

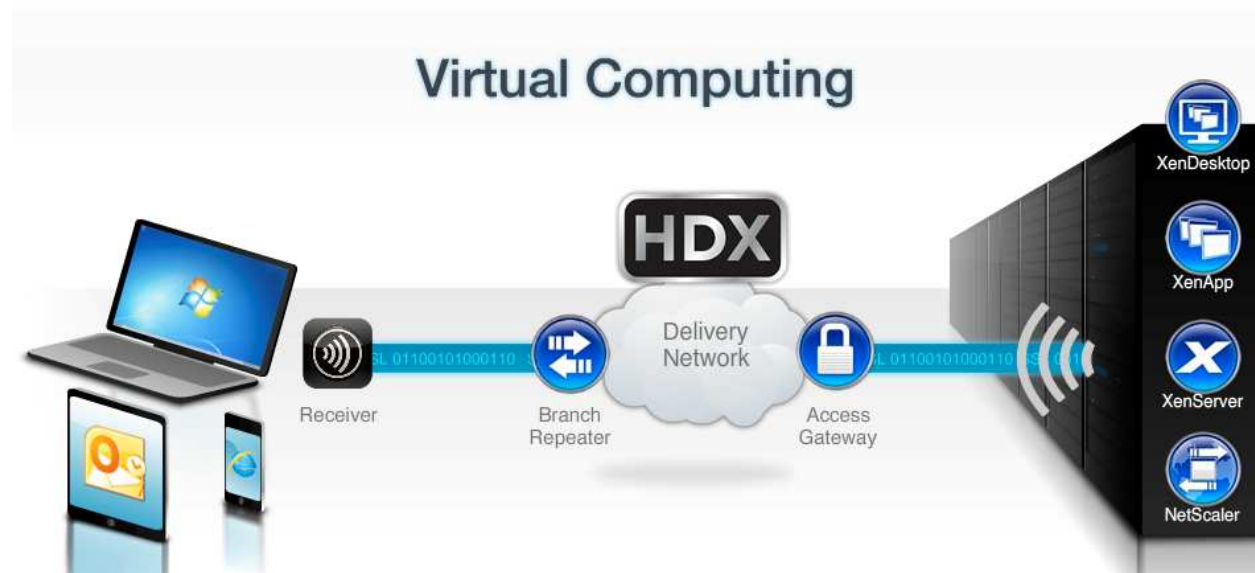
Communication ports used by Citrix Technologies

June, 2013

Overview

Introduction

This document provides an overview of ports that are used by Citrix components and must be considered as part of Virtual Computing architecture, especially if communication traffic traverses network components such as firewalls or proxy servers, where ports must be opened to ensure communication flow.



References

The assignments are listed by the Internet Assigned Numbers Authority (IANA), updated regularly, and revised when new information is available and new assignments are made. The specific location of the port numbers list is available at the following Web site:

<http://www.iana.org/assignments/port-numbers>.

Microsoft Article "[Network Ports Used by Key Microsoft Server Products](#)".

Microsoft Article ID [832017](#) "[Service overview and network port requirements for the Windows Server system](#)".



Ports by Product

Component	Type	Port	Details
Access Gateway 5.x			
Client Connections	TCP	443	TCP Port used for connecting to an Access Gateway Deployment
Citrix Access Controller	TCP	80/443/9002	Communication between Access Gateway and Access Control Server
Administration			
Appliance	TCP	443	Administration Website
Controller	TCP	2513	IMA-based communication
Authentication			
LDAP	TCP	389	LDAP connection
RADIUS	TCP/UDP	1812	RADIUS connection
DNS	TCP/UDP	53	DNS name resolution
Appliance Failover	TCP	694	Communication between Access Gateway appliances
Access Gateway Prior to Version 5.0			
Client Connections	TCP	443	TCP Port used for connecting to an Access Gateway Deployment
Advanced Access Control (AAC)	TCP	80/443	Communication between Access Gateway Standard and Advanced Access Control Server
Administration			
Appliance	TCP	9001	Administration Website
	TCP	9002	Administrative Desktop (until 4.5)
	TCP	9005	AAC
AAC	TCP	2513	IMA-based communication
Authentication			
LDAP	TCP	389	LDAP connection
RADIUS	TCP/UDP	1812	RADIUS connection
DNS	TCP/UDP	53	DNS name resolution
AppController 2.x and later			
Administration			
SSH	TCP	22	Console Administration (Encrypted)
HTTPS	TCP	4443	GUI Administration
Authentication			
LDAP	TCP/UDP	389	LDAP Connection
	TCP/UDP	636	LDAP SSL connection
	TCP	3268	LDAP connection to Global Catalog
	TCP	3269	LDAPs connection to Global Catalog



