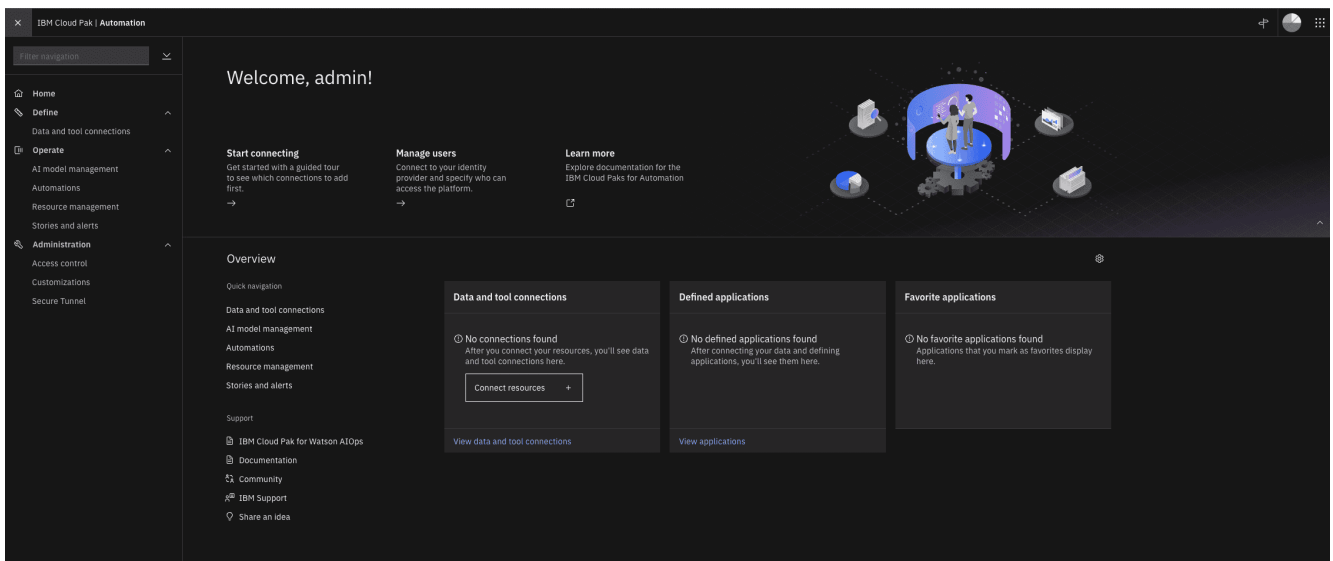


- Login as **admin** with the password from the **LOGINS.txt** file

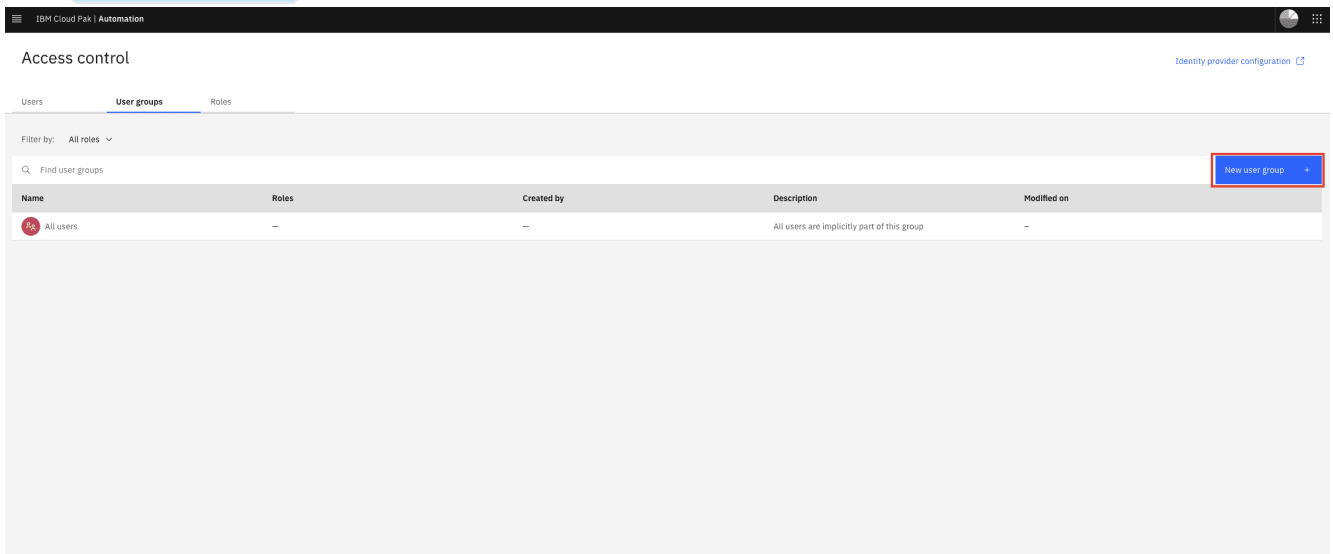


3.2 Add LDAP Logins to CP4WAIOPS

- Go to **AI Manager** Dashboard
- Click on the top left "Hamburger" menu
- Select **Access Control**



- Select **User Groups** Tab
- Click **New User Group**



- Enter demo (or whatever you like)

New user group
Form groups of users to widely administer permissions.

- Details
- Users
- Roles
- Summary

Details

Specify the following information for this user group.

Name

demo

Description (optional)

0/100

What's the purpose of this group?

Cancel

Back

Next

- Click Next
- Select **Identity Provider Groups**
- Search for **demo**
- Select **cn=demo,ou=Groups,dc=ibm,dc=com**

New user group
Form groups of users to widely administer permissions.

- Details
- Users
- Roles
- Summary

Users

Select users to be added to the user group. You can also add users or groups of users directly from your connected identity providers.

Existing users

Identity provider users

Identity provider groups

Selected

None

Search for the identity provider groups you want to add to this user group.

Q demo

1 result returned

cn=demo,ou=Groups,dc=ibm,dc=com

Cancel

Back

Next

- Click Next
- Select Roles (I use Administrator for the demo environment)

New user group
Form groups of users to widely administer permissions.

- Details
- Users
- Roles
- Summary

Roles

Assign at least one role to this new user group. You can also [create a new role](#) and return to this form.

