



F5's Application Ready Solution for Microsoft Lync Server 2010

The release of Microsoft Lync Server 2010 brings much more than a name change for Microsoft's UC platform. Lync Server 2010 delivers complete presence, instant messaging, conferencing and enterprise voice capabilities through a single, easy-to-use interface that is consistent across PC, browser, and mobile device. F5 has worked closely with Microsoft to ensure a high level of interoperability with Microsoft Lync Server 2010.

F5's Application Ready Solution enables a scalable and highly available platform for Lync Server that enables the highest levels of reliability and the best possible end user experience. F5 not only helps optimize performance, security, availability, and scalability for Microsoft Lync Server implementations, but reduces the costs associated with deployment, management, and operation.

F5 enables IT agility, your way.

Key benefits

Improve Performance

F5's intelligent load balancing, combined with SSL offload, TCP optimizations, and simple scalability means a better end-user experience.

Increase administrator efficiency

F5's application templates, Microsoft policies, and step-by-step configuration guidance help reduce deployment cycles by 1/3rd.

Simplify Management

Simplify management with a single control point in the data center.

"We are pleased to certify BIG-IP Local Traffic Manager® for deployment with Lync Server 2010. F5's unique and continued investment in the Microsoft Corp. UC platform demonstrates the company's excellent understanding of how to ensure that sophisticated application software is highly responsive and highly available. Customers who invest in both the Microsoft and F5 platforms benefit from an enterprise-class solution to reliably deliver communications features to end users that are easily manageable by IT."

Ashima Singhal
Group Product Manager,
Microsoft Lync



Microsoft® Partner

Green Infrastructure

F5 can accelerate and secure applications while enhancing performance and availability, all on the same device. This reduces energy consumption with no additional hardware or rack space needed.

Benefits and F5 value

F5's Application Ready Solution for Microsoft Lync Server ensures a secure, fast and available deployment, providing the following benefits to organizations and their end users.

Improving application performance and user experience

Microsoft Lync Server is an integral component in Microsoft's Unified Communications platform that makes it much easier for people to communicate, no matter where they are. The real-time nature of these services, combined with the business-critical status of the underlying software applications make reliability a high priority for IT departments implementing Lync Server 2010.

F5 solutions make certain both end users and administrators have the best possible experience by creating a highly available and scalable platform that achieve the highest levels of reliability through network optimization. Unified Communication client applications are more responsive when supported by F5 solutions because the application health monitoring, intelligent load balancing, and session to site level network optimization ensure the most reliable delivery of Microsoft Lync services.

F5 provides a number of ways to accelerate and optimize Lync Server 2010 implementations:

- *Advanced load balancing methods*
F5's intelligent load balancing methods guarantee optimal user experience. F5 provides advanced traffic distribution methods such sending signaling traffic to the Lync Server with the least number of connections (so users are not randomly sent to a server that may be nearly overwhelmed) or sending clients to servers based on various aspects of real-time server performance analysis. This technology helps enable responsive applications that allows for more productive end users and Help Desk personnel.
- *TCP connection optimizations*
Further acceleration comes in the form of TCP connection optimizations. F5 TCP optimizations combine cutting-edge TCP/IP techniques and improvements in the latest RFCs with numerous improvements and extensions developed by F5 to minimize the effects of congestion, packet loss, and recovery. F5's full proxy devices can shield and transparently optimize older or non-compliant TCP stacks that may be running on servers or clients.

This enables F5 devices to adapt, in real time, to the latency, packet loss, and congestion characteristics of WAN links, and accelerate virtually all application traffic. And F5 isolates, controls, and independently optimizes user and server connections, enabling both the server and end user to maximize productivity. In this way signaling traffic is tuned for the best performance and session resilience.

Because Lync Server sessions can be long-lived, additional TCP settings ensure that signaling sessions remain active and open, avoiding early timeout and session resets. These optimizations give IT administrators high confidence in their real-time communications software and ensure that Lync Server services are delivered in the most efficient way possible.

Global availability

F5 monitors site-level application availability and uses this information to make traffic direction decisions, so that in the event of a site-level application outage, users can be transparently redirected to another site.

Advanced health monitoring and scalability

Because users need and expect responsive client applications, F5 actively monitors the health and responsiveness of Consolidated Edge and Consolidated Lync Servers across multiple protocols to ensure clients are connected to and remain assigned to the most available, appropriate server.

F5 makes scaling Microsoft Lync Server 2010 extremely easy. Simply add another server to the network, and then add the IP address to the F5 load balancing pool. The F5 device immediately begins sending traffic to the newly provisioned node.

Even a hardware failure of a single server can cause expensive downtime, until an administrator can remove the device from service. F5 makes hardware failures a complete non-issue by automatically detecting a failure, and directing traffic away from the problematic server. Once the problem has been solved, F5 devices automatically detect the server and begin resending traffic to it. This is also useful for patch management or maintenance windows. Administrators can easily remove groups of devices from the F5 load balancing pool, perform patching or other maintenance while other devices remain in service. Once the maintenance is complete, those servers go back in the pool, and the remaining servers are taken down for maintenance, all with zero downtime.

SSL Offload

One of F5's core strengths is the ability to enhance end-user experience while increasing application and server performance. We do this in part by taking on the SSL processing duties from the Access and Web Conferencing services on the Lync Server 2010 Edge Servers. If each server has to carry out SSL processing and certificate management, the amount of processing power these devices have left to perform core tasks is reduced. F5 allows these servers to devote all of their resources to the tasks for which they were designed.

Site Resiliency

For Lync Server deployments in globally-dispersed data centers, the F5 solution for Lync Server enables increased application capacity and fault tolerance across sites. F5 monitors site-level application availability and uses this information to make traffic direction decisions, so that in the event of a site-level application outage, users can be transparently redirected to another site.

