

Configuring LCS and MPS J3 for SIP

TANDBERG

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1. SIP

Software version J3.0 for the TANDBERG MPS will include support for the Session Initiated Protocol (SIP). The first version of support will be compatible with the Microsoft Live Communications Server (LCS) 2005, SP1. LCS will serve as both an authentication authority and a SIP Proxy to the MPS for both incoming and outgoing SIP calls.

2. Configuring LCS

In order to facilitate proper communication between the MPS and LCS, LCS must be configured to “trust” the MPS as a trusted site as well as setup the dial-plan to forward appropriate calls to the MPS. This section of the document will illustrate how to setup the LCS server to properly work with the MPS.

2.1 Configuring Microsoft Live Communications Server

In order for the MPS to properly receive calls on the SIP network, the LCS server has to be properly configured to allow the MPS to receive multiple calls on multiple dial-in numbers. LCS dialing works on a prefix basis – a specific prefix is assigned to forward all calls to a specific host. This prefix can be anything and is usually followed by a wildcard identifier, *.

In order to properly configure LCS, login to the LCS server and open the Live Communications Server snap-in for MMC. Expand the tree to locate the server you wish the MPS to use as its home server. Once located, right-click on the server's icon and select 'Properties.'

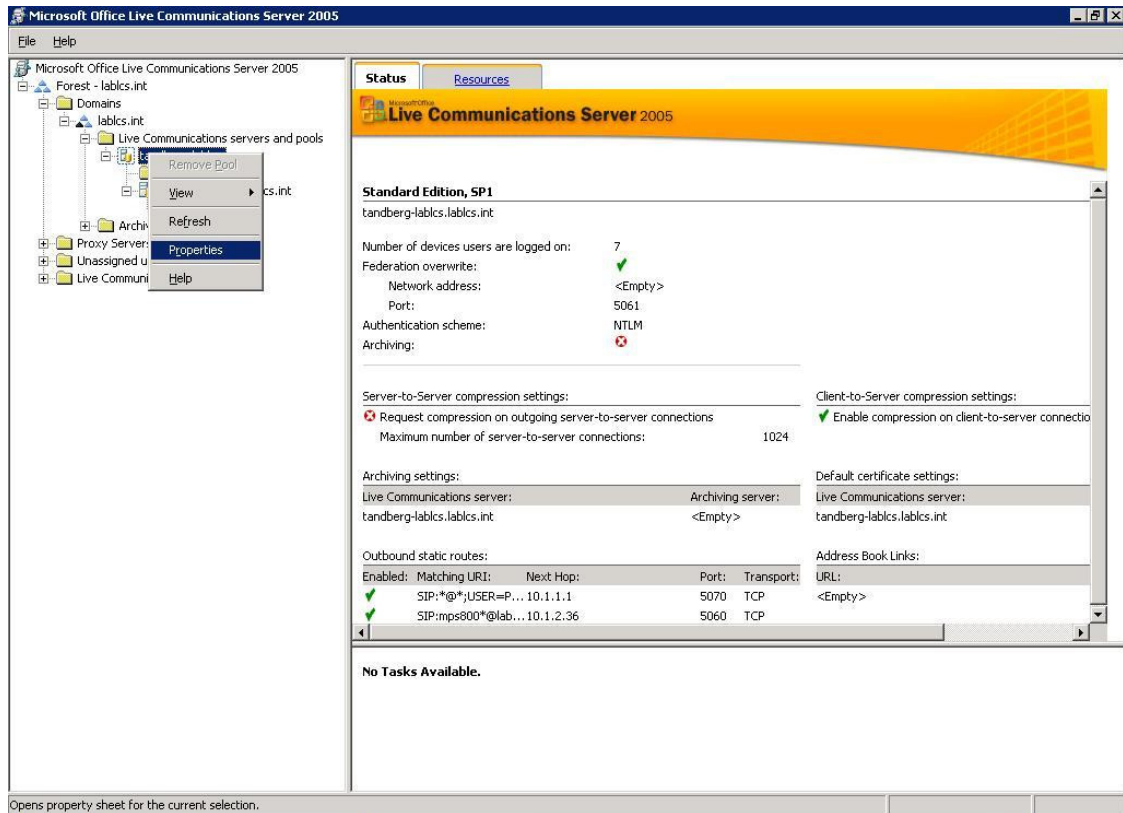


Figure 2.1.1 LCS Server Properties

Select the 'Host Authorization' tab and click 'Add' to add a new authorized host. In the authorized host window, select the server selection to 'IP Address' and enter the IP address of the controller card of the MPS. The selection boxes for 'Throttle As Server' and 'Treat As Authenticated' should be checked. This setup will allow the LCS server to authenticate the MPS and treat it as a trusted host within LCS.

