

## Table of Contents

Lab Overview - HOL-1828-01-HCI- Getting Started with VxRail .....	2
VxRail Lab Overview .....	3
Module 1 - VxRail Initial Configuration (15 minutes) .....	5
Introduction - Configure a newly deployed VxRail Appliance .....	6
Easily deploy the VxRail Hyper-Converged Appliance .....	8
Hands-on Labs Interactive Simulation: VxRail Initial Configuration .....	9
Conclusion.....	10
Module 2 - VxRail Management, Monitoring and Maintenance Features (15 minutes)....	12
Introduction to VxRail Management, Monitoring and Maintenance Features .....	13
What's New with VxRail Management Features?.....	14
VxRail Monitoring and Maintenance Feature Overview .....	15
Hands-on Labs Interactive Simulation: VxRail Management, Monitoring, and Maintenance Features .....	16
Conclusion.....	17
Module 3 - Troubleshooting HDD Failure (45 Minutes).....	19
Introduction to Troubleshooting VxRail Hard Drive Failure .....	20
Hands-on Labs Interactive Simulation: Troubleshooting HDD Failure .....	21
Conclusion.....	22
Module 4 - Striping and Storage Policy Based Management (15 Minutes) .....	24
Introduction.....	25
Hands on Lab Interactive Simulation: Striping and Storage Policy Based Management .....	26
Conclusion.....	27
Module 5 - VxRail One Click Upgrade (15 Minutes) .....	28
Introduction to VxRail "One-Click" Upgrade .....	29
Upgrading VxRail Software -Local Upgrade .....	30
Hands on Lab Interactive Simulation: VxRail "One-Click" Internet Upgrade .....	32
Conclusion.....	33
Module 6 - VxRail One Click Shutdown (15 Minutes).....	34
Introduction to VxRail One Click Shutdown .....	35
Hands-on Labs Interactive Simulation: "One-Click" Shutdown .....	36
Conclusion.....	37

# Lab Overview - HOL-1828-01-HCI- Getting Started with VxRail

# VxRail Lab Overview

**Note: It will take more than 90 minutes to complete this lab. You should expect to only finish 3-4 of the modules during your time. The modules are independent of each other so you can start at the beginning of any module and proceed from there. You can use the Table of Contents to access any module of your choosing.**

The Table of Contents can be accessed in the upper right-hand corner of the Lab Manual.

**Lab Abstract:** VxRail, the hyper-converged appliance from Dell EMC and VMware, is one of the fastest solutions to standing up a Software Defined Data Center. Simply put, its resilient, scalable and one of the most cost-effective solutions for nearly every application workload.

Lab Module List:

- **[Module 1 - VxRail Initial Configuration](#)** (15 minutes) (Beginner) Configure a newly deployed VxRail Appliance.
- **[Module 2 - VxRail Management, Monitoring and Maintenance Features](#)** (15 minutes) (Beginner) Explore new management, monitoring and maintenance features.
- **[Module 3 - Troubleshooting HDD Failures](#)** (15 minutes) (Intermediate) Error detection, HDD replacement and recognition of new HDD.
- **[Module 4 - Striping and Storage Policy Based Management](#)** ( 15 minutes) (Intermediate) Changing the stripes, defining storage policy based management (SPBM) and Apply changes
- **[Module 5 - One Click Upgrade](#)** (15 minutes) (Beginner) One click internet upgrade story
- **[Module 6 - One Click Shutdown](#)** (15 minutes) (Beginner) One click shutdown story reviews the VxRail Shutdown with one button, suspension of alerts and recovery!

**Lab Captains:**

- **Jodi Shely, Principal Technical Account Manager, USA**
- **Vuong Pham, Senior Solutions Architect, USA**

This lab manual can be downloaded from the Hands-on Labs Document site found here:

<http://docs.hol.vmware.com>

This lab may be available in other languages. To set your language preference and have a localized manual deployed with your lab, you may utilize this document to help guide you through the process:

<http://docs.hol.vmware.com/announcements/nee-default-language.pdf>

## Hands-on Lab Simulation Overview

One of the major benefits of virtualization is that virtual machines can be moved and run on any platform. This VxRail Lab will contain six modules all that entail Interactive Simulation.

