Cisco Software: Smart Licensing Management with Smart Accounts

Partners & Customers

Note: Screens in the presentation may vary slightly from the actual tools.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Role Description</th>
<th>Managing Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco Software: Capability Overview for Customers</td>
<td>45 minutes</td>
<td>• All Customer Roles</td>
<td>N/A</td>
</tr>
<tr>
<td>Cisco Software: Smart Account Request and Setup for Customers</td>
<td>1 hour</td>
<td>• All Customer Roles involved with Smart Accounts as Admins and Users</td>
<td>Cisco Software Central (CSC)</td>
</tr>
<tr>
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<td>Cisco Software Central (CSC)</td>
</tr>
<tr>
<td>Cisco Software: Smart Licensing Management with Smart Accounts</td>
<td>1 hour</td>
<td>• Software license and purchasing approver</td>
<td>Smart Software Manager (SSM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• License administration and management</td>
<td></td>
</tr>
<tr>
<td>Cisco Software: Classic Licensing Management with Smart Accounts</td>
<td>30 minutes</td>
<td>• Software license and purchasing approver</td>
<td>License Registration Portal (LRP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• License administration and management</td>
<td></td>
</tr>
<tr>
<td>Cisco Software: EA Workspace</td>
<td>1 hour</td>
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<td>EA Workspace</td>
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<td>----------</td>
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<td>Cisco Software Central (CSC)</td>
</tr>
</tbody>
</table>
| Cisco Software: CCW Quoting and Ordering with Smart Accounts | 1 hour | • Person placing orders  
• Person assigning order from Holding Account to Customer Smart Account | Cisco Commerce (CCW)               |
| Cisco Software: B2B Quoting and Ordering with Smart Accounts | 1 hour | • Person placing order  
• Person assigning order from Holding Account to Customer Smart Account | Cisco Commerce (CCW) and B2B systems |
| Cisco Software: Cisco Enterprise Agreement Quoting and Ordering | 45 minutes | • Person placing orders and assigning Smart Account | Cisco Commerce (CCW)               |
| Cisco Software: Dist Stocking and DropShip Orders for Smart License Enabled Products | 1 hour | • Distributors placing Smart Licensing orders in CCW | Cisco Commerce (CCW)               |
| Cisco Software: Cloud/ SaaS Quoting | 45 minutes | • Person creating quotes for Cloud/ SaaS                                         | Cisco Commerce (CCW)               |
| Cisco Software: Cloud/ SaaS Ordering | 1 hour | • Person creating orders for Cloud/ SaaS                                          | Cisco Commerce (CCW)               |
| Cisco Software: Cloud/ SaaS Subscription Management | 75 minutes | • Person managing subscriptions                                                  | Cisco Commerce (CCW)               |
| Cisco Software: Cloud/ SaaS Invoicing | 0.5 hours | • Person managing invoices                                                        | Cisco Commerce (CCW)               |
| Cisco Software: Smart Licensing Management with Smart Accounts | 1 hour | • Software license and purchasing approver  
• License administration and management                                           | Smart Software Manager (SSM)       |
| Cisco Software: Classic Licensing Management with Smart Accounts | 30 minutes | • Software license and purchasing approver  
• License administration and management                                           | License Registration Portal (LRP)   |
| Cisco Software: EA Workspace | 1 hour | • EA Management                                                                   | EA Workspace                       |
Learn about:

• How to manage Smart Licenses in Smart Software Manager within your Smart Account
Agenda

1. Smart Licensing Ordering Scenarios and Deployment Options

2. Smart Licensing Management in Smart Software Manager (SSM)

3. Additional Resources
Smart Licensing Ordering Scenarios and Deployment Options
Smart Licensing Ordering Scenarios

**Scenario 1: Simple Resale**
- Create Holding Smart Account
- Assign Order to Customer Smart Account
- Customer manages licenses with no partner involvement

**Scenario 2: Resale with Lifecycle Management**
- Create Holding Smart Account
- Assign Order to Customer Smart Account
- Partner assists or manages licenses on behalf of the customer

**Scenario 3: Partner also Consumer**
- Create a Customer Smart Account
- Assign Order to your Customer Smart Account
- Manage Own Licenses
Getting Started with SSM

- **SSM** provides a Software Inventory Management System that provides Customers, Cisco, and Selected Partners with information about Software Ownership and Software Utilization for **Smart Licenses**
- Only Smart Licenses deposited in Customer Smart Accounts are managed in SSM
  - Manage inventory from one centralized website
  - Organize and view licenses in groups called virtual accounts
  - Transfer Licenses easily between virtual accounts

Ownership

- **Commerce (CCW)**
  - I Have Purchased 5 additional ‘Advanced’ Licenses for BigU.edu

Usage

- **Cisco Product**
  - Hello, I am Device-East5, I belong to BigU.edu and I am using 1x Advanced License
  - Hello, You are Device-East5, belonging to BigU.edu and the Physics department you are ‘In-Compliance’

<table>
<thead>
<tr>
<th>BigU.edu</th>
<th>I Own: 10</th>
<th>+5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I am Using: 10</td>
<td>+1</td>
</tr>
</tbody>
</table>
Smart Licensing Deployment Options

**Direct**
- Cisco product sends usage information directly over the internet. No additional components are needed.

**On-Prem**
- Cisco products send usage information to a locally installed on-prem server.
- Periodically, exchange information with Cisco to keep on-prem sync.
- This synchronization can occur automatically in connected environments or manually in disconnected environments.

**Offline** (not recommended)
- Use copy/paste information between product and Cisco.com to manually check in and out licenses.
- Functionally equivalent to current node locking, but with Smart License tracking.
Methods for Securely Communicating with Cisco

The Cisco Product is configured to use Smart Licensing at install/provisioning time. Cisco offers different options for connectivity: the best option depends on how the Customer is deploying their licenses and how their network is setup. Direct cloud access is the default option.

<table>
<thead>
<tr>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Direct Cloud Access</strong></td>
</tr>
<tr>
<td>• Cisco product sends usage information directly over the internet. No additional components are needed</td>
</tr>
<tr>
<td><strong>2 Access Through An HTTPS Proxy</strong></td>
</tr>
<tr>
<td>• Cisco product sends usage information over the internet via a Proxy Server. Smart Call Home Transport Gateway (<a href="#">Free VM Download</a>) or off-the-shelf Proxy (such as Apache).</td>
</tr>
<tr>
<td><strong>3 Access Through An On-Premise License Management</strong></td>
</tr>
<tr>
<td>• Cisco products send usage information to a locally installed on-prem collector. Periodically, exchange information with Cisco to keep the databases in sync. This synchronization can occur automatically in connected environments or manually in disconnected environments.</td>
</tr>
<tr>
<td><strong>4 Full Offline Access - Specific License Reservation</strong></td>
</tr>
<tr>
<td>• Use copy/paste information between product and Cisco.com to manually check in and out licenses. Functionally equivalent to current node locking, but with Smart License tracking.</td>
</tr>
<tr>
<td>• For more information about SLR, check this <a href="#">Quick Guide</a></td>
</tr>
</tbody>
</table>

Reference the [SSM page](#) for more information on using the SSM On-Prem option.

You will also find the following documents: Users Guide, Installation Guide, Data Sheet, Overview and FAQ.
Smart Licensing Management in Smart Software Manager (SSM)
Basic Portal Navigation
View Multiple Accounts

1. If you have access to multiple Customer Smart Accounts, you can click on the arrow next to SA name.
2. From the drop-down, you can view your Smart Accounts on the list.
3. You can also Display All in List View, which prompts a pop-up.
Basic Portal Navigation
Display All in List View

Display All in List View allows you to see all Smart Accounts.

1. You can choose how many Smart Accounts to view per page
2. You can also select specific Alerts for each of your Smart Accounts and View Alert details.

