

Product	Port	Protocol	Source	Target	Purpose
Converter 3.x + 4.x	137	UDP	vCenter Converter Server	Source Computer to be converted	For hot migration. Not required if the source computer does not use NetBIOS
Converter 3.x + 4.x	138	UDP	vCenter Converter Server	Source Computer to be converted	For hot migration. Not required if the source computer does not use NetBIOS
Converter 3.x + 4.x	139	TCP	vCenter Converter Server	Source Computer to be converted	For hot migration. Not required if the source computer does not use NetBIOS
Converter 3.x + 4.x	443	TCP	vCenter Converter Server	ESX/ESXi Host	Required for system conversion
Converter 3.x + 4.x	443	TCP	vCenter Converter Server	vCenter Server	Required if vCenter Server is the conversion target
Converter 3.x + 4.x	443	TCP	Source Computer to be converted	vCenter Server	Required if vCenter Server is the conversion target
Converter 3.x + 4.x	445	TCP	vCenter Converter Server	Source Computer to be converted	Required for system conversion. Not required if the source computer uses NetBIOS
Converter 3.x + 4.x	902	TCP	Source Computer to be converted	ESX/ESXi Host	Required for data transport during cloning of system to be converted to target ESX/ESXi Host
Converter 3.x + 4.x	443	TCP	Source Computer to be converted	ESX/ESXi Host	Required for destination VM access when target is ESX/ESXi/vCenter
Converter 4.x only	9089	TCP	vCenter Converter Server	Source Computer to be converted	Required for system conversion. Remote agent deployment
Converter 4.x only	443	TCP	vCenter Converter Client	vCenter Converter Server	Only required if the Converter Client and Converter Server were installed on different systems
Converter 4.x only	22	TCP	vCenter Converter Server	Source Computer to be converted	Required for conversion of Linux-based source computers
Converter 4.x only	22	TCP	Helper Virtual Machine	Source Computer to be converted	Required for conversion of Linux-based source computers (data flows from source to VM)
Converter 4.x only	443	TCP	vCenter Converter Server	Helper Virtual Machine	Required for conversion of Linux-based source computers
ESX 3.x + 4.x (not ESXi)	161	UDP	SNMP Server	ESX Host	SNMP Polling
ESXi 4.x only	161	UDP	SNMP Server	ESXi 4.x Host	SNMP Polling. Not used in ESXi 3.x
ESX 3.x + 4.x (not ESXi)	21	TCP	FTP Client	ESX Host	FTP
ESX 3.x + 4.x (not ESXi)	21	TCP	ESX Host	FTP Server	FTP
ESX 3.x + 4.x (not ESXi)	22	TCP	SSH Client	ESX Host	SSH
ESX 3.x + 4.x (not ESXi)	22	TCP	ESX Host	SSH Server	SSH

ESX 3.x + 4.x (not ESXi)	88	TCP	ESX Host	Active Directory Server	PAM Active Directory Authentication – Kerberos
ESX 3.x + 4.x (not ESXi)	389	TCP	ESX Host	LDAP Server	PAM Active Directory Authentication – LDAP
ESX 3.x + 4.x (not ESXi)	445	TCP	ESX Host	MS Directory Services Server	PAM Active Directory Authentication
