vSphere Virtual Machine Administration

Manage Persistent Memory 117

Change Memory Hot Add Settings 122

Virtual Disk Configuration 123

About Virtual Disk Provisioning Policies 123

Large Capacity Virtual Disk Conditions and Limitations 124

Change the Virtual Disk Configuration 125

Use Disk Shares to Prioritize Virtual Machines 127

Determine the Virtual Disk Format and Convert a Virtual Disk from Thin Provision to a Thick Provision Format

127

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| How do I Add a Hard Disk to a Virtual Machine | | | | 128 | | | | 135 | 139 |
| SCSI, SATA, and NVMe Storage Controller Conditions, Limitations, and Compatibility | | | | | | | |
| Add a SATA Controller | 137 | | | | | | |
| Add a SCSI Controller to a Virtual Machine | | | | 138 | | | |
| How to Activate and Deactivate the Automatic Replacement of the LSI SAS Controller | | | | | | | |
| Add a Paravirtualized SCSI Adapter | | | 140 | | | | |
| Add an NVMe Controller | 141 | | | | | | |
| Change the SCSI Controller Configuration | | | 142 | | | | |
| Virtual Machine Network Configuration | | | 143 | | | | |
| Network Adapter Basics | 143 | | | | | | |
| Network Adapters and Legacy Virtual Machines | | | | 145 | | | |
| Change the Virtual Machine Network Adapter Configuration | | | | | | 145 | |
| How to Add a Network Interface Controller to a Virtual Machine | | | | | | 147 | |
| Virtual Machine Parallel and Serial Port Configuration | | | | | 149 | | |
| Other Virtual Machine Device Configuration | | | 156 | | | | |
| Change the CD/DVD Drive Configuration | | | 156 | | | | |
| How do I Add or Modify a Virtual Machine CD or DVD Drive | | | | | 160 How do I | | |
| Add a PCI Device to a Virtual Machine | | | 162 | | | | |
| How do I Configure 3D Graphics | | 167 | | | | | |
| How do I Add a Virtual Watchdog Timer Device to a Virtual Machine | | | | | | | 170 |
| How do I Add a Precision Clock Device to a Virtual Machine | | | | | | 171 | |
| Securing Virtual Machines with Intel Software Guard Extensions | | | | | | 172 | |
| Enable vSGX on a Virtual Machine | | 173 | | | | | |
| Remove vSGX from a Virtual Machine | | | 175 | | | | |

USB Configuration from an ESXi Host to a Virtual Machine 176 How the

USB Autoconnect Feature Works with USB Passthrough 178

178 vSphere Features Available

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| VMware by Broadcom | Conditions and Limitations When Configuring USB Devices for vMotion | | | | 179 | 6 |
| Avoiding Data Loss with USB Devices | | | 180 Connecting |
| USB Devices to an ESXi Host | 180 | | |
| Add USB Devices to an ESXi Host | | 181 | |

vSphere Virtual Machine Administration

Add a USB Controller to a Virtual Machine 182

Add USB Devices from an ESXi Host to a Virtual Machine 183

Remove USB Devices That Are Connected Through an ESXi Host 184

Remove USB Devices from an ESXi Host 185

USB Configuration from a Client Computer to a Virtual Machine 185

How to Connect USB Devices to a Client Computer 187

Add USB Devices from a Client Computer to a Virtual Machine 188

Remove USB Devices That Are Connected Through a Client Computer 189

Remove a USB Controller from a Virtual Machine 190

Add a Shared Smart Card Reader to Virtual Machines 190

Securing Virtual Machines with Virtual Trusted Platform Module 191

What Is a Virtual Trusted Platform Module 192

Create a Virtual Machine with a Virtual Trusted Platform Module 193 Add Virtual

Trusted Platform Module to an Existing Virtual Machine 195

Remove Virtual Trusted Platform Module from a Virtual Machine 196

Identify Virtual Trusted Platform Module Enabled Virtual Machines 196

Securing Virtual Machines with AMD Secure Encrypted Virtualization-Encrypted State 197 vSphere and AMD

Secure Encrypted Virtualization-Encrypted State 197

Add AMD Secure Encrypted Virtualization-Encrypted State to a Virtual Machine Using the vSphere Client 198

Activate AMD Secure Encrypted Virtualization-Encrypted State on an Existing Virtual Machine Using the

vSphere Client 199

Add AMD Secure Encrypted Virtualization-Encrypted State to a Virtual Machine Using the

Command Line 200

Activate AMD Secure Encrypted Virtualization-Encrypted State on an Existing Virtual

Machine Using the Command Line 202

Deactivate AMD Secure Encrypted Virtualization-Encrypted State on a Virtual Machine Using the vSphere

Client 203

Deactivate AMD Secure Encrypted Virtualization-Encrypted State on a Virtual Machine Using the Command

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Line | 203 | | | | | | 207 | 7 |
| **6** Configuring Virtual Machine Options | | | 205 | | | |
| General Virtual Machine Options | | 206 | | | | |
| Change the Virtual Machine Name | | | 206 | | | |
| View the Virtual Machine Configuration and Working File Location | | | | | | |
| Change the Configured Guest Operating System | | | | | | 207 | 208 |
| VMware Remote Console Options | | 208 | | | | |
| Change the Virtual Machine Console Options for Remote Users | | | | | | |
| Configure Virtual Machine Encryption Options | | | | | 209 | |
| Encrypt an Existing Virtual Machine or Virtual Disk | | | | | | 209 |
| Decrypt an Encrypted Virtual Machine or Virtual Disk | | | | | | 210 |
| Clone an Encrypted Virtual Machine | | | | 211 | | |
| VMware by Broadcom | | | | | | |

vSphere Virtual Machine Administration

Virtual Machine Power Management Options 213

Manage Power Management Settings for a Virtual Machine 213

Configuring VMware Tools Options 214

Configure the Virtual Machine Power States 214

Synchronize the Time of a Virtual Machine Guest Operating System with the Host 216

Virtualization Based Security 217

Activate Virtualization-based Security on an Existing Virtual Machine 217

Activate Virtualization-based Security on the Guest Operating System 219

Deactivate Virtualization-based Security 219

Identify VBS-Enabled Virtual Machines 220

Configure Virtual Machine Boot Options 220

Activate or Deactivate UEFI Secure Boot for a Virtual Machine

Sequence 222

Configuring Virtual Machine Advanced Options 222

Enable Virtual Machine Logging 222

220 Delay the Boot

Configure Virtual Machine Debugging and Statistics 223

Change the Swap File Location 223

Configure the Virtual Machine Latency Sensitivity 224

Set a Stun Time Limit for vGPU Virtual Machines 225

Configure Fibre Channel NPIV Settings 227

Configure the CPU Topology of a Virtual Machine 228

**7** Configure Virtual Machine Advanced File Parameters 231

**8** Managing Multi-Tiered Applications with vSphere vApp 232

Create a vApp 233

Perform vApp Power Operations 234

Create or Add an Object to a vApp 235

Clone a vApp 236

Edit vApp Notes 236

Configure vApp Properties 237

Edit vApp Settings 238

Configure vApp CPU and Memory Resources 238

Configure vApp IP Allocation Policy 239

Configure vApp Startup and Shutdown Options 241

Configure vApp Product Properties 241

View vApp License Agreements 242

Add a Network Protocol Profile 242

Assign a Port Group or Network to a Network Protocol Profile 245

Use a Network Protocol Profile to Allocate IP Addresses to a Virtual Machine or vApp 246

VMware by Broadcom 8