

Service Graph Connector for OpenTelemetry

With the move to cloud-native architectures and increased autonomy of DevOps teams, organizations struggle to maintain effective visibility and governance across their hybrid estates. Traditional methods of populating the CMDB often fail due to the complexity and dynamic nature of cloud-native environments:

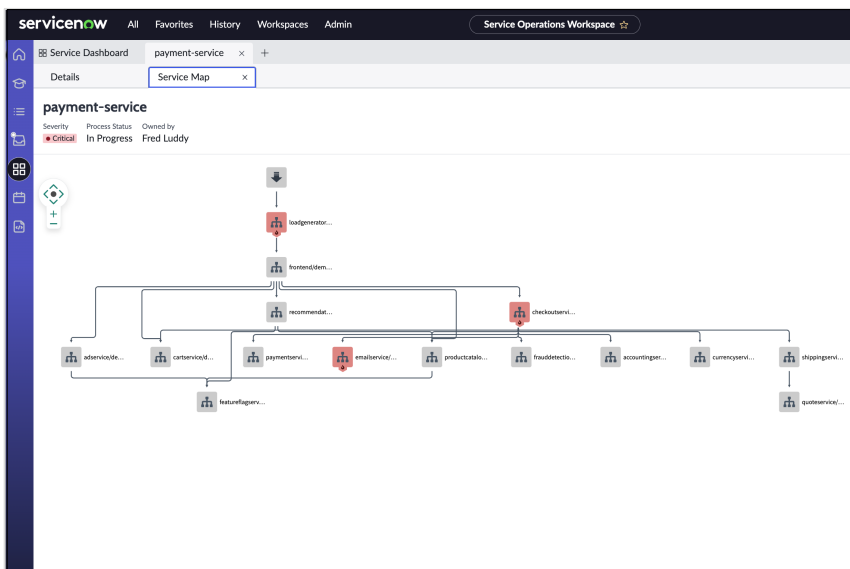
- Intricate connections between microservices and resources need to be accurately reflected in the CMDB;
- Frequent changes in Kubernetes make it difficult to keep the CMDB up to date environments.

To operate successfully in the cloud and fully leverage the benefits of ServiceNow platform, addressing these challenges is vital.

Introducing the Service Graph Connector for OpenTelemetry

The Service Graph Connector for OpenTelemetry is a solution developed by ServiceNow to provide complete visibility and governance into cloud-native applications and Kubernetes environments. It leverages OpenTelemetry data and the ServiceNow Cloud Observability backend powered by Lightstep to map service dependencies across cloud platforms and discover Kubernetes infrastructure.

By analyzing data from your applications, the Service Graph Connector for OpenTelemetry can infer the service topology accurately, automatically, and in near real-time. It also discovers Kubernetes resources and maps them to the applications running on them.



Your SRE and Operations teams can identify potential problems earlier, better predict the impact of planned changes, and reduce MTTR when incidents occur.

Align inventory, incident mgmt. and change between IT and app dev teams

- Discover cloud-native apps and Kubernetes objects automatically from your telemetry data
- Assess impact of planned and unplanned changes via accurate topology maps
- Understand how your cloud-native apps connect to your traditional estate

Improve efficiency, collaboration and reduce risk for your teams

- An up-to-date CMDB supports informed decision-making, streamlining changes and upgrades while reducing time, effort, and risks associated with errors or downtime.
- A unified source of information in the CMDB fosters cross-functional collaboration, breaking down silos across teams and departments.
- A comprehensive CMDB enables proactive risk management, as teams can make informed decisions based on relevant, captured information in cloud-native environments.

The Service Graph Connector for OpenTelemetry is included as part of ITOM Discovery license.

- Reach out to your ServiceNow Representative to schedule a demo.

Automatically discover cloud-native apps and Kubernetes objects into CMDB and Service Maps

The SGC for OpenTelemetry imports the following type of data from OpenTelemetry to CMDB:

- Application Services instrumented with OpenTelemetry.
- Service Relationships (based on application transaction data).
- Kubernetes services and objects (cluster, namespace, workload, node); Pods and containers are coming soon.

Automatically identify relationships between application services and the infrastructure they run on

Reduce MTTR and improve change impact analysis by understanding how cloud-native services map to the Kubernetes infrastructure that runs them.

Ingest ServiceNow Cloud Observability Alerts through Event Management

The SGC for OpenTelemetry ingests Alerts through Event Management and automatically correlates them to the discovered CIs (requires Cloud Observability license).

Create topology maps that span across cloud and traditional environments (coming soon)

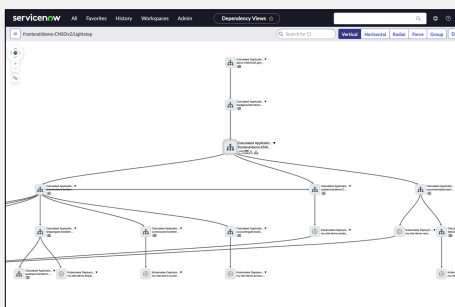
Most organizations operate complex hybrid environments - understand how your cloud-native apps interact with traditional services and databases.

Leverage the OpenTelemetry framework

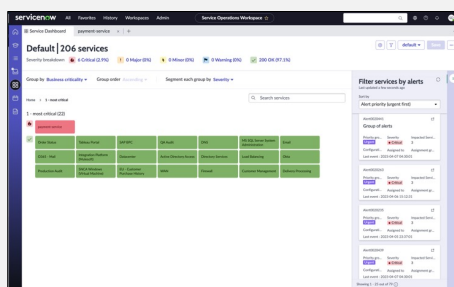
The SGC for OpenTelemetry doesn't require a MID server or other proprietary agent to run in your environment. It is a Kubernetes-native method that solely relies on the OpenTelemetry framework

Complement existing discovery methods

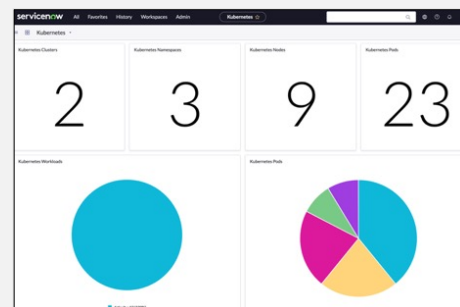
The SGC for OpenTelemetry adheres to the Common Service Data Model, complementing – or in some cases replacing – other discovery methods such as ServiceNow Kubernetes Discovery or ServiceNow Cloud Native Operations.



Relationships between application services and Kubernetes infrastructure



Cloud Observability Alerts ingested through Event Management



Kubernetes infrastructure represented in ServiceNow dashboard

