Red Hat Middleware Management 7.0.TechPreview Red Hat Middleware Management Server Release Notes

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For Use with Red Hat Middleware Management

Red Hat Customer Content Services

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Abstract

The Red Hat Middleware Management Release Notes lists the features and known issues for this release.

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CHAPTER 1. INTRODUCTION TO RED HAT MIDDLEWARE MANAGEMENT 7.0.TECHPREVIEW

Note

This release of Red Hat Middleware Management is a technical preview. Technology Previews provide early access to upcoming product innovations, letting you to test new features and provide feedback during the development process. Technology Preview releases are *not* intended for production use. For more information see the Red Hat Customer Portal.

1.1. MIDDLEWARE MANAGEMENT OVERVIEW

Middleware management in CloudForms is a provider based on the Hawkular open source project. The middleware provider extends CloudForms management capabilities to JBoss Middleware application containers running in managed virtual machines, hosts, and Linux containers. The provider delivers inventory, events, metrics, and power operations.

When feature complete, the middleware provider will replace the current Red Hat middleware management offering, JBoss Operations Network.

1.2. GETTING SUPPORT

If you experience difficulty with a procedure described in this documentation, visit the Red Hat Customer Portal at http://access.redhat.com. Through the customer portal, you can:

- Search or browse through the Red Hat Knowledgebase of technical support articles about Red Hat products
- Submit a support case to Red Hat Global Support Services (GSS)
- Access other product documentation

If you have a suggestion for improving this guide or have found an error, please submit a Bugzilla report at http://bugzilla.redhat.com against **JBoss Middleware Manager** for the **Documentation** component. Please provide specific details, such as the section number, guide name, and CloudForms version so we can easily locate the content.

CHAPTER 2. NEW FEATURES

2.1. FEATURES - TECHNICAL PREVIEW 2

Monitor EAP in OpenShift

You can now use the Middleware Manager and CloudForms to monitor Red Hat JBoss Enterprise Application Platform servers running in containers on Red Hat OpenShift Container Platform. Red Hat is now shipping EAP 6 and EAP 7 containers through the Red Hat Container Catalog that includes an agent that allows for monitoring with the Middleware Manager and CloudForms. The CloudForms user interface has been enhanced to display the relationships between containers and the EAP servers running in those containers. The CloudForms interface has also been modified to disable operations on EAP servers when those servers are running in containers on OpenShift.

Run the Middleware Manager in OpenShift

An OpenShift Template is available for running the Middleware Manager and the Storage Node in OpenShift. This Template is intended to be used on conjunction with the CloudForms OpenShift template for running CloudForms in OpenShift.

Secure Communications with CloudForms

The Middleware Manager can now be configured for secure SSL communication with CloudForms.

Note

The only supported security protocols for the current release are **SSL without validation** and **Non-SSL**.

