

CloudBridge

Deliver the mobile workspace effectively and efficiently over any network



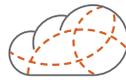
Key Benefits

- Expand WAN capacity through WAN virtualization with low-cost broadband connections, while maintaining MPLS-level quality and reliability
- Improve the virtual desktop experience to branch office and mobile users or accelerate traditional enterprise applications
- Reduce WAN bandwidth requirements and costs
- Maintain high performance for mission critical applications even when a network connection fails
- Support cloud migration with integrated security to protect enterprise data
- Simplify IT with integrated appliance options to reduce server footprint
- Gain visibility into application delivery in order to proactively manage the user experience

Businesses rely on branch offices or remote employees to serve customers, to be near partners and suppliers and to expand into new markets. As application and desktop virtualization increase or applications move to the cloud, IT managers face the challenge of providing these applications without a performance penalty on branch and mobile users due to the nature of wide area networks (WANs).

CloudBridge can help you effectively and economically increase WAN throughput while accelerating enterprise applications and ensuring the performance of virtual desktops. Enterprises can also use CloudBridge to software define their WAN, rendering it more scalable, cost-effective and ready to connect to the cloud, while also ensuring excellent application performance.

CloudBridge features



WAN virtualization

CloudBridge can bond multiple WAN links together to create a single, secure, logical link in order to expand WAN capacity. This logical bonding ensures reliability of high-priority application traffic and includes automatic rerouting of application traffic on a per-packet basis, which ensures continued application performance regardless of fluctuations in network conditions and bandwidth demand. CloudBridge allows enterprises to bond MPLS with lower-cost Internet access options including low-cost flexible broadband connections.



Application acceleration

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. CloudBridge also accelerates Microsoft applications such as file sharing, Exchange and SharePoint as well as any TCP-based application, including file transfers, email, SSL, ERP, CRM, CAD, data backup and storage replication.



Video delivery optimization

With video consumption in the enterprise growing by 25 percent annually, CloudBridge can help reduce WAN bandwidth demand due to video content with its video caching capabilities. Video content from internal as well as many external sites can be cached at the branch site for future playback.



Branch service delivery

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.



Visibility and insight

To ensure great user experiences, enterprise IT must be able to quickly and easily identify the sources of problems in application delivery. Through its integration with Citrix Insight Center, CloudBridge monitors how well applications are being delivered to users in the branch. By leveraging AppFlow data reporting formats, CloudBridge can also export data to third party applications that provide network and application intelligence.

Datacenter appliances					
WAN optimization edition					
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 / unaccelerated bandwidth limit	500 Mbps	1.0 Gbps	2.0 Gbps	2.0 Gbps	4.0 Gbps
Maximum HDX sessions ³	750	1,200	2,500	3,500	5,000
Maximum TCP sessions ⁴	40,000	60,000	120,000	120,000	160,000
Concurrent CloudBridge client plug-ins	1,100	1,800	3,600	3,600	4,800
Video caching					
WCCP clustering	•	•	•	•	•
CloudBridge connector	•	•	•	•	•
Group mode					
Virtual WAN edition					
Model	4000-0500-VW	4000-1000-VW	4000-2000-VW		
Virtual WAN bandwidth ⁵	500 Mbps	1.0 Gbps	2.0 Gbps		
Maximum virtual paths (fixed/dynamic)	256/32	256/32	256/32		
Maximum TCP/UDP sessions	512,000	512,000	512,000		
Storage					
Total disk space (SSD)		3.0 TB		4.2 TB	
Compression history (SSD)		1.8 TB		2.4 TB	
RAM		48 GB		96 GB	
Network interfaces					
Network interfaces ⁶ (interfaces support fail-to-wire bypass)	2 x 10GBASE-SR and 8 x 1000BaseTX			6 x 10GBASE-SR	
Management interfaces	2 x 1000BaseTX			2 x 1000BaseTX	
Mechanical					
Rack units	2U (3.5 inches / 8.90 cm)				
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				

¹Only 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.

