



Introduction to License Reservation

Table 1: Feature History

Feature Name	Release Information	Feature Description
License Reservation for Smart Licensing	Cisco IOS XE Cupertino 17.8.1	<p>Routers using Smart Licensing share information at regular intervals with Cisco Smart Software Manager (CSSM). License reservation allows you to use Smart Licensing without the need to share license information. By reserving node-locked licenses, you can deploy smart licensed routers in highly secure and air-gapped networks.</p> <p>Two kinds of License Reservation are available:</p> <ul style="list-style-type: none">• Permanent License Reservation—Perpetual (Golden key) reserved license.• Specified License Reservation—Specific reserved licenses and term licenses.

License reservation offers two kinds of licensing:

- [Permanent License Reservation](#)
 - Provides an unlimited quantity of licenses.
 - Activates all the functionalities of the router with single universal license.
 - Does not require periodic access to the License Authority.
- [Specific License Reservation](#)

- Allows selection of licenses.
- Requires one-time authorization and configuration with CSSM.

For more information see, Cisco Licensing cisco.com/go/licensingguide.

- [Prerequisites for License Reservation, on page 2](#)
- [Permanent License Reservation, on page 2](#)
- [Specific License Reservation, on page 2](#)
- [Obtaining License Reservation Code, on page 3](#)
- [Enabling License Reservation, on page 3](#)
- [Reserving Licenses using CSSM, on page 4](#)
- [Register the Device Using the Authorization Code, on page 10](#)
- [Verifyig License Registration Status with Authorization Code, on page 10](#)
- [Upgrading Licenses with Specific License Reservation, on page 11](#)
- [Removing License Authorization Code, on page 15](#)
- [Removing the Authorization Code Post Factory Reset, on page 17](#)

Prerequisites for License Reservation

Before you start, ensure that you have the following:

- [Active Cisco.com account](#)
- User or admin access to a Smart account (To request access to a Smart account, refer to [How to Request Access to an Existing Smart Account](#).)
- Understanding of products supporting Specific License Reservation. See [How to Identify Products That Support SLR](#)

Permanent License Reservation

Permanent License Reservation offers a single “Universal” license that authorizes all possible product functionalities. It also includes an unlimited quantity of counted licenses.

Permanent licenses do not require periodic access to the License Authority. You can purchase the license, and install the license key for Prime Access Registrar.

Permanent license reservation (PLR) enables you to deploy permanent software license on a router without communicating license information to CSSM.

Specific License Reservation

Specific License Reservation (SLR) is a functionality that enables you to deploy a software license on a device without communicating usage information to Cisco. This functionality is especially used in highly secure networks, and it is supported on platforms that have Smart Licensing enabled.

SLR lets you reserve a license for your product instance from the CSSM. These reserved licenses need not be renewed or reauthorized unless there is a license usage change on the device.

License enforcement is a mechanism that prevents a feature from being used without first obtaining a license. The following enforcement mechanisms are available:

- **Hard enforcement:** Hard enforcement is applicable only for enforced licenses. If you do not authorize the required licenses by installing the authorization code, the license cannot be used, and the feature is disabled.
- **Soft enforcement:** When you do not authorize the required licenses by installing the authorization code, you can continue to use the license. The system displays an appropriate syslog message and the license status is “Not Authorized”.



Note SLR is not enabled by default, and you must specifically request for this functionality. See [How to Reserve Licenses](#)

Obtaining License Reservation Code

To obtain the license reservation code to the Smart Account in Cisco Smart Software Manager (CSSM).

1. Go to [Support Case Manager](#).
2. Click OPEN NEW CASE
3. Select Software Licensing

For more information see, [How to Reserve Licenses \(SLR\)](#)

Enabling License Reservation

Procedure

Step 1

enable

Example:

```
Router# enable
```

Enables privileged EXEC mode.

Step 2

configure terminal

Enters global configuration mode.

Example:

```
Router# configure terminal
```

Step 3

license smart reservation

Enables License Reservation. Use the no form of this command to disable License Reservation.

Example:

```
Router(config)# license smart reservation
```

Step 4 **exit**

Exits configuration mode, and returns the device to the global configuration mode.

Step 5 **license smart enable**

Enables basic Smart Licensing.

