

TCP and UDP Ports required to access VMware vCenter Server, VMware ESXi and ESX hosts, and other network components (1012382)

<https://kb.vmware.com/s/article/1012382>

Last Updated: 21.11.2018 **Categories:** Best Practices

This article provides information on TCP and UDP ports required to access VMware products, such as, vCenter Server, and ESXi.

These services and agents are commonly present in a VMware vSphere environment:

- CIM HTTP server (insecure service)
- CIM HTTPS server
- FTP client (insecure service)
- FTP server (insecure service)
- iSCSI software client
- NFS client (insecure service)
- NFS server (insecure service)
- NIS client
- NTP client
- SMB client (insecure service)
- SNMP server
- SSH client
- SSH server
- Syslog client
- Telnet client (insecure service)
- Telnet server (insecure service)
- Other supported management agents that you install

vCenter Server, ESXi hosts, and other network components are accessed using predetermined TCP and UDP ports. If you manage network components from outside a firewall, you may be required to reconfigure the firewall to allow access on the appropriate ports.

Resolution

TCP and UDP ports should be modified for each of these products:

- Converter 5.x
- ESXi 5.x
- ESXi 6.0
- ESXi Dump Collector
- ESXi Syslog Collector
- Heartbeat
- NSX for vSphere 6.x: See Network Port Requirements for VMware NSX for vSphere (2079386)
- vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)
- Site Recovery Manager 1.x-5.x: See Ports that Must be Open for Site Recovery Manager 1.0.x to 5.5.x, vSphere Replication 1.0.x to 5.5.x, and vCenter Server (1009562)
- Update Manager
- vRealize Infrastructure Navigator 1.x (formerly known as vCenter Infrastructure Navigator)
- vRealize Log Insight 1.x (formerly known as vCenter Log Insight)
- vCenter Server 5.x
- vCenter Server 6.0
- vCenter Server Appliance: See Required ports for vCenter Server Appliance 5.x (2012773).
- vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x)
- vRealize Operations Manager (vApp) 5.x (formerly known as vCenter Operations Manager (vApp) 5.x)
- vRealize Operations Manager (Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)
- vRealize Operations Manager 6.x

- vRealize Business Advanced/Enterprise
- vCloud Usage Meter
- View 4.x
- View 5.x
- VMware Horizon Mirage: See the VMware Horizon Mirage Administrator's Guide
- vSAN
- vSphere Data Protection: See Required ports for VMware vSphere Data Protection 5.x (2034929).

Note: Ports used with the Virtual Infrastructure / vSphere Client are listed in a [separate table](#) at the end of this article.

Products	Article Links
VMware vSAN	TCP and UDP ports required to access VMware vSAN 52959
VMware Converter Standalone	TCP and UDP ports required to access VMware Converter 52958
VMware ESX/ESXi	TCP and UDP ports required to access ESXi 52960
VMware vRealize Orchestrator	TCP and UDP ports required to access VMware vRealize Orchestrator 52961
VMware vSphere Update Manager	TCP and UDP ports required to access VMware vSphere Update Manager 52962
VMware vCenter Server	TCP and UDP ports required to access VMware vCenter Server 52963
VMware vRealize Operations Manager	TCP and UDP ports required to access VMware vRealize Operations Manager 52964
VMware Horizon View	TCP and UDP ports required to access VMware Horizon View 52965

VI / vSphere Client ports:

Product	Port	Protocol	Source	Target	Purpose
Data Recovery	22024	TCP	Data Recovery vSphere Client Plug-in	Data Recovery Appliance	Data Recovery management
ESXi 5.x	22	TCP	vSphere client	ESXi 5.x	SSH Server
ESXi 5.x	80	TCP	vSphere client / vSphere Web client	ESXi 5.x	Redirect Web Browser to HTTPS Service (443)
ESXi 5.x	443	TCP	VI / vSphere client/ vSphere Web client	ESXi/ESX Host	VI / vSphere client to ESXi/ESX Host management connection
ESXi 5.x	902	TCP	vSphere Client	ESXi 5.x	vSphere Client access to virtual machine consoles (MKS)
vCenter 5.x	80	TCP	vSphere Client /vSphere Web Client	vCenter Server	vCenter Server requires port 80 for direct HTTP connections.
vCenter 5.x	443	TCP	vSphere Client /vSphere Web Client	vCenter Server	vCenter Server system uses to listen for connections from the vSphere Client.
vCenter 5.x	902	TCP/UDP	vSphere Client	ESXi 5.x	vSphere Client uses this ports to display virtual machine consoles.

vCenter 5.x	903	TCP	vSphere Client	ESX 3.5 and 4.x	Remote console traffic generated by user access to virtual machines. This applies to all ESXi/ESX versions.
vCenter 5.x	8080	TCP	vSphere client	vCenter Server	Web Services HTTP. Used for the VMware VirtualCenter Management Web Services.
vCenter 5.x	8443	TCP	vSphere client	vCenter Server	Web Services HTTPS. Used for the VMware VirtualCenter Management Web Services.
vCenter 5.x	9443	TCP	vSphere client	vCenter Server	vSphere Web Client Access
vCenter 5.x	10080	TCP	vSphere client	vCenter Server	vCenter Inventory Service HTTP
vCenter 5.x	10443	TCP	vSphere client	vCenter Server	vCenter Inventory Service HTTPS

VMware vSAN

TCP and UDP ports required to access VMware vSAN 52959

TCP and UDP ports required to access VMware vSAN (52959)

Last Updated: 22.08.2018 **Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware vSAN.

Resolution

TCP and UDP ports for VMware vSAN:

Port	Protocol	Source	Destination	Service
12345	UDP	ESXi hosts	ESXi hosts	vSAN Clustering Service.
23451		ESXi hosts	vSAN Witness	
12321		vSAN Witness	ESXi hosts	
2233	TCP	ESXi hosts	ESXi hosts	vSAN Transport: Used for storage IO.
		ESXi hosts	vSAN Witness	
		vSAN Witness	ESXi hosts	
8080	TCP	ESXi hosts	ESXi hosts	vSAN Management Service
		vCenter	ESXi hosts	VMware vSphere Profile-Driven Storage Service and vSAN Management Service
3260	TCP	iSCSI initiator	ESXi hosts	Default iSCSI port for vSAN iSCSI target service
5001	UDP	ESXi hosts	ESXi hosts	Vsanhealth-multicasttest: vSAN Health Proactive Network test. This port is enabled on demand when Proactive Network Test is running.
8010	TCP	Web browser	vCenter	vSAN observer default port number for live statistics. Custom port number can also be specified for vSAN observer.