ESX 3.x + 4.x (not ESXi)	445	UDP	ESX Host	MS Directory Services Server	PAM Active Directory Authentication
ESX 3.x + 4.x (not ESXi)	445	TCP	ESX Host	SMB Server	SMB
ESX 3.x + 4.x (not ESXi)	464	TCP	ESX Host	Active Directory Server	PAM Active Directory Authentication – Kerberos Password Services
ESX 3.x + 4.x (not ESXi)	137-139	TCP	ESX Host	SMB Server	SMB
ESX 3.x + 4.x (not ESXi)	443	TCP	Client PC	ESX Host	Host VI Management via web browser
ESX/ESXi 3.x + 4.x	162	UDP	ESX Host	SNMP Collector	SNMP Trap Send
ESX/ESXi 3.x + 4.x	53	UDP	ESX/ESXi Host	DNS Server	DNS
ESX/ESXi 3.x + 4.x	80	TCP	Client PC	ESX/ESXi Host	Redirect Web Browser to HTTPS Service (443)
ESX/ESXi 3.x + 4.x	111	TCP	ESX/ESXi Host	NFS Server	NFS Client – RPC Portmapper
ESX/ESXi 3.x + 4.x	111	UDP	ESX/ESXi Host	NFS Server	NFS Client – RPC Portmapper
ESX/ESXi 3.x + 4.x	123	UDP	ESX/ESXi Host	NTP Time Server	NTP Client
ESX/ESXi 3.x + 4.x	427	TCP	ESX/ESXi Host	ESX/ESXi Host	CIM Service Location Protocol (SLP)
ESX/ESXi 3.x + 4.x	427	UDP	ESX/ESXi Host	ESX/ESXi Host	CIM Service Location Protocol (SLP)
ESX/ESXi 3.x + 4.x	443	TCP	VI/vSphere Client	ESX/ESXi Host	VI/vSphere Client to ESX/ESXi Host management connection
ESX/ESXi 3.x + 4.x	902	TCP/UDP	ESX/ESXi Host	ESX/ESXi Host	Authentication, Provisioning, VM Migration
ESX/ESXi 3.x + 4.x	902	TCP	VI/vSphere Client	ESX/ESXi Host	VI/vSphere Client to ESX/ESXi hosted VM connectivity
ESX/ESXi 3.x + 4.x	903	TCP	VI/vSphere Client	ESX/ESXi Host	VM Remote VM Console

ESX/ESXi 3.x + 4.x	903	TCP	VI/vSphere Client	ESX/ESXi Host	VM Remote VM Console
ESX/ESXi 3.x + 4.x	2049	TCP	ESX/ESXi Host	NFS Server	NFS Client
ESX/ESXi 3.x + 4.x	2049	UDP	ESX/ESXi Host	NFS Server	NFS Client
ESX/ESXi 3.x + 4.x	3260	TCP	ESX/ESXi Host	iSCSI SAN	Software iSCSI Client and Hardware iSCSI HBA
ESX/ESXi 3.x + 4.x	5988	TCP	ESX/ESXi Host	ESX/ESXi Host	CIM Client to CIM Secure Server
ESX/ESXi 3.x + 4.x	5989	TCP	ESX/ESXi Host	ESX/ESXi Host	CIM Client to CIM Secure Server
ESX/ESXi 3.x + 4.x	8000	TCP	ESX/ESXi Host (VM Target)	ESX/ESXi Host (VM Source)	VCOtion Communication on VMKernel Interface
ESX/ESXi 3.x + 4.x	8000	TCP	ESX/ESXi Host (VM Source)	ESX/ESXi Host (VM Target)	VCOtion Communication on VMKernel Interface
ESX/ESXi 3.x + 4.x	2050-2250	UDP	ESX/ESXi Host	ESX/ESXi Host	VMware HA
ESX/ESXi 3.x + 4.x	8042-8045	TCP	ESX/ESXi Host	ESX/ESXi Host	VMware HA
ESX/ESXi 3.x + 4.x	514	UDP	ESX/ESXi Host	Syslog Server	Remote syslog logging
ESX/ESXi 3.x only	27000	TCP	ESX/ESXi Host	VMware License Server	ESX/ESXi 3.x Host to License Server communication
ESX/ESXi 3.x only	27010	TCP	ESX/ESXi Host	VMware License Server	ESX/ESXi 3.x Host to License Server communication
ESX/ESXi 4.x only	8100	TCP/UDP	ESX/ESXi 4 Host	ESX/ESXi 4.x Host	VMware Fault Tolerance. ESX/ESXi 4 only.
ESX/ESXi 4.x only	8200	TCP/UDP	ESX/ESXi 4 Host	ESX/ESXi 4.x Host	VMware Fault Tolerance. ESX/ESXi 4 only.
