



SIP Trunking using the EdgeMarc Network Services Gateway and the Allworx 6x IP-PBX 7.6.7.3

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1 Overview

The purpose of this configuration guide is to describe the steps needed to configure the Allworx 6x IP-PBX for proper operation in a SIP Trunking application with the e-SBC EdgeMarc. Please note that this guide documents the basic configuration needed in the Allworx 6x IP-PBX and that the requirements of specific SIP Trunking environments may require modifications to the configuration steps provided in this document.

2 Prerequisites

SIP Trunking information provided by the VoIP service provider:

- SIP proxy server IP address or DNS name.
- Trunking Direct Inward Dial (DID) phone numbers
 - Calls to the Trunking DID(s) are forwarded from the service provider to the wide area network (WAN) IP address of the EdgeMarc. There may be a single Pilot phone number used for all inbound calls and/or multiple DIDs depending on the service provider settings.
- SIP authentication credentials (optional)
 - Some SIP Trunking service providers require a unique username and password to be supplied for IP PBX registrations and/or SIP signaling using P-Asserted-Identity (RFC 3325). This configuration guide provides the configuration steps for both PBX registration and static or non-registration modes of PBX operation.

3 Network Topology

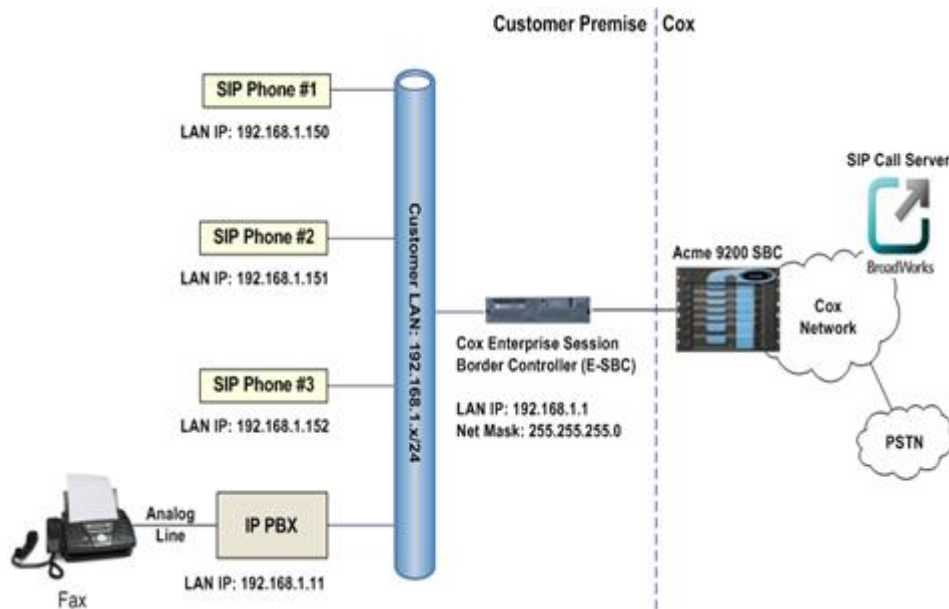


Figure 1 Test Set up

The PBX in the above network topology represents the PBX that is connected via its LAN port to the LAN port of the EdgeMarc Network Services gateway.

Table 1 – PBX Information

Manufacturer:	Allworx
Model:	Allworx 6x
Software Version:	7.6.7.3
Does the PBX send SIP Registration messages (Yes/No)?	Yes
Vendor Contact:	585-421-3850 support@allworx.com

Table 2 – E-SBC Information

Manufacturer:	Edgewater Network, Inc.
Model:	4552
Software Version:	11.6.14

4 Description of Basic Operation and Call Flows

Basic Call Flow:

All phones connect to the ALLWORX 6X IP-PBX. The ALLWORX 6X IP-PBX will interface with the service provider using SIP trunks.

Internal calls:

- Calls between phones on the LAN
- LAN phone -> ALLWORX 6X IP-PBX -> LAN phone

Outbound calls:

- Call is initiated by a LAN phone to a WAN phone.
- LAN phone -> ALLWORX 6X IP-PBX <SIP trunk> -> EdgeMarc -> SIP trunk service provider -> WAN phone

Inbound call:

- Call is initiated by a WAN phone to a LAN phone.
- WAN phone -> SIP trunk service provider EdgeMarc -> <SIP trunk> ALLWORX 6X IP-PBX -> LAN phone

5 Allworx 7x PBX Configuration

The steps below describe the minimum configuration required to enable the PBX to use a SIP trunk for inbound and outbound calling. Please refer to the Allworx 6x product documentation for more information on SIP trunking or other advanced PBX features.

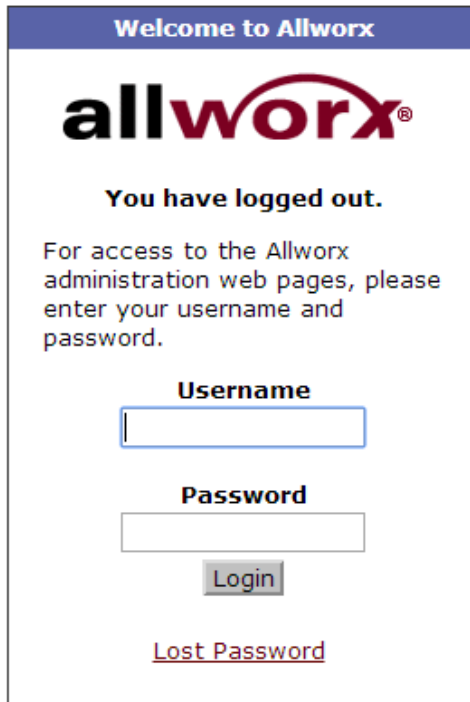
The configuration described here assumes that the PBX is already configured and operational with station side phones using assigned extensions or DIDs. This configuration is based on Allworx 6x.

5.1 Default IP Address

The Allworx PBX, the Allworx IP phones and EdgeMarc's LAN port should be in the same LAN segment. The PBX is shipped with a default IP address of 192.168.2.254/24 for the LAN port. To work with the EdgeMarc's SIP trunking service, the PBX should use EdgeMarc's LAN IP address as its SIP server and gateway. In the lab, the PBX's LAN port and EdgeMarc's LAN port have been assigned with IP addresses of 10.10.107.11/24 and 10.10.107.1/24 respectively. The PBX may be configured to communicate with EdgeMarc using SIP Registration mode or Static IP mode. The PBX's DHCP server should be enabled to provide IP addresses for the Allworx IP phones as these IP phones by default have the DHCP parameter set to Enabled. The IP phones communicate with the PBX using the SIP VoIP protocol.