Find roles

☒ Administrator

Automation Administrator

Automation Analyst

Automation Developer

Automation Operator

Service Administrator

User

Administrator

Description
Administrator role

Modified on
Mar 11, 2022 11:27 AM

28 permissions, 121 actions [Expand all](#)

Administer platform

Administer runbooks and runbook application

Author and manage runbooks

Author runbooks

Create service instances

Delete operational policies

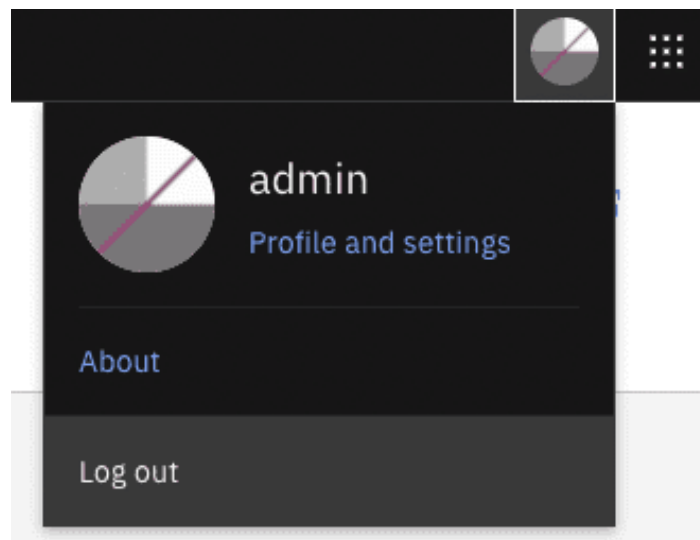
Edit operational policies

Cancel

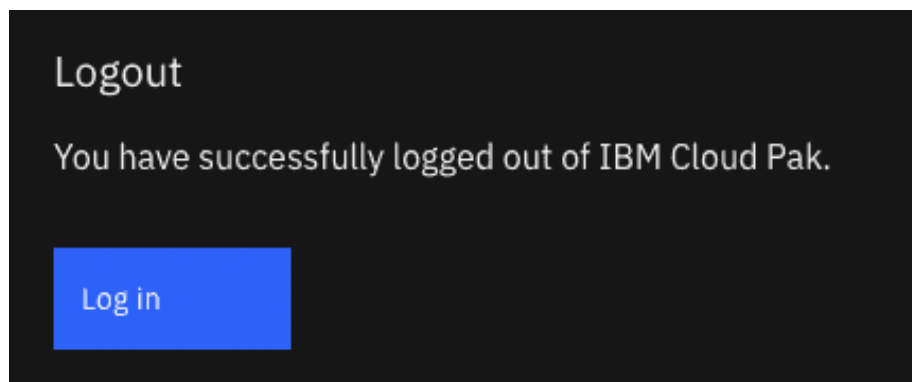
Back

Next

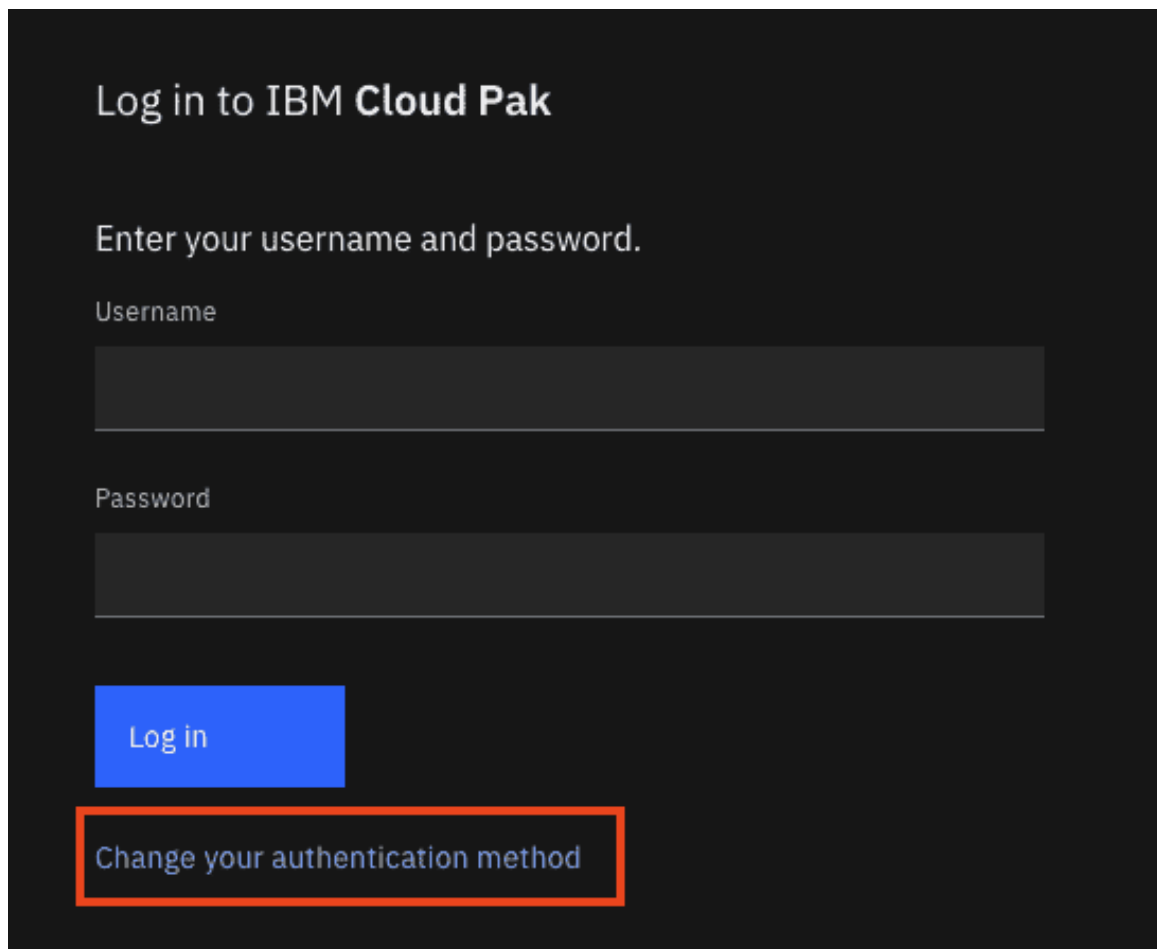
- Click Next
- Click Create
- Click on the top right image
- Select **Logout**



- Click **Log In**

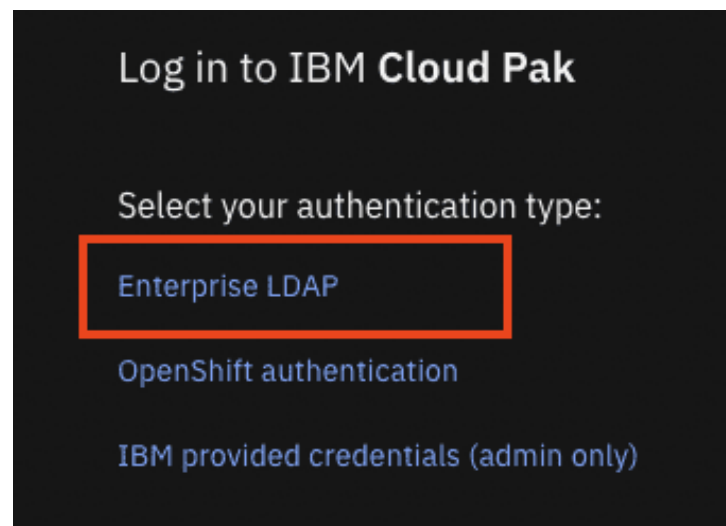


- Select **Change your Authentication method**



The image shows a dark-themed login interface for IBM Cloud Pak. At the top, the text "Log in to IBM Cloud Pak" is displayed. Below it, a prompt says "Enter your username and password." There are two input fields: "Username" and "Password". Below the password field is a blue "Log in" button. At the bottom, a link "Change your authentication method" is highlighted with a red rectangular border.