Lab Manager	443	TCP	Client PC	Lab Manager Server	Lab Manager Console (Web Browser)
Lab Manager	443	TCP	Lab Manager Server	vCenter Server	Lab Manager to vCenter Server Communication
Lab Manager	1433	TCP	Lab Manager Server	Microsoft SQL Server	Lab Manager Connectivity to Microsoft SQL Server (for LM database)
Lab Manager	5212	TCP	Lab Manager Server	ESX/ESXi Host	Lab Manager Agent. ESXi requires Lab Manager 4.x
Lab Manager	137	UDP	ESX/ESXi Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs. ESXi requires Lab Manager 4.x
Lab Manager	138	UDP	ESX/ESXi Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs. ESXi requires Lab Manager 4.x
Lab Manager	139	TCP	ESX/ESXi Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs. ESXi requires Lab Manager 4.x
Lab Manager	445	TCP	ESX/ESXi Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs. ESXi requires Lab Manager 4.x
Lab Manager	514	TCP	Lab Manager Server	ESX/ESXi Host	ESX/ESXi Host Virtual Router. ESXi requires Lab Manager 4.x
Lab Manager	389	TCP	Lab Manager Server	LDAP Server	LDAP Authentication (optional)
Lab Manager	636	TCP	Lab Manager Server	LDAP Server	LDAPS Authentication (optional)
Stage Manager	137	UDP	ESX Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs

Stage Manager	138	UDP	ESX Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs
Stage Manager	139	TCP	ESX Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs
Stage Manager	443	TCP	Client PC	Stage Manager Server	Stage Manager Console (Web Browser)
Stage Manager	445	TCP	ESX Host	SMB File Server	SMB File Sharing for Importing/Exporting VMs
Stage Manager	514	TCP	Stage Manager Server	ESX Host	ESX Host Virtual Router
Stage Manager	389	TCP	Stage Manager Server	LDAP Server	LDAP Authentication (optional)
Stage Manager	636	TCP	Stage Manager Server	LDAP Server	LDAPS Authentication (optional)
Stage Manager	443	TCP	Stage Manager Server	ESX Host	Stage Manager Server communication with ESX Host Agent
Stage Manager	443	TCP	Stage Manager Server	vCenter Server	Stage Manager Server communication with vCenter Server
Stage Manager	5212	TCP	Stage Manager Server	ESX Host	Stage Manager Agent
Site Recovery Manager	1433	TCP	vCenter Server	Microsoft SQL Server	SRM Connectivity to Microsoft SQL Server (for SRM database)
Site Recovery Manager	1521	TCP	vCenter Server	Oracle Database Server	SRM Connectivity to Oracle (for SRM database)
Site Recovery Manager	8095	TCP	Site Recovery Manager	Local vCenter Server	SRM communication with local vCenter Server
Site Recovery Manager	443	TCP	Site Recovery Manager	Remote vCenter Server	SRM communication with remote vCenter Server
Consolidated Backup	443	TCP	VCB Proxy Server	vCenter Server	Required for VCB and vcbMounter communication and backup processes
Consolidated Backup	443	TCP	VCB Proxy Server	ESX/ESXi Host	Required for VCB and vcbMounter communication and backup processes
vCenter 2.5.x + 4.x	25	TCP	vCenter Server	SMTP Server	Email notifications
vCenter 2.5.x + 4.x	53	UDP	vCenter Server	DNS Server	DNS lookups
vCenter 2.5.x + 4.x	80	TCP	Client PC	vCenter Server	Redirect Web Browser to HTTPS Service (443)
vCenter 2.5.x + 4.x	88	TCP	vCenter Server	Active Directory Server	AD Authentication
vCenter 2.5.x + 4.x	88	UDP	vCenter Server	Active Directory Server	AD Authentication

vCenter 2.5.x + 4.x	161	UDP	SNMP Server	vCenter Server	SNMP Polling
vCenter 2.5.x + 4.x	162	UDP	vCenter Server	SNMP Server	SNMP Trap Send
vCenter 2.5.x + 4.x	389	TCP	vCenter Server	LDAP Server	LDAP Authentication
vCenter 2.5.x + 4.x	443	TCP	vCenter Server	ESX/ESXi Host	vCenter Agent
vCenter 2.5.x + 4.x	443	TCP	Client PC	vCenter Server	VI Web Access (Web Browser)
vCenter 2.5.x + 4.x	443	TCP	VI/vSphere Client	vCenter Server	VI/vSphere Client access to vCenter Server
vCenter 2.5.x + 4.x	445	TCP	vCenter Server	Active Directory Server	AD Authentication
vCenter 2.5.x + 4.x	445	UDP	vCenter Server	Active Directory Server	AD Authentication
vCenter 2.5.x + 4.x	902	UDP	vCenter Server	ESX/ESXi Host	Heartbeat
vCenter 2.5.x + 4.x	902	UDP	ESX/ESXi Host	vCenter Server	Heartbeat
vCenter 2.5.x + 4.x	903	TCP	Client PC	vCenter Server	VI/vSphere Client to VM Console
vCenter 2.5.x + 4.x	903	TCP	vCenter Server	ESX/ESXi Host	VI/vSphere Client to VM Console (after connection established between VI/vSphere Client and vCenter)