5.2 Web GUI Access

To access the PBX for the first time, run `http://192.168.2.254:8080` on your PC and you should see the Allworx System Administration screen for login.



The image shows a web browser window displaying the Allworx login page. At the top, there is a blue header with the text "Welcome to Allworx". Below this is the Allworx logo in red and black. The main content area has a white background and contains the following text: "You have logged out." followed by "For access to the Allworx administration web pages, please enter your username and password." Below this text are two input fields: "Username" and "Password". Under the "Password" field is a "Login" button. At the bottom of the form is a link labeled "Lost Password".

5.3 Username and Password

Enter the default password, **admin**, in the **Password** field, click the **Login** button and you should see the Home screen of the PBX.



The screenshot shows the 'allworx' Home screen. On the left is a navigation menu with links for About, Phone System, Business, Network, Servers, Reports, Maintenance, Need help?, and Install Checklist. Below the menu is a '[Logout]' link. The main content area is divided into six colored boxes, each representing a system category with a list of sub-items:

- PHONE SYSTEM** (Green header): Audit PIN Codes, Auto Attendants, Call Monitors, Call Park, Call Queues, Conference Center, Dial Plan, Emergency CID, Extensions, Handsets, Languages, Outside Lines, Paging, Speed Dial.
- NETWORK** (Orange header): Configuration, Multi-Site, Port Expanders, Static Routes, VPN.
- REPORTS** (Blue header): Call Details, Configuration, Live Calls, Network Statistics, System Events, Users.
- BUSINESS** (Green header): Contact Information, Message Aliases, Schedules, Users.
- SERVERS** (Orange header): DHCP, DNS, Email, VoIP, Web.
- MAINTENANCE** (Blue header): Backup, Feature Keys, Import / Export, Reboot Phones, Restart, Time, Tools, Update.

5.4 Network Settings

In order to configure SIP Trunk services navigate to **Network > Configuration** to change the PBX's default LAN network to the one you intend to use in your network.

allworx [Home](#) > [Network](#) > Configuration

[About](#)

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Network

[Configuration](#)

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Configuration [modify](#)

	Current Value
Network Mode	LAN Host
LAN IP Address	10.10.107.11
LAN Subnet Mask	255.255.255.0
WAN Settings Method	Static
WAN IP Address	192.168.1.1
WAN IP Subnet Mask	255.255.255.0
Gateway	10.10.107.1
PPPoE Username	
PPPoE Service Name	
PPPoE MTU	1492
DNS Server Mode	Normal
Primary DNS Server	
Secondary DNS Server	
Public IP Address	
Host Name	allworx
Domain Name (DNS)	allworx.inscitek.com

Click the **Modify** link.

Select LAN Host in the Allworx Network Mode field.

Enter PBX's LAN IP address in the **LAN IP Address** field.

Select (FFFFFF00) 255.255.255.0 Class C in the LAN Subnet Mask field.

Enter EdgeMarc's LAN IP address in the **Gateway** field.

Leave other fields as defaults and then click the **Update** button at the bottom of the screen.



Home > Network > Configuration > Modify

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Allworx Network Mode ?

Allworx Network Mode LAN Host ▼

LAN Configuration

LAN IP Address 10.10.107.11

LAN Subnet Mask (FFFFFF00) 255.255.255.0 Class C ▼

WAN Configuration

WAN IP Address 192.168.1.1

WAN Subnet Mask (FFFFFF00) 255.255.255.0 Class C ▼

Allow admin configuration on WAN interface

Gateway

Gateway 10.10.107.1

NOTE
In LAN Host mode if the Gateway is specified (not left blank), then it must be on the Allworx LAN or WAN Network.

Public IP Address

If you are using a third party NAT Firewall to map a Public IP Address to the Allworx LAN IP Address, then enter that address here, otherwise leave this field blank.

Public IP Address

NOTE
The Public IP Address is used by Allworx VoIP services to encode the proper IP Addresses when communicating with remote SIP services or devices (such as IP Phones) when a third party NAT Firewall is between the Allworx and the Internet.

Most third party NAT Firewalls require specific access rules to enable this functionality. Refer to your firewall documentation to map the ports listed below from the Public IP Address to the Allworx LAN IP Address.

Ports:
 2088 (UDP)
 5060 (UDP)
 8081 (TCP)
 15000-15511 (UDP)

Operating Mode

The Allworx attempts to resolve domain names to IP addresses in this order: internal cache, Primary DNS Server (if specified), Secondary DNS Server (if specified), list of well known DNS Root Name Servers (only if Primary and Secondary servers have NOT been specified).

Normal

Primary DNS Server (IP Address)

Secondary DNS Server (IP Address)

Standalone

The Allworx does not use any external servers to resolve domain names to IP addresses. Domain names that can not be resolved internally are assumed to be invalid.

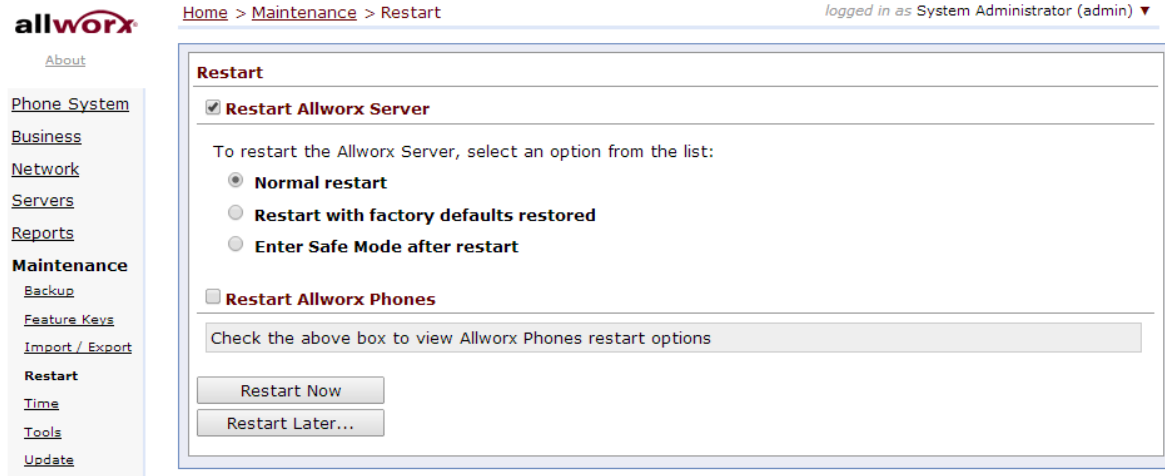
Host Information

Host Name allworx

Domain Name (DNS) allworx.inscitek.com

NOTE
It is necessary to restart the Allworx for new Network Address settings to take effect.

