

Understanding Microsoft Office Communications Server Deployment

<https://campus.barracuda.com/doc/12189786/>

This article applies to:

- Barracuda Load Balancer running firmware version 3.3.1.005 or higher
- Barracuda Load Balancer 340 or above
- Microsoft® Office Communications Server 2007 R2 Enterprise Edition

This article assumes you are connected to the Barracuda Load Balancer web interface and have an activated subscription.

Organizations use solutions like Microsoft Office Communications Server to allow them to effectively disseminate information and enhance collaborative efforts among their employees. Microsoft Office Communication Suite offers functionality such as VoIP, instant messaging and web collaboration. All these Services can be utilized by clients from either the internal office network or from the Internet.

Companies deploying Microsoft Office Communication Servers for higher traffic throughput look to deploy a scalable solution. To scale the deployment of the Microsoft Office Communication Server solution, Microsoft recommends using a hardware load balancer to distribute the traffic among multiple Office Communications Servers.

Barracuda Networks has conducted interoperability tests between the Barracuda Load Balancer and Office Communications Server 2007 R2. This document describes some ways to deploy the Barracuda Load Balancer to provide scaling in an Office Communications Server environment.

Table 1. Terminology.

Term	Description
Front-End Server	A Microsoft Office Communications Server in the internal network.
Edge Server	A Microsoft Office Communications Server deployed in the perimeter network.
Fully Qualified Domain Name (FQDN)	The unique name for a specific computer or host that can resolve to an IP address, e.g. www.example.com
Virtual IP (VIP) Address	The IP address assigned to a Service. Clients use the Virtual IP address to connect to the load-balanced Service.
Service	A combination of a Virtual IP address and one or more TCP/UDP ports that the Barracuda Load Balancer listens on. Traffic arriving on the specified port(s) is directed to one of the Real Servers associated with a Service.

Deployment Recommendations

- **High Availability** – If you wish to scale your Microsoft Office Communications Server deployment with High Availability, you must first have a pair of Barracuda Load Balancers joined in a cluster. Note that if your Barracuda Load Balancers are already clustered, the configuration between the active and passive systems is synchronized automatically, so you will not need to modify any passive Barracuda Load Balancers at this time.
- **Internal Office Communications** – Minimum one Barracuda Load Balancer, two recommended for high availability.
- **Internal Office Communications Deployment and Edge Deployment** – Minimum two Barracuda Load Balancers, four recommended for high availability.
- **Internal Office Communications Deployment, Edge Deployment, and Communicator Web Access Deployment** – Minimum three Barracuda Load Balancers, six recommended for high availability.

Deployment Options

The following options are supported in an Office Communications Server and the Barracuda Load Balancer deployment:

- **Office Communications Front-End Server Deployment Options** - Servers in an Office Communications Server enterprise pool communicate with each other using the VIP address of the pool. To facilitate this communication, create a TCP Proxy Service and associate the servers with it. The servers and the Barracuda Load Balancer must be deployed using a one-armed topology in either a single or multiple subnet configuration.
Deploying internal Office Communications Server pools using a two-armed topology (Route-Path), Direct Server Return (DSR) or Bridge Mode *does not work*.
- **Office Communications Edge Server Deployment Options** - Load balanced Edge deployments are supported using either a one-armed topology using a TCP Proxy Service or a two-armed (Route-Path) topology using a Layer 4 Service.
Bridge Mode and Direct Server Return deployments *do not work*.

Refer to the Microsoft TechNet online library for more information on the following topics:

- Load Balancing Requirements for Office Communications Server 2007 Enterprise Pools: <http://technet.microsoft.com/en-us/library/bb870398.aspx>
- Load Balancers for Office Communications Server 2007 R2: [http://technet.microsoft.com/en-us/library/dd572362\(office.13\).aspx](http://technet.microsoft.com/en-us/library/dd572362(office.13).aspx)
- Load Balancer Requirements for Edge Servers: <http://technet.microsoft.com/en-us/library/bb870418.aspx>

- Using a Load Balancer to Increase Capacity and Availability:
[http://technet.microsoft.com/en-us/library/dd441196\(offic.13\).aspx](http://technet.microsoft.com/en-us/library/dd441196(offic.13).aspx)

Next Step

Proceed to [How to Deploy with Microsoft Office Communications Server](#).

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