Sentinel Cloud Run-time .NET Samples ReadMe

Introduction

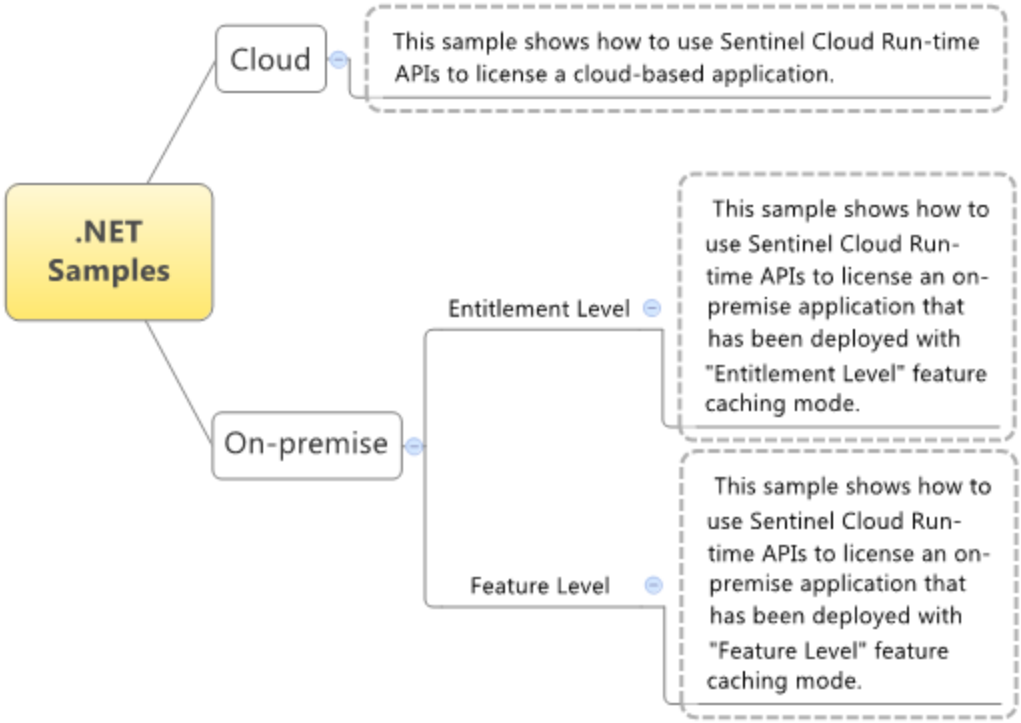
This document provides details of Run-time .NET samples offered by Sentinel® Cloud.

The .NET samples covers the following stages of licensing:

Licensing	Usage
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 .NET Samples

A set of console-based samples written in .NET 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 .NET samples.

Run-time SDK

Before you run the samples, you must have installed Run-time SDK. The following table lists the installed folders that contain items for using .NET Run-time samples.

Directory	Contents
Configurations	Stores the client configuration file, *SentinelCloudRuntime.properties*, which contains configuration settings for executing Run-time APIs.
RunTimes/Dot NET SDK	Contains the required libraries.
Samples/Runtime/DotNet	Contains source code and workspace of .NET samples. Separate sample folders are available for **Cloud** and **On-Premise** deployments, each of which contains the project solution file and main files containing API source.
Redistributables	Contains *haspdinst.exe* which need to be installed for on-premise deployments.

For more information on installation, see *Installation Guide*.

Operating System and Compiler

- Windows (32-bit and 64-bit)
- Microsoft Visual Studio

Note

- If you are using Visual Studio 2010 and intend to integrate a non-web based application with Sentinel Cloud, ensure that the target framework is set to **.NET Framework 4** (and not to .NET Framework 4 Client Profile), for the successful application compilation.
- These samples have been created in Microsoft Visual Studio 2005.

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.

Configuration Related Items

You will need the following items for configuration, which you receive in provisioning e-mails from SafeNet on purchase of Sentinel Cloud Services:

- **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 .NET Samples

Open the client configuration file and update the following properties:

Property	Example
YPSAddresss	`<add key="YPSAddress" value="https://yps-trial.sentinelcloud.com/YPServer" />`

DeploymentType	If you are running cloud sample, set its value to **Cloud**.
	`<add key="DeploymentType" value ="Cloud" />`
	If you are running Entitlement Level or Feature Level sample, set its value to **OnPremise**.
	`<add key="DeploymentType" value ="OnPremise" />`

ClientAlias	`<add key="ClientAlias" value="isv" />`
VendorID	`<add key="VendorId" value="a8e06c3" />`
SecretKeyId	`<add key="SecretKeyId" value="SecretKeyId" />`
SecretKey	`<add key="SecretKey" value="SecretKey" />`
CAbundle	`<add key="CAbundle" value=".\cacert.pem" />`

Running .NET Samples

The steps for running .NET samples are:

1. Open *APIDemo.sln* in Microsoft Visual Studio.
2. In the *APIDemo.cs* 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*.
3. Build *APIDemo.sln* and run it.

API Implementation in .NET 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
■ acquireLicenseClient ■ getInfo - with format set as Feature_Details ■ login - with details of feature, customer, and user ■ logout ■ releaseLicenseClient	■ acquireLicenseClient ■ transfer - with Detach action ■ getInfo - with format set as Feature_Details ■ login - with details of feature, customer, and user ■ logout ■ releaseLicenseClient	■ 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	

http://www.safenet-inc.com/

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Software versions 3.6 and later

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