- Select **Enterprise LDAP**



The image shows a dark-themed screen for selecting an authentication type. The title "Log in to IBM Cloud Pak" is at the top. Below it, the text "Select your authentication type:" is followed by three options: "Enterprise LDAP", "OpenShift authentication", and "IBM provided credentials (admin only)". The "Enterprise LDAP" option is highlighted with a red rectangular border.

- Login with the demo credentials
 - User: demo
 - Password: P4ssw0rd!

Log in to IBM Cloud Pak

Enter your enterprise LDAP username and password

Username

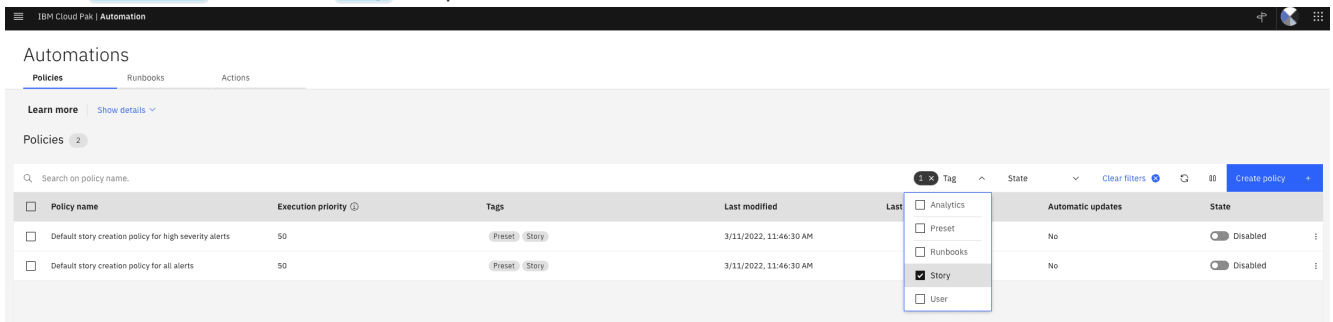
Password

Log in

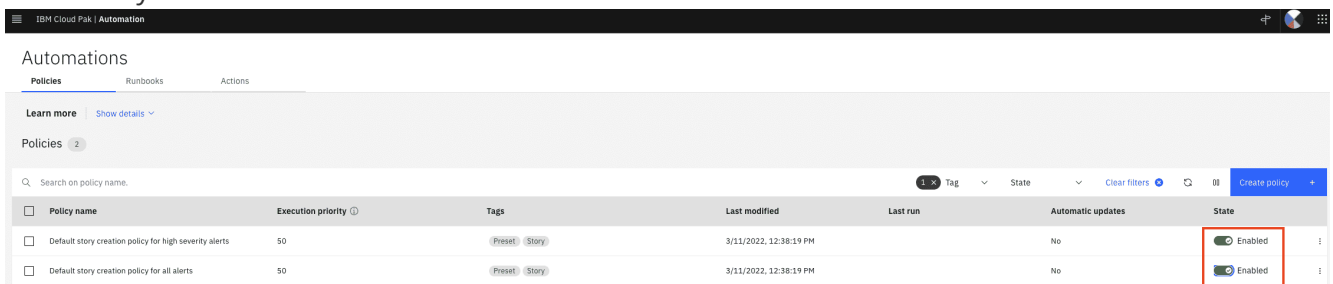
[Change your authentication method](#)

3.3 Enable Story creation Policy

- In the **AI Manager** "Hamburger" Menu select **Operate** / **Automations**
- Under **Policies**
- Select **Stories** from the **Tag** dropdown menu



- Enable **Default story creation policy for high severity alerts**
- Also enable **Default story creation policy for all alerts** if you want to get all alerts grouped into a story

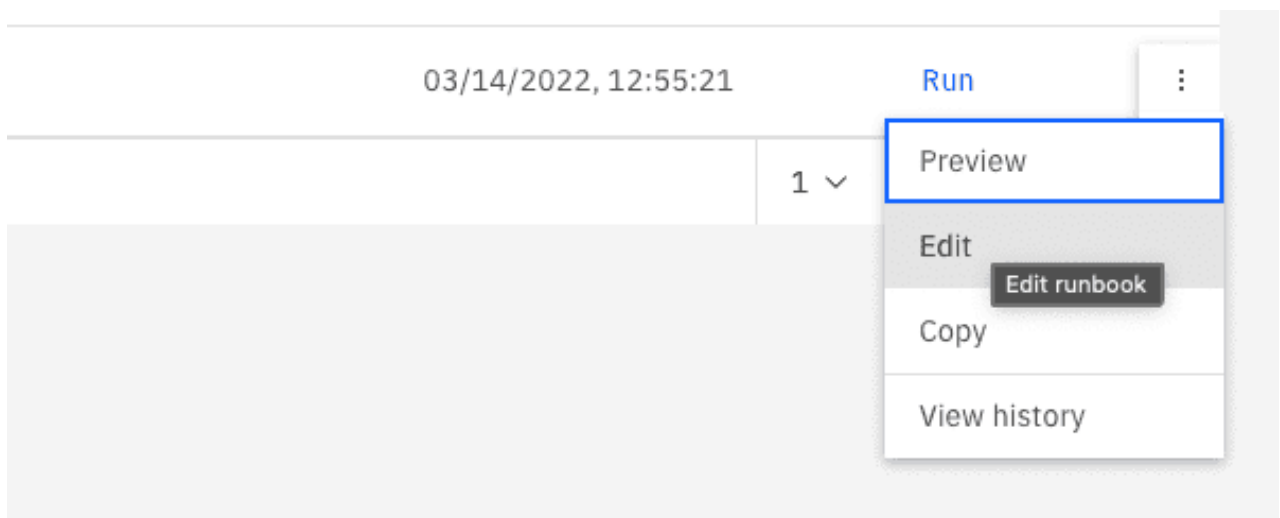


! Wait for the playbook to complete before continuing

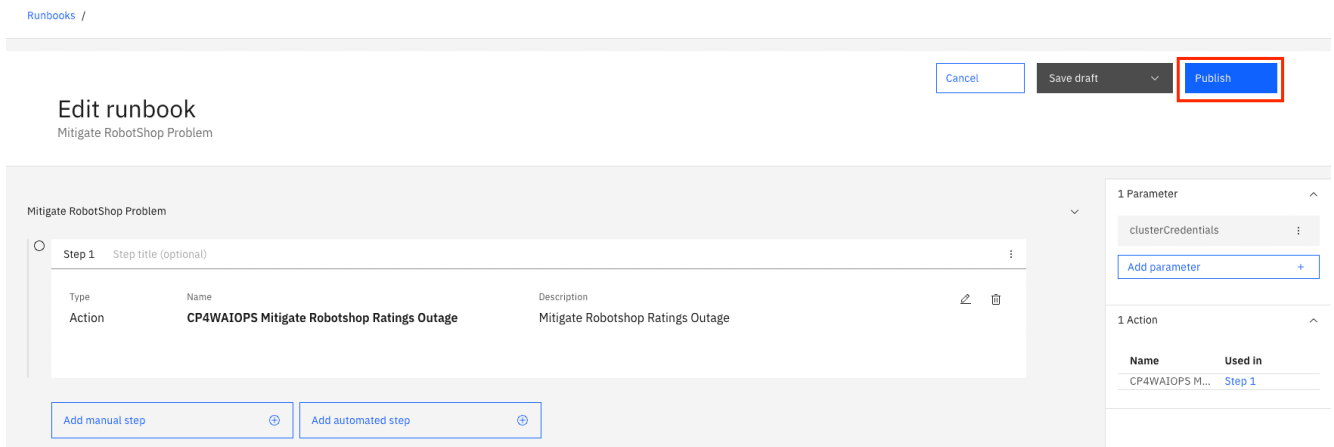
3.4 Publish Runbooks

! If you don't get any runbooks you can run the following to try to create them again:
`ansible-playbook ./ansible/45_aimanager-load-awx-playbooks-all.yaml`