Please continue to Module 1 to learn more about the VxRail Initial Configuration.

# Module 1 - VxRail Initial Configuration (15 minutes)

# Introduction - Configure a newly deployed VxRail Appliance

Welcome to VxRail!

In this lab, we will walk through an Interactive Simulation on how to Configure a newly deployed VxRail Appliance.

This module contains an interactive simulation to allow you to experience steps which are too time-consuming and resource intensive to do live in the lab environment.

**Objective:** Become familiar with the VxRail Initial Configuration.

The hyper-converged VxRail Appliance features a clustered node architecture that consolidates compute, storage, and management into a single, resilient, network-ready HCI unit. The software-defined architectural structure converges server and storage resources, allowing a scale-out, building-block approach, and each appliance carries management as an integral component.

From a hardware perspective, the VxRail node is a server with integrated direct-attached storage. No external network components are included with the appliance; VxRail leaves that up to the customer to decide. This allows the VxRail to seamlessly integrate into the existing network infrastructure, preserving existing investment in network infrastructure, processes, and training. Organizations benefit from the simplicity of the appliance architecture that expedites application deployment while providing the same data services expected from high-end systems.

✎ The Appliance architecture design center is “simple.” VxRail is simple to acquire, deploy, operate, scale, and maintain.

✎ The Appliance system-level architecture uses Software Defined Storage and multi-node servers with integrated storage and can leverage whatever network infrastructure is available. Appliance architecture provides low-cost and low-capacity entry points with simple configurations that can easily scale.

✎ Appliance-architecture workload and business requirements focus on simplicity and the ability to start small and grow easily. VDI and productivity applications are examples of the initial workloads deployed in appliances.

The VxRail Appliance is fully loaded with integrated, mission-critical data services from Dell EMC and VMware including compression, deduplication, replication, and backup. The VxRail Appliance delivers resiliency and centralized-management functionality enabling faster, better, and simpler management of consolidated workloads, virtual desktops, business-critical applications, and remote-office infrastructure.

As the exclusive hyper-converged infrastructure appliance from Dell EMC and VMware, VxRail is the easiest and fastest way to stand up a fully virtualized SDDC environment.

Please continue to the next section to proceed to learn more about the VxRail Initial Configuration.

# Easily deploy the VxRail Hyper-Converged Appliance

VxRail is a Hyper-Converged Infrastructure created with the collaboration of EMC and VMware. It contains a fully integrated software in a pre-configured and tested Hyper Converged appliance, managed through VMware vCenter Server. VxRail delivers a turnkey, ease to use, and functionally rich solution to all applications that benefit from server virtualization. VxRail and VSAN are a distributed system architecture that can start small with a single 4-node appliance and scale linearly, in single node increments, up to 64 nodes per cluster. A single vCenter Server can manage several clusters, up to 1000 hosts, further extending the scalability. VxRail provides a very rich set of data services for data protection, data replication, data integrity, non-disruptive data mobility and automated load balancing, and a large number of space efficiency options. VxRail also provides a differentiated ability to service the cluster by leveraging EMC's remote service support, ESRS, from VxRail Manager services.

This lab introduces VxRail 4.0.

In this lab, you will:

- Learn how easy and fast it is to deploy a VxRail Appliance
- Explore VxRail Manager services to monitor the health of the appliance and learn how to execute corrective procedures
- Learn how to upgrade or add a node to an existing cluster
- Learn and explore the new features introduced with VxRail 4.0 such as new Monitoring and Maintenance features, Expanding and Extending your VxRail Cluster, Troubleshooting a Hard Drive and Drive Replacement, IOPS/Striping and Storage Policy Based Management and One-Click Upgrade and One-Click Shutdown procedures.

VxRail Manager streamlines deployment, configuration, and management for easier initial setup and ongoing operations. It also provides integration for services and support to help you get the most out of your VxRail Appliance.

Please proceed to learn more about how VxRail Manager provides a software stack for Software Defined Data Center (SDDC) building blocks including compute, network, storage, and management.

# Hands-on Labs Interactive Simulation: VxRail Initial Configuration

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for VxRail Initial Configuration](#). It will open in a new browser window or tab.
2. When finished, click the **“Return to the lab”** link to continue with this lab.

