



# Connecting the Dots: Smart Account and Smart License Learning Series

An Introduction to Cisco Smart Software Manager On-Prem

April 2019

# In this session, we will cover:

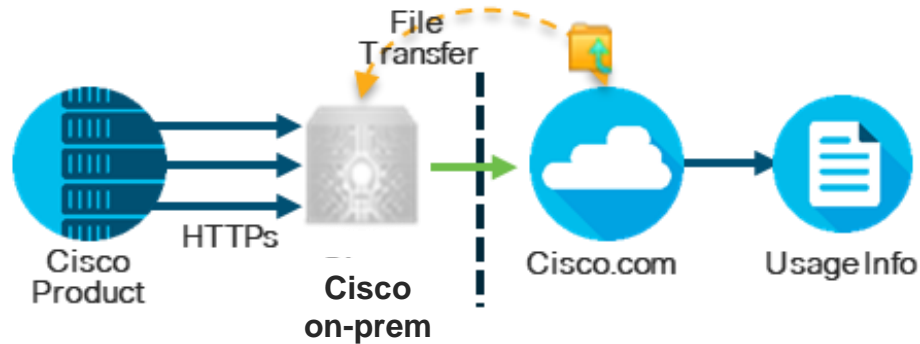
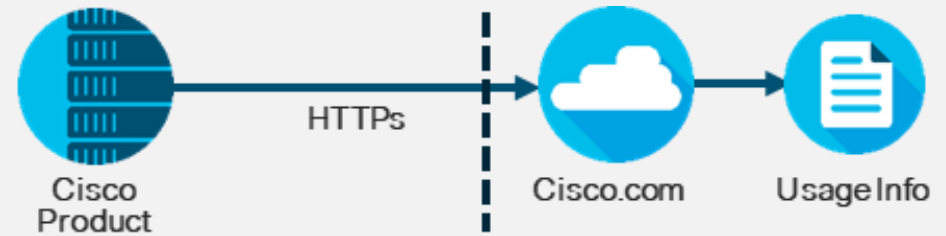
- 1 Cisco Smart Software Manager On-prem Overview
- 2 Cisco SSM On-prem Benefits
- 3 On-prem Enhanced Edition Overview
- 4 Manage Your On-prem
- 5 On-prem Deployment Modes



# Deploying Smart License Enabled Products

## 1. Direct cloud access (Default)

Cisco product sends usage information directly **over the internet or through a HTTP Proxy Server**. No additional components are needed.

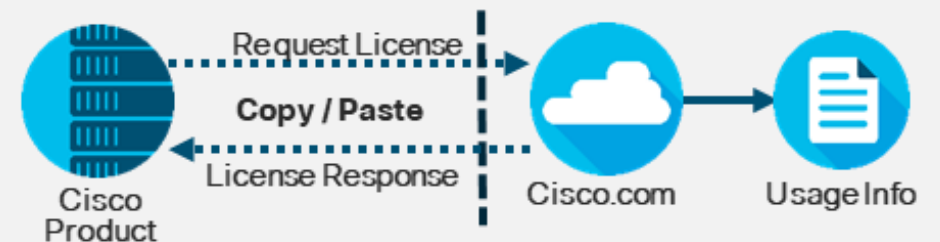


## 2. Access Through An On-premise License Management

Cisco products send usage information to a **locally installed on-prem**. Periodically, exchange information automatically in connected environments or manually in disconnected environments.

## 3. Full Offline Access – License Reservation

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.