Example:

```
Router(config)# license smart enable
```

Step 6 **license smart reservation request local**

Generates a request code for the device to be entered in the Cisco Smart Software Manager.

Note To cancel the License Reservation request, execute the **license smart reservation cancel** command.

Example:

```
Router# license smart reservation request local
```

Reserving Licenses using CSSM

Procedure

- Step 1** Log in to Cisco Smart Software Manager at <https://software.cisco.com/#> using the Cisco provided username and password..
- Step 2** Click the **Inventory** tab. From the **Virtual Account** drop-down list, select the smart account.
- Step 3** From the **Licenses** tab, click **License Reservation**.
- The system displays the Smart License Reservation wizard.

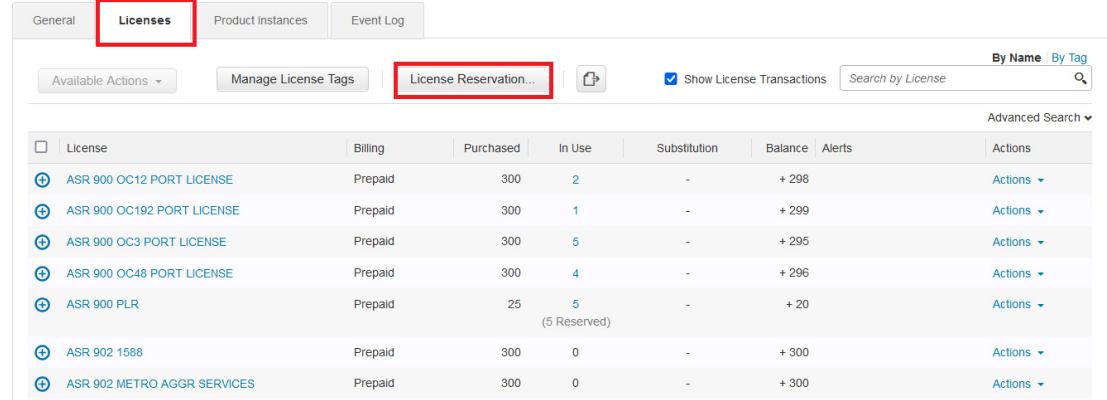
Smart Software Licensing

Feedback Support Help

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

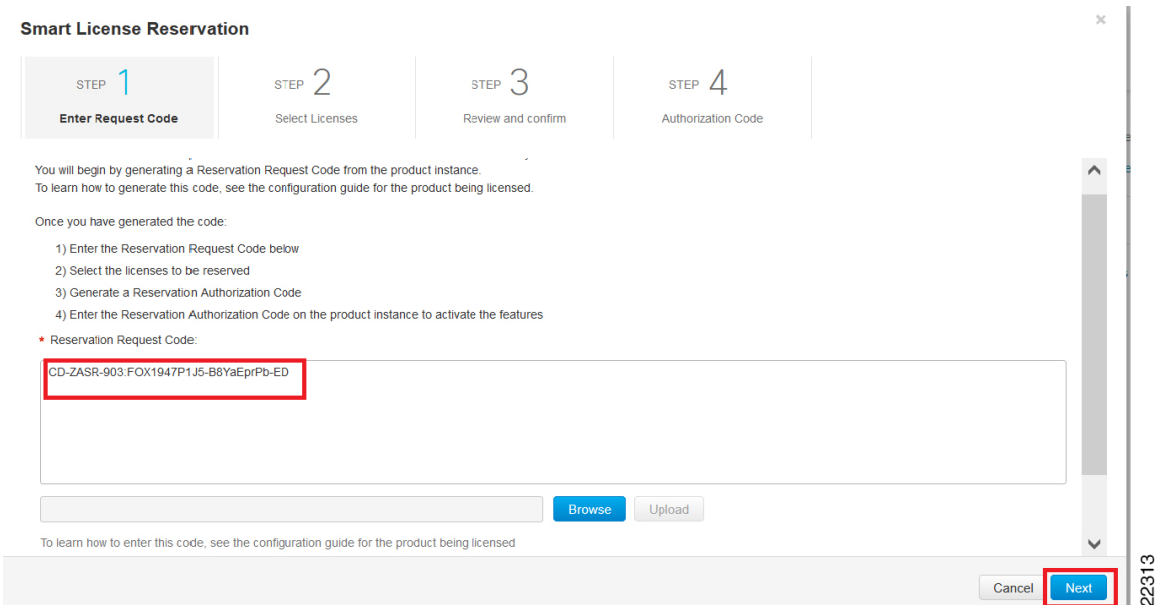
Virtual Account: ASR920

44 Minor | Informational | Hide Alerts



License	Billing	Purchased	In Use	Substitution	Balance	Alerts	Actions
ASR 900 OC12 PORT LICENSE	Prepaid	300	2	-	+298		Actions
ASR 900 OC192 PORT LICENSE	Prepaid	300	1	-	+299		Actions
ASR 900 OC3 PORT LICENSE	Prepaid	300	5	-	+295		Actions
ASR 900 OC48 PORT LICENSE	Prepaid	300	4	-	+296		Actions
ASR 900 PLR	Prepaid	25	5 (5 Reserved)	-	+20		Actions
ASR 902 1588	Prepaid	300	0	-	+300		Actions
ASR 902 METRO AGGR SERVICES	Prepaid	300	0	-	+300		Actions

Step 4 Click License Reservation. Enter or attach the reservation request code that is generated from the router at **Enter Request Code**, and click **Next**.



Smart License Reservation

STEP 1 Enter Request Code | STEP 2 Select Licenses | STEP 3 Review and confirm | STEP 4 Authorization Code

You will begin by generating a Reservation Request Code from the product instance. To learn how to generate this code, see the configuration guide for the product being licensed.

Once you have generated the code:

- 1) Enter the Reservation Request Code below
- 2) Select the licenses to be reserved
- 3) Generate a Reservation Authorization Code