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Domain Identifier</th>
<th>Smart Account Alerts</th>
<th>Smart Licensing Alerts</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU Production Test 1</td>
<td>buproductiontest1.cisco.com</td>
<td>❌ 1 Major View</td>
<td>❌ 135 Major ❌ 586 Minor View</td>
</tr>
<tr>
<td>Canada Motors</td>
<td>test.canadamotorsinc.com</td>
<td>❌ 1 Major View</td>
<td>❌ 1 Major ❌ 52 Minor View</td>
</tr>
<tr>
<td>Cisco Demo Customer Smart Account</td>
<td>demo.cisco.com</td>
<td>❌ 380 Major ❌ 1622 Minor View</td>
<td></td>
</tr>
<tr>
<td>CISCO.COM Holding Account (HOLDING)</td>
<td>cisco.com</td>
<td>❌ 3287 Major ❌ 282 Minor View</td>
<td></td>
</tr>
<tr>
<td>Internal Test Orders - test.cisco.com</td>
<td>test.cisco.com</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InternalTestDemoAccount3.cisco.com</td>
<td>internaltestdemoaccount3.cisco.com</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Showing All 6 Records
Basic Portal Navigation
Access SSM

From Cisco Software Central (CSC), click Smart Software Licensing.
Basic Portal Navigation
License Agreement

1. This notification displays when logging into SSM for the first time or when a new agreement needs to be accepted. Agreement must be accepted to generate tokens and connect product instances to consume licenses.

2. If you have authority to accept the agreement, click View/Accept, or click Continue to defer agreement.

3. Review the agreement. If you agree with the terms, and click Accept.

Note that only a Smart Account Administrator can accept the Agreement in SSM. Upon accepting the Agreement, an Administrator will obtain the Approver role in addition.
Basic Portal Navigation
License Agreement

1. If you are an Administrator and you select 'Continue' instead of accepting the agreement, you will be shown a new screen.

2. Here, you will be able to view SSM, but, upon selecting Inventory, the interface will generate an error as the Smart Account will be in pending status until any outstanding Smart Software Licensing Agreements are accepted.

Note that only a Smart Account Administrator can accept the Agreement in SSM. Upon accepting the Agreement, an Administrator will obtain the Approver role in addition.
Basic Portal Navigation
License Agreement

1. If the agreement was not accepted upon initial login, there will not be an option to generate tokens and you can accept the agreement from the General Tab.

2. Click the hyperlink to view and accept agreement so you can generate tokens. Please note that by accepting the agreement you will become the Smart Account Approver.

QA_C2A_CUST_JUN28_SHE_V 1.0

PLEASE READ CAREFULLY THIS AGREEMENT TO USE CISCO'S SMART LICENSING SMART ACCOUNT AND OTHER SA PRODUCTS. IF YOU DON'T AGREE, CLICK “DECLINE” BELOW. IF YOU DO AGREE, CLICK “ACCEPT.”

This Agreement is between Cisco Systems, Inc. (“CISCO”), and your entity ("You" or "Customer"), for the use of and access to Smart Licensing and Smart Account, including any related documentation and materials, subject to the terms of this Agreement. This Agreement applies to updates, supplements, add-on components, and Internet-based services and portal components of Smart Licensing and Smart Account that are made available to you on such terms and conditions as specified in this Agreement.

By using Smart Licensing and Smart Account, you acknowledge that you are bound by these terms and conditions, and you accept and agree to be bound by all of the terms and conditions set forth in this Agreement.

The Concept of Smart Account: You may create a Smart Account on behalf of the organization or entity you represent. A Smart Account is not a Cisco account, it is a virtual entity used to manage the Smart Licensing and Smart Account service for a specific user. You are responsible for ensuring that all users who access Smart Licensing and Smart Account are authorized by the organization or entity they represent.

The Concept of Smart Account Approver: If you enter a Smart Account for a specific organization or entity, you will be designated as an Authorized Channel. You will be responsible for ensuring that all users who access Smart Licensing and Smart Account are authorized by the organization or entity they represent.

Thank you for choosing Cisco Smart Licensing and Smart Account. We hope you find them valuable.

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Basic Portal Navigation
Layout – Navigation

1. The Smart Software Manager has 7 tabs and provides visibility to Alerts. You can view all major and minor alerts. At the Virtual Account and Smart Account Level, when license expiration alert messages are generated for licenses that are part of a subscription, the word ‘term’ is added after the license type.

2. Throughout the tool, click the export icon to download the information in that tab.
Alerts

Major, Minor & Informational

1. View alerts for the entire Smart Account in one location.
2. Major alerts are red, Minor alerts are in yellow and Informational alerts are light blue.
3. Click Action to resolve any issues or dismiss minor/informational alerts.
4. View alerts by Virtual Account in the Inventory tab. Click Header level icon to expand message.

When viewing the Alerts Page, the alerts are sequenced in the following order: Major, Minor and Informational.

Any license or product instance that is not in compliance with the licensing agreement creates an alert. (e.g. more licenses in use than purchased)

At the Virtual Account and Smart Account Level, when license expiration alert messages are generated for licenses that are part of a subscription, the word “term” is now added after the license type.
In the Inventory – General Tab, view Virtual Account details for the selected Virtual Account.

You can also generate tokens to register new product instances to the Virtual Account. See Product Instance Section for more details.

Remember: A Virtual account is a subset of a Smart Account used to internally organize licenses.
Inventory

General

1. You can toggle between Virtual Accounts in the Inventory Section by clicking the arrow and selecting a different Virtual Account.

2. You can use the **Type Down search by Name** or **by Tag** to select a Virtual Account. This makes it easier to switch between Virtual Accounts.

Default Virtual Accounts

- Indicated with Blue Star Icon
- If items were assigned to the overall Smart Account and not a specific Virtual Account, licenses will be deposited into the default Virtual Account.
- Before setting up Virtual Accounts in CSC, all Smart Licenses will display in the default account in the Licenses tab.
Inventory Licenses

From the Licenses tab, view license inventory, license usage, which licenses have a surplus or shortage, and alerts. This keeps you informed on your licenses and actions needed to maintain compliance.

Alerts at line level indicate when licenses are expiring soon, so you know when to renew licenses. It will also notify you if you have insufficient licenses or if there is an upgrade pending. This will ensure you remain in compliance.

Insufficient License Alerts occur when more licenses are in use than are purchased. To remedy this issue:
- Transfer available licenses from another Virtual Account
- Purchase more licenses to return to compliance
Inventory Licenses

You can select multiple licenses to add tags, remove tags, and perform transfers.
Inventory Licenses - Details

1. Click on a license to view more details:
2. In the pop-up window, you can see 4 tabs: **Overview** (Virtual Account usage, License expiration), **Product Instances**, **Event Log**, and **Transaction History**.
Inventory
Licenses - Details

2 In the Transaction History tab, you can see a table featuring details such as:
   • Transaction Date
   • License SKU
   • Quantity
   • License Expiration
   • Order (Line) Number.

3 You can also select the Transaction, and a pop-up will appear with Transaction Details.
Inventory - Preferences
License Transaction Details in the Inventory Tab (Advanced View)

1. To enable **Advanced View of License Transaction Details**, go to the **Preferences** tab.

2. For **Show License Transaction Details in Inventory Tab**, change the default value from **Disabled** to **Enabled**. Once it is enabled, you will be able to see the transaction level details for licenses and perform transaction level operations.
Inventory
License Transaction Details in the Inventory Tab (Advanced View)

When **Show License Transaction Details in Inventory Tab** is enabled, the **Advanced View** and **Advanced Search** will automatically show.

