

# Mission Control Release Notes

## Overview

This page presents release notes for JFrog Mission Control describing the main fixes and enhancements made to each version as it is released.

If you need release notes for earlier versions of Mission Control, refer to the [Release Notes](#) in the Mission Control 3.x User Guide.



### Mission Control is Moving to Artifactory as a Service

From JFrog Artifactory version 7.27.3, Mission Control has been integrated directly into Artifactory as a service. You will no longer need to install Mission Control to use the features it provides, only to enable the service in Artifactory.

The metrics capabilities that were provided Mission Control will now be provided through JFrog Insight. To learn more about how to install Insight, see [Installing Insight](#).

To learn more about how Mission Control has been integrated into Artifactory, see [Migrating Platform Deployments and License Buckets](#).

## Mission Control Deployment Options Matrix

While Mission Control will be in maintenance mode with minor fixes and security updates beyond version 4.7.x, you can still install it as an independent product and use it independently as in its previous versions. Since there are several ways in which you can use Mission Control within the JFrog Platform, the following table provides a matrix of the deployment options and their uses.



While Mission Control can be configured to manage multiple environments, it can only have one "home" JPD. Meaning, each Platform deployment, can only have one Mission Control installation as part of its topology - either as a standalone installation, or as an Artifactory microservice.

Mission Control /Insight Configuration	Artifactory Version	Function	Installation Process	Configuration
<b>Mission Control Microservice in Artifactory</b>	From Artifactory 7.27.x	Supported from Artifactory version 7.27.x.  Mission Control microservice provides the topology of JPDs in the dashboard and manages the license buckets.  If you enable the Mission Control microservice, you can longer use the standalone Mission Control service anymore.	<a href="#">Installing Artifactory</a>	Mission Control microservice does not have a standalone <code>system.yaml</code> file. Enable the Mission Control microservice in the Artifactory system YAML file.
<b>Standalone Mission Control Service</b>	Artifactory continues to support standalone Mission Control until Mission Control end-of-life.	Mission Control works as a standalone service. You can continue to use Mission Control to manage your JPDs, license buckets, and view charts and trends.  You cannot use Insight service with standalone Mission Control service. Do not install Insight if you plan to use standalone Mission Control service.  If you enable Mission Control as an Artifactory microservice, the standalone Mission Control can no longer work as part of the Platform deployment.	<a href="#">Installing Mission Control</a>	<a href="#">Mission Control System YAML</a>

## Page Contents

- [Overview](#)
  - [Mission Control Deployment Options Matrix](#)
  - [Download](#)
  - [Previous Versions](#)
  - [Installation](#)
- [Mission Control 4.7](#)
  - [Mission Control 4.7.2](#)
  - [Mission Control 4.7.3](#)
  - [Mission Control 4.7.4](#)
  - [Mission Control 4.7.5](#)
  - [Mission Control 4.7.7](#)
  - [Mission Control 4.7.8](#)
  - [Mission Control 4.7.9](#)
  - [Mission Control 4.7.10](#)
  - [Mission Control 4.7.11](#)
  - [Mission Control 4.7.13](#)
  - [Mission Control 4.7.16](#)
- [Mission Control 4.6](#)
  - [Mission Control 4.6.1](#)
  - [Mission Control 4.6.2](#)
  - [Mission Control 4.6.3](#)
  - [Mission Control 4.6.5](#)
- [Mission Control 4.5](#)
- [Mission Control 4.4](#)
  - [Mission Control 4.4.1](#)
  - [Mission Control 4.4.2](#)
- [Mission Control 4.3.2](#)
- [Mission Control 4.2](#)
- [Mission Control 4.0](#)

## Additional References

- [Artifactory Release Notes](#)
- [Xray Release Notes](#)
- [Distribution Release Notes](#)
- [Pipelines Release Notes](#)

<b>Standalone Insight Service</b>	From Artifactory 7.27.x	<p>JFrog Insight is a product that provides the trends and charts that are currently available with Mission Control. Install Insight if you wish to view the trends and charts. For more information, see <a href="#">JFrog Insight</a>.</p> <p>You must enable Mission Control as a microservice and disable standalone Mission Control Service to use Insight.</p>	<p><b>Installing Insight</b></p> <p><b>Migrating to Insight</b></p> <p>To migrate to Insight, do the following:</p> <ol style="list-style-type: none"> <li>1. Stop standalone Mission Control service.</li> <li>2. <a href="#">Install Insight</a>.</li> <li>3. Enable the Mission Control microservice in Artifactory.</li> <li>4. Enable filebeat for both Artifactory and Xray with the correct Elasticsearch value.</li> <li>5. Restart Artifactory.</li> </ol>	<a href="#">Insight System YAML</a>
-----------------------------------	-------------------------	--	---	-------------------------------------



Do not enable standalone Mission Control service after you migrate to the Mission Control microservice and install Insight.