# What is Cisco Smart Software Manager (SSM) On-prem?



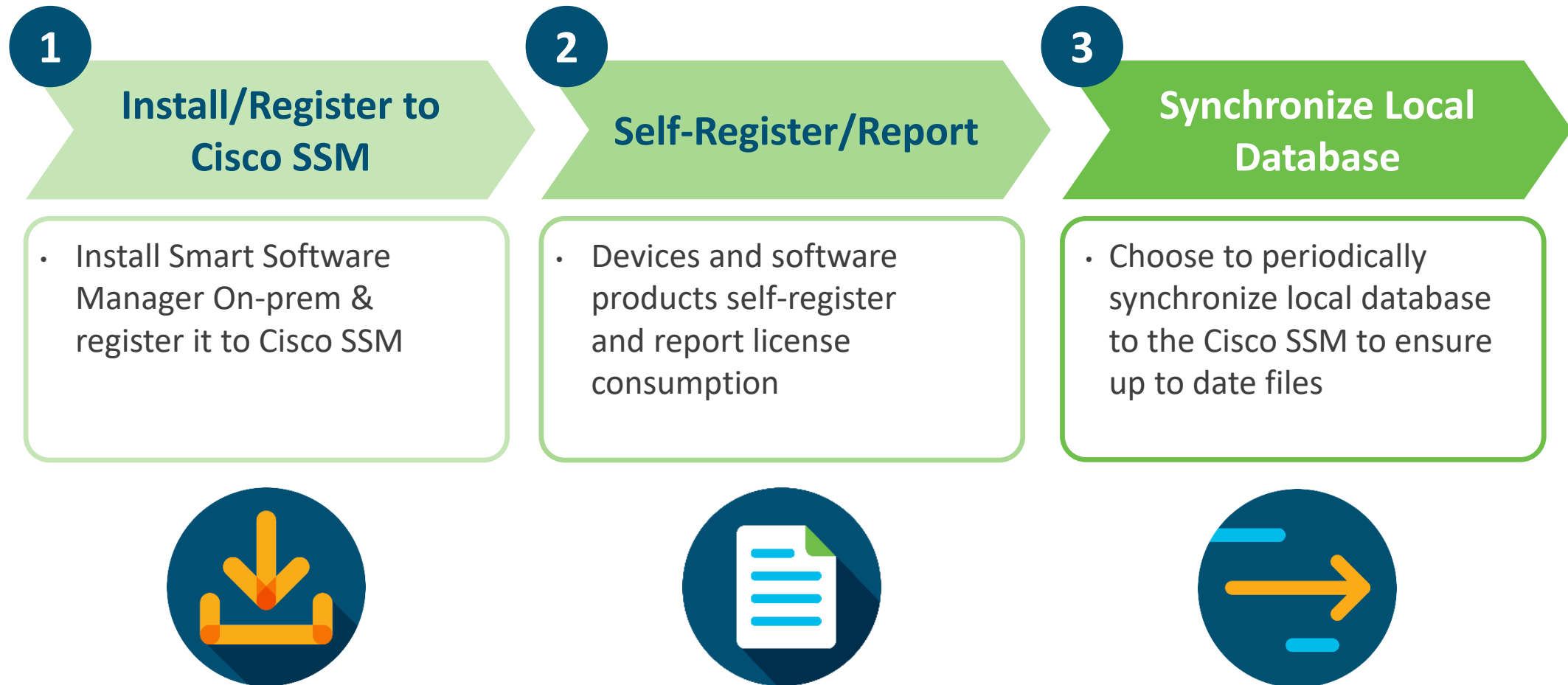
## A Cisco Smart Software Manager On-prem is...

A component of Cisco Smart Licensing and works in conjunction with the cloud-based Cisco Smart Software Manager (SSM), to intelligently manage the customer or partner's product licenses providing near real time visibility and reporting of the cisco licenses they purchase and consume.

## A Cisco Smart Software Manager On-prem is ideal for...

Customers who have strict security requirements and do not want their products to communicate with the central licensing database on Smart Software Manager over a direct Internet connection. most often this is used by financial institutions, utilities, service providers & government organizations.

# How does Cisco SSM On-prem Work?



Find Cisco SSM On-prem User Guides at: <http://www.cisco.com/go/smarton-prem>

# Cisco SSM On-prem Benefits

## On-prem Benefits

### Trusted Security



Secure on-premises single source of truth of license consumption

### Real-time Entitlement



Near real-time license entitlement based on synchronization schedules with backend install base

## Smart Licensing Benefits

### Utilization Visibility



Complete view of software, services, and devices in easy-to-use portal.

### Increased Control



Flexible licensing pooling enable licenses to be reused across devices and the organization

### Unlocked



Elimination of the node-locking of licenses to devices, simplifies the RMA process

### Cost



Save time and money through efficient license usage

### Reduction

# Enhanced Edition – Deployment Model Overview



CSSM On-prem Enhanced Edition



Service Providers



Cisco Partners



Large Enterprises

Supports multiple  
local accounts



Scales up to 10,000  
product instances, 500K  
devices and 500  
accounts



Provides online or  
offline connectivity



Similar User Interface  
to Cisco SSM



Enables faster code  
drop and feature parity  
at Cisco SSM



To get a more detailed description of On-prem Enhanced Edition in the User Guide, visit [www.cisco.com/go/smarton-prem](http://www.cisco.com/go/smarton-prem)

# On-prem Enhanced Edition Portals: Licensing Portal v. Admin Portal

## Licensing Portal



Similar functionality to [software.cisco.com](https://software.cisco.com)



Users can manage their local accounts, users, product instances, devices and licenses



Users can create new on-prem accounts, request access to on-prem accounts and manage on-prem accounts and local virtual accounts



## Administration Portal



Enables internal administrative functions including user control, account management, registration, synchronization, and much more



Supports additional functionality including external authentication, syslog and proxy support



Restricted to only authorized users



# Licensing and Administration Portal Roles



## Licensing Portal Roles

Similar to CSSM Smart Account and Virtual Account roles but at the local level within the on-prem.