- In the **AI Manager** "Hamburger" Menu select **Operate** / **Automations**
- Select **Runbooks** tab
- For the **Mitigate RobotShop Problem** click on the three dots at the end of the line
- Click **Edit**



- Click on the blue **Publish** button



- Repeat for the other Runbooks

3.5 Create Runbook Policy

- In the **AI Manager** "Hamburger" Menu select **Operate** / **Automations**
- Under **Policies**, click **Create Policy**

Automations

Policies						
Learn more Show details						
Policies 2						
Search on policy name. Tag State Clear filters 80 Create policy						
<input type="checkbox"/>	Policy name	Execution priority	Tags	Last modified	Last run	Automatic updates
<input type="checkbox"/>	Default story creation policy for high severity alerts	50	Preset Story	3/11/2022, 12:38:19 PM		No
<input type="checkbox"/>	Default story creation policy for all alerts	50	Preset Story	3/11/2022, 12:38:19 PM		No

- Select **Assign a runbook to alerts**

Automations /

Policy templates

Assign a runbook to alerts

Assign a runbook to alerts for easier automated resolution.

Runbook

Create →

Promote alerts to a story

Create actionable stories from alerts to improve insights into your issue.

Create story

Create →

- Name it **Mitigate RobotShop**

Assign a runbook to alerts

Policy ☒ Enabled

User Runbooks

Learn more [Show details](#)

Details

Condition set 1

Actions

Policy details

Brief description of your policy

Policy name

RobotShop Mitigation

Description (optional)

Enter a brief description.

You can type a maximum of 120 characters.

You can type a maximum of 450 characters.

Execution priority

1

Very high 0 Policies

High 0 Policies

Medium 10 Policies

Low 1 Policy

Very low 0 Policies

100 50

- Under **Condition set 1**
- Select **resource.name** (you can type **name** and select the name field for resources)

Condition set 1

If this condition is met:

Property	Operator	Matches
name	equal to	only

Then to:

▼ alert

- ▼ sender
 - name
 - hostname
- ▼ resource
 - name
 - hostname

alert.resource.name

Description

The name of the resource

Type

string

- Set Operator to **contains**

Condition set 1

If this condition is met:

Property	Operator	Matches	Value
Value of: alert.resource.name x	contains	only	Enter a value.

- And for **value** you type **mysql** (select **String: mysql**)

Condition set 1

If this condition is met:

Property	Operator	Matches	Value
Value of: alert.resource.name x	contains	only	mysql

Add condition +

Then take the following action:

Assign a runbook

Runbooks

Select one or more runbooks to assign.

Filter table

Name	Type	Rating
------	------	--------

Items per page: 5 0-0 of 0 items

Runbooks selected (0)

String: mysql

mysql

Description
String literal of "mysql"

Type
String

- Under Runbooks
- Select the **Mitigate RobotShop Problem** Runbook

Condition set 1

If this condition is met:

Property	Operator	Matches	Value
Value of: alert.resource.name x	contains	only	String: mysql x

Add condition +

Then take the following action:

Assign a runbook

Runbooks

Select one or more runbooks to assign.

1 item selected Cancel

Name	Type	Rating	Success rate
<input type="checkbox"/> Create RobotShop Problem	Automatic	☆☆☆☆☆	
<input checked="" type="checkbox"/> Mitigate RobotShop Problem	Automatic	☆☆☆☆☆	

Items per page: 5 1-2 of 2 items

Runbooks selected (1)

Mitigate RobotShop Problem

1 parameter

- Under **Select Mapping Type**, select **Use default parameter value** (this has been prefilled by the installer)

1 item selected Cancel

Name	Type	Rating	Success rate
<input type="checkbox"/> Create RobotShop Problem	Automatic	☆☆☆☆☆	
<input checked="" type="checkbox"/> Mitigate RobotShop Problem	Automatic	☆☆☆☆☆	

Items per page: 5 1-2 of 2 items 1 of 1 page

Runbooks selected (1)

Mitigate RobotShop Problem 1 parameter

clusterCredentials_(optional)
Cluster Credentials encoded as JSON..

Type
string

Select mapping type

☐ Choose from alert
 ☐ Enter static value
 ☐ Choose at runtime
 ☒ Use default parameter value

Default parameter value

```
{ "my_k8s_apiurl": "https://c100-e.eu-de.containers.cloud.ibm.com:3024" }
```

Pre-defined default value for this parameter

☐ Automatically run this runbook

- Click **Create Policy**

3.6 Re-Run Kubernetes Integration

In the AI Manager (CP4WAIOPS)

- In the **AI Manager** "Hamburger" Menu select **Define / Data and tool integrations**
- Click **Kubernetes**
- Under **robot-shop**, click on **Run** (with the small play button)