Now restart the PBX for the new LAN network settings to take effect. Navigate to **Home > Maintenance > Restart**, select the **Restart Allworx Server** and then select **Normal restart** radio button and click the **Restart Now** button.



The screenshot shows the Allworx web interface. At the top left is the Allworx logo. Below it is a navigation menu with links for About, Phone System, Business, Network, Servers, Reports, Maintenance, Backup, Feature Keys, Import / Export, Restart, Time, Tools, and Update. The main content area is titled "Restart" and shows the "Restart Allworx Server" option checked. Below this, there is a section for selecting a restart option: "Normal restart" (selected), "Restart with factory defaults restored", and "Enter Safe Mode after restart". There is also a checkbox for "Restart Allworx Phones" which is unchecked. Below this is a text box with the instruction "Check the above box to view Allworx Phones restart options". At the bottom of the main content area are two buttons: "Restart Now" and "Restart Later...".

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5.5 PBX access

To access the PBX after the LAN IP address has been changed, run <http://10.10.107.11:8080> (according to this example) on your PC and login again to start configuring the PBX for SIP Trunk services. Navigate to **Home > Phone System > Outside Lines > Direct Inward Dial Blocks** and click the **Add new DID Block** link to configure the SIP Trunk DIDs. In this example, a set of DIDs (408-555-5555...5559) has been assigned for this SIP Trunk, with 408-555-5555 being the Pilot DID. Note: We are not assigning the Pilot DID to the phone that is in this example.

Enter the starting DID (**408-555-5555** in this example) in the **Starting Phone Number** field.

Enter the number of DIDs (24 in this example) intended for assigning to the phones in the **Total number of phone numbers in the DID Block** field.

Select Routing Plan 1 from the DID Routing Plan field.

Click the **Add** button.



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DID Block

Starting Phone Number (include Area Code and Exchange)

Total number of phone numbers in DID Block

DID Routing Plan

5.6 Configuring EdgeMarc as SIP server in PBX Registration mode

To configure EdgeMarc as the SIP server in PBX Registration mode, navigate to **Home > Phone System > Outside Lines > SIP Proxies** and click the **Add new SIP Proxy** link. Skip this step if you are to configure EdgeMarc as the SIP server for Static IP mode.

Enter a description in the **Description** field.

Enter the User ID of **4085555555** (the SIP Trunk pilot DID in this example) in the **User ID** field. Note that, for SIP Registration mode, the PBX's User ID and password must match the username and password configured for the PBX on EdgeMarc.

Enter EdgeMarc's LAN IP address in the **SIP Server** field.

Check the SIP Registration required checkbox.

Enter the same User ID in the **Login ID** field.

Enter the password in the **Password** field.

Enter a number (**10** in this example) in the **Maximum Active Calls** field.

Enter a number (**10** in this example) in the **Number of Line Appearances** field.

Check the Send digits as dialed checkbox.

Select **all digits** in the **Digits Sent** field.

Select **Auto attendant 1 (x431)** as the Default Auto Attendant.

In the Call Route section, select the **Routed using DID Block(s):** radio button and click the **check all** link.

Leave other fields as defaults and then click the **Add** button.

The PBX may have enabled more options than we need; navigate to **Home > Phone System > Outside Lines > SIP Proxies** and click the **Modify** link.

In the Advanced Settings section, make sure only the checkboxes for **Pad DTMF RTP Packets** and **Enable Early Media** are checked.

In the Call Route section, make sure the **Routed using DID Block(s):** radio button is selected and the checkbox for the DIDs is checked.

Leave other fields as defaults and then click the **Update** button.



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SIP Proxy ?

Description
User ID
SIP Server Port

(customer domain/realm) (enter IP Address or Domain Name)
Outbound Proxy Port
(if different from SIP Server) (enter IP Address or Domain Name)

SIP Registration required

Login ID
Password (6 to 40 characters)
Registrar Port
(if different from Outbound Proxy) (enter IP Address or Domain Name)

Caller ID Name up to 47 characters: letters digits . , \ _ ' -

- Use External Caller ID Name from handset (if specified)
- Use Caller ID Name from external sources (if received)

Caller ID Number (up to 24 digits)

- Use External Caller ID Number from handset (if specified)
- Use Caller ID Number from external sources (if received)

Maximum Active Calls (1 to 99, should not exceed proxy capabilities or available bandwidth)

Number of Line Appearances (0 to Maximum Active Calls)

- Append Enterprise Prefix to Dialback number for incoming calls
- Send digits as dialed (without deleting, inserting, or appending per External Dialing Rules)

Digits Sent (digits from the full number, 1-XXX-XXX-XXXX, to send to the proxy)

Default Auto Attendant

Select the attendant used to answer when calls received from this source are routed to an Auto Attendant.

Advanced Settings ?

- Pad DTMF RTP Packets
- Enable Early Media (allow audio from 183 Session Progress responses)
- Supports SIP REFER (when calls from this proxy are transferred back to this proxy)
- Supports SIP Redirect (when call requests from this proxy are routed back to the proxy)
- Use E.164 format for phone numbers
- Offer '100rel' support (RFC 3262 - PRACK)
- Supports Symmetric Response Routing (RFC 3581 - include "rport" in requests)
- Allow SIP P-Asserted-Identity (RFC 3325 - Adds device to the Trust Domain)

Use Proxy Caller ID Name

Caller ID Name
User ID
Domain



Send SIP Diversion header (RFC 5806 - Diversion Indication in SIP)

Obtain DID/DNIS number from

Use **in Request URI of outbound calls**

Codec Negotiation

Features

Prefix String (digits/characters sent by the Allworx to proxy before sending number dialed)

Call Route

Proxy is an "Enterprise Server" (calls received from this proxy follow the server's internal dial plan)

Calls received from this SIP Proxy go to:

- Extension**
- Auto Attendant**
- Voicemail for user**
- Routed using DID Block:**
 -

5.7 Configuring EdgeMarc as SIP server in Static IP mode

Configuring EdgeMarc as SIP server in Static IP mode

To configure EdgeMarc as the SIP server in Static IP mode, navigate to **Home > Phone System > Outside Lines > SIP Gateways** and then click the **Add new SIP Gateway** link. Skip this step if you have already configured EdgeMarc as the SIP server for SIP Registration mode.

Enter a description in the **Description** field.

