KIP-1001: Add CurrentControllerId Metric

Status

Current state: *adopted*

Discussion thread: [here](#)

JIRA:	⚠️ Unable to render Jira issues macro, execution error.

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

Motivation

The purpose of adding a CurrentControllerId metric is to have an easy way to identify the current controller by looking at the metrics of any Kafka node (broker or controller).

Public Interfaces

CurrentControllerId

Name	Context	Type	Mode	Description
`kafka.server:type=MetadataLoader, name=CurrentControllerId`	Broker and Controller	Integer	KRaft and ZK	Outputs the ID of the current controller, or -1 if none is known.

The `CurrentControllerId` metric shows the ID of the controller, as seen by the node in question. If the current node doesn't think there is an active controller, the value of thisd metric will be -1.

Compatibility, Deprecation, and Migration Plan

Since this is a new metric, there are no compatibility issues.

Test Plan

The new metric will need unit and integration tests as per usual.

Rejected Alternatives

One rejected alternative is using the existing `ActiveControllerCount` metric. However, when in KRaft mode, `ActiveControllerCount` is only exposed on controller nodes, not on broker nodes. That makes it impossible to monitor what the brokers think the current active controller is.