vCenter 2.5.x + 4.x	1433	TCP	vCenter Server	Microsoft SQL Server	For vCenter Microsoft SQL Server Database
vCenter 2.5.x + 4.x	1521	TCP	vCenter Server	Oracle Database Server	For vCenter Oracle Database
vCenter 2.5.x + 4.x	8005	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter 2.5.x + 4.x	8006	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter 2.5.x + 4.x	8083	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics
vCenter 2.5.x + 4.x	8085	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics
vCenter 2.5.x + 4.x	8086	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter 2.5.x + 4.x	8087	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics
vCenter 2.5.x + 4.x	27000	TCP	vCenter Server	VMware License Server	Licensing via FlexLM. Only required by vCenter 4 if ESX/ESXi 3.x Hosts will be supported
vCenter 2.5.x + 4.x	27000	TCP	VMware License Server	vCenter Server	Licensing via FlexLM. Only required by vCenter 4 if ESX/ESXi 3.x Hosts will be supported
vCenter 2.5.x + 4.x	27010	TCP	vCenter Server	VMware License Server	Licensing via FlexLM. Only required by vCenter 4 if ESX/ESXi 3.x Hosts will be supported
vCenter 2.5.x + 4.x	27010	TCP	VMware License Server	vCenter Server	Licensing via FlexLM. Only required by vCenter 4 if ESX/ESXi 3.x Hosts will be supported
vCenter 4.x only	636	TCP	vCenter Server	Linked vCenter Servers	Linked mode connectivity between vCenter Servers
vCenter 4.x only	8080	TCP	Client PC	vCenter 4 Server	VMware vCenter 4 Management Web Services – HTTP

vCenter 4.x only	8443	TCP	Client PC	vCenter 4 Server	VMware vCenter 4 Management Web Services – HTTPS
View 3.x / VDM 2.x	80	TCP	Client PC	View/VDM Connection Server	VDM Web Access (not required if only HTTPS is to be supported)
View 3.x / VDM 2.x	80	TCP	View/VDM Client	View/VDM Connection Server	VDM Access (not required if only HTTPS is to be supported)
View 3.x / VDM 2.x	80	TCP	Client PC	View/VDM Security Server	VDM Web Access (not required if only HTTPS is to be supported)
View 3.x / VDM 2.x	80	TCP	View/VDM Client	View/VDM Security Server	VDM Access (not required if only HTTPS is to be supported)
View 3.x / VDM 2.x	88	TCP	View/VDM Connection Server	Active Directory Server	AD Authentication
View 3.x / VDM 2.x	88	UDP	View/VDM Connection Server	Active Directory Server	AD Authentication
View 3.x / VDM 2.x	389	TCP	View/VDM Connection Server	LDAP Server	LDAP Authentication
View 3.x / VDM 2.x	443	TCP	Client PC	View/VDM Connection Server	VDM Web Access and VDM Administration
View 3.x / VDM 2.x	443	TCP	Thin Client	View/VDM Connection Server	VDM API
View 3.x / VDM 2.x	443	TCP	View/VDM Client	View/VDM Connection Server	VDM Access
View 3.x / VDM 2.x	443	TCP	Client PC	View/VDM Security Server	VDM Web Access (Web Browser)
View 3.x / VDM 2.x	443	TCP	View/VDM Client	View/VDM Security Server	VDM Access
View 3.x / VDM 2.x	443	TCP	View/VDM Connection Server	vCenter Server	VDM to vCenter communication
View 3.x / VDM 2.x	445	TCP	View/VDM Connection Server	Active Directory Server	AD Authentication
View 3.x / VDM 2.x	445	UDP	View/VDM Connection Server	Active Directory Server	AD Authentication
View 3.x / VDM 2.x	3389	TCP	Client PC/Thin Client/View/VDM Client	Virtual Desktop VM (View/VDM Agent)	Direct RDP Connection
View 3.x / VDM 2.x	3389	TCP	View/VDM Security Server	Virtual Desktop VM (View/VDM Agent)	Tunneled RDP Connection
View 3.x / VDM 2.x	4001	TCP	View/VDM Security Server	View/VDM Connection Server	JMS
View 3.x / VDM 2.x	4001	TCP	View/VDM Connection Server	View/VDM Security Server	JMS
View 3.x / VDM 2.x	4001	TCP	Virtual Desktop VM (View/VDM Agent)	View/VDM Connection Server	
View 3.x / VDM 2.x	8009	TCP	View/VDM Security Server	View/VDM Connection Server	AJP
View 3.x / VDM 2.x	8009	TCP	View/VDM Connection Server	View/VDM Security Server	AJP

View 3.x / VDM 2.x	1024 – 65535	TCP	View/VDM Connection Server	View/VDM Connection Server	This is required for ADAM replication (Active Directory “lite” replication) between VDM Connection Servers. With a Registry entry this can be fixed to a defined set of ports, but by default its a random TCP high port
View 3.x only	32111	TCP	View Client	View Agent (Virtual Desktop)	USB Device Communication
View 3.x only	32111	TCP	View Agent (Virtual Desktop)	View Client	USB Device Communication
