

CEM MiNiFi Java Agent 2.24.02

## Release Notes for MiNiFi Java Agent

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The Cloudera logo, featuring the word "CLOUDERA" in a bold, orange, sans-serif font. The letter "E" is stylized with a horizontal bar through its center.

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## MiNiFi Java Agent updates

MiNiFi Java Agents has periodic software updates made available independent of the Edge Flow Manager (EFM) releases.

This section lists major features and updates for the independent CEM MiNiFi Java Agent release.

### April 16, 2024

CEM MiNiFi Java Agent - 2.24.02 release includes:

#### Based on NiFi 2

This release marks the transition to NiFi 2 as the underlying framework for the CEM MiNiFi Java Agent. With this update, support for configuring flows using config.yml has been deprecated, and only flows in JSON format are supported. If you use MiNiFi with EFM, flows will now be automatically created in JSON format. For more information, see [Upgrading MiNiFi Java agents from 1.x to 2.x](#).

#### FIPS compatibility for MiNiFi Java

Sensitive properties of flows are now encrypted before storing them on disk when the flow is received through C2. Additionally, bootstrap properties can be encrypted using the minifi-toolkit.

#### CFM NAR compatibility

CEM MiNiFi Java Agent 2.24.02 is compatible with CFM-4.2.0.0 NARs. For more information about integrating CFM NARs into CEM-AGENTS-JAVA, see [Compatibility with CFM NARs](#).

#### Graceful shutdown of MiNiFi Docker

MiNiFi now supports a graceful shutdown process when operating within a container environment, reducing the risk of data loss during shutdown procedures.

#### Encrypting MiNiFi bootstrap.conf sensitive properties

Sensitivity properties within MiNiFi's bootstrap.conf file can now be encrypted using the minifi-toolkit. For more information, see [Encrypting sensitive properties in configuration files](#).

### April 18, 2023

CEM MiNiFi Java Agent - 1.23.04 release includes:

- FIPS compatibility for MiNiFi Java

MiNiFi Java can be run in FIPS enabled environments and it can use Bouncy Castle FIPS keystores (BCFKS).

- Support access through Load Balancer/Proxy

When agents are behind Load Balancer/Proxy, EFM relies on the X-FORWARDED-HOST header to create absolute download URLs for the agents (flow, asset, and file transfer). Not all Load Balancers or Proxies support this header or they can be configured to remove it, so to bypass the issue the agent can rely on the relative path sent by EFM (from version 1.5.1.0) and combine it with the host configured for the agent to create the proper

absolute URL. Three new properties have been introduced while keeping backward compatibility so the old ones can still be used. The old properties will be removed in a future release.

The new properties are:

**c2.rest.path.base**

Base path of the C2 server's REST API

For example: `http://localhost/efm/api`

**c2.rest.path.heartbeat**

Relative URL of the C2 server's heartbeat endpoint

For example: `/c2-protocol/heartbeat`

**c2.rest.path.acknowledge**

Relative URL of the C2 server's acknowledge endpoint

For example: `/c2-protocol/acknowledge`

### March 30, 2023

CEM MiNiFi Java Agent - 1.23.02.1000 Service Pack includes the same features as the 1.23.02 release and a fix for the Too many open files error introduced in 1.23.02, which is caused by non-closed files in the heartbeat request.

### February 15, 2023

CEM MiNiFi Java Agent - 1.23.02 release includes:

- Property update command with the C2 protocol

Implemented the UPDATE/PROPERTIES command. This command allows agents to update bootstrap properties using the C2 protocol. For more information, see [Agent details in CEM](#).

- Pushing assets to agents with the C2 protocol

Implemented the UPDATE/ASSET command. This command allows agents to download artifacts into the specified assets directory as per instructed by the C2 server. For more information, see [Using Asset Push command](#).

- Using change ingestors for configuration updates is no longer necessary.
- The following issues are fixed:
  - Hanging bootstrap commands when executing large flows.
  - Debug command fails on windows due to malformed input.
  - Many additional small improvements and stability fixes.

### October 12, 2022

CEM MiNiFi Java Agent - 1.22.10 release includes:

- Lightweight heartbeat support

This reduces the payload size of the heartbeat and the agent sends the full agent manifest only if a change is detected. The functionality can be enabled with the `c2.full.heartbeat=false` property in the `bootstrap.conf` file.

- Debug support through C2 protocol

Debug bundles can be requested from EFM Agent Manager for the given agent. For more details, see *Debug agent in CEM*.

