Load Balancing over TCP

This topic describes how to incorporate a load balancer in an IM and Presence Service dual-node configuration for use with incoming CSTA/TCP connections. We recommend the Cisco CSS 11501 Content Services Switch for the load balancer.

The following table gives an overview of the necessary tasks for configuring the Cisco CSS 11501 Content Services Switch for this integration. For detailed information on each task, refer to the Cisco CSS 11500 Content Services Switch documentation at the following URL:

http://www.cisco.com/en/US/products/hw/contnetw/ps792/products_installation_and_configuration_guides_list.html

Table 1: Cisco CSS 11501 Configuration Checklist for Load Balancing over TCP

Task	Additional Notes
Create a SIP service entry for each IM and Presence Service node.	• The keepalive port should be the same port as the content, port 5060. • The keepalive message type value should be 'tcp'.
Create a SIP rule that defines the content and the services that will manage this content	The content is SIP on port 5060 The SIP service entries (for each IM and Presence Service node) must be associated to the rule.
Create a NAT (Network Address Translation) rule to show the Virtual IP Address of Load Balancer	The NAT rule shows the packets returning from the IM and Presence Service node to Microsoft OCS as coming from the Load Balancer (and not directly from the IM and Presence Service node).

On Microsoft OCS, you must configure the following parameters:

- The next hop address to be the Virtual IP address of Load Balancer for the SIP message routing.
- The default TCP listener on port 5060.

On IM and Presence Service, you must configure the Virtual IP address of the Load Balancer. This is configured in the Virtual IP address field in **Cisco Unified CM IM and Presence Administration** > **System** > **Service Parameters** > **Cisco SIP Proxy** > **General Proxy Parameters (Clusterwide)**.