

# Electronic Fulfillment of Feature, Capacity and Subscription License Activation Keys via the License Management System (LMS)

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## Overview

Juniper's products utilize a variety of licensing models. Most of our products--outside of our higher-end IPG products--use license activation keys to enable features, capacity and subscriptions in individual systems, appliances and standalone software products.

To enable customers to obtain activation keys very soon after receiving a customer's order, Juniper increasingly employs electronic email fulfillment of ordered items and on-line self service generation of license activation keys..

This document explains product license activation keys, Juniper's related ordering, electronic fulfillment and key generation processes. It presents what a customer should expect.

## A "License Key" Explained

Juniper systems and appliances as shipped come fully capable of supporting the features and capacities a customer may have ordered for the system.

- On most appliances, to use a purchased product feature requires the customer to "unlock" the feature or capacity.
- A customer must purchase the license rights and then apply a License Activation Key to unlock that feature or capacity in the O/S or software.
- Examples of features that require unlocking are: J-Flow on the J-Series, extra appliance management capacity on NSM series. An example of a subscription that requires unlocking is Anti-Virus checking.
- Informally speaking, a "key" that activates or unlocks a given feature on a given Juniper appliance is sometimes called the "license."

## License

The legal right to use software. Covered by the end user license agreement which conveys to the customer the right to use the software consistent with what they purchased.

- License can be in perpetuity or for a limited time.
- License can be limited to a specific SW version
- Even when a feature comes fully enabled on a system, without regard to whether the customer purchased the license right to use the feature, the customer needs to purchase the license rights before using this fully enabled feature.
- For most products, the license rights conveyed are perpetual

## License Activation Key:

A character sequence or small file signed with a highly secure Juniper private cryptographic key, which conveys to the O/S or standalone software information about what is unlocked and allowed to run. It is also known as "Product Activation Key," "License key," or sometimes simply as the "License." These are issued and signed only by Juniper's highly secure back office systems.

- Each O/S supports one key format. Across Juniper product lines, many key formats are used.
- License Activation Keys are almost always "locked" to only a single specific system, appliance or installation ("node locked") in one of these ways
  - to a specific self aware hardware system via the chassis SN or some other attribute of the appliance
  - to a specific software installation ID generated by software at time of installation
  - to a specific version of the standalone software
- Each key can convey one or more features

## Authorization Code (AuthCode)

This is also known as Right to Use (RTU): A unique 16 digit alphanumeric single use character sequence sent from Juniper's order management system which conveys to the recipient that a specific SKU was purchased. The AuthCode

enables the recipient to create appliance specific key(s) to enable the features purchased. The AuthCode is not the key itself.

### **Subscription:**

A product or feature where the conveyed license rights are time limited. Subscriptions have to be renewed. Subscriptions may involve periodic downloads of content (such as for IDP threat signature files). Upon expiration of a subscription, different product behavior occurs, depending on the subscription type and the O/S. Sometimes the subscription activity ceases. In other instances, the appliance ceases downloading new subscription content.

## **Start-up and Activation Behavior Differs Among Juniper Products**

Juniper products have different startup behavior. A product may exhibit one or more of the following behaviors.

- The features come fully enabled, requiring the customer merely purchase the license rights to use the feature. No license activation keys are required
- The product provides warning messages if a feature is used but not licensed as evidenced by application of a license activation key
- The product has a fully licensed base capacity that that is enabled on the appliance as purchased out of the box, no keys required.
- The product has fully licensed base capacity that requires application of an activation key to enable the base capacity. No extra purchase is required. The customer has to retrieve the key from a Juniper website.
- The product allows temporary use of features or capacity, requiring application of a license activation key to continue use the feature/capacity after expiration of the demo period.
- The product allows an appliance to exceed the purchased capacity. Exceeding the purchased capacity may be limited by the amount it exceeds, or by the time duration during which the capacity is allowed to be exceeded
- The product allows temporary use of a feature during a grace period after the use of the feature is no longer allowed
- Without the application of a key, the product will not provide any additional features or capacity

