Cisco Unified Communications 500 Series

DISCLAIMER
The attached document is provided as a basic guideline for setup and configuration of Cisco Unified Communications 500 Series IP PBX systems with MegaPath's SIP Trunking service, based on MegaPath's testing and validation process. It does not include advanced configurations to enable features such as voicemail, Find-Me-Follow-Me, etc. MegaPath is not responsible for customer IP PBX configurations. For more information on advanced features, please refer to your IP PBX documentation.

IMPORTANT
DO NOT USE THE DEFAULT MEGAPATH PROFILE THAT SHIPS WITH THE CISCO CALL MANAGER EXPRESS. IT IS THE LEGACY MEGATH PROFILE WHICH NO LONGER FUNCTIONS PROPERLY. CREATE A GENERIC SERVICE PROVIDER PROFILE.

REQUIRED INFORMATION (Provided by MegaPath)
Host: _____
Maximum Number of Calls: _____
SIP username: _____
SIP Domain Name: **megapathvoice.com**
SIP password: _____

Please complete these steps prior to configuring the SIP Trunk.

DNS Server and Domain Hostname

1. Navigate to Configure - Routing - IP Addresses
2. Select the "Device Configuration" tab
    a. Domain Name: **megapathvoice.com**
    b. Enable Domain Lookup: Checked
    c. Current Servers: These should have been configured during Telephony Setup Wizard and the primary and secondary DNS server addresses should appear here. If not, enter DNS server IP information under New Server - Enter a valid IP Address then click "Add".
3. Click "OK" to save the settings

The following screen captures are included as a reference.

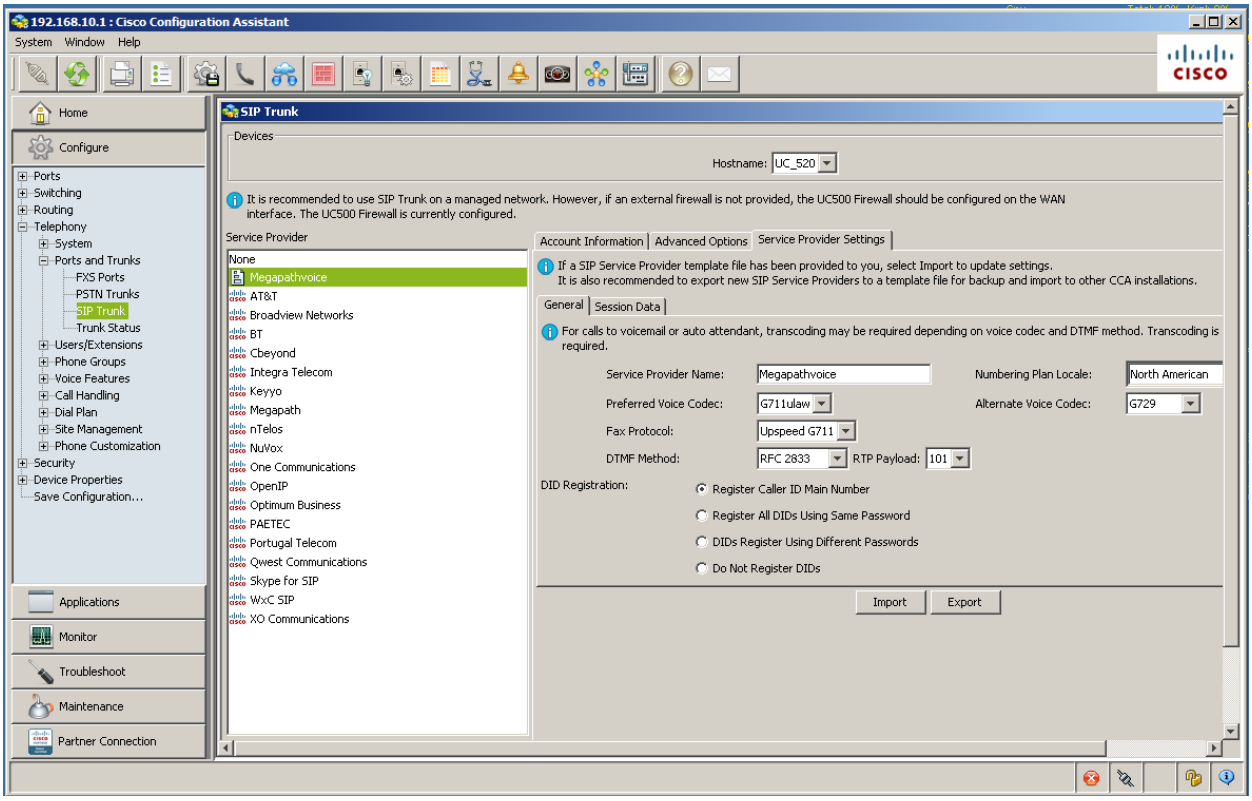

Figure 1: Configuration menu option from the main menu.

