

Citrix CloudBridge

Optimizes and controls applications to all locations: branch, datacenter and public clouds and mobile users



Citrix® CloudBridge™ provides a unified platform that accelerates applications across public and private networks, resulting in superior application performance and end user experience. CloudBridge offers a broad base of features including protocol acceleration, market-leading optimization for Citrix® XenDesktop, secure tunnels between enterprise locations and sophisticated quality of service (QoS). CloudBridge combines these features with extensive bandwidth and application usage reporting for application optimization giving IT fine-grained control over public and private network resources. With the option of an integrated Windows Server as well as 3rd party applications, CloudBridge also supports branch IT consolidation.

Available as a virtual, physical or multi-tenant appliance, CloudBridge provides deployment options that help improve the user experience, reduce IT capital and operating costs by enabling on-demand network resource provisioning. With its QoS management capabilities, CloudBridge is not just a network-centric WAN optimization controller (WOC) infrastructure, but it also supports service management for users.

Key Benefits

- Significantly improves Citrix XenDesktop® and XenApp® capacity and performance over the WAN
- Accelerates enterprise applications and multimedia to branches, data centers and mobile users
- Securely extends and accelerates the enterprise data center network (L2 or L3) connection to public clouds
- Provides granular, application level performance reporting for detailed usage analysis
- Scales up to 5,000 XenDesktop users in a single platform with the ability to “scale out” by load sharing across multiple devices
- Simplifies IT with integrated Windows appliance options

CloudBridge Features



HDX WAN Optimization

Support up to four times more users of virtual apps and desktops by and optimizing ICA and storing streamed application packages on appliances in branch offices. Orchestrate service delivery across your network to ensure the best user experience everywhere



Application Acceleration

Prioritize mission-critical traffic to maximize WAN throughput. Accelerate any TCP-based application, including file transfers, email, SSL, ERP, CRM, CAD, data backup and replication, and optimize Microsoft applications such as File Sharing, Exchange and SharePoint



Storage Replication Acceleration

Ensure continuous availability of storage replication by increasing WAN utilization and Quality of Service capabilities. Schedule and run storage replication in the background without impacting critical traffic.



Integrated Windows Server

The CloudBridge product family offers an option of an integrated Windows Server instance to simplify branch office IT. This option natively integrates WAN optimization with essential branch services (i.e. file, print, DHCP, DNS, and WINS). It also allows IT to securely deploy an Active Directory® database at branch offices using a read-only domain controller.



Video Caching

Video consumption in the enterprise is growing by 25% annually according to an industry analyst. As a result of this growing amount of video and the demands it places on the enterprise WAN, Citrix CloudBridge now provides enterprise IT with a video caching solution that can optimize video delivery to branch offices.



Quality of Service

Guarantee quality of service and experience by assessing network usage, classifying apps and services traffic, controlling bandwidth consumption, monitoring network congestion and delays, and remediating problems quickly. Identify and prioritize virtual desktops and virtual apps to a branch office based on user group (desktop group) and published application.



Flexible Centralized Management

Control, configure, and maintain your CloudBridge devices through the Citrix Command Center console. Get real-time reports and alerts when performance falls below acceptable thresholds. Understand application level performance and end-user based usage via AppFlow records.



Integrated Cloud Connectivity

Ensure complete security for data in motion between the corporate datacenter and third-party cloud providers while delivering services on-demand to users. CloudBridge provides secure and transparent L2/L3 tunneling capabilities with integrated provisioning support



Security and Data Protection

Accelerate encrypted XenDesktop and XenApp traffic and secure web applications while maintaining the highest levels of security. Encrypt disk compression history using AES-256 to prevent theft of sensitive data and to comply with security regulations. CloudBridge interoperates with NetScaler Gateway appliances and the CloudBridge plug-in to optimize all traffic within the secure for remote and mobile users.



Plug-and-Play for any Network

Immediately identify and optimize common enterprise traffic through remote appliance auto-discovery to speed up branch startup time. Ensure reliability and preserve TCP/IP headers, VLAN tags and QoS markings with full network transparency and multiple deployment options, such as high availability pairs.

