VMworld 2014 Hands-on Labs Guide

Listed below are the Hands-on Labs that will be available at VMworld 2014 in San Francisco. The labs are broken into four sections, Software Defined Datacenter Labs, Hybrid Cloud Labs, Mobility Labs, and Partner Labs. Under each lab, you will find all the Modules available for you to take. Here is the key to deciphering the Lab Module table:

| # | This is the Module number |
|------------------|--|
| | |
| Title | The title of the Module |
| Time | This is the estimated time in minutes to complete this Module |
| Lightning Lab | Lab Modules that are 15 or 30 minutes in duration |
| Full Length | Lab Modules that are 45 or 60 minutes in duration |
| Level | |
| 101 Beginning | These Modules are designed to introduce you to a product or solution |
| Advanced | These Modules cover more Advanced topics |
| Туре | |
| Feature Modules | These are focused on the features of a single product. |
| Use Case Modules | These are narrative Modules that demonstrate the interaction between multiple products in a hypothetical scenario. |

It's worth pointing out that Modules with an estimated time of 15 or 30 minutes are Lightning Labs. These Modules offer a great way to quickly become familiar with a specific topic or technology.

For more information, please visit our site at http://hol.vmware.com

Software Defined Datacenter Labs

HOL-SDC-1401 - Cloud Operations Management

VMware vCenter Operations Management suite delivers intelligent operations management across physical, virtual, and cloud infrastructures — from vSphere and Hyper-V to Amazon Web Services. It correlates data from applications to storage in a unified management tool that is easy-to-use and can provide control over performance, capacity, and configuration, with predictive analytics driving proactive action, and policy-based automation.

| # | Title | | Level | Туре |
|---|---|-------------|----------|----------|
| 1 | Introduction to VMware vCenter Operations Management Suite | 4 15 | 101 | |
| 2 | vCenter Operations Manager vSphere UI | 2 30 | 101 | • |
| 3 | vCenter Operations Manager Performance Troubleshooting | 3 0 | | |
| 4 | vCenter Operations Manager Capacity Planning | 9 30 | ॐ | |
| 5 | vCenter Operations Management Suite Business Critical Appliance Adapters | | 101 | 3 |
| 6 | vCenter Operations Management Suite Storage Adapters | | ॐ | • |
| 7 | vCenter Operations Management Suite Hybrid Cloud Adapters | | 101 | © |
| 8 | vCenter Operations Manager 6.0 Tech Preview | 9 30 | ॐ | |

HOL-SDC-1402 - vSphere Distributed Switch from A to Z

This is an ideal lab to learn the basics and advanced virtual network configuration options on vSphere using the vSphere Distributed Switch (VDS). We will cover configuration through migration from a vSphere Standard Switch (VSS) to VDS, Quality of Service, Monitoring with Layer 3 SPAN, High Availability with LACP and some troubleshooting steps. The lab will also help build a basic knowledge of VDS, which is a foundation to NSX deployments.

Lab Modules

| # | Title | | Level | Туре |
|---|--|------------|----------|------|
| 1 | Migrating from a vSphere Standard Switch to the vSphere Distributed Switch | 1 5 | 101 | • |
| 2 | Implementing Quality of Service (QoS) Tagging & Traffic Filtering on the VDS | 1 5 | ॐ | • |
| 3 | Monitoring the vSphere Distributed Switch with Encapsulated Remote Mirroring | | % | • |
| 4 | Manage network traffic with NIOC (Network I/O Control) | | % | * |
| 5 | Implementing LACP on the vSphere Distributed Switch | | | 3 |
| 6 | Network Troubleshooting Using The ESXCLI | 1 5 | · | • |

HOL-SDC-1403 - VMware NSX Introduction

VMware NSX is the platform for Network Virtualization. You will gain hands-on experience with Logical Switching, Distributed Logical Routing, Dynamic Routing, Distributed Firewall and Logical Network Services. This lab introduces the core capabilities of VMware NSX in vSphere environments used to enable Network and Security virtualization.

| # | Title | Time | Level | Туре |
|---|----------------------------------|-------------|----------|------|
| 1 | Component Overview & Terminology | 1 5 | 101 | ₿ |
| 2 | Logical Switching | 2 30 | € | • |
| 3 | Logical Routing | 3 30 | • | • |
| 4 | Distributed Firewall | 6 0 | % | • |
| 5 | Edge Services Gateway | 3 30 | % | • |

