Cloudera Edge Management 2.0.0

Cloudera Edge Management Release Notes

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Contents

What's new in Edge Flow Manager

Edge Flow Manager (EFM) enables you to manage, control, and monitor agents that are deployed on the edge devices in IoT implementations. You can use these agents to collect real-time data originating from the devices to create and push actionable intelligence and insights to the place of data origin.

Edge Flow Manager 2.0.0.0 is a feature release with new features, performance improvements, and bug fixes, including:

Moving to Java 17 / Spring 6 / Spring Boot 3

> In this major release, Edge Flow Manager moves to the Java 17 long-term support (LTS) version as the minimum Java version requirement for running the application. This transition also facilitates the upgrade to the latest Spring and Spring Boot versions, delivering improved stability, performance and security.

LDAP integration

> In addition to OIDC and SAML, this release introduces LDAP integration. This integration allows group assignment information to come from IdP so it can be managed externally outside EFM. The LDAP-based login functionality has also been added.
>
> For more information, see Managing user groups using LDAP.

Infinispan replacing Hazelcast as the underlying caching solution

> Infinispan comes with built-in cluster communication security, so the separate Stunnel configuration became obsolete. This change also enables EFM cluster scalability.
>
> For more information, see EFM cluster configuration and Securing an EFM cluster.

Removal of deprecated Parameter Context endpoint(s)

> In this release, all /parameter-contexts endpoints that were responsible for parameter context mapping have been removed. These endpoints were not exposed on the UI and were only accessible through direct REST calls. Due to confusion around their usage, parameter context mappings have been moved to their corresponding Resource (Agent or Flow). As Agent Class level parameter contexts are not used and they have 1 to 1 mapping with Flow Parameter Contexts, the Agent Class level mapping will be completely removed in the next major release.
>
> For more information, see the Swagger REST API documentation.

Removal of Event Driven Scheduling Strategy for Java agents

> The Event-Driven Scheduling Strategy has been removed from EFM for all MiNiFi Java agent versions starting from this release. This aligns with NiFi's removal of this strategy starting from NiFi 2.0.
>
> **Note:** The C++ agent retains this capability.

Agent Deployer generally available

> Agent Deployer functionality has transitioned from its Technical Preview status and is now generally available.

Database support changes

> - Support for MariaDB 10.2 and 10.3 has been dropped
> - Support for MariaDB 10.11 has been added
> - Support for PostgreSQL 10 and 11 has been dropped
> - Support for PostgreSQL 14.x, 15.x and 16.x has been added

JDK support changes

Support for JDK8 and 11 has been dropped. For more information, see Moving to Java 17 / Spring 6 / Spring Boot 3 on page 4.

EFM download locations

Identify the Edge Flow Manager (EFM) repository location for your operating system and operational objectives.

Note: You must have credentials to download EFM files. Your download credential is not the same as the credential you use to access the support portal.

You can get download credentials in the following ways:

- Contact your Cloudera sales representative.
- View the Welcome email for your Edge Management account.
- File a non-technical case on the Cloudera support portal for our Support team to assist you.

For detailed system requirements, and supported processors for EFM, see System requirements for EFM.

File	Location
EFM tar file	https://archive.cloudera.com/p/CEM/ubuntu20/2.x/updates/2.0.0.0/tars/efm/efm-2.0.0.0-53-bin.tar.gz
EFM zip file	https://archive.cloudera.com/p/CEM/ubuntu20/2.x/updates/2.0.0.0/tars/efm/efm-2.0.0.0-53-bin.zip
| EFM Docker | ```
docker login -u [***USERNAME***] -p [***PASSWORD***]
          container.repo.cloudera.com && docker pull conta
iner.repo.cloudera.com/cloudera/efm:2.0.0.0-53
``` |

Unsupported features

The following Edge Flow Manager (EFM) features are not supported by Cloudera.

As of today, EFM is not compliant with the Federal Information Processing Standard (FIPS). However, it can be deployed and executed in FIPS enabled environments using a FIPS security provider like Bouncy Castle FIPS Keystore (BCFKS).

Fixed issues

Review the list of issues that are resolved in the latest Edge Flow Manager (EFM) release.

Fixed issues in EFM 2.0.0.0 include:

- On the Agent Metrics tab, Agent CPU Utilisation now displays accurate memory information.
- Many Agent Deployer bug fixes and stability enhancements were introduced.
- Download links no longer break when used multiple times.
- The link to documentation from the application has been fixed.
- The flow is now correctly marked as 'dirty' when a parameter change occurs, indicating that changes have been made and enabling the 'publish' option.

Known issues

Review the list of known issues of the latest Edge Flow Manager (EFM) release.

Known issues in EFM 2.0.0.0 include:

- Browser back navigation does not work in parts of the EFM web app.
- EFM repository usage views do not show data or can be inaccurate.
- After upgrading to EFM version 2.0.0.0, you may encounter the following error message when attempting to access the Monitor tab:

An unexpected error has occured. Please check the logs for additional   details.

The error is associated with the handling of agent classes.To address this issue, execute the following SQL commands on the EFM database:

1. Update the FLOW_CONTENT format as follows:

```
UPDATE FLOW_CONTENT
SET FLOW_CONTENT_FORMAT = 'CONFIG_SCHEMA_YAML_TYPE'
WHERE FLOW_CONTENT_FORMAT = 'YAML_V2_TYPE';
```

2. Update the FLOW_CONTENT format as follows:

```
UPDATE FLOW_CONTENT
SET FLOW_CONTENT_FORMAT = 'FLOW_SNAPSHOT_JSON_TYPE'
WHERE FLOW_CONTENT_FORMAT = 'FLOW_SNAPSHOT_JSON_V1_TYPE';
```

Note: This issue is specific to existing EFM installations that have been upgraded to version 2.0.0.0. New deployments of CEM 2.0.0.0 are not affected by this issue. If you are performing a fresh installation of EFM, these SQL commands are not required.