**Local Account Admins**

**Local Account Users**

**Local VA Admins**

**Local VA Users**



## Administration Portal Roles

### System Users

Have read-only permission on the Admin portal and have role based access control in the licensing portal



### System Operators

Have full admin access to all the local accounts, can perform on-prem registration/ synchronization, & can not change system configurations



### System Admins

Have all of the abilities as the System Operator plus they can approve and delete local accounts and complete all system configurations

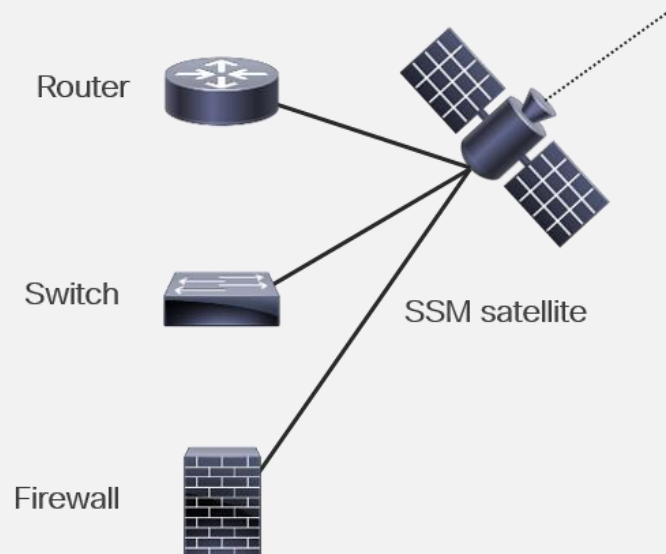


# Deployment Modes – Connected v. Disconnected



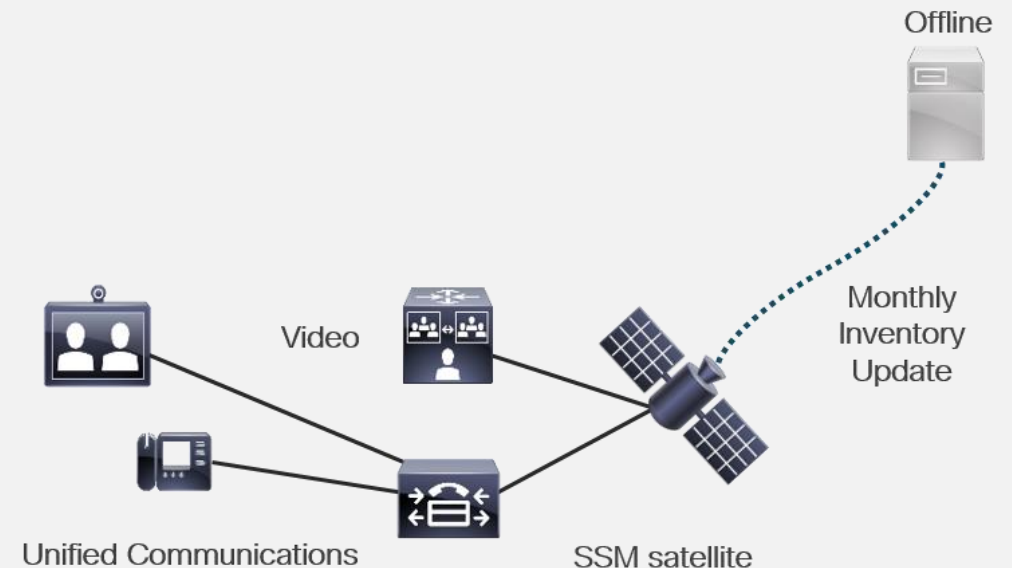
## Connected

- Mode is used when there is direct connectivity to cisco.com from the on-prem
- License consumption and entitlement can be synchronized with Cisco SSM on-demand or automatically via scheduling
- Standard model for Enhanced Edition, easiest to deploy

