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Cisco Identity Services Engine Licensing

Software Version 1.2

Product Overview

ISE License Packages

The Cisco[®] Identity Services Engine (ISE) licensing packaging strategy is designed to minimize the number of orderable licenses by combining related Cisco ISE services. This approach increases the value and simplifies the ordering of licenses. Currently four Cisco ISE license packages are available. The Evaluation license is included in the Cisco ISE software (see Table 1).

Table 1. Cisco ISE License Packages

ISE License Package	Focus	Perpetual/Subscription (Terms Available)	Notes
Base	Secured access	Perpetual	
Advanced	Provides context about endpoints for more detailed access policies	Subscription (1, 3, or 5 years)	Does not include Base services; Base licenses are required to install Advanced licenses.
Wireless	Complete Cisco ISE services for wireless endpoints only	Subscription (1, 3, or 5 years)	
Wireless Upgrade	Enables VPN and wired endpoint support for Wireless license deployments	Subscription (1, 3, or 5 years)	See the Cisco ISE License Ordering Guidelines section for quantity requirements.
Evaluation	Limited use of Cisco ISE product for presales customer evaluations	Temporary (90 day)	Full Cisco ISE functionality is provided for 100 endpoints.

Cisco ISE Services, Licenses, and Software

Understanding Cisco ISE service and license relationships is important for license ordering and deployment. Table 2 provides a cross-reference for Cisco ISE services, supported licenses, and initially supported Cisco ISE software versions.

Table 2.	Cisco ISE	Services.	Licenses.	and Software
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Cisco ISE Service	Supporting Licenses	Initial Cisco ISE Software Releases
Basic RADIUS authentication, authorization, and accounting, including 802.1x, MAC Authentication Bypass	Base and Wireless	Base (1.0), Wireless (1.0MR)
Web Authentication (Local, Central, Device Registration)	Base and Wireless	Base (1.0), Wireless (1.0MR)
MACsec (all)	Base and Wireless	Base (1.0), Wireless (1.0MR)
Guest portal and sponsor services	Base and Wireless	Base (1.0), Wireless (1.0MR)
Representational state transfer (monitoring) APIs	Base and Wireless	Base (1.0), Wireless (1.0MR)
External RESTful Services (CRUD)-capable APIs	Base and Wireless	Base (1.2), Wireless (1.2)
Profiling	Advanced and Wireless	Advanced (1.0), Wireless (1.0MR)
Profiler feed service	Advanced and Wireless	Advanced (1.2), Wireless (1.2)
Device registration (My Devices portal) and provisioning (BYOD)	Advanced and Wireless	Advanced (1.1MR), Wireless (1.1MR)
Security group access (TrustSec)	Advanced and Wireless	Advanced (1.0), Wireless (1.0MR)

Cisco ISE Service	Supporting Licenses	Initial Cisco ISE Software Releases
Posture	Advanced and Wireless	Advanced (1.0), Wireless (1.0MR)
Endpoint Protection Services (EPS)	Advanced and Wireless	Advanced (1.1), Wireless (1.1)
Mobile device management (partner MDM)	Advanced and Wireless	Advanced (1.2), Wireless (1.2)

License Consumption

"License consumption" refers to the decrease in installed licenses. The consumption of Cisco ISE licenses depends on conditions related to network sessions and the use of Cisco ISE services. Cisco ISE licenses are not permanently assigned to an endpoint, so they can be continually consumed and released. Cisco ISE uses RADIUS accounting "start" and "stop" messages to determine when network sessions begin and end. (See Tables 3 and 4.)

Cisco ISE License	When the License Is Consumed	When the License Is Released
Base	An endpoint establishes an active network session.	The session ends.
Wireless	A wireless endpoint establishes an active network session.	The session ends.
Wireless Upgrade	A wired or VPN endpoint establishes an active network session.	The session ends.