1. With the **Advanced View** you can search for licenses by: **Product family**, **Source**, **Ship to Country**, **Order number** (Sales Order number or Web Order ID), **End Customer**, **SKU**, **PAK**, **PO Number**, **Expiration Date**.

2. To disable this view entirely, tick off the **Show License Transactions** option and you’ll go back to the normal screen.

3. You can also minimize the Advanced Search View.
Inventory
License Transaction Details in the Inventory Tab (Advanced View)

With the **Advanced View** you can expand the view for each license summary, which will show transaction level details of the licenses.

**Note:** There are various sources a license can come from:
- Manual Entry
- PAK Conversion
- Device Conversion
- DLC Device Conversion
- EA Workspace
- Device Request
- Order Line
Inventory
Licenses – Tagging Licenses

1. To tag a license, you can either select licenses from the summary view, or pick specific licenses in the detailed view.

2. After selecting the licenses, click Available Actions and then Add License Tags.

3. Enter the desired tags in the pop-up window, click Save. You can add multiple tags at once by clicking ‘enter’, ‘tab’ and ‘comma separator’.

   If the tag already exists, you will be able to select it from a list.

4. If the tags are being added for the first time, confirm the creation of new license tags before saving.
Inventory
Licenses - Tagging Licenses

Once saved, the license tags will show under the license, either at summary or transaction detail level.
Inventory
Licenses – Tagging Licenses

1. Click on **Manage Tags** to delete or edit already existing tags.
2. For each **License Tag**, you can see the **number of licenses** and the information about **transaction details**.
3. Clicking **Edit** will allow you to change the name of the License Tag.
You can either perform an advanced search OR a simple search based on License Tags. When performing a search based on tags, writing multiple tags will show search results with either of the tags.
To transfer a single license, select one from the list, go to Actions and click Transfer.

There are licenses which will not be made available for transfer, such as restricted licenses that are being consumed by devices, Reporting Only Licenses, and permanently reserved or specific reserved licenses.
Inventory Licenses - Transfer

2. Select a destination Virtual Account. You can select it either by name or by tag.

3. Type the desired number of licenses to be transferred.

4. Click Show Preview to see the changes in transferred licenses between Virtual Accounts.

5. Click Transfer.

6. You will see a confirmation message.

Any tags assigned to the licenses will not be persisted in the other Virtual Account.
Inventory
Licenses - Transfer

1 To transfer all of the licenses from your view in one Virtual Account to another Virtual Account, **tick off the box on top.** You can also transfer multiple licenses by selecting the corresponding boxes individually.

2 From **Available Actions**, click **Transfer**.
Inventory Licenses - Transfer

1. After selecting the destination Virtual Account, type the number of licenses to transfer.

2. You will see the totals of licenses to be transferred for each license at a summary level.

3. Again, you can click Show Preview to see the overall changes.

Any tags assigned to the licenses will not be persisted in the other Virtual Account.
Inventory Licenses - Transfer

4 In the preview you can validate the changes made, and see the before and after states of the licenses being transferred.

5 To confirm the changes, click Transfer.

6 You will see a confirmation message.
Inventory
Licenses - Change Virtual Account Assignment

1 For License Subscriptions billed By Usage (not Prepaid), you won’t be transferring the Licenses to another Virtual Account, but you can Change Virtual Account assignment: this option will allow you to copy a License from one Virtual Account to other Virtual Account(s).

2 Under Actions, click on Change Virtual Account Assignment.
In the Change Virtual Account Assignment pop-up, you will see the License and the Subscription ID.

You can assign the License to one or more Virtual Accounts (e.g. you can assign it to a Virtual Account you created for a specific Customer).

To confirm, Click OK

You will receive a success message: Licenses Successfully Assigned.
Inventory
Licenses – Change Virtual Account Assignment

7 The License Subscription is now successfully assigned (copied) to the selected Virtual Account.

8 When you expand the line, you can see all the details of the License, such as Order #, Line #, PO, Customer, Ship to, SKU, Product Family and Expiration date.
Right-to-Use licenses are set up just like Smart Licenses. RTUs are mapped to SKUs, just like Smart SKUs. RTU licenses will populate in SSM Inventory for visibility, and will remain unused until a Smart Licensing enabled version of the product requests for these RTUs.

1. The quantity **In Use** will always be **0**.
2. Click on the License to view more details.
Inventory - Right-to-Use Licenses

RTUs in SSM

1. The **Overview** tab shows a license details in SSM.

2. For RTU licenses, the number **In Use** will always be **0**.

![Overview tab](image)

**Description**

C9300 DNA Advantage in 1_EMEAR Demo

**Virtual Account Usage**

Purchased: 8 / In Use: 0 / Balance: +8

**License Types**

<table>
<thead>
<tr>
<th>Count</th>
<th>Type</th>
<th>Start Date</th>
<th>Expiration Date</th>
<th>Subscription ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Term</td>
<td>2018-Feb-27</td>
<td>2023-Feb-26</td>
<td>-</td>
</tr>
</tbody>
</table>

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Product Instances
What are Product Instances?

A product instance is an individual device with a unique device identifier (UDI) that is registered using a product instance registration token. The token is specific to the Virtual Account and you can register several instances of a product with a single registration token. Each product instance can have one or more licenses that reside in the same virtual account.

Product instances must **periodically connect** to the SSM servers during a specific renewal period. If a product instance **fails to connect**, it continues to use the license. If you remove the product instance, its licenses are released and made available within the virtual account.

Register Product Instance Using Token

Hello, I am Device-East5, I belong to BigU.edu and I am using 1x Advanced License

Token connects product to the Virtual Account and consumes license from that Virtual Account

Hello, You are Device-East5, belonging to BigU.edu and the Physics department you are ‘In-Compliance’
Inventory
General - Register Product Instance to Virtual Account

1. In the General tab of Virtual Account, click New Token.
2. Enter a Description and the number of days that you want the token to be valid for. You can also specify how many times the token can be used before expiring. In that case, the token will be expired when either the expiration or maximum number of uses is reached. Select the checkbox for export-controlled functionality and accept the terms and responsibilities.
3. Click Create Token.

NOTE: Smart Licensing Products received from Distributors will follow the same registration token creation process.
Inventory
General – Register Product Instance to Virtual Account

1. Click **Copy** to copy the newly created token, or **Download** the token to notepad, for use during product configuration and registration process.

A **Token** is required to register the product. Once the product is registered, the registration token is no longer necessary and can be revoked and removed from the table.

Registration tokens can be valid from 1 to 365 days. In addition, you can set up the maximum number of uses for each token.
You will configure the device to your specifications. One of the commands will include entering the token to register your device so that it can communicate to the Smart Software Manager.

- Smart Call Home should be configured on the device. Here is an example of a Smart Call Home configuration:

```bash
call-home contact-email-addr sch-smart/licensing@cisco.com profile "CiscoTAC-1"
  active
  destination transport-method http
  no destination transport-method email
  destination address http
  https://tools.cisco.com/its/service/oddce/services/DDCEService
  no destination address http
  https://tools.cisco.com/its/service/oddce/services/DDCEService
```
Inventory
Configure Device

2. Open a terminal window for the device and paste these commands in the Smart Software Licensing configuration commands. This is an example for a CSR configuration.

   a. (config)license smart enable
   b. (exec)license smart register idtoken
      NzkxOGQzZDEtY2E3NS00MzJhLWE1NmEtMDhjMmVjM2YyYWU4LTEzOTcwMTNhMy0xMDktMTg4NzEtMzczNC0zOGFmNTllMTQ5NzJjNjYzbWl2TXkwUUp6R0dsZStTNiI5SUVEYVpXbElpYnpM%0AMVI2TT0%3D%0A
   c. (config)license boot level premium
Inventory
Product Instances

New product instance information is displayed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Type</th>
<th>Last Contact</th>
<th>Alerts</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBCPrimeinfra</td>
<td>SDNMGMT</td>
<td>2016-Dec-20 12:44:01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSMC-01</td>
<td>FP</td>
<td>2016-Dec-13 03:55:19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FW-NET-A-A</td>
<td>FPRUHI</td>
<td>2016-Dec-26 14:01:13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>localhost.locationalain</td>
<td>ICY</td>
<td>2017-Mar-24 06:11:11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R21-XRV9K</td>
<td>IOSXRV</td>
<td>2017-Jan-28 08:21:58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inventory
Product Instance Details

1. In the Product Instance tab, product instances display.
2. Click the product instance for more details on the Product, License usage and Event Log.