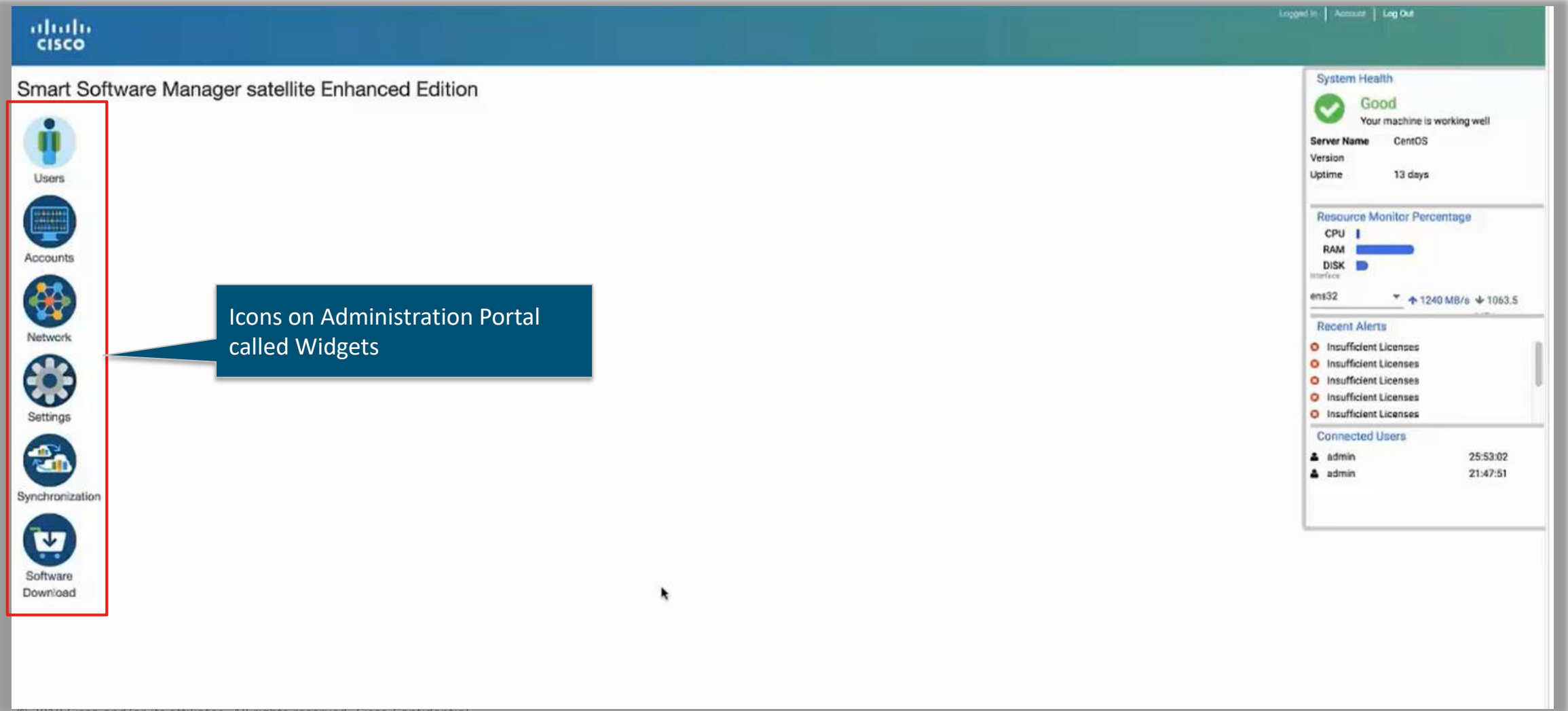


## Disconnected

- Mode is used when there is no connectivity to cisco.com from the on-prem
- On-prem can be synchronized with Cisco SSM via a file upload and download



# CSSM On-prem Extended Edition User Interface: Administration Portal



# Administration Portal - Users

Smart Software Users

Users

1

Create

Search by User Name

User Name	Email Address	Authentication Provider	System Role	Status	Actions
admin		Local	System Admin	Enabled	Actions...
tianyuz	jogaff@cisco.com	LDAP	System User	Enabled	Actions...
johnG	jogaff@cisco.com	LDAP	System User	Enabled	Actions...
ktn-test-user	ktn22030@yahoo.com	Local	System User	Enabled	Actions...
dsavage	dsavage@cisco.com	Local	System User	Enabled	Actions...