- 4) Enter the Reservation Authorization Code on the product instance to activate the features

* Reservation Request Code:

CD-ZASR-903.FOX1947P1J5-B8YAEprPb-ED

Browse Upload

To learn how to enter this code, see the configuration guide for the product being licensed

Cancel Next

The Smart License Reservation displays.

Step 5 Select the type of license to reserve.

- PLR—Reserves single license for Permanent License Reservation. See [Reserving Licenses with Permanent License Reservation](#), on page 6

- SLR—Reserves specific licenses for Specific License Reservation. See [Reserving Licenses with Specific License Reservation, on page 8](#)

Reserving Licenses with Permanent License Reservation

Procedure

Step 1 Select **PLR**.

The system reserves the permanent licenses for the router.

Smart License Reservation ✕

STEP 1 ✓
Enter Request Code

STEP 2
Select Licenses

STEP 3
Review and confirm

STEP 4
Authorization Code

Product Instance Details

Product Type:	ASR900
UDI PID:	ASR-903
UDI Serial Number:	FOX1947P1J5

Licenses to Reserve

In order to continue, ensure that you have a surplus of the licenses you want to reserve in the Virtual Account.

ASR 900 PLR

Reserve a specific license

Cancel
Next

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Step 2 From the **Review and Confirm** tab, click **Generate Authorization Code**.

Smart License Reservation

STEP 1 ✓ Enter Request Code STEP 2 ✓ Select Licenses **STEP 3 Review and confirm** STEP 4 Authorization Code

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Licenses to Reserve

License	Expires	Quantity to Reserve
ASR 900 PLR <small>Permanent License Reservation for ASR 900</small>	-	1

Cancel Back **Generate Authorization Code**

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The system displays the Authorization Code.

Smart License Reservation

STEP 1 ✓ Enter Request Code STEP 2 ✓ Select Licenses STEP 3 ✓ Review and confirm **STEP 4 Authorization Code**

✓ The Reservation Authorization Code below has been generated for this product instance. Enter this code into the Smart Licensing settings for the product, to enable the licensed features.

