

Changing Defaults in Connect 3.0.0

This page documents all of the KIPs related to Connect since AK 0.10.0.0 (the release after Connect was first introduced in 0.9.0.0), and identifies the default behaviors that may make sense to change in AK 3.0.0. See the [list of release plans](#) for the list of all KIPs.

Most (if not all) Connect changes to date have been backward compatible with respect to:

1. worker configurations
2. log configuration
3. connector configurations
4. connector implementations


This means that users that are operating Connect can easily do a rolling upgrade of their Connect clusters without having to change their worker configurations, Log4J configurations, or any persisted connector configurations and without having to upgrade any connector implementations. Likewise, users operating Connect can choose when to upgrade individual connector implementations.


The changes proposed below continue to avoid requiring changes to persisted connector configurations or requiring upgrades of connector implementations. Many of the proposed changes have been recommended for some time, but making them in the AK 3.0.0 major release may require some users to make small changes to their worker configuration and Log4J worker configurations during the upgrade process.



This page is not a KIP.

Discussion thread: [here](#)

AK Release	KIP	Default Behavior	Desired Change for AK 3.0.0	Deprecation KIP (if different)	Jira Issue
0.10.0.0	KIP-51 - List Connectors REST API	Adds new REST resources	None	n/a	n/a
	KIP-52: Connector Control APIs	Adds new REST resources	None	n/a	n/a
	KIP-56: Allow cross origin HTTP requests on all HTTP methods	Adds to the worker config the <code>`access_control.allow.methods`</code> property with a default that allows cross origin requests for GET, POST and HEAD	None	n/a	n/a
0.10.1.0	KIP-65: Expose timestamps to Connect	Modifies the record interfaces to support timestamps	None	n/a	n/a
	KIP-75 - Add per-connector Converters	Adds option of defining converters in connector configurations	None	n/a	n/a
0.10.2.0	KIP-66: Single Message Transforms for Kafka Connect	Added SMTs to connector configurations	None	n/a	n/a
	KIP-89: Allow sink connectors to decouple flush and offset commit	Changed sink task interfaces	None	n/a	n/a
0.11.0.0	KIP-66: Single Message Transforms for Kafka Connect	optionally used in connector configs	None	n/a	n/a
	KIP-128: Add ByteArrayConverter for Kafka Connect	optionally used in worker and/or connector configs	None	n/a	n/a
	KIP-146 - Classloading Isolation in Connect	behavior enabled by default	None	n/a	n/a
	KIP-151 Expose Connector type in REST API	change in selected REST responses	None	n/a	n/a
	KIP-154 Add Kafka Connect configuration properties for creating internal topics	defaults remain sensible	None	n/a	n/a
1.0.0	KIP-196: Add metrics to Kafka Connect framework	added new metrics	None	n/a	n/a

	KIP-197 Connect REST API should include the connector type when describing a connector	change in selected REST responses	None	n/a	n/a
1.1.0	KIP-145 - Expose Record Headers in Kafka Connect	added new interfaces and APIs	None	n/a	n/a
	KIP-208 : Add SSL support to Kafka Connect REST interface	<p>SSL is not enabled by default. KIP-573 changed the <code>ssl.protocol</code> default to "TLSv1.3" for JDK 11 and "TLSv1.2" for older JDKs, and changed the <code>ssl.enabled.protocols</code> default to "TLSv1.2,TLSv1.3" for JDK 11 and "TLSv1.2" for older JDKs.</p> <p>Deprecates <code>`rest.host.name`</code> and <code>`rest.port`</code> for removal in a future major release.</p>	<p>Remove the <code>`rest.host.name`</code> and <code>`rest.port`</code> worker configuration properties deprecated in KIP-208 (AK 1.1). Removing these may break external examples and demos where these are still used, but those would be better to use the preferred listener configs now anyway.</p> <p>We will not enable SSL by default since that requires the user to set up a keystore and truststore, which Connect can't do by default.</p>	Removal already approved in KIP-208	<div>  <p>Unable to render Jira issues macro, execution error.</p> </div>
	KIP-212 : Enforce set of legal characters for connector names	new connector names must only use legal characters, and may not have leading and trailing whitespace.	None	n/a	n/a
	KIP-215 : Add topic regex support for Connect sinks	added <code>`topics.regex`</code> sink connector configuration property.	None. Removing the <code>`topics`</code> sink connector configuration property would be invasive, and it has not been deprecated.	n/a	n/a
	KIP-238 : Expose Kafka cluster ID in Connect REST API	change in selected REST responses	None	n/a	n/a