From the main configuration menu, select Telephony, Ports and Trunks, SIP Trunk. Create a generic Service Provider profile.

SRV Resolution

Using SRV records as the SIP server/registrar allows for redundancy in the case that the primary server is not reachable. This is the recommended configuration. The UC 500 Series is configured by default to attempt and resolve the SIP server address as both A and SRV records, input the SRV address as follows.

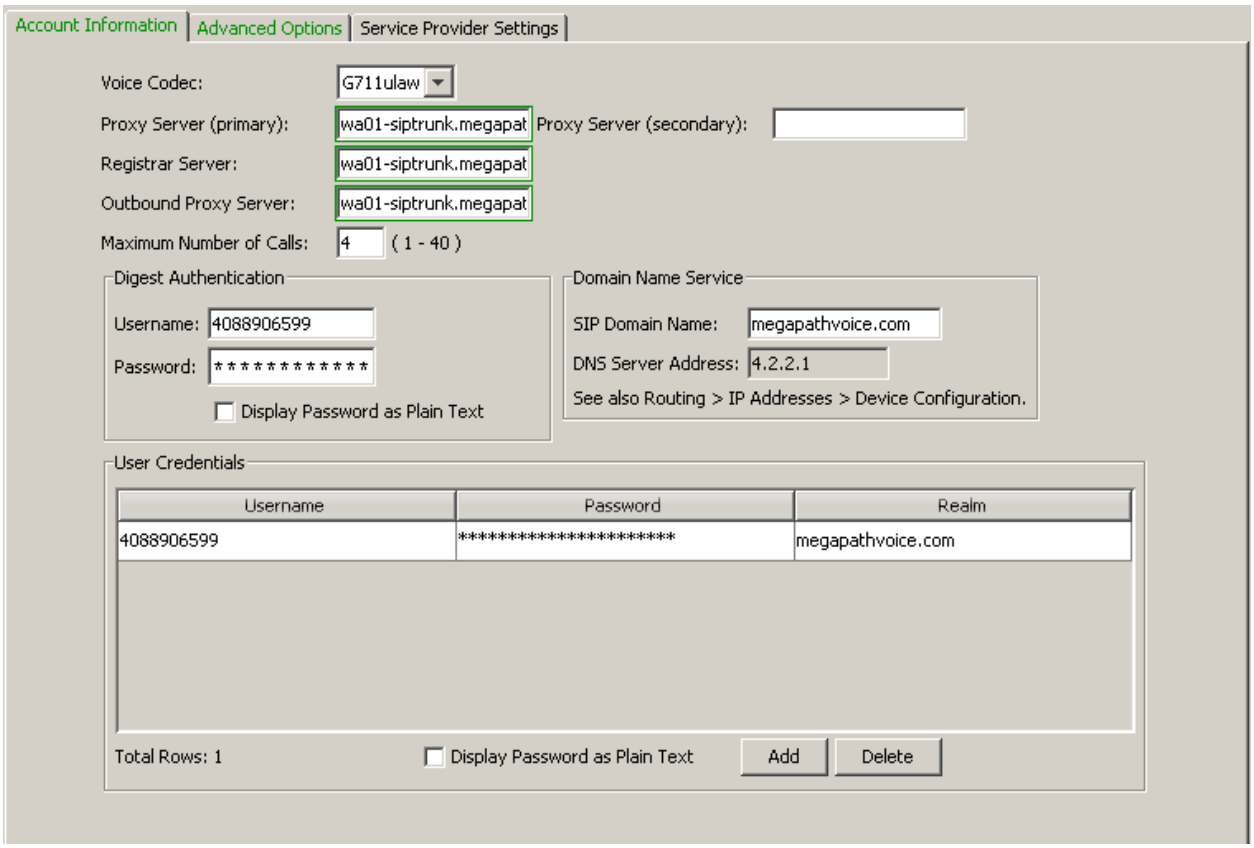

Figure 2: SIP Trunk Account Information tab.

