



# Citrix CloudBridge Product Overview

Businesses rely on branch offices to serve customers, to be near partners and suppliers and to expand into new markets. As server and desktop virtualization increase and 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).

If your goal is increasing the performance and reliability of mission critical applications for remote users, 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 virtualize their WAN, rendering it more scalable, cost effective and ready to connect to the Cloud, while also ensuring excellent application performance. Use CloudBridge to make branch and mobile workers more productive while avoiding costly network upgrades.

**Key benefits**

- 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
- Expand WAN capacity through WAN virtualization with low-cost broadband connections, while maintaining MPLS-level quality and reliability
- 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

As the needs of branches differ, CloudBridge™ offers two solutions for scaling WAN throughput. The WAN optimization edition provides application acceleration and bandwidth efficiency to cost-effectively support growing bandwidth demands, while the CloudBridge Virtual WAN edition dynamically adapts WAN bandwidth to cater for growth and cost-effectively improves WAN reliability..

## CloudBridge WAN Optimization Edition

The Citrix® CloudBridge WAN Optimization edition is the industry's leading WAN optimization and accelerated application delivery solution. Use WAN optimization for high latency or expensive WAN links.

**Improves the virtual desktop experience**

Citrix CloudBridge platform, with integrated HDX™ technologies, accelerates, controls and optimizes virtual desktops delivered by XenDesktop® and virtual applications delivered by XenApp® for branch users.. The CloudBridge Client plug in extends application acceleration benefits to mobile users.

Combined with the NetScaler Gateway™, CloudBridge improves user experience and productivity by providing fast, secure remote access. CloudBridge accomplishes this by caching, optimizing ICA® sessions, and storing streamed application packages on appliances in branch offices. Enterprise IT teams can orchestrate service delivery across IT networks to ensure the best user experience everywhere.

**Reduces WAN Bandwidth**

CloudBridge reduces bandwidth consumption and optimizes the use of existing capacity. This allows you to save on your ongoing bandwidth expenditures to serve up to four times more users, and to reduce bandwidth consumption per desktop by up to 80 percent. CloudBridge also reduces traffic by up to 95 percent for bandwidth-hungry applications such as video viewing, file transfers, software distribution, backups and enterprise data replication.

**Accelerates traditional enterprise applications**

Citrix CloudBridge accelerates traditional enterprise applications such as Microsoft® SharePoint®, network file servers (CIFS and NFS), Microsoft Exchange® and web applications. With

*"We achieved astonishing results with CloudBridge, such as a five fold improvement in application performance over limited bandwidth."*

**Jamie Schofield**

Network Architect Groupe  
Promutuel

CloudBridge, branch-office users experience faster printing, file downloads, video streaming and application start-up times, allowing them to get more done in less time. The CloudBridge Client plug in extends application acceleration benefits to mobile users. Combined with the NetScaler Gateway, CloudBridge improves user experience and productivity by providing fast, secure remote access.

### **Provides insight into application performance**

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.

### **Simplifies branch IT**

CloudBridge with Windows® Server natively integrates essential Windows services that must remain in the branch office, eliminating the need for dedicated servers. Further, CloudBridge supports an option to run third party applications within the Windows Server environment without affecting WAN optimization performance. This allows enterprise IT to simplify branch infrastructure and dramatically lower capital and operational expenses. The CloudBridge family includes a virtual appliance, CloudBridge VPX™, which can be quickly downloaded and deployed on off-the-shelf hardware in datacenters or branch offices to accelerate desktop and application delivery to remote and branch users.

## **CloudBridge Virtual WAN Edition**

The Citrix CloudBridge Virtual WAN edition enables enterprises to bring the benefits of virtualization to the enterprise WAN. Use the Virtual WAN solution to scale bandwidth and ensure connectivity.

### **Combines all paths into a "virtual WAN"**

CloudBridge's WAN virtualization technology logically binds multiple MPLS and broadband paths into a single virtual WAN. Network paths are continuously measured and monitored, so mission critical applications can always be routed across the paths with the fastest transit time and the least congestion, jitter and packet loss. Traffic from high bandwidth applications can be balanced across multiple paths to provide the highest performance and an optimal user experience.

### **Maximizes bandwidth utilization**

CloudBridge ensures that all WAN links are fully utilized during times of peak network traffic. It eliminates the need to reserve broadband links as backups "just in case" an MPLS link fails.

### **Increases the resiliency of critical applications**

Citrix CloudBridge detects path outages after just two or three missing packets, providing for seamless sub-second failover of traffic to alternative paths. Traffic from critical "real-time" applications are dynamically assigned to the best-performing paths, and traffic from low-priority "bulk" applications are bumped to slower paths, or if necessary blocked until bandwidth is available. In most cases path outages are mitigated without users noticing, even with virtual desktops and latency-sensitive applications like VOIP.

**Improves quality for all applications**

CloudBridge continuously measures the latency, jitter and packet loss of every WAN connection, and uses that information to route critical applications across the highest-quality paths. Lower quality paths are used only as much as necessary, and then only for applications that can tolerate higher latency. Packet reordering and packet loss mitigation features reduce jitter and packet loss.

**Integrates with the cloud**

A virtual appliance that runs in Amazon Web Services (AWS) regions can aggregate multiple broadband and Amazon Direct connection links. It provides WAN virtualization capabilities for traffic running between data centers and remote offices and applications running on AWS in the cloud.

**Reduces the cost of adding bandwidth**

Citrix CloudBridge allows broadband connections to delivery mission critical application traffic with the same reliability and quality of service as costly MPLS networks. That means enterprises can add WAN capacity with inexpensive and flexible cable, DSL and 4G wireless connections, knowing that those connections will work seamlessly and reliably with an existing MPLS network.

**Provides insight into application performance**

As with the WAN optimization edition, CloudBridge provides insight into how well applications are being delivered to the branch. Unique to CloudBridge is the ability to drill down into the delivery performance of XenApp

and XenDesktop via the HDX Insight™ module within Insight Center. Beyond XenApp and XenDesktop, CloudBridge can provide visibility for over 200 different enterprise applications.

## Flexible Deployment Options

Both editions of the CloudBridge platform offer a choice of physical and virtual appliances. Depending on rack space, energy and infrastructure availability requirements, you can deploy and provision a CloudBridge physical or virtual appliance and take advantage of hardware standardization initiatives in your organization. CloudBridge is also a pre-integrated option at third party cloud providers such as Amazon Web Services and Windows Azure®.

## Comprehensive Management

Citrix Command Center is a management and monitoring solution for Citrix application networking products that include Citrix NetScaler® and CloudBridge.

Command Center enables network administrators and operations teams to manage, monitor, and troubleshoot the entire global application delivery infrastructure from a single, unified console. This centralized management solution simplifies operations by providing administrators with enterprise-wide visibility and automating management tasks that need to be executed across multiple devices.

**Corporate Headquarters**  
Fort Lauderdale, FL, USA

**Silicon Valley Headquarters**  
Santa Clara, CA, USA

**EMEA Headquarters**  
Schaffhausen, Switzerland

**India Development Center**  
Bangalore, India

**Online Division Headquarters**  
Santa Barbara, CA, USA

**Pacific Headquarters**  
Hong Kong, China

**Latin America Headquarters**  
Coral Gables, FL, USA

**UK Development Center**  
Chalfont, United Kingdom



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