Data Center Appliances					
Model	4000-310	4000-500	4000-1000	5000-1500	5000-2000
Optimized WAN capacity ^{1,2}	310 Mbps	500 Mbps	1.0 Gbps	1.5 Gbps	2.0 Gbps
QoS Bandwidth Limit	2.0 Gbps	2.0 Gbps	2.0 Gbps	4.0 Gbps	4.0 Gbps
Maximum HDX sessions ³	750	1,200	2,500	3,500	5,000
Total TCP sessions ⁴	40,000	60,000	120,000	120,000	160,000
Remote CloudBridge client sessions	1,100	1,800	3,600	3,600	4,800
Video Caching	--	--	--	--	--
CloudBridge Connector	√	√	√	√	√
Group Mode	--	--	--	--	--

Storage		
Total disk space (SSD)	3.0 TB	
Compression history (SSD)	1.8 TB	
RAM	48 GB	

Network Interfaces		
Network interfaces (interfaces support fail-to-wire bypass)	4 x 10GigE SX and 8 x 1GigE TX Bypass	8 x10GigE SX Bypass

Mechanical		
Rack units	2U	
Rack options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets	
System depth	25.4" / 64.5 cm	
System weight	47 lbs (21.3 kg)	51 lbs (23.1 kg)
Shipping dimensions and weight	37" x 24" by 11" (94 x 61 x 28 cm)	37" x 24" by 11" (94 x 61 x 28 cm)
Shipping weight	59 lbs (26.8 kg)	63 lbs (28.6 kg)

Power, Environmental and Regulatory		
Power supplies	Dual Redundant, Hot Swappable	
Wattage (Max)	650 watts	850 watts
Input voltage / frequency ranges	100-240 VAC, 47-63 Hz	
Input current	3.5 – 6.5 A	4.5 – 8.5 A
Operating temperature	32 – 104 F (0 – 40 C)	
Operating altitude	0 – 4921 ft. (0-1500M)	
Storage temperature	14F to 140F (-10C to 60C)	
Allowed relative humidity	5%-95%, non-condensing	
Safety certifications	UL, TUV-C	
Electromagnetic emissions, safety and environmental	FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES	
Environmental compliance	RoHS, WEEE	

¹ Only outbound WAN traffic is counted against the licensed bandwidth (Mbps or Gbps purchased). QoS and / or unaccelerated traffic do not count against the licensed bandwidth. Unaccelerated and QoS traffic can, however, impact the total amount of outbound accelerated traffic.

² Some protocols (for example ICA) can limit the processing capacity of the appliance before the licensed bandwidth is reached.

³ Session count is limited by link bandwidth and TCP session counts. No session count is enforced. Published numbers are for guidance purposes.

⁴ TCP session count will be reduced by active HDX sessions. No session count is enforced. Published numbers are for guidance purposes.

Large Branch / Small Datacenter Appliances						
Model	2000-010	2000-020	2000-050	3000-050	3000-100	3000-155
Optimized WAN capacity ^{5,6}	10 Mbps	20 Mbps	50 Mbps	50 Mbps	100 Mbps	155 Mbps
QoS Bandwidth Limit	200 Mbps	200 Mbps	200 Mbps	500 Mbps	500 Mbps	500 Mbps
Maximum HDX sessions ⁷	100	200	300	300	400	500
Total TCP sessions ⁸	20,000	20,000	20,000	50,000	50,000	50,000
Remote CloudBridge client sessions	100	200	750	750	1000	1000
Video Caching	√	√	√	--	--	--
CloudBridge Connector	--	--	--	--	--	--
Group Mode	√	√	√	√	√	√

Storage		
Total disk space (SSD)	550 GB	2.2 TB
Compression history (SSD)	470 GB	2.1 TB
RAM	24 GB	32 GB