2

System Health

Good

Your machine is working well

Server Name CentOS

Version

Uptime 13 days

Resource Monitor Percentage

CPU 1

RAM

DISK

Interface

ens32 1240 MB/s 1063.5

Recent Alerts

- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses

Connected Users

- admin 25:53:32
- admin 21:48:21

On the **Users** widget in the administration portal

1. Add new users
2. View existing users added when they log into the licensing portal from LDAP – an external authentication server

# Administration Portal - Accounts

Smart Software Accounts

Accounts

New Account

Search by Account Name

Account	Requested By	Cisco Smart Account	Cisco Virtual Account	Account Status	Actions
registrationTest-10.15	jogaff@cisco.com	DLO Test Account	registrationTest-10.15-va	Active	Actions
Kathleen-Test1	ktn@cisco.com	DLO Test Account	KTN New Test VA1	Active	Actions
demo account-10.16	ktn@cisco.com	DLO Test Account		Active	Actions
Kathleen-Test-Account	ktn@cisco.com	DLO Test Account	New-VA-KTN	Active	Actions
demo account-10.23	jogaff@cisco.com	DLO Test Account	demo account-10.23-va	Active	Actions

Showing All 5 Records

System Health

Good  
Your machine is working well

Server Name: CentOS  
Version:  
Uptime: 13 days

Resource Monitor Percentage

CPU |  
RAM |  
DISK |

Recent Alerts

- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses

Connected Users

- admin 25:53:47
- admin 21:48:36

In the **Accounts** widget,

1. Create new on-prem account and register to CSSM if you are a system administrator or request a new account
2. Request access to an existing account

# Administration Portal - Network

The screenshot displays the Cisco Smart Software Network Administration Portal. The left sidebar contains icons for Users, Accounts, Network, Settings, Synchronization, and Software Download. The 'Network' icon is highlighted with a red box. The main content area shows the 'Network' configuration page with tabs for General, Network Interface, and Proxy. The 'Network Interface' and 'Proxy' tabs are highlighted with red boxes. Callout boxes 1 and 2 point to these tabs respectively. The 'General' tab is currently selected, showing fields for Satellite Name, Default Gateway Settings (IPv4 and IPv6), and DNS Settings (Primary, Alternate, and Alternate DNS). The right sidebar contains a 'System Health' section with a 'Good' status, a 'Resource Monitor Percentage' section with CPU, RAM, and DISK usage bars, and a 'Recent Alerts' section listing four 'Insufficient Licenses' alerts. Below these is a 'Connected Users' section showing two users: 'admin' with session times 25:55:48 and 21:50:37.

- In the **Network** widget,
1. Configure up to four network interfaces for the on-prem
  2. Configure proxy

# Administration Portal - Settings

The screenshot shows the Cisco Administration Portal interface. On the left sidebar, the 'Settings' icon is highlighted with a red box. The main content area displays the 'Smart Software Settings' window. Within this window, the 'Messaging' tab is selected and highlighted with a red box. A blue callout box with the number '1' points to the 'Display Message?' checkbox, which is checked. Below this, there is a text input field containing 'UNCLASSIFIED - DO NOT DUPLICATE'. Further down, there is a 'Black on Red' section and a 'Login Page Message' section with a text area containing a welcome message. A 'Save' button is located at the bottom of the settings form. On the right side of the portal, there are several widgets: 'System Health' showing 'Good' status, 'Resource Monitor Percentage' for CPU, RAM, and DISK, 'Recent Alerts' listing 'Insufficient Licenses', and 'Connected Users' showing two active users.

In the **Settings** widget,

1. Configure system parameters such as message of the day, external authentication, syslog support, and email server

# Administration Portal - Synchronization

Smart Software Synchronization

Accounts Schedules

1

0 Major 0 Minor

Search by Name

Name	Satellite Name	Last Synchronization	Synchronization Due	Alerts	Actions
demo account-10.23	demo account-1...	2018-Oct-23 10:18:00	2018-Nov-22 10:18:00	Synchronization Successful	Actions
Kathleen-Test-Account	Kathleen-Test...	2018-Oct-23 20:58:18	2018-Nov-22 20:58:18	Synchronization Successful	Actions
demo account-10.16	demo account-1...	2018-Oct-23 09:45:51	2018-Nov-22 09:45:51	Synchronization Successful	Actions
registrationTest-10.15	registrationTe...	2018-Oct-15 21:31:05	2018-Nov-14 21:31:05	Synchronization Successful	Actions
Kathleen-Test1	Kathleen-Test1	2018-Oct-15 21:37:32	2018-Nov-14 21:37:32	Synchronization Successful	Actions

System Health

Good

Your machine is working well

Server Name CentOS

Version

Uptime 13 days

Resource Monitor Percentage

CPU

RAM

DISK

Recent Alerts

- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses
- Insufficient Licenses

Connected Users

admin	25:56:33
admin	21:51:22

In the **Synchronization** widget,  
1. Perform on-demand or scheduled  
synchronizations to Cisco SSM



