AppSentinels Java Watcher

The AppSentinels Java Watcher provides agent based auto-instrumentation using trusted Hypertrace to enable API visibility and monitoring. The approach uses the build-in javaagent functionality to instrument the java application.

Architecture Overview

The java-agent is a java library that is loaded into the java application at startup. It intercepts the java application's API calls and sends the data to the AppSentinels edge controller.

This document will guide you through the installation and configuration process.

Installation

To install the AppSentinels Java Watcher, you need to install the RPM package provided. Follow these steps:

- 1. **Download the RPM package**: Obtain the RPM package for the AppSentinels Java Watcher from the official source or your internal repository.
- 2. **Install the RPM package**: Use the following command to install the package on your system:

```
sudo rpm -ivh appsentinels-java-watcher-<version>.<arch>.rpm
```

Configuration

After installing the watcher, you need to configure the reporting endpoint to ensure that the watcher can send data to the AppSentinels edge controller.

- 1. **Edit the Configuration File**: Open the config.yaml file located in the /opt/appsentinels-java-watcher/ directory.
- 2. **Set the Reporting Endpoint**: Modify the endpoint under the reporting section to point to your desired OTLP gRPC endpoint. For example:

```
reporting:
  endpoint: http://<edge-controller-ip/hostname>:9009
```

3. **Save the Configuration**: Ensure all changes are saved in the config.yaml file.

Reload and Start

Once the configuration is complete, follow these steps to reload your shell and start the Java application server:

- 1. **Reload Your Shell**: This step ensures that any environment variables required to instrument the java application using watcher are updated.
- 2. **Check the Environment Variable**: Ensure your JAVA_TOOL_OPTIONS environment has been set or appended with the hypertrace agent configuration file path:

```
export JAVA_TOOL_OPTIONS="-javaagent:/opt/appsentinels-java-
watcher/hypertrace-agent.jar=ht.config.file=/opt/appsentinels-java-
watcher/config.yaml"
```

3. **Start Your Java Application Server**: Launch your Java application server as you normally would. The AppSentinels Java Watcher will automatically instrument your application for monitoring.

By following these steps, you will have successfully installed and configured the AppSentinels Java Watcher for enhanced API visibility and monitoring.