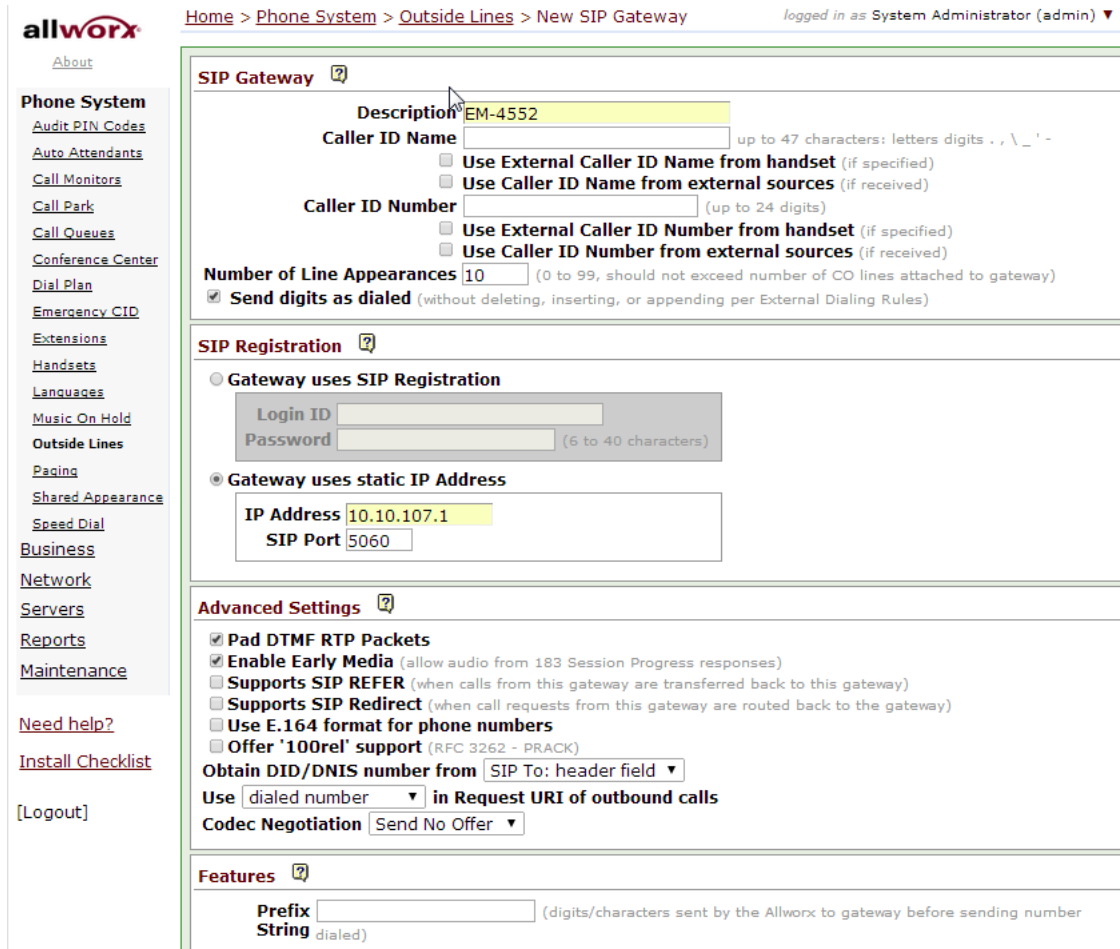
Enter a number (**10** in this example) in the **Number of Line Appearances** field.

Select the Gateway uses static IP Address radio button.

Enter EdgeMarc's LAN IP address in the **IP Address** field.

Enter **5060** in the **SIP Port** field.

Click the **Add** button.



The screenshot shows the Allworx web interface for configuring a SIP Gateway. The breadcrumb trail is Home > Phone System > Outside Lines > New SIP Gateway. The user is logged in as System Administrator (admin). The configuration form is divided into several sections:

- SIP Gateway:**
 - Description: EM-4552
 - Caller ID Name: (empty)
 - Caller ID Number: (empty)
 - Number of Line Appearances: 10
 - Send digits as dialed
- SIP Registration:**
 - Gateway uses SIP Registration (with Login ID and Password fields)
 - Gateway uses static IP Address (with IP Address: 10.10.107.1 and SIP Port: 5060)
- Advanced Settings:**
 - Pad DTMF RTP Packets
 - Enable Early Media
 - Supports SIP REFER
 - Supports SIP Redirect
 - Use E.164 format for phone numbers
 - Offer '100rel' support
 - Obtain DID/DNIS number from: SIP To: header field
 - Use: dialed number in Request URI of outbound calls
 - Codec Negotiation: Send No Offer
- Features:**
 - Prefix String: (empty)

Features ?

Prefix String (digits/characters sent by the Allworx to gateway before sending number dialed)

Default Auto Attendant

Select the attendant used to answer when calls received from this source are routed to an Auto Attendant.

Call Route

Calls received from this SIP Gateway go to:

Extension

Auto Attendant

Voicemail for user

Routed using DID Block:

(408) 555-5555 / 5 Numbers / Routing Plan 1

In Advanced Settings, only check **Pad DTMF RTP Packets** and **Enable Early Media**
 In Call Route, select **Routed using DID Block** and select correct block.
 Hit **Add** at the bottom of the page.

5.8 Creating Extension length & configuring DHCP server

We are about ready to create extensions. First we need to decide on the extension length. In this example, we will configure the extensions to 3 digits in length. Navigate to **Home > Phone System > Dial Plan > Internal Extension Length** and then click the **Modify** link. Select 3 digits in the User and System Extensions are field. Click the **Update** button.

allworx Home > Phone System > Dial Plan > Modify Internal Extension Length

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Internal Dialing Rules

User and System Extensions are in length

You can change from 3 digit to 4 digit extension length at any time. Existing User and System extensions will be changed as follows:

Extensions 100-299 map to 1100-1299

NOTE
It is necessary to reboot all Allworx handsets for new extension length settings to take effect.