VMware Converter Standalone

TCP and UDP ports required to access VMware Converter 52958

TCP and UDP ports required to access VMware Converter (52958)

Last Updated: 29.03.2018**Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware Converter Standalone:

Resolution

TCP and UDP ports for VMware Converter Standalone:

Product	Port	Protocol	Source	Target	Purpose
Converter 5.x	22	TCP	Converter Standalone Server	powered-on source machine	Used to establish an SSH connection between the Converter Standalone server and the source Linux machine
Converter 5.x	137	UDP	Converter Standalone server	powered-on source machine	For hot migration. Not required if the source computer does not use NetBIOS
Converter 5.x	138	UDP	Converter Standalone server	powered-on source machine	For hot migration. Not required if the source computer does not use NetBIOS
Converter 5.x	139	TCP	Converter Standalone server	powered-on source machine	For hot migration. Not required if the source computer does not use NetBIOS
Converter 5.x	443	TCP	Converter Standalone server	vCenter Server	Required only if the conversion destination is a vCenter Server
Converter 5.x	443	TCP	Converter Standalone server	Converter Standalone server	Required only if the Converter Standalone server and Linux client components are on different machines
Converter 5.x	443	TCP	Converter Standalone server	vCenter server	Required only if the Converter Standalone server and client components are on different machines
Converter 5.x	22	TCP	Powered-on Source Linux machine	ESXi/ESX Host	Uses secure connection port 22 to Host
Converter 5.x	443, 902	TCP	Powered-on Source Windows machine	ESXi/ESX Host	Required for data transfer to destination ESXi/ESX host
Converter 5.x	445	TCP	Converter Standalone server	powered-on source machine	Required for system conversion. Not required if the source computer uses NetBIOS
Converter 5.x	9089	TCP	Converter Standalone server	powered-on source machine	Required for system conversion. Remote agent deployment

VMware ESX/ESXi

TCP and UDP ports required to access ESXi 52960

TCP and UDP ports required to access ESXi (52960)

Last Updated: 29.03.2018**Categories:** Informational

Purpose

This article lists the TCP and UDP ports for ESXi

Resolution

TCP and UDP ports for ESXi :

Product	Port	Protocol	Source	Target	Purpose
ESXi 5.x	22	TCP	Client PC	ESXi Host	SSH Server
ESXi 5.x	53	UDP	ESXi 5.x	DNS Server	DNS Client

Product	Port	Protocol	Source	Target	Purpose
ESXi 5.x	68	UDP	ESXi 5.x	DHCP Server	DHCP Client
ESXi 5.x	80	TCP	Client PC	ESXi Host	Redirect Web Browser to HTTPS Service (443)
ESXi 5.x	88	TCP	ESXi host	Active Directory Server	PAM Active Directory Authentication - Kerberos
ESXi 5.x	111	TCP	ESXi/ESX Host	NFS Server	NFS Client – RPC Portmapper
ESXi 5.x	111	UDP	ESXi/ESX Host	NFS Server	NFS Client – RPC Portmapper
ESXi 5.x	123	UDP	ESXi/ESX Host	NTP Time Server	NTP Client
ESXi 5.x	161	UDP	SNMP Server	ESXi Host	SNMP Polling. Not used in ESXi 3.x
ESXi 5.x	162	UDP	ESXi Host	SNMP Collector	SNMP Trap Send
ESXi 5.x	389	TCP/UDP	ESXi host	LDAP Server	PAM Active Directory Authentication - Kerberos
ESXi 5.x	427	UDP	VI / vSphere Client	ESXi/ESX Host	CIM Service Location Protocol (SLP)
ESXi 5.x	443	TCP	VI / vSphere Client	ESXi/ESX Host	VI / vSphere Client to ESXi/ESX Host management connection
ESXi 5.x	443	TCP	ESXi/ESX Host	ESXi/ESX Host	Host to host VM migration and provisioning
ESXi 5.x	445	UDP	ESXi host	MS Directory Services Server	PAM Active Directory Authentication
ESXi 5.x	445	TCP	ESXi host	MS Directory Services Server	PAM Active Directory Authentication
ESXi 5.x	445	TCP	ESXi host	SMB Server	SMB Server
ESXi 5.x	464	TCP	ESXi host	Active Directory Server	PAM Active Directory Authentication - Kerberos
ESXi 5.x	514	UDP/TCP	ESXi 5.x	Syslog Server	Remote syslog logging
ESXi 5.x	902	TCP/UDP	ESXi 5.x	ESXi Host	Host access to other hosts for migration and provisioning
ESXi 5.x	902	TCP	vSphere Client	ESXi Host	vSphere Client access to virtual machine consoles (MKS)
ESXi 5.x	902	UDP	ESXi 5.x	vCenter Server	(UDP) Status update. Managed hosts send a regular heartbeat to the vCenter Server system. This port must not be blocked by firewalls between the server and the hosts or between hosts.
ESXi 5.x	1024 (dynamic)	TCP/UDP	ESXi Host	Active Directory Server	Bi-directional communication on TCP/UDP ports is required between the ESXi host and the Active Directory Domain Controller (via the netlogond process on the ESXi host). See Active Directory and Active Directory Domain Services Port Requirements and the Microsoft Knowledge Base article 179442.
ESXi 5.x	2049	TCP	ESXi 5.x	NFS Server	Transactions from NFS storage devices
ESXi 5.x	2049	UDP	ESXi 5.x	NFS Server	Transactions from NFS storage devices
ESXi 5.x	3260	TCP	ESXi 5.x	iSCSI storage server	Transactions to iSCSI storage devices
ESXi 5.x	5900 to 5964	TCP	ESXi 5.x	ESXi Host	RFB protocol, which is used by management tools such as VNC