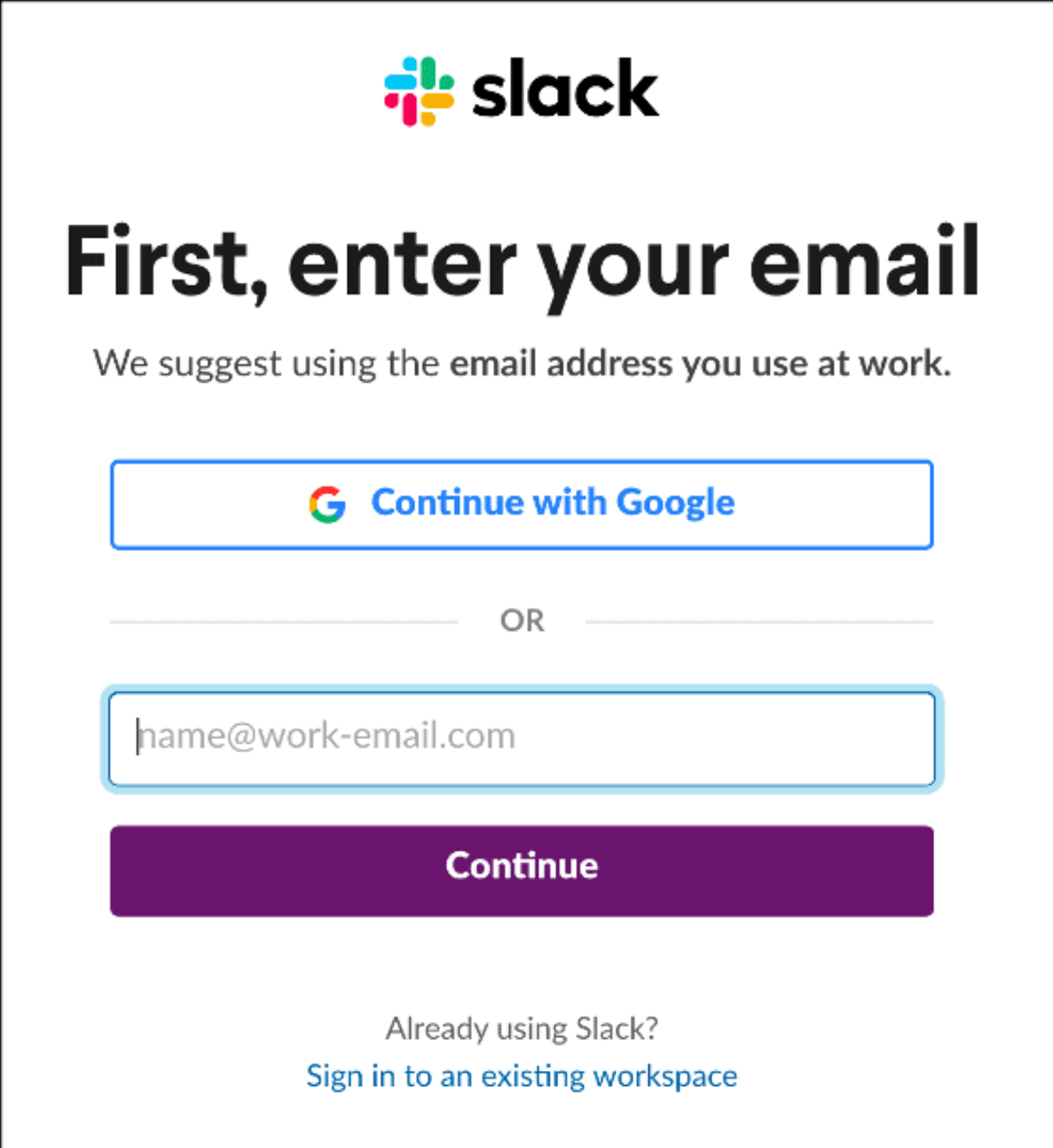
4. Slack integration

For the system to work you need to follow those steps:

1. Create Slack Workspace
2. Create Slack App
3. Create Slack Channels
4. Create Slack Integration
5. Get the Integration URL
6. Create Slack App Communications
7. Slack Reset

4.1 Create your Slack Workspace

1. Create a Slack workspace by going to <https://slack.com/get-started#/createnew> and logging in with an email **which is not your IBM email**. Your IBM email is part of the IBM Slack enterprise account and you will not be able to create an independent Slack workspace outside of the IBM slack service.

A screenshot of the Slack 'First, enter your email' screen. At the top is the Slack logo. Below it is the heading 'First, enter your email' in a large, bold, black font. Underneath the heading is a subtitle: 'We suggest using the email address you use at work.' There are two main options for authentication. The first is a button with the Google 'G' logo and the text 'Continue with Google'. Below this is a horizontal line with the word 'OR' in the center. The second option is a text input field containing the placeholder text 'name@work-email.com'. Below the input field is a large, solid purple button with the word 'Continue' in white. At the bottom of the screen, there is a link that says 'Already using Slack? Sign in to an existing workspace'.

2. After authentication, you will see the following screen:



Create a new Slack workspace

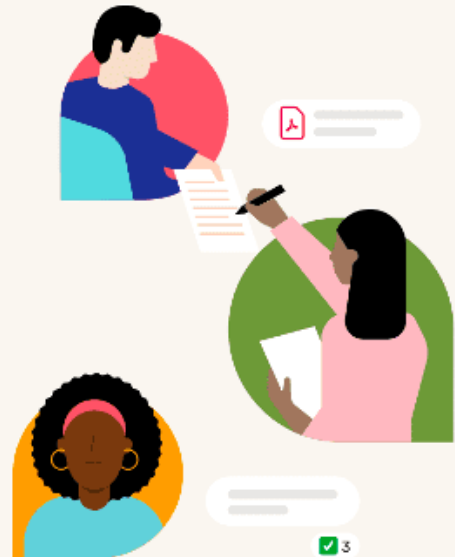
Slack gives your team a home — a place where they can talk and work together. To create a new workspace, click the button below.

Tip: Use the email you use for work. That makes it easy to get the rest of your team on Slack. [Change email](#)

Create a Workspace →

☒ It's okay to send me emails about Slack.

By continuing, you're agreeing to our [Customer Terms of Service](#), [Privacy Policy](#), and [Cookie Policy](#).



3. Click **Create a Workspace** ->
4. Name your Slack workspace

Step 1 of 3

What's the name of your company or team?

This will be the name of your Slack workspace — choose something that your team will recognize.

|Ex: Acme Marketing or Acme Co

255

Next

Give your workspace a unique name such as aiops-<yourname>.

5. Describe the workspace current purpose

Step 2 of 3

What's your team working on right now?

This could be anything: a project, campaign, event, or the deal you're trying to close.

Ex: Q4 budget, autumn campaign

80

Next

This is free text, you may simply write "demo for Watson AIOps" or whatever you like.

6.

Step 3 of 3

Who do you email most about demo-environment?

To give Slack a spin, add a few coworkers you talk with regularly.