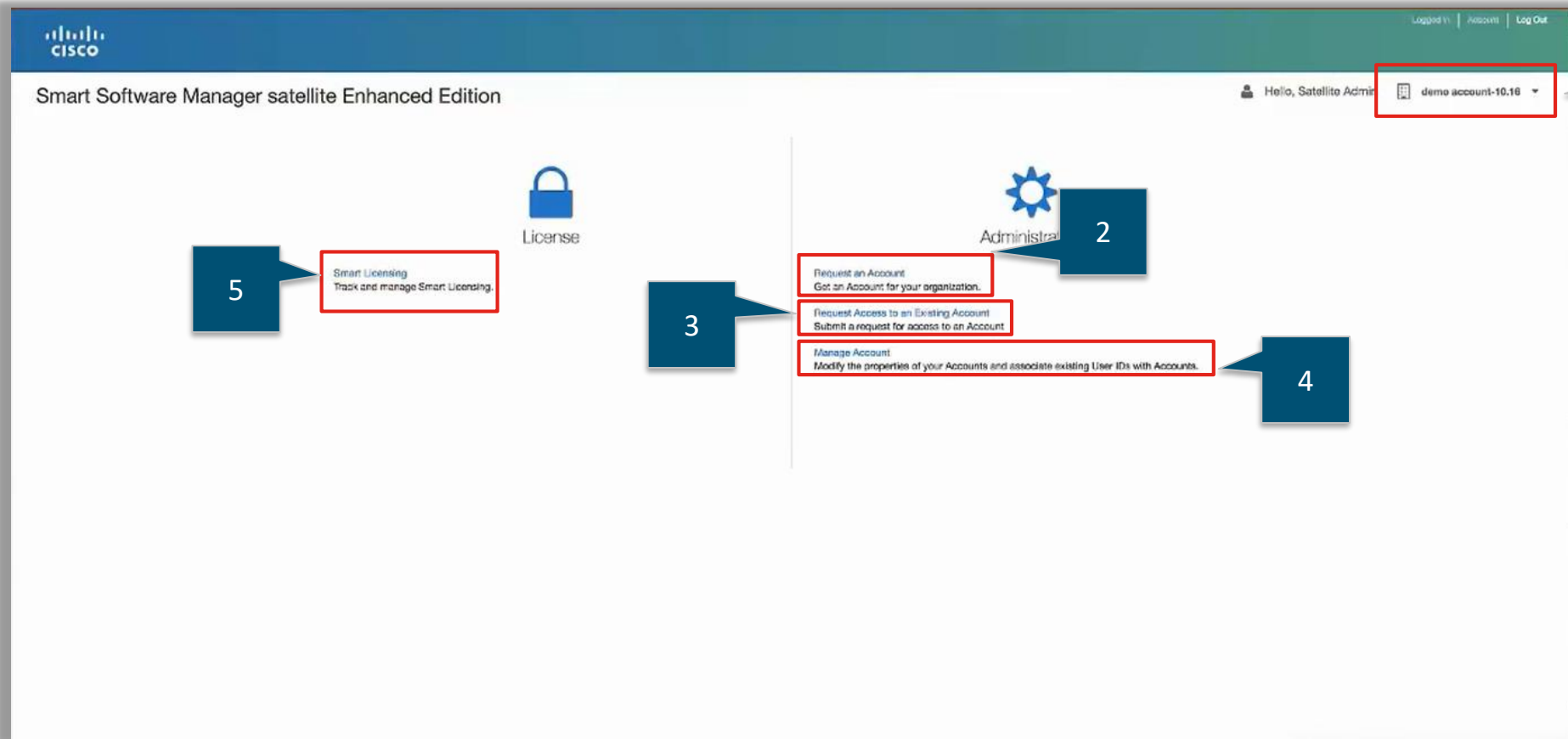
# Administration Portal - Software Download

The screenshot displays the Cisco Administration Portal interface. The main content area features a 'Smart Software Downloads' widget. Within this widget, the 'Software Downloads' tab is active, and the 'New File' button is highlighted with a red box and a blue callout labeled '1'. The left sidebar contains navigation icons for Users, Accounts, Network, Settings, Synchronization, and Software Download, with the latter being highlighted by a red box. The right sidebar provides system health information, including a 'Good' status, server details (CentOS, 13 days uptime), and resource monitor percentages for CPU, RAM, and DISK. Below this, a 'Recent Alerts' section lists four 'Insufficient Licenses' warnings, and a 'Connected Users' section shows two active users.