Any license or product instance that is not in compliance with the smart licensing agreement creates an alert. (e.g. more licenses in use than purchased)
Inventory
Product Instance Details

1. In the Product Instance’s **Overview** tab, you can see the description of the Product and other details, such as Host Identifier, MAC Address, PID, Serial Number, UUID (if available), Virtual Account, Registration Date and Last Contact.

2. You can also see the details of License Usage.

3. In addition, you can view the Event Log.
**Inventory**

**Transfer Product Instances**

1. Under Action dropdown, click **Transfer**.
2. In the **Transfer Product Instance** dialog box, select the Virtual Account to transfer to and click **Ok**.

Transferring a product instance from one Virtual Account to another Virtual Account does not result in the corresponding licenses being transferred. You will have to transfer the licenses separately.
You can also remove product instances. Under **Actions** click on **Remove**.

A pop-up window will display and you will have to confirm this action: **Remove Product Instance**.

* When you remove a product instance from Smart Software Manager, the licenses that the product instance was using are still available and can be used by other products.

After removal, you will have the option to register the product instance again with the Virtual Account (using a Token), so that the product can communicate with the Virtual Account and consume the licenses within that Virtual Account.
The product instances need to **periodically connect** to the SSM servers during a specific renewal period. If a product instance **fails to connect**, it is marked as having a **license shortage**, but continues to use the license. **If you remove the product instance its licenses will be released and made available for other products within the Virtual Account.**
Inventory
Product Instances − Application High Availability

1. As part of the Application High Availability (HA) solution, the icon appears in the Product Instances tab next to a product instance that is configured for High Availability.

2. When you click on that Product Instance name, you will display a new tab in the pop-up window: High Availability.

On the High Availability tab there is a list of applications and peers configured for high availability on the product instance and also status information.

For more details, check this QRG: Application High Availability
Inventory
Event Log

1 In the **Event Log** tab, view recent activities and alerts of the Virtual Account to easily troubleshoot license and product inventory.
After registering a **Product Instance**, you may have the option to **add additional Licenses to your Inventory**. For certain **Product Instances**, you will be able to **add to your Inventory** additional licenses that you are entitled to use as they are mapped to a specific Product, so that you may have access to additional licenses. *This applies in particular to Products such as CUBE and CSR (but not exclusively).*

1. In the **Preferences** tab, the **Add to Inventory** option will be **Enabled** by default. The Customer Smart Account Administrator can disable this option, if needed (however the recommendation is to have it enabled).
Inventory
Self-Serve License Provisioning in SSM

1. In the **Inventory**, from the **Product Instances** tab, go to the Product Instance.
2. From the **Actions** menu, click on **Add to Inventory**.

![Image showing the steps to add a product instance to the inventory in SSM.](image-url)
Inventory
Self-Serve License Provisioning in SSM

1 In Step 1, Select Licenses, you will be able to Add to Inventory the Licenses Available to Add (i.e. Licenses that this Product is entitled to).
You can add licenses that you are entitled to use as they are mapped to that Product.

2 Click Next

Note: this action can be performed only once per License per Product Instance. For each License, you can choose to Add to Inventory only once (one attempt).
Inventory
Self-Serve License Provisioning in SSM

1. In Step 2, Review, check and confirm the set of licenses that will be added to your Inventory.

2. Click on Add to Inventory.
You will see a success message: *your Licenses have been added successfully to your Inventory.*
Inventory
Self-Serve License Provisioning in SSM

1. You can now see the additional Licenses in your **Inventory ➔ Licenses tab**.
2. If you expand each line, you will also be able to see the **Source: Self Service License**.

![Smart Software Licensing UI](image)

<table>
<thead>
<tr>
<th>License</th>
<th>Billing</th>
<th>Purchased</th>
<th>In Use</th>
<th>Balance</th>
<th>Alerts</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR 1KV AX 1G</td>
<td>Prepaid</td>
<td>20</td>
<td>0</td>
<td>+20</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Cloud Services Router</td>
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<td>2019-May-23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Showing All 2 Records
You can see the **License Transactions** in the **Activity tab**, including the addition of new Licenses to your Inventory from the Product Instance.
Inventory
SSM License Hierarchy

To enable Smart Licensing for NXOS products, Smart Software Manager can handle a license hierarchy wherein a lower tier license can have multiple upper tier licenses. For licenses with multiple tiers or licenses with hierarchy, upper tier licenses can be substituted to fulfill requests for lower tier licenses that are not available in the Inventory (insufficient quantity). The available licenses should be substituted based on their hierarchy sequence (the lowest level available will be substituted first).

In Inventory ➔ Licenses, you can see if an upper tier license (-n) is lending licenses to a lower tier license (+n).
Inventory
SSM License Hierarchy

1. Click on a License to open up the dialog box and view the License Details.
2. In the Overview tab you can see the License Details, which will show you the License Hierarchy.
3. In this example you can see that NXOS ESSEN is borrowing 10 licenses from upper tier licenses placed in the same Virtual Account. 2 licenses are fulfilled by NXOS Advantage and 8 licenses by ACI Essentials.

Only 2 licenses are fulfilled by NXOS Advantage because that is the license quantity available in the inventory. The remaining licenses are taken from the hierarchy sequence: in this case, from ACI Essentials.
License Conversion
Convert traditional licenses currently in use to Smart Software Licenses

From the **Convert to Smart Licensing** tab, you can convert Classic Licenses to Smart Licenses and gain the valuable benefits of Smart Accounts. Two options are available:

1. **Convert PAKs to Smart Software Licenses.**
2. **Convert traditional Term & Content licenses** which are currently in use, **to Smart Software Licenses**.

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License Conversion
Convert PAKs to Smart Licenses

1. From **Convert PAKs** Tab in License Conversion section, **click on the PAK to view the PAK Details**.
2. In the **PAK Details**, SKUs and corresponding Smart equivalents will be displayed.
3. **Click on Convert to Smart Licenses**.

If a partial fulfillment is not allowed, you won’t be able to choose which SKUs to convert. If partial conversion is allowed, you can select the SKUs.

If a PAK gets updated in real time an informational icon will show up indicating the PAK update is latest and not according to the time stamp.
License Conversion
Convert PAKs to Smart Licenses

Upon clicking on **Convert to Smart Licenses**, the 2 step wizard opens.

1. In **Step 1, Select Licenses** and the **Quantity to Convert** (if the PAK allows partial fulfillment). Please specify the **Destination Virtual Account**. You may need to provide the **Destination Device Type**. 
2. Click on Next.
3. In **Step 2, Review and Confirm**, double-check the SKUs to convert and **click on Convert Licenses**.

At the Review and Confirm stage you will see a warning message showing that once the licenses have been converted to Smart Licensing they will no longer appear in LRP.
License Conversion
Convert Classic Licenses to Smart Licenses

The **Convert Licenses** Tab contains devices in your Smart Account that are using traditional licenses and can be converted to Smart Software Licenses. If you do not see a device in the table, ensure that it has been assigned to your Smart Account in the License Registration Portal.

