

I. Introduction

This MiVoice Business R7.0 Integration Guide provides general instructions for integration of the **Talkaphone VOIP Series Phone/WEBS® Series Device** with a Mitel MiVoice Business installation. It is recommended to read this instruction set completely before starting any installation. For detailed Talkaphone VOIP Series Phone/WEBS® Series Device setup instructions, please consult the **Talkaphone VOIP Series Phone/WEBS® Series Device Manual**.



Talkaphone's VOIP Series Phone has tested compatible with Mitel MiVoice Business R7.0. The Mitel Compatible logo signifies that Talkaphone's product has undergone interoperability testing by Talkaphone together with Mitel based on testing criteria set by Mitel. Talkaphone is solely responsible for the support and warranty of its product. Mitel makes no warranties, express or implied, with respect to Talkaphone's product or its interoperation with the listed Mitel product(s) and disclaims any implied warranties of merchantability, fitness for a particular use, or against infringement.

II. Prerequisites

- Mitel MiVoice Business R7.0 pre-installed
- SIP Device Licensing for Third-party SIP (Basic) devices
- Network access to the MiVoice Server, **Talkaphone VOIP Series Phone/WEBS® Series Device** and all network services (SIP, TFTP, HTTP, FTP, DNS, RTP/SRTP)

III. MiVoice Business Basic Configuration

Basic instructions for integrating a **Talkphone VOIP Series Phone/WEBS® Series Device** with a Mitel MiVoice Business R7.0 are included. Advanced setup of MiVoice Business features is outside the scope of this document.

1. Using a web browser, enter the IP address (or FQDN if configured) of the MiVoice Business Server in the address bar:



Figure 1 – Login Page

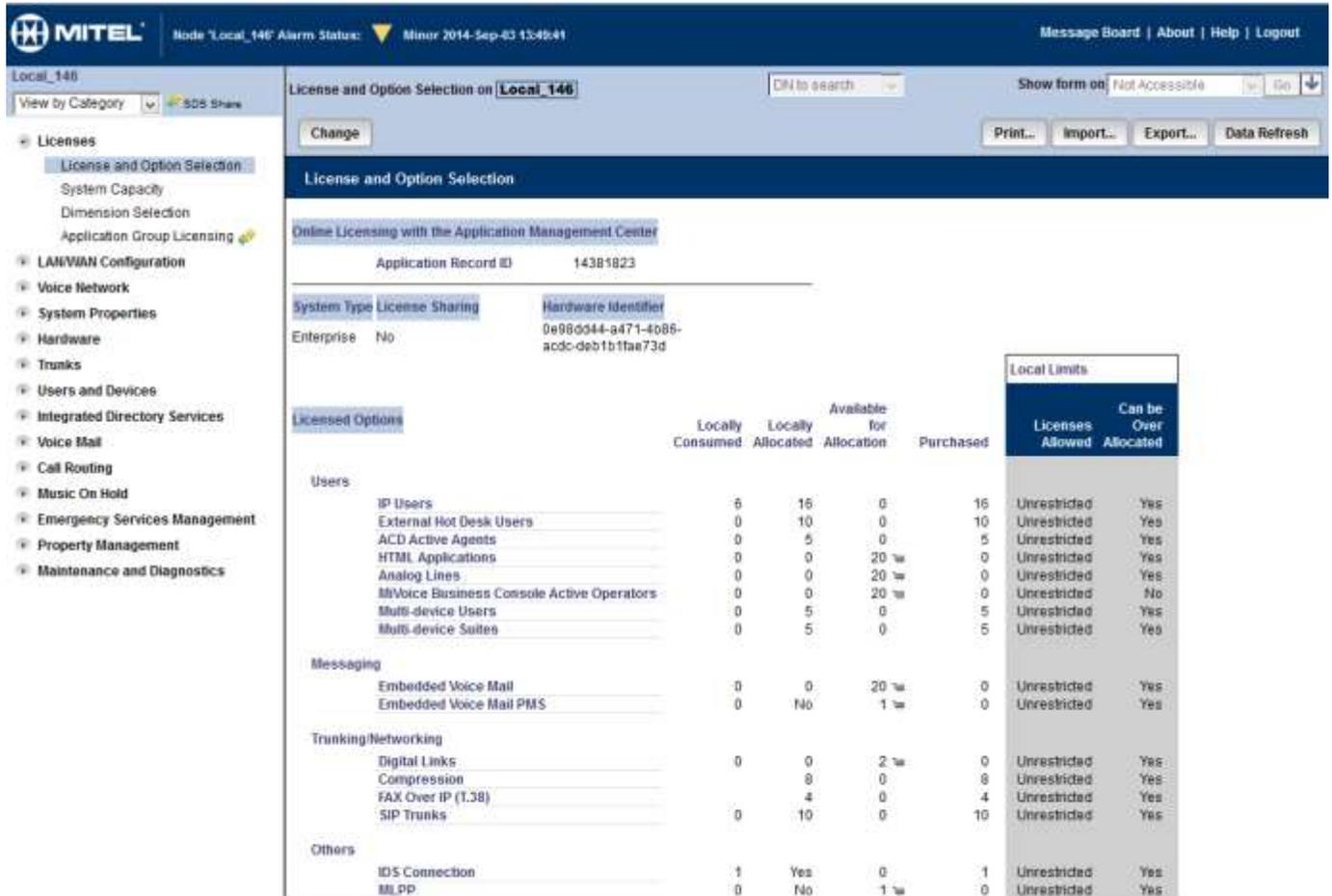
2. Login to MiVoice Business and click on the 'System Administration Tool':



Figure 2 – System Administration Tool

3. Go to Licenses-> License and Option Selection

Ensure that the MiVoice Business is equipped with enough SIP Device licenses for the connection of SIP end points. This can be verified within the License and Option Selection form.



The screenshot shows the MITEL web interface for 'Local_146'. The main content area is titled 'License and Option Selection on Local_146'. It includes a search bar, a 'Change' button, and action buttons for 'Print...', 'Import...', 'Export...', and 'Data Refresh'. Below this is a section for 'Online Licensing with the Application Management Center' showing 'Application Record ID: 14381823'. The system details are as follows:

System Type	License Sharing	Hardware Identifier
Enterprise	No	0e980544-a471-4b86-acdc-deb1b1fae73d

The 'Licensed Options' table is as follows:

Licensed Options					Local Limits	
	Locally Consumed	Locally Allocated	Available for Allocation	Purchased	Licenses Allowed	Can be Over Allocated
Users						
IP Users	6	16	0	16	Unrestricted	Yes
External Hot Desk Users	0	10	0	10	Unrestricted	Yes
ACD Active Agents	0	5	0	5	Unrestricted	Yes
HTML Applications	0	0	20 %	0	Unrestricted	Yes
Analog Lines	0	0	20 %	0	Unrestricted	Yes
MiVoice Business Console Active Operators	0	0	20 %	0	Unrestricted	No
Multi-device Users	0	5	0	5	Unrestricted	Yes
Multi-device Suites	0	5	0	5	Unrestricted	Yes
Messaging						
Embedded Voice Mail	0	0	20 %	0	Unrestricted	Yes
Embedded Voice Mail PMS	0	No	1 %	0	Unrestricted	Yes
Trunking/Networking						
Digital Links	0	0	2 %	0	Unrestricted	Yes
Compression		8	0	8	Unrestricted	Yes
FAX Over IP (T.38)		4	0	4	Unrestricted	Yes
SIP Trunks	0	10	0	10	Unrestricted	Yes
Others						
IDS Connection	1	Yes	0	1	Unrestricted	Yes
MLPP	0	No	1 %	0	Unrestricted	Yes

Figure 3 – License and Option Selection

4. Go to System Properties-> System Feature Settings-> Class of Service Options

In the Class of Service Options, program a Class of Service Number for the Talkphone VOIP