To see what extensions are in use, navigate to **Home > Phone System > Extensions**. Note that the **add new Extension** link is not used for assigning extensions to Allworx IP phones and analog phones.

allworx [Home > Phone System > Extensions](#)

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Extensions [add new Extension](#) (30 system extensions may be added)

Search match extension, description, login name, or site

Ext.	Description	Site	Action
0	Operator	(local)	View Call Routes
199	System Administrator (admin)	(local)	View Call Routes
256	Qa User 02 (qauser02)	(local)	View Call Routes
278	Qa User 01 (qauser01)	(local)	View Call Routes

Before we create the extensions for Allworx IP phone users, navigate to **Home>Server > DHCP** to enable the PBX's DHCP server and configure the unused IP address range for the Allworx IP phones.

allworx

Home > Servers > DHCP Server >

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DHCP Server

	Current Value	Action
Server	enabled	
Dynamic DNS	enabled	
Dynamic Start Address	10.10.107.1	Modify
Dynamic End Address	10.10.107.99	
DHCP Address Reservations		

Active Leases

IP Address	Hardware Address	Client Identifier	Host Name	Expires

Known Hosts

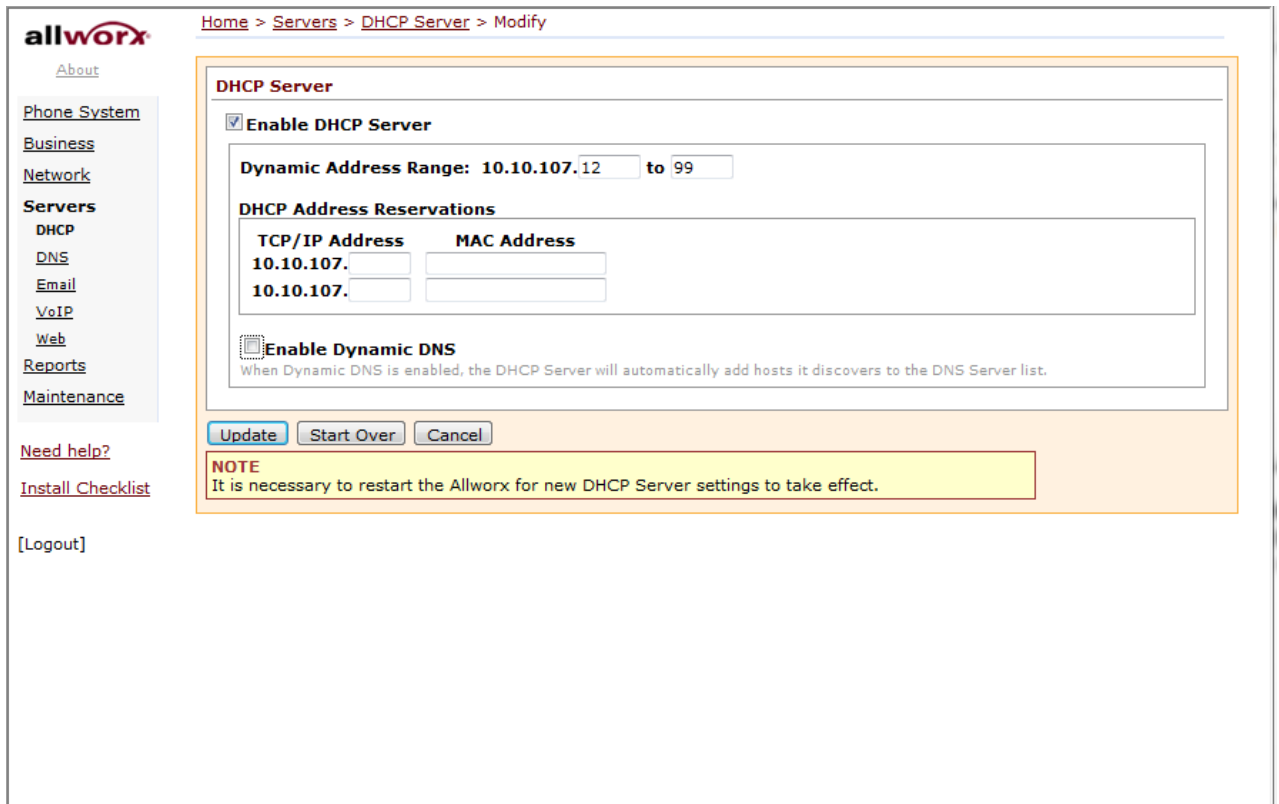
IP Address	Hardware Address	Host Name	Action

- Click the **Modify** link to configure the DHCP server.
- Check the **Enable DHCP Server** checkbox.
- Enter the starting and ending IP addresses in the **Dynamic Address Range** field.
- Uncheck the **Enable Dynamic DNS** checkbox.
- Check the **Update** button and then restart the PBX for the DHCP server changes to take effect.

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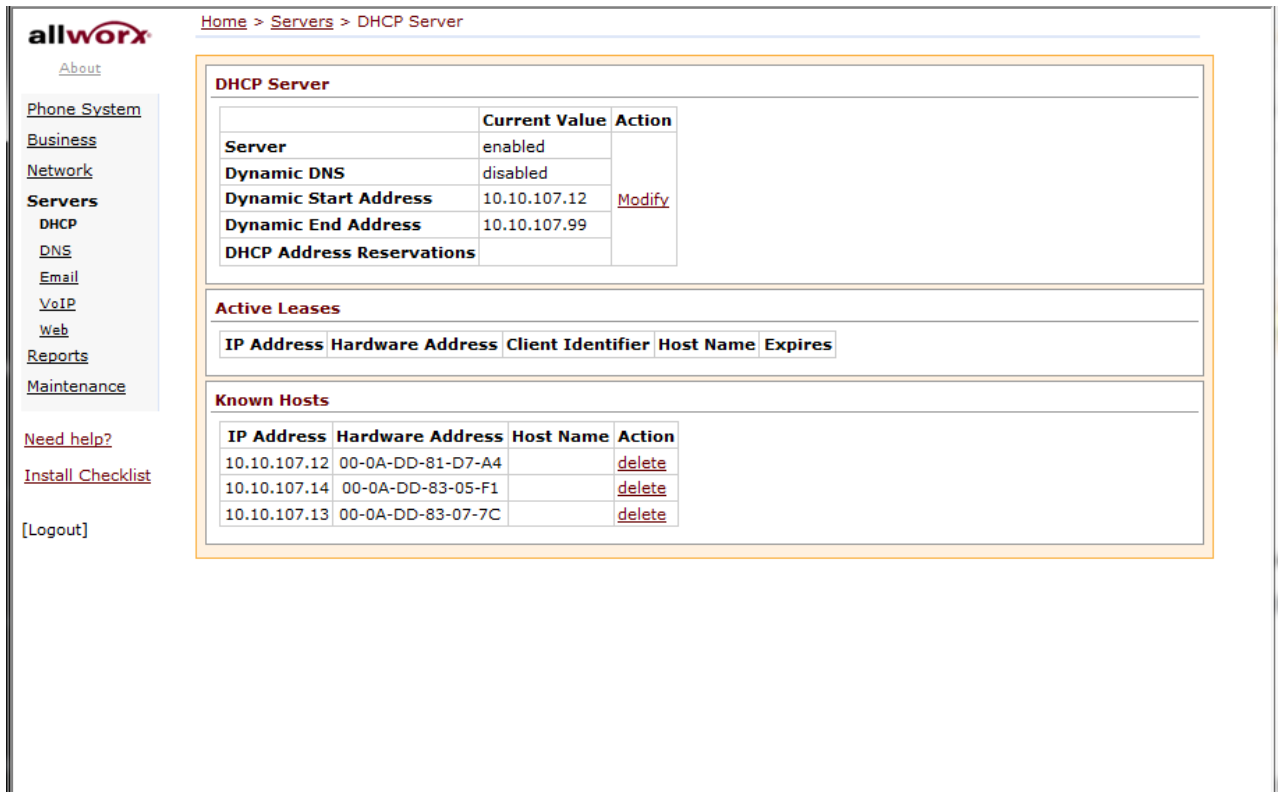
Version 0.3