1. Click on **Convert Licenses**.
License Conversion
Convert Classic Licenses to Smart Licenses – Select Licenses

In **Step 1: Select Licenses**, you will see the License Key and the Product Family selected, as well as the Virtual Account the device is in.

1. Select the destination **Virtual Account** from the drop down, as well as the **License SKU** you would like to convert. **Only Virtual Accounts you have access to will be displayed.**

2. Click on **Next**.

If there is a mapping between the License SKUs and the Device Type, you will need to select a Device Type in Step 1. However, if there is no mapping in the backend, the Destination Device Type drop-down will not appear in Step 1.
License Conversion
Convert Classic Licenses to Smart Licenses – Review and Confirm

1. In the second step, **Review and Confirm**, you will see a warning message that once the licenses have been converted to Smart Licensing, they will no longer appear in LRP.

2. Review your selections, and then confirm by clicking on **Convert Licenses**.

---

Since all of the licenses are being converted to Smart Licensing, they will no longer appear in the Product License Registration application.
License Conversion
Convert Classic Licenses to Smart Licenses – Confirmation Message

You will receive a confirmation message showing that your licenses have been successfully converted.

In order to use these licenses on your device, it must be registered to use Smart Software Licensing in Smart Software Manager.
In the Event Log tab, you can access the latest changes, including a message featuring change descriptions.
# Device-Led Conversion

## Overview

### What is Device-Led Conversion?

With device-led conversion, license migration from Classic to Smart occurs automatically for classic licenses running on Customer devices under the following conditions:

- The Customer’s device needs to be registered in Cisco Smart Software Manager (SSM) for the automatic license conversion to take place.
- Automatic license conversion will not occur if any classic licenses on a device do not have a migration path to an equivalent Smart License.
- Migration paths from Classic to Smart Licenses are defined by the Business Units (BUs).
- Partial license conversion can still be performed manually using as-is processes in License Registration Portal (LRP) and Smart Software Manager (SSM).
- Users can now manually upload a Device-Led Conversion file in SSM (Convert from a Device File).

### What are the Customer benefits of Device-Led Conversion?

Thanks to device-led conversion, Customers can easily start using Smart Licensing while alleviating the pain points associated with a manual conversion process.
Device-Led Conversion

Overview

When devices (product instances) upgrade to a Smart Licensing image and register with Smart Software Manager for the first time, licenses on the devices can be converted from Classic or RTU licenses to Smart licenses automatically with little to no interaction needed by the end user through Device-Led Conversion.

When you register your device in SSM, the licenses go through this automatic conversion process.

If the license has already been added to the Smart Account, it will only be converted to a Smart Entitlement. If the license is NOT already in the Smart Account, it will be added to the Smart Account, and then converted to a Smart Entitlement.

Device-led conversions can only happen once.
Device-Led Conversion

Bulk Device-Led Conversion

You can now perform a **Bulk Device-Led Conversion** in the **Convert Licenses** tab.

1. You can manually upload a DLC Request File by clicking on **Convert from a Device File**.
2. A dialog box will open up: here you can **upload a Device File** downloaded from DevNet.
3. Once the Device File is uploaded, click on **Convert Devices**.

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![Device-Led Conversion Diagram]

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Device-Led Conversion
Bulk Device-Led Conversion

4 The dialog box will display the next steps:
   • The device file is being processed
   • After the devices are converted, a response file will be available in your Conversion History tab.
   • Download the response file and open it in DevNet to complete the process.

5 Go to the Conversion History tab.
Device-Led Conversion
Bulk Device-Led Conversion

6 In the Conversion History tab you can see the new File Upload for two Devices, for which Conversion is in Progress. You can also see previous File Uploads for which Licenses are converted and it is possible to Download File.

Note: the Source column will show if the source of the Device-Led Conversion is a Device or a File Upload.
Device-Led Conversion
Bulk Device-Led Conversion

7 Once the licenses are converted, you will see the Conversion Status change to Licenses Converted.

8 If you click on the Device, you will be able to view the Device Details, Virtual Account and the type of license which was converted to Smart Licensing.

Note: the Devices uploaded will not show up automatically in the Inventory. You will have to register these Devices (Product Instances) to the Smart Account/Virtual Account by using a Token in SSM.
Device-Led Conversion
Conversion History Tab

1. In the Conversion History tab you can check the details of all the devices that have attempted device-led conversion.

2. When device-led conversion takes place, one of three statuses can be assigned. The Conversion Status column displays the statuses accordingly:
   - **Licenses Converted**: all the licenses were converted.
   - **Licenses Converted with Warning**: some licenses were converted and some were not. In this case, an alert is also generated to update the user around the reason(s) why conversion was unsuccessful: e.g. the license is not eligible to be converted because there is no Smart License equivalent, or because the license has expired.
   - **License Not Converted**: all licenses have not been converted. In this case an alert is also generated.
Device-Led Conversion
Conversion History Tab

1. In the Conversion History tab you can export the entire Conversion History to a CSV/Excel file.
2. For Bulk Device-Led Conversion, you can Download File (download the response file and open it in DevNet to complete the Bulk Device-Led Conversion process).

![Smart Software Licensing Interface with Conversion History Tab highlighted]
License Conversion
Convert Classic Licenses to Smart Licenses – Automatic and Bulk Conversion

1 You can now convert Hybrid SKUs from Classic to Smart Licenses in bulk (convert multiple licenses at once). You can also set up the automatic License Conversion of Hybrid SKUs to Smart Licenses.

Bulk Conversion from Classic to Smart Licenses can be done only by Smart Account Administrators.
License Conversion
Convert Classic Licenses to Smart Licenses – Conversion Settings

In the Conversion Settings tab, the Smart Account Admin can add or modify License Conversion settings.

1. For Device Led Conversion to Smart Licensing, you can choose one of the 3 options:
   - Enabled on all Virtual Accounts
   - Enabled on Selected Virtual Accounts
   - Disabled

It is recommended to enable Automatic Device-Led Conversion on all Virtual Accounts.
License Conversion
Convert Classic Licenses to Smart Licenses – Conversion Settings

In the **Conversion Settings** tab, the Smart Account Admin can **1** enable Automatic Conversion to Smart Licensing and decide which PAKs should be automatically converted to Smart Licenses when a PAK is assigned to a Smart Account as part of a new order.

**2** You can choose either **PAKs in All Virtual Accounts** or **PAKs in Selected Virtual Accounts**.

**3** If you choose **PAKs in Selected Virtual Accounts**, you need to select the Virtual Account(s) from the dialog box: select and move to the right-hand side using the arrows.

It is recommended to enable Automatic Conversion to Smart Licensing on all Virtual Accounts and for all Products.
License Conversion
Convert Classic Licenses to Smart Licenses – Conversion Settings

1. In the Conversion Settings tab, you can choose to automatically convert PAKs for All Products or for Selected Products.

2. If you choose Selected Products, you need to select one or more Available Products from the dialog box: select and move to the right-hand side using the arrows.
License Conversion
Convert Classic Licenses to Smart Licenses - Conversion Settings

In the Conversion Settings tab, the Smart Account Admin can 1 enable Automatic Conversion to Smart Licensing and decide which Licenses on a Device should be automatically converted to Smart Licenses when a Device is assigned to a Smart Account as part of a new order.

2 You can choose either Devices in All Virtual Accounts or Devices in Selected Virtual Accounts.

3 If you choose Devices in Selected Virtual Accounts, you need to select the Virtual Account(s) from the dialog box: select and move to the right-hand side using the arrows.
License Conversion
Convert Classic Licenses to Smart Licenses – Conversion Settings

1. In the **Conversion Settings** tab, you can choose to automatically convert **Licenses on Devices** for **All Products** or for **Selected Products**.

2. If you choose **Selected Products**, you need to select one or more Available Products from the dialog box: select and move to the right-hand side using the arrows.