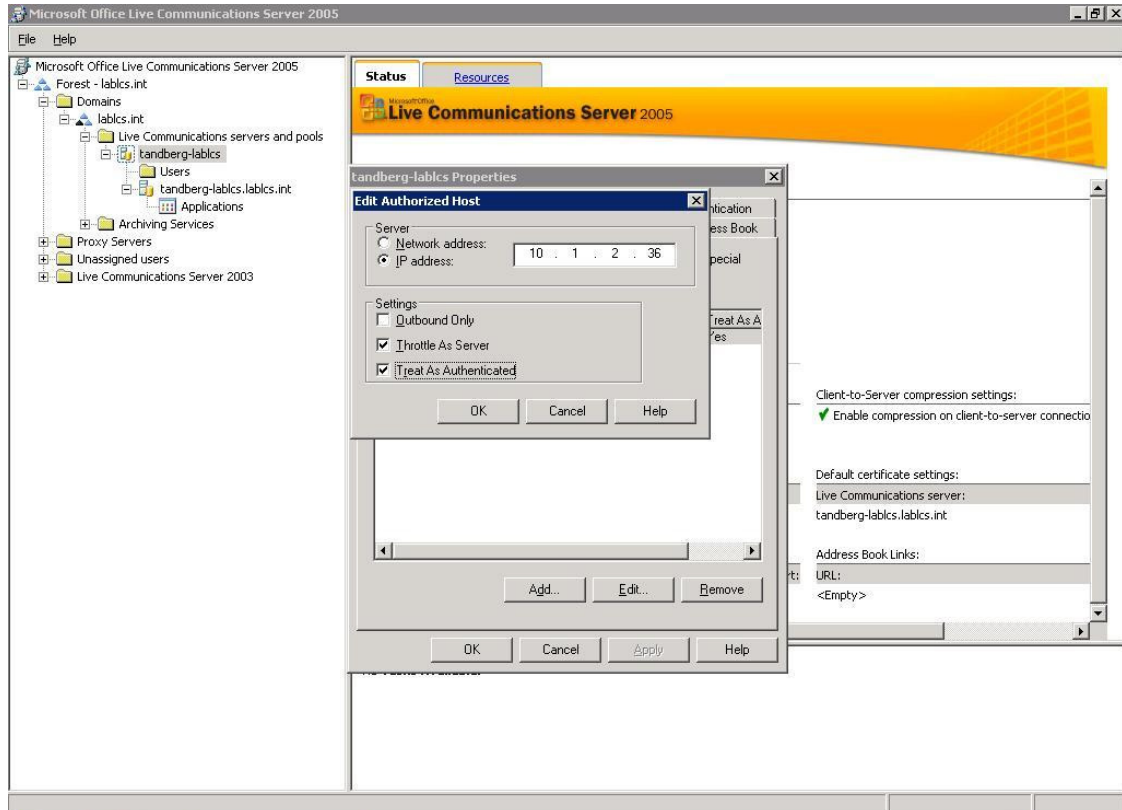


Figure 2.1.2 Authorized Host

Once the trusted host configuration has been completed, click 'OK' to save the changes. Now that the MPS is configured as an Authorized Host to the LCS server, the LCS server now needs to be told what SIP URIs should be forwarded to the MPS. This is configured using routing in LCS. Under the same server properties window, select the 'Routing' tab and click 'Add...' to add a new route pattern. The user field is used to specify which URIs will be forwarded by this rule. Example, if you want all calls that come in to 'MPS' to be forwarded to the MPS, enter "MPS" in the user field. **Note:** LCS does allow for a wildcard entry. Enter the '*' character if a wildcard entry is desired. For example, if all calls that *begin* with MPS should be forwarded to the MPS itself (e.g. MPS123@lcs.int, MPS456@lcs.int MPSconference1@lcs.int), enter "MPS*" in the user field.

In the domain box, enter the domain that will be used with the SIP URI for the MPS. The SIP URI to reach the MPS will be the combination of the user and domain fields. Example: MPS@company.com.

Under Next Hop, select IP Address and enter the IP of the controller card of the MPS. Make sure transport is set to TCP and port is 5060. The completed route should look like the figure below. Click “OK” to save the route, and click “OK” to close the properties window of the server.