2.0.0	KIP-174 - Deprecate and remove internal converter configs in WorkerConfig	deprecated these two worker configs, stating that they will be removed in a subsequent major release.	Remove the deprecated <code>`internal.key.converter`</code> and <code>`internal.value.converter`</code> worker configuration properties. Connect has been logging usage of these as warnings for some time, and it is likely using something other than the defaults is fragile and may not work due to the assumption in Connect.	Already approved in KIP-174 , though removal explicitly approved in KIP-738: Removal of Connect's internal converter properties	 Unable to render Jira issues macro, execution error.
	KIP-285: Connect Rest Extension Plugin	optionally used in worker config	None	n/a	n/a
	KIP-297: Externalizing Secrets for Connect Configurations	optionally used in worker config	None	n/a	n/a
	KIP-298: Error Handling in Connect	The default behavior in Connect remains to kill the task on the first error in any stage. To change this behavior, several worker configurations must be enabled; the defaults are to not enable error logging, not include message details, and to not use a DLQ topic.	None. Error handling and logging should remain opt-in.	n/a	n/a
	KIP-305: Add Connect primitive number converters	Added new converter implementations, which are optionally specified in worker and connector configurations.	None	n/a	n/a
2.1.0	None	None	None	n/a	n/a
2.2.0	None	None	None	n/a	n/a
2.3.0	KIP-411: Make default Kafka Connect worker task client IDs distinct	Changed distributed worker configuration's default for <code>`client.id`</code> .	None	n/a	n/a
	KIP-415: Incremental Cooperative Rebalancing in Kafka Connect	Changed worker configuration's default for <code>`connect.protocol`</code> , and added several other worker configurations.	None	n/a	n/a

	KIP-449: Add connector contexts to Connect worker logs	Defined ability to enable connector contexts in Log4J logs, but did not enable this by default.	Change the `connect-log4j.properties` file to enable connector contexts in Log4J logs by default.	KIP-721: Enable connector log contexts in Connect Log4j configuration	 Unable to render Jira issues macro, execution error.
	KIP-454: Expansion of the ConnectClusterState interface	Expanded ConnectClusterState interface, added new interface, and changed selected REST responses.	None	n/a	n/a
	KIP-458: Connector Client Config Override Policy	Worker config sets <code>connector.client.config.override.policy=None</code> by default to maintain backward compatibility.	Change the default for <code>connector.client.config.override.policy</code> to <code>All</code> , still allowing connector configurations to override client behavior.	KIP-722: Enable connector client overrides by default	 Unable to render Jira issues macro, execution error.
	KIP-465: Add Consolidated Connector Endpoint to Connect REST API	Adds optional query parameter to <code>/connectors</code> endpoint	None	n/a	n/a
2.4.0	KIP-481: SerDe Improvements for Connect Decimal type in JSON	Added to JSON converter configuration a <code>decimal.format</code> property that defaults to <code>"BASE64"</code> , and that can optionally be set to <code>"NUMERIC"</code>	None. Even though <code>NUMERIC</code> is probably a better default, changing this might require users to change potentially many existing persisted connector configurations before upgrading. This is not worth changing.	n/a	n/a

	KIP-495: Dynamically Adjust Log Levels in Connect	Adds new `/admin` REST endpoints.	None	n/a	n/a
	KIP-507: Securing Internal Connect REST Endpoints	Changed worker configuration's default for `connect.protocol`, and added several other worker configurations.	None	n/a	n/a
	KIP-521: Enable redirection of Connect's log4j messages to a file by default	Modified default Log4J configuration to also write worker logs to a file, in addition to the console.	None	n/a	n/a
2.5.0	KIP-558: Track the set of actively used topics by connectors in Kafka Connect	Adds new worker configuration properties, where behavior is enabled by default	None	n/a	n/a
2.6.0	KIP-131 - Add access to OffsetStorageReader from SourceConnector	Allowed source tasks to get OffsetStorageReader via task context.	None	n/a	n/a
	KIP-158: Kafka Connect should allow source connectors to set topic-specific settings for new topics	Added <code>topic.creation.enable.worker.configuration</code> option, defaulting to `true`. Adds multiple optional connector configuration properties with sensible defaults.	None	n/a	n/a
	KIP-437: Custom replacement for MaskField SMT	Expanded behavior of MaskField SMT to allow replacement literals.	None	n/a	n/a
	KIP-577: Allow HTTP Response Headers to be Configured for Kafka Connect	Added <code>response.http.headers.config</code> worker configuration, defaults to empty string.	????		
	KIP-585: Filter and Conditional SMTs	Added new optional properties that can be used in connector configuration	None	n/a	n/a
	KIP-586: Deprecate commit records without record metadata	Deprecates the <code>SourceTask.commitRecord(SourceRecord record)</code> method.	None. We could remove the method, but that would prevent installing and running any connector implementation that still uses that method. Keeping the deprecated method is little effort yet still maximizes compatibility for connector implementations.	n/a	n/a
	KIP-605: Expand Connect Worker Internal Topic Settings	Modifies the allowed values of several existing worker configuration properties, and adds optional worker configuration properties for topic settings.	None	n/a	n/a
	KIP-606: Add Metadata Context to MetricsReporter	Modifies the MetricsReporter extension interface for Connect, Streams, and Broker.	None	n/a	n/a
	KIP-610: Error Reporting in Sink Connectors	Adds the ability for a sink task to get an error reporter	None	n/a	n/a
2.7.0	None	None	None	n/a	n/a
2.8.0	KIP-661: Expose task configurations in Connect REST API	Adds <code>`/{connector}/tasks-config`</code> endpoint that returns configuration of connector's tasks. Does not add any worker or connector configurations.	None	n/a	n/a

defaults may make sense to change. for which defaults were chosen to maintain backward compatibility, but which may be with a major upgrade