**Before You Get Started!**

Be sure to read the [Mission Control 4.0 Release Notes](#) carefully before installing or upgrading any version of Mission Control 4.X version to learn about the new features and functionality introduced in the JFrog Platform.

## Download

[Click to download the latest Mission Control version.](#)



**Installer Name Change!**

From Mission Control 4.0, the installer naming convention has been changed to include the installer type... The following table lists the official installer names.

Installer Type	Installer Syntax
Linux archive	jfrog-mc-<version>-linux.tar.gz
Compose	jfrog-mc-<version>-compose.tar.gz
RPM/Debian	jfrog-mc-<version>.<rpm deb>

## Previous Versions

Previous versions of JFrog Mission Control are available for download in the [Previous Releases](#) page.

## Installation

For installation instructions, please refer to [Installing Mission Control](#).

To upgrade to the latest version, please refer to [Upgrading Mission Control](#).

## Mission Control 4.7

This section contains all the Mission Control 4.7 releases.

---

### Mission Control 4.7.2

Released: March 31, 2021

#### Highlights

##### Project Support

This version introduces support for managing and monitoring projects. For more information, see [Projects](#).

##### New Dashboard Trends

The Dashboard Trends have been completely redesigned by enhancing existing trends and introducing new trends.

See [Viewing Trends in the Dashboard](#) for full details.

List of metrics available in this version:

Metric	Products	Metric Group	Available on SaaS	Changes this version
<a href="#">Garbage Collection</a>	Artifactory	Storage	No	Enhanced
<a href="#">Local and Remote Repository storage</a>	Artifactory	Storage	Yes	Enhanced
<a href="#">Optimization Info</a>	Artifactory	Storage	No	New
<a href="#">Incoming HTTP Requests</a>	Artifactory	Incoming HTTP Requests	Yes	New
<a href="#">Incoming HTTP Requests</a>	Xray	Incoming HTTP Requests	Yes	New
<a href="#">Slow Queries</a>	Artifactory	Performance	No	New
<a href="#">DB Connections</a>	Artifactory	Performance	No	Enhanced
<a href="#">DB Connections</a>	Xray	Performance	No	Enhanced
<a href="#">Xray Performance</a>	Xray	Performance	No	Enhanced
<a href="#">Scanned Components (Xray Data)</a>	Xray	Scanned Components	Yes	Enhanced
<a href="#">Heap Size</a>	Artifactory	Performance	No	Enhanced
<a href="#">Remote HTTP Connections</a>	Artifactory	Performance	No	Enhanced
<a href="#">Replication</a>	Artifactory	Replication	Yes	No change
<a href="#">System Metrics</a>	Artifactory	System Metrics	No	Enhanced
<a href="#">System Metrics</a>	Xray	System Metrics	No	Enhanced
<a href="#">P2P Downloads</a>	Artifactory	P2P	Yes	New

#### Resolved Issues

Jira Issue	Description
	Fixed an issue whereby, the <a href="#">Get JPD List</a> returned duplicate entries if the tag filter matched multiple tags for the same JPD.

### Mission Control 4.7.3

Released: April 15, 2021

#### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby the creation of a support bundle for Mission Control was not working properly.

---

## Mission Control 4.7.4

Released: May 20, 2021

### Feature Enhancements

Mission Control is now compatible with PostgreSQL version 13.x.

### Resolved Issues

Jira Issue	Description
	Fixed an issue whereby, warning messages appeared in the logs when replicator was disabled.

---

## Mission Control 4.7.5

Released: June 10, 2021

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby License Bucket Projects information was not included in the export. Users who had a License Bucket with Projects had to reimport those buckets.
	Fixed an issue, whereby Insights metrics were failing for legacy Artifactory service ID <code>jf-artifactory@*</code> .

---

## Mission Control 4.7.7

Released: June 30, 2021

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby registering an Artifactory version 6 server starting from version 6.23.19 and above was not working.
	Fixed an issue, whereby the Elasticsearch password was taking the default password "admin" during Elasticsearch internal upgrades, causing the Mission Control upgrade to fail.

---

## Mission Control 4.7.8

Released: July 8, 2021

### Feature Enhancements

#### Elasticsearch Upgrade

Elasticsearch version was upgraded to 7.12.1.