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Authorization Code:

```
<specificPLR><authorizationCode><flag>A</flag><version>C</version><pid>00f6aede-2c0f-425f-bbd9-0869f23193b5</pid><timestamp>1645013000266</timestamp><entitlements><entitlement><tag>regid.2016-05.com.cisco.oc192.1.0_5a786289-1224-46f3-8dd8-d8413ee0251b</tag><count>1</count><startDate>2022-Feb-11 UTC</startDate><endDate>2022-Aug-10 UTC</endDate><licenseType>TERM</licenseType><displayName>ASR 900 OC192 PORT LICENSE</displayName><tagDescription>ASR 900 OC192 PORT LICENSE</tagDescription><subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2015-04.com.cisco.metroaggrservices.2.0_373c3dc4-d25d-4d1b-a6d0-b5616e442bc5</tag><count>1</count><startDate>2022-Feb-11 UTC</startDate><endDate>2022-Aug-10 UTC</endDate><licenseType>TERM</licenseType><displayName>ASR 903 METRO AGGR SERVICES</displayName><tagDescription>ASR 900 METRO AGGR SERVICES</tagDescription><subscriptionID></subscriptionID></entitlement></entitlements></authorizationCode></signature>MEQCf3IE9J9FJ9NH+n0n8R8MkU+ouUA2p9DhOOV/9agmLMQCICQnExrd71keIATBiyYxpQm1St5j1DvzfJQQBGOouM/vA==</signature></specificPLR>
```

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File Copy to Clipboard **Close**

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Note After generating the code, the authorization code file is valid till you install the code.

For installation failure issues, contact Cisco [Global Licensing Operations \(GLO\)](#) to generate a new authorization code.

- Step 3** Click the **Copy to Clipboard** option to copy the code, or **Download as File** to download the code as a file.
- Step 4** Install the authorization file on the router by registering the device. See [Register the Device Using the Authorization Code, on page 10](#)

Reserving Licenses with Specific License Reservation

Procedure

Step 1 Check **Reserve a specific License**.

The system displays the list of surplus licenses available in your Virtual Account.

Smart License Reservation

STEP 1 ✓ Enter Request Code | **STEP 2 Select Licenses** | STEP 3 Review and confirm | STEP 4 Authorization Code

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Licenses to Reserve

In order to continue, ensure that you have a surplus of the licenses you want to reserve in the Virtual Account.

ASR 900 PLR
 Reserve a specific license

License	Expires	Purchased	Available	Reserve
ASR 900 OC12 PORT LICENSE <small>ASR 900 OC12 PORT LICENSE</small>	2022-Aug-10	300	300	0
ASR 900 OC192 PORT LICENSE <small>ASR 900 OC192 PORT LICENSE</small>	2022-Aug-10	300	300	0

Step 2 Enter the number of licenses to reserve, in the **Reserve** field. Click **Next**.

Smart License Reservation

STEP 1 ✓ Enter Request Code | **STEP 2 Select Licenses** | STEP 3 Review and confirm | STEP 4 Authorization Code

ASR 900 OC192 PORT LICENSE <small>ASR 900 OC192 PORT LICENSE</small>	2022-Aug-10	300	299	1
ASR 900 OC3 PORT LICENSE <small>ASR 900 OC3 PORT LICENSE</small>	2022-Aug-10	300	300	0
ASR 900 OC48 PORT LICENSE <small>ASR 900 OC48 PORT LICENSE</small>	2022-Aug-10	300	300	0
ASR 902 1588 <small>ASR 900 1588</small>	2022-Aug-10	300	300	0
ASR 902 METRO AGGR SERVICES <small>ASR 900 METRO AGGR SERVICES</small>	2022-Aug-10	300	300	0
ASR 902 METRO IP SERVICES <small>ASR 900 METRO IP SERVICES</small>	2022-Aug-10	300	300	0
ASR 902 METRO SERVICES <small>ASR 900 METRO SERVICES</small>	2022-Aug-10	300	300	0
ASR 903 METRO AGGR SERVICES <small>ASR 900 METRO AGGR SERVICES</small>	2022-Aug-10	300	299	1
ASR 903 METRO IP SERVICES	2022-Aug-10	300	300	0

Cancel Next

Step 3 At the **Review and Confirm** tab, click **Generate Authorization Code**

The system displays the Authorization Code.