Product	Port	Protocol	Source	Target	Purpose
ESXi 5.x	5988	TCP	CIM Server	ESXi Host	CIM transactions over HTTP
ESXi 5.x	443	TCP	ESXi	vCenter Server	Deploy VIBs for NSX
ESXi 5.x	5989	TCP	vCenter Server	ESXi Host	CIM XML transactions over HTTPS
ESXi 5.x	5989	TCP	ESXi 5.x	vCenter Server	CIM XML transactions over HTTPS
ESXi 5.x	8000	TCP	ESXi 5.x (VM Target)	ESXi (VM Source)	Requests from vMotion
ESXi 5.x	8000	TCP	ESXi 5.x (VM Source)	ESXi (VM Target)	Requests from vMotion
ESXi 5.x	808,100	TCP/UDP	ESXi 5.x	ESXi Host	Traffic between hosts for vSphere Fault Tolerance (FT)
ESXi 5.x	8182	TCP/UDP	ESXi 5.x	ESXi Host	Traffic between hosts for vSphere High Availability (vSphere HA)
ESXi 5.x	8200	TCP/UDP	ESXi 5.x	ESXi Host	Traffic between hosts for vSphere Fault Tolerance (FT)
ESXi 5.x	8301	UDP	ESXi 5.x	ESXi Host	DVS Port Information
ESXi 5.x	8302	UDP	ESXi 5.x	ESXi Host	DVS Port Information
ESXi 5.x	31000	TCP	SPS Server	vCenter Server	Internal Communication Port
ESXi 6.x	9	UDP	vCenter Server	Virtual Volumes	Used by the Virtual Volumes feature
ESXi 6.x	22	TCP	SSH Client	ESXi Host	Required for SSH access
ESXi 6.x	53	UDP	ESXi Host	DNS Server	DNS client
ESXi 6.x	68	UDP	DHCP Server	ESXi Host	DHCP client for IPv4
ESXi 6.x	80	TCP	Web Browser	ESXi Host	Welcome page, with download links for different interfaces
ESXi 6.x	161	UDP	SNMP Server	ESXi Host	Allows the host to connect to an SNMP server
ESXi 6.x	427	TCP/UDP	CIM Server	ESXi Host	The CIM client uses the Service Location Protocol, version 2 (SLPv2) to find CIM servers
ESXi 6.x	443	TCP	vSphere Web Client	ESXi Host	Client connections
ESXi 6.x	546	TCP/UDP	DHCP Server	ESXi Host	DHCP client for IPv6
ESXi 6.x	547	TCP/UDP	ESXi Host	DHCP Server	DHCP client for IPv6
ESXi 6.x	902	TCP/UDP	VMware vCenter Agent	ESXi Host	vCenter Server agent
ESXi 6.x	2233	TCP	ESXi Host	vSAN Transport	Used for RDT traffic (Unicast peer to peer communication) between vSAN nodes.
ESXi 6.x	3260	TCP	ESXi Host	Software iSCSI Client	Supports software iSCSI
ESXi 6.x	5671	TCP	ESXi Host	rabbitmqproxy	A proxy running on the ESXi host that allows applications running inside virtual machines to communicate to the

Product	Port	Protocol	Source	Target	Purpose
					AMQP brokers running in the vCenter network domain. The virtual machine does not have to be on the network, that is, no NIC is required. The proxy connects to the brokers in the vCenter network domain. Therefore, the outgoing connection IP addresses should at least include the current brokers in use or future brokers. Brokers can be added if customer would like to scale up.
ESXi 6.x	#####	TCP	CIM Server	ESXi Host	Server for CIM (Common Information Model)
ESXi 6.x	5989	TCP	CIM Secure Server	ESXi Host	Secure server for CIM
ESXi 6.x	6999	UDP	NSX Distributed Logical Router Service	ESXi Host	NSX Virtual Distributed Router service. The firewall port associated with this service is opened when NSX VIBs are installed and the VDR module is created. If no VDR instances are associated with the host, the port does not have to be open. This service was called NSX Distributed Logical Router in earlier versions of the product.
ESXi 6.x	8000	TCP	ESXi Host	ESXi Host	vMotion
ESXi 6.x	8080	TCP	vSANvp	ESXi Host	vSAN VASA Vendor Provider. Used by the Storage Management Service (SMS) that is part of vCenter to access information about vSAN storage profiles, capabilities, and compliance. If disabled, vSAN Storage Profile Based Management (SPBM) does not work.
ESXi 6.x	#####	TCP\UDP	Fault Tolerance	ESXi Host	Traffic between hosts for vSphere Fault Tolerance (FT).
ESXi 6.x	#####	UDP	DVSSync	ESXi Host	DVSSync ports are used for synchronizing states of distributed virtual ports between hosts that have VMware FT record/replay enabled. Only hosts that run primary or backup virtual machines must have these ports open. On hosts that are not using VMware FT these ports do not have to be open.
ESXi 6.x	12345, 23451	UDP	ESXi Host	vSAN Clustering Service	Cluster Monitoring, Membership, and Directory Service used by vSAN.
ESXi 6.x	443	TCP	ESXi Host	vCenter Server	Deploy VIBs for NSX
ESXi 6.x	44046, 31031	TCP	ESXi Host	HBR	Used for ongoing replication traffic by vSphere Replication and VMware Site Recovery Manager.
ESXi Dump Collector	6500	UDP	ESXi	vCenter Server	Network coredump server
ESXi Dump Collector	8000	TCP	ESXi	vCenter Server	Network coredump web port
ESXi Syslog Collector	8001	TCP	ESXi	vCenter Server	Network syslog server

VMware vRealize Orchestrator

TCP and UDP ports required to access VMware vRealize Orchestrator 52961

TCP and UDP ports required to access VMware vRealize Orchestrator (52961)

Purpose

This article lists the TCP and UDP ports for VMware vRealize Orchestrator

Resolution

TCP and UDP ports for VMware vRealize Orchestrator:

Product	Port	Protocol	Source	Target	Purpose
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	25	TCP	vRealize Orchestrator Server (formerly known as VMware vCenter Orchestrator)	SMTP Server	Email notifications
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	80	TCP	vRealize Orchestrator Server (formerly known as VMware vCenter Orchestrator)	vCenter Server	Used to obtain virtual infrastructure and virtual machine information from orchestrated vCenter Server(s) through the vCenter API (Shared sessions)
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	389	TCP/UDP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	LDAP Server	LDAP Authentication
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	443	TCP	vRealize Orchestrator Server (formerly known as VMware vCenter Orchestrator)	vCenter Server	Used to obtain virtual infrastructure and virtual machine information from orchestrated vCenter Server(s) through the vCenter API
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	636	TCP	vRealize Orchestrator Server (formerly known as VMware vCenter Orchestrator)	LDAP Server	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) 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 pendant of 389). This is used for secured LDAP authentication
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	1433	TCP	vRealize Orchestrator Server	Microsoft SQL Server	vRealize Orchestrator Server to Microsoft SQL Server for vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Database
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	1521	TCP	vRealize Orchestrator Server	Oracle Database Server	vRealize Orchestrator Server to Oracle for vRealize Orchestrator Database
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	3306	TCP	vRealize Orchestrator Server	MySQL Server	vRealize Orchestrator Server to MySQL Server for vRealize Orchestrator Database
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	5432	TCP	vRealize Orchestrator Server	PostgreSQL Server	vRealize Orchestrator Server to PostgreSQL Server for vRealize Orchestrator Database
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8230	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client	vRealize Orchestrator Server	Lookup port – The main port to communicate with vRealize Orchestrator Configurator server (JNDI port). All other ports communicate with the vRealize Orchestrator (formerly known as

