



System Alerting and Monitoring

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System Alerting and Monitoring

Important: System Alerting and Monitoring (SAM) has been deprecated; the following documentation is provided for existing users only. Customers interested in a comprehensive view of their operational platform can access the [metrics API](#) and [structured logs](#) of InterSystems products within another observability tool. Existing users who would like assistance identifying an alternative solution should contact the [WRC](#).

System Alerting and Monitoring (SAM) is an independent component that InterSystems provides for monitoring InterSystems products.

1 Description

System Alerting and Monitoring (SAM) provides a monitoring solution for instances of InterSystems IRIS® data platform version 2020.1 and later. Whether your application runs on a local mirrored pair or in the cloud with multiple application and data servers, you can use SAM to monitor your InterSystems IRIS instances.

Group your InterSystems IRIS instances into one or more *clusters*, then observe a high-level summary of your application performance. Use the SAM web application to view real-time performance metrics for your clusters and instances. Keep track of the alerts SAM sends when a metric crosses a user-defined threshold. SAM packages all your monitoring needs behind an easy-to-use web interface. SAM also provides a [REST API](#) for monitoring your instances programmatically.

2 How It Works

The core System Alerting and Monitoring (SAM) application is built on an InterSystems IRIS instance called the SAM Manager. Using cloud-native software, the SAM Manager collects and stores performance data and alerts from the InterSystems IRIS instances you choose to monitor.

SAM integrates the SAM Manager with these multiple open-source technologies, augmenting their features with enterprise resiliency:

- Prometheus, an efficient cloud-native monitoring tool, collects time series data at regular intervals from all your target InterSystems IRIS instances. The SAM Manager stores these metrics, enabling high availability and scalability features not available in default Prometheus databases.
- Grafana, a world-class metrics visualization tool, presents this data in graphs that make it easy to examine the state of your instances.
- Alertmanager aggregates Prometheus alerts, which you define and configure from the SAM web application, with InterSystems IRIS alerts, which are pre-configured on the target instances.
- Nginx provides a web server which allows these components to communicate. It also serves the SAM web application, which provides the graphical interface for configuring SAM and monitoring your instances.

A container engine (either Docker Compose or Podman Compose) runs SAM Manager alongside these applications simultaneously, each in its own *container*. When you run SAM, the container engine starts each of these containers based on the contents of the SAM `docker-compose.yml` file.

Note: Due to the way containers are implemented in Windows and macOS versions of container engines compatible with SAM, InterSystems does not currently support containerized deployments of its products on Windows or macOS at this time. (See [here](#) for details.) All instructions for installing, configuring, and using SAM assume that you are deploying SAM on a Linux system.

3 Available Versions

The following table provides details about the versions of System Alerting and Monitoring (SAM) which are currently available:

SAM Version	SAM Manager InterSystems IRIS Version	InterSystems Documentation	Integrated Component Documentation
2.0	2022.1	<i>Monitor Your InterSystems IRIS Instances with SAM (Version 2.0)</i>	<ul style="list-style-type: none">• Prometheus v2.36.0• Grafana v8.5.4• Alertmanager v0.24.0
1.0 – 1.1	2021.1	<i>Monitor Your InterSystems IRIS Instances with SAM (Version 1.0/1.1)</i>	<ul style="list-style-type: none">• Prometheus v2.17.1• Grafana v6.7.1• Alertmanager v0.20.0

For help choosing and setting up a SAM image, see [Deploy a System Alerting and Monitoring Image](#).