Smart License Reservation

STEP 1 ✓ Enter Request Code

STEP 2 ✓ Select Licenses

STEP 3 **Review and confirm**

STEP 4 Authorization Code

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Licenses to Reserve

License	Expires	Quantity to Reserve
ASR 903 METRO AGGR SERVICES <i>ASR 900 METRO AGGR SERVICES</i>	2022-Aug-10	1
ASR 900 OC192 PORT LICENSE <i>ASR 900 OC192 PORT LICENSE</i>	2022-Aug-10	1

Cancel Back **Generate Authorization Code**

Note After you generating the code for a specific device, the authorization code file is valid till you install the code the router.

For installation failure issues, contact [GLO](#) to generate a new authorization code.

Step 4 Click the **Copy to Clipboard** option to copy the code or **Download as File** to download the code as a file.

Smart License Reservation

STEP 1 ✓ Enter Request Code

STEP 2 ✓ Select Licenses

STEP 3 ✓ Review and confirm

STEP 4 **Authorization Code**

✓ The Reservation Authorization Code below has been generated for this product instance. Enter this code into the Smart Licensing settings for the product, to enable the licensed features.

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Authorization Code:

```
<specificPLR><authorizationCode><flag>A</flag><version>C</version><pid>00f5aede-2c0f-425f-bbd9-0869f23193b5</pid><timestamp>1645013000266</timestamp><entitlements><entitlement><tag>regid.2016-05.com.cisco.oc192.1_0_5a786289-1224-46f3-8dd8-d8413ee0251b</tag><count>1</count><startDate>2022-Feb-11 UTC</startDate><endDate>2022-Aug-10 UTC</endDate><licenseType>TERM</licenseType><displayName>ASR 900 OC192 PORT LICENSE</displayName><tagDescription>ASR 900 OC192 PORT LICENSE</tagDescription><subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2015-04.com.cisco.metroaggrservices.2.0_373c3dc4-d25d-4d1b-a6d0-b5616e442bc5</tag><count>1</count><startDate>2022-Feb-11 UTC</startDate><endDate>2022-Aug-10 UTC</endDate><licenseType>TERM</licenseType><displayName>ASR 903 METRO AGGR SERVICES</displayName><tagDescription>ASR 900 METRO AGGR SERVICES</tagDescription><subscriptionID></subscriptionID></entitlements></authorizationCode><signature>MEQCH3TE9J9FJ9NNH+n0n8R8Mku+ouUA2p9DhOOV/9agmLMQCICQ0nExrd71KeiATBlyYxpQm1St5J1DvzFJQBG0oUvA==</signature><ud>P.ASR-903.S.FOX1947P1J5</ud></specificPLR>
```

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File Copy to Clipboard Close

Step 5 Install the authorization code file on the router by registering the device. See [Register the Device Using the Authorization Code](#), on page 10

Register the Device Using the Authorization Code

After you get the authorization code from CSSM, execute the following commands to complete the license reservation procedure:

Procedure

Step 1 enable

Enables privileged EXEC mode.

Enter your password, if prompted.

Step 2 license smart reservation install file bootflash:<authfile.txt>

This command registers the device. The authorization code you copied as a file is used to activate smart licensing reservation for your device. When you run the `show license tech support` command, the system displays the details of the reserved licenses.

Example: Installing the Authorization Code

This example shows how to install the authorization code on the router.

```
Router# license smart reservation install file bootflash:AuthorizationCode_SN_FOX1947P1J5
.txt
Reservation install file successful
Last Confirmation code UDI: PID:ASR-903,SN:FOX1947P1J5
Confirmation code: 24cbda5f
```

Verifying License Registration Status with Authorization Code

Verify the license status after registration, using the `show license reservation` command:

```
Router# show license reservation
License reservation: ENABLED
Overall status:
  Active: PID:ASR-903,SN:FOX1947P1J5
  Reservation status: SPECIFIC INSTALLED on Feb 17 06:05:40 2022 UTC
  Last Confirmation code: 24cbda5f

Specified license reservations:
ASR 903 METRO AGGR SERVICES (metroaggrservices):
  Description: ASR 900 METRO AGGR SERVICES
  Total reserved count: 1
  Enforcement type: NOT ENFORCED
  Term information:
    Active: PID:ASR-903,SN:FOX1947P1J5
    Authorization type: SPECIFIC INSTALLED on Feb 17 06:05:40 2022 UTC
    License type: TERM
    Start Date: 2022-FEB-17 UTC
    End Date: 2022-AUG-20 UTC
    Term Count: 1
```

```

ASR 900 OC192 PORT LICENSE (OC192portlicense):
  Description: ASR 900 OC192 PORT LICENSE
  Total reserved count: 1
  Enforcement type: ENFORCED
  Term information:
    Active: PID:ASR-903-IM,SN:FOX1947P1J5
    Authorization type: SPECIFIC INSTALLED on Feb 17 06:05:40 2022 UTC
    License type: TERM
    Start Date: 2022-FEB-17 UTC
    End Date: 2022-AUG-20 UTC
    Term Count: 1