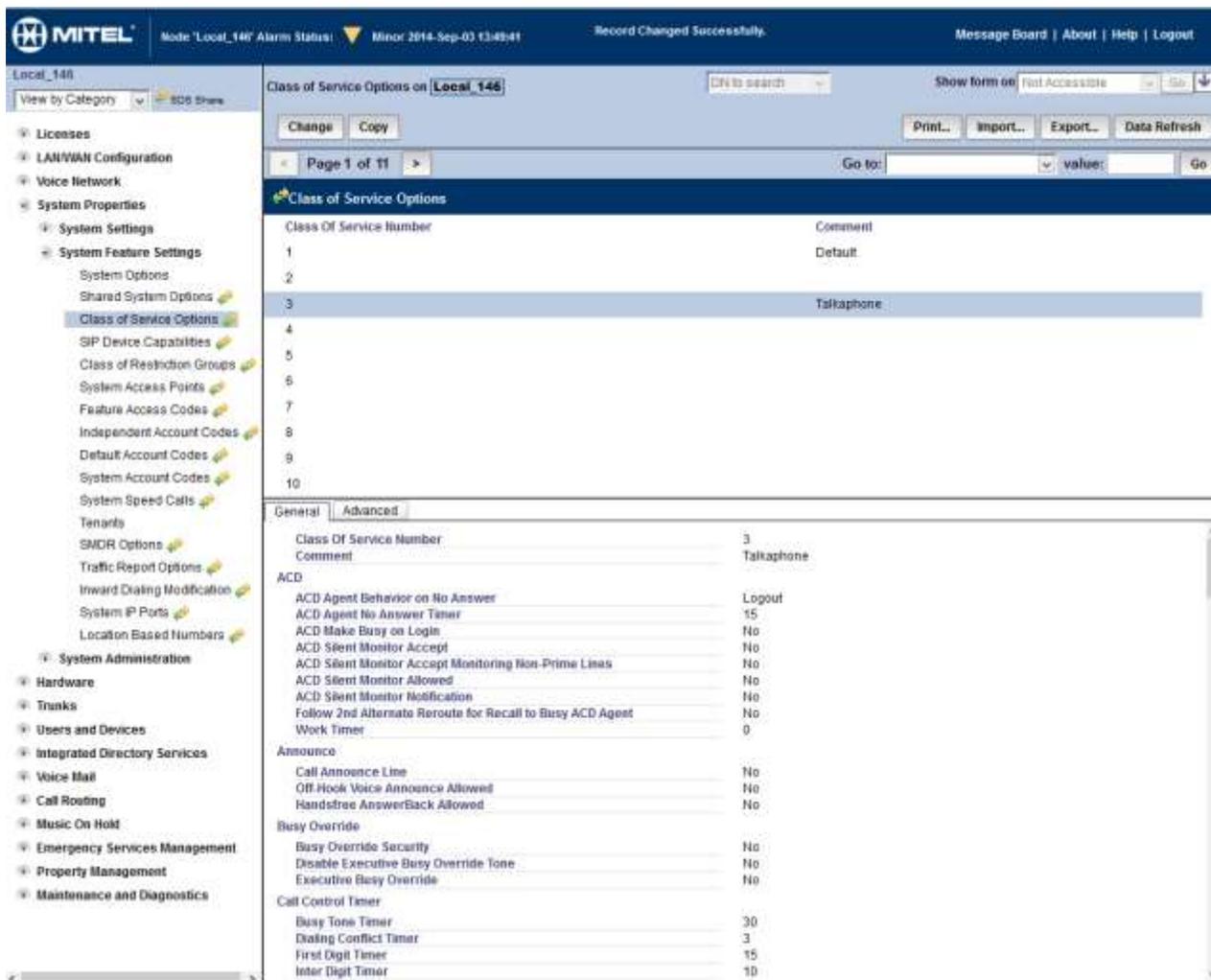
Series Phone/WEBS® Series Device. Make the following changes and then click **'Save Changes'**

Many different options may be required for your site deployment, but these are the options that are required to be changed from the default for a Generic SIP Device to work with the MiVoice Business.

Conference Call: Set to 'Yes'

Public Network Access via DPNSS: Set to 'Yes'

Auto Campon Timer: Leave as blank (no value)



The screenshot shows the Mitel configuration interface for 'Local_146'. The left-hand navigation menu is expanded to 'System Feature Settings' > 'Class of Service Options'. The main area displays a table of Class of Service Options:

Class Of Service Number	Comment
1	Default
2	
3	Talkphone
4	
5	
6	
7	
8	
9	
10	

Below the table, the configuration for Class 3 is shown in the 'Advanced' tab:

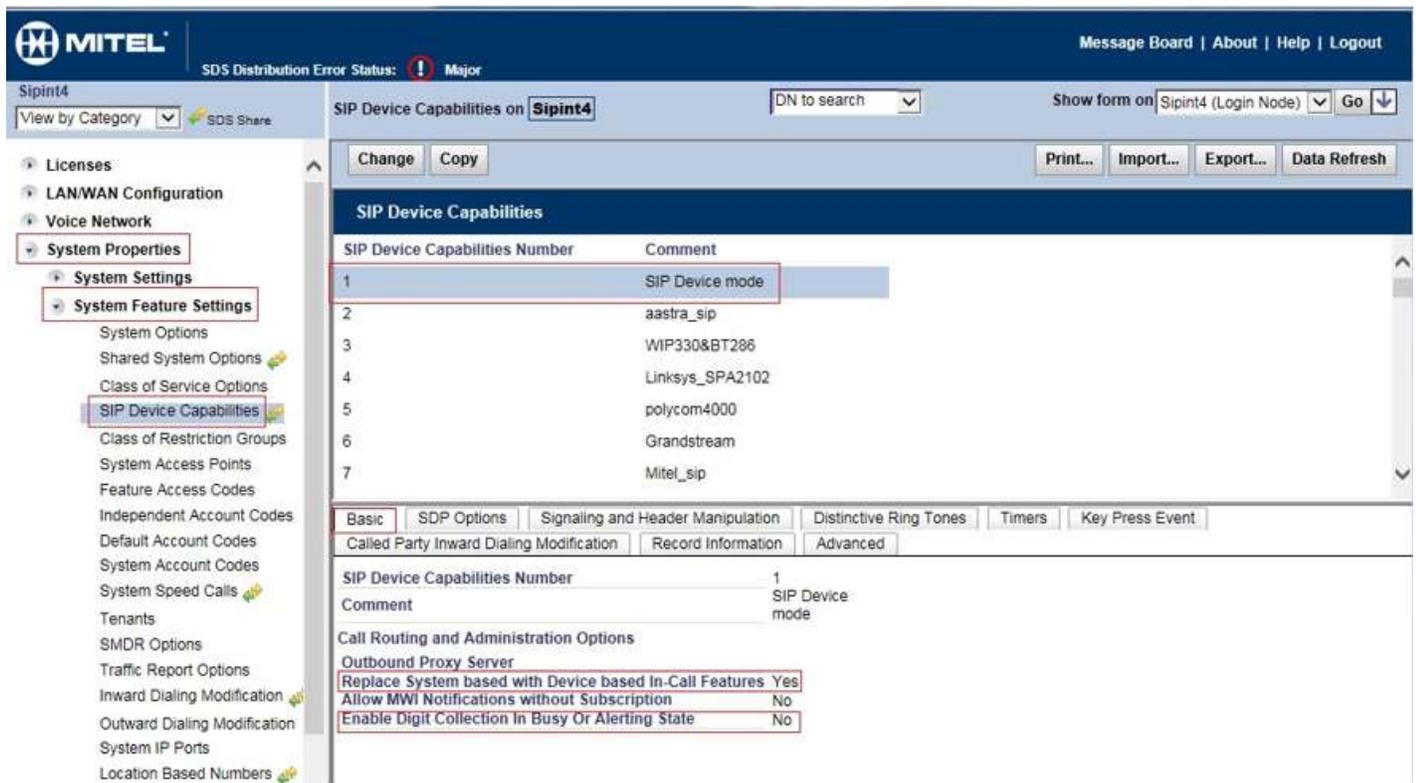
Class Of Service Number	3
Comment	Talkphone
ACD	
ACD Agent Behavior on No Answer	Logout
ACD Agent No Answer Timer	15
ACD Make Busy on Login	No
ACD Silent Monitor Accept	No
ACD Silent Monitor Accept Monitoring Non-Prime Lines	No
ACD Silent Monitor Allowed	No
ACD Silent Monitor Notification	No
Follow 2nd Alternate Route for Recall to Busy ACD Agent	No
Work Timer	0
Announce	
Call Announce Line	No
Off Hook Voice Announce Allowed	No
Handsfree AnswerBack Allowed	No
Busy Override	
Busy Override Security	No
Disable Executive Busy Override Tone	No
Executive Busy Override	No
Call Control Timer	
Busy Tone Timer	30
Dialing Conflict Timer	3
First Digit Timer	15
Inter Digit Timer	10

Figure 4 – Class of Service Options

5. Go to System Properties-> System Feature Settings-> SIP Device Capabilities

In the Device Capabilities form, program a SIP Device Capabilities Number for the Talkphone VOIP Series Phone/WEBS® Series Device. Make the following changes and then click 'Save Changes'.