3. After changing any of the Conversion Settings, you need to click **Save**.
License Conversion
Convert Classic Licenses to Smart Licenses

1. In the **Convert PAKs** tab, the Smart Account Admin can **Convert PAKs to Smart Licenses in bulk**. Click on **Convert Now**.

2. In the dialog box, you are informed that eligible Licenses will be converted to Smart Licenses based on your automatic conversion settings.

3. Click **OK**. When converted, the Licenses will appear in your **Inventory** tab.

---

**Convert Eligible Licenses**
If there are any licenses that are eligible to be converted, based on your automatic conversion settings, they will be converted now.
When licenses are converted, they will be removed from the conversion tab and will appear in your inventory.
If an error occurs, a notification will appear in the Alerts tab. Please note that license conversion cannot be reversed.

You will need to open a support case to revert from Smart Licenses back to traditional licenses.
License Conversion
Convert Classic Licenses to Smart Licenses

1. The Smart Account Admin can **Convert PAKs to Smart Licenses in bulk** also in the Convert Licenses tab. Click on **Convert Now**.

2. In the dialog box, you are informed that eligible Licenses will be converted to Smart Licenses based on your automatic conversion settings.

3. Click **OK**. When converted, the Licenses will appear in your **Inventory** tab.
Reports
Licenses and Product Instance Details

Generate reports for selected Virtual Accounts: you can run reports in the tool (it will open in a web page of your browser), or export to CSV or XLS. Click on the report name (e.g. Licenses) to view the report customization pop-up and run the report.

1. The License report provides a summary of licenses count and usage.
2. The License Subscription report is a summary of current subscription licenses counts and usage.
3. The Product Instance report includes count and listing of product instances.
Reports
Licenses and Product Instance Details

1. Under any of the reporting options (Licenses, License Subscriptions, Product Instances), when you click on Run a Report, you will be redirected to the Report screen.

Note: This is a sample data for the Licenses Report.
Reports
License Reports

1 Under **Run License Report**, you can select **Virtual Accounts** from the drop down menu. **You have 3 options:**
- All Virtual Accounts
- Selected Virtual Accounts
- Accounts with ALL of these tags

2 If you choose **Selected Virtual Accounts**, you will have the option to select **Virtual Accounts** for the report. You have the option to select which Virtual Accounts you would like to run a report on. You can search by keywords.
Reports
License Reports

1. If you select **Accounts with ALL of these Tags**, you will search for multiple tags and only the Virtual Accounts with ALL of the tags that you select will be shown in the report.

2. If you select **All Virtual Accounts**, there are no search functionalities since the report will pull from all Virtual Accounts within the Smart Account.
Reports
License Reports

1. You can also filter by Licenses. You can choose to view a report generated for the All Licenses, Licenses with ALL of these License Tags or Licenses with NO License Tags.

2. If you choose to search for Licenses with ALL of these Tags, you can choose a number of tags from the drop down menu and only the licenses with all of these tags associated with them will be included in the report.
Reports
License Reports

1. If you choose to search for **Licenses with NO License Tags**, the report will pull licenses that have NO tags associated with them.

2. If you choose **All Licenses**, the report will pull all of the licenses that the user has access to.
Reports
License Subscriptions Report

Under the License Subscription Report, you can also select Virtual Accounts and Licenses.

1 For the License Subscriptions Report you can select a Subscription Status:

- All Subscriptions
- Active Only Subscriptions
- Expired or Cancelled Only Subscriptions
Reports
Product Instances Report

1. Under the **Product Instance Report**, you are also able to select the **Virtual Accounts**.

2. In addition, you can choose **Product Types**.

![Product Type Report](image-url)
Reports
Advanced Filters

In addition to the Virtual Accounts, Licenses and Subscription Status filters, you can add Advanced Filters.

The Advanced Filters Section allows you to filter by Source (drop down options shown below), Customer, Order Number, Purchase Order, Ship to Country, Product Family, SKU, Device, PAK, and Expiration.
Preferences
License Configuration

In the **Preferences Tab**, a Smart Account Admin can view the **License Configuration** section.

- If Specific License Reservation is enabled in the Smart Account, the Smart Account Admin will have the option to enable Reserved License Preinstallation.

**Specific License Reservation (SLR)** is a feature used in highly secure networks.

If you need to enable SLR, open a case via [Support Case Manager (SCM)]

Once SLR is enabled, the SA Admin will have the option to enable Reserved License Pre-installation.

- For more details, check this [Quick Reference Guide](#)
Preferences
Select Notifications

The Email notification settings are now in the Preferences Tab, below the License Configuration section.

1. Here you can select the email notifications you would like to receive.

2. Click Save before transferring to a new page.
On-Prem Accounts
SSM On-Prem (Offline Connector)

For security sensitive Customers who do not want to manage their install base using a direct Internet connection, the Smart Software Manager On-Prem is installed on the Customer premises, and provides a subset of Cisco SSM functionality.

1. On the main On-Prem Accounts tab, you will see any listed On-Prem Accounts, and you will be able to create a New On-Prem.
On-Prem Accounts
SSM On-Prem (Offline Connector)

2 Upon selecting **New On-Prem**, a pop-up will prompt you to enter the following information: On-Prem Name, Registration File and Virtual Accounts.

3 Once you click on **Generate Authorization File**, a pop-up will appear through which you can download the authorization file by clicking Download Authorization File.

Reference the SSM.Cisco.com page for more information on SSM On-Prem. You will also find the following documents:
- SSM On-Prem Overview presentations, Users Guide, Installation Guide, Data Sheet, Overview, FAQ.
- What’s more, the SSM On-Prem Overview presentation provides a very good summary of SSM On-Prem deployment models, system requirements, features, network synchronization, etc.
- SSM On-Prem Enhanced Edition
# Activity

## Holistic View of License Transactions

1. On the Activity page, in the Transaction History tab, view License Transactions and additional details.

2. You can click on the Transaction Date link to view Transaction Details and Term Details.

### Smart Software Licensing

**Activity**

<table>
<thead>
<tr>
<th>Transaction Date</th>
<th>License SKU</th>
<th>License</th>
<th>Quantity</th>
<th>License Expiration</th>
<th>Virtual Account</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-Jul-02 06:03:06</td>
<td>L-COR-5G-APP-Sr</td>
<td>CSR 1Kv APP</td>
<td>-1</td>
<td>2019-Aug-31 (Demo)</td>
<td>kkww</td>
<td>TRANSFER</td>
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<tr>
<td>2019-Jul-02 03:04:02</td>
<td>L-COR-5G-APP-Sr</td>
<td>CSR 1Kv APP</td>
<td>1</td>
<td>2019-Aug-31 (Demo)</td>
<td>kkww</td>
<td>Manual Entry</td>
</tr>
<tr>
<td>2019-Jul-02 03:04:02</td>
<td>L-COR-5G-APP-Sr</td>
<td>CSR 1Kv APP</td>
<td>1</td>
<td>2019-Aug-31 (Demo)</td>
<td>kkww</td>
<td>Manual Entry</td>
</tr>
<tr>
<td>2019-Jul-02 03:04:02</td>
<td>L-COR-5G-APP-Sr</td>
<td>CSR 1Kv APP</td>
<td>1</td>
<td>2019-Aug-31 (Demo)</td>
<td>kkww</td>
<td>Manual Entry</td>
</tr>
</tbody>
</table>

**Transaction Details**

- **Transaction Date:** 2019-Jul-02 13:23:12
- **License SKU:** L-COR-2G-AX-Sr
- **License:** CSR 1Kv AX
- **Quantity:** 5
- **License Expiration:** 2019-Aug-01 (Demo)
- **Virtual Account:** jonn
- **Source:** Manual Entry

**Term Details**

- **Subscription ID:** -
- **Subscription Status:** -
- **Start Date:** 2019-Jul-02
- **Expiration Date:** 2019-Aug-01
On all pages, there are links to provide feedback, raise a support case and for in tool help.
Virtual Chat Assistant
Virtual Assistant in SSM

You can now access the **Virtual Chat Assistant (VCA)** from Smart Software Manager. The Virtual Chat Assistant will appear as a blue icon in the upper right-hand corner, in SSM.

