Artifactory and Xray Integration with Microsoft Teams

Overview

Microsoft Teams is a business communication platform developed by Microsoft, as part of the Microsoft 365 family of products.

```
# Microsoft Teams

This integration is between the JFrog Platform and Microsoft Teams that focuses on notifications from the
JFrog Platform. If you do not already have a JFrog account, you can [get the free tier here](https://jfrog.
com/start-free/#saas).

We know that software development happens in a myriad of tools and collaboration environments. As your
mission-critical tools for DevOps, the results of many key events that occur in Artifactory and Xray
reveal whether or not your software pipeline is on-track to deliver production-quality releases. The JFrog
app for Microsoft Teams brings real-time visibility and awareness of what's happening in your JFrog-
powered software pipelines to your entire team through one of the most widely used collaboration tools.
When it comes to people across the organization knowing what's going on, there aren't great solutions.
This will give each user situational awareness about occurrences in the JFrog Platform.  Additionally,
where appropriate - they will have easy links and action buttons to go follow-up on the event.

With the JFrog app for Teams, developers can better collaborate on delivering quality releases, responding
in real-time to DevOps events as they occur.

**[Watch this video](https://youtu.be/nAuL8NruiNk) to see what it looks like to create your first
notification.**

# Contact Support

If you need help with this Microsoft Teams integration, please contact `partner-support@jfrog.com`. If you
need general JFrog support, you can [reach out to us on the contact form here](https://jfrog.com/contact-us
/).

## Issues

To raise any issues with this integration, you can [use github issues here](https://github.com/jfrog
/partner-integrations/issues).

# Terms and Conditions

You can [read our terms and conditions here](https://jfrog.com/eula/).

# Privacy Policy

You can [read our privacy policy here](https://jfrog.com/privacy-policy/).

# How it Works

* This integration allows you the ability to see Artifact, Artifact Properties, Docker, Release Bundle,
Distribution and Build events through notifications and actionable cards inside the Microsoft Teams
browser.
* You can send these notifications to multiple teams and channels.
* Additionally, you can get vulnerability and license compliance notification based on policies setup in
JFrog Xray and take actions.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-
1.png" width="800">
```

On-premise JFrog Installation

To use the Microsoft Teams integration with an on-premise JFrog installation, the network port `8082` will need to be exposed to the external network. See [JFrog System Requirements](https://www.jfrog.com/confluence/display/JFROG/System+Requirements#SystemRequirements-RequirementsMatrix) for more information.

Then when configuring the JPD, include the network port in the JPD url, e.g. `https://example.com:8082`

Requirements

* Your organization should have an instance of the JFrog Platform version 7.27 or above. You can signup for a free instance at: https://jfrog.com/start-free/

* You must be a user with Admin permissions to authenticate your organization's app with your JFrog Platform Deployment (JPD).

* You must be a user with Admin permissions to create the initial notifications for Artifactory and Xray.

* Your organization must already have setup policies and watches prior to getting Xray notifications in MSTeams. [Learn how to setup watches and policies in Xray](https://www.youtube.com/watch?v=88hwwMJsS58).

Support Commands

To use the commands in Microsoft Teams, start by typing **@jfrog** and hit enter. Next, click on **Select or type a command** and you should see the following commands:

command	description
menu	Show available options
help	Get help and support
connect	Connect JFrog Platform
disconnect	Disconnect JFrog Platform
login	Sign in user to app
logout	Sign out user to app

Types of Supported Notifications

All notifications are based on webhook events in the JFrog Platform. The currently supported notifications include:

Artifactory

Type	Events
Artifact	*deployed, deleted, moved, copied*
Artifact Properties	*added, deleted*
Docker Tag	*pushed, deleted, promoted*
Builds	*uploaded, deleted, promoted*
Release Bundles (Enterprise+)	*created, signed, deleted*
Distribution (Enterprise+)	*stared, completed, aborted, failed, deletion started, deletion failed, deletion completed*

Xray

Type	Description
Security Violations by CVE	*This sends individual notification cards for each CVE or issue*
Security Violations by Component (Summary view)	*This provides a summary of all CVEs and severities by component*
License Compliance	*This sends individual notification cards for each license compliance issue*

Commands

In the Micrsoft Teams chat area, typing in **@jfrog** followed by one of these commands, will result in

the following actions:

| Type	Action
menu	This will show the menu of available options on the app
help	This will show you how to get help and support
connect	This will provide the ability to connect to the JPD
disconnect	This will let you disconnect from the JPD
login	Sign in user to JPD
logout	Sign out user from JPD

Getting Started

Follow the instructions below or [watch the video examples](#) for more help on how to get started using the app.