Replace System based with Device based In-Call Feature: Set to 'Yes'.



The screenshot shows the MITEL SIP Device Capabilities configuration page. The left sidebar contains a navigation tree with 'System Properties' and 'System Feature Settings' expanded. The main content area shows a table of SIP Device Capabilities with 7 entries. The first entry is highlighted. Below the table, there are tabs for configuration options, and the 'Advanced' tab is selected, showing settings for 'Replace System based with Device based In-Call Features' set to 'Yes'.

SIP Device Capabilities Number	Comment
1	SIP Device mode
2	aastra_sip
3	WIP330&BT286
4	Linksys_SPA2102
5	polycom4000
6	Grandstream
7	Mitel_sip

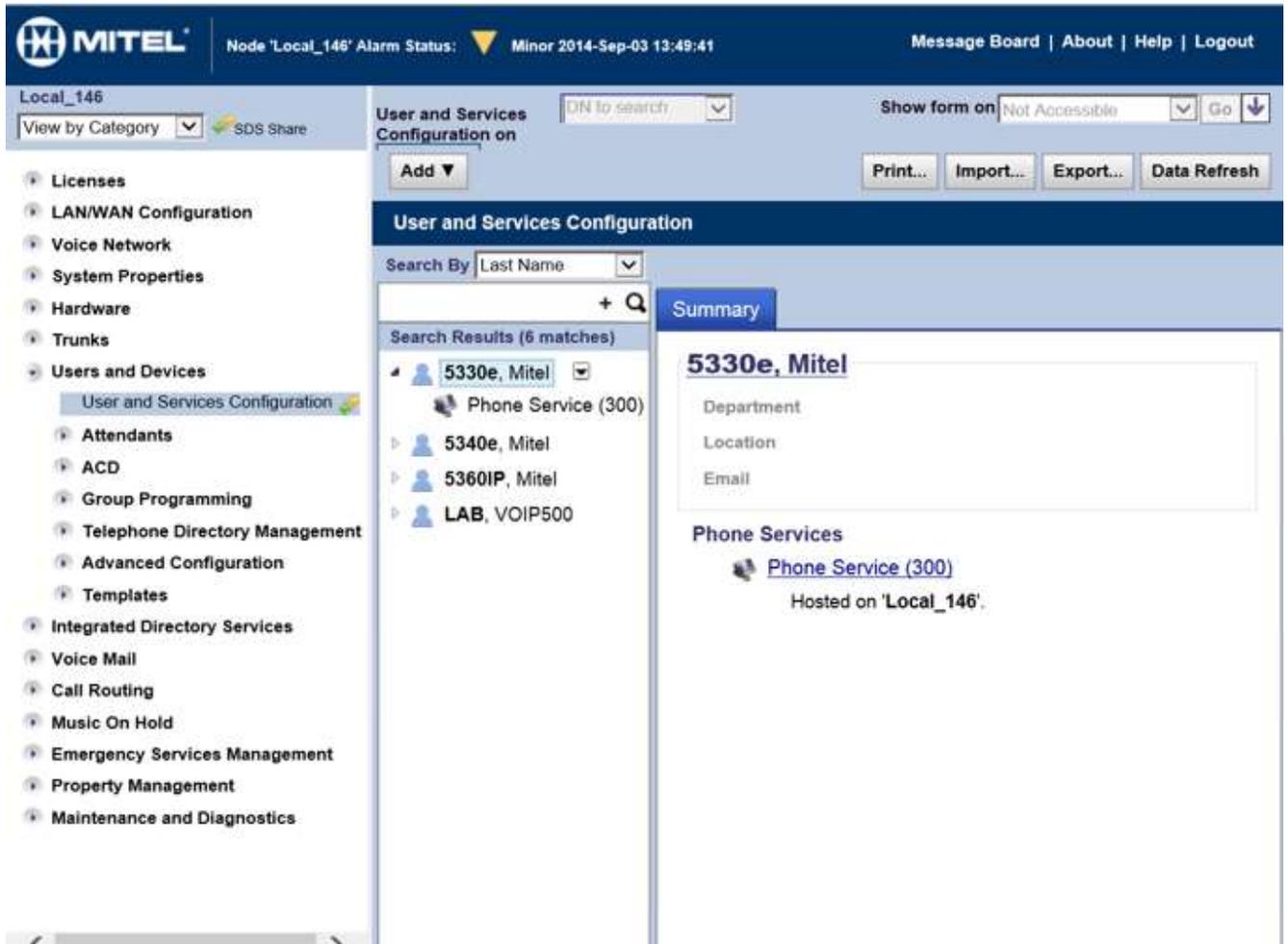
Configuration options for SIP Device Capabilities Number 1:

- Replace System based with Device based In-Call Features: Yes
- Allow MWI Notifications without Subscription: No
- Enable Digit Collection In Busy Or Alerting State: No

Enable Digit Collection in Busy Or Alerting State: Set to "No"