- GZip C2 requests

Using GZipped requests can be beneficial to prevent network saturation. To enable it, set the `c2.request.compression=gzip` property in the `bootstrap.conf` file.

- Docker images released for multiple platforms (x86, ARM)

- The following issues are fixed:
  - Missing required controller services for several processors
  - Fixed agent information values when running agent on Windows

### July 28, 2022

CEM MiNiFi Java Agent - 1.22.07 release includes:

- Initial release of the new MiNiFi Java agent based on the latest version of NiFi (1.16.3).
- Includes heartbeat and update/configuration support over the C2 protocol.

## MiNiFi Java Agent download locations

Identify the CEM MiNiFi Java repository location for your operating system and operational objectives.



**Note:** You must have credentials to download CEM 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 detailed system requirements and supported processors for MiNiFi Java Agents, see *System requirements for MiNiFi Java*.

### April 16, 2024 - CEM MiNiFi Java Agent - 2.24.02

Software	Location
MiNiFi zip	<a href="https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-2.24.02.0-33-bin.zip">https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-2.24.02.0-33-bin.zip</a>
MiNiFi tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-2.24.02.0-33-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-2.24.02.0-33-bin.tar.gz</a>
MiNiFi MSI	<a href="https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/windows/msi/minifi-2.24.02.0-33.msi">https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/windows/msi/minifi-2.24.02.0-33.msi</a>
MiNiFi-Toolkit zip	<a href="https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-toolkit-2.24.02.0-33-bin.zip">https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-toolkit-2.24.02.0-33-bin.zip</a>
MiNiFi-Toolkit tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-toolkit-2.24.02.0-33-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/2.24.02.0/ubuntu18/apt/tars/nifi-minifi-java/minifi-toolkit-2.24.02.0-33-bin.tar.gz</a>
MiNiFi Docker	<pre>docker login -u [***USERNAME***] -p [***PASSWORD***] container.repo.cloudera.com &amp;&amp; docker pull container.repo.cloudera.com/cloudera/nifi-minifi-java:2.24.02.0-33</pre>

### April 18, 2023 - CEM MiNiFi Java Agent - 1.23.04

Software	Location
MiNiFi zip	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.04/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.04-b15-bin.zip">https://archive.cloudera.com/p/cem-agents-java/1.23.04/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.04-b15-bin.zip</a>
MiNiFi tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.04/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.04-b15-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/1.23.04/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.04-b15-bin.tar.gz</a>

Software	Location
MiNiFi MSI	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.04/windows/msi/minifi-1.23.04-b15.msi">https://archive.cloudera.com/p/cem-agents-java/1.23.04/windows/msi/minifi-1.23.04-b15.msi</a>
MiNiFi Docker	<pre>docker login -u [***USERNAME***] -p [***PASSWORD***] container.repo.cloudera.com &amp;&amp; docker pull container.repo.cloudera.com/cloudera/nifi-minifi-java:1.23.04-b15</pre>

### February 15, 2023 - CEM MiNiFi Java Agent - 1.23.02.1000

Software	Location
MiNiFi zip	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.02.1000-2-bin.zip">https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.02.1000-2-bin.zip</a>
MiNiFi tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.02.1000-2-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.23.02.1000-2-bin.tar.gz</a>
MiNiFi MSI	<a href="https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/windows/msi/minifi-1.23.02.1000-2.msi">https://archive.cloudera.com/p/cem-agents-java/1.23.02.1000/windows/msi/minifi-1.23.02.1000-2.msi</a>
MiNiFi Docker	<pre>docker login -u [***USERNAME***] -p [***PASSWORD***] container.repo.cloudera.com &amp;&amp; docker pull container.repo.cloudera.com/cloudera/nifi-minifi-java:1.23.02.1000-2</pre>

### October 12, 2022 - CEM MiNiFi Java Agent - 1.22.10

Software	Location
MiNiFi zip	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.10/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.10-b16-bin.zip">https://archive.cloudera.com/p/cem-agents-java/1.22.10/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.10-b16-bin.zip</a>
MiNiFi tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.10/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.10-b16-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/1.22.10/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.10-b16-bin.tar.gz</a>
MiNiFi MSI	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.10/windows/msi/minifi-1.22.10-b16.msi">https://archive.cloudera.com/p/cem-agents-java/1.22.10/windows/msi/minifi-1.22.10-b16.msi</a>
MiNiFi Docker	<pre>docker login -u [***USERNAME***] -p [***PASSWORD***] container.repo.cloudera.com &amp;&amp; docker pull container.repo.cloudera.com/cloudera/nifi-minifi-java:1.22.10-b16</pre>