In the **Synchronization** widget,

1. Populate software images for customers to download directly from their on-prems if they have purchased them in their smart account

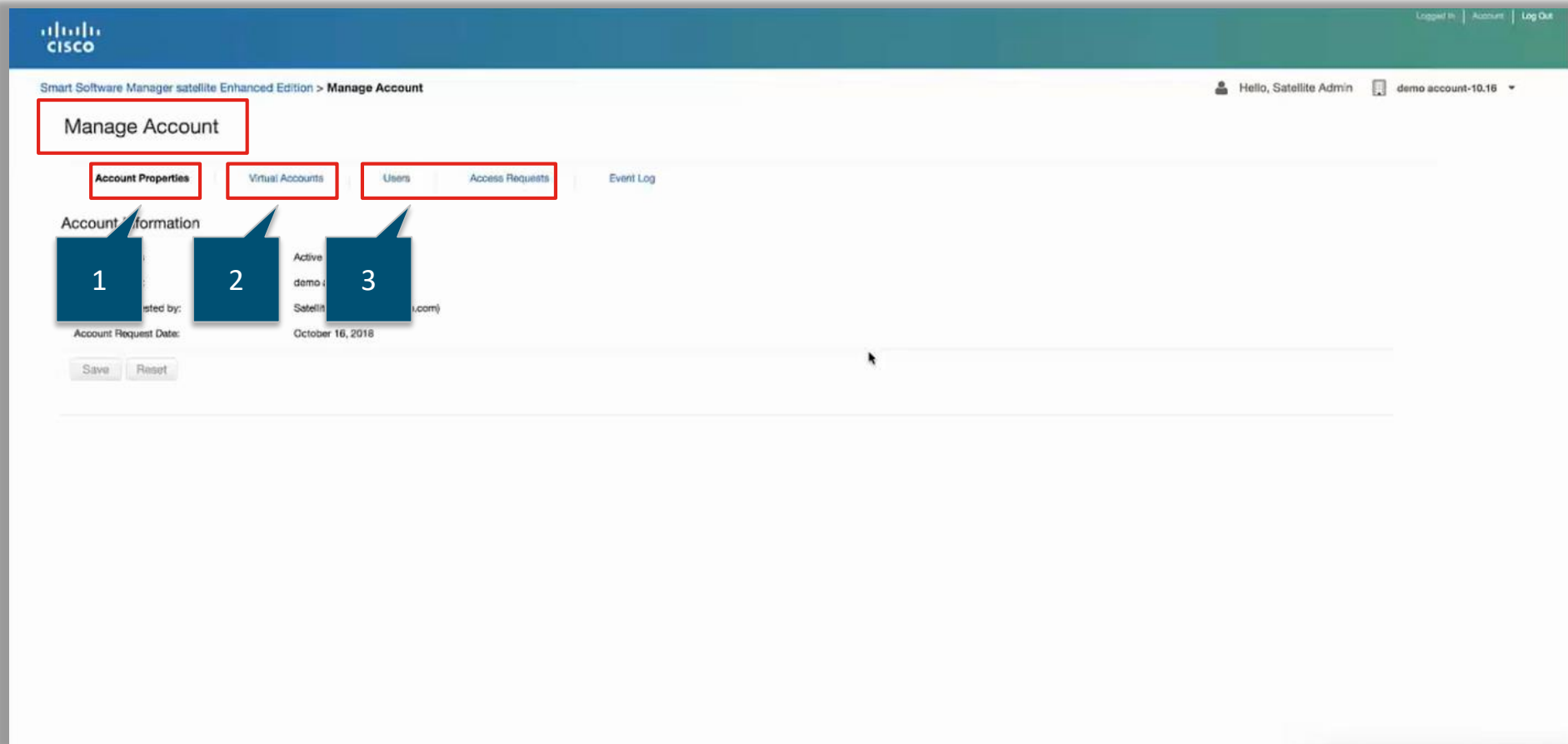
# Licensing Portal



In the **Licensing Portal**,

1. View on-prem account name
2. Request an account
3. Request access to an existing account
4. Manage account
5. Select **Smart Licensing** for functions similar to CSSM

# Licensing Portal – Manage Accounts



In the **Manage Account** tab,

1. View account properties
2. Create Virtual Accounts
3. Enable role based access such as account administrator, account user, local virtual account administrator or local virtual account user

# Licensing Portal – Smart Licensing

Smart Software Manager satellite Enhanced Edition > Smart Licensing

Smart Licensing

Alerts Inventory Reports Satellites Activity

1

Alerts

1 Major 0 Minor

Sev	Message	Source	Action Due	Actions
Major	Insufficient Licenses - The Virtual Account "KTN Local VA1" has a shortage of "CSR 1KV AX 100M" licens...	KTN Local VA1	Now	Actions