Figure 5 – SIP Device Capabilities

6. Go to Users and Devices-> Users and Services Configuration

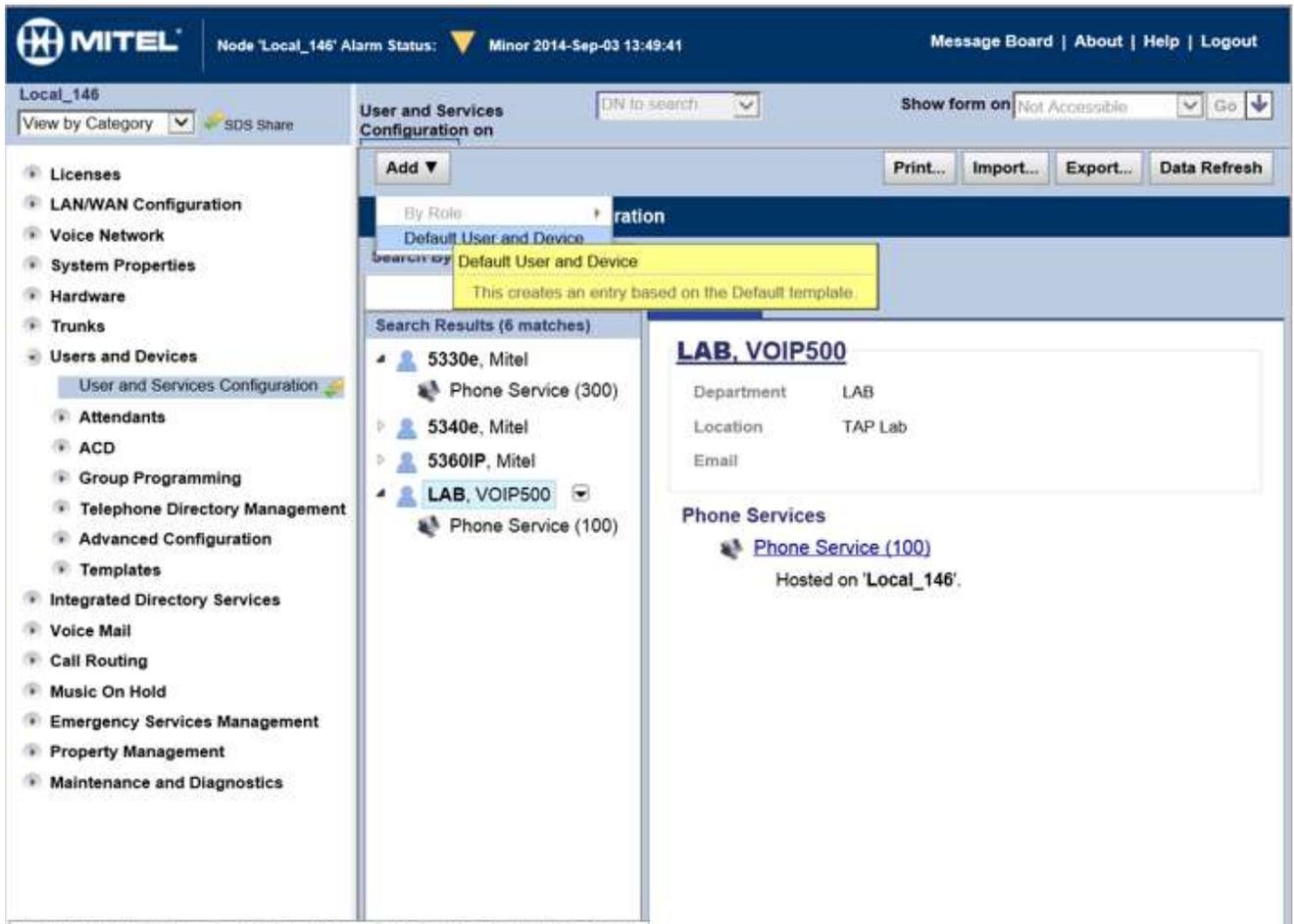


The screenshot shows the Mitel User and Services Configuration web interface. The top navigation bar includes the Mitel logo, node information ('Local_146'), and a status indicator ('Minor 2014-Sep-03 13:49:41'). The main content area is titled 'User and Services Configuration' and features a search bar with 'Last Name' selected. Below the search bar, there are search results for '5330e, Mitel' and a summary for '5330e, Mitel'. The summary includes fields for Department, Location, and Email, and a section for 'Phone Services' showing 'Phone Service (300)' hosted on 'Local_146'.

Services Configuration



7. C

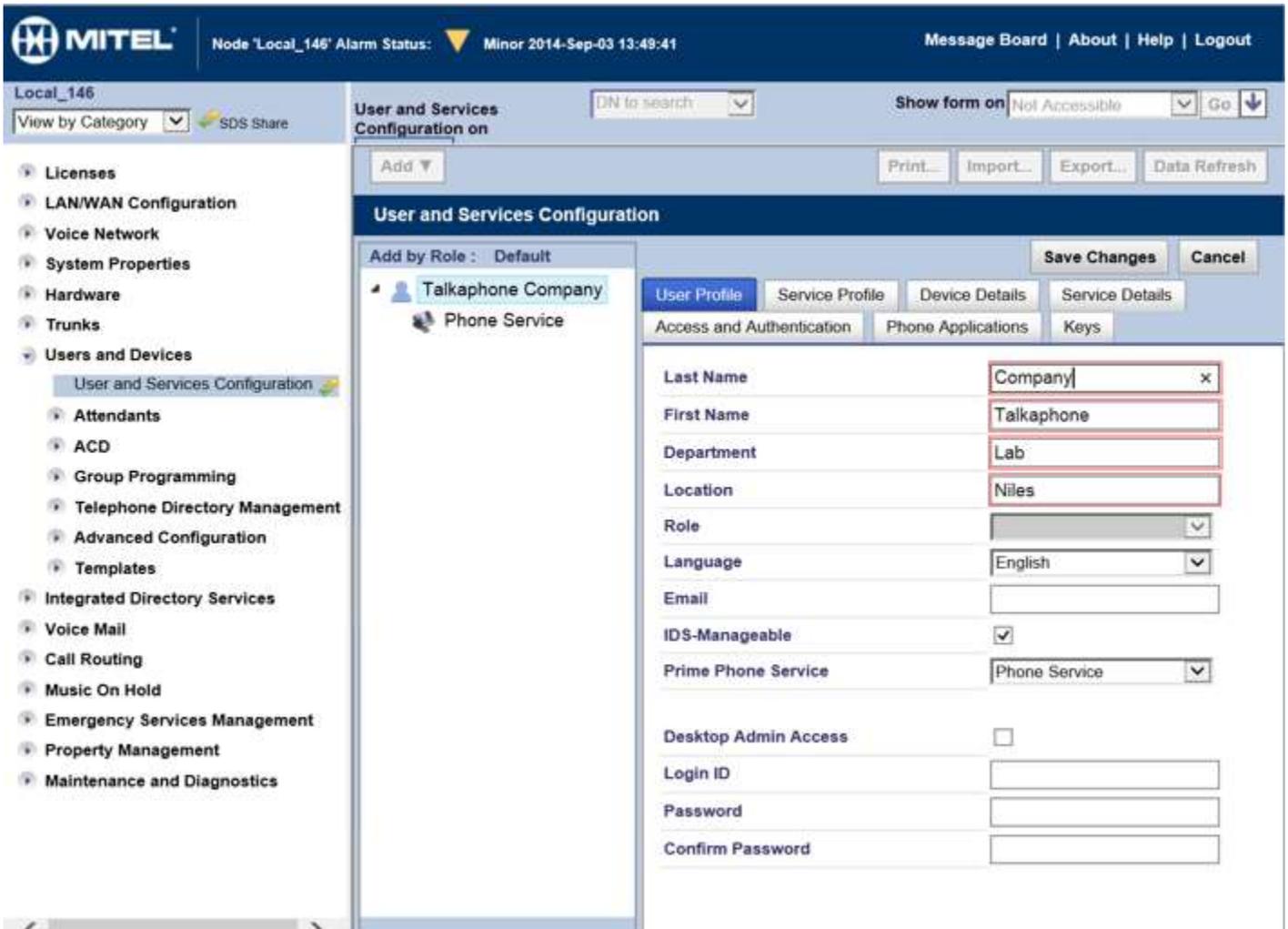


add a new user and associated device.

Figure 7 – Add a new User

- a. In the 'User Profile' page enter the following fields. Then click 'Save Changes'.

Last Name: Enter a Last name for the User
First Name: Enter a First name for the User
Department: Enter a Department name
Location: Enter the location for the phone



The screenshot shows the Mitel User and Services Configuration interface. The 'User Profile' tab is selected, and the following fields are highlighted with red boxes:

Field	Value
Last Name	Company
First Name	Talkphone
Department	Lab
Location	Niles

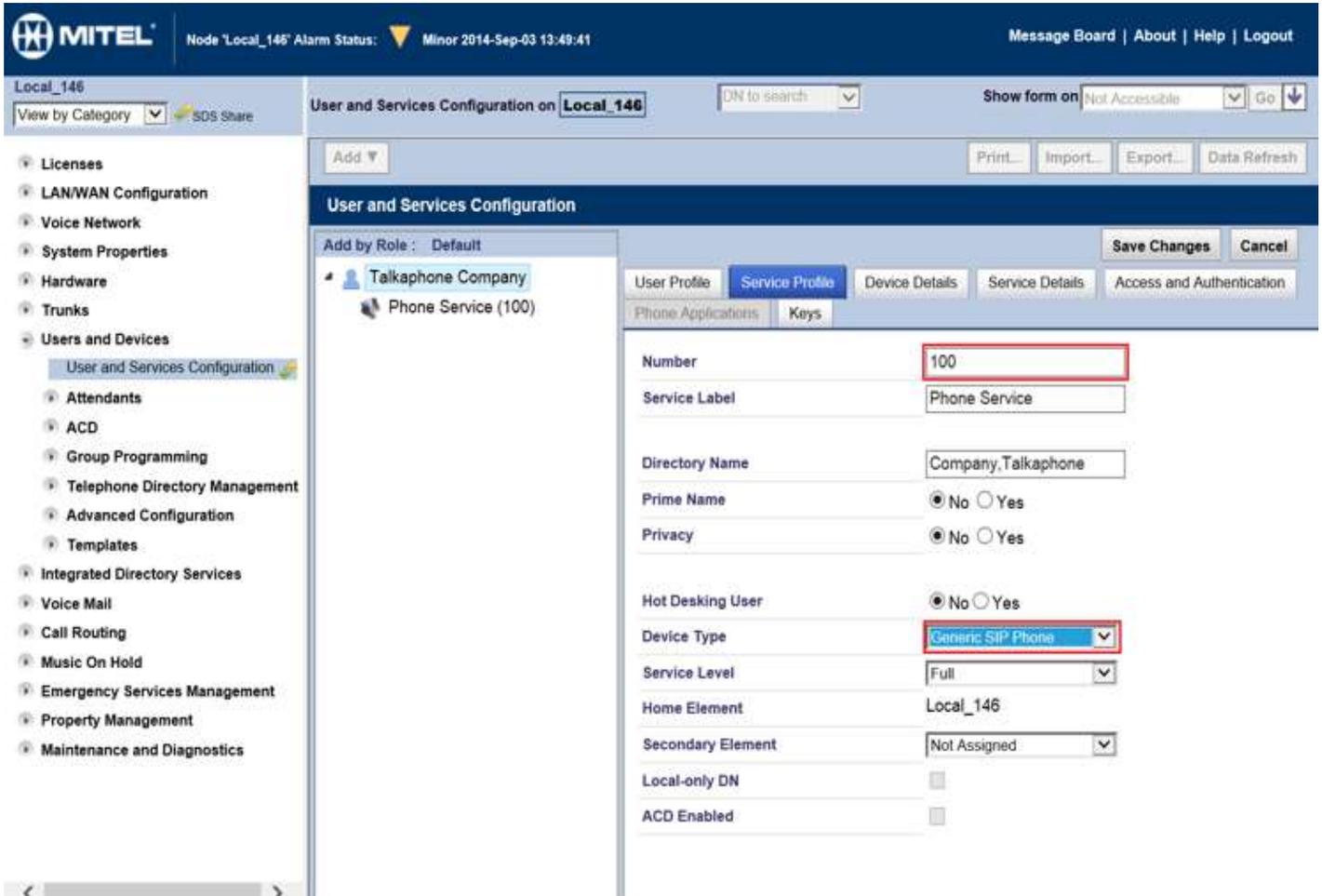
Other visible fields include: Role (dropdown), Language (English), Email (empty), IDS-Manageable (checked), Prime Phone Service (Phone Service), Desktop Admin Access (checkbox), Login ID (empty), Password (empty), and Confirm Password (empty).