Product	Port	Protocol	Source	Target	Purpose
					VMware vCenter Orchestrator) Configurator smart client through this one. It is part of the JBoss Application server infrastructure
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8240	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) 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.
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8244	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	Data port used to access all vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) data models, such as workflows and policies. It is part of the JBoss application server infrastructure.
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8250	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	Messaging port – The Java messaging port used to dispatch events. It is part of the JBoss Application server infrastructure
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8280	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	Port used by vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server to connect to the Web front-end via HTTP
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8281	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	Port used by vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server to connect to the Web front-end via HTTPS
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8281	TCP	vCenter Server	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	Port used by vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server to connect to vCenter Server to communicate with the vCenter API
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8282	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client PC	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Server	HTTP server port – Port used by the HTTP connector to connect to the Web frontend.
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8283	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client PC	vRealize Orchestrator Server	HTTPS server port – Port used by HTTP connector to connect to the Web frontend. Requires Jetty to be configured for SSL.
vRealize Orchestrator (formerly known as VMware vCenter Orchestrator)	8286	TCP	vRealize Orchestrator (formerly known as VMware vCenter Orchestrator) Client PC	vRealize Orchestrator Server	Java messaging port used for dispatching events.
vRealize Orchestrator	8287	TCP	vRealize Orchestrator	vRealize	SSL secured Java messaging port

Product	Port	Protocol	Source	Target	Purpose
(formerly known as VMware vCenter Orchestrator)			(formerly known as VMware vCenter Orchestrator) Client PC	Orchestrator Server	used for dispatching events.
Realize Business Advanced/Enterprise	80/8080	TCP	Web Browser	vRealize Business Advanced/Enterprise	Port used to login (HTTP) to the vRealize Business UI.
vRealize Business Advanced/Enterprise	443	TCP	Web Browser	vRealize Business Advanced/Enterprise	Port used to login (HTTPS) to the vRealize Business UI.
vRealize Business Advanced/Enterprise	1521	TCP	vRealize Business Advanced/Enterprise	Oracle RDBMS	Port used by vRealize Business to connect to Oracle DB
vRealize Business Advanced/Enterprise	389/3268	TCP	vRealize Business Advanced/Enterprise	LDAP Server	Listen port in the LDAP/AD server that vRealize Business connects to for synchronizing users.
vRealize Business Advanced/Enterprise	32xx range	TCP	vRealize Business Advanced/Enterprise	Oracle DB	When a firewall is present between vRealize Business and Oracle DB servers, the 3200 range ports need to be opened on the firewall. Calls from vRealize Business to Oracle DB server originate on port 1521, but DB server uses a variety of random ephemeral ports in the 3200 range for return calls. If these are not opened, calls between vRealize Business and Oracle DB will hang. Use network monitoring applications such as Wireshark to verify these ephemeral ports.

VMware vSphere Update Manager

TCP and UDP ports required to access VMware vSphere Update Manager 52962

TCP and UDP ports required to access VMware vSphere Update Manager (52962)

Last Updated: 29.03.2018 **Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware vSphere Update Manager

Resolution

TCP and UDP ports for VMware vSphere Update Manager:

Product	Port	Protocol	Source	Target	Purpose
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	ESXi/ESX Host	Update Manager Host	ESXi/ESX Host to Update Manager Server. The reverse proxy forwards the request to port 9084
Update Manager	80	TCP	Update Manager Server	vCenter Server	Update Manager to vCenter Server communication
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

Product	Port	Protocol	Source	Target	Purpose
Update Manager	443	TCP	ESXi/ESX Host	Update Manager Server	ESXi/ESX Host to Update Manager Server . The reverse proxy forwards the request 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	735	TCP	Update Manager Server	Virtual Machines	Update Managerlistenerport (rdevServer.exe) part of theRemote Device Server used for virtual machine patching.
Update Manager	902	TCP	Update Manager Server	ESXi/ESX Host	To push patches and updates from Update Manager to the ESXi/ESX 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 Client Plugin	SOAP between components of Update Manager Server and the vCenter Update Manager client plug-in. Configurable at install. Note: In an embedded Update Manager setup in version 6.5, if there are multiple vCenter/VUM servers in enhanced link mode, port 8084 needs to be open with two way communication between each vCenter/VUM server in order for Update Manager to be viewable in enhanced link mode in the web client.
Update Manager	9084	TCP	ESXi/ESX host	Update Manager Server	ESXi/ESX hosts connect to the VUM (VMware Update Manager) webserver listening for updates. Configurable at install.
Update Manager	9087	TCP	Update Manager Server	Update Manager Client Plugin	Port used for uploading host update files. Configurable at install.
Update Manager	9000 to 9100	TCP	ESXi/ESX Host	Update Manager Server	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.

VMware vCenter Server

TCP and UDP ports required to access VMware vCenter Server 52963

TCP and UDP ports required to access VMware vCenter Server (52963)

Last Updated: 29.03.2018**Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware vCenter Server

Resolution

TCP and UDP ports for VMware vCenter Server:

Product	Port	Protocol	Source	Target	Purpose
Heartbeat	52267	TCP	vCenter Server Heartbeat Console	vCenter Server Heartbeat Server	Client Connection Port
Heartbeat	57348	TCP	vCenter Server	vCenter Server	Default Channel Port to

Product	Port	Protocol	Source	Target	Purpose
			Primary Server	Secondary Server	communicate between Primary and Secondary server
vCenter Server 5.x	25	TCP	vCenter Server	SMTP Server	Email notifications
vCenter Server 5.x	53	UDP	vCenter Server	DNS Server	DNS lookups
vCenter Server 5.x	80	TCP	Client PC	vCenter Server	vCenter Server requires port 80 for direct HTTP connections.
vCenter Server 5.x	80	TCP	vCenter Server	ESXi 5.x	DPM with IPMI (iLO/BMC) ASF Remote Management and Control Protocol
vCenter Server 5.x	88	UDP	vCenter Server	Active Directory Server	AD Authentication
vCenter Server 5.x	88	TCP	vCenter Server	Active Directory Server	AD Authentication
vCenter Server 5.x	135	TCP	vCenter Server	vCenter Server	Used by ADAM for RPC communications between vCenter Servers in Linked Mode.
vCenter Server 5.x	161	UDP	SNMP Server	vCenter Server	SNMP Polling
vCenter Server 5.x	162	UDP	vCenter Server	SNMP Server	SNMP Trap Send
vCenter Server 5.x	389	TCP/UDP	vCenter Server	Linked vCenter Servers	This port must be open in the local and all remote instances of vCenter Server. This is the LDAP port number for the Directory Services for the vCenter Server group. The vCenter Server system needs to bind to port 389, even if you are not joining this vCenter Server instance to a Linked Mode group. If another service is running on this port, it might be preferable to remove it or change its port to a different port. You can run the LDAP service on any port from 1025 through 65535.
vCenter Server 5.x	443	TCP	vSphere Client	vCenter Server	vCenter Server system uses to listen for connections from the vSphere Client.
vCenter Server 5.x	443	TCP	vCenter Server	ESXi 5.x	vCenter Agent. Host DPM with HP iLO Remote Management and Control Protocol
vCenter Server 5.x	623	UDP	vCenter Server	ESXi 5.x	DPM with IPMI (iLO/BMC) ASF Remote Management and Control Protocol
vCenter Server 5.x	636	TCP	vCenter Servers	Linked vCenter Servers	This is the SSL port of the local instance for vCenter Server Linked Mode. If another service is running on this port, it might be preferable to remove it or change its port. You can run the SSL service on any port from 1025 through 65535.
vCenter Server 5.x	902	TCP	vCenter Server	ESXi 5.x	vCenter Server system uses to send data to managed hosts. This port must not be blocked by firewalls