### Resolved Issues

Jira Issue	Description
------------	-------------

	Fixed an issue, whereby the Mission Control server shut down when it connected to an Amazon Elasticsearch Service instance.
	Fixed an issue, whereby the active_request_data index was getting auto-deleted when the index cleanup and the rollover configuration were set to the same value.

---

## Mission Control 4.7.9

Released: July 22, 2021

### Feature Enhancements

#### Elasticsearch Upgrade

Elasticsearch version was upgraded to 7.13.2.

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby the wrong version of Elasticsearch was displayed in the list of microservices on the Service Status page.

## Mission Control 4.7.10

Released: August 05, 2021

### Feature Enhancements

#### Liveness and Readiness API

Liveness and Readiness endpoints have been added to Kubernetes probes.

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby non-UTC VMs showed the replication status as not configured.

## Mission Control 4.7.11

Released: August 09, 2021

### Resolved Vulnerabilities

Fixed a number of security vulnerabilities. For more information, refer to [Fixed Security Vulnerabilities in Mission Control](#).

## Mission Control 4.7.13

Released: September 02, 2021

### Feature Enhancements

#### Elasticsearch Upgrade

Upgraded the Elasticsearch version to 7.13.4.

#### Searchguard Upgrade

Upgraded the Searchguard version to 52.1.0.

Artifactory Docker Container Image Uses the Redhat UBI-micro Base Image

In an effort to provide a more secure Mission Control image, Mission Control now uses the Redhat UBI-micro base image. Some of the tools that were available in the previous image are not available in this more secure image.

### Resolved Vulnerabilities

Fixed a number of security vulnerabilities. For more information, refer to [Fixed Security Vulnerabilities in Mission Control](#).

## Mission Control 4.7.14

Released: September 16, 2021

### Feature Enhancements

#### Elasticsearch Upgrade

Upgraded the Elasticsearch version to 7.14.0.

### Resolved Vulnerabilities

Fixed a number of security vulnerabilities. For more information, refer to [Fixed Security Vulnerabilities in Mission Control](#).

## Mission Control 4.7.15

Released: September 24, 2021

### Feature Enhancements

#### Elasticsearch Upgrade

Upgraded the Elasticsearch version to 7.14.1.

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby the data in the database for JPDs were empty or stale because of a deadlock during the token creation.

### Resolved Vulnerabilities

Fixed a number of security vulnerabilities. For more information, refer to [Fixed Security Vulnerabilities in Mission Control](#).

## Mission Control 4.7.16

Released: October 04, 2021

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby the Mission Control service failed to start since the <code>mc_scheduler</code> microservice did not start when there were pre-existing tables in the Mission Control database.

---

## Mission Control 4.6

This section contains all the Mission Control 4.6 releases.

### Mission Control 4.6.1

Released: December 2, 2020

### Highlights

#### Elasticsearch Improvements

Elasticsearch calls are forwarded via router using port 8082.

Mission Control now supports Search Guard based credential support in Elasticsearch.

### Performance Improvements

Introduced general performance improvements to Mission Control, such as improvements in the system YAML and JPD monitoring services.

### New Dashboard Trends

Added a new trend, the [Artifactory Performance Trend](#) that allows you to track performance bottlenecks, capture stack traces of specific failures, and monitor the state of Artifactory.



The new trend requires Artifactory 7.11.x. You need to perform a few steps when upgrading to Mission Control 4.6.1. For more information, see [Upgrading Mission Control](#).

### Logging Improvements

Mission Control is now included in the [Live Logs](#), allowing admins to access the Mission Control logs from the JFrog Platform UI.

### Resolved Issue

Jira Issue	Description
	Fixed the search.max_buckets error in Elasticsearch.

---

## Mission Control 4.6.2

Released: December 23, 2020

### Feature Enhancements

#### JDBC Driver Upgrade

PostgreSQL JDBC Driver version was upgraded to version 42.2.12.

### Resolved Issues

Jira Issue	Description
	Fixed an issue, whereby Elasticsearch metrics indices were created on an hourly basis.
	Fixed an issue, when upgrading from Mission Control 4.5.0 to 46.1, Elasticsearch alias name was used as an index.
	Fixed an issue, whereby PostgreSQL DB entries were not cleaned up correctly.

---

## Mission Control 4.6.3

Released: January 25, 2020

### Feature Enhancements

#### Access Client Upgrade

Upgraded the Access client module to the latest version 7.12.4.

#### Elasticsearch and Search Guard Version Upgrade

Elasticsearch and Search Guard versions upgraded to Elasticsearch version 7.8.1 and Search Guard version 48.0.0.