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The screenshot shows the Allworx web interface for configuring a DHCP server. The breadcrumb trail is "Home > Servers > DHCP Server > Modify". The left sidebar contains navigation links: About, Phone System, Business, Network, Servers (with sub-links for DHCP, DNS, Email, VoIP, Web, Reports, and Maintenance), Need help?, Install Checklist, and [Logout]. The main content area is titled "DHCP Server" and includes a checked checkbox for "Enable DHCP Server". Below this, the "Dynamic Address Range" is set to "10.10.107.12" to "99". The "DHCP Address Reservations" section contains a table with two rows, each with a "TCP/IP Address" and a "MAC Address" column. The first row has "10.10.107." in the first column and an empty field in the second. The second row has "10.10.107." in the first column and an empty field in the second. There is also an unchecked checkbox for "Enable Dynamic DNS" with a note: "When Dynamic DNS is enabled, the DHCP Server will automatically add hosts it discovers to the DNS Server list." At the bottom of the form are "Update", "Start Over", and "Cancel" buttons. A yellow "NOTE" box at the bottom states: "It is necessary to restart the Allworx for new DHCP Server settings to take effect."

Now restart the Allworx IP phones and each IP phone should be able to get an assigned IP address, as indicated in the Known Hosts section of the DHCP server.



allworx Home > Servers > DHCP Server

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DHCP Server

	Current Value	Action
Server	enabled	
Dynamic DNS	disabled	
Dynamic Start Address	10.10.107.12	Modify
Dynamic End Address	10.10.107.99	
DHCP Address Reservations		

Active Leases

IP Address	Hardware Address	Client Identifier	Host Name	Expires

Known Hosts

IP Address	Hardware Address	Host Name	Action
10.10.107.12	00-0A-DD-81-D7-A4		delete
10.10.107.14	00-0A-DD-83-05-F1		delete
10.10.107.13	00-0A-DD-83-07-7C		delete

After the Allworx IP phone gets its assigned IP address and other info from the PBX, it will attempt to TFTP the configuration information from the PBX when rebooted. In case you are configuring the Allworx IP phones manually, make sure the **Boot Server IP** parameter is set to point to the PBX as the phone will use this IP address to TFTP the PBX.

5.9 Creating user & extension for IP phones

We are now going to create user and extension for the Allworx IP phone so that the Allworx IP phone can TFTP its configuration information. Navigate to **Home > Business > Users** and then click the **Add new user** link.

Enter a login name in the **Login Name** field.

Enter first name, middle name and last name of the user in the **Full Name** field.

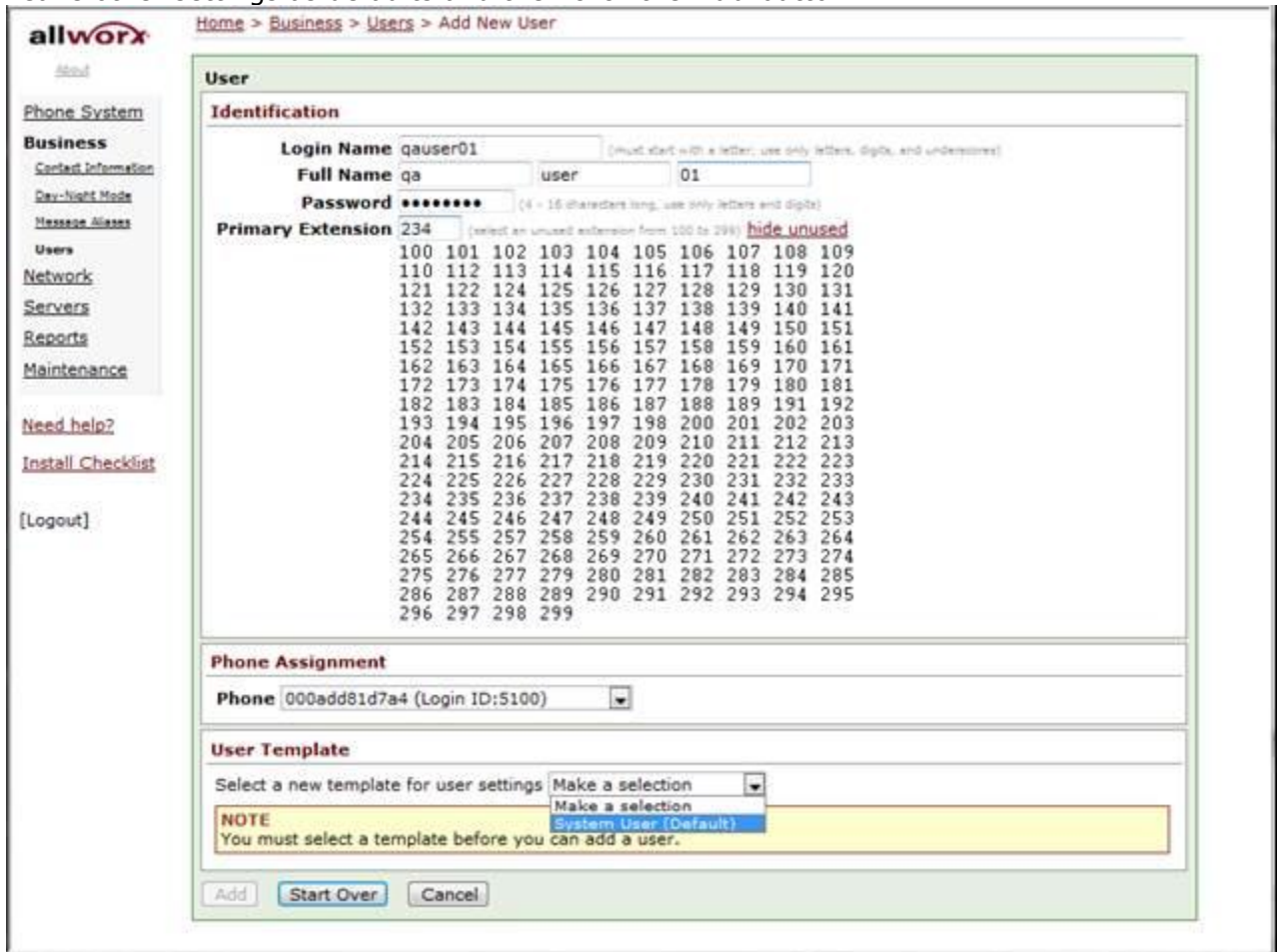
Enter a password in the **Password** field.

