

Sentinel Cloud Run-time Java Samples ReadMe

Introduction

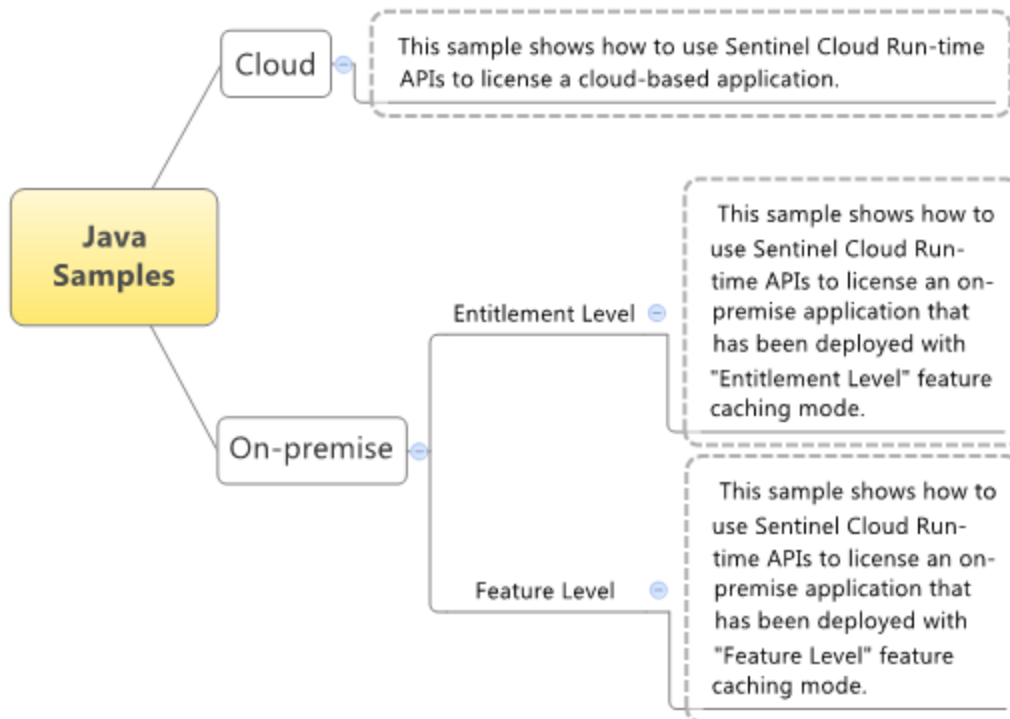
This document provides details of Run-time Java samples offered by Sentinel® Cloud.

The samples cover the following stages of licensing:

Stage	Description
License Availability	Checks if a license can be granted to a user or not.
Requesting a License	Authorizes a user by requesting a license from the Cloud Connect.
Releasing a License	Releases the license acquired by the user.

Available Run-time Java Samples

A set of console-based samples written in Java programming language are available that demonstrate how to implement Sentinel Cloud Run-time API calls in an application. You can use the sample that best suits your deployment environment.




Prerequisites

This section lists the requirements for using Run-time Java samples.

Run-time SDK

Before you run the samples, you must have installed Run-time SDK. Here is a brief of the installed items you will be using for running Java samples. For more information, see *Installation Guide*.

Directory	Contents
Configurations	Stores the client configuration file, <i>SentinelCloudRuntime.properties</i> , which contains configuration settings for executing Run-time APIs.
RunTimes/Java SDK	Contains jar files, property file, and .ccf files.
Samples/Runtime/Java	Stores source code of samples. Separate sample folders are available for Cloud and On-Premise deployments. Each of these has a build folder containing an ant script to build the jar file.
Redistributables	Contains components required for on-premise deployments: <ul style="list-style-type: none"> ■ Windows: <i>haspdinst.exe</i> ■ Linux: <i>aksusbd-*.rpm, aksusbd-*.deb, aksusbd-*.tar.gz</i>
Samples/Utilities/DotNet	Contains .NET utilities for fingerprint extraction and management. You will need these for on-premise deployments. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  The Utilities folder is not available on Linux. </div>

Operating System

You can build Run-time Java samples on Windows and Linux platforms (32-bit and 64-bit).

Software Requirements

Ensure that following requirements are met:

- Java Run-time Environment (JRE 6) is installed.
- Apache Ant 1.9.3 is installed, ANT_HOME environment variable is set to the directory where you installed Ant, and PATH environment variable is set to the bin directory of ANT.
- JDK 1.6 or higher version is installed and JAVA_HOME environment variable is set to the directory where you installed JDK.

Entitlement Availability

Before you run a sample, an entitlement for its deployment type should be created in EMS.