# Conclusion

In this module, we learned how to quickly deploy and configure the VxRail appliance in just a few steps. Through the use of an quick and easy to use installation wizard, your VxRail will be up and running in no time.

The VxRail is the only fully integrated, pre-configured, and pre-tested hyper-converged infrastructure appliance. This appliance is based on VMware's vSphere and vSAN, and Dell EMC software.

Please proceed as interested to the list of Modules below to learn more about VxRail.

## You've finished Module 1

Congratulations on completing Module 1.

If you are looking for additional information on VxRail, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Proceed to any module to learn more about the VxRail Manager Appliance.

Lab Module List:

- [Module 2 - VxRail Management, Monitoring and Maintenance Features](#) (15 minutes) (Beginner) Explore new management features such as system health.
- [Module 3 - Troubleshooting HDD Failure](#) (45 minutes) (Intermediate) Error detection, HDD Change out and recognition of new HDD .
- [Module 4 - Striping and Storage Policy Based Management](#) (45 minutes) (Intermediate) Identifying the IOPS challenge, Changing the Stripes, Defining Storage Policy Based Management(SPBM) and Apply!
- [Module 5 - VxRail Internet Upgrade](#) (15 minutes) (Beginner) One Click Internet Upgrade Story .
- [Module 6 - VxRail Shutdown](#) (15 minutes) (Beginner) One Click Shutdown Story

Lab Captains:

- Jodi Shely, Principal Technical Account Manager-Office of the CTO Global Field, USA
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## How to End Lab



To end your lab click on the **END** button.

# **Module 2 - VxRail Management, Monitoring and Maintenance Features (15 minutes)**

# Introduction to VxRail Management, Monitoring and Maintenance Features

Welcome to VxRail!

In this lab, we will walk through an Interactive Simulation on how to Configure a newly deployed VxRail Appliance.

This module contains an interactive simulation to allow you to experience steps which are too time-consuming and resource intensive to do live in the lab environment.

**Objective:** Become familiar with the VxRail Management, Monitoring and Maintenance Features.

VxRail Manager features a user-friendly dashboard for automating VxRail deployment and configuration and monitoring the health of individual appliances and individual nodes in the entire cluster. The VxRail Manager is preinstalled on the VxRail appliance as a single virtual machine and it can be accessed by pointing a browser at the VxRail Manager IP address or the DNS host name.

VxRail Manager dashboard displays storage, CPU, and memory utilization at the cluster, appliance, or individual node level. It also incorporates functionality for hardware serviceability and appliance platform life-cycle management. For instance, it guides systems administrators through adding new appliances to an existing cluster, and it automatically detects new appliances when they come online. VxRail Manager is also used to replace failed disk drives without disrupting availability, to generate and download diagnostic log bundles, and to apply VMware updates or software patches non-disruptively across VxRail nodes

Please proceed to start the Hands-on Lab simulation to view the available options to manage your VxRail deployment.

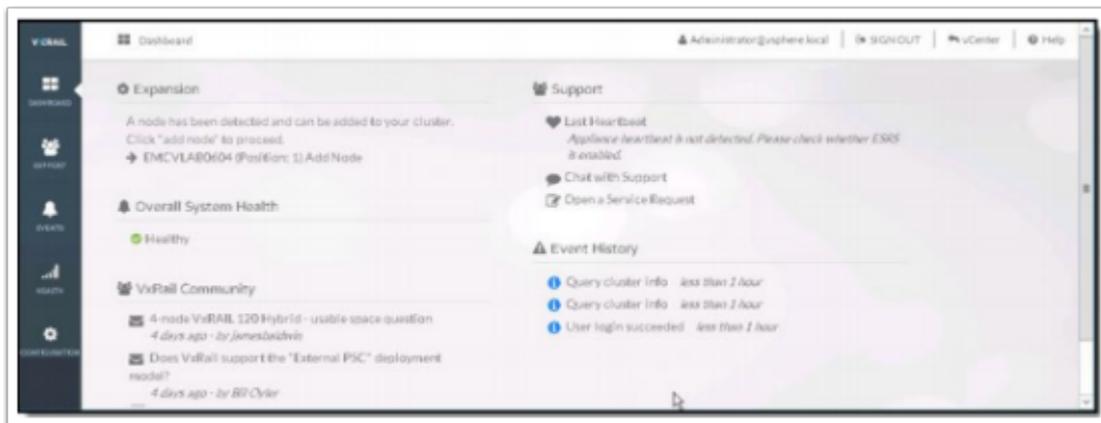
# What's New with VxRail Management Features?