```

This example shows the license status on the router.

```

Router# show license usage
License Authorization:
  Status: AUTHORIZED

ASR 903 METRO AGGR SERVICES (metroaggrservices):
  Description: ASR 903 METRO AGGR SERVICES
  Count: 1
  Version: 1.0
  Status: AUTHORIZED
  Export status: NOT RESTRICTED
  Feature Name: metroaggrservices
  Feature Description: metroaggrservices
  Reservation:
    Reservation status: SPECIFIC INSTALLED
    Total reserved count: 1

ASR 900 OC192 PORT LICENSE (OC192portlicense):
  Description: ASR 900 OC192 PORT LICENSE
  Count: 0
  Status: AUTHORIZED
  Export status: NOT RESTRICTED
  Feature Name: ASR 900 OC192 PORT LICENSE
  Feature Description: ASR 900 OC192 PORT LICENSE
  Reservation:
    Reservation status: SPECIFIC INSTALLED
    Total reserved count: 1

```

Upgrading Licenses with Specific License Reservation

Registered devices can be upgraded new features licenses or licenses.

Procedure

-
- Step 1** Log in to Cisco Smart Software Manager at <https://software.cisco.com/#> using the Cisco provided username and password.
 - Step 2** Click the **Inventory** tab. From the **Virtual Account** drop-down list, select your smart account.
 - Step 3** From the **Product Instances** tab, for the device that you want to update, click **Actions**.

Smart Software Licensing

Feedback Support Help

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: ASR920

44 Minor | 7 Informational | Hide Alerts

Product Instances				
Name	Product Type	Last Contact	Alerts	Actions
UDI_PID:ASR-903; UDI_SN:FOX1842P0LP;	ASR900	2022-Feb-07 11:42:07 (Reserved Licenses)		Actions
UDI_PID:ASR-903; UDI_SN:FOX1947P1J5;	ASR900	2022-Feb-16 12:03:20 (Reserved License...)		Actions
UDI_PID:ASR-903; UDI_SN:FOX2002P3WD;	ASR900	2022-Feb-07 11:41:58 (Reserved Licenses)		Actions
UDI_PID:ASR-920-12CZ-A; UDI_SN:CAT1815U08H;	ASR900	2022-Feb-03 08:22:08 (Reserved License...)		Actions
UDI_PID:ASR-920-12SZ-IM; UDI_SN:CAT1930U20Q;	ASR900	2022-Feb-15 15:32:29 (Reserved License...)		Actions
UDI_PID:ASR-920-24SZ-IM; UDI_SN:CAT1925V0QJ;	ASR900	2022-Feb-03 10:25:22 (Reserved License...)		Actions

Step 4

Click Update Reserved Licenses.

UDI_PID:ASR-903; UDI_SN:FOX1947P1J5;

Overview | Event Log

Description
asr903 and asr902 (UEA platforms)

General

Name: UDI_PID:ASR-903; UDI_SN:FOX1947P1J5;
 Product: asr903 and asr902 (UEA platforms)
 Host Identifier: -
 MAC Address: -
 PID: ASR-903
 Serial Number: FOX1947P1J5
 UUID: -
 Virtual Account: ASR920
 Registration Date: 2022-Feb-16 12:03:20
 Last Contact: 2022-Feb-16 12:03:20 (Reserved Licenses) - [Download Reservation Authorization Code](#)

License Usage These licenses are reserved on this product instance [Update reservation](#)

License	Billing	Expires	Required
Transfer..	Prepaid	2022-Aug-10	1
Update Reserved Licenses...	Prepaid	2022-Aug-10	1
Remove..			
Rehost Licenses from a Failed Product...			