## **Ordering**

### **Licenses are product and follow product sales guidelines**

- Licenses (for both features and subscriptions) can be found on the product price list.
- Customers can order one or more licenses for one or more appliances in a single order.
- Licenses can either be purchased at the time of a new appliance order or can be purchased later, after the appliance is purchased.
- If a customer wants to buy a new appliance with a license, they must purchase two SKUs – one for the appliance and one for the license.
- As feature and subscription licenses are Products, channel discounts for licenses follow the same rules as other Juniper products (as opposed to Service discounts).
- Typically, distributors don't inventory feature licenses as Customers receive everything they need to proceed within an hour of Juniper booking the sales order.

### **The order itself**

- Does not contain the serial number of the system to which the license is destined. That is collected post order fulfillment.
- Contains the company who is buying directly from Juniper (distributor, or company direct), VAR information (through VAR ID) if provided, and end customer information (through end customer email address) if provided.
- For each sales order line item that contains an electronically fulfilled product Juniper sends an email.
- The quantity ordered on the sales order line determines how many Authorization Codes will be provided in the email

- If a sales order contains multiple electronically fulfilled line items, an email is sent for each line item.

## The Electronic Fulfillment Process

- For products and features shipped electronically, fulfillment would be to the email address of the direct customer (distributor or company direct), and VAR (if VAR ID is present on the order), and end customer (if email address is present on the order).
- Once Juniper processes the order for the feature/capacity/subscription, it is fulfilled within an hour by the electronically shipping--via email—one or more Authorization Code(s)
- When ordering software only products, Juniper ships electronically via email a Software Serial Number (the serial number of the product installation). The customer will use this serial number through out their interactions with Juniper support teams in reference to this installation.
- Attached to the email is a .PDF file which contains the RTUs (Authorization Code(s)) or software serial numbers, and contains instructions to obtain the license activation key(s) and to apply each license activation key to the appliance.
- Fulfillment email and accompanying attachments are Juniper branded.

## Obtaining Non-Subscription Product Activation Keys

- Obtaining a non-subscription license activation key follows a self-service model
- To obtain the license key, the partner or customer must have a Juniper support login
- Partner/Customer accesses Juniper's License Management System (LMS) at [https://www.juniper.net/generate\\_license/](https://www.juniper.net/generate_license/)
  - Select "Login to Generate License Keys."
  - Partner/Customer would select the product line from the dropdown
  - In the WebUI, the customer is prompted for the serial number of the product, the Authorization Codes (if applicable), and other relevant information (e.g., Hardware ID, Email address, etc.)
  - Upon validation of the Serial Number and the Authorization Code(s), LMS returns the license activation key(s).
- The License Activation key is highly specific, in that it will unlock only the particular feature (known from the Authorization Code) on the particular appliance or installation (as specified by the serial number)
- The license activation key(s) can be returned in a text file or emailed to the person logged in.

## Obtaining License Activation Keys via the Partner Online Authorization Code Access Tool

- All purchased Authorization Codes sent to a partner are deposited in their Juniper partner Authorization Code portal.
- Partners can log in from the Partner Center or at the URL <https://cust-services.juniper.net/authcode/>
- The tool allows Partners to retrieve and download their Authorization Codes and to convert Authorization Codes to license activation keys. (This is enabled for most product lines.)
- Specific partner employee permission is needed to access un-used Authorization Codes

## Obtaining Subscription License Activation Keys

- Obtaining Subscription license activation keys follows a self-service hands-free model
- To obtain the license key, the partner or customer must have a Juniper support login
- Partner/Customer accesses Juniper's Subscription Registration System at <http://tools.juniper.net/subreg/> and selects Subscription Registration Tool.
- In the WebUI, the customer is prompted for the serial number of the product, the Authorization Code, the end user email address (to assign ownership) and the support e-certificate. The support e-certificate, while optional for creating a new subscription, allows Juniper support to attach to the product.
- Upon validation of the Serial Number and the Authorization Code, LMS readies itself for an internet request by the appliance itself for the subscription activation keys.