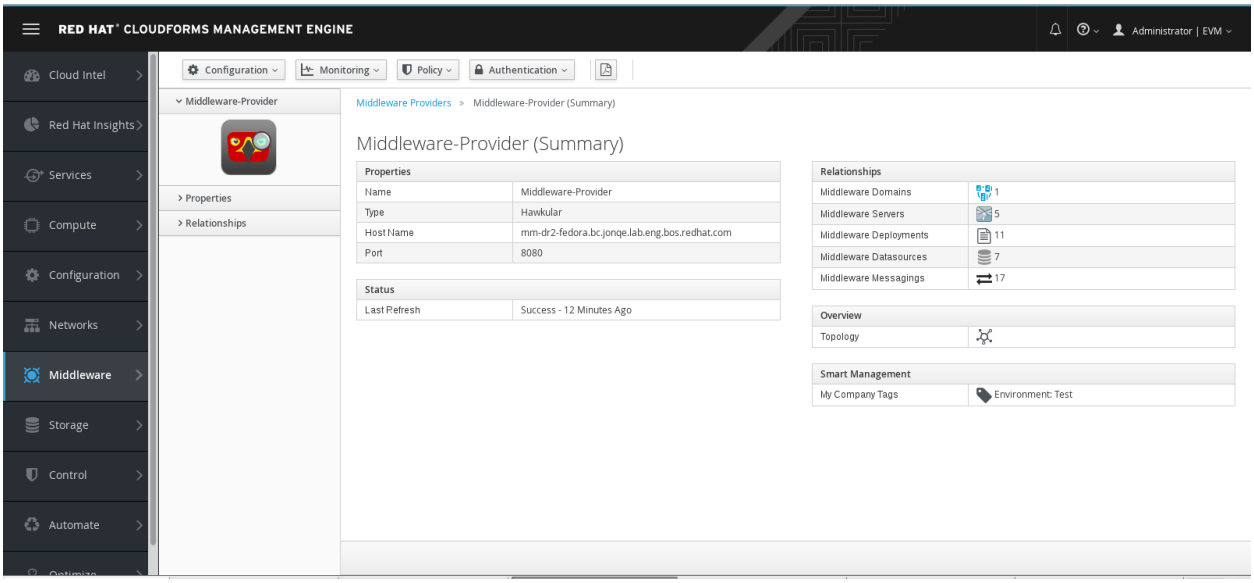
RPM distributions of EAP agents

The EAP agents are now distributed in the EAP 6 and EAP 7 RPM Package Manager channels for users who are provisioning their Red Hat JBoss Enterprise Application Platform servers via RPMs.

2.2. FEATURES - TECHNICAL PREVIEW 1

The middleware provider provides several dedicated views of important middleware server groupings. You can view Enterprise Application Platform (EAP 6 and 7) domains and server groups, and drill down to view the availability and state of your middleware servers.

Figure 2.1. Provider Summary Screen



Middleware Provider Inventory

When viewing the discovered inventory, Red Hat JBoss Enterprise Application Platform (EAP 6 and 7) Servers can have parent relations to the following entities:

- Middleware Provider
- Virtual Machines
- EAP Server Group

EAP Servers can have child relations to the following entities:

- Deployments
- DataSources
- Message Brokers

Middleware Provider Power Operations

Using the middleware provider you can perform the following power operations on EAP 6 and 7 servers:

- Gracefully Shutdown Server - rejects new sessions and allows sessions to complete
- Restart Server - restarts the Java Virtual Machine (JVM)
- Stop Server - stop the session and shutdown the JVM.
- Suspend and Resume - stop sessions but do not shutdown
- Reload Server - restarts the server but not the JVM

Note

The technical preview does not yet support the "start" operation.

Middleware Provider Datasources

For standalone EAP servers you can create datasources. You can also create datasource drivers for all supported EAP databases and add user provided drivers.

Middleware Provider Application Deployment

For standalone EAP servers you can add application deployments.

Middleware Provider Monitoring

The middleware monitor provides a timeline view where you can see:

- Alerts triggered by
  - Heap Used
  - Non Heap Used
  - Garbage Collection
- Events tracked
  - Application Deployement
  - Application Undeployment
  - Datasource Deployment
  - Datasource Undeployment

The middleware provider monitors local capacity and utilization, including the utilization of the following resources:

- Datasource availability
  - Available
  - In Use
  - Timed Out
- Datasource responsiveness
  - Creation Time
  - Get Time
  - Wait Time
- Garbage Collection Duration
- JVM Heap Memory
  - Committed
  - Max
  - Used
- JVM Non-Heap Memory
  - Used Committed
- Messaging

- Delivering Message Count
- Durable Message Count
- Non-durable Message Count
- Messages Added
- Messages Count

- Messaging Subscribers
  - Durable Subscribers
  - Non-durable Subscribers
  - Subscriptions
- Transactions
  - Aborted
  - Application Failure
  - Committed
  - Heuristic
  - Resource Failure
  - Timed-Out
- Web Sessions
  - Active
  - Expired
  - Rejected

Middleware Provider Reports

The middleware provider comes with the following pre-configured reports:

- JVM Heap and Non-heap consumption
- JVM Garbage Collection
- EAP JTA Transactions

