

# Juniper Licensing User Guide

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*Juniper Licensing User Guide*

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The information in this document is current as of the date on the title page.

## YEAR 2000 NOTICE

Juniper Networks hardware and software products are Year 2000 compliant. Junos OS has no known time-related limitations through the year 2038. However, the NTP application is known to have some difficulty in the year 2036.

## END USER LICENSE AGREEMENT

The Juniper Networks product that is the subject of this technical documentation consists of (or is intended for use with) Juniper Networks software. Use of such software is subject to the terms and conditions of the End User License Agreement ("EULA") posted at <https://support.juniper.net/support/eula/>. By downloading, installing or using such software, you agree to the terms and conditions of that EULA.

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# Software License Model Overview

## Software License Model Overview

The Software License Model is a framework, set of policies, and tools that help unify and thereby simplify Juniper product-driven licensing and packaging.

### Software License Model

The major components of the framework are:

- A focus on customer segments (enterprise, service provider, and cloud) and use cases for Juniper Networks hardware and software products.
- The introduction of subscription licenses and subscription portability for all Juniper Networks products including Junos OS, Contrail, and Juniper cloud-based services.
- The introduction of a common, three-tiered model (standard, advanced, and premium) for all Juniper Networks software products.

### Three-Tier Software License Model

As a customer ordering a Juniper Networks product under the Software License Model that includes hardware, you order:

- The hardware platform that includes the standard license.
- The customer support package that fits your needs.
- The advanced or premium subscription licenses, according to your use case. These subscription licenses include embedded customer support.

As a customer ordering a Juniper Networks software product, you order:

- The standard, advanced, or premium subscription license, according to your use case. These subscription licenses include embedded customer support.

### Three-Tier Model

As new hardware platforms become available under the Software License Model, you can customize your purchase using one of the following three models:

- **Standard License**

The standard license includes the hardware platform and a license to use the software with the standard feature set. Standard Return Material Authorization (RMA) policies apply with no changes in case of hardware failure. Customer support is ordered separately as you select your preferred hardware support policy and support for the standard software features. For more information about support policy, see [Contact Support](#). The hardware platform does not require a separate license, and the software right-to-use (RTU) license is perpetual for the licensed features.

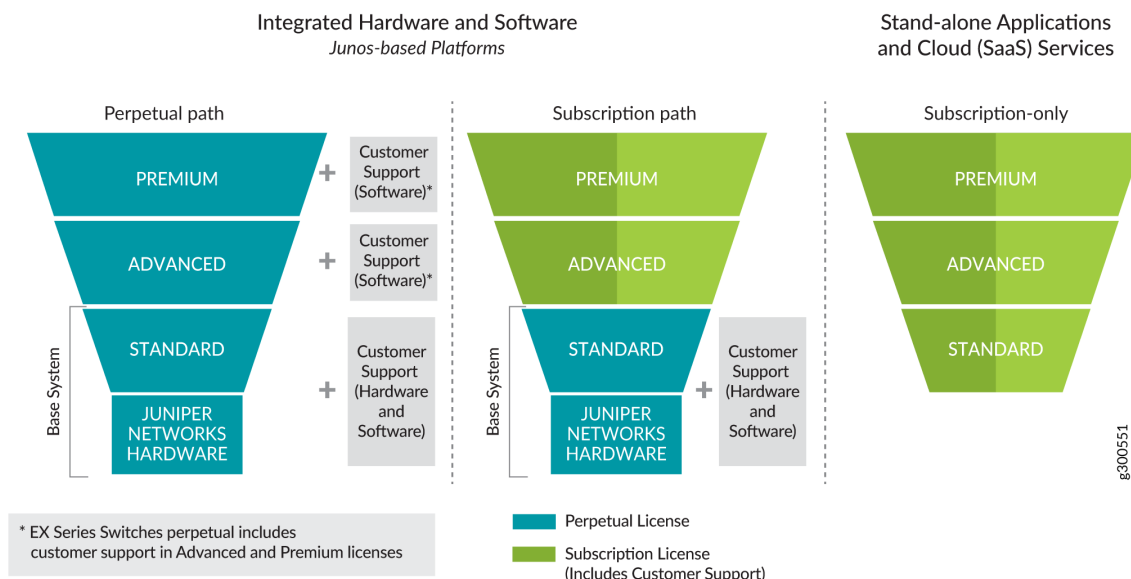
- **Advanced License**

The advanced license includes the subscription-based license to use the advanced software features. The license term is 1 year, 3 years, or 5 years. Customer support for the software features is included. These features differ by use case and platform. For example, to view the list of features for the QFX devices, see [QFX device class and SKUs](#).

- **Premium License**

The premium license includes the subscription-based license to use the Junos OS software features. The license term is 1 year, 3 years, or 5 years. Customer support for the software features is included. These features differ by use case and platform. The premium license is a superset and includes all the features from the advanced license and additional features. For example, to view the list of features for the QFX devices, see [QFX device class and SKUs](#).

**Figure 1: Three-Tier Model for the Software License Model**



## Understanding Perpetual Licenses

All advanced and premium licenses are offered as perpetual licenses under the Software License Model.

Perpetual licenses include the following attributes:

- The perpetual licenses are locked to the chassis on which it is activated.
- Perpetual licenses are not portable.
- You must purchase support separately.
- Premium licenses include all the features in the premium and advanced licenses.
- Perpetual licenses are available in full bandwidth and pay as you grow model (PAYG).
- In case of RMA, you can exchange the perpetual license keys to the RMA device. You must contact Juniper Customer Care to exchange the license keys for RMA devices.

## Understanding Subscription Licenses

All advanced and premium licenses are offered as subscriptions under the Software License Model. Subscription licenses are available in 1-year, 3-year, or 5-year terms. After the order fulfilment, the subscription period begins after the completion of a 30-day grace period.

Table 1 describes the subscription terms for purchase and number of months to use the license.

**Table 1: Subscription Terms Details**

Subscription Terms	Number of Months for the License
1-year	13 months
3-year	37 months
5-year	61 months

Software Subscription licenses include the following attributes:

- Specific products might offer a subset of these licenses. At the end of the term, you have three options:
  - You can renew the subscription, to continue to use the features and scale granted under the license.

- You can order a replacement subscription.

Upgrading and downgrading the subscription models is supported. In both cases, subscription models are processed as a new order, and you might use the features and scale granted under the new license. For example, you have a 5-year subscription, and you want to downgrade to a 3-year subscription or the other way around.

- You might decline to renew or purchase a replacement subscription. In this case, you may no longer use the features and scale granted under the expired subscription. You can continue to use the hardware and any software features which are granted under the perpetual license.
- Alternatively, when an advanced subscription term expires, your needs may require an upgrade to the premium subscription term.
- Subscription licenses include Juniper customer support for software features as part of the subscription license, unless customer support is provided by a Juniper partner directly. There is no need to order a separate customer support policy for the advanced and premium licenses.
- Premium licenses include all the features in the premium and advanced licenses.
- Subscriptions may be ordered at any time.
- New software features may be available over time with new software versions.
- Subscription licenses are portable for similar devices.
- Subscriptions are cancelable at the end of the term.
- Renewals are not automatic.

## License Portability

Subscription licenses are portable. This means that if you buy a new similar hardware platform, then you can port the subscription license. You can stop using the license on one hardware platform and move it to another hardware platform. This portability allows you to balance features across hardware platforms in the network without having to buy extra feature licenses.



# Licenses for Juniper Hardware and Software

## Software License Overview

The Software License offers a framework, set of policies, and tools that help unify and thereby simplify Juniper product-driven licensing and packaging.

The major components of the framework are:

- A focus on customer segments (enterprise, service provider, and cloud) and use cases for Juniper Networks hardware and software products.
- The introduction of subscription licenses and subscription portability for all Juniper Networks products including Junos OS, Contrail, and Juniper cloud-based services.
- The introduction of a common, three-tiered model (standard, advanced, and premium) for all Juniper Networks software products.

## Three-Tier License Model

As a customer ordering a Juniper Networks product under the Software License Model that includes hardware, you order:

- The hardware platform that includes the standard license.
- The customer support package that fits your needs.
- The advanced or premium subscription licenses, according to your use case. These subscription licenses include embedded customer support.

As a customer ordering a Juniper Networks software product, you order:

- The standard, advanced, or premium subscription license, according to your use case. These subscription licenses include embedded customer support.