Showing all 2 Rows

Actions

Step 5

Select the license that you want to update.

Update License Reservation

Update License Reservation

STEP 1 Select Licenses | STEP 2 Review and confirm | STEP 3 Authorization Code

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Licenses to Reserve

In order to continue, ensure that you have a surplus of the licenses you want to reserve in the Virtual Account.

Reserve a specific license

License	Expires	Purchased	Available	Reserve
ASR 900 OC12 PORT LICENSE <small>ASR 900 OC12 PORT LICENSE</small>	2022-Aug-10	300	299	<input type="text" value="1"/>
ASR 900 OC192 PORT LICENSE <small>ASR 900 OC192 PORT LICENSE</small>	2022-Aug-10	300	299	<input type="text" value="1"/>
ASR 900 OC3 PORT LICENSE <small>ASR 900 OC3 PORT LICENSE</small>	2022-Aug-10	300	300	<input type="text" value="0"/>

Cancel Next

Step 6Click **Next**.**Step 7**From the **Review and Confirm** tab, click **Generate Authorization Code**.

Update License Reservation

STEP 1 Select Licenses | STEP 2 Review and confirm | STEP 3 Authorization Code

Product Instance Details

Product Type: ASR900
 UDI PID: ASR-903
 UDI Serial Number: FOX1947P1J5

Licenses to Reserve

License	Expires	Quantity to Reserve
ASR 900 OC12 PORT LICENSE <small>ASR 900 OC12 PORT LICENSE</small>	2022-Aug-10	1

Cancel Back **Generate Authorization Code**

Step 8Click the **Copy to Clipboard** option to copy the code, or **Download as File** to download the file.

Update License Reservation

STEP 1 ✓ Select Licenses STEP 2 ✓ Review and confirm STEP 3 Authorization Code

✓ The Reservation Authorization Code below has been generated for this product instance. Several steps remain:

1. This code must be entered into the Product Instance's Smart Licensing settings to complete the reservation.
2. When the code has been entered, a Reservation Confirmation Code will be generated.
3. To release licenses in transition, enter confirmation code generated by device into CSSM.

Authorization Code:

```
<specificPLR><authorizationCode><flag>A</flag><version>C</version><pid>00f6aede-2c0f-425f-bbd9-0869f23193b5</pid><timestamp>1645016051124</timestamp><entitlements><entitlement><tag>regid.2014-05.com.cisco.oc12.1.0_720ded1e-2ad8-4939-bb86-fc75ceca1f7e</tag><count>1</count><startDate>2022-Feb-11 UTC</startDate><endDate>2022-Aug-10 UTC</endDate><licenseType>TERM</licenseType><displayName>ASR 900 OC12 PORT LICENSE</displayName><tagDescription>ASR 900 OC12 PORT LICENSE</tagDescription><subscriptionID></subscriptionID></entitlement></entitlements></authorizationCode><signature>MEYCIQDz0vld7aX5THjbfuicCOFE4zaRbiIT0gu/gG7ZWZiDQihAO5GlaJ49TiboxhDEqsOaBkeuSuOISu2Tx3w5/HJ4Kri</signature><ud>P ASR-903, S FOX1947P1J5</ud></specificPLR>
```

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File Copy to Clipboard Enter Confirmation Code Close

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Step 9 To Install the downloaded file on the router, run the **license smart reservation install file** command.

```
license smart reservation install file bootflash: <authfile.txt>
```

This command registers the device with the new authorization code.

Example:

```
Router# license smart reservation install file
bootflash:AuthorizationCode_SN_FOX1947P1J5.txt
Reservation install file successful
Last Confirmation code UDI:PID:ASR-903,SN:FOX1947P1J5
c64da523
```

Note the confirmation code that is displayed in the output.

Step 10 In CSSM, from the **Authorization Code** tab, click the **Enter Confirmation Code** button.

Enter the confirmation code that is displayed on the router.

Enter Confirmation Code ✕

To complete the pending License Reservation, enter the Reservation Confirmation Code that was generated by the Product Instance after the Reservation Authorization Code was installed.

* Reservation Confirmation Code:

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Step 11 Click **OK** to complete the license reservation.