Component	Type	Port	Details
Client Connections			
HTTPS	TCP	443	TCP Port used for connecting to the store or Receiver for Web Site hosted on AppController
DNS	TCP/UDP	53	DNS name resolution
SMTP	TCP	25	Mail server connection
High Availability	TCP	9736	Used for High Availability
Reporting/Monitoring			
Syslog	UDP	514	Used for Logging Reporting
Log Transfer (SCP)	TCP	3820	Used for Logging Reporting
Log Transfer (FTP)	TCP	21	Used for Logging Reporting
Branch Repeater			
Administration	TCP	80/443	Citrix Repeater Console
	TCP	3389	RDP connection to server console (Windows)
Appliance to Appliance	TCP	N/A	Pass through of native application ports
Client to Appliance	TCP	443	Client to Appliance communication
Citrix License Server			
License Manager Daemon	TCP	27000	Handles initial point of contact for license requests (Lmadmin.exe)
Citrix Vendor Daemon	TCP	7279	Check-in/check-out of Citrix licenses (Citrix.exe)
License Management Console	TCP	8082	Web-based administration console (Lmadmin.exe)
Licensing Configuration Service	TCP	80	Licensing Config PowerShell Snap-in Service used by Citrix.LicensingConfig.SdkWcfEndpoint.exe
Citrix Online Products			
GoToMeeting GoToWebinar GoToMyPC GoToAssist	TCP	80/443/8200	Contacting GoToMeeting service broker using the Endpoint Gateway (EGW)
CloudStack/CloudPlatform			
CloudStack Management Server	TCP	9090 + 8250 (bi-directional)	To/from CloudStack Management Server
User/Client/API	TCP	8080	User/Client/API to CloudStack Management Server - Management Port (authenticated communication)
User/Client	TCP	8096	User/Client to CloudStack Management Server - Management Port (unauthenticated communication)
vCenter	TCP	443	CloudStack Management Server to vCenter
KVM	TCP	22	CloudStack Management Server to KVM
XenServer	TCP	22/80/443	CloudStack Management Server to XenServer
MySQL	TCP	3306	CloudStack Management Server to MySQL
DNS	TCP	53	CloudStack Management Server to DNS
Secondary Storage	TCP	3922	CloudStack Management Server to SSVM

Component	Type	Port	Details
Virtual Machine (SSVM)	TCP	8250	SSVM to CloudStack Management Server
	TCP	80/443	SSVM to HTTP(s) File Share to download VM Image
	TCP	111/2049	SSVM to NFS
	TCP	53	SSVM to DNS
Console Proxy VM	TCP	3922	CloudStack Management Server to Console Proxy VM
	TCP	8250	Console Proxy VM to CloudStack Management Server
	TCP	53	Console Proxy VM to DNS
Virtual Router	TCP	3922	CloudStack Management Server to Virtual Router
	TCP	8250	Virtual Router to CloudStack Management Server
	TCP	53	Virtual Router to DNS
NFS	TCP	111/2049	CloudStack Management Server to NFS (initial deployment of SSVM and CPVM)
Common Citrix Communication Ports			
Citrix Receiver	TCP	80/443	Communication with Merchandising Server
ICA / HDX	TCP	1494	Access to applications and virtual desktops
Session Reliability	TCP	2598	Access to applications and virtual desktops
IMA	TCP	2512	Independent Management Architecture (IMA)
Management Console	TCP	2513	Citrix Management Consoles and *WCF services
Application / Desktop Request	TCP	80/8080/443	XML Service
STA	TCP	80/8080/443	Secure Ticketing Authority (embedded into XML Service)
*Note:	In XenApp 6.5 port 2513 is used by XenApp.Command.Remoting.Services through WCF		
EasyCall			
EasyCall Client	TCP	8443	PSync
EasyCall Gateway	TCP	5060	EasyCall Gateway communicates with the SIP trunk over port 5060
Admin Console	TCP	443	Administration of EasyCall
LDAP	TCP	389	Active Directory/LDAP
PBX	TCP	N/A	The PBX port depends on the vendor and varies.
EdgeSight			
Agent	TCP	80/443	Communication with EdgeSight Server for payloads and alerts
	TCP	9036	EdgeSight Agent internal communication (client-side database)
Web Console	TCP	9035	Communication with RSCorSvc on EdgeSight Agent
Database	TCP	1433	Microsoft SQL Server



Component	Type	Port	Details
Lab Manager			
End-Device to Lab Manager Server User Interface	TCP	8443	End device communication with Lab Manager Server User interface
End-Device to Virtual Machines	TCP	3389	RDP for Windows Guests
	TCP	5900	VNC for Linux Guests
End-Device to Virtualization Host	TCP	5900 – 5999	Connections for XenServer
	TCP	2179	Connections for Microsoft Hyper-V
VMAgent to Lab Manager Server	TCP/UDP	35110 - 35112	Server Discovery ports for VMAgent
	TCP	8443	Secure (HTTPS) Server Discovery ports for VMAgent
Lab Manager Server to Active Directory	TCP	389	LDAP
NetScaler / Access Gateway Enterprise Edition			
Administration			
SSH	TCP	22	CLI Administration (encrypted)
HTTP/S	TCP	80/443	GUI Administration
Java	TCP	3008	GUI Administration (encrypted)
	TCP	3010	GUI (no encryption)
Authentication			
LDAP	TCP/UDP	389	LDAP connection
	TCP/UDP	636	LDAP SSL connection
	TCP	3268	LDAP connection to Global Catalog
RADIUS	TCP/UDP	1812	RADIUS connection
DNS	TCP/UDP	53	DNS name resolution
High Availability	UDP	3003	Exchange of Hello packets for communicating UP/DOWN status (heartbeat)
	TCP	3008	Secure High Availability configuration synchronization
	TCP	3009	Secure command propagation and MEP
	TCP	3010	High Availability configuration synchronization plus web-logging and audit server logging
	TCP	3011	Command propagation and MEP
Command Center	TCP	9091/9092/9094	For opening TCP communication between client and the server
	TCP	9091/9092	Ports are used to refresh, update, and query objects pertaining to Discovery (Maps/Devices, etc.)/Fault Management/Administration/Configuration Management modules
	TCP	9094	Used specifically by Configuration Management module while executing/scheduling tasks