Ex. ellis@gmail.com

+ Add another

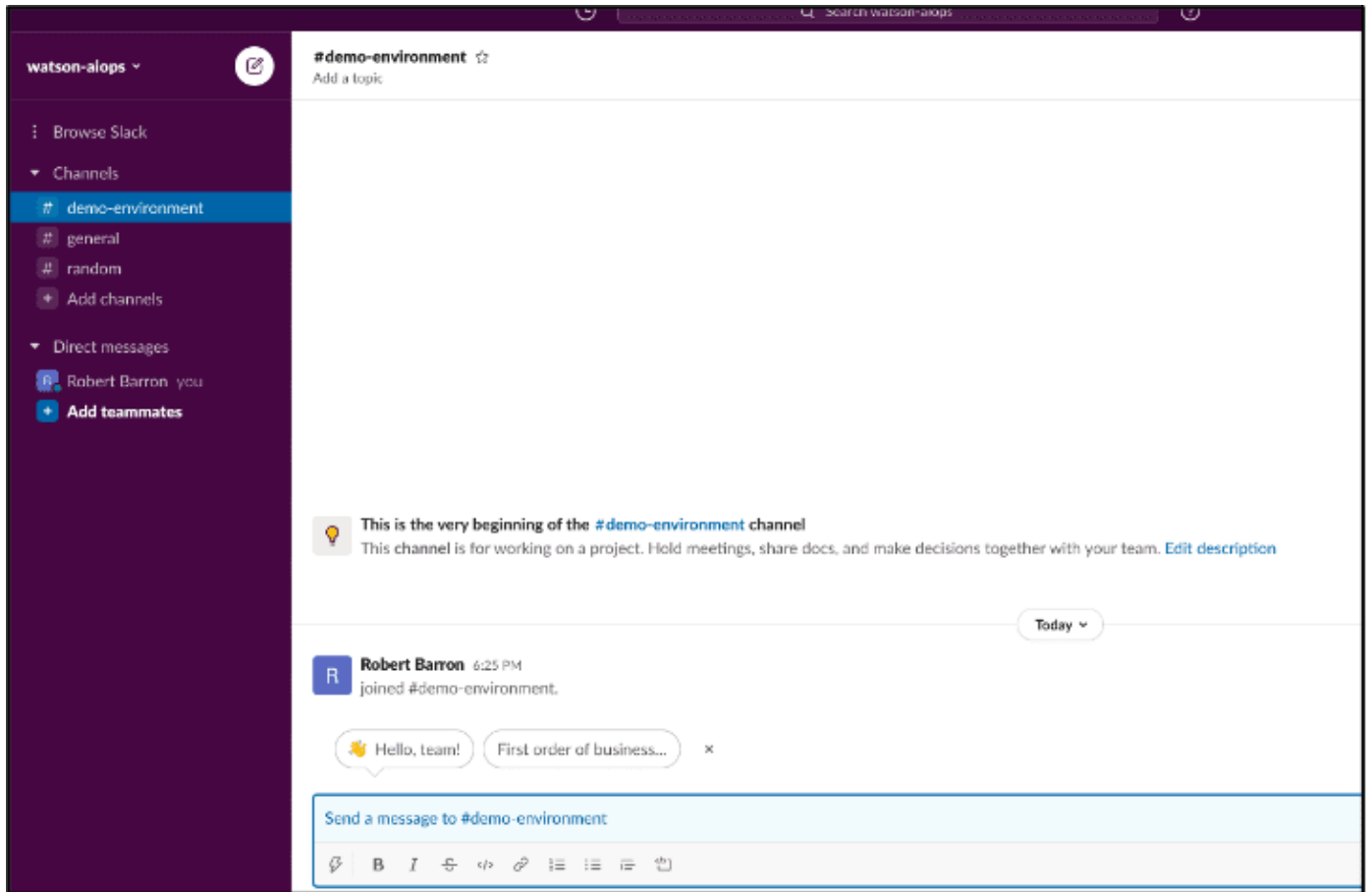
Get a shareable invite link instead

Add Teammates

Skip this step

You may add team members to your new Slack workspace or skip this step.

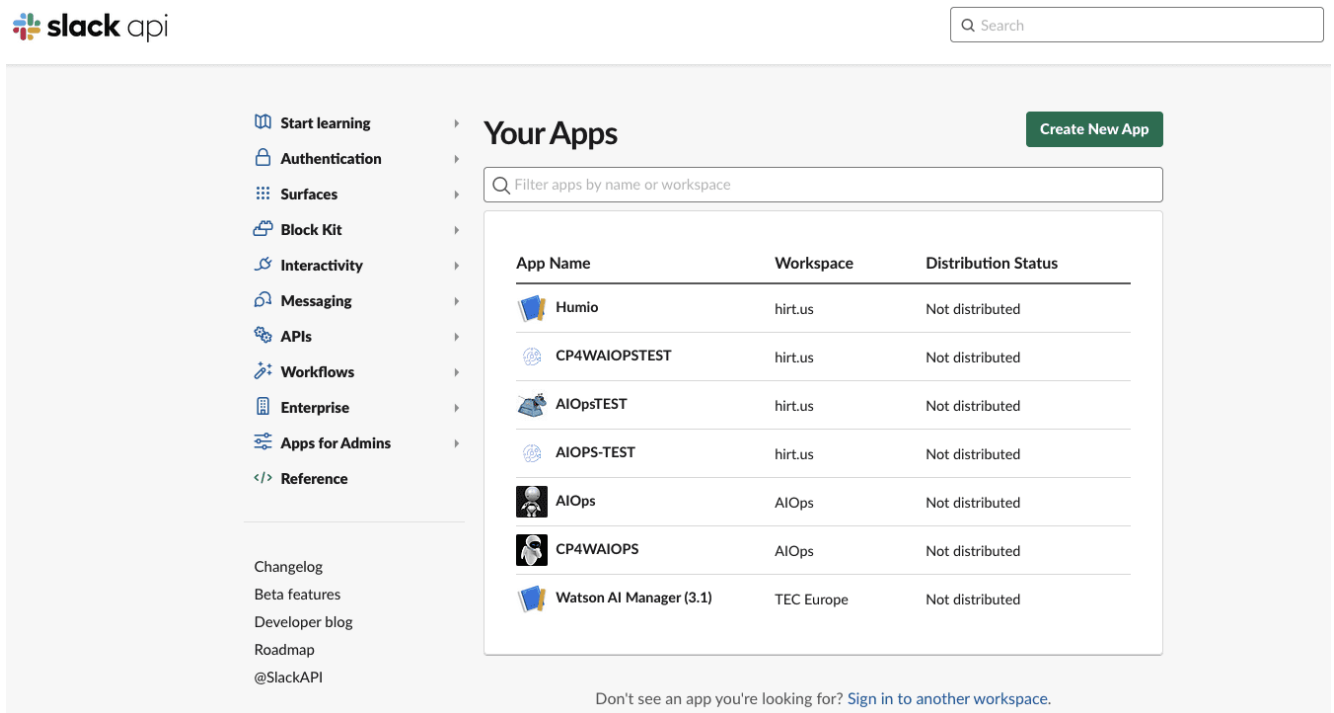
At this point you have created your own Slack workspace where you are the administrator and can perform all the necessary steps to integrate with CP4WAOps.



Note : This Slack workspace is outside the control of IBM and must be treated as a completely public environment. Do not place any confidential material in this Slack workspace.

4.2 Create Your Slack App

1. Create a Slack app, by going to <https://api.slack.com/apps> and clicking **Create New App**.



2. Select **From an app manifest**

Create an app



Choose how you'd like to configure your app's scopes and settings.

From scratch

Use our configuration UI to manually add basic info, scopes, settings, & features to your app.



From an app manifest **BETA**

Use a manifest file to add your app's basic info, scopes, settings & features to your app.