Figure 8 – User Profile

- b. In the 'Service Profile' page enter the following fields. Then click 'Save Changes'.

Number: Enter a unique extension for the Talkphone VOIP Series Phone

Device Type: Select 'Generic SIP Phone'



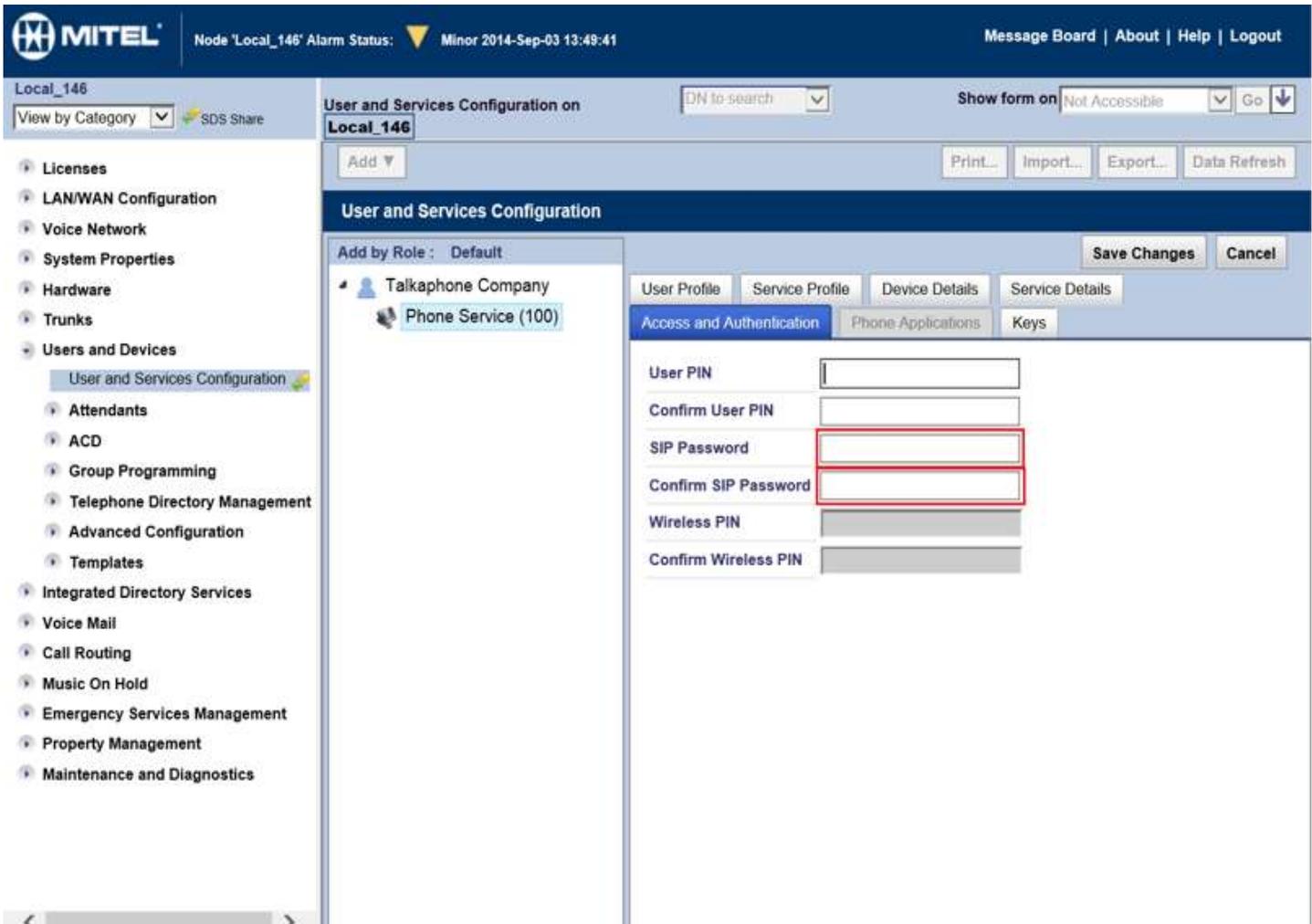
The screenshot shows the MITEL User and Services Configuration interface for Local_146. The 'Service Profile' tab is active, and the 'Number' field is highlighted with a red box, containing the value '100'. The 'Device Type' dropdown menu is also highlighted with a red box, showing 'Generic SIP Phone' selected. Other fields include Service Label (Phone Service), Directory Name (Company, Talkphone), Prime Name (No), Privacy (No), Hot Desking User (No), Service Level (Full), Home Element (Local_146), and Secondary Element (Not Assigned). The interface includes a left-hand navigation menu, a top status bar, and various action buttons like 'Save Changes' and 'Cancel'.

Figure 10 – Service Profile

- c. In the 'Access and Authentication' page enter the following fields. Then click 'Save Changes'.