Enter an unused extension in the **Primary Extension**.

Select the Allworx IP phone for this user by selecting its MAC address in **Phone** field.

Select **System User (Default)** in the **Select a new template for user settings** field (the screen will then show more settings and the **Add** button will be high-lighted).

Leave other settings as defaults and then click the **Add** button.



allworx Home > Business > Users > Add New User

Menu

Phone System

Business

- Contact Information
- Day-Night Mode
- Mission Alias
- Users
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[Logout]

User

Identification

Login Name qauser01 (Must start with a letter, use only letters, digits, and underscores)

Full Name qa user 01

Password ***** (4 - 16 characters long, use only letters and digits)

Primary Extension 234 (select an unused extension from 100 to 299) [hide unused](#)

100	101	102	103	104	105	106	107	108	109
110	112	113	114	115	116	117	118	119	120
121	122	124	125	126	127	128	129	130	131
132	133	134	135	136	137	138	139	140	141
142	143	144	145	146	147	148	149	150	151
152	153	154	155	156	157	158	159	160	161
162	163	164	165	166	167	168	169	170	171
172	173	174	175	176	177	178	179	180	181
182	183	184	185	186	187	188	189	191	192
193	194	195	196	197	198	200	201	202	203
204	205	206	207	208	209	210	211	212	213
214	215	216	217	218	219	220	221	222	223
224	225	226	227	228	229	230	231	232	233
234	235	236	237	238	239	240	241	242	243
244	245	246	247	248	249	250	251	252	253
254	255	257	258	259	260	261	262	263	264
265	266	267	268	269	270	271	272	273	274
275	276	277	279	280	281	282	283	284	285
286	287	288	289	290	291	292	293	294	295
296	297	298	299						

Phone Assignment

Phone 000add81d7a4 (Login ID:5100)

User Template

Select a new template for user settings

NOTE
You must select a template before you can add a user.

Now restart the Allworx IP phone and you should see the user's full name and the extension on the phone's display.

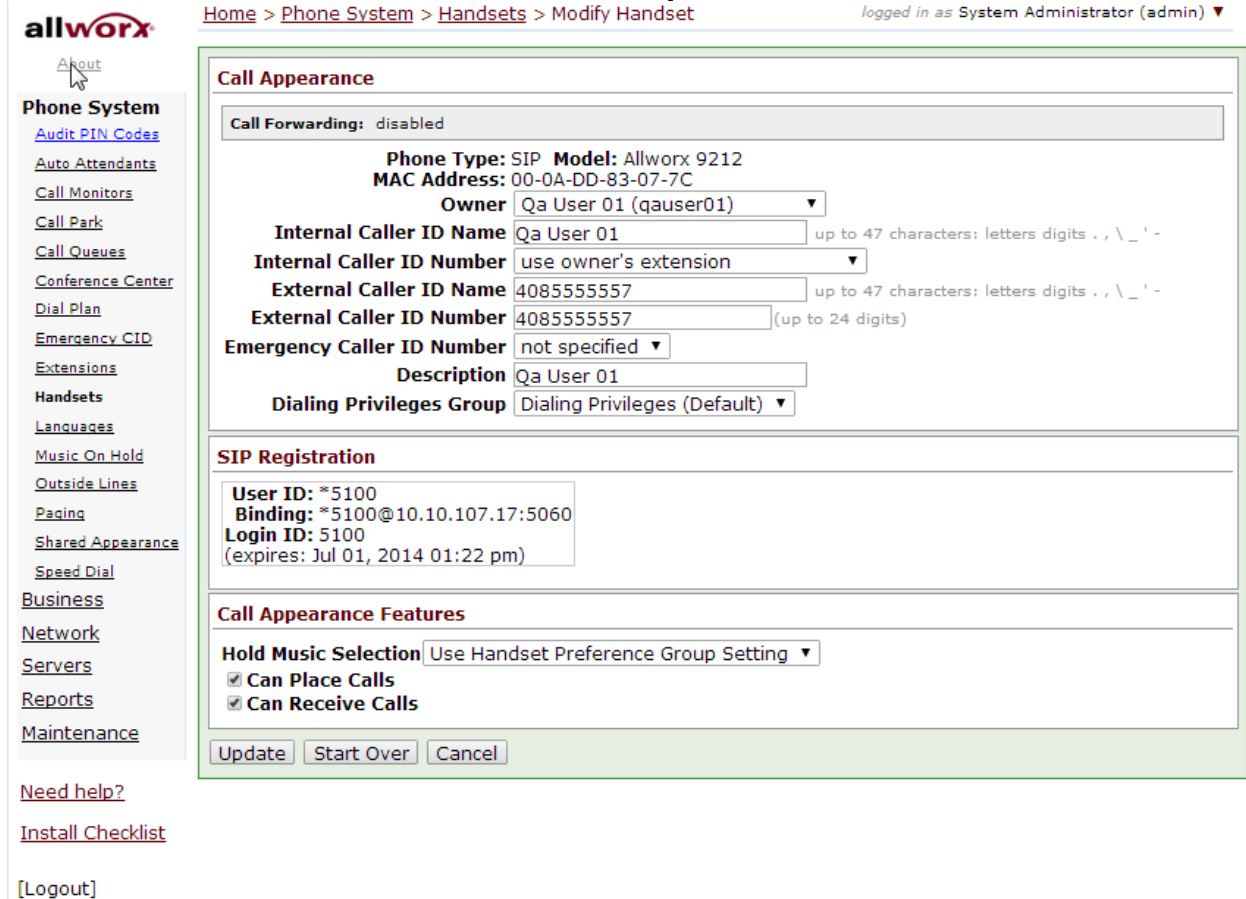
5.10 Configuring Caller ID for IP phones

To configure Caller ID for the user, navigate to **Home > Phone System > Handsets > SIP Handsets** and click the **Modify** link of the user we just assigned an extension and an IP phone.

Enter an external Caller ID Name in the **external Caller ID Name** field. This field will be used as the Display part of the **From** header when the phone sends the Invite message for the outbound call.