### Three-Tier Model

As new hardware platforms become available under the Flex Software License Model, you can customize your purchase using one of the following three models:

- **Standard License**

The standard license includes the hardware platform and a license to use the software with the standard feature set. Standard Return Material Authorization (RMA) policies apply with no changes in case of hardware failure. Customer support is ordered separately as you select your preferred hardware support policy and support for the standard software features. For more information about support policy, see [Contact Support](#). The hardware platform does not require a separate license, and the software right-to-use (RTU) license is perpetual for the licensed features.

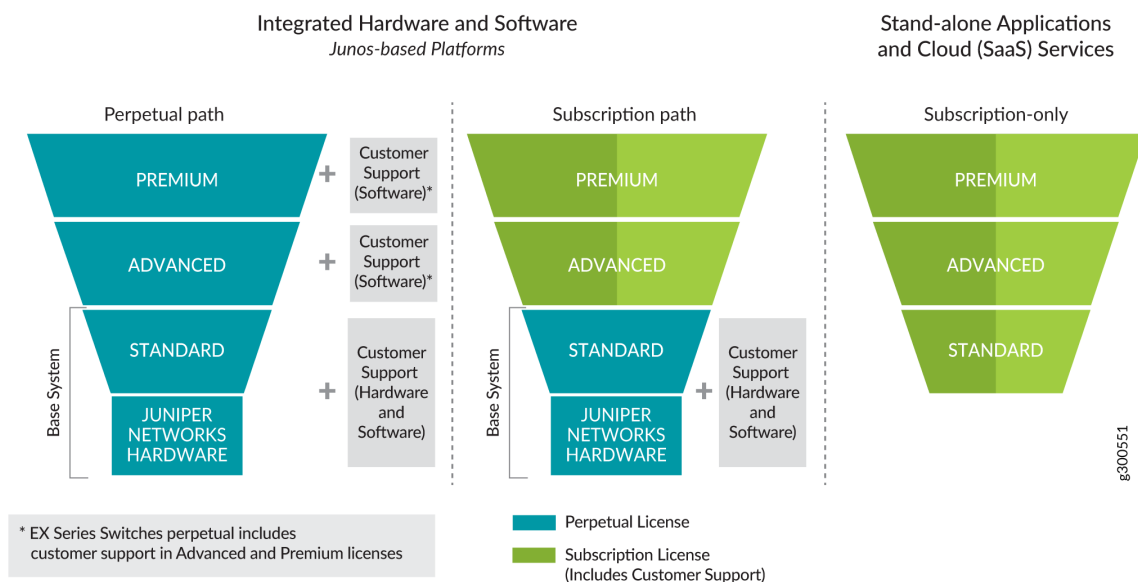
- **Advanced License**

The advanced license includes the subscription-based license to use the advanced software features. The license term is 1 year, 3 years, or 5 years. Customer support for the software features is included. These features differ by use case and platform. For example, to view the list of features for the QFX devices, see [QFX device class and SKUs](#).

- **Premium License**

The premium license includes the subscription-based license to use the Junos OS software features. The license term is 1 year, 3 years, or 5 years. Customer support for the software features is included. These features differ by use case and platform. The premium license is a superset and includes all the features from the advanced license and additional features. For example, to view the list of features for the QFX devices, see [QFX device class and SKUs](#).

**Figure 2: Three-Tier Model for the Software License Model**



# Software Licensing Information for Juniper Products

Software licensing information for Juniper products is as follows:

- [ACX Series](#)
- [Contrail Service Orchestration \(CSO\)](#)
- [cRPD](#)
- [cSRX](#)
- [EX Series](#)
- [JATP](#)
- [Juniper Apstra](#)
- [MX Series](#)
- [NFX Series](#)
- [Northstar Controller](#)
- [Northstar Planner](#)
- [Paragon Automation as a Service](#)
- [Paragon Insights](#)
- [PTX Series](#)
- [QFX Series](#)
- [SRX Series](#)
- [vBNG](#)
- [vMX](#)
- [vSRX](#)

# Licenses for Juniper Hardware and Software Prior to 2020

Non-Flex licensing information for Juniper products is as follows:

- [ACX Series](#)
- [ATP Cloud](#)
- [Contrail Service Orchestration \(CSO\)](#)
- [EX Series](#)
- [Juniper Secure Connect](#)
- [Junos Space Network Management Platform](#)
- [NSM](#)
- [PTX, MX, M and T Series](#)
- [QFX Series](#)
- [SRX Series](#)
- [vMX](#)
- [vSRX](#)

# Juniper Agile Licensing for License Management

## Juniper Agile Licensing Overview

### IN THIS SECTION

- [Benefits of Juniper Agile Licensing | xiii](#)
- [Understand Juniper Agile Licensing | xiii](#)
- [Components of Juniper Agile Licensing | xiv](#)

### Benefits of Juniper Agile Licensing

- Provides an intuitive user experience and simplified operational processes.
- Provides seamless lifecycle management of licenses.
- Offers flexible license administration and deployment.
- Enables monitoring of software usage through centralized administrator and reporting.
- Allows users to proactively adjust usage based on real-time reporting.
- Provides consistent license management workflow for all Juniper products.

### Understand Juniper Agile Licensing

Juniper Networks introduced the Juniper Agile Licensing solution to provide an efficient way for customers and partners to manage licenses for hardware and software features. To use a licensed feature, you need to purchase and activate a license that corresponds to that feature and deploy that license so that it can be utilized by the software during normal operation. You can administer and

manage the licenses through the [Juniper Agile Licensing Portal](#). The portal provides an intuitive task-based user interface that provides full lifecycle management of licenses.

Juniper Agile Licensing ensures that features are used in compliance with Juniper's End User License Agreement.

- Standalone mode allows you to activate a license on a single hardware device or software instance. Such a license can only be used by the instance on which it is activated. Sharing a license with multiple instances is not permissible.

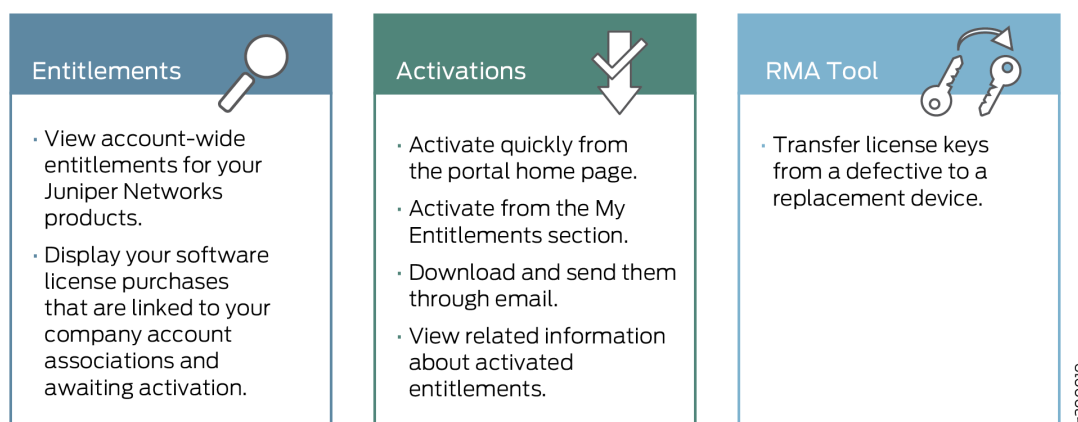
Support for each deployment mode varies by product. Both deployment modes enable efficient management of both subscription and perpetual licenses and may enable combinations of features and capacity depending on the specific license purchased.

## Components of Juniper Agile Licensing

### 1. Juniper Agile Licensing Portal

The Juniper Agile Licensing Portal provides the features shown in [Figure 3 on page xiv](#).

**Figure 3: Juniper Agile Licensing Portal Features**



You use the [Juniper Agile Licensing Portal](#) to activate and deliver the required license keys for products you have purchased.

Depending on the type of license, the fulfillment e-mail you receive from Juniper after purchase of a license indicates whether your device can be used without installing license keys. If you need to

install license keys, you can view and activate the purchased entitlements in the Agile Licensing Portal.

**NOTE:** In some cases, the fulfillment e-mail might include a license key, in which case it is not necessary to manage the entitlement through the Agile Licensing Portal.

## 2. Juniper Entitlement Management System

The Juniper Agile Entitlement Management System is a repository of all your entitlements. It simplifies the licensing life cycle by providing a centralized license management interface that you can access using the Agile Licensing Portal.