The VxRail™ Manager main dashboard displays the current status of overall system health. Administrators can access additional real-time system health details for both logical and physical resources and can view and analyze resource operability, performance, and utilization data.

The VxRail Manager is the foundation of appliance management functionality. It provides simplicity, scale and savings to allow for real results! It is the only fully integrated, preconfigured, and pre-tested hyper-converged infrastructure appliance on the market.

Here are a few highlights that can speed your time to market leveraging VxRail Manager:

- **Automation for deployment configuration, hardware serviceability, and appliance platform life cycle management**
- **Merged software assets as a single VM and extended new capability to increase flexibility**
- **Single node scaling**
- **vSphere license independence**
- **Enabling asynchronous integration with VMware enterprise management solutions**



VxRail dramatically simplifies IT operations while lowering your overall capital and operational costs. Combined with Dell PowerEdge server options, VxRail offers highly configurable appliances that meet any use case.

Please proceed to the next section to learn more about all the VxRail Management 4.0 Features available today.

# VxRail Monitoring and Maintenance Feature Overview

The VxRail Hyper-Converged Appliance management software includes applications for monitoring, logging, security and access control, compliance and upgrades, in addition to configuration utilities for virtual machines, network, and data services. The building-block design provides a superior implementation model in which all the components have been fully integrated, preconfigured, and tested, making the system simple to set up, expand, and maintain.

The VxRail management platform is a strategic advantage for VxRail and further reduces operational complexity. VxRail Manager presents a simple dashboard interface for infrastructure monitoring and automation of management tasks such as software upgrades. Since VxRail nodes function as ESXi hosts, vCenter Server is used for VM-related management, automation, monitoring, and security.

To summarize, VxRail creates IT certainty. It is built on the enterprise-proven VMware hypervisor, VSAN technology, management, and ecosystem that removes complexity and simplifies day-to-day operations. The system architecture is designed to predictably evolve with the business. The system scales by deploying preloaded appliances to effortlessly extend the environment, rather than by building and manually integrating servers. VxRail, powered by vSAN and featuring Dell PowerEdge Servers, continues to evolve so business can thrive without worrying about the IT infrastructure.

Please continue to the next section to learn more about the Hands-on Lab simulation for VxRail Monitoring and Maintenance.

# Hands-on Labs Interactive Simulation: VxRail Management, Monitoring, and Maintenance Features

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for VxRail Management, Monitoring and Maintenance Features](#). It will open in a new browser window or tab.
2. When finished, click the “Return to the lab” link to continue with this lab.

# Conclusion

In this module, we demonstrated how the VxRail Manager dashboard shows system health and support resources at a glance, including configuration, overall system health, support, community activity, and event history. This module also provided a brief overview of how to quickly monitor your VxRail Appliance and reviewed maintenance options available within the VxRail Dashboard.

## You've finished Module 2

Congratulations on completing Module 2.

If you are looking for additional information on VxRail Manager Appliance, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Please proceed to any of the following Modules for more information regarding VxRail.

Lab Module List:

- [Module 1 - VxRail Initial Configuration](#) (15 minutes) (Beginner) Configure a newly deployed VxRail appliance.
- [Module 3 - Troubleshooting HDD Failure](#) (45 minutes) (Intermediate) Error detection, HDD Change out and recognition of new HDD .
- [Module 4 - Striping and Storage Policy Based Management](#) (45 minutes) (Intermediate) Identifying the IOPS challenge, Changing the Stripes, Defining Storage Policy Based Management(SPBM) and Apply!
- [Module 5 - VxRail Internet Upgrade](#) (15 minutes) (Beginner) One Click Upgrade Story .
- [Module 6 - VxRail Shutdown](#) (15 minutes) (Beginner) One Click Shutdown Story

Lab Captains:

- Jodi Shely, Principal Technical Account Manager-Office of the CTO Global Field, USA
- Vuong Pham, Senior Solutions Architect, USA

## How to End Lab



To end your lab click on the **END** button.