### Resolved Issue

Jira Issue	Description
	Fixed an issue whereby, in some cases, the Storage Summary graph was displaying incorrect information.

## Mission Control 4.6.5

Released: March 11, 2021

### Feature Enhancements

#### Index Rollover Improvements

The index rollover is now specific for each Elasticsearch index.

### Resolved Issues

Jira Issue	Description
	Improved the <code>insight-service</code> log, by fixing some log formatting issues.
	Improved the performance of Elasticsearch queries, such as fixing some issues for the <code>replication_metrics_info</code> REST API, and improved the response time for the <code>artifactory_performance</code> and <code>xray_performance_metrics</code> REST APIs.
	Fixed UI backward compatibility issues.
	Changed error code for UI calls that are made for Dashboard Trends to 413 instead of 500 in case of large response data, so that 500 error redirection will be avoided.

## Mission Control 4.5

Released: August 13, 2020



From Mission Control 4.5, the Control Executor service is no longer supported.

### Highlights

#### Storage Garbage Collection Trends

The [Storage Garbage Collection Trends](#) tracks Artifactory storage garbage collection metrics. It enables you to track metrics such as the duration of garbage collection jobs and the total storage reclaimed by Artifactory. These metrics are presented in a visual graph to help you track possible performance issues and improve the garbage collection process.

#### PostgreSQL Version Bundling

All JFrog's installers bundling PostgreSQL have been updated to use a newer PostgreSQL version 10.13.



#### Upgrading Mission Control

In Mission Control version 4.5.0 some improvements were made to the microservices. In order for these improvements to take effect, you need to run a migration script for Linux Archive upgrades, as described in [Linux Archive Upgrade](#).

### Resolved Issues

Jira Issue	Description
	Fixed an issue whereby, the license bucket migration from JFrog Mission Control version 3.x to 4.x did not work properly.
	Fixed issues in Replication Trends to display long-running replications.



---

## Mission Control 4.4

Released: May 19, 2020

### Feature Enhancements

#### Performance Improvements

Introduced the following improvements and enhancements to Mission Control:

- Improved and enhanced performance in Trends Storage Summary.
- Improved security for OSS dependencies identified by Xray.

#### PostgreSQL Support

Mission Control now supports PostgreSQL versions 10.5 and 11.5.

### Resolved Issues

Jira Issue	Description
	Fixed an issue whereby, when <a href="#">adding an existing JPD</a> through the REST API, the previous token of the initially registered JPD was revoked, and the initial JPD was forbidden.
	Fixed an issue whereby, when downloading a Support Bundle, a few obfuscation issues occurred.
	Fixed a bug whereby, when trying to log in to the JFrog Platform, an Out Of Memory error was generated due to gRPC server connectivity failure issues.

---

## Mission Control 4.4.1

Released: May 29, 2020

 Mission Control 4.4.1 is compatible with Artifactory 7.4.1 and above.


### Resolved Issues

Jira Issue	Description
	Fixed an issue whereby, Mission Control had a compatibility issue with Microsoft Azure Cloud and PostgreSQL had SSL enabled.

---

## Mission Control 4.4.2

Released: June 15, 2020

 Mission Control 4.4.2 is compatible with Artifactory 7.4.1 and above.

#### PostgreSQL Support

Database connection pool management was improved to avoid unnecessary idle connections.

---

## Mission Control 4.3.2

Released: 20 April, 2020



Mission Control version 4.3.2 is compatible with Artifactory 7.4.1 and above.

## Highlights

### Added Backward Compatibility for Artifactory Version 6.2

Artifactory 6.2 instances are now supported in the JFrog Platform web UI allowing users to register such instances, view details, and even add tags.

### Improvements to Dashboard Replication Trends and Topology page

Performed multiple UX improvements to the Trends page and the Topology page has been redesigned to be more responsive.

### Added Support for Elasticsearch 7.6.1

Previous versions of Mission Control are compatible with Elasticsearch version 6.6.0. This version adds support for Elasticsearch 7.6.1.



This Mission Control version is not backward compatible with Elasticsearch 6.6.0, therefore if you have externalized Elasticsearch, please back up and upgrade before upgrading to this version.

## Feature Enhancements

### Dashboard Topology Page Supports Display of Large Number of JPDs

The Dashboard Topology page been redesigned to be more responsive. When zooming out, nearby JPDs are displayed as a cluster whereas when zooming in the JPDs are displayed separately.

### Replication Trends View Improvements

Introduced the following improvements to the Replication Trends located under the **Application | Dashboard | Trends** page.