# Juniper Agile Licensing Workflow for Procuring and Managing Licenses

## IN THIS SECTION

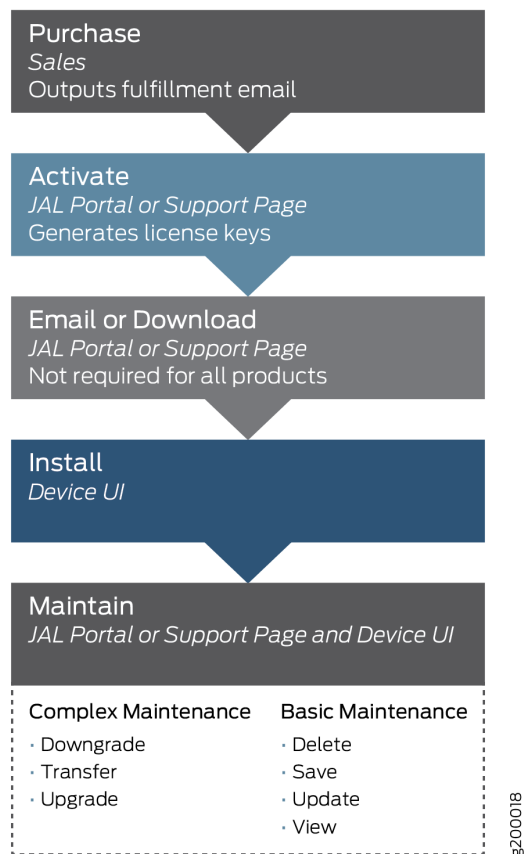
- [Procuring and Managing Licenses | xv](#)

## Procuring and Managing Licenses

For procuring and managing licenses, Juniper Agile Licensing comprises the following phases:

The phases of the licensing life cycle are shown in [Figure 4 on page xvi](#).

Figure 4: Licensing Phases



## Purchase Licenses from Juniper Networks

Licenses to use Juniper software are purchased through Juniper's standard sales order process. After meeting with your Sales Representative or Juniper Partner, submit a sales order to Juniper. License sales order lines will send you an e-mail that includes your activation code and Software Support Reference Number (SSRN) relating to your entitlements. The system creates entitlements associated with your user account (e-mail ID) that you can subsequently manage through the Juniper Agile Licensing Portal.

Depending on the type of license, access the Agile Licensing Portal to activate license keys or send the keys by e-mail to yourself.

**NOTE:** Keep a record of your SSRN, which is used as a proof of purchase and for support entitlement purposes.



## Manage Entitlements using the Agile Licensing Portal

You use the information from the fulfillment e-mail to activate your entitlements. This process generates software license activation keys (license keys) that you can install on devices directly, or automatically synchronize to previously installed licenses.

**NOTE:** Some software licenses can be only activated, and do not generate or require a license activation key to be installed on the device. Refer to the fulfillment e-mail that you receive after purchase for this information.

## Juniper Agile Licensing Videos

See the following videos to learn about the JAL portal, single license activation, bulk licenses activation, revoking license key, and so on.

- See [JAL Overview](#) video to learn about the JAL portal features.
- See [Revoking a License Key](#) video to learn about how to revoke the license key.
- See [RTU Licenses](#) video to learn about how to activate RTU licenses.
- See [Bulk License Key Activation](#) video to learn how to activate bulk licenses.
- See [Hardware and Software License Activation](#) video to learn about hardware and software license activation.
- See [RMA Overview](#) video to learn about Return Materials Authorization.
- See [Multiple Entitlement Quantities in a Single Activation](#) video to learn how to activate multiple licenses.

# Activate Your Licenses

You're now set to activate the purchased license.

## Activate Licenses

To activate license, perform the following steps:

1. Log in to the [Juniper Agile Licensing Portal](#).
2. Navigate to the **My Entitlements** section on the landing page.

If you are unable to view your entitlements in the JAL Portal, contact [Juniper Customer Care](#).

3. Click the **Activate**.
4. In the Product Activation screen, select the Software Version and the quantity to activate. You can add any useful information in the Notes field.
5. Click **Activate**. Once complete, the screen will display as shown below:

The screenshot shows the Juniper Networks Licensing Portal interface. At the top left is the Juniper Networks logo. To the right are links: Licensing Home, Original LMS, Portal FAQ, and a welcome message 'Welcome, MARK JORDAN'. Below the header, there are fields for 'Company:', 'Activation Code:', and 'Entitlement Expiration: N/A'. The main heading is 'Activation Complete'. Below this is a table with the following data:

Product Name	Activated	Expiry Date
VBNG-PREF-10K	100	N/A

At the bottom right of the screen is a blue button labeled 'I'm Done'.

To add license, perform the following steps:

1. Issue the set system license keys key *ID* statement.

2. The *ID* parameter includes the license ID and the license key. For example:

```
[edit]
user@device# set system license keys key "JUNOS_TEST_LIC_FEAT xxxxxx xxxxxx xxxxxx xxxxxx
xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx"
```

To add multiple license keys in the Junos OS CLI, issue the `set system license keys key name` statement for each license key to add. For example:

```
[edit]
user@device# set system license keys key "key_1"
set system license keys key "key_2"
set system license keys key "key_2"
set system license keys key "key_4"
```

3. Issue the `commit` command.

```
[edit]
user@device# commit
commit complete
```

4. Verify that the added license key.

For example:

```
user@device# run show system license
```

License usage:

	Licenses used	Licenses installed	Licenses needed	Expiry
Feature name				
sdk-test-feat1	0	1	0	permanent

Licenses installed:

License identifier: JUNOS\_TEST\_LIC\_FEAT

License version: 2

Features:

    sdk-test-feat1   - JUNOS SDK Test Feature 1  
    permanent

Alternatively, you can issue the `show system license` command from operational mode.

Reboot the device after adding license on the SRX300, SRX320, SRX320-POE, SRX340, SRX345, SRX380, SRX550, and SRX550-M devices. Rebooting the device sets system resources to support session capacity of the license.

## Activate Junos OS Licenses

In case of Junos OS upgrade, you might need the new license keys. See the ["Step 2" on page xx](#) to generate license keys. If you have any problem in generating license keys, contact Juniper Customer Care.

1. Gather your activation codes.

**Activation Code:** The 17-digit alphanumeric activation code is sent through email in response to your order and is used to generate license capacity / feature activation keys for your Juniper Networks software. The activation code is used to generate your license activation key—it is not the license activation key itself.

2. Generate license keys and activation keys.

Upon initial setup, a base activation key might be required to activate the software. If further capacity or feature(s) were purchased and are being added to the software, each capacity increment and feature needs to be added via another activation key. Generate license activation keys using the [Juniper Agile Licensing Portal](#). At the top of the portal, enter your activation code, and click Activate. Then follow the instructions on screen. Juniper provides license activation keys in one of two ways:

- Download: You can download activation keys from the [Juniper Agile Licensing Portal](#).
- Email: You receive an email that contains the license activation keys.

3. Add license.

To add and manage licenses, see [Managing Licenses](#).

## Activate Contrail Insights Licenses

This topic describes how to obtain the appropriate product keys and software required for your Juniper® Contrail® Insights product.

1. Create a user account.

To download your software, you need an approved user account with Juniper Networks. If you do not already have one, you can create an account through the [User Registration Portal](#).

2. Forward your fulfillment e-mail to the Juniper account activation team.

Locate the fulfillment e-mail(s) that you received and forward it to <mailto:appformix-key-request@juniper.net>. (These e-mails verify that you purchased the product.) Identify the subject as "AppFormix Product Keys Needed." Add the following information to the e-mail:

- Company name
- Primary contact name
- Full company address
- Contact e-mail address
- Contact phone number

You will receive an e-mail confirmation acknowledging your activation request. The Juniper product activation team will complete the activation request within two business days.

3. Retrieve your software serial number.

The software serial number is a unique 14-digit number that Juniper uses to identify your Juniper Networks software installation (or purchased capacity). You can find this number in the Software Serial Number Certificate attached to the e-mail sent when you ordered your Juniper Networks Service. Store the Software Serial Number in a safe place, as it will be necessary to identify your installation when engaging Juniper for support.

4. Download your Software.

Find your product software on the [Juniper Software Downloads page](#). You will need to sign in with your Juniper user account and provide your Software Serial Number.

5. Install your Software.

Install your software according to the instructions in the software documentation at [Contrail Insights](#). Make sure to enter the license key as instructed during installation.