Product	Port	Protocol	Source	Target	Purpose
					between the server and the hosts or between hosts.
vCenter Server 5.x	902	TCP/UDP	vSphere Client	ESXi 5.x	vSphere Client uses this ports to display virtual machine consoles.
vCenter Server 5.x	902	TCP/UDP	ESXi 5.x	ESXi 5.x	Host access to other hosts for migration and provisioning
vCenter Server 5.x	1024 (dynamic)	RPC	Linked vCenter Servers	Linked vCenter Servers	Bi-directional RPC communication on dynamic TCP ports is required between all vCenters that need to replicate (via ADAM).
vCenter Server 5.x	1433	TCP	vCenter Server	Microsoft SQL Server	For vCenter Microsoft SQL Server Database
vCenter Server 5.x	1521	TCP	vCenter Server	Oracle Database Server	For vCenter Oracle Database
vCenter Server 5.x	5988	TCP	ESXi 5.x	vCenter Server	CIM transactions over HTTP
vCenter Server 5.x	5989	TCP	vCenter Server	ESXi 5.x	CIM XML transactions over HTTPS
vCenter Server 5.x	5989	TCP	ESXi 5.x	vCenter Server	CIM XML transactions over HTTPS
vCenter Server 5.x	7500	UDP	vCenter Server	Linked vCenter Servers	vCenter Inventory Service Groups diagnostics port for Inventory Service instances.
vCenter Server 5.x	8005	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter Server 5.x	8006	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter Server 5.x	8009	TCP	vCenter Server	vCenter Server	AJP Port
vCenter Server 5.x	8080	TCP	Client PC	vCenter Server	Web Services HTTP. Used for the VMware VirtualCenter Management Web Services
vCenter Server 5.x	8083	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics
vCenter Server 5.x	8085	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics/SDK
vCenter Server 5.x	8086	TCP	vCenter Server	vCenter Server	Internal Communication Port
vCenter Server 5.x	8087	TCP	vCenter Server	vCenter Server	Internal Service Diagnostics
vCenter Server 5.x	8089	TCP	vCenter Server	vCenter Server	SDK Tunneling Port
vCenter Server 5.x	8443	TCP	Client PC	Linked vCenter Servers	Web Services HTTPS. Used for the VMware VirtualCenter Management Web Services.
vCenter Server 5.x	8443	TCP	vCenter Server	vCenter Server	VMware Web Management Services Linked Mode Communication port
vCenter Server 5.x	9443	TCP	Client PC	vCenter Server	vSphere Web Client Access
vCenter Server 5.x	10111	TCP	vCenter Server	Linked vCenter Servers	vCenter Inventory Service Linked Mode Communication
vCenter Server 5.x	10443	TCP	Client PC	Linked vCenter Servers	vCenter Inventory Service Linked Mode Communication between

Product	Port	Protocol	Source	Target	Purpose
					Inventory Service instances. This can be changed during the vCenter Server installation and should be adjusted in the firewall settings as needed.
vCenter Server 5.x	51915	TCP	ESXi	vSphere Authentication Proxy	This is a web service, which is used to add host to Active Directory domain.
vCenter Server 5.x	60099	TCP	vCenter Server	vCenter Server	Web Service change service notification port
vCenter Server 5.1	7005	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Base shutdown port.
					For more information, see Configuring VMware Tomcat Server Settings in vCenter Server 5.1.
vCenter Server 5.1	7080	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	HTTP Port
vCenter Server 5.1	7009	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	AJP Port
vCenter Server 5.1	49152 to 65535	TCP	Active Directory	vCenter Server	Allow Active Directory authentication/communication between domain controllers and vCenter Server.
vCenter Server 5.1/5.5	7444	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Lookup Service, HTTPS Port
vCenter Server 5.1/5.5	8003	TCP	vCenter Server (Tomcat Server settings)	vCenter Server Management Web Services	vCenter Server Management Web Service shutdown
vCenter Server 5.5	31000 to 32999	TCP	vCenter Single Sign-On	vCenter Single Sign-On	Internal Communication Ports for VMware Secure Token Service, which uses two available ports. One port from the 31000 to 31999 range and one port from the 32000 to 32999 range.
vCenter Server 5.5	88	TCP	vCenter Server	vCenter Single Sign-On	Kdc Service
vCenter Server 5.5	2012	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Directory Service
vCenter Server 5.5	2013	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Kdc Service
vCenter Server 5.5	2014	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	VMware Certificate Service inter-communications with vCenter Single Sign-On
vCenter Server 5.5	6501	TCP	Auto Deploy service	ESXi Host	Auto Deploy Service