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

³User count is based upon a medium level workload as defined by Login VSI and XenDesktop / XenApp advanced encryption security. User count is limited by link bandwidth and TCP session counts. No user count is enforced. Published numbers are for guidance purposes only.

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

⁵Virtual WAN bandwidth is based on AEC-128 encryption and typical enterprise application profiles.

⁶Published Ethernet interfaces compliant per IEEE802.3-2002/2005/2008/2012.

Large branch/small data center appliances						
WAN optimization edition						
Model	2000-010	2000-020	2000-050	3000-050	3000-100	3000-155
Optimized WAN capacity ⁷	10 Mbps	20 Mbps	50 Mbps	50 Mbps	100 Mbps	155 Mbps
QoS / unaccelerated bandwidth limit	200 Mbps	200 Mbps	200 Mbps	500 Mbps	500 Mbps	500 Mbps
Maximum HDX sessions ⁹	100	200	300	300	400	500
Maximum TCP sessions ¹⁰	20,000	20,000	20,000	50,000	50,000	50,000
Concurrent CloudBridge client plug-ins	100	200	750	750	1,000	1200
Video caching	•	•	•	•	•	•
WCCP clustering	•	•	•	•	•	•
CloudBridge connector						
Group mode	•	•	•	•	•	•
Virtual WAN edition						
Model	2000-100-VW	2000-200-VW				
Virtual WAN bandwidth ¹¹	100 Mbps	200 Mbps				
Maximum virtual paths (fixed/dynamic)	32/16	32/16				
Maximum TCP/UDP sessions	64,000	64,000				
Storage						
Total disk space (SSD)		600 GB			2.4 TB	
Compression history (SSD)		275 GB			1.5 TB	
RAM		24 GB			32 GB	
Network interfaces						
Network interfaces ¹² (interfaces support fail-to-wire bypass)		4 x 1000BaseTX			6 x 1000BaseTX or 4 x 1000BaseSX	
Management interfaces		2 x 1000BaseTX			2 x 1000BaseTX	
Mechanical						
Rack units				1U (1.75 inches / 4.45 cm)		
Rack options				EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets		
System depth				24" (63.5 cm)		
System weight		32 lbs (14.6 kg)			33 lbs (15 kg)	
Shipping dimensions				32" x 23.5" x 7.5" (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		

⁷Only 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.

⁸Some protocols (for example ICA) can limit the processing capacity of the appliance before the licensed bandwidth is reached.

⁹User count is based upon a medium level workload as defined by Login VSI and XenDesktop / XenApp advanced encryption security. User count is limited by link bandwidth and TCP session counts. No user count is enforced. Published numbers are for guidance purposes only.

¹⁰TCP session count will be reduced by active HDX sessions. No session count is enforced. Published numbers are for guidance purposes.

¹¹Virtual WAN bandwidth is based on AEC-128 encryption and typical enterprise application profiles.

¹²Published Ethernet interfaces compliant per IEEE802.3-2002/2005/2008/2012.