### Need Help?

For additional assistance, you may contact Juniper Networks by opening a case online through the Juniper Customer Support Center (CSC) [Service Request Manager](#).

# Activate CSO and Juniper Sky Enterprise Licenses

This topic describes how to activate Juniper Contrail Service Orchestration and Juniper Sky Enterprise.

Note: These instructions are written for the customer who will be using the product. If you are a partner, reseller, or distributor who is setting up Contrail Service Orchestration and Juniper Sky Enterprise for an end customer, please fill in the details about the customer.

## 1. Create a user account.

If you don't already have a Juniper user account, go to the [User Registration Portal](#) to create one. (For detailed instructions, see [KB 9946: Create a New User Login Account with Juniper Networks](#).)

**Important:** When creating your account, do not select *Guest User Access* or *Use your Cloud Marketplace or Cloud Service Provider credentials*. If you choose either of these options, you will not be able to use the resulting user account to activate your licenses in the next step.

## 2. Locate your license certificate.

When you purchased your Juniper product, you should have received an e-mail containing information about your software license. Locate that e-mail and the attached certificate, which contains details you need to activate your product.

## 3. Enter your activation code.

Sign into the [Juniper Agile Licensing Portal](#). At the top of the screen, enter the activation code (also sometimes called an authorization code) located in your license certificate, and click **Activate**.

## 4. Activate your licenses.

Choose one of the following options in the Product Activation screen:

- **Add devices to an existing account instance:** Select this option if you are simply adding additional licenses to an existing Contrail Service Orchestration or Juniper Sky Enterprise account. Then, select your preexisting account.
- **Register a new account instance:** Select this option if you are activating Contrail Service Orchestration or Juniper Sky Enterprise for the first time. Then, provide relevant account details.

Note: When creating an account, you will be asked to select an account type (Enterprise or Service Provider). If you are a partner, distributor, or reseller filling in this form for a customer, specify your customer's business type, not your own.

## 5. Complete your request.

Juniper will complete the request and e-mail you the details you need to activate your new product within two (2) business days.

## Need Help?

For additional assistance, you may contact Juniper Networks by opening a case online through the Juniper Customer Support Center (CSC) [Service Request Manager](#).

# Activate Juniper ATP Appliance Licenses

This topic describes how to obtain the appropriate license keys and software required for your Juniper Networks Advanced Threat Prevention Appliance.

## 1. Create a user account.

To download your software, you need an approved user account with Juniper Networks. If you do not already have one, you can create an account through the [User Registration Portal](#).

Note: Compliance approval typically takes two hours following the creation of a new Juniper User Account.

## 2. Retrieve your software serial number.

The software serial number is a unique 14-digit number that Juniper uses to identify your Juniper Networks software installation (or purchased capacity). You can find this number in the Software Serial Number Certificate attached to the e-mail sent when you ordered your Juniper Networks Service. Store the Software Serial Number in a safe place, as it will be needed to identify your installation when engaging Juniper for support. Note that this number is different than the license key described in Step 3.

## 3. Request your license key.

Open an admin service request (case) using our [Service Request Manager](#) on the Juniper Customer Support Center (CSC) and enter the following information to facilitate your request. You may also call Customer Care via telephone if you prefer:

- Subject Line: Juniper ATPA Software License Request
- Description:
  - Sales order number
  - Software product SKU
  - UUID (for assistance finding your UUID, see [kb.juniper.net/kb32301](http://kb.juniper.net/kb32301))

- Serial Number/SSRN (enter the software serial number provided in your license fulfillment e-mail). If available, please attach the software serial number certificate (PDF) to the admin service request.

Once your service request is processed, your license key will be sent to you.

#### 4. Download your software.

If you need to download your software, you can find it on the [Juniper Software Downloads page](#). You will need to sign in with your Juniper user account and provide your Software Serial Number.

Note: If you receive an account privileges error, please contact Customer Care to have your account upgraded. Be prepared to provide your Software Serial Number as proof of purchase.

#### 5. Install your software.

Install your software according to the instructions in the software documentation at [JATP400 Advanced Threat Prevention Appliance](#) and [JATP700 Advanced Threat Prevention Appliance](#). Make sure to enter the license key as instructed during installation.

#### Need Help?

For additional assistance, you may contact Juniper Networks by opening a case online through the Juniper Customer Support Center (CSC) [Service Request Manager](#).

## Activate Juniper Cloud Workload Protection Licenses

This topic describes how to obtain the appropriate license keys and software required for your Juniper Networks Cloud Workload Protection software.

#### 1. Create a user account.

To access your software, you need an approved user account with Juniper Networks. If you do not already have one, you can create an account through the [User Registration Portal](#).

Note: Compliance approval typically takes two hours following the creation of a new Juniper User Account.

#### 2. Retrieve your software serial number.

The software serial number is a unique 14-digit number that Juniper uses to identify your Juniper Networks software installation (or purchased capacity). You can find this number in the Software Serial Number Certificate attached to the e-mail sent when you ordered your Juniper Networks



Service. Store the Software Serial Number in a safe place, as you'll need it later to identify your installation when engaging Juniper for support.

### 3. Request your licensed software.

Open an admin case by going to support on <https://www.juniper.net/> and then selecting [Juniper Support Portal](#). Under cases, you can now open a case and enter the following information to facilitate your request. You may also call Customer Care via telephone if you prefer:

- Subject Line: Juniper Cloud Workload Protection Software Request
- Description:
  - Sales order number
  - Software product SKU
  - Serial Number/SSRN (enter the software serial number provided in your license fulfillment e-mail). If available, please attach the software serial number certificate (PDF) to the admin service request.
  - Email address for the master admin account – this can be the same as the Juniper user account or a different email address if preferred. Ensure that the incoming email from outside your organization is allowed.

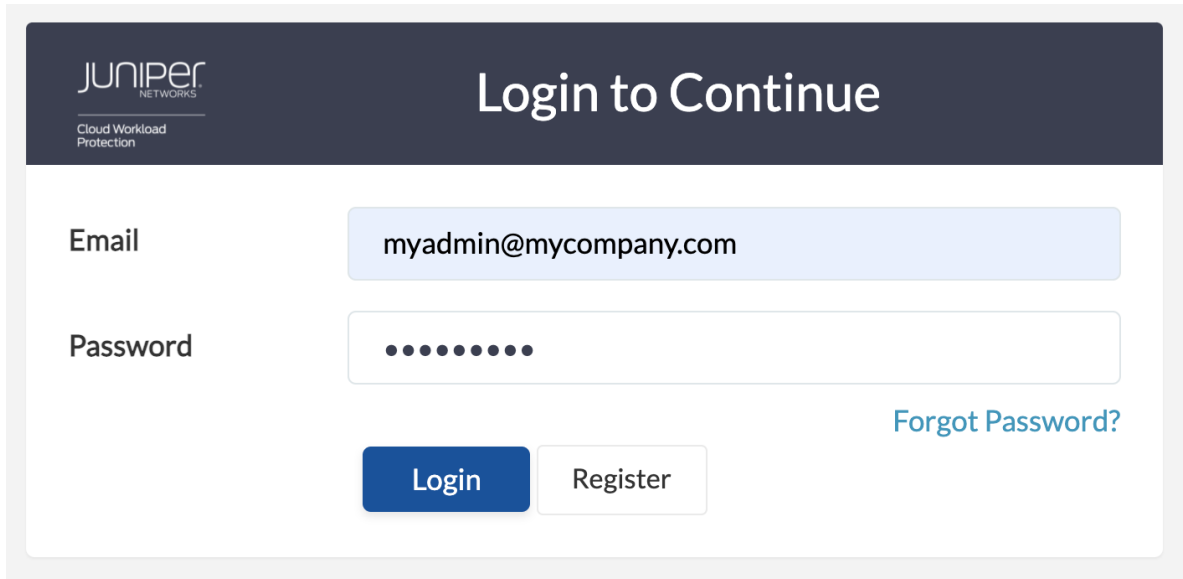
Temporary login details are emailed automatically once your account is set up. Once your service request is processed, you'll receive an email with your account information. Your product is automatically licensed.

### 4. Access Juniper Cloud Workload Protection portal.

1. Go to [Juniper Cloud Workload Protection](#).

**NOTE:** If you have purchased the on-prem version of the software, you'll still need to login initially to the SaaS portal in order to download the full software.