Component	Type	Port	Details
	TCP	1099/6010	Used when you execute the <i>Invoke NSCLI</i> option. Under Device, right click under Map Between Command Center Server and NetScaler. The ping is the SNMP ping.
	TCP	22	Connect SSH/SFTP to the NetScaler device from Command Center Server
	UDP	161/162	SNMP Polling to NetScalers and TRAPs from NetScaler to Command Center
Note: If you use an HTML client, then only 8443 port needs to be open between client and Command Center server. Citrix recommends using an HTML client as much as possible.			
Cloud Bridge	TCP	50	IPSec Encapsulating Security Protocol (ESP) traffic
	TCP	51	IPSec Authentication Header (AH) traffic
	UDP	500	Internet Key Exchange (IKE/ISAKMP) negotiation
Password Manager/Single Sign-On			
Password Manager Service	TCP	443	Communication with Management Console and Password Manager Agent (non-IMA)
Credential Store on			
Network File Share	TCP/UDP	445	CIFS
Active Directory	TCP/UDP	135 - 139	NetBIOS
	TCP/UDP	389	LDAP connection
	TCP/UDP	636	LDAP SSL connection
	TCP	3268	LDAP connection to Global Catalog
	TCP	3269	LDAP SSL connection to Global Catalog
Novell File Share	TCP/UDP	524	ZENworks communication
Provisioning Services			
PXE	-	Broadcast	Target devices PXE booting from network
DHCP	UDP	67	Client broadcast/communication with DHCP server(s)
	UDP	68	DHCP server(s) communication with client See note below for required DHCP options
TFTP	UDP	69	Trivial File Transfer (TFTP)
Two Stage Boot (BDM)	EDP	6969	TFTP used for two stage boot process
Console	TCP	54321 54322	SOAP Service
Active Directory	TCP	389	Communication with Active Directory services
Database	TCP	1433	Microsoft SQL Server
Target Devices	UDP	6901	Default port for Target Devices prior to version 6.0
Target Devices	UDP	6901, 6902, 6905	Default ports for Target Devices starting with version 6.0 (hard-coded, not configurable)
Streaming Services	UDP	6910 – 6930	Provisioning services Streaming Service
Server Communication	UDP	6890 – 6909	Inter-server communication, version 6.0 and later
	UDP	6905 – 6909	Inter-server communication, prior to version 6.0



Component	Type	Port	Details
Boot Login	UDP	6910	Target Device logon at Provisioning services
Write Cache	UDP	10802 10803	Target Device communication with its Write Cache
Note:	Required DHCP options: 66 = TFTP Server Name (Bootstrap Protocol Server) 67 = Bootfile Name (Bootstrap Protocol Client)		
SmartAuditor			
Components (Agent / Player)	TCP/UDP	80/443	SmartAuditor components connecting to SmartAuditor Broker
Database	TCP	1433	Microsoft SQL Server
Microsoft Message Queuing (MSMQ)			Provides reliable transport of data from SmartAuditor Agent to SmartAuditor Server using an MSMQ private message queue named CitrixSmAudData
MSMQ Service (default)	TCP/UDP	1801	MSMQ
	TCP	2101	MSMQ-DCs
	TCP	2103	MSMQ-RPC
	TCP	2105	MSMQ-RPC
	TCP	2107	MSMQ-Mgmt
	UDP	3527	MSMQ-Ping
	TCP	135	RPC
MSMQ Service HTTP/S	TCP	80/443	Secured connections
StageManager			
End-Device to StageManager Server User Interface	TCP	9443	End device communication with StageManager Server User interface
End-Device to Virtual Machines	TCP	3389	RDP for Windows Guests
	TCP	5900	VNC for Linux Guests
End-Device to Virtualization Host	TCP	5900 – 5999	Connections for XenServer
	TCP	2179	Connections for Microsoft Hyper-V
VMAgent to StageManager Server	TCP/UDP	35110 - 35112	Server Discovery ports for VMAgent/GuestAgent
	TCP	9443	Secure (HTTPS) Server Discovery ports for VMAgent/GuestAgent
StageManager Server to Active Directory	TCP	389	LDAP
	TCP	636	LDAP over SSL (LDAPS)
StorageLink			
StorageLink Service	TCP	21605	Communication of StorageLink Manager to StorageLink Service
Database	TCP	1433	Microsoft SQL Server
StoreFront			
Application/Desktop Request			

Component	Type	Port	Details
HTTP/S SSL Relay	TCP	80/443	XML Service
	TCP	443	SSI Relay service to secure XML traffic against XML brokers
Authentication			
LDAP	TCP/UDP	389	LDAP connection to query user-friendly name and email-address
Kerberos	TCP/UDP	88	Native Windows authentication protocol to validate domain user credentials
Kpasswd	TCP/UDP	464	Native Windows authentication protocol to allow users change expired passwords
Client Connections			
HTTP/S	TCP	80/443	TCP port used to connecting to the store or Receiver for Web site hosted on StoreFront
SQL Connection	TCP	1433	TCP port used to connecting StoreFront and SQL server to read/write application information to the subscription database
Peer-to-peer Services (Credential Wallet, Subscriptions Store (1 per Store))	TCP	Randomly selected unreserved port per service	Uses MS .Net NetPeerTcpBinding which negotiates a random port on each server between the peers. Only used for communication within the cluster.
Subscription Replication Services	TCP	808	Not installed by default. Used to replicate subscriptions between associated clusters
Workflow Studio			
Console	TCP	8010	Connection to remote runtime
Database	TCP	1433	Microsoft SQL Server
XenApp			
Offline Plug-in	SMB	445	Communication with Application Hub (File Server / Share)
	HTTP/S	80/443	Communication with Application Hub (Web Server / File Server / Share)
Power & Capacity Management Agent	TCP	11168	Communication with Concentrator
Database	TCP	1433	Microsoft SQL Server
	TCP	1434	Microsoft SQL Server. Note: Named instance connection requires UDP 1434
XenClient			
XenClient Synchronizer			