Showing All 1 Records

In the **Smart Licensing** tab,

1. View the same options as on CSSM – **Alerts, Inventory, Reports, on-prems, Activity**

**Please note:** These operations are local to on-prem

# Licensing Portal – Inventory

Smart Software Manager satellite Enhanced Edition > Smart Licensing

Logged In | Account | Log Out

Hello, Satellite Admin | demo account-10.16

### Smart Licensing

Alerts **Inventory** Reports Activity

Virtual Account: KTN Local VA1

General Licenses Product Instances Event Log

#### Virtual Account

Description:

Default Virtual Account:

#### Product Instance Registration Tokens

The registration tokens below can be used to register new product instances to this virtual account.

New Token...

Token	Expiration Date	Description	Export-Controlled	Created By	Actions
OGY4NTJMTktMTI3ZS0...	2018-Nov-16 20:50:26 (in 23 days)	demo	Allowed	admin	<a href="#">Actions</a>

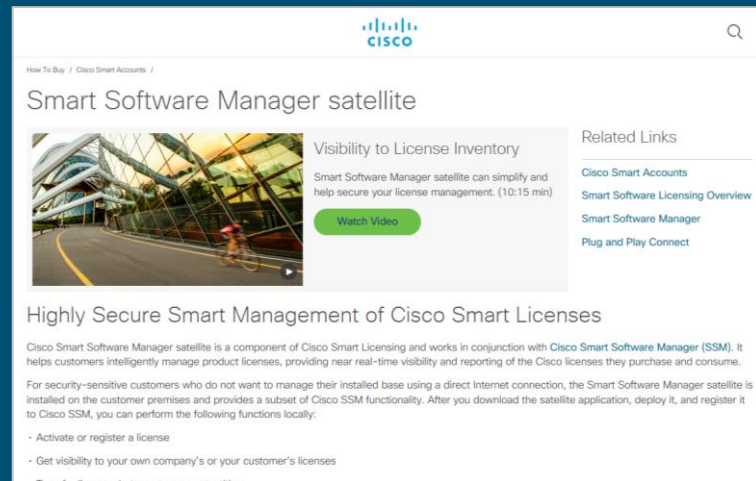
Showing All 1 Records

In the **Inventory** tab,

1. View and select **Virtual Account**
2. View **Licenses** and **Product Instances** registered locally to the on-prem

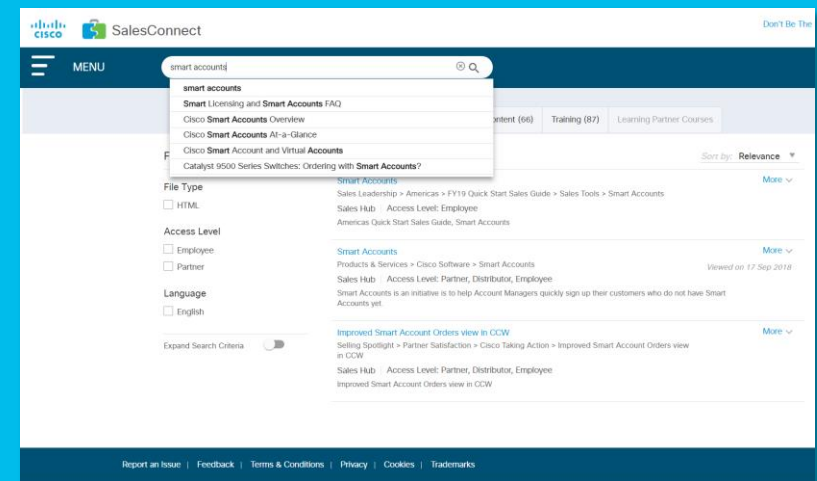
**Please note:** Registered product instances and consumed licenses are reflected on the virtual account associated with the on-prem on cisco SSM and newly available licenses are updated on the licensing portal of the on-prem account once the synchronization occurs

# For More Information



## Cisco Smart Software Manager On-prem

<http://www.cisco.com/go/smartsatellite>



## Cisco SalesConnect

<https://salesconnect.cisco.com/#/>

## In this session, we covered:

- ✓ Cisco Smart Software Manager (SSM) On-prem Overview
- ✓ Cisco SSM On-prem Benefits
- ✓ On-prem Enhanced Edition Overview
- ✓ Manage Your On-prem
- ✓ On-prem Deployment Modes