Orchestrator	25	TCP	VCO Server	SMTP Server	Email notifications
Orchestrator	389	TCP	VCO Server	LDAP Server	LDAP Authentication
Orchestrator	443	TCP	VCO Server	vCenter Server	Used to obtain virtual infrastructure and virtual machine information from orcestrated vCenter Server (s) through the vCenter API
Orchestrator	636	TCP	VCO Server	LDAP Server	VCO uses LDAP authentication and group membership to determine role authorization in LCM and access to VMs/requests. This is the SSL secured LDAP protocol ldaps (the SSL pendent of 389). This is used for secured LDAP authentication
Orchestrator	3306	TCP	VCO Server	MySQL Server	vCenter Orchestrator Server to MySQL Server for VCO Database
Orchestrator	1433	TCP	VCO Server	Microsoft SQL Server	vCenter Orchestrator Server to Microsoft SQL Server for VCO Database
Orchestrator	1521	TCP	VCO Server	Oracle Database Server	vCenter Orchestrator Server to Oracle for VCO Database
Orchestrator	5432	TCP	VCO Server	PostgreSQL Server	vCenter Orchestrator Server to Portgresql Server for VCO Database
Orchestrator	8230	TCP	VCO Client	VCO Server	Lookup port – The main port to communicate with Orchestrator Configurator server (JNDI port). All other ports communicate with the Orchestrator Configurator smart client through this one. It is part of the JBoss Application server infrastructure
Orchestrator	8240	TCP	VCO Client	VCO Server	Command port – The application communication port (RMI container port), it is used for remote invocations. It is part of the JBoss Application server infrastructure.
Orchestrator	8250	TCP	VCO Client	VCO Server	Messaging port – The Java messaging port used to dispatch events. It is part of the JBoss Application server infrastructure
Orchestrator	8280	TCP	VCO Server	VCO Server	Port used by VCO Server to connect to the Web front-end via HTTP
Orchestrator	8281	TCP	VCO Server	VCO Server	Port used by VCO Server to connect to the Web front-end via HTTPS
Orchestrator	8281	TCP	vCenter Server	VCO Server	Port used by VCO Server to connect to vCenter Server to communicate with the vCenter API

Orchestrator	8282	TCP	VCO Client PC	VCO Server	HTTP server port – The port for the HTTP connector used to connect to the Web frontend.
Orchestrator	8283	TCP	VCO Client PC	VCO Server	HTTPS server port – The port for the SSL HTTP connector used to connect to the Web frontend. Requires Jetty to be configured for SSL.
Update Manager	80	TCP	Update Manager Server	www.vmware.com and xml.shavlik.com	To obtain metadata for the updates, Update Manager must be able to connect to http://www.vmware.com and http://xml.shavlik.com
Update Manager	80	TCP	ESX/ESXi Host	Update Manager Host	ESX/ESXi Host to Update Manager Server . The reverse proxy forwards the required to port 9084
Update Manager	443	TCP	Update Manager Server	www.vmware.com and xml.shavlik.com	To obtain metadata for the updates, Update Manager must be able to connect to http://www.vmware.com and http://xml.shavlik.com
Update Manager	443	TCP	ESX/ESXi Host	Update Manager Server	ESX/ESXi Host to Update Manager Server . The reverse proxy forwards the required to port 9084
Update Manager	443	TCP	vCenter Server	Update Manager Server	vCenter Server to Update Manager Server. The reverse proxy forwards the request to port 8084
Update Manager	443	TCP	Update Manager Server	vCenter Server	Update Manager to vCenter Server communication
Update Manager	902	TCP	Update Manager Server	ESX/ESXi Host	To push patches and updates from Update Manager to the ESX/ESXi Hosts to be updated
Update Manager	1433	TCP	Update Manager Server	Microsoft SQL Server	Update Manager to Microsoft SQL Server connectivity (for UM Database)
Update Manager	1521	TCP	Update Manager Server	Oracle Database Server	Update Manager to Oracle connectivity (for UM Database)
Update Manager	8084	TCP	Update Manager Server	Update Manager Server	SOAP between components of Update Manager Server
Update Manager	9084	TCP	Update Manager Server	Update Manager Server	Update Manager Web Server. Accessed through reverse proxy from port 80 and/or 443
Update Manager	9000-9010	TCP	Update Manager Server	ESX/ESXi Host	This is the recommend port range from which to choose ports for Update Manager if ports 80 and 443 are already in use. Update Manager automatically opens these ports for ESX Host scanning and remediation