This technology maintains continuity of Lync Server services using DNS redirects per user connection in a seamless integration with the existing network infrastructure. DNS redirection is a comparatively lightweight, straightforward, and effective resilience method that makes the most of the Lync Server built-in database redundancy, with or without more expensive block-level storage area network mirroring solutions.

F5 provides options for site resilience through effective detection of service outages and direct control over user connections across sites. Site level health detection and management capabilities are essential for a well-designed, effective business continuity plan for essential business applications.

Application templates and deployment guides

As part of the Application Ready Solution, F5 has configured, tested, and tuned our devices for Microsoft Lync Server 2010 and carefully documented the procedures in our Deployment Guide. An Application Template for Lync Server 2010, based on the deployment guide configuration, will be available in an upcoming release. Application templates (currently

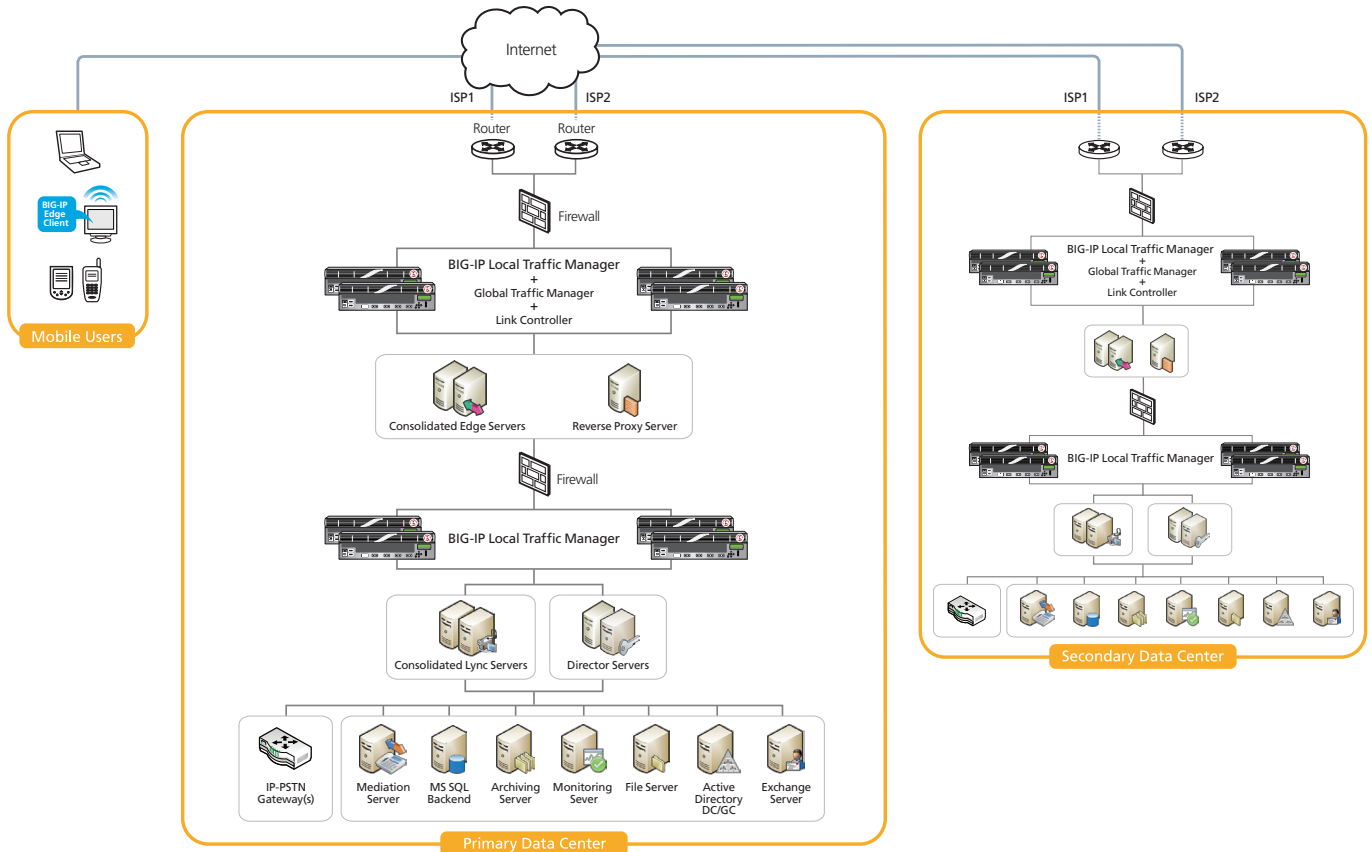
available for Microsoft Office Communications Server 2007 R2 and a number of other Microsoft applications) requires a minimum amount of information from an administrator to quickly, easily and accurately configure F5 devices, enabling a Microsoft-optimized F5 configuration in minutes.

And F5's developer community, DevCentral, has a section dedicated to Microsoft solutions, where you can find forums, tips and tricks, and much more (<http://devcentral.f5.com/microsoft>)

F5's Application Ready Solution for Microsoft Lync Server 2010:
Explore it. Deploy it. And run your business with it.



F5 Application Ready Network Unified Communications • Microsoft Lync Server 2010



More Information

To learn more about Microsoft Lync Server and F5, use the search function on F5.com to find these and other resources.

Deployment Guide

[Deploying F5 with Microsoft Lync Server 2010](#)

Application Page

[Microsoft Lync Server](#)

White Paper

[Microsoft Lync Server 2010 Site Resiliency](#)

Microsoft on F5's DevCentral

<http://devcentral.f5.com/microsoft>

Microsoft Certified Application Delivery Controller list (external link)

<http://technet.microsoft.com/en-us/office/ocs/cc843611.aspx>

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