1. Click the Virtual Assistant icon 📺 to open VCA.
2. The **Licensing Help Central** page appears and you can enter a message/type in your questions.

For more details, check this QRG: **VCA Quick Reference Guide**
Additional Resources
Customer Support
Submitting Cases

Software Licensing Support:
If you have support questions about Software Licensing, open a case via Support Case Manager (SCM).

To learn more on how to open a case in SCM, click here.

Product Support: Technical Assistance Center (TAC)
For Technical Support questions, please contact Cisco TAC: Worldwide Support Contacts
## Additional Resources for End Customers

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://cisco.com/go/smartaccounts">http://cisco.com/go/smartaccounts</a></td>
<td>Cisco Smart Accounts Overview</td>
</tr>
<tr>
<td><a href="http://cisco.com/go/smartlicensing">http://cisco.com/go/smartlicensing</a></td>
<td>Cisco Smart Software Licensing Overview</td>
</tr>
<tr>
<td>Training Schedule</td>
<td>Additional Software training and informational resources</td>
</tr>
<tr>
<td>Orderable Smart Licensing SKU List</td>
<td></td>
</tr>
<tr>
<td>Cisco Software: Capability Overview for Customers</td>
<td>Cisco Software Overview: Smart Accounts, Smart Licensing, Cloud/ SaaS and EA</td>
</tr>
<tr>
<td>Cisco Software: Smart Account Request and Setup for Customers</td>
<td>How to request and set up a Smart Account.</td>
</tr>
<tr>
<td>Cisco Software: Smart Account Administration for Customers</td>
<td>How to manage a Smart Account in terms of Virtual Accounts, Users, User Groups, etc.</td>
</tr>
<tr>
<td>Cisco Software: Smart Licensing Management with Smart Accounts</td>
<td>Smart Licensing Management in Smart Software Manager</td>
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<tr>
<td>Cisco Software: Classic Licensing Management with Smart Accounts</td>
<td>Classic Licensing Management in the License Registration Portal</td>
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<tr>
<td>Cisco Software: EA Workspace</td>
<td>EA Workspace E2E Training Guide</td>
</tr>
<tr>
<td>Smart Account Leading Practices – Customers</td>
<td>Smart Accounts Leading Practices for End Customers</td>
</tr>
<tr>
<td>Request Customer Smart Account Quick Reference Guide</td>
<td>Quick step-by-step guide on how to initiate a request for a Customer Smart Account</td>
</tr>
<tr>
<td>Complete Customer Smart Account Setup Quick Reference Guide</td>
<td>Quick step-by-step guide on how to complete the setup for a Customer Smart Account</td>
</tr>
<tr>
<td>Getting Started with Smart Accounts Quick Reference Guide</td>
<td>Quick guide on how to create a Customer Smart Account in Cisco Software Central (CSC)</td>
</tr>
<tr>
<td>Assign a Partner to Manage Account on your Behalf Quick Reference Guide</td>
<td>Quick step-by-step guide on how a Customer can assign a Partner to manage their Smart Account</td>
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<tr>
<td>Request Access to an Existing Smart Account</td>
<td>Quick step-by-step guide on how to request access to an existing Smart Account</td>
</tr>
<tr>
<td>Virtual Account Custom Tagging Quick Guide</td>
<td>- How to add Custom Tags to Virtual Accounts</td>
</tr>
<tr>
<td>Smart Software Licensing: Specific License Reservation</td>
<td>- Quick Guide on Specific License Reservation (SLR) in Smart Software Manager.</td>
</tr>
</tbody>
</table>
Backend Communication Channels and Ports

Authorized Backends

Cisco Smart Software Manager (SSM) (cisco.com)
HTTPS: tools.cisco.com (Port 443)
HTTP: www.cisco.com (Port 80) (Cert Downloads)

SSM On-Prem (formerly known as SSM satellite)
User Interface: HTTPS (Port 8443)
Product Registration: HTTPS (Port 443), HTTP (Port 80)
Communication to SSM: HTTPS (tools.cisco.com, api.cisco.com, cloudsso.cisco.com, swapi.cisco.com), port 443
Questions?
Appendix: Device-Led Conversion
Device-Led Conversion
Conversion Checks

If a device-led conversion has never been triggered for a device in the past, then several checks take place to verify if the conversion should happen.

Conversion will happen in the following scenarios:
✓ If a device is successfully registered and migration has not happened on this device and the Customer has not disabled auto migration.
✓ If migration is triggered on an active device in high availability relationship, all devices in a high availability relationship with this device will be migrated.
✓ If a new device is added to an existing HA configuration, it will automatically trigger migration of that device.
✓ If a device goes from standby to active it will check its auto migration status. If it has not already done an automatic migration, it will start one.

If approved, Classic licenses and RTU Licenses associated with that device get converted to Smart Entitlements.
Device-Led Conversion
Conversion Checks

Automatic conversion will not happen in the following scenarios:
✓ If a migration has already happened on the device, automatic conversion should not happen and the user should be displayed an error message on Device as "Already Converted".
✓ If a device is already registered and then reloaded (rebooted) and it has not already done a migration.

Manual conversion will not be triggered in the following scenarios:
✓ If a conversion has already happened on the device, manually triggered conversion should not happen and the user will be displayed an error message as “already converted.”
✓ If a customer does a migration then disables Smart Licensing, installs additional license files, then re-enables and migrates again, the second attempt should not migrate the additional licenses because it already migrated once
✓ If a second manual migration attempt is triggered while a current migration is pending, it will not be successful.
Device-Led Conversion
Conversion History Tab

Click the data under the **Device Identifier** column to view additional details for that particular device. A pop-up appears showing additional details about the device and conversion status.

**Example 1**: Here are additional details for a device that has the conversion status of **Licenses Converted**. In this example, the additional details also include information around the device’s classic/RTU licenses and associated smart licenses, along with information on whether the license was successfully converted or not, and the reason why not, if applicable. Reasons why they may not be converted are because the license has expired or it does not have a Smart Equivalent.

**Example 2**: Here are additional details for a device that has a Conversion status of **License Not Converted**. In this example, the additional details also include information around the device’s classic licenses and associated smart licenses, along with if the license was successfully converted and the reason why not, if applicable.

Note: The ineligibility of one license does not affect the conversion of other licenses.
Device-Led Conversion
Conversion History Tab

Example 3: Here are some additional details for a device that has a conversion status of **License Not Converted**. Due to the ineligibility of one or more licenses, the entire conversion process was not completed.

Example 4: Here is an example for a device that has a conversion status of **License Not Converted**. Due to being unable to establish a communication, the entire conversion process was not completed.

Note: the System checks to see if the SKU should have smart licensing equivalent or not based on settings in Software Licensing Tool.
- If the Smart equivalent should be there, it will stop the Device-Led Conversion from happening.
- If the Smart equivalent should not be there, it will not stop the Device-Led Conversion happening for other licenses.
Appendix: License Upgrade
Inventory – License Upgrade

Overview

License Upgrade is a feature that allows you to see what upgrades are available for your licenses in Smart Software Manager. It will help you identify which licenses you want to use and in which Virtual Account.