- The Topology map is highlighted when hovering over a JPD cluster.
- The Storage Summary checkboxes are disabled in a cloud environment.
- The replication status color has been removed in the Topology arcs.

### Attaching Licenses from a License Bucket is Included in Onboarding Wizard

The Onboarding Wizard now lets you attach a license or multiple licenses from a license bucket for your Artifactory instance.

## Mission Control 4.2

Released: Feb 23, 2020

### Resolved Issues

Jira Issue	Description
	Updated the Xray Scanning metric to display the Repos and Builds coverage.
	Fixed an issue in the Topology map linking to the replication details for a JPD.
	Fixed a few issues with the migration scripts.
	Fixed an issue around adding multiple JPDs with the same URL.
	Improved logging around adding and removing nodes.
	Fixed an issue in the Trends page by retaining the same metric type when the JPD is changed.
	Fixed an issue with selecting location in the JPD registration page.

## Mission Control 4.0

Released: January 12, 2020



### Deprecated Features

Mission Control 4.0 introduces several deprecated features. [Learn More >](#)

Also, read about the features that are currently out of scope and will be available in later releases. [Learn More >](#)

### Breaking Changes

For a list of breaking changes in Mission Control and other services in the JFrog Platform. [Learn More >](#)

### REST API Changes

For a list of REST API changes in Mission Control, [click here >](#)

**Important:** The JFrog Platform web UI is now accessed through port 8082 (For example, `http://SERVER_HOSTNAME:8082/ui/`). Accessing Mission Control directly for REST API and downloads is still possible through port 8081. [Learn More >](#)

## Highlights

### JFrog Platform

Announcing the new JFrog Platform, designed to provide developers and administrators with a seamless DevOps experience across all JFrog products, supporting the following main features:

**Universal package management** with all major packaging formats, build tools, and CI servers.

**Security and Compliance** that's fully integrated into the JFrog Platform, providing full trust of your pipeline from code to production.

**Radically simplified administration** with all configurations in one place.

**Complete trust in your pipeline** all the way from code to production.

**Seamless DevOps experience** from on-prem, cloud, hybrid or multi-cloud of your choice.



[Get Started with the JFrog Platform >](#)

## JFrog Platform New Functionalities

### System Architecture

The new Mission Control architecture has been updated to align with all JFrog products in the Platform. [Learn More >](#)

### Mission Control System.yaml

This release introduces a new system configuration file, allowing system configurations to be handled externally to the application, before/after the installation process. [Learn More >](#)

### Installation and Upgrade

Mission Control 4.0 comes with a new installer, which affects the [Install](#) and [Upgrade](#) procedures. As part of the new installers, the file structure was changed and is now aligned with the other JFrog products.

### Upgrade Process Changes

Mission Control 4.0 will work only with services that are installed as part of a JPD. To upgrade, follow the instructions [here](#).

### Unified User Interface

This version introduces a new UI that is unified for the entire JFrog Platform, including all JFrog products. If you are using Artifactory and other JFrog products such as JFrog Xray, JFrog Distribution, JFrog Mission Control and JFrog Insights, you will now be able to access them all from within a single UI with one URL address.

### Unified Permission Model

This version unifies all JFrog product permissions, allowing easier permission management across all products from one unified UI. The Unified Permission Model enables you to create a single permission target that applies to all products installed in the JFrog Platform. Since the products are unified within the Platform, you can now use a single permission target to control the permissions of all products. [Learn More >](#)

### Managing Platform Deployments

You can register, manage, monitor and gain visibility on all your installed [JFrog Platform Deployments](#) (JPDs) and the installed services according to geographic locations in the JFrog Platform. The monitored services are Artifactory, Xray and Distribution. Start by registering your JPDs in the JFrog Platform. [Learn More >](#)

### **Dedicated JPD Health and Status Dashboard**

The Topology Dashboard displays your registered JPDs across geographical areas in a map view with a set of indicators providing insight into the health of your services running on each JPD. You can view the status of your Access Federation and Replication in the map view and information about each of your [Registered JPDs](#) in the JFrog Platform.

### **Monitoring Metrics**

The Trends view in the Dashboard displays metrics and a set of graphs related to Distribution, Replication, Security and Storage based on historical data collected and stored in the Unified JFrog Platform. For more information, see [Viewing Trends in the Dashboard](#).

### **Logging**

All JFrog products now follow a standardized logging format and naming convention. [Learn More >](#)

### **Feature Enhancements**

#### **Replication Monitoring**

Mission Control 4.0 now allows you to view all the configured replications including the most recent status for any of the registered JPDs. You can also view the status of the running replications. Historical trends are available to provide visibility into the performance and status of replications.