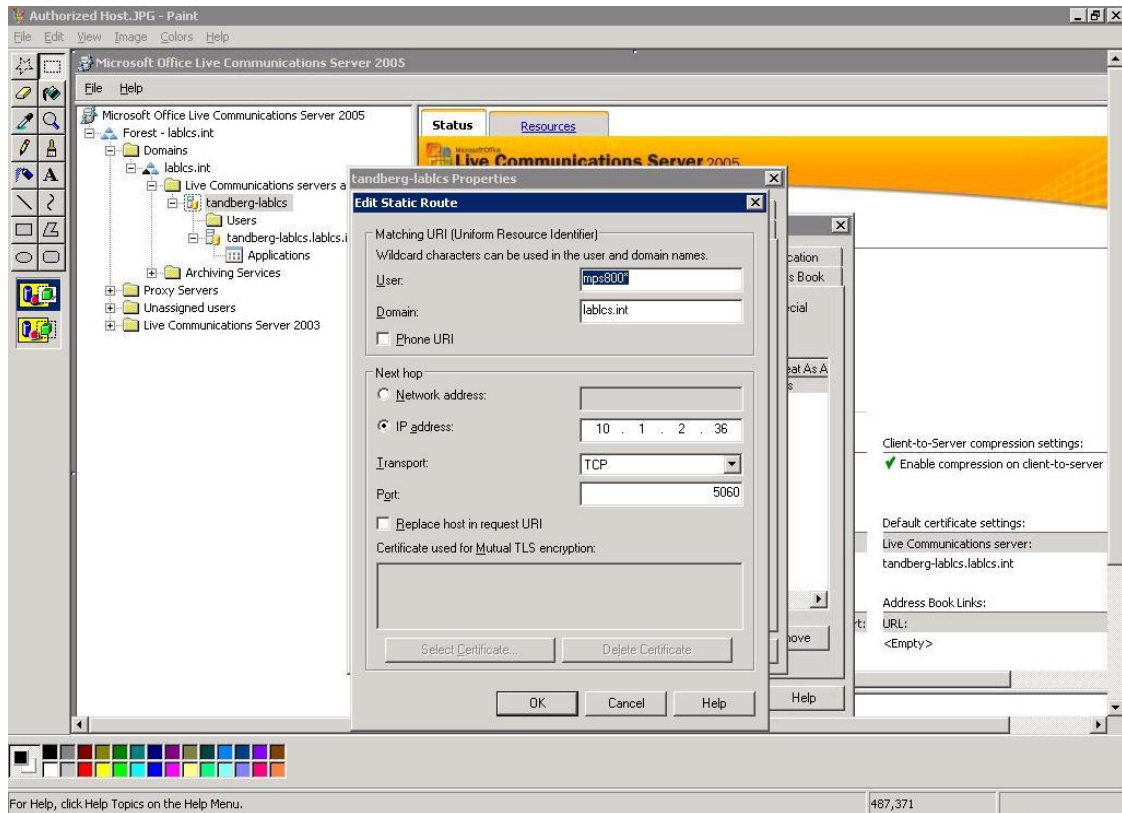


Figure 2.1.3 Static Route Configuration

This completes the configuration of the LCS server. Next, the MPS will need to be configured to use the LCS server.