HOL-SDC-1404 - vSphere Performance Optimization

This Lab covers vSphere performance best practices and features. You will work with a broad array of solutions, including VMware Labs "Flings," to gauge and diagnose performance in a VMware Environment, including vFRC, vNUMA and Latency Sensitivity.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|------------|----------|------|
| 1 | Basic vSphere Performance Concepts and Troubleshooting | 60 | 101 | |
| 2 | Performance Feature: vSphere Flash Read Cache | 45 | % | |
| 3 | Performance Feature: Latency Sensitivity Setting | 45 | 80 | |
| 4 | Performance Feature: vNUMA | | | |
| 5 | Performance Feature: Power Policy Setting | 1 5 | 101 | |
| 6 | Using esxtop | 60 | % | |

HOL-SDC-1405 - IT Outcomes — High Availability and Business Continuity/Disaster Recovery

VMware Business Continuity and Disaster Recovery (BC/DR) solutions drive automation, efficiency, data protection, and validation of an organization's enterprise-level BC/DR strategy. Learn how to reduce downtime and increase availability for your applications and services with Site Recovery Manager (SRM) and VMware Data Protection Advanced (VDP-A).

| # | Title | | Level | Туре |
|---|---|-------------|----------|------|
| 1 | Use Site Recovery Manager to Test Disaster Recovery and Execute Datacenter Migrations | 60 | 101 | € |
| 2 | Site Recovery Manager and vSphere Replication Features | 2 30 | % | |
| 3 | Data Backup and Recovery with VMware vSphere Data Protection | 3 0 | 101 | • |
| 4 | Automating Site Recovery Manager Tasks Using PowerCLI | 9 30 | ॐ | • |

HOL-SDC-1406 - vCloud Suite 101

This introductory lab demonstrates the first steps in the journey to a Software Defined Enterprise by implementing all components of vCloud Suite Standard, which focuses on the core features and functions of vSphere, vCenter, vCenter Operations Manager and vCloud Automation Center. This is an excellent place to begin your Software Defined Data Center (SDDC) experience by moving from the world of traditional templates to blueprints that enable Automated Infrastructure Delivery.

Lab Modules

| # | Title | | Level | Туре |
|---|--|-------------|----------|------|
| 1 | Review Infrastructure in the vSphere Web Client | 1 5 | [5] | |
| 2 | Using vCenter Operations Manager to check Cluster Capacity for New Workloads | ½ 15 | <u> </u> | * |
| 3 | Enabling Automated Provisioning by configuring vCloud Automation Center | 60 | | |

HOL-SDC-1407 - VMware Automation Solutions

VMware vCloud Automation Solutions accelerate the journey to a lights-out, fully automated, and efficient Software-Defined Datacenter. Explore vCenter Orchestrator, PowerCLI, VSAN, and Auto Deploy working together to solve real-word problems.

| # | Title | Time | Level | Туре |
|---|--|------------|----------|------|
| 1 | From Beginner to the Latest Features with PowerCLI | 60 | 101 | |
| 2 | VSAN Automation with PowerCLI | 45 | % | * |
| 3 | Automating Tasks through vCO Workflows | 45 | 101 | • |
| 4 | Customizing vCO Workflows for Advanced Automation | 45 | 101 | 8 |
| 5 | Automating vSphere Hosts Deployments with vSphere Auto Deploy | 6 0 | 101 | |

HOL-SDC-1408 - VMware Virtual SAN 101

Experience VMware Virtual SAN for the first time. Learn how to deploy, configure, and manage VMware's latest hypervisor-converged storage solution. Includes new and updated modules for the 2014 catalog.

Lab Modules

| # | Title | Time | Level | Туре |
|---|---|------------|----------|------|
| 1 | Virtual SAN Setup and Enable | 3 0 | 101 | |
| 2 | Virtual SAN with vMotion, Storage vMotion and HA Interoperability | 60 | 101 | |
| 3 | 3 Virtual SAN Storage Level Agility | | % | 0 |
| 4 | Useful CLI Commands | | % | |
| 5 | Virtual SAN Monitoring | 3 0 | 101 | 0 |
| 6 | Virtual SAN Troubleshooting | 60 | % | 8 |

HOL-SDC-1409 - vSphere Big Data Extensions

vSphere Big Data Extensions (BDE) makes Hadoop virtualization-aware, improves performance in virtual environments and enables deployment of highly available Hadoop clusters in minutes. You can choose from introductory to advanced modules in this exciting lab topic.

| # | Title | Time | Level | Туре |
|---|--|-------------|----------|----------|
| 1 | Hadoop POC In Under an Hour | 45 | 101 | |
| 2 | Fast And Easy Deployment Of Hadoop Clusters | 1 5 | 101 | * |
| 3 | Compute Only and No Distro Clusters on Shared HDFS | 1 5 | 30 | |
| 4 | Highly Available Hadoop | ½ 15 | % | * |
| 5 | Fast And Easy Deployment of HBase Cluster | 4 15 | 101 | |
| 6 | Elastic Scaling of Hadoop Clusters | 45 | % | |