Branch/small data center appliances with integrated Windows Server						
WAN optimization edition						
Model	1000WS-006	1000WS-010	1000WS-020	2000WS-010	2000WS-020	2000WS-050
Optimized WAN capacity ^{13,14}	6 Mbps	10 Mbps	20 Mbps	10 Mbps	20 Mbps	50 Mbps
QoS / unaccelerated bandwidth limit	50 Mbps	50 Mbps	50 Mbps	200 Mbps	200 Mbps	200 Mbps
Maximum HDX sessions ¹⁵	60	100	200	100	200	300
Maximum TCP sessions ¹⁶	10,000	10,000	10,000	20,000	20,000	20,000
Concurrent CloudBridge client plug-ins				100	200	750
Video caching	•	•	•	•	•	•
WCCP clustering	•	•	•	•	•	•
CloudBridge connector						
Group mode	•	•	•	•	•	•
Windows server specs						
Version	Microsoft® Windows® Server 2012 R2					
Windows Server VM resources	2 CPU cores with 8 GB RAM, 1 GigE interface			2 CPU cores with 8 GB RAM, 1 GigE interface		
Storage						
Total disk space (SSD)	300 GB SSD + 1 TB HDD			600 GB SSD + 2 TB HDD		
Compression history (SSD)	148 GB SSD			275 GB SSD		
File Storage	1 TB HDD			2 x 1 TB HDD		
RAM	32 GB			24 GB		
Network interfaces						
Network interfaces ¹⁷ (interfaces support fail-to-wire bypass)	4x 1000BaseTX					
Management interfaces	1 x 1000BaseTX					
Windows Server interface	1 x 1000BaseTX					
Mechanical						
Rack units	1U (1.75 inches / 4.45 cm)					
Rack options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets					
System depth	10.5" (26.7 cm)			24" (63.5 cm)		
System weight	8.5 lbs (3.86 kg)			33 lbs (15 kg)		
Shipping dimensions	25.5" x 6.1" x 18.5" (64.8 x 15.5 x 47.0 cm)			32" x 23.5" x 7.5" (81.5 x 59.7 x 19.1 cm)		
Shipping weight	14.5 lbs (6 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	0.6 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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¹⁴Some protocols (for example ICA) can limit the processing capacity of the appliance before the licensed bandwidth is reached.

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¹⁶TCP session count will be reduced by active HDX sessions. No session count is enforced. Published numbers are for guidance purposes.

¹⁷Published Ethernet interfaces compliant per IEEE802.3-2002/2005/2008/2012.

Small branch office appliances								
WAN optimization edition								
Model	400-002	400-006	800-002	800-006	800-010	1000-006	1000-010	1000-020
Optimized WAN capacity ^{18,19}	2 Mbps	6 Mbps	2 Mbps	6 Mbps	10 Mbps	6 Mbps	10 Mbps	20 Mbps
QoS / unaccelerated bandwidth limit	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps
Maximum HDX sessions ²⁰	10	30	20	60	100	60	100	200
Maximum TCP sessions ²¹	500	1,000	10,000	10,000	10,000			
Concurrent CloudBridge client plug-ins								
Video caching			•	•	•	•	•	•
WCCP clustering	•	•	•	•	•	•	•	•
CloudBridge connector								
Group mode	•	•	•	•	•	•	•	•
Virtual WAN edition								
Model	400-010-VW	400-020-VW				1000-020-VW	1000-050-VW	1000-100-VW
Virtual WAN bandwidth ²²	10 Mbps	20 Mbps				20 Mbps	50 Mbps	100 Mbps
Maximum virtual paths (fixed/dynamic)	8/4	8/4				16/8	16/8	16/8
Maximum TCP/UDP sessions	32,000	32,000				64,000	64,000	64,000
Storage								
Total disk space (SSD)	160 GB SSD					240 GB SSD		300 GB SSD
Compression history (SSD)	40 GB SSD					80 GB SSD		148 GB SSD
RAM	8 GB					8 GB		32 GB
Network interfaces								
Network interfaces ²³ (interfaces support fail-to-wire bypass)	4 x 1000BaseTX							
Management interfaces	2 x 1000BaseTX							
Mechanical								
Rack units	1U (1.75 inches / 4.45 cm)							
Rack options	EIA 310-D, IEC 60297, DIN 41494 SC48D rack width with mounting brackets							
System depth	10.5" (26.7 cm)							
System weight	8 lbs (3.63 kg)							
Shipping dimensions	25.5" x 6.1" x 18.5" (64.8 x 15.5 x 47.0 cm)							
Shipping weight	14.0 lbs (6.35 kg)							
Power, environmental and regulatory								
Power supplies	Single							
Wattage (max)	200 W							
Input voltage / frequency ranges	100-240 VAC, 50-60 Hz							
Input current	0.5 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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²¹TCP session count will be reduced by active HDX sessions. No session count is enforced. Published numbers are for guidance purposes.