Removing License Authorization Code

Deregistering devices requires the removal of the authorization code. Installed Authorization codes must be returned to CSSM. The router moves into Eval mode on returning the code.

Procedure

Step 1 Log in to the router to generate a return code for the instance.

Step 2 Run the **license smart reservation return local** command to generate the code.

```
Router# license smart reservation return local
This command will remove the license reservation authorization code and the device will
transition back to the unregistered state. Some features may not function properly.
Do you want to continue? [yes/no]: yes
Enter this return code in Cisco Smart Software Manager portal:
```

```
UDI: PID:ASR-903,SN:FOX1741P5P8
```

```
CiFaL1-uFvouy-baod31-V9S6EZ-YoFfMD-2YFHro-Tywy77-FkzFF2-LMq
```

Step 3 Log in to Cisco Smart Software Manager at <https://software.cisco.com/#>.

You must log in to the portal using the Cisco provided username and password.

Step 4 Click the **Inventory** tab. From the **Virtual Account** drop-down list, select your smart account.

Step 5 From the **Product Instances** tab, select the device to remove license reservation, click **Actions**.

Smart Software Licensing

Feedback Support Help

Alerts | Inventory | [Convert to Smart Licensing](#) | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: ASR920

44 Minor

7 Informational

Hide Alerts

Product Instances				
Name	Product Type	Last Contact	Alerts	Actions
RSP2	ASR900	2021-Sep-01 10:55:43		Actions
TDM2-Crete	ASR900	2021-Sep-17 07:36:38		Actions
UDI_PID:ASR-903; UDI_SN:FOX1552P0A8;	ASR900	2021-Nov-15 13:02:51 (Reserved Licenses)		Actions
UDI_PID:ASR-903; UDI_SN:FOX1741P5P8;	ASR900	2021-Nov-17 10:35:52 (Reserved Licenses)		Actions
UDI_PID:ASR-903; UDI_SN:FOX1842P0LP;	ASR900	2022-Feb-07 11:42:07 (Reserved Licenses)		Actions
UDI_PID:ASR-903; UDI_SN:FOX1947P1J5;	ASR900	2022-Feb-16 12:54:12 (Reserved Licenses)	License Reservation Pending	Actions

Step 6

Select **Remove**.

UDI_PID:ASR-903; UDI_SN:FOX1741P5P8;

Overview | Event Log

Description
asr903 and asr902 (UEA platforms)

General

Name: UDI_PID:ASR-903; UDI_SN:FOX1741P5P8;
 Product: asr903 and asr902 (UEA platforms)
 Host Identifier: -
 MAC Address: -
 PID: ASR-903
 Serial Number: FOX1741P5P8
 UUID: -
 Virtual Account: ASR920
 Registration Date: 2021-Nov-17 10:35:52
 Last Contact: 2021-Nov-17 10:35:52 (Reserved Licenses) - [Download Reservation Authorization Code](#)

License Usage These licenses are reserved on this product instance [Update reservation](#)

Billing	Expires	Required
Prepaid	-	1

Showing all 1 Rows

Transfer...
 Update Reserved Licenses...
Remove...
 Rehost Licenses from a Failed Product...

Actions

Step 7

Enter the return code, and click **Remove Product Instance**.

Remove Product Instance ×

To remove a Product Instance that has reserved licenses and make those licenses once again available to other Product Instances, enter in the Reservation Return Code generated by the Product Instance. If you cannot generate a Reservation Return Code, contact [Cisco Support](#)

* **Reservation Return Code:**

CiFaL1-uFvouy-baod31-V9S6EZ-YoFfMD-2YGHro-TywyY7-FkzFF2-LMq

Remove Product Instance

Cancel

522320

Removing the Authorization Code Post Factory Reset

Before performing a factory reset, you must generate the reservation return code to the Cisco Global Licensing Operations (GLO).



Note The router may go into Unregistered state if you fail to return the code, and CSSM displays the product instance.

To remove the router instance from CSSM, do one of the following:

- Check if authorization code is available post factory reset. Use the **license smart reservation return authorization file *autho_code_file*** command to generate return code for the router. Use this return code to remove the instance from the CSSM. See [Removing License Authorization Code, on page 15](#).
- Contact [Cisco Support](#) to remove the router instance from CSSM.