Product	Port	Protocol	Source	Target	Purpose
vCenter Server 5.5	6502	TCP	Auto Deploy Manager	vSphere Client	Auto Deploy Manager Service
vCenter Server 5.5	7331	TCP	vSphere Web Client	vCenter Server (Tomcat Server settings)	HTML5 remote console for virtual machines
vCenter Server 5.5 Update 2 and later	7343	TCP	vSphere Web Client	vCenter Server (Tomcat Server settings)	HTML5 remote console for virtual machines, HTTPS
vCenter Server 5.5	7444	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Lookup Service, HTTPS port
vCenter Server 5.5	8190	TCP	vCenter Server	vCenter Server	Storage Policy Server HTTP
vCenter Server 5.5	8191	TCP	vCenter Server	vCenter Server	Storage Policy Server HTTPS
vCenter 5.5	9875-9877	TCP	vSphere Web Client	vSphere Web Client	vSphere Web Client Java Management Extension (JMX). Dynamically acquired upon the vSphere Web Client service starting.
vCenter Server 5.5	9090	TCP	vSphere Web Client HTTP	vSphere Web Client	HTTP redirect to HTTPS
vCenter Server 5.5	11711	TCP	vCenter Single Sign-On	vCenter Single Sign-On	Directory service LDAP use for replication between vCenter Single Sign-On nodes
vCenter Server 5.5	11712	TCP	vCenter Single Sign-On	vCenter Single Sign-On	Directory service LDAPS use for replication between vCenter Single Sign-On nodes
vCenter Server 5.5	12721	TCP	vCenter Single Sign-On	vCenter Single Sign-On	Identity Management Service (IDM) internal client/server communication port.
					Used by VMware Identity Management Service.
vCenter Server 5.5	12443	TCP	Log Browser	vCenter Server	Log Browser
vCenter Server 5.5	22000	TCP	vCenter Server	vCenter Server	vCenter Server Storage Monitoring Service HTTP
vCenter Server 5.5	22100	TCP	vCenter Server	vCenter Server	vCenter Server Storage Monitoring Service HTTPS
vCenter Server 5.5	31000	TCP	vCenter Server	vCenter Server	VMware vSphere Profile-Driven Storage Service HTTP
vCenter Server 5.5	31100	TCP	vCenter Server	vCenter Server	VMware vSphere Profile-Driven Storage Service HTTPS
vCenter Server 5.5	49000 to 65000	TCP	Active Directory	vCenter Server	Allow Active Directory authentication/communication between domain controllers and vCenter Server. Used by the VMware Identity Management Service
vCenter Server 6.0	22	TCP/UDP	vCenter Server	SSH Client	System port for SSHD. This port is only used by the vCenter Server Appliance

Product	Port	Protocol	Source	Target	Purpose
vCenter Server 6.0	80	TCP	Client PC	vCenter Server	<p>vCenter Server requires port 80 for direct HTTP connections. Port 80 redirects requests to HTTPS port 443. This redirection is useful if you accidentally use http://server instead of https://server.</p> <p>WS-Management (also requires port 443 to be open).</p> <p>If you use a Microsoft SQL database that is stored on the same virtual machine or physical server as vCenter Server, port 80 is used by the SQL Reporting Service.</p> <p>When you install or upgrade vCenter Server, the installer prompts you to change the HTTP port for vCenter Server. Change the vCenter Server HTTP port to a custom value to ensure a successful installation or upgrade.</p>
vCenter Server 6.0	88	TCP	vCenter Server	Active Directory Server	VMware key distribution center port
vCenter Server 6.0	389	TCP/UDP	vCenter Server	Linked vCenter Servers	<p>This port must be open on the local and all remote instances of vCenter Server. This is the LDAP port number for the Directory Services for the vCenter Server group.</p> <p>If another service is running on this port, it might be preferable to remove it or change its port to a different port. You can run the LDAP service on any port from 1025 through 65535.</p>
vCenter Server 6.0	443	TCP	vSphere Web Client	vCenter Server	<p>The default port that the vCenter Server system uses to listen for connections from the vSphere Web Client. To enable the vCenter Server system to receive data from the vSphere Web Client, open port 443 in the firewall.</p> <p>The vCenter Server system also uses port 443 to monitor data transfer from SDK clients.</p> <p>Port 443 is also used for these services:</p> <p>WS-Management (also requires port 80 to be open)</p> <p>Third-party network management client connection to vCenter Server.</p> <p>Third-party network management clients access to host</p>
vCenter Server 6.0	514	UDP	Syslog Collector	Syslog Collector	vSphere Syslog Collector port for vCenter Server on Windows and

Product	Port	Protocol	Source	Target	Purpose
					vSphere Syslog Service port for vCenter Server Appliance
vCenter Server 6.0	636	TCP	Platform Service Controller	Management Nodes	For vCenter Server Enhanced Linked Mode, this is the SSL port of the local instance. If another service is running on this port, it might be preferable to remove it or change its port to a different port. You can run the SSL service on any port from 1025through65535. This port is also used during install to verify SSL certificates.
vCenter Server 6.0	902	TCP/UDP	vCenter Server	ESXi 6.0/5.x	<p>The default port that the vCenter Server system uses to send data to managed hosts. Managed hosts also send a regular heartbeat over UDP port 902to the vCenter Server system.</p> <p>This port must not be blocked by firewalls between the server and the hosts or between hosts.</p> <p>Port 902 must not be blocked between the vSphere Client and the hosts. The vSphere Client uses this port to display virtual machine consoles.</p>
vCenter Server 6.0	10080	TCP	vCenter Server	Inventory Service	vCenter Server vCenter Inventory Service HTTP
vCenter Server 6.0	1514	TCP/UDP	Syslog Collector	Syslog Collector	vSphere Syslog Collector TLS port for vCenter Server on Windows and vSphere Syslog Service TLS port for vCenter Server Appliance
vCenter Server 6.0	2012	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	Control interface RPC for vCenter Single Sign-On(SSO).
vCenter Server 6.0	2014	TCP	vCenter Server (Tomcat Server settings)	vCenter Single Sign-On	RPC port for all VMCA (VMware Certificate Authority) APIs.
vCenter Server 6.0	2020	TCP/UDP	vCenter Server	vCenter Server	Authentication framework management
vCenter Server 6.0	6500	TCP/UDP	vCenter Server	ESXi host	ESXi Dump Collector port
vCenter Server 6.0	6501	TCP	Auto Deploy service	ESXi Host	Auto Deploy service
vCenter Server 6.0	6502	TCP	Auto Deploy Manager	vSphere Client	Auto Deploy management
vCenter Server 6.0	7444	TCP			Secure Token Service
vCenter Server 6.0	8009	TCP	vCenter Server	vCenter Server	AJP Port
vCenter Server 6.0	8089	TCP	vCenter Server	vCenter Server	SDK Tunneling Port
vCenter Server 6.0	9443	TCP	vSphere Web	vSphere Web Client	vSphere Web Client HTTPS

Product	Port	Protocol	Source	Target	Purpose
			Client Server		
vCenter Server 6.0	11711	TCP	vCenter Single Sign-On	vCenter Single Sign-On	VMware Directory service (vmdir) LDAP
vCenter Server 6.0	11712	TCP	vCenter Single Sign-On	vCenter Single Sign-On	VMware Directory service (vmdir) LDAPS

VMware vRealize Operations Manager

TCP and UDP ports required to access VMware vRealize Operations Manager 52964

TCP and UDP ports required to access VMware vRealize Operations Manager (52964)