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²³Published Ethernet interfaces compliant per IEEE802.3-2002/2005/2008/2012.

Virtual appliances

WAN optimization edition

Model	VPX 2	VPX 6	VPX 10	VPX 20	VPX 50	VPX 100	VPX 200
Optimized WAN capacity ^{24, 25}	2 Mbps	6 Mbps	10 Mbps	20 Mbps	50 Mbps	100 Mbps	200 Mbps
QoS / unaccelerated bandwidth limit	15 Mbps	50 Mbps	75 Mbps	150 Mbps	250 Mbps	250 Mbps	300 Mbps
Maximum HDX sessions ²⁶	20	60	100	200	300	400	500
Total TCP sessions ²⁷	5,000	5,000	5,000	10,000	10,000	20,000	30,000
Concurrent CloudBridge client plug-ins	20	60	100	200	300	400	500
CloudBridge connector ²⁸	•	•	•	•	•	•	•
Hypervisor	XenServer 5.5 - 6.2; Hyper-V 2008R2 SP1 – 2012; ESX/ESXi 4.1 - 6.0						
Processor	Dual core (quad core recommended) Intel VTx or AMD-V 64-bit x86						
Virtual CPU	1 x XenServer & 2 x VMware vSphere (>2.33GHz)	2-4 x XenServer, Hyper-V & VMware vSphere (>2.33GHz)					2-4 x XenServer, Hyper-V & VMware vSphere (~3.0GHz)
Memory	4 GB	4 GB	4 GB	4 GB	4 GB	8 GB	16 GB
Hard drive ³⁰	100 GB	100 GB	250 GB	250 GB	250 GB	500 GB	500 GB
Network interface	2 virtual NICs						

Virtual WAN VPX edition

Model	VPX 10-VW	VPX 20-VW	VPX 50-VW	VPX 100-VW
Virtualize Bandwidth	10 Mbps	20 Mbps	50 Mbps	100 Mbps
Max Virtual Paths (Fixed/Dynamic)	8/2	8/4	16/6	16/8
Max TCP/UDP Sessions	64,000			
Hypervisor	XenServer 6.5 SP1; ESX/ESXi 5.5 & 6.0			
Processor	Dual core (quad core recommended) Intel VTx or AMD-V 64-bit x86			
Virtual CPU	4 vCPU @ 2.7Ghz			
Memory	4GB			
Network Interface	1 Virtual NIC per WAN link			

CloudBridge plug in software requirements²⁹

Operating System	Windows Vista (32-bit versions), Windows 7 (32-bit and 64-bit versions), and Windows 8 (32-bit and 64-bit Enterprise Edition)
CPU	Pentium 4-class or higher
Minimum RAM	4 GB
Minimum HDD or SSD	30 GB

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²⁷TCP session count will be reduced by active HDX sessions. No session count is enforced. Published numbers are for guidance purposes.

²⁸For CloudBridge VPX appliances, the CloudBridge Connector is delivered as a separate software appliance.

²⁹The CloudBridge Client Plug In does not support video caching. Other items such as HDX and TCP sessions supported are hardware dependent.

³⁰For best performance, use solid state drives or high IOPS storage devices.



About Citrix

Citrix (NASDAQ:CTXS) is leading the transition to software-defining the workplace, uniting virtualization, mobility management, networking and SaaS solutions to enable new ways for businesses and people to work better. Citrix solutions power business mobility through secure, mobile workspaces that provide people with instant access to apps, desktops, data and communications on any device, over any network and cloud. With annual revenue in 2014 of \$3.14 billion, Citrix solutions are in use at more than 330,000 organizations and by over 100 million users globally. Learn more at www.citrix.com.

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