Sentinel HASP ®

Transitioning From HASP SRM v.2.x to Sentinel HASP v.5.10

Releases HASP SRM v.3.x and later have introduced a number of changes in functionality and in some of the basic concepts that were part of earlier HASP SRM versions. This document describes the primary changes. For more detailed information, refer to the help documentation for the various applications and to the *Sentinel HASP v.5.10 Software Protection and Licensing Guide*.

> **Note:** If you intend to use Sentinel HASP Business Studio to process license activations for your protected applications, before you upgrade to Sentinel HASP v.5.10 you require new licenses to be installed on your Sentinel HASP Master key(s). Ensure that you have received your new licenses from SafeNet prior to commencing the upgrade process.

Product Structure

In versions of HASP SRM prior to version 3.x, the key element of functionality was the Feature. In run-time, a user saw only a list of Features. The protected applications used only the Features, and the "Product" element was only available in Business Studio.

If a Feature was included in multiple Products, only one instance of the Feature could be processed in the order to prevent collision in licensing terms. This meant that each protected application that used that Feature affected the Feature's license. For example, if the license for the Feature in one application decremented the number of available executions, when the Feature was used as part of another application additional executions were decremented from the license.

Starting with HASP SRM v.3.10, Features are grouped within identifiable Products. At run-time, the end user can view the Products, and the Features that they include. When a Feature is included in more than one Product, it is usable during run-time in every Product in which it is included, even though the license terms for the Feature may vary between Products.

The new Product structure is built on Base Products. A Base Product is a completely new Product, from which other Products may be created.

The Product entity is not limited to Business Studio as it was in earlier versions, but is incorporated throughout the Sentinel HASP system. The Product entity is included in the Run-time Environment and in Sentinel HASP protection keys.

The Base Product is allocated a Product ID that is unique in the Batch. All Modification Products, Provisional Products, Cancellation Product are created from Base Products and have the same Product ID as the Base Product from which they were created.

You may use a Base Product as a marketable entity, or simply as a foundation from which Product variants are built.

Effect of the new Product Structure on Other Applications

The change in Product Structure also affects the following applications:

- **Admin Control Center:** The new Products page in Admin Control Center enables users to view information about Base Products, including information about the vendor of the Product.

  By clicking the **Features** button for a Product, you can access data about every Feature that is in the Product (including all Products built on the Base Product that are available in this instance of HASP License Manager).

- **Sentinel HASP Run-time API:** As with HASP SRM v.2.50, you can log in to any Feature, subject to various parameters, using hasp_login or hasp_login_scope. Starting from HASP SRM v.3.x, you can also log in a specific Product ID using hasp_login_scope. When you log into a Product ID, you can use all the Features for all the Products that are built on the Base Product to which the Product ID applies (that are available in this instance of HASP License Manager).

Conversion of Existing Products at Upgrade

When you upgrade to Sentinel HASP v.5.10, the following automatic conversions are made to your existing Products from HASP SRM v.2.*x*:

- A single Base Product is automatically created that is named **V.2.x Products**.

- Each of your existing HASP SRM 2.*x* Products are converted to Modification Products of that Base Product.

- All existing data (including users, customers, Features, and Products) is retained in the upgrade. Note that users that were deleted in HASP SRM 2.*x* will reappear in Sentinel HASP v.5.10 as "Obsolete" users (that is, as inactive users).

Using the HASP SRM v.2.x Run-time

You can continue to work in HASP SRM 2.*x* format, as long as you only create Products from the **V.2.x Products** Base Product. You can continue to send HASP SRM 2.*x* format license updates to your customers, as long as your update only contains Products that have been derived from the **V.2.x Products** Base Product. You can also continue to use the hasp_update function in code that is linked to the HASP SRM v.2.*x* Run-time API libraries.

With the exception of the scenario described in the previous paragraph, once you start creating new Base Products, you must continue working in Sentinel HASP v.5.10 format. If you use the hasp_update function in your code, you must link to the Sentinel HASP v.5.10 Run-time API libraries. You must also ensure that your end users have Sentinel HASP v.5.10 Run-time Environment installed.

When you create Sentinel HASP v.5.10 updates for Sentinel HASP protection keys in the field, you must ensure that your customers have the Sentinel HASP v.5.10 Run-time Environment installed. Updates can be applied using RUS, the hasp_update function in the Sentinel HASP Run-time API, or by applying a V2C file in Admin Control Center, but they must all use Sentinel HASP v.5.10.

Applying Updates to Sentinel HASP v.5.10-Format Keys in the Field

After your HASP SRM protection keys in the field have been converted to Sentinel HASP v.5.10 format, you can only use Sentinel HASP Business Studio v.5.10 to process updates. The C2V files can only be checked in using Business Studio v.5.10.

> **Important:** In an environment in which the HASP SRM Business Studio Server has been upgraded and the Business Studio application or Business Studio API is version 2.*x*, checking in a Sentinel HASP protection key in v.5.10 format will require that HASP SRM Business Studio/Business Studio API be upgraded to Sentinel HASP v.5.10.

Converting your HASP SRM v.2.x Business Studio Server API to Sentinel HASP v.5.10

As long as you do not create any new Base Products in Sentinel HASP, you can continue to use the HASP SRM Business Studio Server API v.2.50 on a server that has been upgraded to Sentinel HASP Business Studio Server v.5.10.

Various changes have been made to the Sentinel HASP Business Studio Server API v.5.10 to prepare it for future enhancements. The changes include:

- Removing the handle object; instances are now handled by generated objects
- Changing structures to classes
- Addition of new functions
- Addition of new classes and enumerations for the new functions
- Rename of objects and change of parameter types in the existing functions (this affects `AddProductsToOrder`, `FinalizeOrder`, `LocateC2VKey`, and `SetOrderFreeParameters`)
- Change of lists to arrays
- Deprecating the two `ProduceOrder` functions and replacing them with the `ProduceOrderByC2V`, and `ProduceOrderByHaspID` functions
- Parameterized constructs have been removed from classes
- The following parameters have been added, where relevant, in the classes: `BaseProductID`, `BaseProductName`, `ProductType`, and `ProductFeatureID`

To convert your existing Business Studio Server API to Sentinel HASP v.5.10:

1. Compile your code using the new DLL (HaspBusinessStudioServer.dll). Errors will be returned according to the changes between the two versions of the API. (For example, handle will be returned as a non-object.)

2. Use the Sentinel HASP Business Studio Server v.5.10 API to identify the changes that you need to make.

3. Re-compile your code using the DLL to ensure all errors have been addressed.