Last Updated: 29.03.2018 **Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware vRealize Operations Manager

Resolution

TCP and UDP ports for VMware vRealize Operations Manager:

Product	Port	Protocol	Source	Target	Purpose
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	22	TCP	Client PC	vRealize Infrastructure Navigator Appliance	Enables SSH access to vRealize Infrastructure Appliance
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	80	TCP	vRealize Infrastructure (formerly known as vCenter Infrastructure Navigator) Navigator	vSphere Web service API	HTTP web service
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	443	TCP	vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator)	vSphere Web service API	HTTPS web service
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	443	TCP	vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator)	ESXi/ESX hosts and virtual machines	VIX protocol on target hosts to perform discovery
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	902	TCP	vRealize Infrastructure Navigator	ESXi/ESX hosts and virtual machines	VIX protocol on target hosts to perform discovery
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	2868	TCP	vCenter Server	vRealize Infrastructure (formerly known as vCenter Infrastructure Navigator) Navigator	Plug-in downloads. This download happens as part of the registration process.
vRealize Infrastructure Navigator (formerly known as vCenter Infrastructure Navigator) 1.x	6969	TCP	vCenter Server	vRealize Infrastructure Navigator (formerly known as vCenter	Connectivity from vSphere Web Client to vRealize Infrastructure Navigator (formerly known as

Product	Port	Protocol	Source	Target	Purpose
				Infrastructure Navigator)	vCenter Infrastructure Navigator)
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	22	TCP	SSH Client	vRealize Log Insight (formerly known as vCenter Log Insight)	Secure Shell (SSH) access to the vRealize Log Insight (formerly known as vCenter Log Insight) virtual appliance
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	25	TCP	vRealize Log Insight (formerly known as vCenter Log Insight)	SMTP Server	Email notifications from vRealize Log Insight (formerly known as vCenter Log Insight) to a configured mail server
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	514	UDP	Syslog Client	vRealize Log Insight (formerly known as vCenter Log Insight)	Remote Syslog logging
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	514	TCP	Syslog Client	vRealize Log Insight (formerly known as vCenter Log Insight)	Remote Syslog logging
Realize Log Insight (formerly known as vCenter Log Insight) 1.x	1514	TCP	Syslog Client	vRealize Log Insight (formerly known as vCenter Log Insight)	SSL Encrypted Remote Syslog logging
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	445	UDP	vRealize Log Insight (formerly known as vCenter Log Insight)	MS Directory Services Server	Connection to a Domain Controller for Active Directory Authentication
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	80	TCP	HTTP Client	vRealize Log Insight (formerly known as vCenter Log Insight)	vRealize Log Insight (formerly known as vCenter Log Insight) Web Interface. Redirects to encrypted web interface
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	443	TCP	HTTP Client	vRealize Log Insight (formerly known as vCenter Log Insight)	vRealize Log Insight (formerly known as vCenter Log Insight) Web Interface Encrypted
vRealize Log Insight (formerly known as vCenter Log Insight) 1.x	123	UDP	vRealize Log Insight (formerly known as vCenter Log Insight)	NTP Server	Time synchronization with NTP server
vCloud Usage Meter	80	TCP	vCloud Usage Meter	vCenter Server	This is for vSphere API
vCloud Usage Meter	443	TCP	vCloud Usage Meter	vCenter Server	This is for vSphere API
vCloud Usage Meter	5480	TCP	vCenter Update Manager	vCloud Usage Meter	This is used for virtual appliance updates
vCloud Usage Meter	8443	TCP	Client Browser	vCloud Usage Meter	This is for WebApp
vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x)	22	TCP	SSH Client	vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x) virtual appliance	Enables SSH access to the vRealize Operations Manager Standard (formerly known as vCenter Operations Manager Standard) virtual appliance
vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x)	443	TCP	Browser or vSphere Client plugin	vRealize Operations Manager Standard 1.x (formerly known as vCenter)	HTTPS server port for the vRealize Operations Manager Standard (formerly known as

Product	Port	Protocol	Source	Target	Purpose
Standard 1.x)				Operations Manager Standard 1.x) virtual appliance	vCenter Operations Manager Standard) Administration page
vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x)	5480	TCP	Browser	vRealize Operations Manager Standard 1.x (formerly known as vCenter Operations Manager Standard 1.x) virtual appliance	HTTPS server port for the VMware Studio Web console to administer the virtual appliance
vRealize Operations Manager (vApp) 5.x (formerly known as vCenter Operations Manager (vApp) 5.x)	80	TCP	Browser	vRealize Operations Manager (formerly known as vCenter Operations Manager) UI VM	HTTP server port that unconditionally redirects to HTTPS port
vRealize Operations Manager (vApp) 5.x (formerly known as vCenter Operations Manager (vApp) 5.x)	443	TCP	Browser or vSphere Client plugin. vRealize Operations Manager UI VM, vRealize Operations Manager (formerly known as vCenter Operations Manager) Analytics VM	vRealize Operations Manager UI VM vCenter Server	HTTPS server port for the vRealize Operations Manager (formerly known as vCenter Operations Manager) UIs: Administration, vSphere, and Custom UI VM: Registration of vRealize Operations Manager (formerly known as vCenter Operations Manager) as an extension to vCenter, Analytics VM: Collecting metric data from vCenter Server.
vRealize Operations Manager (vApp) 5.x (formerly known as vCenter Operations Manager (vApp) 5.x)	22	TCP	SSH Client	vRealize Operations Manager (formerly known as vCenter Operations Manager) UI VM, vRealize Operations Manager Analytics VM	Enables SSH access to the vRealize Operations Manager (formerly known as vCenter Operations Manager) virtual appliance
vRealize Operations Manager (vApp) 5.x (formerly known as vCenter Operations Manager (vApp) 5.x)	1194	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) Analytics VM	vRealize Operations Manager (formerly known as vCenter Operations Manager) UI VM	Open VPN tunnel for communication between the two VMs
vRealize Operations Manager (Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)	443	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) UI VM, vRealize Operations Manager (formerly known as vCenter Operations Manager) Analytics VM	vCenter Server	UI VM: Registration of vRealize Operations Manager as an extension to vCenter, Analytics VM: Collecting metric data from vCenter