SIP Password: Enter a password for this user in the system

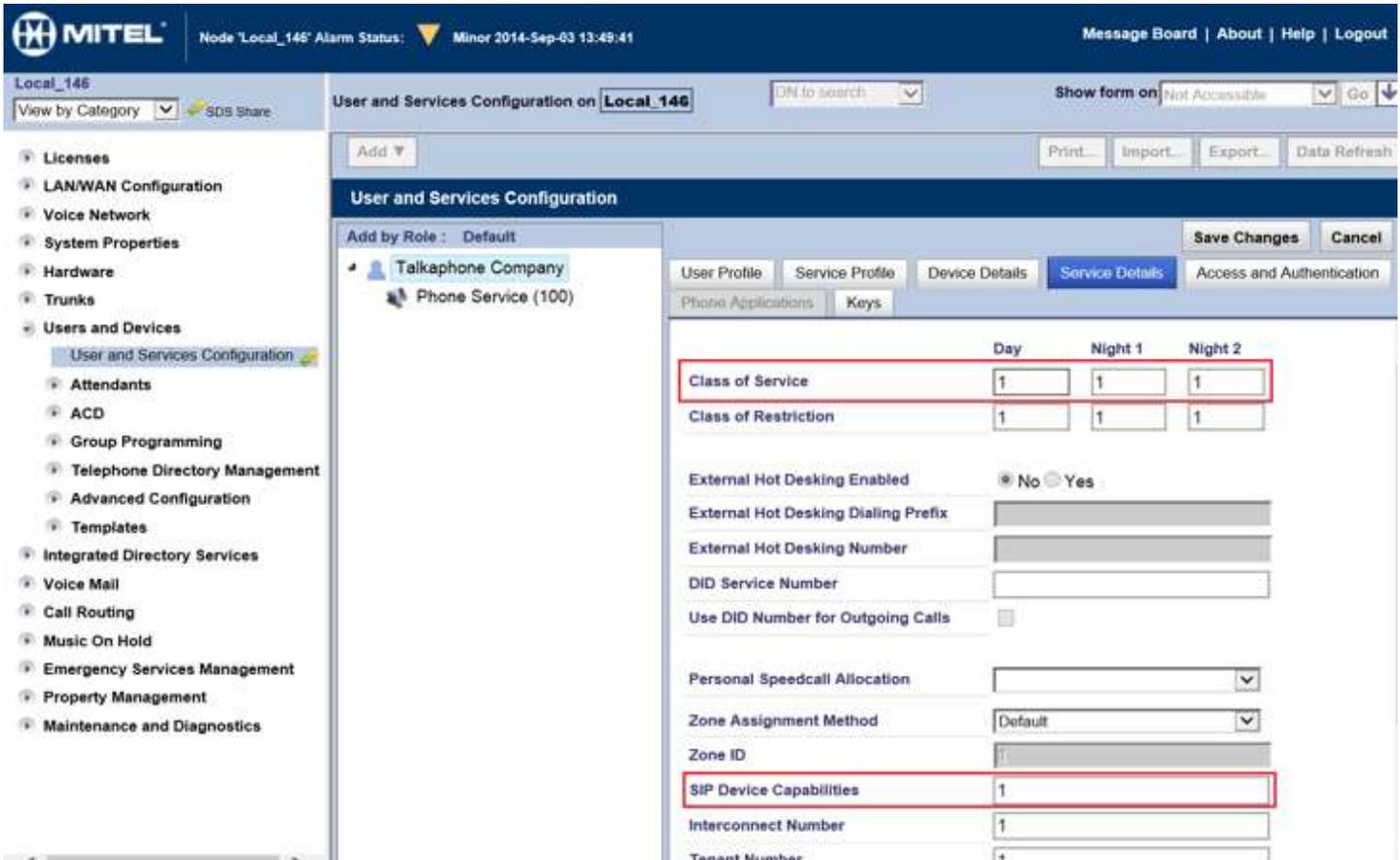
Confirm SIP Password: Re-enter the password



The screenshot shows the Mitel User and Services Configuration interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, and Users and Devices. The main area is titled 'User and Services Configuration on Local_146'. It features a search bar, a 'Show form on' dropdown, and buttons for 'Print...', 'Import...', 'Export...', and 'Data Refresh'. Below this is a 'User and Services Configuration' section with a tree view showing 'Talkphone Company' and 'Phone Service (100)'. The 'Access and Authentication' tab is selected, displaying fields for 'User PIN', 'Confirm User PIN', 'SIP Password', 'Confirm SIP Password', 'Wireless PIN', and 'Confirm Wireless PIN'. The 'SIP Password' and 'Confirm SIP Password' fields are highlighted with red boxes.

Figure 11 – Access and Authentication

- d. In the 'Service Details' page enter the following fields. Then click 'Save Changes'.
- Class of Service:** Enter the Class of Service Options number for Talkphone's VOIP Series Phone as in Step 4.
 - SIP Device Capabilities:** Enter the SIP Device Capabilities number for Talkphone's VOIP Series Phone as in Step 5.



The screenshot shows the MITEL User and Services Configuration interface. The main configuration area is titled 'User and Services Configuration' and is set for 'Local_146'. The 'Service Details' tab is selected, showing the following configuration fields:

	Day	Night 1	Night 2
Class of Service	1	1	1
Class of Restriction	1	1	1
External Hot Desking Enabled	<input checked="" type="radio"/> No <input type="radio"/> Yes		
External Hot Desking Dialing Prefix			
External Hot Desking Number			
DID Service Number			
Use DID Number for Outgoing Calls	<input type="checkbox"/>		
Personal Speedcall Allocation			
Zone Assignment Method	Default		
Zone ID			
SIP Device Capabilities	1		
Interconnect Number	1		
Tenant Number	1		

Figure 12 – Service Details

8. If adding multiple Talkphone VOIP Series Phone/WEBS® Series Device, repeat Step 6a-6d for each device.



IV. Talkaphone VOIP Series Phone/WEBS® Series Device Configuration Notes

Pre-requisites

Prior to configuring a Talkaphone VOIP Series Phone/WEBS® Series Device, ensure the unit is powered on and connected to the network. The Talkaphone VOIP Series Phone/WEBS® Series Device can be configured from a computer with either a TCP/IP network connection or a DB-9 Serial port. The Talkaphone VOIP Series Phone/WEBS® Series Device supports straight-through serial connections for basic programming. For access to the full configurable feature set, a web browser will be required.

The Talkaphone VOIP Series Phone/WEBS® Series Device currently supports access from:

- Internet Explorer 8 or greater
- Firefox 3.5 or greater

Accessing the Talkaphone VOIP Series Phone/WEBS® Series Device WEB GUI

9. Ensure both the Talkaphone VOIP Series Phone/WEBS® Series Device and your PC are connected to the Local Area Network. A direct connection to the Talkaphone VOIP Series Phone/WEBS® Series Device will require the use of a crossover network cable.

Talkaphone VOIP Series Phone/WEBS® Series Device are pre-configured with the following default settings:

IP Address: 192.168.1.10

Username: admin / Password: admin@123

Configure the IP address of your PC to be on the same subnet as the Talkaphone VOIP Series Phone/WEBS® Series Device. For example, 192.168.1.3

10. Open a supported web browser and direct it to the IP address of the Talkaphone VOIP Series Phone/WEBS® Series Device. For example, enter the following URL: <http://192.168.1.10>.

11. The browser prompts for authentication.

Enter the default Username and Password. After authentication is successful, you are redirected to the WEB GUI Home page.