# Module 3 - Troubleshooting HDD Failure (45 Minutes)

# Introduction to Troubleshooting VxRail Hard Drive Failure

This module contains an interactive simulation to allow you to experience steps which are too time-consuming and resource intensive to do live in the lab environment.

The VxRail appliance is driven by vSAN, which has built in protection from drive failures. Depending on the level of protection you need you can set the how VxRail responds to drive failures.

The current architecture used in this Interactive Simulation.

- 4-node G Series VxRail Appliance running v4.0 code
- Deduplication / Compress turned off
- FTT = 1 using FTM = Mirroring
- Capacity hard disk drive failure simulation

This configuration will withstand single component failure without losing data access.

Please proceed to the Interactive Simulation for Troubleshooting VxRail Hard Drive Failure.

# Hands-on Labs Interactive Simulation: Troubleshooting HDD Failure

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for Troubleshooting VxRail Hard Drive Failures](#). It will open in a new browser window or tab.
2. When finished, click the “Return to the lab” link to continue with this lab.

# Conclusion

In this module, we demonstrate how to Troubleshoot your VxRail Hard Drive Failure. This drive failure was a simulation.

## You have finished Module 3

Congratulations on completing Module 3.

If you are looking for additional information on VxRail Manager Appliance, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Please proceed to any of the following Modules for more information regarding VxRail.

Lab Module List:

- Lab Module List:
- [Module 1 - VxRail Initial Configuration](#) (15 minutes) (Beginner) Configure a newly deployed VxRail appliance.
- [Module 2 - VxRail Management, Monitoring, and Maintenance Features](#) (15 minutes) (Beginner) Explore new management features such as system health.
- [Module 4 - Striping and Storage Policy Based Management](#) (45 minutes) (Intermediate) Identifying the IOPS challenge, Changing the Stripes, Defining Storage Policy Based Management (SPBM) and Apply!
- [Module 5 - VxRail Internet Upgrade](#) (15 minutes) (Beginner) One Click Upgrade Story.
- [Module 6 - VxRail Shutdown](#) (15 minutes) (Beginner) One Click Shutdown Story. Cluster Shutdown one-button, Suspension of Alerts and Recovery all in one! .

Lab Captains:

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## How to end the Lab



To end your lab click on the END button

# **Module 4 - Striping and Storage Policy Based Management (15 Minutes)**

# Introduction

VxRail Appliance is powered by **vSAN**. It is the fastest growing Software Defined Storage. **vSAN code is in the vSphere kernel.**

One of the fundamental frameworks available is **Storage Policy-Based Management.**

Policy-based management that allows automated storage consumption through application-centric policies.

Storage Policy-Based Management helps you ensure that virtual machines use storage that guarantees a specified level of capacity, performance, availability and redundancy.

# Hands on Lab Interactive Simulation: Striping and Storage Policy Based Management

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for Striping and Storage Policy Based Management](#). It will open in a new browser window or tab.
2. When finished, click the “Return to the lab” link to continue with this lab.

# Conclusion

In this module, we demonstrate how to troubleshoot VxRail Striping challenges and reviewed how to define a Storage Policy Based Management within the VxRail Appliance.

## You have finished Module 4

Congratulations on completing Module 4.

If you are looking for additional information on VxRail Manager Appliance, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Please proceed to any of the following Modules for more information regarding VxRail.

Lab Module List:

- [Module 1 - VxRail Initial Configuration](#) (15 minutes) (Beginner) Configure a newly deployed VxRail appliance.
- [Module 2 - VxRail Management, Monitoring and Maintenance Features](#) (15 minutes) (Beginner) Explore new management features such as system health.
- [Module 3- Troubleshooting VxRail Hard Drive Failure](#) (45 minutes) (Intermediate) Error detection, HDD Change out and recognition of new HDD .
- [Module 5 - VxRail Internet Upgrade](#) (15 Minutes) (Beginner) One Click Internet Upgrade Story
- [Module 6 - VxRail Shutdown](#) (15 minutes) (Beginner) One Click Shutdown Story. VxRail Shutdown, Cluster Shutdown one-button, Suspension of Alerts and Recovery all in one!