Under the SIP Trunk Account Information tab, enter or select the following parameters:

- Voice Codec: G711ulaw
- Proxy Server: (Primary): **<provided by MegaPath>**
- Proxy Server (Secondary): leave blank
- Register Server: **<provided by MegaPath>**
- Outbound Proxy Server: **<provided by MegaPath>**
- Maximum Number of Calls: **<Number of Trunks>**
- Username: **<provided by MegaPath>**
- Password: **<provided by MegaPath>**
- SIP Domain Name: **megapathvoice.com**
- User Credentials
    - Username: **<provided by MegaPath>**
    - Password: **<provided by MegaPath>**
    - Realm: **megapathvoice.com**

Due to the way that SRV resolves, the Cisco UC500 needs to be explicitly configured to allow the SBC IP addresses. If skipped, registrations will fail as the UC500 will not recognize the server as authorized and therefore will not respond.

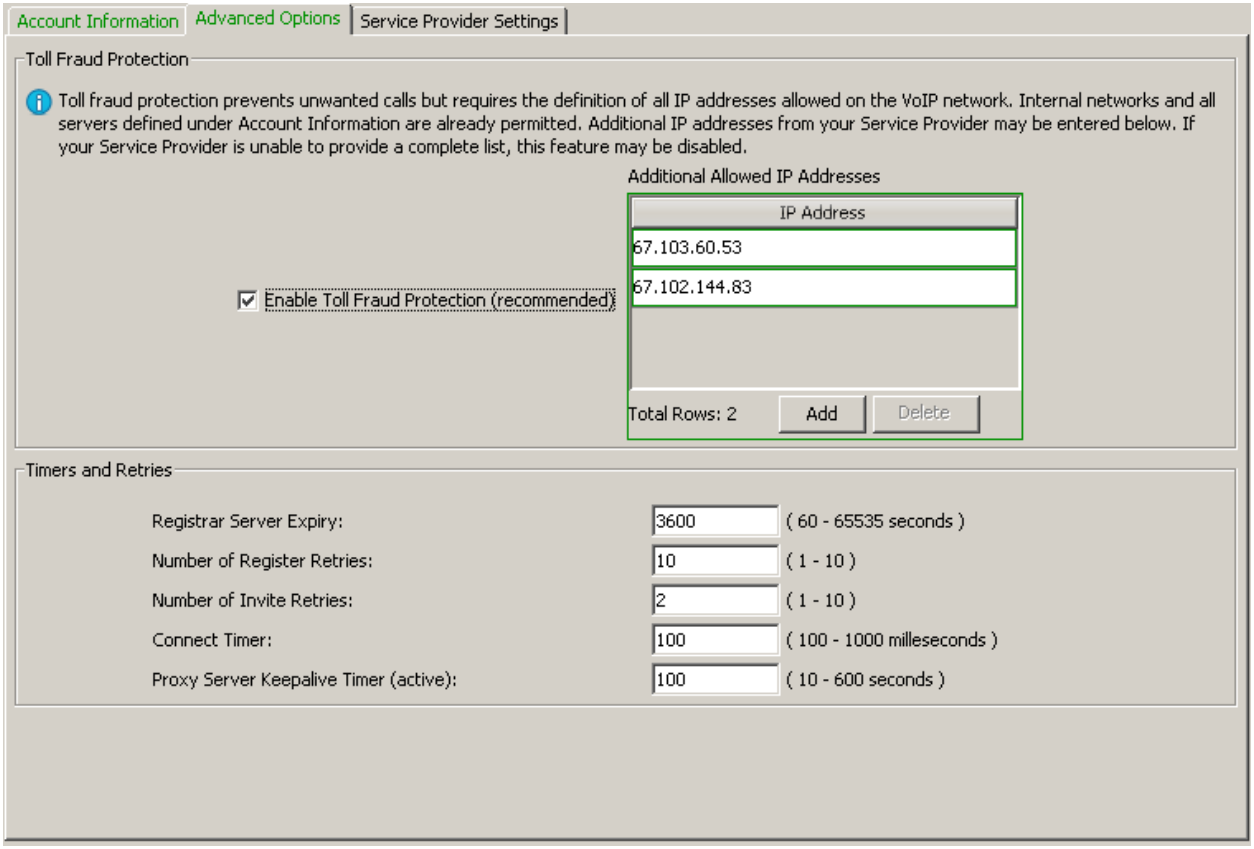

Figure 3: SIP Trunk Advanced Options

Within the SIP Trunk window, click the "Advanced Options" tab. Click "Add" and input each of the following addresses:

Additional Allowed IP Addresses:

- **67.103.60.53**
- **67.102.144.83**

Note – These IP Addresses may change at any time without prior notice!