Component	Type	Port	Details
Enterprise Engine	TCP	443	Used by XenClient Enterprise Engines to communicate with XenClient Enterprise Synchronizer. If not open, clients cannot register or otherwise communicate with XenClient Enterprise Synchronizer.
Administration	TCP	8443	Used by the Administrator to communicate with XenClient Enterprise Synchronizer UI.
Hyper-V Management	RDP	2179	Used by Hyper-V Management Service Console (RDP)
SQL	TCP	1433	SQL database port; this port should be open between the remote and central XenClient Enterprise Synchronizer servers.
LDAP	TCP	389	Non-SSL port for LDAP to AD
LDAP /S	TCP	636	SSL port for LDAP to AD
XenClient Engine			
Enterprise Engine	TCP	443	Used by XenClient Enterprise Engines to communicate with XenClient Enterprise Synchronizer. If not open, clients cannot register or otherwise communicate with XenClient Enterprise Synchronizer.
XenDesktop			
Virtualization Infrastructure			
Citrix XenServer	TCP	80/443	Communication with XenServer infrastructure
Microsoft Hyper-V	TCP	8100	SCVMM Administrator Console
VMware vSphere	TCP	443	VMware Web Services communication
Broker	TCP	80/443	Used by process BrokerService.exe for WCF communications to VDA, SDK, XML Service
Active Directory Identity Service	TCP	80	Used by Citrix.ADIIdentity.SdkWcfEndpoint.exe
Configuration Service	TCP	80	Used by Citrix.Configuration.SdkWcfEndpoint.exe
Host Service	TCP	80	Used by Citrix.Host.SdkWcfEndpoint.exe
Machine Creation Service	TCP	80	Used by Citrix.MachineCreation.SdkWcfEndpoint.exe
Machine Identity Service	TCP	80	Used by Citrix.MachineIdentity.SdkWcfEndpoint.exe
License Configuration Service	TCP	80	Used by Citrix.LicensingConfig.SdkWcfEndpoint.exe
Desktop Director	TCP	80/443	
Virtual Desktop Agent 5.x and later	TCP	80	Communication between Desktop Delivery Controller and Virtual Desktop Agent
	TCP	3268	Communication between Virtual Desktop Agent and Microsoft Global Catalog used during the registration process in order to validate its list of configured Controllers (DDCs).

Component	Type	Port	Details
	TCP	135 3389	Communication between Desktop Director and Virtual Desktop Agent for Remote Assistance
	TCP/UDP	49152-65535	Remote Assistance dynamic ports allocated
	UDP	16500 16509	Used port range for HDX Audio
	TCP	80	Communication between Desktop Director and Virtual Desktop Agent for WinRM 1.1
	TCP	5985	Communication between Desktop Director and Virtual Desktop Agent for WinRM 2.0
Virtual Desktop Agent (previous versions)	TCP	8080	Communication between Desktop Delivery Controller and Virtual Desktop Agent
Citrix Desktop Service	TCP	80	Used by process WorkstationAgent.exe for communicating with Broker
Database	TCP	1433	Microsoft SQL Server
	TCP	1434	Microsoft SQL Server. Note: Named instance connection requires UDP 1434
XenServer			
XenCenter	TCP	22	SSH
	TCP	443	Management using XenAPI
	TCP	5900	VNC for Linux Guests
	TCP	3389	RDP for Windows Guests
Resource Pool	TCP	22	SSH
	TCP	443	Management using XenAPI
Infrastructure	TCP/UDP	123	NTP
	TCP/UDP	53	DNS
	TCP	389	Active Directory
	TCP/UDP	139	ISO Store: NetBIOS Session Service
	TCP/UDP	445	ISO Store: Microsoft-DS
Storage	TCP	3260	iSCSI Storage
	TCP	2049	NFS Storage
	TCP	21605	SOAP over HTTP StorageLink Gateway traffic
	TCP	636	LDAP over SSL (LDAPS)

By Port

Port	Product	Component	Type	Details
22	CloudStack/CloudPlatform	KVM	TCP	CloudStack Management Server to KVM
		XenServer	TCP	CloudStack Management Server to XenServer
22	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	Connect SSH/SFTP to the NetScaler device from Command Center Server
		SSH administration	TCP	CLI Administration (encrypted)
22	XenServer	Resource Pool	TCP	SSH
		XenCenter	TCP	SSH
22	AppController 2.0	Administration	TCP	SSH- Console administration
25	AppController	SMTP	TCP	Mail server connection
43	SmartAuditor	MSMQ Service HTTP/S	TCP	Secured connections
50	NetScaler / Access Gateway Enterprise Edition	Cloud Bridge	TCP	IPSec Encapsulating Security Protocol (ESP) traffic
51	NetScaler / Access Gateway Enterprise Edition	Cloud Bridge	TCP	IPSec Authentication Header (AH) traffic
53	Access Gateway 5.0	DNS	TCP/UDP	DNS name resolution
53	AppController 2.0	DNS	TCP/UDP	DNS name resolution
53	CloudStack/CloudPlatform	Console Proxy VM	TCP	Console Proxy VM to DNS
		DNS	TCP	CloudStack Management Server to DNS
		SSVM	TCP	SSVM to DNS
		Virtual Router	TCP	Virtual Router to DNS
53	NetScaler / Access Gateway Enterprise Edition	DNS	TCP/UDP	DNS name resolution
53	Previous versions of Access Gateway Standard / Advanced Edition	DNS	TCP/UDP	DNS name resolution
53	XenServer	Infrastructure	TCP/UDP	DNS
67	Provisioning services	DHCP	UDP	DHCP Option for TFTP Server Name (Bootstrap Protocol Server)
68	Provisioning services	DHCP	UDP	DHCP Option for Bootfile Name (Bootstrap Protocol Client)
69	Provisioning services	TFTP	UDP	Trivial File Transfer
80	Access Gateway 5.0	Citrix Access Controller	TCP	Communication between Access Gateway and Access Control Server
80	Branch Repeater	Administration	TCP	Citrix Repeater Console
80	Citrix Online Products	GoToMeeting GoToWebinar GoToMyPC GoToAssist	TCP	Contacting GoToMeeting service broker using the Endpoint Gateway (EGW)

