

## Nutanix Hyper-Converged Infrastructure - Workshop Agenda

<p><b>1: Getting Started with a Nutanix Cluster</b></p> <ul style="list-style-type: none"> <li>• Understand three-tier and hyperconverged infrastructure</li> <li>• Understand Nutanix Cloud Solution Packages</li> <li>• Understand nodes, blocks, clusters, and cluster services</li> <li>• Get Started with Prism Central and Prism Element</li> <li>• Understand when to use Prism Central and when to use Prism Element</li> </ul> <p>Hands-on-Labs</p> <ul style="list-style-type: none"> <li>Connecting to and exploring the Prism Web Console</li> <li>Adding data services IP, an NTP server, and a name server</li> <li>Configuring Active Directory authentication</li> <li>Exploring Prism Central</li> </ul> <p>Prism Central initial configuration</p>	<p><b>4: Managing Images</b></p> <ul style="list-style-type: none"> <li>• Understand the image service</li> <li>• Use Prism Central to monitor, upload, import, and manage images</li> </ul> <p>Hands-on Labs</p> <ul style="list-style-type: none"> <li>Uploading and importing images to Prism Central</li> <li>Configuring an image placement policy</li> </ul>
<p><b>2: Securing a Nutanix Cluster</b></p> <ul style="list-style-type: none"> <li>• Understand Nutanix's approach to security</li> <li>• Use Prism Central to configure authentication, users, and RBAC</li> <li>• Understand Policies in Flow Network Security</li> <li>• Use Prism Element to configure Data-at-Rest Encryption</li> </ul> <p>Hands-on-Labs</p> <ul style="list-style-type: none"> <li>Adding a local user</li> <li>Verifying a new user account</li> </ul>	<p><b>5: Creating Virtual Machines</b></p> <ul style="list-style-type: none"> <li>• Use Prism Central to create VMs</li> <li>• Use Prism Central's self-service capabilities to create VM templates</li> <li>• Install and enable Nutanix Guest Tools</li> </ul> <p>Hands-on Labs</p> <ul style="list-style-type: none"> <li>Creating Windows and Linux VMs</li> <li>Installing Windows and Linux operating systems</li> <li>Installing Nutanix Guest Tools on Windows and Linux</li> </ul>
<p><b>3: Configuring Cluster Networking</b></p> <ul style="list-style-type: none"> <li>• Understand AHV networking terminology</li> <li>• Use Prism Central to monitor cluster networks</li> <li>• Use Prism Element to explore the Network Visualizer</li> <li>• Create and update subnets and virtual switches</li> <li>• Understand subnet extension and network segmentation</li> </ul> <p>Hands-on Labs</p> <ul style="list-style-type: none"> <li>Creating unmanaged and managed networks</li> <li>Exploring the AHV network configuration</li> <li>Managing virtual switches and uplinks</li> </ul> <p>Viewing virtual switches from the Prism Web Console</p>	<p><b>6: Managing Virtual Machines</b></p> <ul style="list-style-type: none"> <li>• Update, clone, customize, export, and apply placement rules to VMs</li> <li>• Create and apply storage policies to VMs</li> <li>• Create playbooks to automate common VM administrative tasks</li> </ul> <p>Hands-on Labs</p> <ul style="list-style-type: none"> <li>Updating a VM</li> <li>Creating a template and a clone</li> <li>Exporting a VM as an OVA</li> <li>Creating and running a playbook</li> <li>Creating a storage policy</li> </ul>

<p><b>7: Protecting VMs and Their Data</b></p> <ul style="list-style-type: none"> <li>• Understand data protection terms and concepts</li> <li>• Understand synchronous and asynchronous replication capabilities</li> <li>• Use Prism Element to configure local and remote backup and DR</li> <li>• Use Prism Central to create protection policies with Leap</li> </ul> <p>Hands-on Labs Creating protection domains and local VM restore Creating containers for replication Configuring remote sites and creating protection domains</p> <p>Performing VM migration and migrating back to primary</p>	<p><b>11: Monitoring Cluster Health</b></p> <ul style="list-style-type: none"> <li>• Understand health monitoring features in Prism Central and Prism Element</li> <li>• Get summarized and detailed health information from Prism</li> <li>• Use Nutanix Cluster Check</li> <li>• Collect logs</li> </ul> <p>Hands-on Labs Using Nutanix Cluster Check health checks Collecting logs for Support Creating and managing reports</p>
<p><b>8: Configuring and Managing Cluster Storage</b></p> <ul style="list-style-type: none"> <li>• Understand AOS Distributed Storage</li> <li>• Understand key storage concepts such as storage pools, storage containers, redundancy factor, replication factor, capacity reservation, and snapshots</li> <li>• Understand fault tolerance and failure handling mechanisms</li> <li>• Create and update storage containers</li> <li>• Use various capacity optimization features</li> </ul> <p>Hands-on Labs Exploring the Storage dashboard Creating containers with and without compression Comparing data in a compressed vs uncompressed container Migrating disks between storage containers</p>	<p><b>12: Investigating and Remediating Performance Issues</b></p> <ul style="list-style-type: none"> <li>• Understand alerts and events and the associated dashboards in Prism Central</li> <li>• Identify problematic or inefficient VMs</li> <li>• Potential methods of remediating problematic VMs</li> </ul> <p>Hands-on Labs Working with Alerts Exploring Events</p>
<p><b>9: Migrating Workloads with Nutanix Move</b></p> <ul style="list-style-type: none"> <li>• Understand, install, and upgrade Nutanix Move</li> <li>• Use Move to migrate VMs</li> <li>• Download Move logs</li> </ul> <p>Hands-on Labs Preparing a VM for migration Deploying a Move VM Configuring Move and a migration plan</p>	<p><b>13: Performing Cluster Maintenance</b></p> <ul style="list-style-type: none"> <li>• Performing health checks</li> <li>• Using maintenance mode</li> <li>• Starting and stopping nodes and clusters</li> <li>• Adding nodes to or removing nodes from clusters</li> </ul> <p>Hands-on Labs Verifying cluster health Putting a node into maintenance mode &amp; removing it</p>
<p><b>10: Monitoring Cluster Performance</b></p> <ul style="list-style-type: none"> <li>• Understand performance monitoring features in Prism Central</li> <li>• Create sessions, charts, and reports</li> <li>• Create custom dashboards in Prism Central</li> </ul> <p>Hands-on Labs Creating a Prism Central performance monitoring dashboard Creating charts to analyze metrics using Prism Central</p> <p>Creating and managing reports</p>	<p><b>14: Upgrading Licenses, Software, and Firmware</b></p> <ul style="list-style-type: none"> <li>• Understanding LCM and the LCM workflow</li> <li>• Performing an upgrade using LCM</li> <li>• Licensing a cluster and managing licenses</li> </ul> <p>Hands-on Labs Use Life Cycle Manager to upgrade NCC</p>