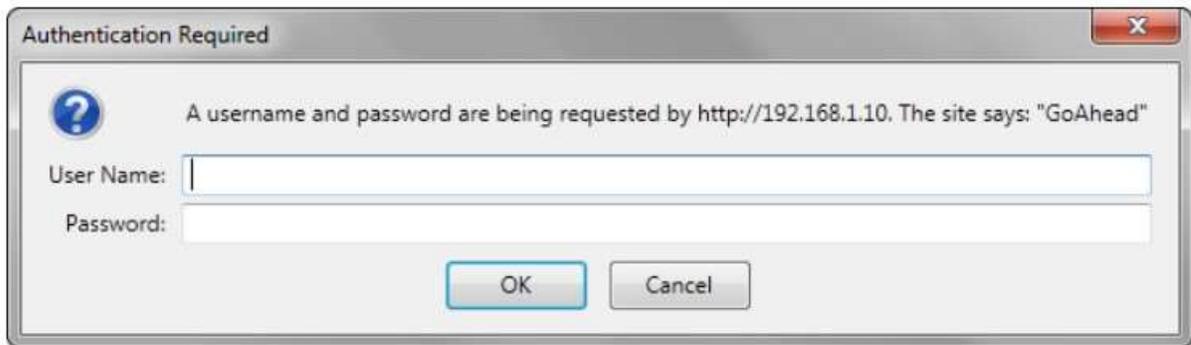


Figure 13 – Authentication Tab

Configuration Settings Using the WEB GUI

12. The 'Home' page shows the Hostname, current Firmware version and the MAC address of the device.

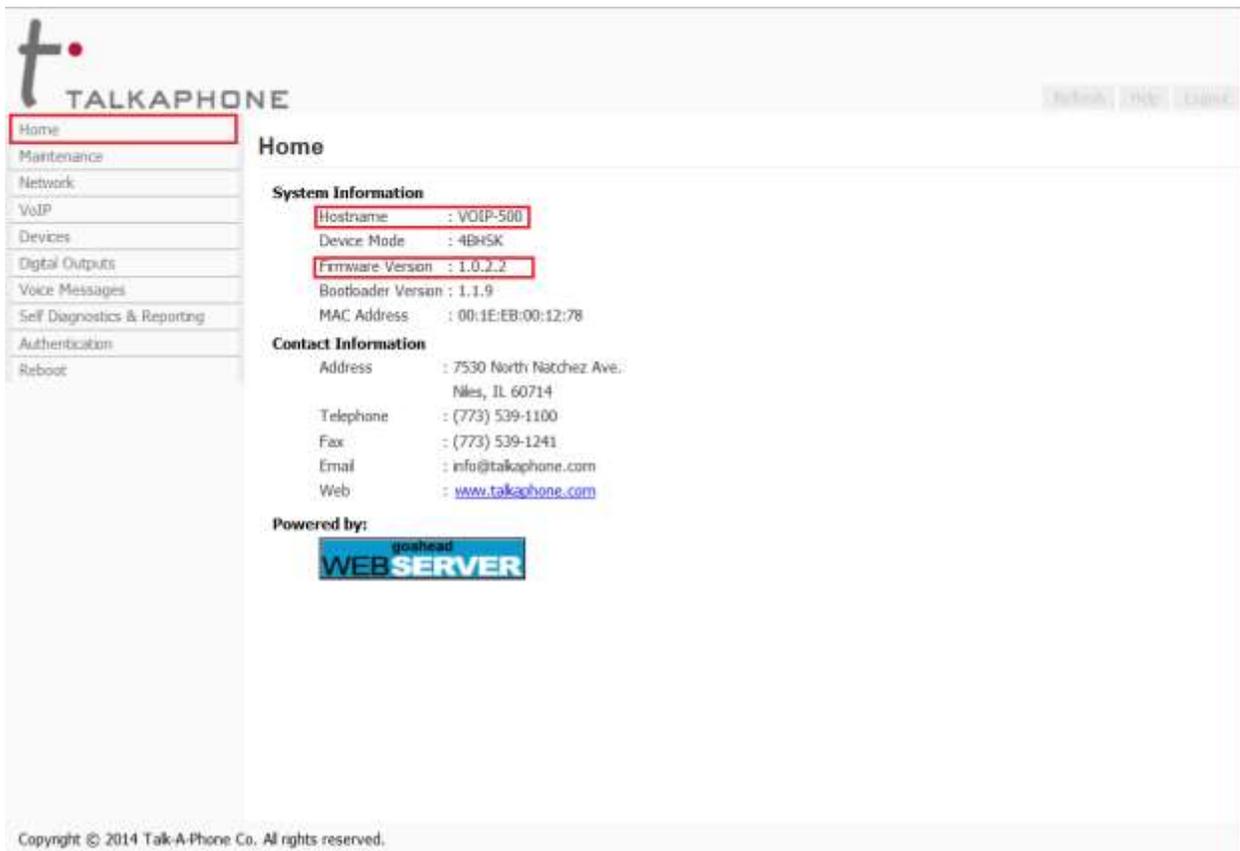
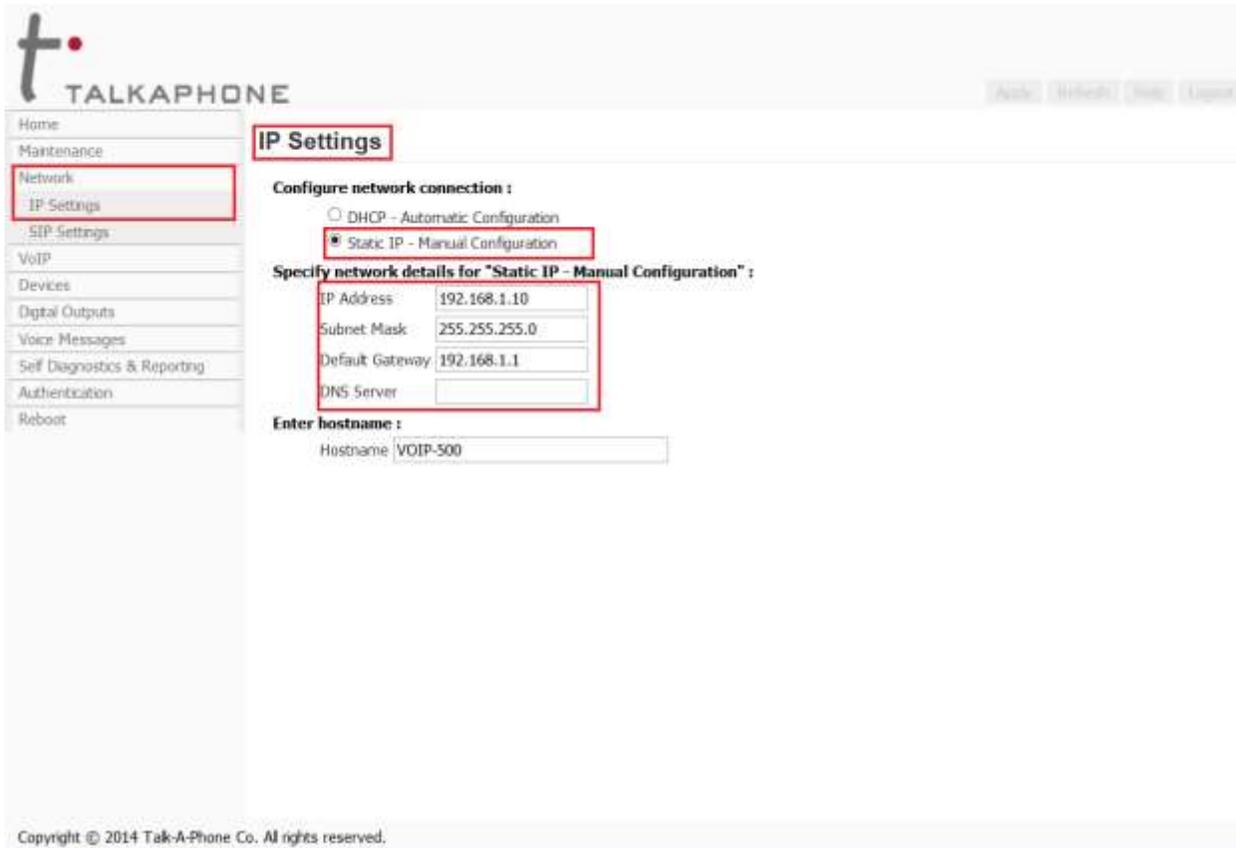


Figure 14 – Home Screen

13. Go to Network-> IP Settings. Make the following changes and click 'Apply' to save changes.

DHCP: Select DHCP to automatically assign an IP address to the device.



Static IP: Manually set static IP and network addresses.

Figure 15 – IP Settings

14. Go to SIP Settings page and manually enter SIP settings and click **'Apply'** to save changes.

Assign a phone number: Enter the extension number as created in step 6 'Service Profile' -> 'Phone Number' in the MiVoice Business.

Specify FQDN/IP Address: Enter the IP address of the MiVoice Business server.