- Before running the **Cloud** sample, ensure that a Cloud entitlement has been created in EMS.
- Before running the **Entitlement Level** sample, ensure that an On-premise entitlement with feature caching mode as Entitlement level has been created in EMS.
- Before running the **Feature Level** sample, ensure that an On-premise entitlement with feature caching mode as Feature level has been created in EMS.

See *Quick Start Guide* for a quick overview on how to create entitlements in EMS.

Machine Registration for Running Entitlement Level and Feature Level Samples

For running the Entitlement Level sample, you must have registered machine fingerprint with the entitlement. For Feature Level sample, this step is optional.

You can use the utility available in the SDK installation folder for machine registration. See *Sentinel Cloud Fingerprint Management Utilities ReadMe* for more information.

Configuration Related Items

You will need the following items while configuring samples. These items are provided to you in e-mails from SafeNet:

- **YPSAddress**: Address of the Cloud Directory Services.
- **ClientAlias**: This is usually the vendor name provided in the vendor registration request file.
- **Vendor ID**: The unique ID assigned to each customer of Sentinel Cloud.
- **Secret Key ID**: ID of the secret key.
- **Secret Key**: The secret key received from SafeNet for authentication of the client requests.

In addition to the above, for running on-premise samples, you will also need **CA certificate bundle** that refers to the certificate store that Run-time uses for server certificate verification. You can download it from <http://curl.haxx.se/ca/cacert.pem>.

Configuring Java Samples

Open the client configuration file and update the following properties:

Property	Example
YPSAddresss	<pre><add key="YPSAddress" value="https://yps-trial.sentinelcloud.com/YPServer" /></pre>
DeploymentType	<p>If you are running cloud sample, set its value to Cloud.</p> <pre><add key="DeploymentType" value ="Cloud" /></pre> <p>If you are running Entitlement Level or Feature Level sample, set its value to OnPremise.</p> <pre><add key="DeploymentType" value ="OnPremise" /></pre>
ClientAlias	<pre><add key="ClientAlias" value="isv" /></pre>
VendorID	<pre><add key="VendorId" value="a8e06c3" /></pre>
SecretKeyId	<pre><add key="SecretKeyId" value="SecretKeyId" /></pre>
SecretKey	<pre><add key="SecretKey" value="SecretKey" /></pre>
CABundle	<pre><add key="CABundle" value=".\\cacert.pem" /></pre>

Building Java Samples

Follow the steps given below to build the Java sample by using the Ant script:

1. Open the *APIDemo.java* file, update customer, user, feature details according to the values specified in EMS. Also provide your remarks in the vendorInfo string, for example, *Vendor Application Data*.
2. Go to the command prompt.
3. Go to the build directory of the sample that you want to build.
4. Type `ant` and press **Enter**. It will create a *APIDemo.jar* file.

Running Java Samples

The command to execute the jar file are:

- For cloud sample:

```
java -jar APIDemo.jar
```

- For on-premise samples:

```
java -Djava.library.path=. -jar APIDemo.jar
```

API Implementation in Java Source Code

You can analyze the source code of samples to understand calling sequence and implementation of Run-time APIs. This section lists the order in which Run-time APIs have been implemented in samples.

Cloud	On Premise Entitlement Level Caching	On Premise Feature Level Caching
<ul style="list-style-type: none"> ■ acquireLicenseClient ■ getInfo - with format set as Feature_Details ■ login - with details of feature, customer, and user ■ logout ■ releaseLicenseClient 	<ul style="list-style-type: none"> ■ acquireLicenseClient ■ transfer - with Detach action ■ getInfo - with format set as Feature_Details ■ login - with details of feature, customer, and user ■ logout ■ releaseLicenseClient 	<ul style="list-style-type: none"> ■ acquireLicenseClient ■ getInfo - with format set as Feature_Details ■ transfer - with Detach action ■ login with details of feature, customer, and user ■ logout ■ releaseLicenseClient

For details about the Run-time APIs, refer to the *Sentinel Cloud Run-time Guide*.

Obtaining Support

If you encounter a problem while installing, registering or operating this product, please make sure that you have read the documentation. If you cannot resolve the issue, contact your supplier or SafeNet Customer Support. SafeNet Customer Support operates 24 hours a day, 7 days a week. Your level of access to this service is governed by the support plan arrangements made between SafeNet and your organization. Please consult this support plan for further information about your entitlements, including the hours when telephone support is available to you.

Contact Method	Contact Information	
Address	SafeNet, Inc. 4690 Millennium Drive Belcamp, Maryland 21017, USA	
Phone	US	1-800-545-6608
	International	1-410-931-7520
Technical Support Customer Portal	https://serviceportal.safenet-inc.com Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the SafeNet Knowledge Base	

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