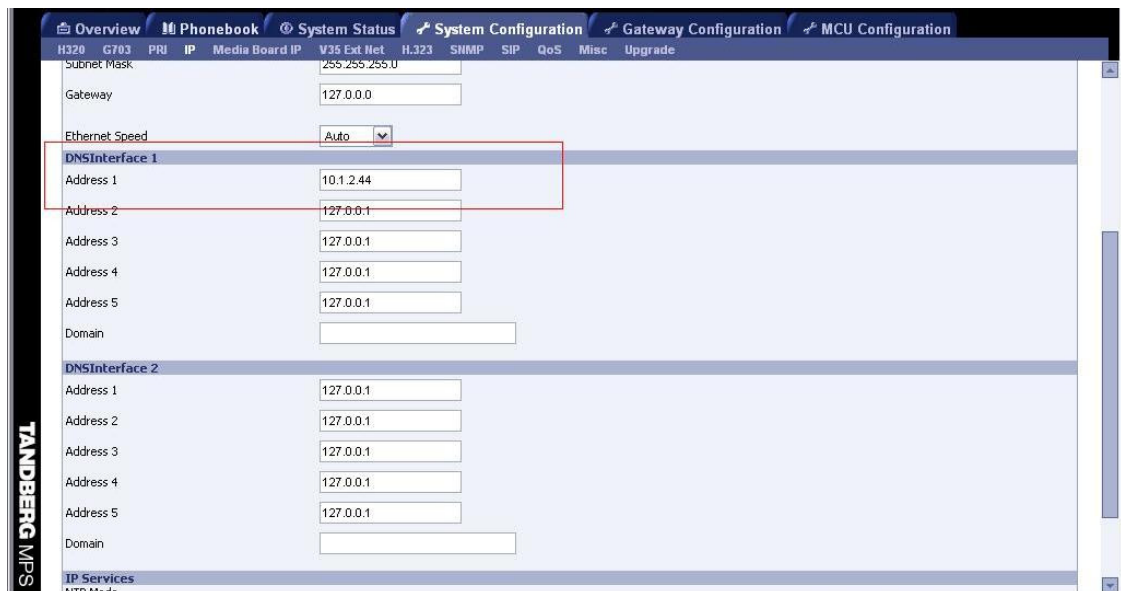
3. Configuring the MPS

The LCS Server should be configured prior to configuring the MPS unit. The MPS configuration consists ensuring the MPS has a valid DNS name server configured and entering the LCS server information.

3.1 DNS Server Configuration

LCS SIP operation requires the MPS have a valid DNS name server configured. If the DNS server is not configured properly, calls may connect to the MPS, but neither video nor audio will be transmitted to the far end.

To configure the DNS server on the MPS, navigate to System Configuration → IP. Locate the configuration for the particular Service Controller Interface the system will be using and enter the IP address of the DNS name server to use. Up to five DNS name servers can be configured.



The screenshot displays the 'System Configuration' page for an MPS unit, specifically the 'IP' configuration section. The interface includes a navigation bar at the top with tabs for Overview, Phonebook, System Status, System Configuration (active), Gateway Configuration, and MCU Configuration. Below the navigation bar, there are fields for Subnet Mask (255.255.255.0), Gateway (127.0.0.0), and Ethernet Speed (Auto). The main configuration area is divided into two sections: 'DNSInterface 1' and 'DNSInterface 2'. Each section contains five 'Address' fields and a 'Domain' field. In the 'DNSInterface 1' section, the 'Address 1' field is highlighted with a red box and contains the value '10.1.2.44'. The other address fields in this section contain '127.0.0.1'. The 'DNSInterface 2' section has all address fields set to '127.0.0.1'. At the bottom of the page, there is a section for 'IP Services' with a dropdown menu set to 'NTP Mode'. The Tandberg logo is visible on the left side of the interface.

Interface	Address 1	Address 2	Address 3	Address 4	Address 5	Domain
DNSInterface 1	10.1.2.44	127.0.0.1	127.0.0.1	127.0.0.1	127.0.0.1	
DNSInterface 2	127.0.0.1	127.0.0.1	127.0.0.1	127.0.0.1	127.0.0.1	

Figure 3.1.1 MPS DNS Server Configuration

After entering the DNS server IP(s), scroll to the bottom of the page and click the Save icon.

3.2 SIP Configuration

To initially configure the MPS for SIP communication, navigate to System Configuration → SIP. On the SIP Configuration screen, enable SIP by selecting ‘on’ in the mode selection. Once turned on, choose the appropriate interface(s) for SIP communication. Within these interfaces, enter in the DNS name for the SIP server and choose ‘Microsoft’ for SIP type. Once completed, click ‘Save’ and restart the MPS for all changes to take affect. **NOTE:** The username and password fields are not used in this first release of SIP for the MPS.