Install Microsoft Teams

The first thing to do is to download the Microsoft Teams Application.

You can learn how to [download and install Microsoft Teams here](https://www.microsoft.com/en-us/microsoft-teams/download-app).

Once, you have Microsoft Teams, you can add the JFrog application by navigation to the lower left-hand corner and clicking on the icon called Apps.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-2.png" width="70">
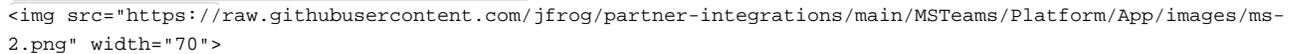
Then, in the search bar, type in "JFrog" and look for the JFrog app*.

*Now, before you add the JFrog app, you must have a team created in your Microsoft Teams browser. If you do not, please create a team.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-3.png" width="500">
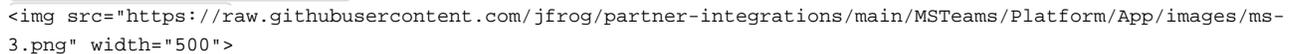
Click on the app and a window will open that has an "Add to Team" button. Click on that button and select the team you want.

Then click on **Set up a bot** button to finish installing the JFrog app with Microsoft Teams.

Once you've added the JFrog Application from the Microsoft Teams browser, you must connect the application to your JFrog Platform Deployment (or JPD) instance.

How to Configure the JPD

The first message you will see from the JFrog Bot is going to be an introduction card that asks you to **Connect JFrog Platform**. Click on that button.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-4.png" width="500">
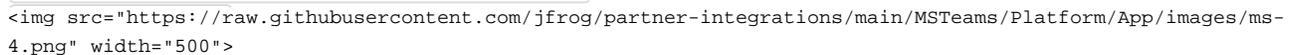
Now, you will need to login to your JFrog instance with Admin credentials. Once logged in, navigate to the **Administration > General > Applications** area.

*In the free JFrog Platform versions, this information can be found under:
Administration > Security > Integrations.

Then click on **+ New Client Integration**. Provide it a name and then click on the application dropdown and select the **JFrog Collaboration Integration**.
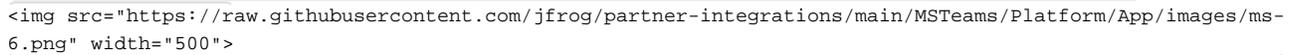
Next, under Integration ID and Secret, click on the button: **Generate your ID and Secret**.
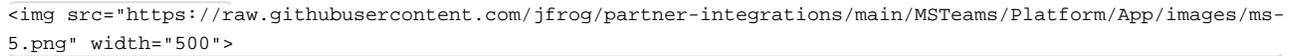
<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-5.png" width="500">

When you have your Integration ID and Secret, copy and paste these items into the modal window.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-6.png" width="500">

Last, copy and paste your JFrog Platform URL (found at the top of your browser window) into the modal window where it says JFrog Platform URL.

Hit Save and look for the success message! Great, you have now connected your organization's JFrog account to the Microsoft Teams app.

Next, there will be a window that asks you to Get Started. Click on **Get Started** and on the next screen: **Sign In**. Use the username and password provided to you by JFrog.

Login to the JFrog Platform with your credentials and **Allow** the Microsoft Teams JFrog application to authenticate to the JFrog Platform.
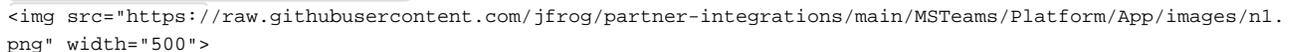
Create an Artifactory Notification

Next, you'll see a Get Started button, click on that to bring up the main menu of items.