By Port

Port	Product	Component	Type	Details
80	CloudStack	SSVM	TCP	SSVM to HTTP(s) File Share to download VM Image
		XenServer	TCP	CloudStack Management Server to XenServer
80	Common Citrix Communication Ports	Application / Desktop Request	TCP	XML Service
		Citrix Receiver	TCP	Communication with Merchandising Server
		STA	TCP	Secure Ticketing Authority (embedded into XML Service)
80	EdgeSight	Agent	TCP	Communication with EdgeSight Server for payloads and alerts
80	NetScaler / Access Gateway Enterprise Edition	HTTP/S administration	TCP	GUI Administration
80	Previous versions of Access Gateway Standard / Advanced Edition	Advanced Access Control (AAC)	TCP	Communication between Access Gateway Standard and Advanced Access Control Server
80	SmartAuditor	Components (Agent / Player)	TCP/UDP	SmartAuditor components connecting to SmartAuditor Broker
		Components (Agent / Player)	TCP/UDP	SmartAuditor components connecting to SmartAuditor Broker
		MSMQ Service HTTP/S	TCP	Secured connections
80	StoreFront	Application/Desktop Req.	TCP	HTTP XML Service
80	XenApp	Offline Plug-in	HTTP/S	Communication with Application Hub (Web Server / File Server / Share)
80	XenDesktop	Active Directory Identity Service	TCP	Used by Citrix.ADIdentity.SdkWcfEndpoint.exe
		Broker	TCP	Used by process BrokerService.exe for WCF communications to VDA, SDK, XML Service
		Citrix Desktop Service	TCP	Used by process WorkstationAgent.exe for communicating with Broker
		Citrix XenServer Virtualization Infrastructure	TCP	Communication with XenServer infrastructure
		Configuration Service	TCP	Used by Citrix.Configuration.SdkWcfEndpoint.exe
		Desktop Director	TCP	
		Host Service	TCP	Used by Citrix.Host.SdkWcfEndpoint.exe

By Port

Port	Product	Component	Type	Details
		License Configuration Service	TCP	Used by Citrix.LicensingConfig.SdkWcfEndpoint.exe
		Machine Creation Service	TCP	Used by Citrix.MachineCreation.SdkWcfEndpoint.exe
		Machine Identity Service	TCP	Used by Citrix.MachineIdentity.SdkWcfEndpoint.exe
		Virtual Desktop Agent 5	TCP	Communication between Desktop Delivery Controller and Virtual Desktop Agent
		Virtual Desktop Agent 5	TCP	Communication between Desktop Director and Virtual Desktop Agent for WinRM 1.1
88	StoreFront	Kerberos	TCP/UDP	Native windows authentication protocol
111	CloudStack/CloudPlatform	NFS	TCP	CloudStack Management Server to NFS (initial deployment of SSVM and CPVM)
		SSVM	TCP	SSVM to NFS
123	XenServer	Infrastructure	TCP/UDP	NTP
135	SmartAuditor	MSMQ Service (default)	TCP	RPC
135	XenDesktop	Virtual Desktop Agent 5	TCP	Communication between Desktop Director and Virtual Desktop Agent for Remote Assistance
135 - 139	Password Manager	Credential Store on Network File Share	TCP/UDP	NetBIOS
139	XenServer	Infrastructure	TCP/UDP	ISO Store: NetBIOS Session Service
161	NetScaler / Access Gateway Enterprise Edition	Command Center	UDP	SNMP Polling to NetScalers and TRAPs from NetScaler to Command Center
162	NetScaler / Access Gateway Enterprise Edition	Command Center	UDP	SNMP Polling to NetScalers and TRAPs from NetScaler to Command Center
389	AppController	Authentication	TCP	LDAP connection
389	StoreFront	Authentication	TCP/UDP	LDAP connection
389	Access Gateway 5.x	LDAP authentication	TCP	LDAP connection
389	EasyCall	LDAP	TCP	Active Directory/LDAP
389	Lab Manager	Lab Manager Server to Active Directory	TCP	LDAP
389	NetScaler / Access Gateway Enterprise Edition	LDAP authentication	TCP/UDP	LDAP connection