Need help? Check our [documentation](#), or [see an example](#)

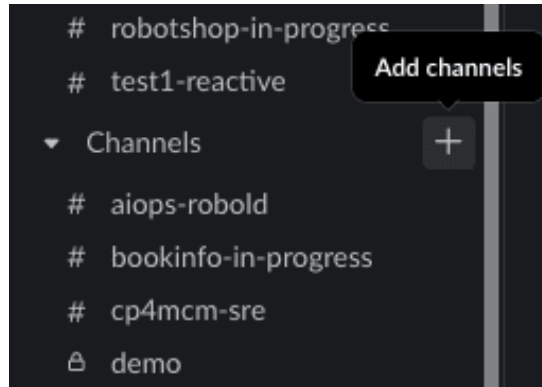
3. Select the appropriate workspace that you have created before and click **Next**
4. Copy and paste the content of this file [./doc/slack/slack-app-manifest.yaml](#).
Don't bother with the URLs just yet, we will adapt them as needed.
5. Click **Next**

6. Click **Create**
7. Scroll down to Display Information and name your CP4WAIOPS app.
8. You can add an icon to the app (there are some sample icons in the `./tools/4_integrations/slack/icons` folder).
9. Click save changes
10. In the **Basic Information** menu click on **Install to Workspace** then click **Allow**

4.3 Create Your Slack Channels

1. In Slack add a two new channels:

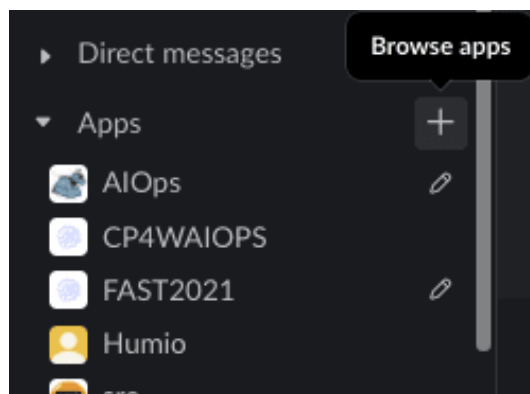
- aiops-demo-reactive
- aiops-demo-proactive



2. Right click on each channel and select **Copy Link**

This should get you something like this <https://xxxx.slack.com/archives/C021QOY16BW>
The last part of the URL is the channel ID (i.e. C021QOY16BW)
Jot them down for both channels

3. Under Apps click Browse Apps



4. Select the App you just have created

5. Invite the Application to each of the two channels by typing

@<MyAppname>

6. Select **Add to channel**

You should get a message from saying **was added to #<your-channel> by ...**

4.4 Integrate Your Slack App

In the Slack App:

1. In the **Basic Information** menu get the **Signing Secret** (not the Client Secret!) and jot it down

App Credentials

These credentials allow your app to access the Slack API. They are secret. Please don't share your app credentials with anyone, include them in public code repositories, or store them in insecure ways.

App ID	Date of App Creation
A02MJTPE7M2	November 16, 2021

Client ID

1624757694871.2732941483716

Client Secret

..... **Show** **Regenerate**

You'll need to send this secret along with your client ID when making your [oauth.v2.access](#) request.

Signing Secret

a117e0170bbef1e017c11bc07dc0312 **Show** **Regenerate**

Slack signs the requests we send you using this secret. Confirm that each request comes from Slack by verifying its unique signature.

Verification Token

woBhrC5m0IZg2X0CgfShrTLV **Regenerate**

This deprecated Verification Token can still be used to verify that requests come from Slack, but we strongly recommend using the above, more secure, signing secret instead.

2. In the **OAuth & Permissions** get the **Bot User OAuth Token** (not the User OAuth Token!) and jot it down

CP4WAIOPSTE... ▾

Settings

Basic Information

Collaborators

Socket Mode

Install App

Manage Distribution

Features

App Home

Org Level Apps

Incoming Webhooks

Interactivity & Shortcuts

Slash Commands

Workflow Steps

OAuth & Permissions

Event Subscriptions

User ID Translation

App Manifest NEW

Beta Features

Submit to App Directory

Review & Submit


Give feedback

Slack ❤️

OAuth & Permissions

Advanced token security via token rotation

Recommended for developers building on or for security-minded organizations – opting into token rotation allows app tokens to automatically expire after they're issued within your app code. [View documentation.](#)

 At least one redirect URL needs to be set below before this app can be opted into token rotation

Opt in

OAuth Tokens for Your Workspace

These tokens were automatically generated when you installed the app to your team. You can use these to authenticate your app. [Learn more.](#)

User OAuth Token

xoxp-1624757694871-1639736885955-2723982398998-593c61defc81d2a8 Copy

Access Level: Workspace

Bot User OAuth Token

Copy

Access Level: Workspace

Reinstall to Workspace

In the AI Manager (CP4WAIOPS)

1. In the **AI Manager** "Hamburger" Menu select **Define / Data and tool integrations**
2. Click **Add connection**

IBM Cloud Pak | Automation

Data and tool connections

Connect to your tools to provide data that will help gather insights for your environment.

Learn more Show details ▾

Manage connections

Schedule connections

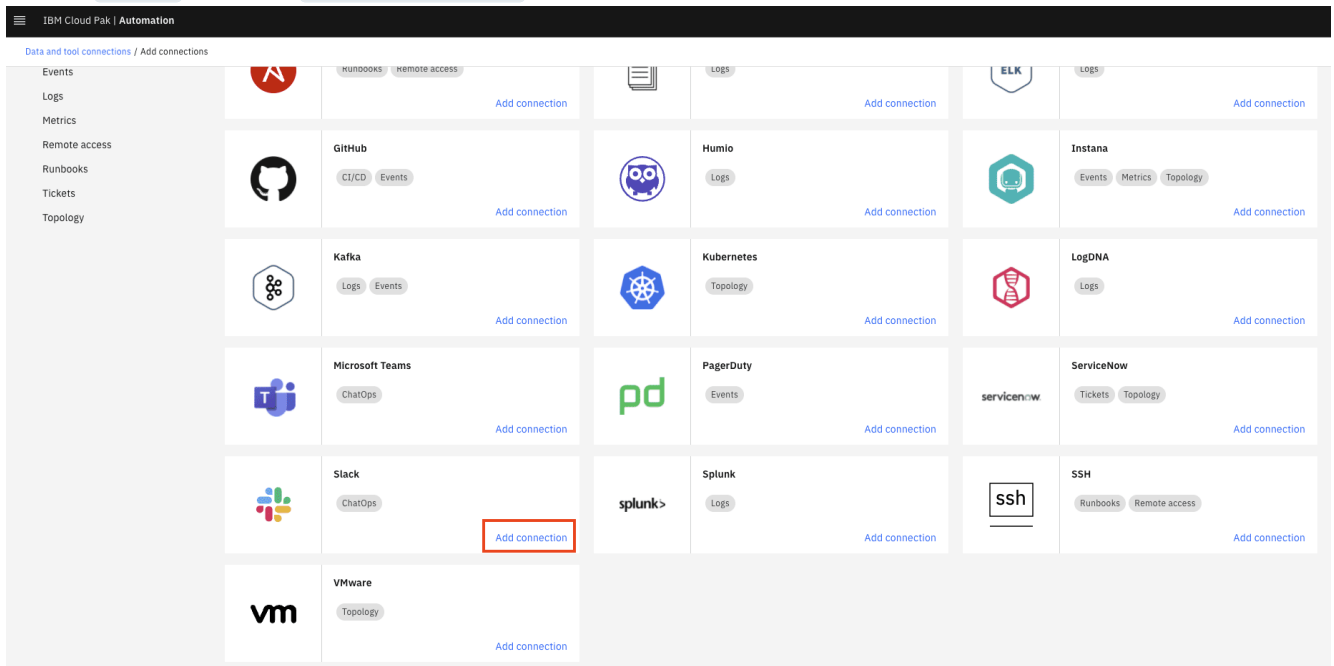
Q Filter table

Connection type	Total connections	Connection status	Categories
<div><div></div> Start by adding a connection Click the Add connection button to get started</div>			

