Welcome to VxRail Administration and Management Learning Series, VxRail Licensing module.
This module covers VxRail Appliance licensing requirements and considerations.

VxRail Licensing

Objectives

Upon completion of this module, you should be able to:

• Discuss how customers are responsible for all network switch licensing
• Describe what licensing is included with the VxRail Appliance
• Explain the options for customers to procure vSphere licensing
VxRail licensing

- Customers provide network switches and are responsible for all licensing to operate the switch
- VxRail includes VMware licenses for:
  - VxRail Manager
  - VMware vCenter Server Standard
  - VMware Virtual SAN Enterprise
  - VMware vRealize Log Insight
  - Customer Provided
  - Customer Provided
  - Bundled with Appliance
- It does not include licenses for vSphere
- A vSphere license is required for every CPU on every VxRail node
- VxRail is shipped with 60-day temporary licenses
  - There is a 60 day grace period to apply vSphere licenses to the VxRail nodes
- vSphere licenses for Enterprise Plus, Enterprise, Standard, ROBO, and Desktop Editions can be applied to VxRail nodes

VxRail bundles Dell EMC and VMware software within the VxRail appliance. It includes licensing for VxRail Manager, vCenter, VMware Virtual SAN and VMware vRealize Log Insight. Customers must acquire their own vSphere licensing. This could be included in the order or for customers with existing vSphere licenses those could be used. VxRail models ordered with the “bundled” 60 day vSphere license (also know as the non-VLP option) come with vSphere Standard licenses not vSphere Enterprise Plus.
As already stated, VxRail requires customers to provide vSphere licensing. Whether they already have an enterprise site license agreement or choose to purchase licensing at the time of a VxRail appliance purchase, vSphere licenses are the responsibility of the customer.

Included with the VxRail appliance is a 60-day trial vSphere license to allow a customer to do a proof-of-concept or to simply get started with the evaluation of the system before they go into production. To avoid a possible disruption, it is strongly recommended that the actual licenses be in place before running production applications on the VxRail system.
For the VxRail Bring You Own (BYO) vSphere license model, several vSphere license editions are supported including Enterprise Plus, Standard, and ROBO editions. Also supported are vSphere licenses from VMware Horizon bundles or add-ons when the appliance is dedicated to VDI.

If vSphere licenses need to be purchased, they should be ordered through Dell EMC, the customer’s preferred VMware channel partner, or from VMware directly. Licenses acquired through VMware ELA, VMware partners, or Dell EMC will receive single-call support from Dell EMC.
With VxRail you have a number of choices for features and functions. For cost conscience environments the standard license feature set may suffice. For enterprise customers who require simplified management, optimal performance and maximum availability the enterprise plus would make the most sense. Enterprise plus is recommend for the automation and increased productivity that it delivers with features including Distributed Resource Scheduler (DRS) and the VMware Distributed Virtual Switch.
There are numerous software licenses included with VxRail. These licenses are used for monitoring and managing the VxRail environment as well as licenses to help with replication (Dell EMC RecoverPoint for Virtual Machines) and cloud storage (Dell EMC CloudArray.) Most are installed as part of the initial configuration. The remainder can be downloaded through VxRail Manager.
Network switch licensing

- Most major network switch vendors require licensing
- Depending on switch type, it may be important to install licensing for:
  - Operating system
  - Ports
  - Advance features
- Apply all network licensing as required to operate the switch
  - Apply properly licenses to verify there is no disruption in service

Often the network switches used in VxRail environments require optional features that are enabled by license keys or available via universal licenses for multiple switches. Determine if the network switch is licensed per product, per feature or per port and apply the appropriate network licensing to make sure there is no disruption in service.
RecoverPoint for Virtual Machines provides continuous data protection for virtual machines in a VMware virtual environment. VxRail includes a Starter Pack license for RecoverPoint for Virtual Machines. Additional licenses can be purchased as needed.

Dell EMC CloudArray is accessed through VxRail Manager and provides an additional 10TB of on-demand cloud storage per appliance. CloudArray currently provides connections through APIs to over 20 different public and private clouds including Dell EMC ViPR, VMware vCloud Air, Rackspace, Amazon Web Services, Google Cloud, Dell EMC Atmos, and Openstack. VxRail CloudArray can provide an elegant, seamless solution for cost-efficient cold data storage or an easily accessible online archive with predictable performance.
VxRail software license management

- VxRail comes with the licensing required to operate the appliance but requires customers to provide vSphere licensing
- It is recommended to make software licensing a part of change management
  - Consider how normal VxRail management affect software licenses
- It is important to keep the licensing in a secure place for when they are needed:
  - Node replacement
  - Appliance expansion
  - Software audit
- VxRail runbook can act as a software asset management tool where licenses are documented

As with all data center infrastructure systems, it is also important to stay compliant with VxRail software licensing. Record the VxRail and VMware vSphere licensing in the system runbook for a single point of reference. This ensures that license information will be easily accessible when it is needed.
Warning on license downgrade

A license downgrade from vSphere Enterprise Plus will result in loss of features

In the event of a change in licensing from Enterprise plus to Standard, features will be disabled. The Distributed Resource Scheduler functionality will be disabled which could have a direct impact on system availability and automated maintenance procedures. It is recommended to keep the same licensing level used to validate the VxRail environment throughout the life of the VxRail.
Thank you!