Metrics

Ambari Metrics System ("AMS") is a system for collecting, aggregating and serving Hadoop and system metrics in Ambari-managed clusters.

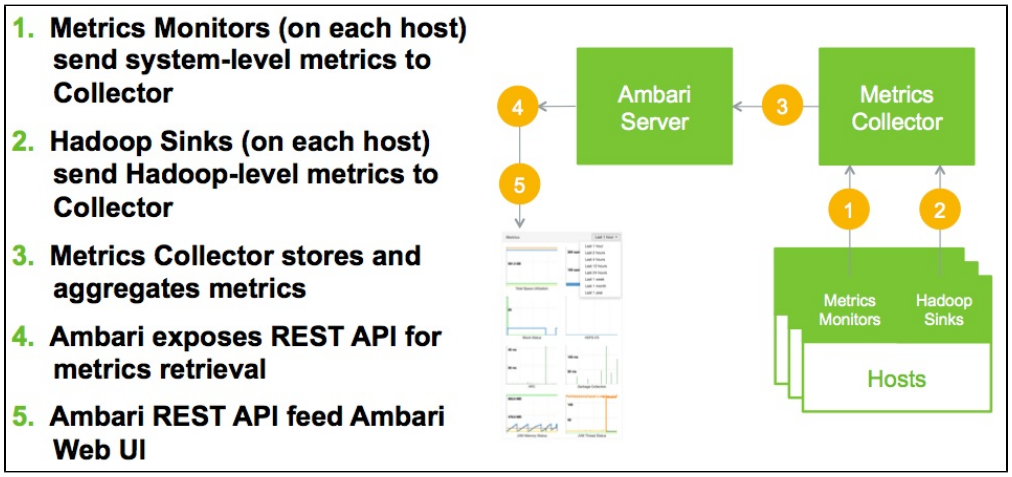
> The JIRA Epic for Ambari Metrics System delivery is https://issues.apache.org/jira/browse/AMBARI-5707 and was first introduced with Ambari 2.0.0.

Terminology

Term	Definition
Ambari Metrics System ("AMS")	The built-in metrics collection system for **Ambari**.
Metrics Collector	The standalone server that collects metrics, aggregates metrics, serves metrics from the Hadoop service sinks and the **Metrics Monitor**.
Metrics Monitor	Installed on each host in the cluster to collect system-level metrics and forward to the **Metrics Collector**.
Metrics Hadoop Sinks	Plugs into the various Hadoop components sinks to send Hadoop metrics to the **Metrics Collector**.

Architecture

Following image depicts the high level conceptual architecture of the new Ambari Metrics System:



The **Metrics Collector** is daemon that receives data from registered publishers (the **Monitors** and **Sinks**). The Collector itself is build using Hadoop technologies such as HBase Phoenix and ATS. The Collector can store data on the local filesystem (referred to as "embedded mode") or use an external HDFS (referred to as "distributed mode").

> The entire System can be installed and managed by **Ambari**. The Service Definition can be found here:
>
> https://github.com/apache/ambari/tree/trunk/ambari-server/src/main/resources/common-services/AMBARI_METRICS

Learn More

Browse the following to learn more about the Ambari Metrics REST API specification and about advanced Configuration of AMS.