### July 28, 2022 - CEM MiNiFi Java Agent - 1.22.07

Software	Location
MiNiFi zip	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.07/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.07-b37-bin.zip">https://archive.cloudera.com/p/cem-agents-java/1.22.07/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.07-b37-bin.zip</a>
MiNiFi tar.gz	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.07/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.07-b37-bin.tar.gz">https://archive.cloudera.com/p/cem-agents-java/1.22.07/ubuntu18/apt/tars/nifi-minifi-java/minifi-1.22.07-b37-bin.tar.gz</a>
MiNiFi MSI	<a href="https://archive.cloudera.com/p/cem-agents-java/1.22.07/windows/msi/minifi-1.22.07-b37.msi">https://archive.cloudera.com/p/cem-agents-java/1.22.07/windows/msi/minifi-1.22.07-b37.msi</a>

#### Related Information

[System requirements for MiNiFi Java](#)

## MiNiFi Java Agent processor support

Review the comprehensive list of processors that MiNiFi Java Agent supports out-of-the-box.

## Supported processors

AttributesToCSV	ListenUDPRecord
AttributesToJSON	LogAttribute
CalculateRecordStats	LogMessage
CompressContent	LookupAttribute
ControlRate	LookupRecord
ConvertCharacterSet	MergeContent
ConvertJSONToSQL	MergeRecord
ConvertRecord	ModifyBytes
CountText	MonitorActivity
CryptographicHashContent	Notify
DebugFlow	PackageFlowFile
DeduplicateRecord	ParseCEF
DetectDuplicate	ParseSyslog
DistributeLoad	ParseSyslog5424
DuplicateFlowFile	PartitionRecord
EncodeContent	PutDatabaseRecord
EnforceOrder	PutDistributedMapCache
EvaluateJsonPath	PutEmail
EvaluateXPath	PutFTP
EvaluateXQuery	PutFile
ExecuteProcess	PutRecord
ExecuteSQL	PutSFTP
ExecuteSQLRecord	PutSQL
ExecuteStreamCommand	PutSyslog
ExtractGrok	PutTCP
ExtractRecordSchema	PutUDP
ExtractText	QueryDatabaseTable
FetchDistributedMapCache	QueryDatabaseTableRecord
FetchFTP	QueryRecord
FetchFile	RemoveRecordField
FetchSFTP	RenameRecordField
FilterAttribute	ReplaceText
FlattenJson	ReplaceTextWithMapping
ForkEnrichment	RetryFlowFile
ForkRecord	RouteOnAttribute
GenerateFlowFile	RouteOnContent
GenerateRecord	RouteText
GenerateTableFetch	SampleRecord
GetFTP	ScanAttribute

GetFile	ScanContent
GetSFTP	SegmentContent
HandleHttpRequest	SplitContent
HandleHttpResponse	SplitJson
IdentifyMimeType	SplitRecord
InvokeHTTP	SplitText
JoinEnrichment	SplitXml
JoltTransformJSON	TailFile
ListDatabaseTables	TransformXml
ListFTP	UnpackContent
ListFile	UpdateCounter
ListSFTP	UpdateDatabaseTable
ListenFTP	UpdateRecord
ListenHTTP	ValidateCsv
ListenRELP	ValidateJson
ListenSyslog	ValidateRecord
ListenTCP	ValidateXml
ListenTCPRecord	Wait
ListenUDP	

### Compatibility with CFM NARs

CEM-AGENTS-JAVA 2.24.02.0 is compatible with CFM-4.2.0.0 NARs. For the list of supported Apache NiFi 2.0 extensions, see [Supported NiFi extensions](#).

To incorporate NARs from CFM into CEM-AGENTS-JAVA, follow these steps:

1. Download the required NARs from the [Cloudera repository](#).
2. Place the downloaded NARs into the <MINIFI\_AGENT\_HOME>/extensions directory.

## Fixed issues for MiNiFi Java Agent

Summary of fixed issues for the latest release.

Fixed issues in the CEM MiNiFi Java Agent - 2.24.02 release include many additional small improvements and stability fixes coming from the Apache NiFi 2 M release.

## Known issues for MiNiFi Java Agent

Summary of known issues for the latest release.

There are no known issues in the CEM MiNiFi Java Agent - 2.24.02 release.