Lab Captains:

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- Vuong Pham, Senior Solutions Architect, USA

## How to end the Lab



To end the lab, click the **END** button.

# Module 5 - VxRail One Click Upgrade (15 Minutes)

# Introduction to VxRail "One-Click" Upgrade

VxRail Manager is a key management component of VxRail. VxRail Manager simplifies appliance platform lifecycle management by delivering patch software and update notifications that can be automatically installed without interruption or downtime.

There are other functions that VxRail Manager provides. It guides systems administrators through **adding new appliances** to an existing cluster, and it automatically detects new appliances when they come online.

VxRail Manager is also used to **replace failed disk drives** without disrupting availability, to generate and download diagnostic log bundles, and to apply VMware updates or software patches in a non-disruptive manner across VxRail nodes.

The Interactive Simulation of this lab will demonstrate the process to do a VxRail One Click Internet Upgrade. You will perform both an Internet Upgrade of the system software and review the processes it takes to perform a Local upgrade of the VxRail Appliance.

This module contains an interactive simulation to allow you to experience steps which are too time-consuming and resource intensive to do live in the lab environment.

- When finished, click the **RETURN TO THE LAB** link the top right corner or close the browser tab to continue to other VxRail lab modules.
- **NOTE:** Be aware, that the lab continues to run in the background. If you spend a long time in the simulation, the lab may go into standby mode. If this happens, just resume the lab.

Please proceed to learn more about the VxRail Local and Internet upgrade procedures.

# Upgrading VxRail Software -Local Upgrade

In this article you will learn the process to install updates from the local VxRail system software installed on your VxRail Appliance.

The software that makes the VxRail Appliance includes:

- VMware ESXi
- vCenter
- vSAN
- VxRail Manager
- VMware Log Insight

## Initiating a Software Upgrade procedure with VxRail Manager

The software that makes the VxRail Appliance includes: VMware ESXi, VMware vCenter, vSAN and VxRail Manager.

There are two upgrade options. The Interactive Simulation will cover the **Internet Upgrade**.

This article is just an overview of the **Local Upgrade**.

- **Internet Upgrade:** Allows you to download a new version of software from Internet.
- **Local Upgrade:** Allows you to upload a new version of the software from your local storage.

## START local Upgrade

***Note: This is a simulated lab and we will be unable to connect the customer private cloud . The steps that require connectivity to the customer private cloud will be noted. The steps are provided for informational purposes only.***

The other option to update VxRail software is to choose an Local Upgrade option. This can be helpful if the VxRail Appliance does not have direct Internet access.

1. Download the appropriate Update package.
2. Click **Local Upgrade**.
3. Navigate to the location of the downloaded Upgrade Package.
4. **Select** the Upgrade package.
5. Click **Open** to upload the Upgrade package.

6. Once the update package is uploaded and ready to proceed with the update Click **Continue**.
7. You can verify version numbers of the components to be upgraded.
8. Enter credentials : the following Root privileges are required to continue.
  - VxRail Manager Root Account
  - vCenter Server Administrator Account
  - vCenter Server Root Account
  - PSC Root Account
9. Enter the credentials required for the VxRail Manager upgrade.
  - VxRail Manager Root Account
  - vCenter Server Administrator Account
  - vCenter Server Root Account
  - PSC Root Account
10. Click **Submit** to verify credentials and permission to continue with the upgrade.
11. VxRail Manager will validate credentials necessary to perform the upgrade.
12. Click **Dashboard** to see the progress of the upgrade.
13. Click **More** to view details of the upgrade
14. The upgrade in the lab has been sped up in the interest of time.
15. Click **Refresh** to update the system status.

**Note:** The VxRail software before the update was 4.0.100-4907697

- After the update VxRail software is at version 4.0.132-5128179
- After the page has refreshed, the new software upgrade version will be displayed.

## You have completed the overview for performing a Local Upgrade for VxRail

Please proceed to the Hands on Labs Interactive Simulation to perform the tasks related to the VxRail Internet Upgrade.

To return to the lab, click the link in the top right corner or close this browser tab.