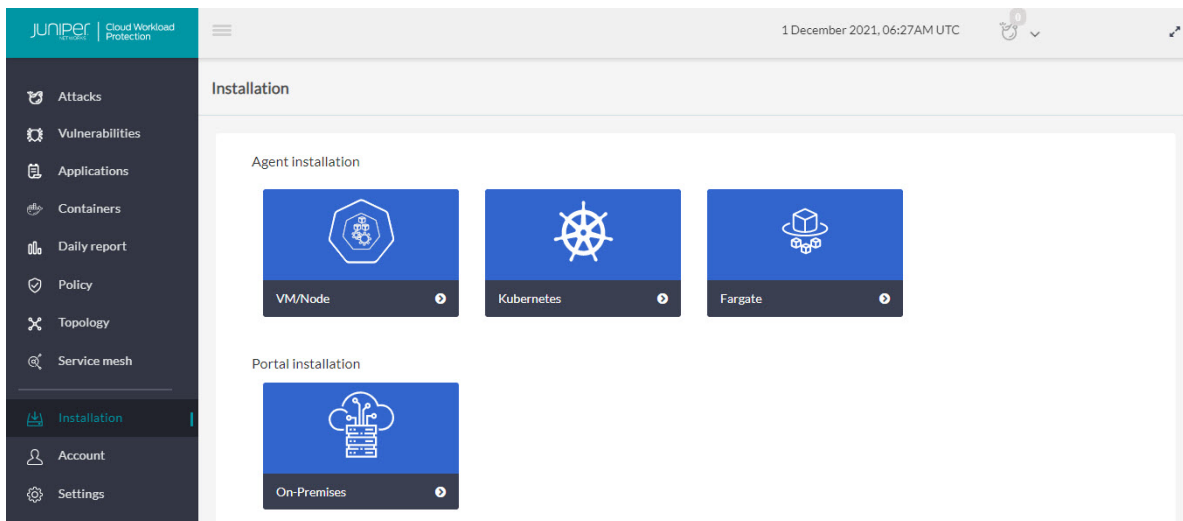
2. Enter your log in details. Use the log in information you received in the email to sign into your account for the first time.



The screenshot shows the Juniper Cloud Workload Protection login interface. At the top left is the Juniper Networks logo and 'Cloud Workload Protection'. The main heading is 'Login to Continue'. Below this are two input fields: 'Email' with the value 'myadmin@mycompany.com' and 'Password' with masked dots. To the right of the password field is a link 'Forgot Password?'. At the bottom are two buttons: 'Login' (blue) and 'Register' (white with blue border).

Click **Login** to continue. Upon successful authentication, you'll be directed to the Juniper Cloud Workload Protection dashboard.

5. Navigate to the Installation tab.



6. Use Agent installation option for both the SaaS and on-prem options. The Portal installation option is only accessible if you purchase on-prem option. Follow the instructions on the screen to download and install agents.

# Generate Voucher Certificate

## IN THIS SECTION

- [Generate Voucher Certificate for One Device | xxvii](#)
- [Generate Voucher Certificates for Multiple Devices | xxviii](#)

The Juniper Agile Licensing (JAL) Portal generates voucher certificate for your network device. This voucher certificate validates that a device with serial number belongs to the correct owner.

## Generate Voucher Certificate for One Device

Let's generate voucher certificate for your network device using the JAL Portal.

1. To onboard a device, open a Web browser and log in to [JAL Portal](#).
2. Click **My Entitlements**, find the **S-ALL-S-DV-P** SKU, and click **Activate**.
3. On the **Product Activation** page, fill the following details:
  - a. Select the **Software Version**.
  - b. Enter the **Device Serial Number**. Use the device serial number mentioned in your purchase order or sale order. To find the device serial number, see [Locating my Product Serial Number or Software Support Reference Number \(SSRN\)](#).
  - c. Select the **Voucher Certificate** expiration date.
  - d. Enter the **Email ID** to which you want to receive the confirmation mail.
  - e. Upload the Pinned Domain Certificate or select the previously uploaded Pinned Domain. On your device, generate an X509 standard based certificate with certificate authority flag. Use the generated certificate as Pinned Domain certificate.
  - f. Read the agreement and select **I Agree with Terms and Conditions**.
    - a. Click **Activate**.
4. On the **Activation Complete** page, you can download or email the activation code using the **Download** and **E-Mail** options. Click **I'm Done** to activate the SKU.  
Use the downloaded voucher in Secure ZTP bootstrap response messages.

5. You have successfully onboarded your device. You can see the activated SKU in **My Activations** section.

## Generate Voucher Certificates for Multiple Devices

Let's generate voucher certificates for multiple network devices using the JAL Portal.

1. To onboard multiple devices, open a Web browser and log in to [JAL Portal](#).
2. Click **Bulk Tool**.
3. On the **Bulk License Activation Tools** page click **Bulk Activation Tool**.
4. On the **Bulk Voucher Certificate Entitlement Activation** page, click **Download Excel File**. A voucher certificate template file gets downloaded.
5. Open the voucher certificate template file and enter the activation code, serial number, software version, and expiration date.
  - a. To find the activate code, navigate to **My Entitlements** and find the **S-ALL-S-DV-P** SKU.
  - b. Use the device serial number mentioned in your purchase order or sale order. To find the device serial number, see [Locating my Product Serial Number or Software Support Reference Number \(SSRN\)](#).
  - c. You can choose a date up to when you want the Secure ZTP to be active.
6. Save the voucher certificate template.
7. Upload the saved voucher certificate template file.
8. Upload the Pinned Domain Certificate or select the previously uploaded Pinned Domain. On your device, generate an X509 standard based certificate with certificate authority flag. Use the generated certificate as Pinned Domain certificate.
9. Enter the **Email ID** to which you want to receive the confirmation mail.
10. Read the agreement and select **I Agree with Terms and Conditions**.
11. Click **Upload File**.
12. After the voucher certificate template file is uploaded, you receive two mails.
  - a. First mail informs about the submission of SKUs for activation.
  - a. Second mail to confirm the activation of the SKUs, you can find the activation code in the attached file.
13. You have successfully onboarded your device. You can see the activated SKU in **My Activations** section.

# Monitor Your Licenses

## SUMMARY

This topic helps you to manage your licenses.

## IN THIS SECTION

- [Overview | xxix](#)
- [View License | xxx](#)
- [Save License | xxxiii](#)
- [Delete License | xxxiii](#)
- [System Log for License | xxxvi](#)
- [request system license add | xxxvii](#)
- [request system license autoupdate | xxxix](#)
- [request system license delete | xli](#)
- [request license renew | xlii](#)
- [Viewing Licenses with Network Director | xliv](#)
- [Install VCF Software Licenses | xlv](#)
- [Junos Space License Installation | xlv](#)
- [Exporting the License Inventory | xlvii](#)
- [Juniper Connected Security for VMware NSX Licensing | I](#)
- [License Duration | Iii](#)
- [License Procurement and Installation | Iii](#)

## Overview

After you activate and add the license, you can view, save, and delete the licenses.

# View License

IN THIS SECTION

- [View Installed Licenses | xxx](#)
- [View License Usage | xxxii](#)

To verify Junos OS license management, perform the following tasks:

## View Installed Licenses

IN THIS SECTION

- [Purpose | xxx](#)
- [Action | xxx](#)
- [Meaning | xxxi](#)

### Purpose

Verify that the expected licenses are installed and active on the device.

### Action

From the CLI, enter the `show system license` command.

### Sample Output

command-name

```
user@host> show system license
License usage:
  Feature name      Licenses used  Licenses installed  Licenses needed  Expiry
subscriber-acct      0             1                   0                permanent
```

subscriber-auth	0	1	0	permanent
subscriber-addr	0	1	0	permanent
subscriber-vlan	0	1	0	permanent
subscriber-ip	0	1	0	permanent
scale-subscriber	0	1000	0	permanent
scale-l2tp	0	1000	0	permanent
scale-mobile-ip	0	1000	0	permanent

Licenses installed:

License identifier: E000185416

License version: 2

Features:

subscriber-acct - Per Subscriber Radius Accounting  
permanent

subscriber-auth - Per Subscriber Radius Authentication  
permanent

subscriber-addr - Address Pool Assignment  
permanent

subscriber-vlan - Dynamic Auto-sensed Vlan  
permanent

subscriber-ip - Dynamic and Static IP  
permanent

## Meaning

The output shows a list of the license usage and a list of the licenses installed on the device. Verify the following information:

- Each license is present. Licenses are listed in ascending alphanumeric order by license ID.
- The state of each license is permanent.