Due to the use of SRV DNS, the UC 500 produces an error that the SIP server is not reachable although registration has likely succeeded. This error may appear one or more

times, ignore it and click "OK" to continue.

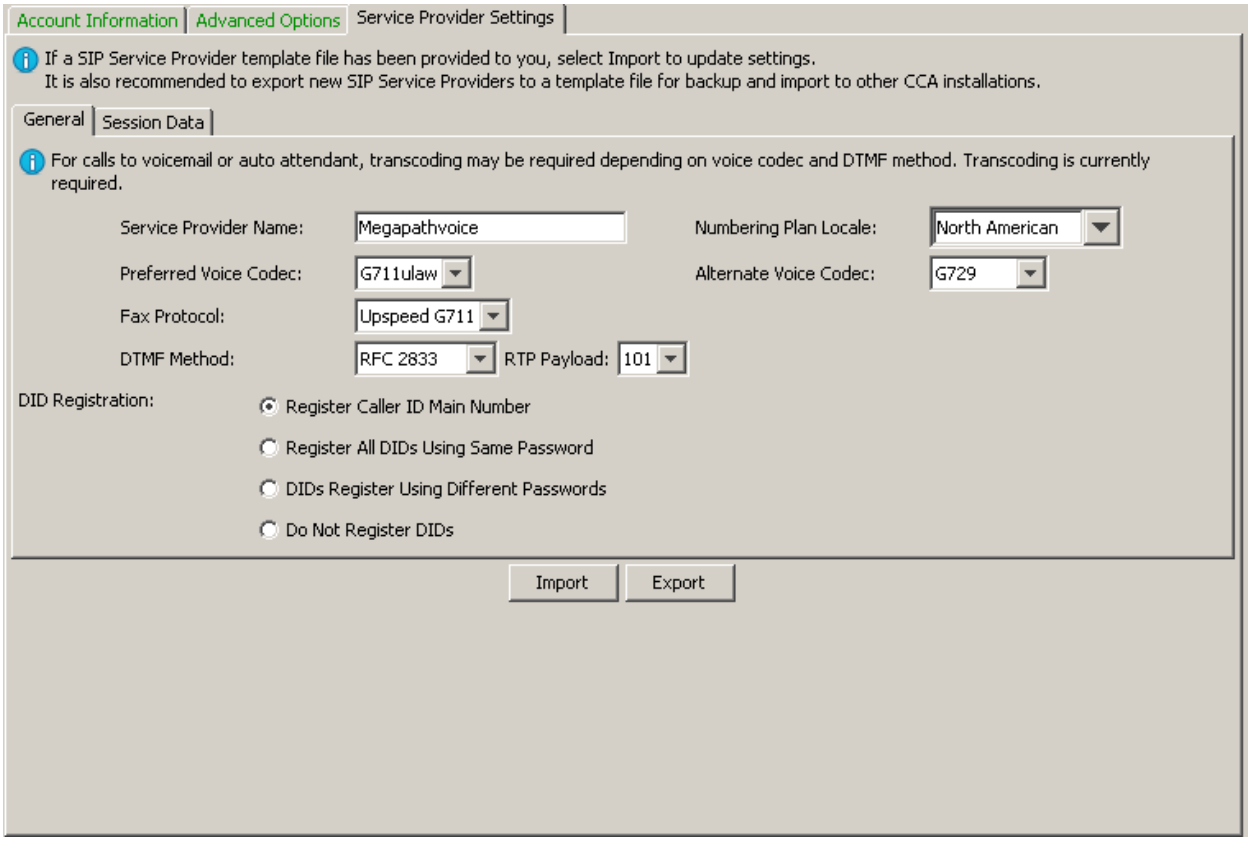

Figure 3: Service Provider Settings

Under the Service Provider Settings, apply the following parameters:

- Service Provider Name: **MegapathVoice**
- Preferred Voice Codec: G711ulaw
- Fax Protocol: Up speed G711
- DTMF Method: RFC 2833
- RTP Payload: 101
- Numbering Plan Locale: North American
- Alternate Voice Codec: G729
- DID Registration: Register Caller ID Main Number

NOTE:
IT IS POSSIBLE TO OVER-RIDE THE MAIN NUMBER CALLER-ID BY SPECIFYING THE OUTBOUND CALLER-ID PER USER EXTENSION TO APPLY IN OVER-RIDING THE MAIN NUMBER CALLER-ID. THIS CAN BE ACCOMPLISHED UNDER USER EXTENSIONS.