

# KIP-830: Allow disabling JMX Reporter

- [Status](#)
- [Motivation](#)
- [Public Interfaces](#)
- [Proposed Changes](#)
- [Compatibility, Deprecation, and Migration Plan](#)
- [Rejected Alternatives](#)

## Status

**Current state:** Accepted

**Discussion thread:** [here](#)

**Voting thread:** [here](#)

**JIRA:** [here](#)

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

## Motivation

Currently all Kafka components that support Metrics Reporters always inject JmxReporter. While it's possible to include/exclude metrics the JmxReporter exposes (via `metrics.jmx.include/exclude` settings) this reporter can't be disabled and as it is not controlled via the `metric.reporters` configuration like other reporters.

This reporter is useful when developing and in some environments but in other environments where it's not used, it would be nice to be able to just disable it and only have explicitly configured metrics reporters running.

## Public Interfaces

This KIP proposes a plan to remove the current special behavior of the JMX Reporter and treat it like all other reporters. In order to do so, we will introduce a new configuration to all components (broker, producer, consumer, admin, connect and streams) to disable JmxReporter. This new configuration is expected to serve as a temporary measure until the next major release when JmxReporter will only be enabled if it's included in `metric.reporters`.

## Proposed Changes

1) A new configuration setting:

Name: `auto.include.jmx.reporter`

Description: Deprecated. Whether to automatically include JMX Reporter even if it's not listed in `metric.reporters`. This configuration will be removed in Kafka 4.0, users should instead include `org.apache.kafka.common.metrics.JmxReporter` in `metric.reporters` in order to enable the JMX Reporter.

Type: Boolean

Default: true

Update Mode: Read only

When set to false, components will not instantiate a JmxReporter and only reporters set via `metric.reporters` will be used.

When explicitly set to true or when using the default and not including JmxReporter in `metric.reporters`, a warning will be printed to indicate this setting is deprecated and recommend using `metric.reporters` instead.

2) From Kafka 4.0, `metric.reporters` will have its default value set to `org.apache.kafka.common.metrics.JmxReporter`

## Compatibility, Deprecation, and Migration Plan

By default the new setting will be set to true so it does not change the current behavior. This setting will be marked as deprecated immediately.

In the next major version:

- `auto.include.jmx.reporter` will be removed
- `metric.reporters` will have its default value set to `org.apache.kafka.common.metrics.JmxReporter`

- only reporters listed in `metric.reporters` will be enabled

Users currently relying on `JmxReporter` and that are using additional reporters via `metric.reporters` will have to include `org.apache.kafka.common.metrics.JmxReporter` in `metric.reporters`.

## Rejected Alternatives

- Immediately change the default value of `metric.reporters` to include `JmxReporter`. This would avoid creating a new configuration but this would cause a change of behavior for users that already set `metric.reporters`.
- Add a new configuration to disable the JMX Reporter. The drawback of this approach was the permanent addition of a new configuration. The current proposal only adds a new configuration that will be removed in next major release.