HOL-SDC-1410 - Virtualization 101

This introductory lab demonstrates the core features and functions of vSphere and vCenter. This is an excellent place to begin your experience with VMware vSphere.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|------------|-------|--------------|
| 1 | Introduction to Management with vCenter Server | 60 | 101 | |
| 2 | Introduction to vSOM Networking And Security | 6 0 | 101 | & |
| 3 | Introduction to vSOM Storage | 60 | 101 | ₩ |

HOL-SDC-1411 - IT Cost Transparency with ITBM

Gain transparency into and proactively manage the costs, quality, and performance of IT services, vendors, and contracts through insightful dashboards, analytics, and capabilities that helps align IT to the demands of the business.

| # | Title | Time | Level | Туре |
|---|-----------------|------------|-------|------|
| 1 | ITBM Standard | 45 | 101 | |
| 2 | ITBM Advanced | 45 | 101 | • |
| 3 | ITBM Enterprise | 3 0 | 101 | • |

HOL-SDC-1412 - IT Outcomes – Consolidated and Standardized Data Center

This lab will focus on taking the traditional benefits of vSphere and extending it further into your Software-Defined Data Center (SDDC) through Software-Defined Storage using Virtual SAN and network virtualization using NSX for vSphere. This will enable organizations to see how to deliver the same efficiency and agility for the datacenter as it does right now for the VM.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|----------|------|
| 1 | Lab Overview | 1 5 | 101 | |
| 2 | Overview of vCenter and VSAN Configuration | ½ 15 | 101 | * |
| 3 | Overview of NSX Configuration | 1 5 | 101 | |
| 4 | vCenter Operations Capacity Reporting | ½ 15 | % | • |
| 5 | Increase Compute Cluster Capacity | 4 15 | % | • |
| 6 | Expand 3-Tier Application Capacity | ½ 15 | % | • |

HOL-SDC-1413 - IT Outcomes – Faster Delivery of Infrastructure and Apps through Automation

Reduce time to deliver applications and infrastructure with automated provisioning and policy-based governance throughout the service delivery lifecycle using vCloud Automation Center and Application Director. Integration points with VMware's VSAN and NSX for vSphere will be shown, as well as external service integration (such as vCloud Hybrid Services, IP, and service management), and extensibility through additional automation.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|--------|
| 1 | Extending vCloud Automation Center | 3 0 | 80 | |
| 2 | Integrating with vCAC and NSX | 2 30 | ⊗ | • |
| 3 | Third Party Integration: Service Desk | 45 | 80 | |
| 4 | vCloud Application Director Integration | 2 30 | % | • |
| 5 | Managing vCAC with Log Insight | 3 0 | % | Page 1 |

HOL-SDC-1415 - IT Outcomes – Policy-Based Compliance and Network Security

Learn how several VMware technologies work together to implement policy-based network control, configuration and compliance management, and intelligent operations management. You will use NSX for vSphere to isolate, protect, and apply security policies across virtual network workloads. Use vCenter Configuration Manager to continuously identify, assess, and remediate out-of-compliance virtual machines. Finally, you will use vCenter Operations Manager for operational insight into the health, risk, and efficiency of the virtual infrastructure.

Lab Modules

| # | Title | Time | Level | Туре |
|---|-------------------------------|-------------|-------|------|
| 1 | Policy-Based Compliance | 60 | 101 | |
| 2 | Policy-Based Network Security | 2 30 | 101 | • |

HOL-SDC-1416 - IT Outcomes - Intelligent Operations Management

Use the VMware vCloud Suite to manage Business Critical Applications (BCA). See how applications such as Microsoft SQL and Exchange can be managed using vCenter Operations Manager (vCOps) with data from vCenter Infrastructure Navigator (VIN), vCenter Hyperic, and vCloud Hybrid Service (vCHS). See demonstrations of monitoring, capacity and performance management, application grouping, super metrics and more.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|------|
| 1 | vCenter Operations Policies and Groups for Applications | 3 0 | 30 | |
| 2 | Hybrid Cloud Monitoring with vCenter Operations | 1 5 | 101 | • |
| 3 | Managing Business Critical Applications with vCenter Operations | 4 30 | % | • |
| 4 | Super Metrics – Making it your own! | 2 30 | % | 8 |

HOL-SDC-1420 - OpenStack with VMware vSphere and NSX

Are you interested in learning more about OpenStack? OpenStack is a cloud API framework that enables self-service cloud provisioning and automation. You will take a basic tour of OpenStack and use it with vSphere and NSX to provision compute, storage and networking resources.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-----------|------------|----------|
| 1 | OpenStack Compute and Storage with vSphere | 60 | ° ® | ₽ |
| 2 | OpenStack Networking with NSX | 60 | % | 8 |