By Port

Port	Product	Component	Type	Details
389	NetScaler / Access Gateway Enterprise Edition	LDAP authentication	TCP/UDP	LDAP connection
389	AppController	LDAP authentication	TCP/UDP	LDAP connection
389	Previous versions of Access Gateway Standard / Advanced Edition	LDAP authentication	TCP	LDAP connection
389	Provisioning services	Active Directory	TCP	Communication with Active Directory services
389	StageManager	StageManager Server to Active Directory	TCP	LDAP
389	XenServer	Infrastructure	TCP	Active Directory
443	Access Gateway 5.0	Appliance administration	TCP	Administration Website
		Citrix Access Controller	TCP	Communication between Access Gateway and Access Control Server
		Client Connections	TCP	TCP Port used for connecting to an Access Gateway Deployment
443	AppController 2.0	Client Connections	TCP	Connect to AppController
443	StoreFront	Application/Desktop Req.	TCP	SSL Relay for secure XML traffic
443	Branch Repeater	Administration	TCP	Citrix Repeater Console
		Client to Appliance	TCP	Client to Appliance communication
443	Citrix Online Products	GoToMeeting GoToWebinar GoToMyPC GoToAssist	TCP	Contacting GoToMeeting service broker using the Endpoint Gateway (EGW)
443	CloudStack	SSVM	TCP	SSVM to HTTP(s) File Share to download VM Image
		vCenter	TCP	CloudStack Management Server to vCenter
		XenServer	TCP	CloudStack Management Server to XenServer
443	Common Citrix Communication Ports	Application / Desktop Request	TCP	XML Service
		Citrix Receiver	TCP	Communication with Merchandising Server
		STA	TCP	Secure Ticketing Authority (embedded into XML Service)
443	EasyCall	Admin Console	TCP	Administration of EasyCall
443	EdgeSight	Agent	TCP	Communication with EdgeSight Server for payloads and alerts
443	NetScaler / Access Gateway Enterprise Edition	HTTP/S administration	TCP	GUI Administration

By Port

Port	Product	Component	Type	Details
443	Password Manager	Password Manager Service	TCP	Communication with Management Console and Password Manager Agent (non-IMA)
443	Previous versions of Access Gateway Standard / Advanced Edition	Advanced Access Control (AAC)	TCP	Communication between Access Gateway Standard and Advanced Access Control Server
		Client Connections	TCP	TCP Port used for connecting to an Access Gateway Deployment
443	XenApp	Offline Plug-in	HTTP/S	Communication with Application Hub (Web Server / File Server / Share)
443	XenDesktop	Broker	TCP	Used by process BrokerService.exe for WCF communications to VDA, SDK, XML Service
		Citrix XenServer Virtualization Infrastructure	TCP	Communication with XenServer infrastructure
		Desktop Director	TCP	
		VMware vSphere Virtualization Infrastructure	TCP	VMware Web Services communication
443	XenServer	Resource Pool	TCP	Management using XenAPI
		XenCenter	TCP	Management using XenAPI
443	XenClient	Enterprise Engine	TCP	Enterprise Engine communication
445	Password Manager	Credential Store on Network File Share	TCP/UDP	CIFS
445	XenApp	Offline Plug-in	SMB	Communication with Application Hub (File Server / Share)
445	XenServer	Infrastructure	TCP/UDP	ISO Store: Microsoft-DS
464	StoreFront	Kpasswd	TCP/UDP	Native Windows Authentication for expired passwords
500	NetScaler / Access Gateway Enterprise Edition	Cloud Bridge	UDP	Internet Key Exchange (IKE/ISAKMP) negotiation
524	Password Manager	Credential Store on Novell File Share	TCP/UDP	ZENworks communication
636	Lab Manager	Lab Manager Server to Active Directory	TCP	LDAP over SSL (LDAPS)
636	NetScaler / Access Gateway Enterprise Edition	LDAP authentication	TCP/UDP	LDAP SSL connection
636	Password Manager	Credential Store on Active Directory	TCP/UDP	LDAP SSL connection
636	StageManager	StageManager Server to Active Directory	TCP	LDAP over SSL (LDAPS)
636	AppController 2.0	Authentication	TCP	LDAP SSL connection



By Port

Port	Product	Component	Type	Details
694	Access Gateway 5.0	Appliance Failover	TCP	Communication between Access Gateway appliances
1099	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	Used when you execute the <i>Invoke NSCLI</i> option. Under Device, right click under Map Between Command Center Server and NetScaler. The ping is the SNMP ping.
1433	EdgeSight	Database	TCP	Microsoft SQL Server
1433	Provisioning services	Database	TCP	Microsoft SQL Server
1433	SmartAuditor	Database	TCP	Microsoft SQL Server
1433	StorageLink	Database	TCP	Microsoft SQL Server
1433	StoreFront	SQL Connection	TCP	Connect StoreFront and SQL server
1433	Workflow Studio	Database	TCP	Microsoft SQL Server
1433	XenApp	Database	TCP	Microsoft SQL Server
1433	XenDesktop	Database	TCP	Microsoft SQL Server
1434	XenApp	Database	TCP	Microsoft SQL Server. Note: Named instance connection requires UDP 1434
1434	XenDesktop	Database	TCP	Microsoft SQL Server. Note: Named instance connection requires UDP 1434
1494	Common Citrix Communication Ports	ICA / HDX	TCP	Access to applications and virtual desktops
1801	SmartAuditor	MSMQ Service (default)	TCP/UDP	MSMQ
1812	Access Gateway 5.x	RADIUS authentication	TCP/UDP	RADIUS connection
1812	NetScaler / Access Gateway Enterprise Edition	RADIUS authentication	TCP/UDP	RADIUS connection
1812	Previous versions of Access Gateway Standard / Advanced Edition	RADIUS authentication	TCP/UDP	RADIUS connection
2049	CloudStack/CloudPlatform	NFS	TCP	CloudStack Management Server to NFS (initial deployment of SSVM and CPVM)
2049	CloudStack/CloudPlatform	SSVM	TCP	SSVM to NFS
2049	XenServer	Storage	TCP	NFS Storage
2101	SmartAuditor	MSMQ Service (default)	TCP	MSMQ-DCs
2103	SmartAuditor	MSMQ Service (default)	TCP	MSMQ-RPC
2105	SmartAuditor	MSMQ Service (default)	TCP	MSMQ-RPC
2107	SmartAuditor	MSMQ Service (default)	TCP	MSMQ-Mgmt
2179	Lab Manager	End-Device to Virtualization Host	TCP	Connections for Microsoft Hyper-V