Once you see the menu, you can create new notifications and add them to your Microsoft Teams channel*. You can also type @jfrog and select the menu option in the text to bring up the menu.

*We expect you to have your channels already setup - how you want to organize notifications to various teams and channels is up to your organization.
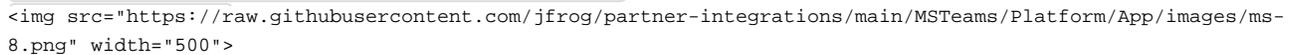
Click on **Create Notification**.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/n1.png" width="500">
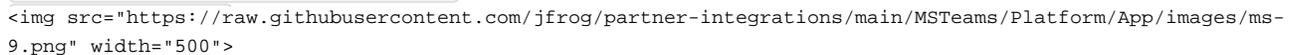
From the window that appears, use the drop-down to select the notification type you want to create. In this example, we'll select **Artifact Properties**.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-8.png" width="500">
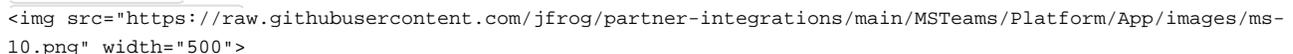
On the next screen, give the notification a name followed by selecting which kinds of artifact properties events you want to get notified about.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-9.png" width="500">

Last, you'll want to choose which repositories you can get notified from. You have the option of selecting **Any Local** and **Any Remote** or you can scroll down and select specific repositories using the drop-down selection.

<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-10.png" width="500">

Click on the Create button at the bottom of the window and you will see a Success message appear. You can now close this window and go back to the channel.

Congrats!!! You should receive one notification for every event type used in the notification.
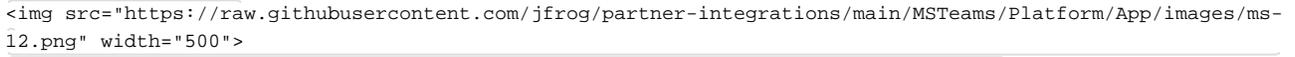
Test the notification:

 If you want to test the notification, navigate to the JFrog Platform and go to Administration > General > Webhooks.

```
<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images
/ms-11.png" width="500">
```

Look for the name of the notification you created and click on it.

On the bottom right-hand corner, click on the **Test** button.

```
<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/ms-
12.png" width="500">
```

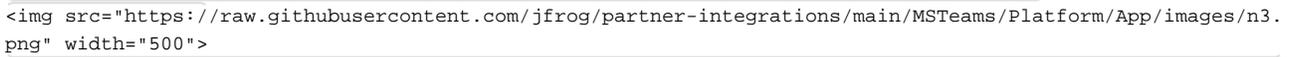You should get a confirmation in the JFrog Platform that a dummy webhook was sent.

If you navigate back to the Microsoft Teams, you will see this information in the UI.

NOTE: It can take up to 2-4 minutes to receive all notifications.

How to Sign Out

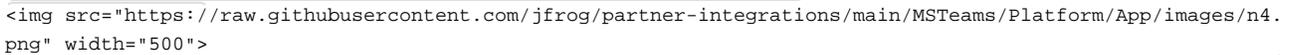To sign out of the application, click on **Help** or type /jfrog help

A message will show up with a button that allows you to **Sign Out** of the JFrog Bot.

```
<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/n3.
png" width="500">
```

Please note that signing out does not disconfigure the JFrog Platform from the JFrog Bot in Microsoft
Teams.

Disconnect JFrog Platform Deployment

To disable the connection between your JFrog Platform instance and the JFrog bot in Microsoft Teams, you
can use the **Disconnect JFrog Platform** button found on the menu.

```
<img src="https://raw.githubusercontent.com/jfrog/partner-integrations/main/MSTeams/Platform/App/images/n4.
png" width="500">
```

Uninstall

To completely uninstall application, [follow the instructions here](https://support.microsoft.com/en-us
/office/remove-an-app-from-teams-0bc48d54-e572-463c-a7b7-71bfdc0e4a9d)