HOL-SDC-1421 - Brokering IT Services and Applications with vCloud Automation Center

This lab will demonstrate the ability to use vCloud Automation Center 6 to rapidly automate the deployment and management of a variety of IT services and applications. It covers key features of vCloud Automation Center 6, including use cases from the perspectives of the consumers, business managers and administrators. You will explore the integrations between vCloud Automation Center and vCloud Application Director, vCenter Orchestrator and ITBM Standard, and develop new service offerings through the Advanced Service Designer.

| # | Title | Time | Level | Туре |
|---|--|-------------|------------|------|
| 1 | Consuming IT Services via Self-Service Catalog with Policy Based Governance | 45 | 101 | |
| 2 | Creating Policy Based Governance for Self-Service | 2 30 | 101 | * |
| 3 | Automating Infrastructure Provisioning with vCloud Automation Center | 3 0 | 101 | 0 |
| 4 | Automating Any Service with vCloud Automation Center and vCenter Orchestrator | 45 | % | • |
| 5 | Deploying Application Environments with vCloud Automation Center Enterprise | 45 | Ç. | • |
| 6 | Tenant Configuration and Management with vCloud Automation Center | 2 30 | <u>[0]</u> | * |
| 7 | Cost Transparency and Public Cloud Comparison with ITBM Standard | 45 | 101 | € |

HOL-SDC-1422 - VMware Development Tools and SDKs

This introductory lab will get you up and running building cloud infrastructure solutions with VMware development tools and SDKs. These are developer focused modules and some familiarity with programming in Java or Python is expected. But don't worry, no coding is required. Complete sample code has been provided.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|-------|----------|
| 1 | Developer Center, Workbench IS, and the vSphere Management SDK | 3 0 | 101 | 3 |
| 2 | pyvmomi - The Python SDK for VMware vSphere API | 2 30 | 101 | * |
| 3 | Workbench IS Tools | 4 15 | 101 | ₩ |

HOL-SDC-1423 - vCloud Suite Networking

This is an excellent lab to begin learning about vCloud Networking. You will use vCloud Networking and Security to deploy a DMZ network segment, a multi-tier application and a virtual distributed firewall for microsegmentation.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|------|
| 1 | VCNS Component Overview | 4 15 | 101 | |
| 2 | Prepare Clusters for VXLAN Logical Network Deployment | 3 0 | 101 | |
| 3 | Configuring Edge Services for a 3-Tier Application | 45 | 101 | • |
| 4 | Configuring Additional Edge Services | 1 5 | 101 | 8 |
| 5 | App Firewall | 3 0 | % | • |

HOL-SDC-1424 - VMware NSX in the SDDC

This NSX lab covers integration of NSX with components of the vCloud Suite to deliver on the Software Defined Datacenter. Integration of NSX with Management components like vCloud Automation Center (vCAC), vCenter Operations Manager (vC Ops) and Log Insight is covered in this lab. In addition, the lab also demonstrates how NSX is a platform built for automation by using vCO and the NSX API.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|-------|------|
| 1 | Create Network Profiles | 45 | 101 | • |
| 2 | Create a Multi-Machine Blueprint | 60 | 101 | 8 |
| 3 | Configure a Catalog Item and Deploy | 45 | 101 | |
| 4 | vCenter Orchestrator and the NSX API through vCloud Automation Center Advanced Designer | 45 | 101 | • |
| 5 | Using vCenter Operations with the NSX Management Pack | 60 | 101 | |
| 6 | Using vCenter Log Insight with NSX | 1 45 | 101 | • |

HOL-SDC-1425 - VMware NSX Advanced

This lab covers advanced NSX topics and builds on the basics learned in the "VMware NSX Introduction (SPL-SDC-1403)" lab. Attendees will gain hands-on experience on advanced NSX features like DHCP Relay, L2VPN, ECMP and Service Composer. This lab will also cover Third party integration with NSX by highlighting Networking Management, Load Balancing and End-Point Security Partners to demonstrate how NSX provides a comprehensive platform for Network and Security Virtualization.

| # | Title | Time | Level | Туре |
|---|-------------------------|------------|----------|------|
| 1 | DHCP Relay | 3 0 | 80 | |
| 2 | Scale Out L3 | 45 | % | • |
| 3 | L2VPN | 45 | 80 | |
| 4 | Trend Micro Integration | 45 | 8 | 8 |
| 5 | Riverbed Integration | 1 5 | % | • |

HOL-SDC-1426 - Log Insight in the Real World!