Items per page: 10 ▾ 0-0 of 0 items

1 ▾ of 1 page

3. Under **Slack**, click on **Add Connection**



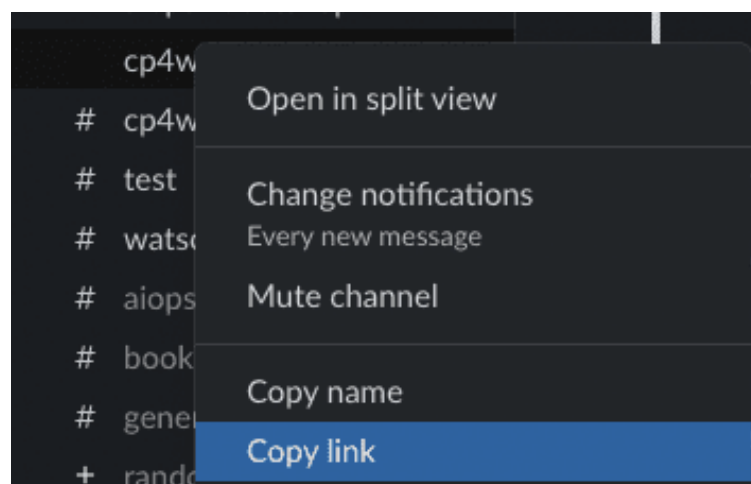
4. Name it "Slack"

5. Paste the **Signing Secret** from above

6. Paste the **Bot User OAuth Token** from above

Slack

7. Paste the channel IDs from the channel creation step in the respective fields



Proactive channel	
C035U4CONCV	
Enter a proactive channel for the connection.	
Reactive channel	
C035U4CAAA	
Enter a reactive channel for the connection.	
Test connection to slack.com	☑ Test succeeded

8. Test the connection and click save

4.5 Create the Integration URL

In the AI Manager (CP4WAIOPS)

1. Go to **Data and tool integrations**
2. Under **Slack** click on **1 integration**
3. Copy out the URL

The screenshot displays the IBM Automation console. On the left, the 'Data and tool integrations' sidebar is visible, with 'Slack' highlighted under the 'Optional' tab, showing '1 integration'. The main panel shows the 'Slack' integration details. A table lists the integration with the name 'Slack' and a URL: `https://cpd-aiops.apps.ocp46.tec.uk.ibm.com/aiops/aimanager/instances/XXXXXXXXXXXX/api/slack/events`. The URL is highlighted with an orange box. Below the table, there are pagination controls showing '1 of 1 items'. A 'Close' button is located at the bottom right of the interface.

This is the URL you will be using for step 6.

4.6 Create Slack App Communications

Return to the browser tab for the Slack app.

4.6.1 Event Subscriptions

1. Select **Event Subscriptions**.
2. In the **Enable Events** section, click the slider to enable events.
3. For the Request URL field use the **Request URL** from step 5.

e.g: `https://<my-url>/aiops/aimanager/instances/xxxxx/api/slack/events`

4. After pasting the value in the field, a *Verified* message should display.

Enable Events On ☐

Your app can subscribe to be notified of events in Slack (for example, when a user adds a reaction or creates a file) at a URL you choose. [Learn more.](#)

Request URL Verified ✓

Change



We'll send HTTP POST requests to this URL when events occur. As soon as you enter a URL, we'll send a request with a **challenge** parameter, and your endpoint must respond with the challenge value. [Learn more.](#)

If you get an error please check 5.7

5. Verify that on the **Subscribe to bot events** section you got:
 - **app_mention** and
 - **member_joined_channel** events.

Subscribe to bot events

Apps can subscribe to receive events the bot user has access to (like new messages in a channel). If you add an event here, we'll add the necessary [OAuth scope](#) for you.

Event Name	Description	Required Scope
app_mention	Subscribe to only the message events that mention your app or bot	app_mentions:read 
member_joined_channel	A user joined a public or private channel	channels:read or groups:read 

Add Bot User Event

- Click [Save Changes](#) button.

4.6.2 Interactivity & Shortcuts

- Select [Interactivity & Shortcuts](#).
- In the Interactivity section, click the slider to enable interactivity. For the [Request URL](#) field, use the URL from above.

There is no automatic verification for this form

Interactivity & Shortcuts

Interactivity

On 

Any interactions with shortcuts, modals, or interactive components (such as buttons, select menus, and datepickers) will be sent to a URL you specify. [Learn more.](#)

Request URL

<https://> 0000.t

Slack will send an HTTP POST request with information to this URL when users interact with a shortcut or interactive component.

- Click [Save Changes](#) button.

4.6.3 Slash Commands

Now, configure the **welcome** slash command. With this command, you can trigger the welcome message again if you closed it.

1. Select **Slash Commands**
2. Click **Create New Command** to create a new slash command.

Use the following values:

Field	Value
Command	/welcome
Request URL	the URL from above
Short Description	Welcome to Watson AIOps

3. Click **Save**.

4.6.4 Reinstall App

The Slack app must be reinstalled, as several permissions have changed.

1. Select **Install App**
2. Click **Reinstall to Workspace**

Once the workspace request is approved, the Slack integration is complete.

If you run into problems validating the **Event Subscription** in the Slack Application, see 5.2

4.7 Create valid CP4WAIOPS Certificate (optional)

Installer should already have done this.

But if there still are problems, you can directly run:

```
ansible-playbook ./ansible/31_aimanager-create-valid-ingress-certificates.yaml
```

4.8 Slack Reset

4.8.1 Get the User OAUTH Token

This is needed for the reset scripts in order to empty/reset the Slack channels.

This is based on [Slack Cleaner2](#).

You might have to install this:

```
pip3 install slack-cleaner2
```

Reset reactive channel

In your Slack app

1. In the **OAuth & Permissions** get the **User OAuth Token** (not the Bot User OAuth Token this time!) and jot it down

In file `./tools/98_reset/13_reset-slack.sh`

2. Replace **not_configured** for the **SLACK_TOKEN** parameter with the token
3. Adapt the channel name for the **SLACK_REACTIVE** parameter

Reset proactive channel

In your Slack app

1. In the **OAuth & Permissions** get the **User OAuth Token** (not the Bot User OAuth Token this time!) and jot it down (same token as above)

In file `./tools/98_reset/14_reset-slack-changerisk.sh`

2. Replace **not_configured** for the **SLACK_TOKEN** parameter with the token
3. Adapt the channel name for the **SLACK_PROACTIVE** parameter

4.8.2 Perform Slack Reset

Call either of the scripts above to reset the channel:

```
./tools/98_reset/13_reset-slack.sh  
  
or  
  
./tools/98_reset/14_reset-slack-changerisk.sh
```

5. Demo the Solution



5.1 Simulate incident - Command Line

Make sure you are logged-in to the Kubernetes Cluster first

In the terminal type

```
./tools/01_demo/incident_robotshop.sh
```

This will delete all existing Alerts/Stories and inject pre-canned event, metrics and logs to create a story.

-  Give it a minute or two for all events and anomalies to arrive in Slack.
-  You might have to run the script 3-4 times for the log anomalies to start appearing.