

Ranger and Observability Integration

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Contents

Overview of Ranger and Observability integration.....	4
Configuration details of supported Ranger modules.....	4
Ranger Admin.....	4

Overview of Ranger and Observability integration

This guide provides the foundational knowledge and structured processes necessary to connect Apache Ranger with Cloudera's OpenTelemetry-native telemetry framework.

Modern enterprise data platforms face severe reputational and brand risks if data is exposed or left unmonitored. Regulated organizations demand total operational visibility alongside strict adherence to compliance standards like FIPS 140-3 and FedRAMP High. Meeting these requirements necessitates a standardized approach to tracking platform security compliance, ensuring that every security policy evaluation and audit event is captured efficiently and securely.

To achieve this, the Cloudera Observability framework leverages the `cdp-opentelemetry-collector`, a custom distribution of the OpenTelemetry Collector. This component acts as the unified telemetry pipeline across both virtual machine (VM) and Kubernetes (K8s) cluster form factors. By onboarding Apache Ranger into this architecture, platform administrators can seamlessly collect system metrics and stream vital security log records directly to Cloudera-managed data storages and backend analytical engines.

By following this guide, service teams can successfully establish deep security observability for Apache Ranger, reinforcing the data platform's perimeter security with high-performance and compliant monitoring.

Configuration details of supported Ranger modules

The integration between Cloudera Observability and Apache Ranger is modularly designed around specific platform roles and telemetry types to ensure comprehensive security monitoring and system visibility.

The initial scope of this integration officially supports the following modules:

- Ranger Admin

The integration modules are natively supported across all primary Cloudera deployment footprints managed through Cloudera Manager, including:

- DataHub
- Data Lake
- Cloudera Base on premises clusters

This modular approach ensures that regardless of where Ranger

5. Save changes.