

ISE 2.4 Upgrade Alarms: Fewer VM licenses installed than VM nodes deployed

Contents

[Introduction](#)

[Question. After upgrade of ISE to 2.4 you may be getting an Alarm "Alarms: Fewer VM licenses installed than VM nodes deployed", even though all required licenses were installed before the upgrade.](#)

Introduction

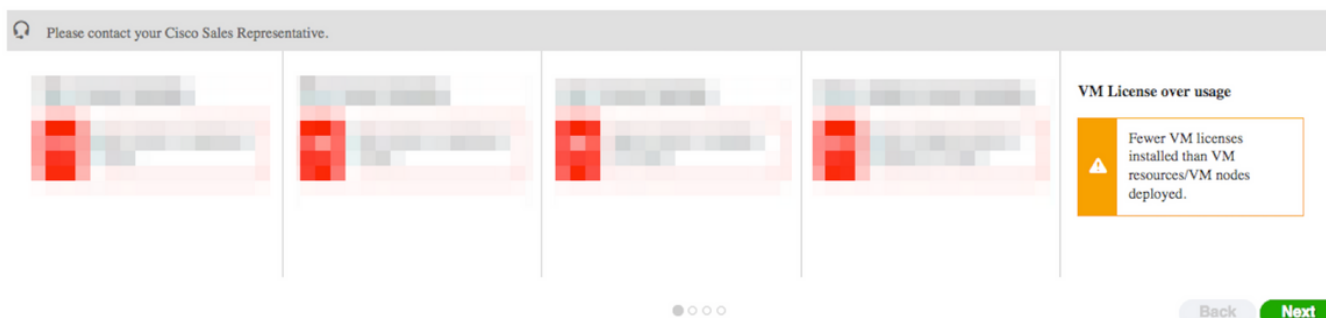
Question. After upgrade of ISE to 2.4 you may be getting an Alarm "Alarms: Fewer VM licenses installed than VM nodes deployed", even though all required licenses were installed before the upgrade.

Answer. For Release 2.4, it is recommended that you install appropriate VM licenses for the VM nodes in your deployment. You must install the VM licenses based on the number of VM nodes and each VM node's resources such as CPU and memory. Otherwise, you will receive warnings and notifications to procure and install the VM license keys in Release 2.4, however, the services are not interrupted.

Alarm itself will manifest in multiple ways.

- **License Warning on first login after upgrade:**

License Warning











- **License Information message on first login after upgrade:**

License Information

Release 2.4 upgrade has successfully completed. Please import the VM license when notified. You may access the Upgrade Guide to review additional information on Release 2.4.



- **Alarm in the Alarms Dashlet:**

ALARMS ⓘ			
Severity	Name	Occu...	Last Occurred
	[Redacted]	7955	3 mins ago
	[Redacted]	88	28 mins ago
	[Redacted]	12	31 mins ago
	Fewer VM licenses installed than VM nodes deployed	1	31 mins ago
	[Redacted]	2271	31 mins ago
	[Redacted]	147	31 mins ago
	[Redacted]	69	5 hrs 15 mins ago
	[Redacted]	231	5 hrs 16 mins ago

Last refreshed: 2018-04-06 13:49:28

VM licenses are offered under three categories—Small, Medium, and Large. For instance, if you are using 3595 equivalent VM node with 8 cores and 64 GB RAM, you might need a Medium category VM license, if you want to replicate the same capabilities on the VM. You can install multiple VM licenses based on the number of VMs and their resources as per your deployment requirements.

VM licenses are Infrastructure licenses, therefore, you can install VM licenses irrespective of the endpoint licenses available in your deployment. You can install a VM license even if you have not installed any Evaluation, Base, Plus, or Apex license in your deployment. However, in order to use the features enabled by the Base, Plus, or Apex licenses, you must install the appropriate licenses.

After installing or upgrading to Release 2.4, if there is any mismatch between the number of deployed VM nodes and installed VM licenses, alarms are displayed in the Alarms dashlet for every 14 days. Alarms are also displayed if there are any changes in the VM node's resources or whenever a VM node is registered or deregistered.

VM licenses are perpetual licenses. VM licensing changes are displayed every time you log in to the Cisco ISE GUI, until you check the "Do not show this message again" check box in the notification popup.

If you are planning to upgrade to Release 2.4, contact licensing@cisco.com with sales order numbers that include VM purchase to procure one medium VM license for each VM previously purchased. You should also include your CCOID along with the sales order number. Alias is only for previously purchased customers who wish to upgrade to 2.4 and need PAKs. New customers are expected to channel their purchases through direct sales or partners who will walk them through the regular buying process.

The following table shows the minimum VM resources by category:

VM Category RAM Range Number of CPUs

Small	16 GB	12 CPUs
Medium	64 GB	16 CPUs
Large	256 GB	16 CPUs

For more information about the licenses, see the "Cisco ISE Licenses" chapter in the [Cisco Identity Services Engine Administrator Guide, Release 2.4](#).

This information is also available in the upgrade guide:

[Cisco Identity Services Engine Upgrade Guide, Release 2.4](#)