When an upgrade feature of an existing license is purchased, it should ideally replace the existing license in Smart Software Manager. However, currently there is no such provision. As a result, both the existing and upgrade licenses are in the same inventory and can be used by multiple instances. When a user purchases an upgrade SKU, the entitlements in the upgrade SKU are deposited in the Smart Account as “Pending Upgrade” entitlements. The user can choose to upgrade these entitlements with several options based on the upgrade SKU mapping. The user will make the choice of the upgrade path and the entitlement is added to the license inventory. Whichever entitlement it is upgraded from will be removed from the license inventory and Virtual Account.

Examples for which license upgrade may take place are:
- Collab customer purchases an upgrade from “Basic” to “Enhanced Plus”
- Catalyst 9K customer purchases an upgrade from “Network Essentials” to “Network Advantage”
Inventory – License Upgrade

Here you can see an example of entitlements being added through an upgrade SKU. In this example, 0 is provisioned from a non-upgrade SKU and 20 is provisioned through an upgrade SKU. In other words, there are 20 licenses that are pending upgrade and hence, cannot be consumed by product instances.
Inventory – License Upgrade

Whenever a pending upgrade license is added to a Virtual Account, an event gets generated.
You can view this in the **Event Log** tab under the **Inventory** tab.
Inventory – License Upgrade

1. You will see an informational message for the licenses pending upgrade.
2. There are three ways from where you can open the Upgrade Licenses wizard:
   3a. Using the Upgrade Pending link in the Alerts column
   3b. Selecting Complete Upgrade option from the Actions drop down in the Actions column
   3c. After clicking on a license name in the license inventory, click on the Actions drop down in that model, click Complete Upgrade
Next, the Upgrade Licenses wizard opens up. The Upgrade To shows the value which is the pending upgrade entitlement. In this example, BAT_Upgrade1 is the pending upgrade entitlement.

In the Quantity text box, you can enter a value indicating how much you want to upgrade for BAT_Upgrade1. Using the To Virtual Account drop down, you can also transfer the upgrade pending entitlement to a different Virtual Account. The upgrade will happen in the destination Virtual Account and the upgrade from entitlement will also be removed from this destination Virtual Account. By default it displays the Virtual Account from which this upgrade action was triggered.

Any tags assigned to the current licenses are not automatically assigned to the upgrade licenses.
Enter the value in the **Quantity** text box and click the **Apply** button. The system will show the different upgrade path options available to the user based on the upgrade mapping (in this example, we have only one option). There can be different scenarios based on the upgrade mapping. If the Virtual Account is changed, the upgrade paths will also refresh.

**Note:** Only those different scenarios based on the upgrade mapping will be available for which the quantities are available. These upgrade paths can be perpetual to perpetual or term to term. It will never be a combination of both.
5a If you enter a quantity which is not available, the system will throw an error asking you to decrease the quantity. The screenshot highlights the error received in the above scenario.

6 Only if a valid upgrade path is selected you can click the Next button.
Inventory – License Upgrade

7 In Step 2: Review page of the wizard appears.

8 Review the information and click the Submit button.
Inventory – License Upgrade

Upon successful completion of the upgrade process, you will see the message as highlighted in the screenshot.

Based on your choice of the upgrade path, the entitlement is added to the license inventory. Whichever entitlement it is upgraded from will be removed from the license inventory and Virtual Account.

In addition, an event is also generated in the Event Log tab.

If you change the Virtual Account during the process, this will be added into the event log.

An event will also be generated when the licenses are added to the Virtual Account via the upgrade.
Inventory – License Upgrade

There could be instances that while you were reviewing the information, the quantity became unavailable. This could be due to simultaneous upgrade happening by different users.

In this case, when you click the Submit button, an error is generated. The screenshot highlights the same error.

You will now have to click the Start Over link to start the process again.
Appendix: Reporting Only Licenses
Inventory – Reporting Only Licenses

✓ Reporting Only Licenses are zero-dollar base licenses that are bundled with the hardware and these licenses are not purchased separately via a commerce transaction.

✓ Reporting Only Licenses are the “base” component of the Software and included in the price of the Hardware, so not monetized or productized separately.

✓ When the User is purchasing a device which has Reporting Only Licenses mapped to it, after the order is completed, the Reporting Only Licenses will not automatically flow in the Inventory pool in SSM.

✓ Only when the User registers the Product Instance (Device) in SSM, the User will see the consumption of Reporting Only Licenses in the Inventory, in the Smart Account/Virtual Account to which the device is registered.

✓ Removing a Product Instance will result in a permanent removal of Reporting Only License from the License Inventory.

✓ Reporting Only Licenses will not be released back to the pool if the Product Instance is removed.
Inventory – Reporting Only Licenses

1. When you register a product instance, the "Reporting Only" License will be visible in the Licenses tab of your Virtual Account.

2. An entry is created in SSM so the purchased quantity and in use are exactly the same; there will never be a surplus or shortage.
Inventory – Reporting Only Licenses

When you click on the License Name for a Reporting Only License in the License tab of SSM, a message will be displayed: **this license is included with certain products and is automatically added to your Smart Account during Product Instance registration. These licenses can only be transferred to other Virtual Accounts along with the Product Instances using them.**
Inventory – Reporting Only Licenses

Reporting Only Licenses

1. You will not be able to transfer a "Reporting Only" License between Virtual Accounts. If you attempt to do this an error message will be displayed.

This is because the Reporting Only License is locked to the product instance and can only be transferred if the product instance is transferred.
In the Product Instances Tab you will be able to transfer Product Instances from one Virtual Account to another, even when they have "Reporting Only" Licenses.
## Version History (August 2019)

<table>
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<th>Slide #</th>
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<tr>
<td>102</td>
<td>Update to authorized backends</td>
<td>N/A</td>
</tr>
<tr>
<td>9, 19, 94, 95</td>
<td>Replaced SSM Satellite with SSM On-Prem, where possible</td>
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## Version History (October 2019)

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<td>Rebranding from SSM Satellite to SSM On-Prem (SSM User Interface) – mainly updated screenshots and some commentary.</td>
<td>September 27th</td>
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<tr>
<td>17, 94, 95</td>
<td>Rebranding from SSM Satellite to SSM On-Prem (SSM User Interface) – updated text/commentary in addition to screenshots</td>
<td>September 27th</td>
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## Version History (December 2019)

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<tr>
<td>66, 68</td>
<td>License Conversion Enhancement, Device Type</td>
<td>December 6th, 2019</td>
</tr>
<tr>
<td>95</td>
<td>Minor changes, related to SSM On-Prem</td>
<td>December 2019</td>
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<td>15, 17, 18, 19, 20, 21, 22, 23, 25, 26, 30, 31, 32, 33, 34, 37, 38, 39, 40, 44, 51, 52, 53, 54, 55, 56, 59, 60, 62, 64, 65, 67, 71, 73, 74, 75, 76, 92, 93, 94, 96, 97, 106, 107, 112, 113, 123, 124, 125</td>
<td>Screenshot updates due to the new layout of the Virtual Chat Assistant</td>
<td>December 13th, 2019</td>
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<tr>
<td>98</td>
<td>Updated slide about the Virtual Chat Assistant</td>
<td>December 13th, 2019</td>
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<td>67</td>
<td>Bulk Device Led Conversion – updated screenshot</td>
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<td>72, 73, 74, 75, 76, 77, 78, 79</td>
<td>Bulk Device Led Conversion – new or updated slides</td>
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## Version History (February 2020)

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<td>103</td>
<td>Update to the Virtual Chat Assistant layout (updated screenshot).</td>
<td>February 14th, 2020</td>
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## Version History (May 2020)

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<td>57, 97, 105</td>
<td>Modified Support slide to include Support Case Manager</td>
<td>May 2020</td>
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## Version History (June 2020)

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<tbody>
<tr>
<td>All slides</td>
<td>PPT format update/refresh</td>
<td>June 2020</td>
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