In this lab you will learn how to use Log Insight to troubleshoot common issues. You will also learn how Log Insight can detect issues in your virtual infrastructure and server environments. This lab will also cover all of the Log Insight basics like configuration, log collection setup, how to use Content Packs, and integration with vCenter Operations Manager.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|------------|------|
| 1 | Getting started with Log Insight | 3 0 | 101 | |
| 2 | Troubleshooting and Problem Detection in vSphere | 3 0 | <u>[0]</u> | 8 |
| 3 | Troubleshooting and Problem Detection in Windows | 4 15 | 101 | • |

HOL-SDC-1427 - VMware Software Defined Storage

Software Defined Storage is here today. See how VMware can deliver a complete set of storage capabilities, on-demand and dynamically created, using exciting new solutions such as Storage Policy Based Management (SPBM), Virtual SAN, and Virtual Volumes. Learn how to manage policies in this new model and offer storage services to users on a self-service basis.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|------|
| 1 | Create Storage Policies using vCenter Storage Policy Based Management | 1 5 | 101 | |
| 2 | Integrate vCenter Storage Policies into VCAC Service Catalog | ½ 15 | 101 | • |
| 3 | Provision New VM from Service Catalog using Software Defined Storage Policies | 3 0 | 101 | • |
| 4 | Assign New Storage Policy To Existing VM | 2 30 | 101 | 8 |
| 5 | Advanced Software Defined Storage With SPBM and PowerCLI | 3 0 | % | • |

HOL-SDC-1429 - Virtual Volumes Tech Preview

This Hands-on Lab gives a closer look at Virtual Volumes in order to become familiar with the concepts and some of the data path workflows. Virtual Volumes are VMware's new storage paradigm to facilitate per VM/VMDK data services on the storage array. This allows the storage to move away from a LUN centric storage representation to a granular form of representation. In this lab, you will learn how to setup and enable Virtual Volumes and understand how to enable storage policies utilizing Virtual Volumes.

| # | Title | Time | Level | Туре |
|---|---|-------------|-------|------------|
| 1 | Virtual Volumes (VVOLs) Setup and Enablement | 3 0 | 101 | |
| 2 | Storage Based Policy Management | 2 30 | 101 | (2) |

Hybrid Cloud Labs

HOL-HBD-1481 - vCloud Air - Jump Start for vSphere Admins

Learn how to use VMware vCloud® Air™. Deploy a virtual machine, migrate from your existing vSphere environment, and explore basic networking and security principles.

Module Listing

| # | Title | Time | Level | Туре |
|---|---|-------------|-------|----------|
| 1 | VMware vCloud® Air™ : Architecture and Consumption Principles | 1 5 | 101 | ₹ |
| 2 | Identifying and Deploying Workloads in VMware vCloud® Air™ | 2 30 | 101 | ★ |
| 3 | Administer VMware vCloud® Air™ resources from vSphere Client | 3 0 | 101 | |
| 4 | Networking and Security Basics | 2 30 | 101 | * |

HOL-HBD-1482 - vCloud Air - Networking & Security

VMware vCloud® Air™ facilitates advanced networking features. You will experience vCloud Air through the eyes of a systems administrator facing such issues as IP address mobility and security.

| # | Title | Time | Level | Туре |
|---|---|------------|-------|------|
| 1 | Introduction to VMware vCloud Air Networking and Security | 1 5 | 101 | |
| 2 | IP Address Portability Between Customer and VMware vCloud® Air™ Data Centers (Data Center Extension) | 45 | 101 | * |
| 3 | Public and Private Cloud Multi-Tiered Application Networking | 45 | 101 | |

HOL-HBD-1483 - vCloud Air - Manage Your Cloud

VMware vCloud® Air™ is VMware's Infrastructure as a Service offering. You will manage users and role-based access, deploy from the Service Catalog, and use a host of VMware solutions with both vSphere and VMware vCloud® Air™.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|------|
| 1 | Automate IT Service delivery on VMware vCloud® Air™ with vCloud Automation Center | 60 | ₹ | • |
| 2 | Monitor resources on VMware vCloud® Air™ with vCenter Operations Manager | 45 | ॐ | • |
| 3 | Migrate workloads to VMware vCloud® Air™ with vCloud Connector | 45 | % | • |
| 4 | Automate resource management in VMware vCloud® Air™ with PowerCLI | 0 45 | ₩ | • |

Mobility Labs

HOL-MBL-1451 - Horizon 6 with View from A to Z

Complete a guided tour of Horizon 6 with View features with a focus on new technologies such as Cloud Pod Architecture, Hosted Applications, and vSAN, learn how to Optimize Horizon View for your environment, and learn steps to Troubleshoot a View environment while avoiding common issues.