By Port

Port	Product	Component	Type	Details
2179	StageManager	End-Device to Virtualization Host	TCP	Connections for Microsoft Hyper-V
2179	XenClient	Hyper-V	TCP	Hyper-V Management Console
2512	Common Citrix Communication Ports	IMA	TCP	Independent Management Architecture (IMA)
2513	Access Gateway 5.x	Controller administration	TCP	IMA-based communication
2513	Common Citrix Communication Ports	Management Console	TCP	Citrix Management Consoles
2513	Previous versions of Access Gateway Standard / Advanced Edition	AAC administration	TCP	IMA-based communication
2598	Common Citrix Communication Ports	Session Reliability	TCP	Access to applications and virtual desktops
3003	NetScaler / Access Gateway Enterprise Edition	High Availability	UDP	Exchange of Hello packets for communicating UP/DOWN status (heartbeat)
3008	NetScaler / Access Gateway Enterprise Edition	High Availability	TCP	Secure High Availability configuration synchronization
3008		Java administration	TCP	GUI Administration (encrypted)
3009	NetScaler / Access Gateway Enterprise Edition	High Availability	TCP	Secure command propagation and MEP
3010	NetScaler / Access Gateway Enterprise Edition	High Availability	TCP	High Availability configuration synchronization plus web-logging and audit server logging
		Java administration	TCP	GUI (no encryption)
3011	NetScaler / Access Gateway Enterprise Edition	High Availability	TCP	Command propagation and MEP
3260	XenServer	Storage	TCP	iSCSI Storage
3268	NetScaler / Access Gateway Enterprise Edition	LDAP authentication	TCP	LDAP connection to Global Catalog
3268	AppController	Authentication	TCP	LDAP connection to Global Catalog
3268	Password Manager	Credential Store on Active Directory	TCP	LDAP connection to Global Catalog
3268	AppController	LDAP Authentication	TCP	LDAP connection to Global Catalog
3268	XenDesktop 5.x	VDA Agent	TCP	Communication between VDA and Microsoft Global Catalog.
3269	AppController	LDAP Authentication	TCP	LDAPS connection to Global Catalog
3269	AppController	Authentication	TCP	LDAPS connection to Global Catalog
3269	Password Manager	Credential Store on Active Directory	TCP	LDAP SSL connection to Global Catalog
3306	CloudStack/CloudPlatform	MySQL	TCP	CloudStack Management Server to MySQL



By Port

Port	Product	Component	Type	Details
3389	Branch Repeater	Administration	TCP	RDP connection to server console (Windows)
3389	Lab Manager	End-Device to Virtual Machines	TCP	RDP for Windows Guests
3389	StageManager	End-Device to Virtual Machines	TCP	RDP for Windows Guests
3389	XenDesktop	Virtual Desktop Agent 5	TCP	Communication between Desktop Director and Virtual Desktop Agent for Remote Assistance
3389	XenServer	XenCenter	TCP	RDP for Windows Guests
3527	SmartAuditor	MSMQ Service (default)	UDP	MSMQ-Ping
3922	CloudStack/CloudPlatform	Console Proxy VM	TCP	CloudStack Management Server to Console Proxy VM
		SSVM	TCP	CloudStack Management Server to SSVM
		Virtual Router	TCP	CloudStack Management Server to Virtual Router
4443	AppController	Administration	TCP	GUI Administration
5060	EasyCall	EasyCall Gateway	TCP	EasyCall Gateway communicates with the SIP trunk over port 5060
5900	Lab Manager	End-Device to Virtual Machines	TCP	VNC for Linux Guests
5900	StageManager	End-Device to Virtual Machines	TCP	VNC for Linux Guests
5900	XenServer	XenCenter	TCP	VNC for Linux Guests
5900 - 5999	Lab Manager	End-Device to Virtualization Host	TCP	Connections for XenServer
5900 - 5999	StageManager	End-Device to Virtualization Host	TCP	Connections for XenServer
5985	XenDesktop	Virtual Desktop Agent 5	TCP	Communication between Desktop Director and Virtual Desktop Agent for WinRM 2.0
6010	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	Used when you execute the <i>Invoke NSCLI</i> option. Under Device, right click under Map Between Command Center Server and NetScaler. The ping is the SNMP ping.
6890 – 6904	Provisioning Services	Server Communication	UDP	Inter-server communication (version 6.0 and later)
6901	Provisioning Services	Target Devices	UDP	Default port for Target Devices prior to version 6.0 .
6901, 6902 6905	Provisioning Services	Target Devices	UDP	Default ports for Target Devices starting with version 6.0 and later (hard-coded and not configurable).