Network Interfaces		
Network interfaces (Interfaces support fail-to-wire bypass)	4 Port 10/100/1000 TX	6 Port 10/100/1000 TX or 4 Port 10/100/1000 SX

Mechanical		
Rack Units	1U	
Rack Options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets	
System depth	24" (29.2 cm)	
System weight	32 lbs (14.6 kg)	33 lbs (15 kg)
Shipping Dimensions	32 x 23.5 x 7.5 in (81.5 x 59.7 x 19.1 cm)	
Shipping Weight	39 lbs (17.8 kg)	40 lbs(18.1 kg)

Power, Environmental and Regulatory		
Power supplies	Single	Single (optional dual redundant)
Wattage (Max)	300W	450W (900W w/ redundant PSU)
Input voltage / frequency ranges	100-240 VAC, 50-60 Hz	
Input current	0.6 – 1.5 A	1.0 – 2.5 A
Operating temperature	32F to 104F (0C to 40C)	
Operating altitude	0 – 4921 ft. (0-1500M)	
Storage temperature	14F to 140F (-10C to 60C)	
Allowed relative humidity	5%-95% non-condensing	
Safety certifications	UL, TUV-C	
Electromagnetic emissions, safety and environmental	FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES	
Environmental compliance	RoHS, WEEE	

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⁶ Some protocols (for example ICA) can reach the processing capacity of the appliance before the licensed bandwidth is reached.

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Branch / Small Datacenter Appliances with Integrated Windows Server						
Model	700-001	700-002	700-010	2000WS-010	2000WS-020	2000WS-050
Optimized WAN capacity ^{9,10}	1 Mbps	2 Mbps	10 Mbps	10 Mbps	20 Mbps	50 Mbps
QoS Bandwidth Limit	50 Mbps	50 Mbps	50 Mbps	200 Mbps	200 Mbps	200 Mbps
Maximum HDX sessions ¹¹	10	20	100	100	200	300
Total TCP sessions ¹²	10,000	10,000	10,000	20,000	20,000	20,000
Remote CloudBridge client sessions	--	--	--	100	200	750
Video Caching	--	--	--	√	√	√
CloudBridge Connector	--	--	--	--	--	--
Group Mode	√	√	√	√	√	√

Windows Server Specs		
Version	Microsoft® Windows® Server 2008R2	Microsoft® Windows® Server 2008R2 (licensed for Windows Server 2012 and 2012 R2)
Windows Server VM hardware	--	2 CPU cores with 8 GB RAM, up to 2-1 GigE interfaces

Storage		
Total disk space	500 GB HDD	550 GB SSD
Compression History	125 GB HDD	470 GB SSD
File Storage	250 GB HDD	2 x 1 TB HDD
RAM	4 GB	24 GB

Network Interfaces		
Network interfaces	2-Port Copper 10/100/1000 Base TX (Optional support for fail-to-wire bypass)	4 Port 10/100/1000 TX (Interfaces support fail-to-wire bypass)

Mechanical		
Rack Units	1U	
Rack Options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets	
System depth	11.5" (29.2 cm)	24" (29.2 cm)
System weight	10.8 lbs (4.9kg)	33 lbs (15 kg)
Shipping Dimensions	25 x 19.5 x 6 in (63.5 x 49.5 x 15.2 cm)	32 x 23.5 x 7.5 in (81.5 x 59.7 x 19.1 cm)
Shipping Weight	17.6 lbs (8 kg)	40 lbs (18.1 kg)

Power, Environmental and Regulatory		
Power supplies	Single	Single
Wattage (Max)	200W	300W
Input voltage / frequency ranges	100-240 VAC, 50-60 Hz	100-240 VAC, 50-60 Hz
Input current	2 – 4 A	0.6 – 1.5 A
Operating temperature	32F to 104F (0C to 40C)	32F to 104F (0C to 40C)
Operating altitude	0 – 4921 ft. (0-1500M)	0 – 4921 ft. (0-1500M)
Storage temperature	-4F to 140F (-20C to 60C)	14F to 140F (-10C to 60C)
Allowed relative humidity	5%-95% non-condensing	5%-95% non-condensing
Safety certifications	UL, TUV-C	UL, TUV-C
Electromagnetic emissions, safety and environmental	FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES	FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES
Environmental compliance	RoHS, WEEE	RoHS, WEEE