A state of `invalid` indicates that the license key is not a valid license key. Either it was entered incorrectly, or it is not valid for the specific device.

- The feature for each license is the expected feature. The features enabled are listed by license. An all-inclusive license has all the features listed.
- All configured features have the required licenses installed. The Licenses needed column must show that no licenses are required.

## View License Usage

### IN THIS SECTION

- Purpose | xxxii
- Action | xxxii
- Meaning | xxxii

### Purpose

Verify that the licenses fully cover the feature configuration on the device.

### Action

From the CLI, enter the `show system license usage` command.

### Sample Output

#### command-name

```
user@host> show system license usage
```

	Licenses	Licenses	Licenses	Expiry
Feature name	used	installed	needed	
subscriber-addr	1	0	1	29 days
scale-subscriber	0	1000	0	permanent
scale-l2tp	0	1000	0	permanent
scale-mobile-ip	0	1000	0	permanent

### Meaning

The output shows any licenses installed on the device and how they are used. Verify the following information:

- Any configured licenses appear in the output. The output lists features in ascending alphabetical order by license name. The number of licenses appears in the third column. Verify that you have installed the appropriate number of licenses.



- The number of licenses used matches the number of configured features. If a licensed feature is configured, the feature is considered used. The sample output shows that the subscriber address pooling feature is configured.
- A license is installed on the device for each configured feature. For every feature configured that does not have a license, one license is needed.

For example, the sample output shows that the subscriber address feature is configured but that the license for the feature has not yet been installed. The license must be installed within the remaining grace period to comply.

## Save License

To save the licenses installed on a device:

From operational mode, do one of the following tasks.

- To save the installed license keys to a file or URL, enter the following command:

```
user@host> request system license save filename | url
```

For example, the following command saves the installed license keys to a file named **license.config**:

```
user@host> request system license save license.config
```

- To output installed license keys to the terminal, enter the following command:

```
user@host> request system license save terminal
```

## Delete License

### IN THIS SECTION

- [Using the Operational Command to Delete Licenses | xxxiv](#)
- [Using a Configuration Command to Delete Licenses | xxxv](#)

Before deleting a license, ensure that the features enabled by the license will not be needed.

You can use the `request system license delete operational` command, or the `delete` or `deactivate configuration` command to delete a license:

## Using the Operational Command to Delete Licenses

To delete licenses using the `request system license delete` command:

1. Display the licenses available to be deleted.

```
user@host> request system license delete license-identifier-list?
Possible completions:
E00468XXX4      License key identifier
JUNOS10XXX1     License key identifier
JUNOS10XXX2     License key identifier
JUNOS10XXX3     License key identifier
JUNOS10XXX4     License key identifier
[               Open a set of values
```

2. To delete a license key or keys from a device using the CLI operational mode, select one of the following methods:

- Delete a single license by specifying the license ID. Using this option, you can delete only one license at a time.

```
user@host> request system license delete license-identifier
```

- Delete all license keys from the device.

```
user@host> request system license delete all
```

- Delete multiple license keys from the device. Specify the license identifier for each key and enclose the list of identifiers in brackets.

```
user@host> request system license delete license-identifier-list [JUNOS10XXX1 JUNOS10XXX3
JUNOS10XXX4 ...]
```

```
Delete license(s) ?
[yes,no] (no) yes
```

3. Verify the license was deleted by entering the `show system license` command.

## Using a Configuration Command to Delete Licenses

Starting in Junos OS Release 16.1, to remove licenses from the configuration, you can use either the `delete` or `deactivate` configuration command. The `delete` command deletes a statement or identifier, and all subordinate statements and identifiers contained within the specified statement path are deleted with it. The `deactivate` command adds the `inactive:` tag to a statement, effectively commenting out the statement or identifier from the configuration. Statements or identifiers marked as inactive do not take effect when you issue the `commit` command. To remove the `inactive:` tag from a statement, issue the `activate` command. Statements or identifiers that have been activated take effect when you next issue the `commit` command.

The following procedure uses the `delete` command, but you could use the `deactivate` command as well.

To delete one or all licenses using the `delete` command:

You can use the `deactivate` command instead of the `delete` command in this procedure.

1. Display the licenses available to be deleted.

Issue the `run request system license delete license-identifier-list?` command from the configuration mode of the CLI.

```
[edit]
user@host# run request system license delete license-identifier-list?
```

A list of licenses on the device is displayed:

```
Possible completions:
E00468XXX4      License key identifier
JUNOS10XXX1     License key identifier
JUNOS10XXX2     License key identifier
JUNOS10XXX3     License key identifier
```

JUNOS10XXX4	License key identifier
[	Open a set of values

2. Delete the license or licenses you want.

- To delete a single license, for example:

```
[edit]
user@host# delete system license keys key [License key]
```

- To delete all licenses, for example:

```
[edit]
user@host# delete system license keys
```

3. Commit the configuration by entering the `commit` command.

4. Verify the license was deleted by entering the `show system license` command.

## System Log for License

**NOTE:** After you add or delete a license, the system might take up to one minute to synchronize license between master and backup. You must allow one minute interval before performing any actions such as switchover or reboot.

Junos OS generates alarms for capacity (scale) features such as bandwidth to indicate the license requirement if the feature usage on a device exceeds the added license. The alarm detail shows the current feature usage information.

You can see the list of alarms at [System Log Explorer](#).

For example, see the below scenarios where alarms are generated for license requirement:

- Scenario 1

If a device is configured with a 100G bandwidth license and current usage is 200G bandwidth, the Junos OS generates an alarm as the bandwidth usage exceeded the added license.

The alarm specifies that the current usage of 200G bandwidth requires a license.

- Scenario 2

If a device is configured with a 128K RIB license and uses 130K RIB, the Junos OS generates an alarm as the RIB feature scale exceeded the added licenses.

The alarm specifies 130K RIB requires a license.

## request system license add

### IN THIS SECTION

- Syntax | [xxxvii](#)
- Description | [xxxvii](#)
- Options | [xxxvii](#)
- Additional Information | [xxxviii](#)
- Required Privilege Level | [xxxviii](#)
- Output Fields | [xxxviii](#)
- Sample Output | [xxxviii](#)
- Release Information | [xxxix](#)

## Syntax

```
request system license add (filename | terminal)
```

## Description

Adding a license key to the Junos OS devices to activate the feature.

Starting in Junos OS Release 18.3R1, the `display xml rpc` CLI option is supported for `request system license add` and `request system license save` commands while installing licenses on Juniper Networks devices.

## Options

***filename*** License key from a file or URL. Specify the filename or the URL where the key is located.

**terminal** License key from the terminal.

## Additional Information

The `| display xml rpc` filter returns “xml rpc equivalent of this command is not available,” the following RPC is supported for license installation:

The following RPC is supported for license installation:

```
<rpc>
<request-license-add>
<key-data> key </key-data>
</request-license-add>
</rpc>
```

Where *key-data* is the license key data.

```
<rpc>
<request-license-add>
<filename> key-file </filename>
</request-license-add>
</rpc>
```

Where *source* is the URL of the source license key file.

## Required Privilege Level

maintenance

## Output Fields

When you enter this command, you are provided feedback on the status of your request.

## Sample Output

**request system license add**

```
user@host> request system license add terminal
XXXXXXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX
```

```

XXXXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX
XXXXXXXX XXXXXX XXX
XXXXXXXXXX: successfully added
add license complete (no errors)

```

## Release Information

Command introduced before Junos OS Release 7.4.

Added additional information section on XML RPC in Junos OS Release 17.4.

## request system license autoupdate

### IN THIS SECTION

- [Syntax | xxxix](#)
- [Description | xxxix](#)
- [Required Privilege Level | xl](#)
- [Output Fields | xl](#)
- [Release Information | xl](#)

## Syntax

```
set system license autoupdate url <URL>
```

## Description

Before autoupdate licenses, complete the following tasks:

- Purchase the required licenses.
- Establish basic network connectivity with the router or switch. For instructions on establishing basic connectivity, see the *Getting Started Guide* or *Quick Start Guide* for your device.

To autoupdate licenses using a configuration command:

- From the CLI configuration mode, enter the following CLI command:

```
set system license autoupdate url <URL>
```

- You must commit the configuration using the `commit` command.

