Architecture

Date of Publish: 2018-10-15

Contents

Real-Time Processing Security Engine.....3

Telemetry Data Collectors.....3

Data Services and Integration Layer.....3

Real-Time Processing Security Engine

The core of Hortonworks Cybersecurity Platform (HCP) architecture is the Apache Metron real-time processing security engine.

The real-time processing security engine provides the ingest buffer to capture raw events, and, in real time, parses the raw events, enriches the events with relevant contextual information, enriches the events with threat intelligence, and applies available models (such as triaging threats by using the Stellar language). The engine then writes the events to a searchable index, as well as to HDFS, for analytics.

Telemetry Data Collectors

Telemetry data collectors push or stream the data source events into Apache Metron. Hortonworks Cybersecurity Platform (HCP) works with Apache NiFi to push the majority of data sources into Apache Metron.

For high-volume network data, HCP provides a performant network ingest probe. And for threat intelligence feeds, HCP supports a set of both streaming and batch loaders that enables you to push third-party intelligence feeds into Apache Metron.

Data Services and Integration Layer

The data services and integration layer is a set of three HCP modules that provides different features for different SOC personas.

HCP provides three modules for the integration layer.

Security data vault	Stores the data in HDFS.
Search portal	The Metron dashboard.
Provisioning, management, and monitoring tool	An HCP-provided management module that expedites provisioning and managing sensors. Other provisioning, management, and monitoring functions are supported through Apache Ambari.