Table 4.	Cisco ISE Advanced License with Service-Based Consumption
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Cisco ISE Service	When the License Is Consumed	When the License Is Released
Profiling	An endpoint with an active session is dynamically profiled and the profile is used to assign authorization.	The session ends.
Profiler feed service	No consumption. Service is enabled with a valid Advanced license.	Not applicable.
Secure group access (SGA)	An endpoint with an active session is assigned an SGA tag.	The session ends or the endpoint is Re-authenticated without SGT assignment.
MDM (partner)	No consumption. Service is enabled with a valid license.	Not applicable.
Posture	An endpoint with an active session receives authorization based on a posture status other than "Not applicable" (for example, Compliant, Not compliant, Pending, or Unknown).	The session ends or the endpoint reauthenticates to a session that does not require posture.
Device registration and client provisioning (BYOD)	No consumption. Service is enabled with a valid Advanced license.	Not applicable.
Endpoint Protection Services	No consumption. Service is enabled with a valid license.	Not applicable.

License Enforcement

Enforcement actions may occur when events cause the terms and conditions governing the use of the Cisco ISE license to be exceeded. Presently two conditions cause a license enforcement action to occur: oversubscription and license expiration (Table 5). These enforcement actions may change in the future.

 Table 5.
 Cisco ISE License Enforcement Guidelines

Event	Definition	Enforcement Action
Oversubscription	More endpoints are authorized to establish network sessions or use Cisco ISE services than are entitled to do so through installed licenses.	Alerts and notifications are transmitted.
30 Days Before License Expires	License expiration date approaches.	An alert notifies the user that the "license expires in x days" and is updated hourly.

Event	Definition	Enforcement Action
License Expiration	License expiration date is reached.	Cisco ISE generates an alert that the license has expired.
		The Advanced service options (profiling, posture, etc.) in the Policy menu will be unavailable.
		When the Evaluation license expires, it locks out the system completely and defaults to the license import page.

Notes: The licensing terms and conditions are listed in the Supplemental End User Agreement (SEULA) and is distributed with the product activation key (PAK).

The term of a Cisco ISE subscription license (Advanced, Wireless, Wireless Upgrade) begins when the PAK is dispatched; this generally occurs 24 hours after the sales order is processed.

License Management

Cisco offers a variety of license management tools at the <u>License Management portal</u>. A valid CCO user name and a password are required to access the portal. Key features of the Cisco License Management portal include:

- Simplified asset management: Identifies PAKs registered to a customer and the devices with installed licenses
- Automated software activation: Quickly processes PAK registration and license file distribution
- License transfers: Rehosts existing licenses to new Cisco ISE Administration nodes
- Replacement of devices: Uses the "return materials authorization" to request replacement PAKs and licenses

Cisco ISE Licensing FAQ

- Q. Can I mix Base and Advanced licenses with Wireless licenses in a Cisco ISE deployment?
- A. No. A Cisco ISE deployment can use either Base and Advanced licenses or Wireless and Wireless Upgrade licenses. A Base or Advanced license cannot be mixed with Wireless licenses.
- Q. Can a single endpoint consume more than one license?
- A. Yes, but not more than one license of each type. For example, a single endpoint could consume both a Base and an Advanced license. However, a single endpoint cannot consume two Base licenses, or two Advanced licenses, or two Wireless licenses, and so on.
- Q. Do I need to enable RADIUS accounting on my network access devices (NADs)?
- A. Yes. Properly configured RADIUS accounting is essential for accurate Cisco ISE license consumption metrics and endpoint session monitoring.
- Q. Does an endpoint with a session authorized by MAC Authentication Bypass (MAB) consume a license?
- A. Yes. A Base license will be consumed by an endpoint that receives MAB to access the network.
- Q. Why do some Advanced, Wireless, and Wireless Upgrade licenses have an "S" in the SKU?
- A. The "S" designates a new type of subscription license. These new licenses enable the same services and are priced the same as the older licenses. However, the new subscription licenses enable additional ordering capabilities such as co-terming and renewal management.
- Q. Can the older (non-"S") Advanced, Wireless, or Wireless Upgrade licenses be co-termed or renewed?
- **A.** No.