You can autoupdate the license using the proxy server available in the private network to be able to connect to the EMS server and download the license updates. The devices in the private network connect to the proxy server to download the license or license updates.

```
set system proxy server IP address
set system proxy port port number
set system proxy username user name
set system proxy password password
```

The license-check process reads the URL from the above configuration and validates it.

- For hardware products, the URL query uses the device chassis serial number to fetch the required license key. The physical products support first time license fetching and license renewal.
- For virtual software products, you need to do the first-time installation. Subsequent fetching and renewal of the license key from the EMS portal can be done based on Software Serial Number (SSN).

By default, the `autoupdate` command sets renew before-expiration day as 60 days and renew time interval as 24 hours. The last devices are allowed to contact the EMS server 60 days before the current license expiry and check for an automatic update every 24 hours.

## Required Privilege Level

maintenance

## Output Fields

When you enter this command, you are provided feedback on the status of your request.

## Release Information

Command introduced in Junos OS Release 21.4R1.



## request system license delete

### IN THIS SECTION

- [Syntax | xli](#)
- [Description | xli](#)
- [Options | xli](#)
- [Required Privilege Level | xli](#)
- [Output Fields | xli](#)
- [Sample Output | xlii](#)
- [Release Information | xlii](#)

### Syntax

```
request system license delete (all | license-identifier-list)
```

### Description

Delete a license key from the Junos OS device.

### Options

- |                                |  |
|--------------------------------|--|
| <b>all</b>                     | Deletes all the licenses from Junos OS device.               |
| <b>license-identifier-list</b> | Deletes the license identifier feature from Junos OS device. |

### Required Privilege Level

maintenance

### Output Fields

When you enter this command, you are provided feedback on the status of your request.

## Sample Output

### request system license delete

```
user@host> request system license delete license-identifier-list?
Possible completions:
  E00468XXX4      License key identifier
  JUNOS10XXX1     License key identifier
  JUNOS10XXX2     License key identifier
  JUNOS10XXX3     License key identifier
  JUNOS10XXX4     License key identifier
  [               Open a set of values
```

## Release Information

Command introduced before Junos OS Release 7.4.

## request license renew

### IN THIS SECTION

- Syntax | [xlii](#)
- Description | [xliii](#)
- Options | [xliii](#)
- Required Privilege Level | [xliii](#)
- Release Information | [xliii](#)

## Syntax

```
set system license renew
{
  before-expiration days
```

```
interval hours
}
```

## Description

Before renewing licenses, complete the following tasks:

- Purchase the required licenses.
- Establish basic network connectivity with the router or switch. For instructions on establishing basic connectivity, see the *Getting Started Guide* or *Quick Start Guide* for your device.

To renew licenses using a configuration command:

- From the CLI configuration mode, enter the following CLI command:

```
set system license renew before-expiration days
```

```
set system license renew interval hours
```

- You must commit the configuration using the `commit` command.

## Options

`before-expiration` *days*

`interval` *hours*

## Required Privilege Level

maintenance

## Release Information

Command introduced in Junos OS Release 21.4R1.

## Viewing Licenses with Network Director

To view the license for a Juniper Networks device on your network:

1. Select the **Build** icon in the Network Director banner.
2. In the View pane, select wired device.
3. In the Tasks pane, select **View License Information**.

**Table 2: Viewing Licenses with Network Director**

Field	Description
Feature Name	Name of the licensed SKU or feature. It can be used to look up the license with Juniper Networks. Not all devices support this.
License Count	Number of times an item has been licensed. This value can have contributions from more than one licensed SKU or feature. Alternatively, it can be 1, no matter how many times it has been licensed.
Used Count	Number of times the feature is used. For some types of licenses, the license count will be 1, no matter how many times it is used. For capacity-based licensable items, if infringement is supported, the license count can exceed the given count, which has a corresponding effect on the need count.
Need Count	Number of times the feature is used without a license. Not all devices can provide this information.
Given Count	Number of instances of the feature that are provided by default.

If a device does not have a license, a blank page is displayed with the message, No license is installed on this device. If you are sure the device has a license, try resynchronizing the device before displaying the license again.

4. Optionally, expand the license information by feature name to view the feature SKU information.

Table 3: Additional Licensing Information

Field	Description
Validity Type	Validity type can be Databased (license expires on end date), Permanent, Countdown (license expires when time remaining is zero), or Trial. If the validity type is either Databased or Countdown, more information is displayed—License Name, License Version, License State, and Time Remaining. Additional information can be added in the details grid based on the SKU type (SKU or Feature)—Start Date, End Date, or Original Time Allowed.
License Name	If the validity type is either Databased or Countdown, the identifier associated with a license key is displayed.
License Version	If the validity type is either Databased or Countdown, the version of a license is displayed. The version indicates how the license is validated, the type of signature, and the signer of the license key.
License State	If the validity type is either Databased or Countdown, the state of the license is displayed—Valid, Invalid, or Expired.
Time Remaining	If the validity type is either Databased or Countdown, the remaining time left on the license is displayed. For a trial license, the number of days remaining after you installed the device is displayed. For a commercial license, the time remaining is unlimited.
Start Date	Based on the SKU type, the start date of the license can be displayed in the details grid.
End Date	Based on the SKU type, the end date of the license can be displayed in the details grid.
Original Time Allowed	Based on the SKU type, the original license timeframe can be displayed here.

## Install VCF Software Licenses

To install a VCF software license:

1. Purchase two VCF software license keys (QFX-VCF-LIC) from your [Juniper Networks sales representative](#).

The sales representative will provide you with the feature license files and license keys. You will be asked to supply the chassis serial number of your switch; you can obtain the serial number by issuing the `show virtual-chassis` command.

2. Install the first software license on one device in the VCF (for example, the device acting in the primary role):

```
user@device> request system license add (filename | url)
```

3. Install the second software license on a second device in the VCF (for example, the device acting in the backup role):

```
user@device> request system license add (filename | url)
```

## Junos Space License Installation

Junos Space Network Management Platform comes with a 60-day full-featured trial license. You must procure and install a valid license during this period to ensure continued operation beyond the trial period.

If you fail to upload a valid license during the 60-day trial period, the Junos Space user interface displays an error message when you log in indicating that the license has expired. Your access is limited to the Licenses page (**Administration > Licenses**) from where you can execute the **Import License** task to enter a valid license.

For Junos Space Platform licensing details, see [Generating and Uploading the Junos Space License Key File](#) and [Viewing Junos Space Licenses](#).

You can use either of the following options to install a valid license for Junos Space Platform:

- If you plan to use the Junos Space Platform with only the Support Automation applications (Service Now and Service Insight), you can navigate to the **Add Organization** page (**Service Now > Administration > Organizations > Add Organization**) in the Service Now user interface to activate

these applications. However, to activate these applications, you must have a valid support contract for your Juniper Networks devices and valid credentials to access the Juniper Support System (JSS) back end.

If you choose this option and if you want to use other Junos Space applications beyond the trial period, you must purchase a license for Junos Space Platform (as explained in the bulleted item that follows).

- If you want to use Junos Space applications other than Service Now and Service Insight, or if you do not have a valid support contract for your Juniper Networks devices, you must purchase a license for Junos Space Platform. After you obtain the license file, you can install the license from the **Import License** page (**Administration > Licenses > Import License**). For more information about installing a valid license for Junos Space Platform, see the [Generating and Uploading the Junos Space License Key File](#) topic (in the *Junos Space Network Management Platform Workspaces Feature Guide*).

## Exporting the License Inventory

The Device License Inventory feature enables you to display the currently installed license inventory information for all DMI schema-based devices under Junos Space Network Management Platform management.

The license inventory is generated when the device is first discovered and synchronized in Junos Space Network Management Platform.

The licenses used by all Juniper Networks devices are based on SKUs, which represent lists of features. Each license includes a list of features that the license enables and information about those features. Sometimes the license information also includes the inventory keys of hardware or software elements upon which the license can be installed.

To view the license(s) for Junos Space Network Management Platform itself, see [Viewing Junos Space Licenses](#).

This topic also covers:

- Absence of license
- Trial information
- Count-down information
- Date-based information

DMI enables each device family to maintain its own license catalog in the DMI Update Repository. The license catalog is a flat list of all the licenses used by a device family. The key for a license element is its SKU name. Each license element in the catalog includes a list of features that the license enables and

information about each feature (that is, its name and value). Optionally, the license element can also list the inventory keys of hardware or software elements and where it can be installed.

If the license inventory on the device is changed, the result depends on whether the network is the system of record or Junos Space Network Management Platform is the system of record. See [Systems of Record in Junos Space Overview](#).