| # | Title | Time | Level | Туре |
|---|--|-------------|----------|----------|
| 1 | Guided Tour of Horizon 6 with View | 60 | 101 | |
| 2 | Hosted Applications and Desktops (RDSH) | 60 | % | * |
| 3 | Horizon 6 support for Virtual SAN (VSAN) | 3 0 | 101 | |
| 4 | Cloud Pod Architecture | 2 30 | ∘ | * |
| 5 | Optimize Horizon 6 with View | 45 | * | • |
| 6 | Troubleshooting Horizon 6 with View | 3 0 | ⊗ | 8 |
| 7 | SSL Certificates in Horizon 6 with View | 3 0 | 30 | |

HOL-MBL-1452 - Horizon View - Use Cases

You will experience the Horizon View use cases of Business Process Desktop, Branch Office Desktop and Mobile Secure Workplace (with focus on Fed Secure Desktop and Always-On Point of Care). Additional modules include Mirage Controlled View Static Desktops and A Guided Tour of vCenter Operations for View.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|------------|------------|------|
| 1 | Build and Operate the Mobile Secure Workplace | 60 | 101 | • |
| 2 | Build and Operate the Call Center Desktop | 60 | *** | • |
| 3 | Build and Operate the Branch Office Desktop | 60 | % | • |
| 4 | Take a Guided Tour of vCOPS for View | 60 | 101 | * |
| 5 | Understanding use cases for Application Remoting | 1 5 | 101 | |
| 6 | Understanding use cases for Cloud Pod Architecture | 1 5 | 101 | • |
| 7 | Mirage-Controlled View Static Desktops | 3 0 | 101 | • |

HOL-MBL-1453 - VMware Workspace Portal - Explore and Deploy

VMware Workspace Portal securely delivers your applications any device. Gain hands-on experience in the Application Catalog, SAML integration and Desktop brokering.

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|----------|
| 1 | Introduction to VMware Workspace Portal | 4 15 | 101 | 3 |
| 2 | Published Horizon 6 Applications in VMware Workspace Portal | 2 30 | <u> </u> | * |
| 3 | A Day in the Life of VMware Workspace Portal | 45 | 101 | • |
| 4 | VMware Workspace Portal and Web/SaaS application | 45 | 101 | * |
| 5 | VMware Workspace Portal and ThinApp Integration | 45 | [5] | 8 |
| 6 | Install and configure VMware Workspace Portal using external database | 60 | 101 | * |
| 7 | VMware Workspace Portal and SSL Certificates and Kerberos SSO | 60 | 30 | |

HOL-MBL-1454 - Applied ThinApp with the Horizon Suite

VMware ThinApp accelerates and simplifies application deployment and migration. You will learn what's new in ThinApp, build ThinApp packages, and integrate ThinApp with Horizon Mirage, Horizon Workspace and Horizon View.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--------------------------------------|-------------|-------|------|
| 1 | ThinApp Overview | 60 | 101 | |
| 2 | ThinApp and Horizon 6 with View | 2 30 | 101 | |
| 3 | ThinApp and Mirage | 3 0 | 101 | |
| 4 | ThinApp and Horizon Workspace Portal | 45 | 101 | * |
| 5 | ThinApp and BYOD | 3 0 | 101 | |

HOL-MBL-1455 - Managing Desktops with VMware Mirage

VMware Mirage enables efficient and unified image management of physical, virtual and BYO desktops using layering technology. You will capture layers and use them to address three common use cases that trouble desktop administrators today.

| # | Title | Time | Level | Туре |
|---|---------------------------|-------------|----------|----------|
| 1 | Capture Base Layer | 3 0 | 101 | ₿ |
| 2 | Capture Application Layer | 2 30 | 101 | * |
| 3 | Use Cases | 6 0 | 101 | |
| 4 | Mirage Edge Gateway | 2 30 | % | * |
| 5 | Tour Mirage Web Admin | 3 0 | 101 | |

HOL-MBL-1456 - Horizon DaaS - Explore and Deploy

This lab will introduce you to desktop as a service (DaaS). Through hands-on exercises, you will learn how DaaS goes beyond typical virtual desktop infrastructure (VDI), and work closely with VMware Horizon DaaS, the market leading offering.