- **Q.** Are there specific renewal license SKUs to order when renewing a license, and is there a built-in renewal discount?
- A. No, there are no specific ISE license SKUs for renewals. Customers must reorder or renew the general licenses. There is no built-in renewal discount, but a nonstandard discount might be arranged through your Cisco Certified Partner or Cisco sales team.
- Q. Does BYOD consume an Advanced license?
- A. No. BYOD is associated with an endpoint being registered with the My Devices portal and supported by native supplicant provisioning. Neither of these operations consumes an Advanced license. However, it should be noted that an Advanced license is required to enable the My Devices portal and native supplicant provisioning.
- Q. Do I need to buy technical support for Cisco ISE licenses?
- **A.** No. Technical support is entitled through a support offer (for example, Cisco SMARTnet[®] or Software Application Support plus Upgrades) that is purchased for a Cisco ISE appliance.
- **Q.** If I deploy Cisco ISE with primary and secondary Administration nodes, can I have the licenses registered to both nodes?
- A. Yes. The <u>Cisco PAK registration page</u> allows a PAK and the associated license file to be registered to the unique device identifiers (UDIs) of the primary and secondary Administration nodes. The registration of the PAK to the primary Administration node is mandatory; the registration of the secondary Administration node is optional.
- **Q.** If I upload a license file only to the primary Administration node, will it propagate license information to the other Cisco ISE nodes on the network?
- **A.** All nodes in a Cisco ISE deployment use the license applied to the primary Administration node. If the primary node fails, the secondary Administration node is promoted and uses the licenses acquired from the primary Administrative node.
- **Q.** What is a UDI?
- **A.** A UDI is the unique device identifier of each Cisco ISE appliance. The UDI comprises three values: the product ID (PID) or SKU, the version ID (VID), and the serial number.
- Q. I need to change or upgrade my Administration node. Do I need to buy new licenses?
- A. No. Valid ISE licenses can be rehosted to the UDI of a new node (see <u>http://www.cisco.com/go/ise</u> for more information).
- **Q.** Do all Cisco ISE licenses require partners be certified Authorized Technology Provider (ATP) certification to order?
- **A.** No. Wireless licenses do not require ATP certification. ATP certification is required for Base, Advanced, and Wireless Upgrade licenses.
- **Q.** If I installed 5-year Wireless licenses and have 3 years remaining in the term before they expire, and I want to install Wireless Upgrade licenses, what license term should I select?
- **A.** Select the 3-year term. The term of the Wireless Upgrade licenses should match the remaining term of the Wireless licenses as closely as possible so they expire together.

- **Q.** I have 1,000 Wireless licenses installed and want to add support for 200 wired and 300 VPN devices. How many Wireless Upgrade licenses should I order?
- **A.** If Cisco ISE Software Release 1.2 is being used, you can order 500 Wireless Upgrade licenses. If Release 1.1.x is being used, 1,000 Wireless Upgrade licenses are needed.
- Q. Do I need to purchase licenses for every node in a Cisco ISE cluster or deployment?
- **A.** No. Cisco ISE license files are uploaded to the primary Administrative node, and the node propagates the licenses to all the nodes in the cluster or deployment.
- Q. What happens when a Cisco ISE term-based license expires?
- **A.** When an Advanced license expires, the Advanced-level services (posture, profiling, SGA, etc.) are no longer available in the Policy menu. Base-level services are not affected. When a Wireless license expires, the user is redirected to the License Import page so that a new license can be installed.
- Q. Will I receive an alert before license expires?
- **A.** Yes. An alert will be generated 30 days before the date of expiration and will be sent hourly. Additionally, the licensing homepage (Main Menu: Administration > Licensing) displays the date at which each license expires.
- Q. Can I extend the term of my Cisco ISE Evaluation license?
- **A.** Yes. To extend the term of your Evaluation license, please contact your Cisco sales team or partner. They will coordinate with the Cisco ISE product team to produce the license extension. Please allow 10 business days to obtain the license extension.

Ordering

All Cisco ISE licenses are orderable through the Cisco Commerce Workspace (CCW) website. All Cisco ISE licenses are listed on global price list (GPL).

Cisco ISE licenses can be ordered in quantities of 100; 250; 500; 1,000; 1,500; 2,500; 3,500; 5,000; 10,000; 25,000; 50,000; and 100,000.

Term licenses can be ordered with 1, 3, or 5-year terms.

Cisco ISE License Ordering Guidelines

- Do not mix Base or Advanced licenses with Wireless or Wireless Upgrade licenses.
- The number of installed Base licenses must exceed or be equal to the number of Advanced licenses.
- For ordering Wireless Upgrade licenses, use the following rules:

ISE SW Release	Rule
1.1.x	The number of Wireless and Wireless Upgrade license must be equal
1.2	The number of Wireless Upgrade licenses must be less than or equal to the number of Wireless licenses



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