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Small Branch Appliances					
Model	400-002	400-006	800-002	800-006	800-010
Optimized WAN capacity ^{13,14}	2 Mbps	6 Mbps	2 Mbps	6 Mbps	10 Mbps
QoS Bandwidth Limit	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps
Maximum HDX sessions ¹⁵	10	30	20	60	100
Total TCP sessions ¹⁶	500	1,000	10,000	10,000	10,000
Remote CloudBridge client sessions	N/A	N/A	N/A	N/A	N/A
Video Caching	--	--	√	√	√
CloudBridge Connector	--	--	--	--	--
Group Mode	√	√	√	√	√

Storage		
Total disk space	160 GB SSD	240 GB SSD
Compression history	40 GB SSD	80 GB SSD
RAM	8 GB	8GB

Network Interfaces	
Network interfaces (Interfaces support fail-to-wire bypass)	4-Port Copper 10/100/1000 Base TX

Mechanical	
Rack units	1U
Rack options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets
System depth	10.5" (26.7 cm)
System weight	10.8 lbs (4.9kg)
Shipping Dimensions	W: 17" (43.2 cm); H: 1.7" (4.32 cm); D: 10.0" (25.4 cm)
Shipping weight	14.0 lbs (6.35 kg)

Power, Environmental and Regulatory	
Power supplies	Single
Wattage (Max)	40 watts
Input voltage / frequency ranges	100-240 VAC, 50-60 Hz
Input current	0.33 A
Operating temperature	32F to 104F (0C to 40C)
Operating altitude	0 – 4921 ft. (0-1500M)
Storage temperature	-4F to 140F (-20C to 60C)
Allowed relative humidity	5%-95% non-condensing
Safety certifications	UL, TUV-C
Electromagnetic emissions, safety and environmental	FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES
Environmental compliance	RoHS, WEEE

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Virtual Appliances					
Model	VPX Express ¹⁷	VPX 2	VPX 10	VPX 20	VPX 45
Optimized WAN capacity ^{18,19}	512 Kbps	2 Mbps	10 Mbps	20 Mbps	45 Mbps
Maximum HDX sessions ²⁰	3	15	75	150	250
Total TCP sessions ²¹	10	10,000	10,000	20,000	20,000
Remote CloudBridge client sessions	--	20	100	200	350
Video Caching	--	--	--	--	--
CloudBridge Connector	--	--	--	--	--

Minimum System Requirements (per VM)				
Hypervisor	Citrix XenServer 5.5 or 6.0, Microsoft Hyper-V R2, SP1 or VMware vSphere ESX/ESXi 4.1 to 5.1			
Processor	Dual core (quad core recommended) Intel VTx or AMD-V 64-bit x86			
Memory	2 GB	2 GB	4 GB	4 to 8 GB
Hard drive	60 GB	100 GB	250 GB	
Network interface	2 virtual NICs			
Virtual CPUs	1 for Citrix XenServer, 2 for VMware vSphere		2 to 4 CPUs for XenServer, Hyper-V & VMWare vSphere	



About Citrix

Citrix (NASDAQ:CTXS) is the cloud company that enables mobile workstyles—empowering people to work and collaborate from anywhere, easily and securely. With market-leading solutions for mobility, desktop virtualization, cloud networking, cloud platforms, collaboration and data sharing, Citrix helps organizations achieve the speed and agility necessary to succeed in a mobile and dynamic world. Citrix products are in use at more than 260,000 organizations and by over 100 million users globally. Annual revenue in 2012 was \$2.59 billion. Learn more at www.citrix.com.

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¹⁷ VPX Express is a 12 month free trial license that includes 5 Repeater Plug-in licenses and limits usage to 10 accelerated connections

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