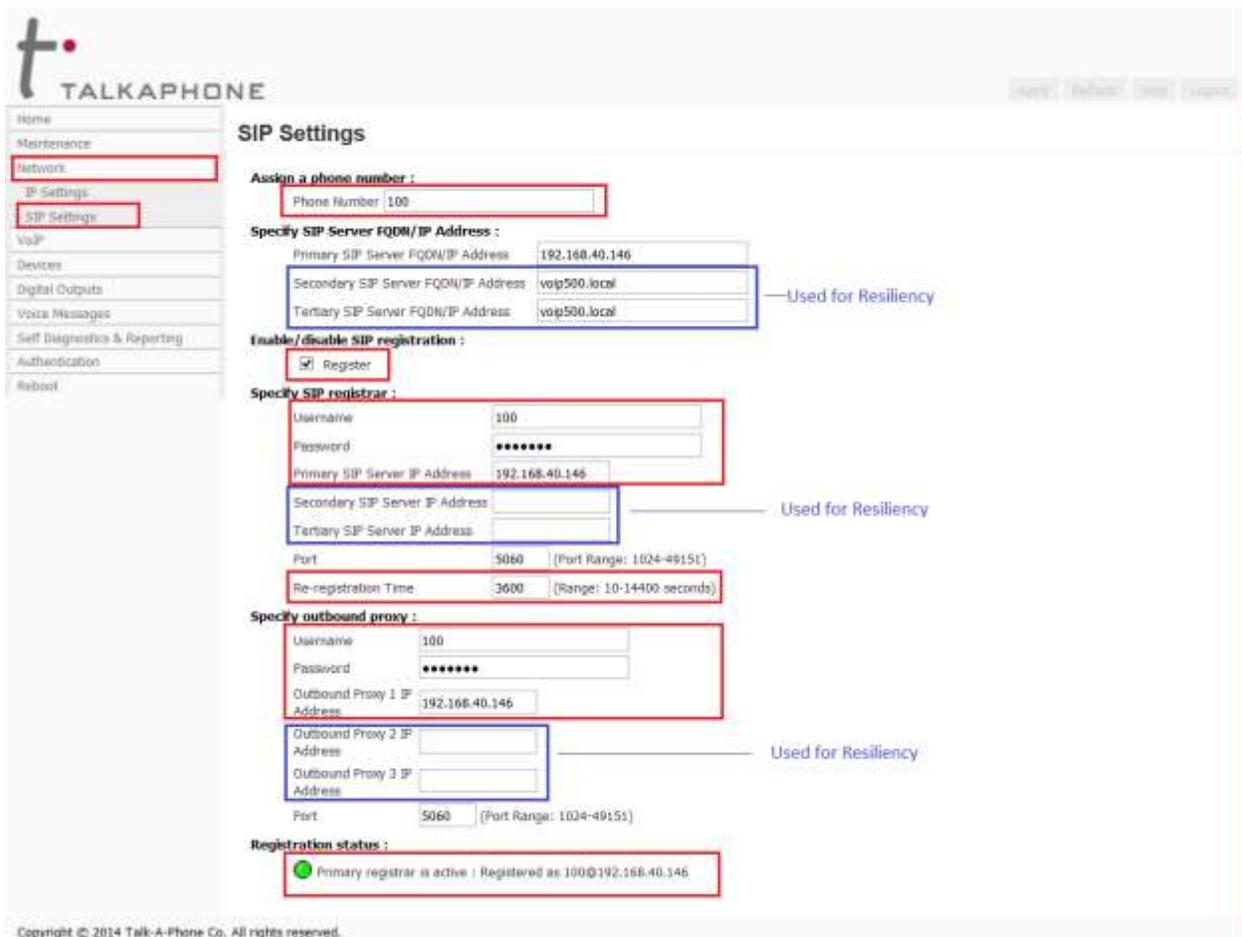
Enable/disable SIP registration: Checked

Username: The Username is the extension number for the Talkphone VOIP Series Phone/WEBS® Series Device.

Password: Enter the 'SIP Password' as created for this user in Step 6 'Access and Authentication' -> 'SIP Password' in the MiVoice Business.

IP Address: Enter the IP address of the MiVoice Business server.

Re-registration time: Enter the re-registration time with the MiVoice Server



SIP Settings

Assign a phone number :
Phone Number: 100

Specify SIP Server FQDN/IP Address :
 Primary SIP Server FQDN/IP Address: 192.168.40.146
 Secondary SIP Server FQDN/IP Address: voip500.local
 Tertiary SIP Server FQDN/IP Address: voip500.local — Used for Resiliency

Enable/disable SIP registration :
 Register

Specify SIP registrar :
 Username: 100
 Password: *****
 Primary SIP Server IP Address: 192.168.40.146
 Secondary SIP Server IP Address: — Used for Resiliency
 Tertiary SIP Server IP Address: — Used for Resiliency
 Port: 5060 (Port Range: 1024-49151)
 Re-registration Time: 3600 (Range: 10-14400 seconds)

Specify outbound proxy :
 Username: 100
 Password: *****
 Outbound Proxy 1 IP Address: 192.168.40.146
 Outbound Proxy 2 IP Address: — Used for Resiliency
 Outbound Proxy 3 IP Address: — Used for Resiliency
 Port: 5060 (Port Range: 1024-49151)

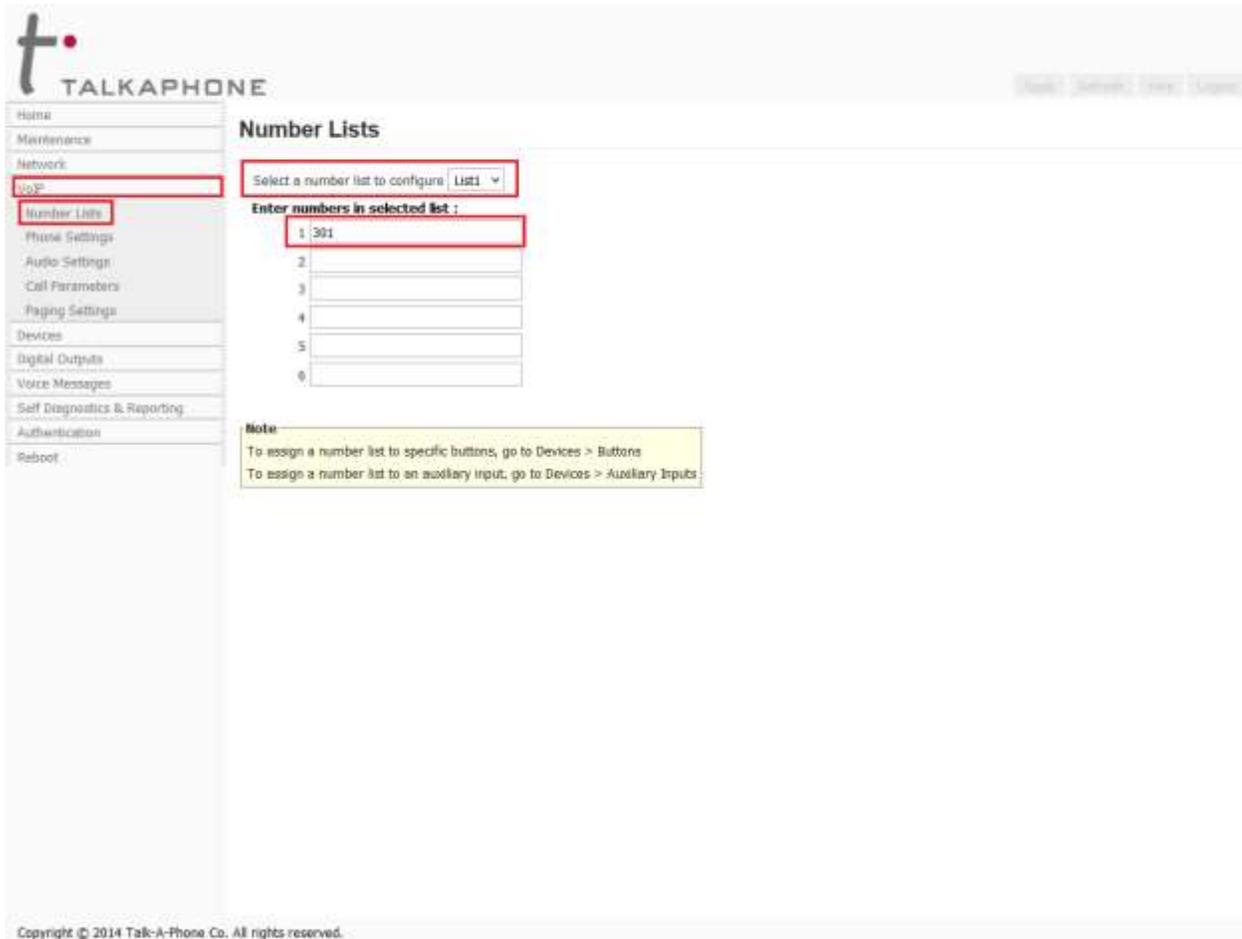
Registration status :
 Primary registrar is active : Registered as 100@192.168.40.146

Copyright © 2014 Talk-A-Phone Co. All rights reserved.

15. Go to VOIP-> Number Lists- Make the following changes and click '**Apply**' to save changes.

Select a number list to configure- Use the drop-down menu to select the number list to be configured (List1 is the default list assigned to Button 1.)

Enter numbers in selected list- Enter the list of destination numbers. Provide up to six numbers. Numbers can be in the format of plain numbers/aliases or as number@ip-address.



S

16. Repeat steps 10-13 for any additional Talkphone VOIP Series Phone/WEBS® Series Device.