By Port

Port	Product	Component	Type	Details
6905 - 6909	Provisioning Services	Server Communication	UDP	Inter-server communication (prior to version 6.0)
6910	Provisioning Services	Boot Login	UDP	Target Device logon at Provisioning services
6910 – 6930	Provisioning Services	Streaming Services	UDP	Provisioning services Streaming Service
7279	Citrix License Server	Citrix Vendor Daemon	TCP	Check-in/check-out of Citrix licenses (Citrix.exe)
8010	Workflow Studio	Console	TCP	Connection to remote runtime
8080	CloudStack/CloudPlatform	User/Client/API	TCP	User/Client/API to CloudStack Management Server - Management Port (authenticated communication)
8080	Common Citrix Communication Ports	Application / Desktop Request	TCP	XML Service
		STA	TCP	Secure Ticketing Authority (embedded into XML Service)
8080	XenDesktop	Virtual Desktop Agent (previous versions)	TCP	Communication between Desktop Delivery Controller and Virtual Desktop Agent
8082	Citrix License Server	License Management Console	TCP	Web-based administration console (Lmadmin.exe)
8096	CloudStack/CloudPlatform	User/Client	TCP	User/Client to CloudStack Management Server - Management Port (unauthenticated communication)
8100	XenDesktop	Microsoft Hyper-V Virtualization Infrastructure	TCP	SCVMM Administrator Console
8200	Citrix Online Products	GoToMeeting GoToWebinar GoToMyPC GoToAssist	TCP	Contacting GoToMeeting service broker using the Endpoint Gateway (EGW)
8250	CloudStack/CloudPlatform	CloudStack Management Server	TCP	To/from CloudStack Management Server
		Console Proxy VM	TCP	Console Proxy VM to CloudStack Management Server
		SSVM	TCP	SSVM to CloudStack Management Server
		Virtual Router	TCP	Virtual Router to CloudStack Management Server
8443	EasyCall	EasyCall Client	TCP	PSync
8443	XenClient	Administrator	TCP	Administrator communicate with Synchronizer



By Port

Port	Product	Component	Type	Details
8443	Lab Manager	End-Device to Lab Manager Server User Interface	TCP	End device communication with Lab Manager Server User interface
		VMAgent to Lab Manager Server	TCP	Secure (HTTPS) Server Discovery ports for VMAgent
9001	Previous versions of Access Gateway Standard / Advanced Edition	Appliance administration	TCP	Administration Website
9002	Access Gateway 5.0	Citrix Access Controller	TCP	Communication between Access Gateway and Access Control Server
9002	Previous versions of Access Gateway Standard / Advanced Edition	Appliance administration	TCP	Administrative Desktop (until 4.5)
9005	Previous versions of Access Gateway Standard / Advanced Edition	Appliance administration	TCP	AAC
9035	EdgeSight	Web Console	TCP	Communication with RSCorSvc on EdgeSight Agent
9036	EdgeSight	Agent	TCP	EdgeSight Agent internal communication (client-side database)
9090	CloudStack/CloudPlatform	CloudStack Management Server	TCP	CloudStack Management Server
9091	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	For opening TCP communication between client and the server
		Command Center	TCP	Ports are used to refresh, update, and query objects pertaining to Discovery (Maps/Devices, etc.)/Fault Management/Administration/Configuration Management modules
9092	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	For opening TCP communication between client and the server
		Command Center	TCP	Ports are used to refresh, update, and query objects pertaining to Discovery (Maps/Devices, etc.)/Fault Management/Administration/Configuration Management modules
9094	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	For opening TCP communication between client and the server
9094	NetScaler / Access Gateway Enterprise Edition	Command Center	TCP	Used specifically by Configuration Management module while executing/scheduling tasks
9443	StageManager	End-Device to StageManager Server User Interface	TCP	End device communication with StageManager Server User interface
		VMAgent to StageManager Server	TCP	Secure (HTTPS) Server Discovery ports for VMAgent/GuestAgent
10802	Provisioning services	Write Cache	UDP	Target Device communication with its Write Cache



By Port

Port	Product	Component	Type	Details
10803	Provisioning services	Write Cache	UDP	Target Device communication with its Write Cache
11168	XenApp	Power & Capacity Management Agent	TCP	Communication with Concentrator
16500	XenDesktop	Virtual Desktop Agent 5	UDP	Used port range for HDX Audio
16509	XenDesktop	Virtual Desktop Agent 5	UDP	Used port range for HDX Audio
21605	StorageLink	StorageLink Service	TCP	Communication of StorageLink Manager to StorageLink Service
21605	XenServer	Storage	TCP	SOAP over HTTP StorageLink Gateway traffic
27000	Citrix License Server	License Manager Daemon	TCP	Handles initial point of contact for license requests (Lmadmin.exe)
35110 - 35112	Lab Manager	VMAgent to Lab Manager Server	TCP/UDP	Server Discovery ports for VMAgent
35110 - 35112	StageManager	VMAgent to StageManager Server	TCP/UDP	Server Discovery ports for VMAgent/GuestAgent
54321	Provisioning services	Console	TCP	SOAP Service
54322	Provisioning services	Console	TCP	SOAP Service

Revision	Change Description	Updated By	Date
2.2	Added AppController, Director, StoreFront, XenClient and , XenDesktop ports and updated ports by listing section for all categories.	Steve Weizman Stehanie Roper,	June 2013
2.1	Revised Provisioning Services Target Device ports	Fred Donovan	December, 2012
2.0	Added ports for Provisioning Services version 6.x Added ports listing by port	Fred Donovan, John Scoles	February, 2012
1.9	Corrected DHCP descriptions for Provisioning Services	Fred Donovan	January, 2012
1.8	Added CloudStack	John Scoles	November, 2011
1.7	Changed Power Capacity Management port, added Command Center	Steve Weizman	October, 2011
1.6	Changed VDA 5 HDX port type to UDP	John Scoles	September, 2011
1.5	Updates to URLs, XenDesktop, and NetScaler sections	Tarkan Koçoğlu	July, 2011
1.4	Added 1434 to XenApp and XenDesktop	John Scoles	November, 2010
1.3	Update	Tarkan Koçoğlu	November, 2010
1.2	Update	John Scoles	November, 2010
1.1	Update	John Scoles	June, 2010
1.0	Initial document	Michael Palesch Thomas Berger Tarkan Koçoğlu	August 28, 2009