Lab Modules

| # | Title | Time | Level | Туре |
|---|----------------------|------------|-----------|-----------|
| 1 | DaaS Overview | 1 5 | 101 | ₿ |
| 2 | Desktop Provisioning | 6 0 | *** | 8 |
| 3 | Desktop Management | 3 0 | 30 | \$ |

HOL-MBL-1457 - AirWatch - Explore and Deploy

How do you plan to simplify enterprise mobility in your organization? You will use the AirWatch Enterprise Mobility Management platform with your own phone or tablet, or borrow a device from the labs team.

| # | Title | Time | Level | Туре |
|---|---|-----------|----------|------|
| 1 | Basic Enrollment and Basic MDM | 45 | 101 | |
| 2 | Advanced MDM Using the AirWatch Cloud Connector | 45 | % | * |
| 3 | Single Device/Multiple Users (Check In/Check Out) | 45 | 101 | |

Partner Labs

HOL-PRT-1461 - Policy Based Storage Management with EMC ViPR and VMware Integrations

You will explore how EMC ViPR with VMware integrations can easily map your classes-of-services to vCenter storage profiles and provision block, file, and object storage. Monitor and report capacity usage across your enterprise in a single view. Includes the ViPR plug-ins for vCAC, vCOps, vCenter and VCO.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|-------|------|
| 1 | ViPR Overview | 1 5 | 101 | |
| 2 | ViPR integration with VMWare | 2 30 | 101 | • |
| 3 | Optional - ViPR Monitoring and Reporting | 4 15 | 101 | |

HOL-PRT-1462 - Virtualized Data Center Security: VMware NSX and Palo Alto Networks Next Generation Virtual Firewall

In this lab, learn how to configure Palo Alto Networks virtualized next-generation firewall with VMware NSX to secure VM to VM communications from today's advanced threats.

| # | Title | Time | Level | Туре |
|---|--|------------|-----------|------|
| 1 | Palo Alto Networks VM-Series and VMware NSX dynamic security policy configuration | 3 0 | 101 | € |
| 2 | Deploying Palo Alto Networks VM-Series with VMware NSX to protect a multi-tier application | 45 | <u>[0</u> | • |
| 3 | Using Distributed FireWall (DFW) to Protect Intra-tier Traffic | 3 0 | 101 | • |

HOL-PRT-1463 - vCenter Operations Management Pack for Oracle Enterprise Manager

Get the most out of your Oracle Enterprise Manager data using vCenter Operations Manager. You will install, configure, and operate the vCenter Operations Management Pack for Oracle Enterprise Manager to achieve comprehensive visibility into the performance, capacity, and health of the monitored infrastructure.

Lab Modules

| # | Title | Time | Level | Туре |
|---|---|-------------|----------|------|
| 1 | Oracle Enterprise Manager Management Pack Introduction | 4 15 | 101 | |
| 2 | Installation of Oracle Enterprise Manager Management Pack | ½ 15 | 101 | |
| 3 | Configuration of Oracle Enterprise Manager Management Pack | 3 0 | 101 | |
| 4 | Understanding Oracle on VMware Relationships | ½ 15 | 101 | |
| 5 | Performance, Health, and Availability Diagnosis Using Oracle Enterprise Manager Dashboards | 4 30 | 101 | |
| 6 | Troubleshooting and Trend Spotting the Oracle Enterprise Manager Management Pack | 9 15 | 8 | • |

HOL-PRT-1464 - Secure your SDDC built on VMware NSX & vSphere with Symantec Data Center Security: Server

Learn how Symantec Data Center Security: Server integrates with VMware NSX Service Composer and leverages Security Groups to orchestrate and provision security policies on your virtual workloads. Data Center Security:Server provides agent-less malware protection and Guest Network Threat Protection with automated workflows.

| # | Title | Time | Level | Туре |
|---|--|------------|------------|------|
| 1 | Configuring policies, Test Virtual Machine and NSX Security Group | 1 5 | ç ⊛ | |
| 2 | Demonstrate Symantec's Virtual Machine Threat Protection and Quarantine Features | 45 | % | • |
| 3 | Demonstrate Symantec's Virtual Machine Network Security Introspection | 45 | | • |

HOL-PRT-1465 - Atlantis USX Data Services and VSAN: Softwaredefined Storage Infrastructure for Tier-1 Apps

Get hands-on experience with Atlantis USX: Deliver dramatically higher-performance for your production workloads, including tier 1 apps and VDI at a fraction of the capacity and cost of traditional storage. Deploy Atlantis USX with VSAN to build hyper-converged infrastructure.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|------------|-------|------|
| 1 | Deploying together with VMware VSAN to deliver optimized local storage | 45 | 101 | ₿ |
| 2 | Build In Memory Storage | 45 | 101 | * |
| 3 | Using the USX API Browser to drive automation and orchestration to scale a software-based storage infrastructure | 3 0 | 101 | |

HOL-PRT-1466 - Bridge the gap between Virtualization and IT Service Management

Integrate BMC Remedy ITSM Change Management approval and Atrium CMDB CI creation into the vCAC provisioning processes. Create, read and update a BMC Remedy Change ticket, BMC Remedy Incident (Help Desk) ticket, BMC Remedy Task and BMC Atrium CMDB Configuration Item (CI) using vCenter Orchestrator.