# Hands on Lab Interactive Simulation: VxRail "One-Click" Internet Upgrade

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for VxRail Internet Upgrade Story](#). It will open in a new browser window or tab.
2. When finished, click the "Return to the lab" link to continue with this lab.

# Conclusion

In this module, we demonstrated how you can Upgrade VxRail with One Click through the Internet with the VxRail Manager. This was a simulated VxRail One Click Internet Upgrade Story.

## You have completed Module 5

Congratulations for completing Module 5.

If you are looking for additional information on VxRail Manager Appliance, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Please proceed to any of the following Modules for more information regarding VxRail.

Lab Module List:

- [Module 1 - VxRail Initial Configuration](#) (15 minutes) (Beginner) Configure a newly deployed VxRail appliance.
- [Module 2 - VxRail Management, Monitoring and Maintenance Features](#) (15 minutes) (Beginner) Explore new management features such as system health.
- [Module 3 - Troubleshooting HDD Failure](#) (15 minutes) (Beginner) Quickly identify how to monitor VxRail issues, and apply maintenance with this module
- [Module 4 - Striping and Storage Policy Based Management](#) (45 minutes) (Intermediate) Error detection, HDD Change out and recognition of new HDD.
- [Module 6 - VxRail Shutdown](#) (15 minutes) (Beginner) One Click Shutdown Story. VxRail Shutdown, Cluster Shutdown with one-button, Suspension of Alerts and Recovery all in one!

Lab Captains:

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- Vuong Pham, Senior Solutions Architect, USA

## How to end the Lab



To end the lab, click the **END** button.

# Module 6 - VxRail One Click Shutdown (15 Minutes)

# Introduction to VxRail One Click Shutdown

VxRail is a Hyper-Converged infrastuctue Appliance. VxRail Manager can automate over 200 tasks for daily task management.

The VxRail Manager **Shut Down Cluster** feature provides users a graceful shutdown for the entire cluster with just a few clicks. The procedure supports VxRail appliances runing VxRail software version v4.x and up.

Please continue to the Interactive Simulation for the VxRail One Click Shutdown Story.

# Hands-on Labs Interactive Simulation: "One-Click" Shutdown

This part of the lab is presented as a **Hands-on Labs Interactive Simulation**. This will allow you to experience steps which are too time-consuming or resource intensive to do live in the lab environment. In this simulation, you can use the software interface as if you are interacting with a live environment.

1. [Click here to open the interactive simulation for VxRail "One-Click" Shutdown Story](#). It will open in a new browser window or tab.
2. When finished, click the "Return to the lab" link to continue with this lab.

# Conclusion

In this module, we demonstrated how you can Shutdown VxRail with "One-Click" through the VxRail Manager. This was a simulated VxRail Shutdown Story.

## You have completed Module 6

Congratulations for completing Module 6.

If you are looking for additional information on VxRail Manager Appliance, try one of these:

- [VxRail Appliance Tech Book](#)
- [VxRail Appliance Community](#)

Please proceed to any of the following Modules for more information regarding VxRail.

Lab Module List:

- [Module 1 - VxRail Initial Configuration](#) (15 minutes) (Beginner) Configure a newly deployed VxRail appliance.
- [Module 2 - VxRail Management, Monitoring and Maintenance Features](#) (15 minutes) (Beginner) Explore new management features such as system health.
- [Module 3 - Troubleshooting HDD Failure](#) (45 minutes) (Intermediate) Error detection, HDD Change out and recognition of new HDD
- [Module 4 - VxRail Striping and Storage Policy Based Management](#) (45 minutes) (Intermediate) Identifying the IOPS challenge, Changing the Stripes, Defining Storage Policy Based Management(SPBM) and Apply!
- [Module 5 - VxRail Internet Upgrade](#) (15 minutes) (Beginner) "One-Click" Upgrade Story.

Lab Captains:

- Jodi Shely, Principal Technical Account Manager-Office of the CTO Global Field, USA
- Vuong Pham, Senior Solutions Architect, USA

## How to end the Lab



To end the lab, click the **END** button.

## Conclusion

Thank you for participating in the VMware Hands-on Labs. Be sure to visit <http://hol.vmware.com/> to continue your lab experience online.

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