- From the product itself, the customer invokes a request to retrieve the subscription keys via the internet.
- Upon retrieval of keys, product initiates the subscription activity. Reboot may be required depending on the specific product O/S.

### **Activation of multiple product features (bulk activation)**

- Both perpetual and subscription license activation keys can be activated in bulk (A URL is located on the single appliance activation screen)
- If there are more than 20 items, it is easier to use the “bulk” registration utility, wherein the customer can up-load a file (text or Excel depending on the juniper webUI) containing a list of Authorization Codes, Serial numbers and other required information.
- A single file can activate product licenses for a single customer and single location and a maximum of 500 appliances. For multiple customers or multiple locations or greater than 500 units, multiple upload files should be used.

## **Subscriptions**

### **Subscription Duration**

- Registration has the effect of “starting the clock” for the subscription license. That is, the start date of the subscription license is the date that the subscription AuthCode is presented to Juniper and registered to the appliance. The end date is specific to the purchased license term (i.e., one year, two years, three years, etc.) later
- For content security subscriptions (Antivirus, AntiSpam, Web Filtering, IDP), should two subscription AuthCodes for the same subscription type be applied to the same appliance, LMS will concatenate the terms in the order the AuthCodes are presented. For Access capacity subscriptions, two AuthCodes applied to the same device will result in more capacity, not concatenated terms.
- At no time will a customer be allowed to exceed Juniper’s maximum limit for the individual subscription type

### **Renewing Subscriptions**

- Renewals apply only to subscription licenses, which are time-bound. Renewals are not applicable to perpetually licensed features or capacity.
- During the renewals process, subscriptions can be co-terminated with other time bound Juniper products and services.
- The process for renewing subscription licenses is similar to the process for renewing support contracts.
  - The Juniper renewals team notifies the customer and channel partner when subscriptions are coming up for renewal (up to 90 days in advance).
  - They will work with the channel partner and the end customer to create a quote for renewal.
  - Renewal SKUs are distinguished by the –R suffix
  - Once the quote is accepted and an order is booked through in Juniper’s order management system, the LMS system is updated and the subscription term end date is set to that of specified in the quote.
- Juniper appliances are programmed to automatically contact LMS via the internet and download a renewal subscription activation key as they near the end of their subscription period. This automatic download only works if (a) the appliance is connected to the Internet and (b) the renewal is processed before the original key expires.

## License Activation Keys and the Product Lifecycle

### Product Demos / Subscription Trials

- Juniper enables product demonstrations. Time limited demo keys enable are available in most Juniper products.
- Juniper's pre-sales Systems Engineers and sales teams can facilitate product demonstrations.
- A customer can self-service try a subscription
  - If an appliance capable of running a subscription is connected to the Internet, then the appliance can request a trial key for the full complement of available subscriptions. Juniper's LMS will provide the appliance via the internet the keys necessary to enable the trial.
  - Alternatively, a customer may login to LMS to request a trial of one or all subscriptions on a specific appliance. In this instance the keys are presented to the customer by LMS.
- Trial keys typically enable 30 day subscription trials.
- Only once a year are trials allowed for a specific subscription for a specific appliance.

### Finding Past Keys

- Customer can login to Juniper's License Management System (LMS) at [https://www.juniper.net/generate\\_license/](https://www.juniper.net/generate_license/) and Manage Product Licenses - Find License Keys
- At the Find Keys tab, they can enter the system serial number and obtain all keys still valid for that appliance

### RMA Transfer of Keys

- Juniper offers customers self service web tools to transfer keys to RMA replacement appliances
- If you return an appliance via a service RMA, the old feature/subscription key(s) will no longer work on the replacement appliance because the replacement appliance will have a different serial number
- Specific RMA procedures are described in the document "How to transfer a license activation key to an RMA replacement device" <https://www.juniper.net/support/990504.pdf>

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