| # | Title | Time | Level | Туре |
|---|---|-----------|-------|------|
| 1 | Interacting with BMC Remedy Change Management | 60 | 101 | |
| 2 | Interacting with BMC Remedy Incident Management | 45 | 101 | * |
| 3 | Interacting with BMC Atrium CMDB | 60 | 101 | |
| 4 | Closed Loop Provisioning with vCAC and BMC Remedy Suite | 60 | 101 | 8 |

HOL-PRT-1467 - Virtual Volume with Dell EqualLogic

In this lab, you will learn more about Virtual Volumes and how they integrate with Dell EqualLogic Storage. You will get to see how day to day tasks, like snapshots and cloning are accelerated by the Virtual Volume integration with Dell EqualLogic and how the work flows involved remain similar.

Lab Modules

| # | Title | Time | Level | Туре |
|---|--|-------------|-------|------|
| 1 | Working with Dell EqualLogic and VVOLs | 60 | 101 | |
| 2 | Dell Virtual Storage Manager, more then just a VASA Provider | 9 30 | 101 | * |

HOL-PRT-1468 - Automating your cloud with vCloud Automation Center 6.0 and the Infoblox vCO IPAM Plug-in

One key challenge facing Cloud Administrators is the amount of time needed to obtain an IP address for a virtual machine. Automate your IP Address assignment and DNS registration so that this critical process does not slow the deployment of your Cloud.

| # | Title | Time | Level | Туре |
|---|---|-------------|-------|----------|
| 1 | Configuring vCloud Automation Center 6.0 for Integration with Infoblox Trinzic DDI | 3 0 | 101 | |
| 2 | Verifying Proper Configuration of the Infoblox IPAM Plug-in and the Trinzic DDI VirtualAppliance | 9 15 | 101 | * |
| 3 | Using vCAC Self Service Web Portal to Provision/Deprovision a VM and using the Infoblox IPAM-DNS services | 4 15 | 101 | |
| 4 | Customizing vCAC 6.0 to Enable Network Selection Before Provisioning a VM | 4 15 | 101 | ☆ |

HOL-PRT-1469 - Puppet Labs – Automating Your Virtual Datacenter with Puppet Enterprise

Puppet Enterprise enables IT teams to automate VM lifecycle management and scale services quickly, reliably, and efficiently. In these modules, you will go hands-on with Puppet Enterprise and deploy a multitier managed application with vCAC 6 and Puppet Enterprise.

Lab Modules

| ı | # | Title | Time | Level | Туре |
|---|---|---------------------------------------|------------|-------|------|
| | 1 | Learning More About Puppet Enterprise | 3 0 | 101 | |
| | 2 | vCAC Puppet Enterprise Integration | 45 | 101 | |

HOL-PRT-1470 - Storage Management and troubleshooting using Insight Control and VCOPS and HP StoreFront Analytics for vCenter Operations Manager

Test drive the new unified VMware Storage Management with this lab. Experience single-click data store deployment, visualization of complex configurations all from within vCenter. As a bonus, learn how to effectively troubleshoot performance situations using HP StoreFront Analytics for vCenter Operations Manager.

| # | Title | Time | Level | Туре |
|---|---|-------------|-------|------|
| 1 | HP OneView - Deploy VSA | 3 0 | 101 | |
| 2 | Troubleshoot a VM & Storage performance problem | 2 30 | 101 | * |
| 3 | Use Super Metrics to see what's important to you! | 3 0 | 101 | |

HOL-PRT-1471 - NetApp VSC and VASA for Clustered Data ONTAP – Policy-Based Mgmt & VVOLs Tech Preview

This lab will focus on highlighting the latest innovations for storage provisioning and management, and will bring our VASA Provider for clustered Data ONTAP into the lab to demonstrate how pre-defined policies make provisioning and compliance even easier than before.

Lab Modules

| # | Title | Time | Level | Туре |
|---|---|-------------|-------|------|
| 1 | Policy-Based Management and VASA in the VSC | 45 | 101 | |
| 2 | Virtual Volumes (VVOLs) & NetApp storage | 2 30 | 101 | |

HOL-PRT-1472 - Juniper Virtual Security for the Enterprise and Service Provider Environment

So, you have decided to incorporate a cloud and/or virtualization into your business. This lab will show you how to secure and operate a software defined datacenter with Juniper's virtual security capabilities for your Enterprise or Service Provider environment.

| # | Title | Time | Level | Туре |
|---|--|------------|-------|----------|
| 1 | Juniper Junos Space 101 | 1 5 | 101 | ⇔ |
| 2 | Managing Your Physical and Virtual Infrastructure with Juniper Junos Space | 45 | 101 | * |
| 3 | Juniper DDoS Secure | 45 | 101 | |