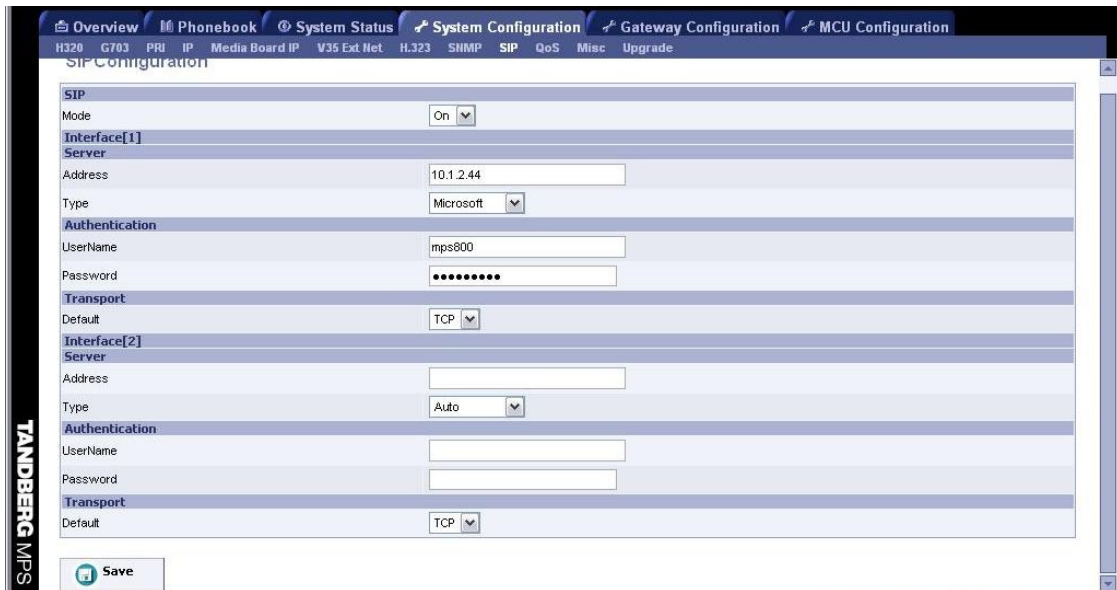


Figure 3.2.1 MPS SIP Configuration

Once the MPS has restarted, the Overview page of the MPS should show that the SIP status is ‘Server Active.’

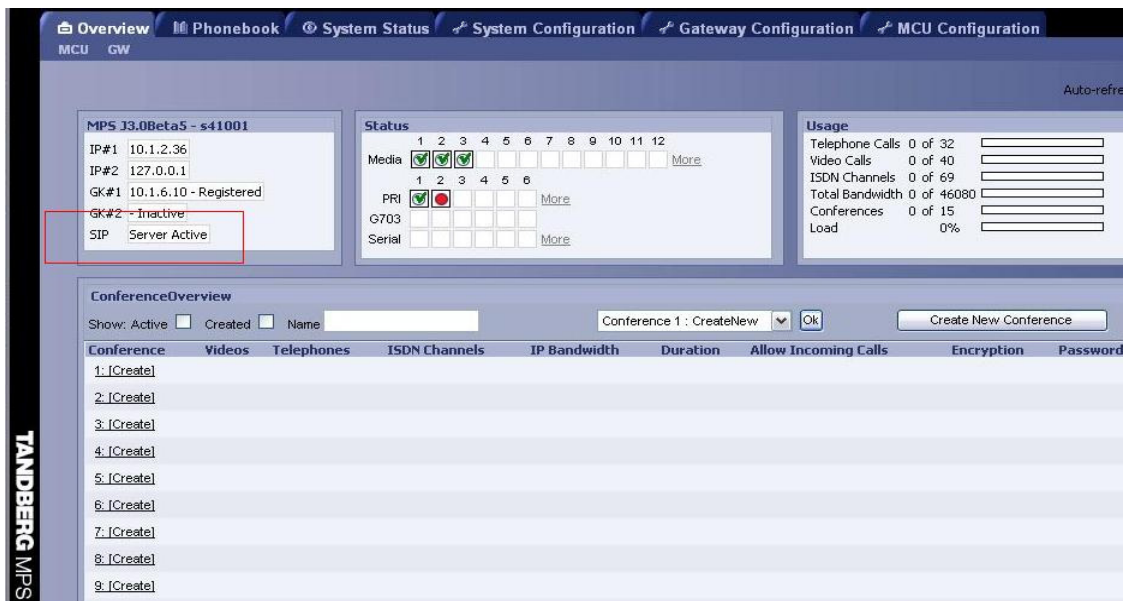


Figure 3.2.2 MPS SIP Status

Once ‘Server Active’ has been verified, it is now time to configure the appropriate SIP dial-ins for the MPS system. Navigate to MCU Configuration → Dial In Numbers.

Within this screen, enter in all of the appropriate SIP URIs for the appropriate dial-in conferences and single number dial-in interface. **NOTE:** all SIP URIs configured in the MPS must be fully qualified domain names with the domain name that is configured under 'Routing' within LCS. In addition, the prefix entered under routing must be included within all of the SIP names for the MPS to properly receive the calls. For example, if the domain name for the LCS server is "lcs.int" and the SIP prefix for the MPS was configured as "MPS*", your dial-in numbers must begin with MPS and end with @lcs.int in order to be valid (e.g. MPSConference1@lcs.int, MPSConference2@lcs.int, MPSDialin@lcs.int, MPS12345@lcs.int).

Once all of the dial-in URIs are configured, the MPS is ready to make and receive SIP calls from other SIP devices registered to the LCS network.