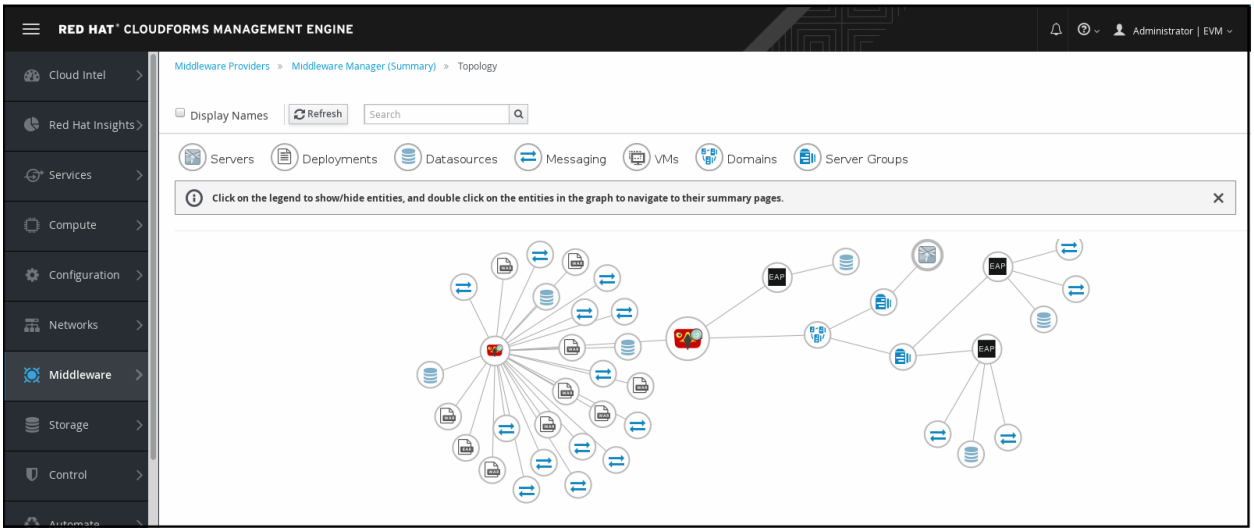
Middleware Provider Topology

The middleware provider includes an interactive user interface that allows you to view the network topology of managed entities, including the following:

- Datasources
- Deployments
- EAP Domains
- Messaging (Queues/Topics)

- EAP Servers
- EAP Server groups
- Virtual Machines

Figure 2.2. Topology View



CHAPTER 3. RESOLVED ISSUES

3.1. FIXED ISSUES

BZ# 1387287

All CVEs found by the OpenSCAP scanning tool in the Hawkular-Services container image for the tech preview release have been resolved in the tech preview 2 release.

BZ# 1387301

All CVEs found by the OpenSCAP scanning tool in the Cassandra container image for the tech preview release have been resolved in the tech preview 2 release.

BZ# 1394040

When refreshing the status of the middleware manager (Configuration > Refresh Items and Relationships), received the following error: **`unknown attribute '_object' for MiddlewareServerGroup`**.

BZ# 1396225

When deploying a WAR file to an EAP domain server running in a container, received an **`ERROR: Failed to process`** message. Domain mode is not yet fully supported in the technical preview. This deployment option has been removed from the user interface until this feature is available for servers managed in a domain.

BZ# 1402126

When using an external PostgreSQL for the inventory service, the storage adapter failed to store the available data.

Note

The inventory service no longer requires PostgreSQL database; it now uses the Cassandra datastore.

BZ# 1403775

When starting a second EAP7 domain, the domain mode servers of the first EAP7 domain were missing in the inventory displayed in CloudForms. Updates were made to how server groups are associated with domains and servers with server groups when multiple domains are present.

BZ# 1404776

In the first technical preview there was not a way to enable SSL when starting a Hawkular Services container. The ability to configure SSL has been added in the second technical preview.

CHAPTER 4. KNOWN ISSUES

4.1. KNOWN ISSUES

Note

Domain mode is not yet fully supported in the technical preview.

These known issues exist in Red Hat Middleware Management at this time:

BZ# 1390756

After deleting an EAP Server Datasource, the deletion event does not appear on the timeline.

BZ# 1404270

For EAP7 in domain mode, CloudForms does not display the underlying Virtual Machine attribute in the server details. The underlying VM representation for each EAP7 server in domain mode is also missing in the Topology view.

BZ# 1405092

Middleware manager Server fails to start due to low disk space but does not give a descriptive error message in either the Hawkular Service log or the Cassandra log.

BZ# 1438823

There is no history of EAP power operation; it only shows that the operation was initiated, but there is no history or event showing if the operation was successful or failed.

BZ# 1455877

When running the middleware management services container image in SSL mode, the Java agent is not able to monitor the middleware manager services itself, so the middleware manager server is not recognized and displayed in the CloudForms user interface. This only happens when you are running the middleware manager container with the **`HAWKULAR_USE_SSL=`** option set to **`true`**.

BZ# 1457491

The links on any Provider Timeline Event Details page are broken and display the error message "The page you were looking for doesn't exist." instead of navigating back to the Provider Summary view.