If the network is a system of record, Junos Space Network Management Platform automatically synchronizes with the managed device. You can also manually resynchronize the Junos Space Network Management Platform license database with the device by using the Resynchronize with Network action. See [Resynchronizing Managed Devices with the Network](#).

If Junos Space Network Management Platform is the system of record, neither automatic nor manual resynchronization is available.

Viewing device license inventory does not include pushing license keys to devices. You can, however, push licenses with the Configuration Editor to any device that has license keys in its configuration. You can export device license inventory information to a CSV file for use in other applications.

License inventory information shows individually installed licenses as well as a license usage summary, with statistics for various features.

To export the license inventory for a device:

1. On the Network Management Platform user interface, select **Devices > Device Management**.

The Device Management page displays the devices managed in Junos Space Network Management Platform.

2. Select **Device Inventory > View License Inventory** from the Actions menu.

Need Counts in red indicate violations. In other words, entries in red indicate that you are using features that you are not licensed to use. You may also encounter the message that you have no licenses installed.

3. (Optional) View the list of licensed features for the selected license by double-clicking a license usage summary or clicking on the forward action icon to the left of a license usage summary.

4. (Optional) Click **Return to Inventory View** at the top of the inventory page.

5. (Optional) Click **Export** at the top of the inventory page, to export the license inventory information.

The Export Device License Information dialog box appears, displaying a link: Download license file for selected device (CSV format).

6. (Optional) Click the download link.

The Opening Device License-xxxxxxCSV dialog box appears, where xxxxxx represents a number.



7. Open the file with an application of your choice or download the file by clicking **Save**.

Exporting device license information generates an audit log entry.

**Table 4: License Usage Summary Fields**

Field	Description
Feature name	Name of the licensed SKU or feature. It can be used to look up the license with Juniper Networks. Not all devices support this.
License count	Number of times an item has been licensed. This value may have contributions from more than one licensed SKU or feature. Alternatively, it may be 1, no matter how many times it has been licensed.
Used count	Number of times the feature is used. For some types of licenses, the license count will be 1, no matter how many times it is used. For capacity-based licensable items, if infringement is supported, the license count may exceed the given count, which has a corresponding effect on the need count.
Need count	Number of times the feature is used without a license. Not all devices can provide this information.
Given count	Number of instances of the feature that are provided by default.

**Table 5: License Feature or SKU Fields**

Field	Description
Feature Name	Name of the licensed SKU or feature. It can be used to look up the license with Juniper Networks. Not all devices support this.
Validity Type	The SKU or feature is considered permanent if it is not trial, count-down, or data-based.

**Table 6: Additional Fields in CSV Files**

Field	Description
State	Status of the license: valid, invalid, or expired. Only licenses marked as valid are considered when calculating the license count.
Version	Version of the license.
Type	Permanent, trial, and so on.
Start Date	Licensed feature starting date.
End Date	Licensed feature ending date.
Time Remaining	Licensed feature time remaining.

## Juniper Connected Security for VMware NSX Licensing

VMware NSX is VMware's network virtualization platform for the Software Defined Data Center (SDDC). You can add the vSRX Virtual Firewall Virtual Services Gateway as a partner security service in the VMware NSX environment. The vSRX Virtual Firewall security service is managed by the Junos Space Security Director and VMware NSX Manager to deliver a complete and integrated virtual security solution for your SDDC environment. The vSRX Virtual Firewall provides advanced security services (Layer 7 services), including intrusion detection and prevention (IDP), and application control and visibility services through AppSecure.

The Juniper Connected Security for VMware NSX licensing includes support for Juniper's virtual firewall (vSRX Virtual Firewall), Network Security services (AppSecure, IDP) and the Juniper Connected Security and Security Management solutions (Policy Enforcer and Security Director) for VMware NSX-based private cloud advanced security.

### Juniper Connected Security for VMware NSX Advanced Security Licenses

The Juniper Connected Security for NSX Advanced Security (ADS) licenses that are available from Juniper Networks provide entitlement for protection of one physical CPU socket, with one vSRX Virtual Firewall instance key provided for each license. Typically, a VMware ESXi server has multiple CPU sockets, and each CPU socket has multiple cores.

All Juniper Connected Security for NSX ADS licenses have an associated time duration; you purchase licenses as subscription based for a 1-year, 3-year, or 5-year duration.

A Juniper Connected Security for NSX ADS license cannot be purchased as a perpetual (never expire) license. Each license is only available on a subscription basis.

Each license includes support for the following:

- Juniper vSRX Virtual Firewall Series Virtual Services Gateway, including:
  - Stateful L3-L4 firewall
  - Advanced Application Security (ASEC) features (such as AppID, AppFW, AppQoS, and AppTrack)
  - Intrusion Detection and Prevention (IDP)
- Juniper Security Management solutions, including:
  - Junos Space Security Director
  - Juniper Connected Security Policy Enforcer

The licenses available in the Juniper Connected Security for VMware NSX ADS licensing model are based on SKUs which represent the terms of subscription and the supported features.

**Table 7: Juniper Connected Security for VMware NSX ADS Licensing Packages**

License Model Number	Description
JNSX-ADS-1-1Y	<p>Juniper Connected Security for NSX Advanced Security with vSRX Virtual Firewall for 1 physical CPU socket - 1 Year Subscription</p> <p>The 1-year subscription license includes support for Security Director, Policy Enforcer, 1 vSRX Virtual Firewall entitlement for 1 physical CPU socket protection with AppSecure and IDP feature support</p>
JNSX-ADS-1-3Y	<p>Juniper Connected Security for NSX Advanced Security with vSRX Virtual Firewall for 1 physical CPU socket - 3-year Subscription</p> <p>The 3-year subscription license includes support for Security Director, Policy Enforcer, 1 vSRX Virtual Firewall entitlement for 1 physical CPU socket protection with AppSecure and IDP feature support</p>

**Table 7: Juniper Connected Security for VMware NSX ADS Licensing Packages (Continued)**

License Model Number	Description
JNSX-ADS-1-5Y	<p>Juniper Connected Security for NSX Advanced Security with vSRX Virtual Firewall for 1 physical CPU socket - 5 Year Subscription</p> <p>The 5-year subscription license includes support for Security Director, Policy Enforcer, 1 vSRX Virtual Firewall entitlement for 1 physical CPU socket protection with AppSecure and IDP feature support</p>

## License Duration

The Juniper Connected Security for NSX ADS license model is subscription based. A subscription license is an annual license that allows you to use the licensed software for the matching duration. Subscriptions might involve periodic downloads of content (such as for IDP threat signature files). At the end of the license period, you need to renew the license to continue using it.

Subscription licenses start when you retrieve the license key or 30 days after purchase if you have not retrieved the license key. All subscription licenses are renewable.

## License Procurement and Installation

To enable a Juniper Connected Security for NSX ADS license, you must purchase, install, and manage the license key that corresponds to the specific terms of each license. The presence of the appropriate software unlocking key on your virtual instance allows you to configure and use that license.

Licenses are usually ordered when the software application is purchased, and this information is bound to a customer ID. If you did not order the licenses when you purchased your software application, contact your account team or [Juniper Networks Customer Care](#) for assistance. Licenses can be procured from the [Juniper Networks License Management System \(LMS\)](#).

From the Junos Space Security Director, you discover the NSX Manager and perform service registration of the vSRX Virtual Firewall VM with the NSX Manager. The NSX Manager is added as a device in Security Director and its inventory is synchronized with Security Director. Discovering the NSX Manager and registering vSRX Virtual Firewall as a security service in Security Director are described in detail in [Deploying the vSRX as an Advanced Security Service in a VMware NSX Environment](#).

As part of the service registration procedure, in the Service Manager Registration section of the Add NSX Manager page, you enter the license key.

**Figure 5: Service Manager Registration: Entering the License Key**

The screenshot displays the 'Add NSX Manager' wizard interface. At the top, a progress bar indicates three steps: 1. NSX Manager, 2. Service Manager Registration (current step), and 3. vCenter Server. Below the progress bar, the section is titled 'Security Service Registration'. It contains three input fields: 'SO Username' with the value 'supdr', 'SO Password' with masked characters, and 'License Key \*' with a long alphanumeric string. At the bottom of the form, there are three buttons: 'Cancel', 'Back', and 'Next'.

## Example: Content Security License Activation Video

Use the [License Activation](#) video for a walkthrough of license activation and basic management using the J-Web.