Product	Port	Protocol	Source	Target	Purpose
vRealize Operations Manager (Standalone) 5.x	80	TCP	Browser	vRealize Operations Manager (formerly known as vCenter Operations Manager) (Standalone)	(If chosen during configuration) HTTP port to access vRealize Operations Manager (formerly known as vCenter Operations Manager) UI
vRealize Operations Manager (Standalone) 5.x	443	TCP	Browser	vRealize Operations Manager (Standalone) (formerly known as vCenter Operations Manager (Standalone))	(If chosen during configuration) HTTPS port to access vRealize Operations Manager (formerly known as vCenter Operations Manager) UI
vRealize Operations Manager (Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)	1199	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) remote collector	vRealize Operations Manager (Standalone) (formerly known as vCenter Operations Manager (Standalone))	Heartbeat connection between remote collector and main vRealize Operations Manager (formerly known as vCenter Operations Manager) server
vRealize Operations Manager (Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)	61616	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) remote collector	vRealize Operations Manager (Standalone) (formerly known as vCenter Operations Manager (Standalone))	Connection between remote collector and ActiveMQ component on the main vRealize Operations Manager (formerly known as vCenter Operations Manager) server
vRealize Operations Manager (Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)	443	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) local/remote collector	vCenter Server	Connection between remote collector and ActiveMQ component on the main vRealize Operations Manager (formerly known as vCenter Operations Manager) server
vRealize Operations Manager(Standalone) 5.x (formerly known as vCenter Operations Manager (Standalone) 5.x)	10443	TCP	vRealize Operations Manager (formerly known as vCenter Operations Manager) Analytics VM	vCenter Server	vCenter Inventory Service HTTPS
vRealize Operations Manager 6.x	22	TCP	SSH Client	vRealize Operations Manager	Used for SSH access to the vRealize Operations Manager cluster.
vRealize Operations Manager 6.x	80	TCP	Browser	vRealize Operations Manager	Redirects to port 443.
vRealize Operations Manager 6.x	123	UDP	vRealize Log Insight	NTP Server	Used by vRealize Operations Manager for Network Time Protocol (NTP) synchronization to the master node.
vRealize Operations Manager 6.x	443	TCP	Browser	vRealize Operations Manager	Used to access the vRealize Operations Manager product user interface and the vRealize Operations Manager

Product	Port	Protocol	Source	Target	Purpose
					administrator interface.
vRealize Operations Manager 6.x	1235	TCP	vRealize Operation Manager 6.0 nodes	vRealize Operation Manager 6.0 nodes	Used by all nodes in the cluster to transmit resource data and key-value data for the Global xDB database instance.
vRealize Operations Manager 6.x	3091-3094	TCP	When Horizon View (V4V)	vRealize Operations Manager	When Horizon View (V4V) is installed, used to access data for vRealize Operations Manager from V4V.
vRealize Operations Manager 6.x	6061	TCP	vRealize Operations Manager 6.x clients	vRealize Operation Manager 6.x nodes	Used by clients to connect to the GemFire Locator to get connection information to servers in the distributed system. Also monitors server load to send clients to the least-loaded servers.
vRealize Operations Manager 6.x	10000-10010	TCP/UDP	vRealize Operation Manager 6.x nodes	vRealize Operation Manager 6.x nodes	GemFire Server ephemeral port range used for unicast UDP messaging and for TCP failure detection in the peer-to-peer distributed system.
vRealize Operations Manager 6.x	20000-20010	TCP/UDP	vRealize Operation Manager 6.x nodes	vRealize Operation Manager 6.x nodes	GemFire Locator ephemeral port range used for unicast UDP messaging and for TCP failure detection in the peer-to-peer distributed system.

VMware Horizon View

TCP and UDP ports required to access VMware Horizon View 52965

TCP and UDP ports required to access VMware Horizon View (52965)

Last Updated: 29.03.2018 **Categories:** Informational

Purpose

This article lists the TCP and UDP ports for VMware Horizon View

Resolution

TCP and UDP ports for VMware Horizon View:

Product	Port	Protocol	Source	Target	Purpose
View 4.5.x	-	-	-	-	For more information, see Network connectivity requirements for VMware View Manager 4.5 and later (1027217) .
View 4.5.x	80/443	TCP	View Client with Local Mode	View Transfer Server	HTTP(S) access via direct connection for downloading and uploading Local Mode data
View 4.5.x	80/443	TCP	Security Server	View Transfer Server	HTTP(S) access via tunnel connection for downloading and uploading Local Mode data
View 4.5.x	902	TCP	View Connection Server	ESX Host	Used when checking out local desktops. Must be accessible on your ESX host when using View Client with Local Mode.
View 4.5.x	902	TCP	View Transfer Server	ESX Host	Publishing View Composer packages for Local Mode
View 4.5.x	4001	TCP	View Connection Server	View Transfer Server	Required by JMS for Local Mode

Product	Port	Protocol	Source	Target	Purpose
View 4.5.x	4172	TCP/UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)
View 4.5.x	50002	UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)
View 4.6.x	-	-	-	-	For more information, see Network connectivity requirements for VMware View Manager 4.5 and later (1027217) .
View 4.6.x	80/443	TCP	View Client with Local Mode	View Transfer Server	HTTP(S) access via direct connection for downloading and uploading Local Mode data
View 4.6.x	80/443	TCP	Security Server	View Transfer Server	HTTP(S) access via direct connection for downloading and uploading Local Mode data
View 4.6.x	902	TCP	View Connection Server	ESX Host	Used when checking out local desktops. Must be accessible on your ESX host when using View Client with Local Mode.
View 4.6.x	902	TCP	View Transfer Server	ESX Host	Publishing View Composer packages for Local Mode
View 4.6.x	4001	TCP	View Connection Server	View Transfer Server	Required by JMS for Local Mode
View 4.6.x	4172	TCP/UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)
View 4.6.x	50002	UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)
View 5.x	-	-	-	-	For more information, see Network connectivity requirements for VMware View Manager 4.5 and later (1027217) .
View 5.x	80/443	TCP	View Client with Local Mode	View Transfer Server	HTTP(S) access via direct connection for downloading and uploading Local Mode data
View 5.x	80/443	TCP	Security Server	View Transfer Server	HTTP(S) access via direct connection for downloading and uploading Local Mode data
View 5.x	902	TCP	View Connection Server	ESXi Host	Used when checking out local desktops. Must be accessible on your ESXi host when using View Client with Local Mode.
View 5.x	902	TCP	View Transfer Server	ESXi Host	Publishing View Composer packages for Local Mode
View 5.x	902	TCP	View Composer Server	ESXi Host	Used when View Composer customizes linked-clone disks, including View Composer internal disks and, if they are specified, persistent disks and system disposable disks.
View 5.x	4001	TCP	View Connection Server	View Transfer Server	Required by JMS for Local Mode
View 5.x	4172	TCP/UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)
View 5.x	50002	UDP	View Client	View Agent (Virtual Desktop)	PCoIP (AES 128-bit encryption)