Enter an external Caller ID Number in the **external Caller ID Number** field. This field will be used as the user part of the **From** header when the phone sends the Invite message for the outbound call.

Leave other field as defaults and then click the **Update** button.



allworx Home > Phone System > Handsets > Modify Handset logged in as System Administrator (admin) ▼

Call Appearance

Call Forwarding: disabled

Phone Type: SIP Model: Allworx 9212
 MAC Address: 00-0A-DD-83-07-7C
 Owner: Qa User 01 (qauser01) ▼
 Internal Caller ID Name: Qa User 01 up to 47 characters: letters digits , , \ _ ' -
 Internal Caller ID Number: use owner's extension ▼
 External Caller ID Name: 408555557 up to 47 characters: letters digits , , \ _ ' -
 External Caller ID Number: 408555557 (up to 24 digits)
 Emergency Caller ID Number: not specified ▼
 Description: Qa User 01
 Dialing Privileges Group: Dialing Privileges (Default) ▼

SIP Registration

User ID: *5100
 Binding: *5100@10.10.107.17:5060
 Login ID: 5100
 (expires: Jul 01, 2014 01:22 pm)

Call Appearance Features

Hold Music Selection: Use Handset Preference Group Setting ▼
 Can Place Calls
 Can Receive Calls

Update Start Over Cancel

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5.11 Creating user & extension for analog phones

We are now going to create user and extension for the analog phone. Navigate to **Home > Business > Users** and then click the **Add new user** link.

Enter a login name in the **Login Name** field.

Enter first name, middle name and last name of the user in the Full Name field.

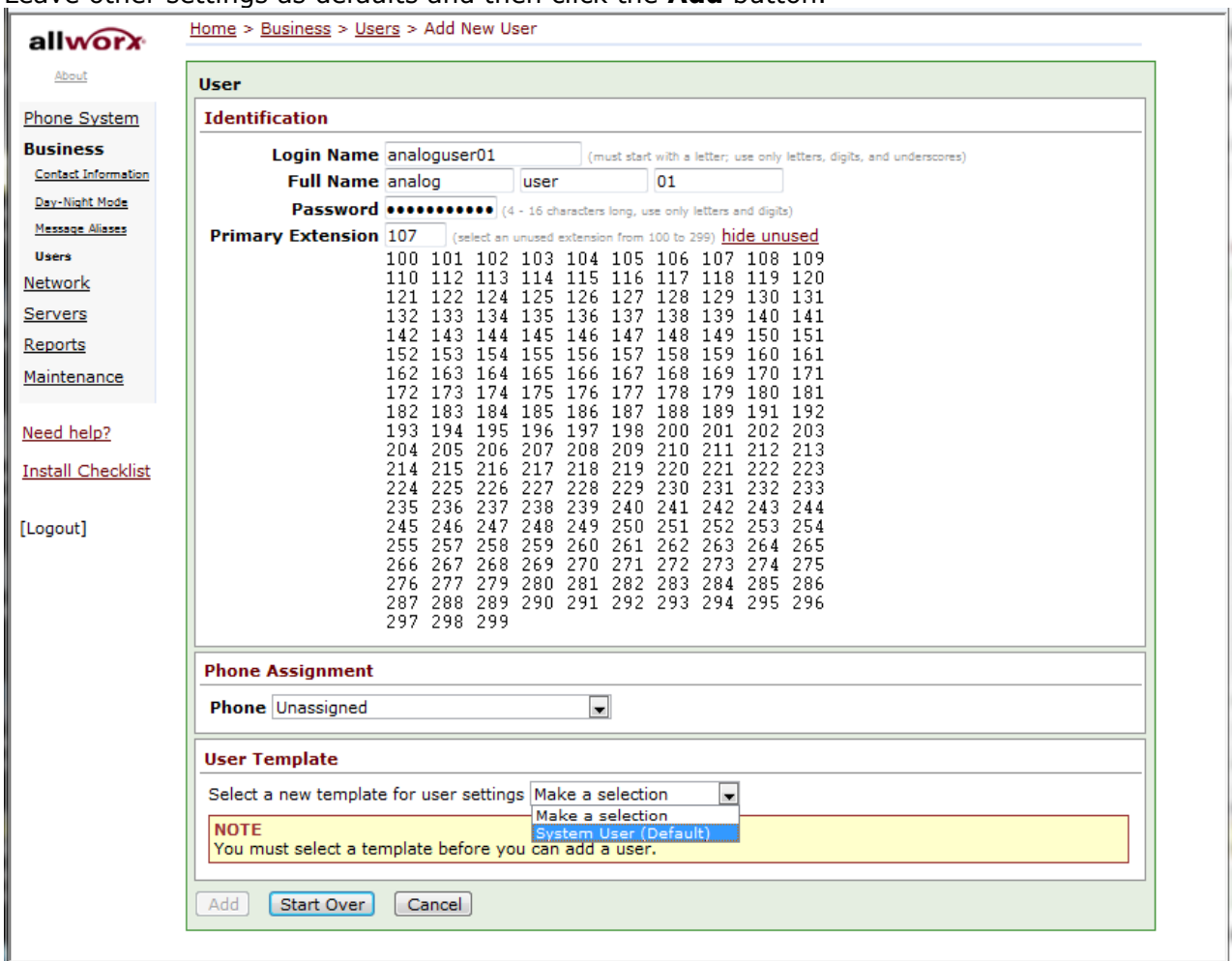
Enter a password in the **Password** field.

Enter an unused extension in the **Primary Extension**.

Select **Unassigned** in **Phone** field.

Select **System User (Default)** in the **Select a new template for user settings** field (the screen will then show more settings and the **Add** button will be high-lighted).

Leave other settings as defaults and then click the **Add** button.



allworx Home > Business > Users > Add New User

User

Identification

Login Name analoguser01 (must start with a letter; use only letters, digits, and underscores)

Full Name analog user 01

Password ●●●●●●●● (4 - 16 characters long, use only letters and digits)

Primary Extension 107 (select an unused extension from 100 to 299) [hide unused](#)

100	101	102	103	104	105	106	107	108	109
110	112	113	114	115	116	117	118	119	120
121	122	124	125	126	127	128	129	130	131
132	133	134	135	136	137	138	139	140	141
142	143	144	145	146	147	148	149	150	151
152	153	154	155	156	157	158	159	160	161
162	163	164	165	166	167	168	169	170	171
172	173	174	175	176	177	178	179	180	181
182	183	184	185	186	187	188	189	191	192
193	194	195	196	197	198	200	201	202	203
204	205	206	207	208	209	210	211	212	213
214	215	216	217	218	219	220	221	222	223
224	225	226	227	228	229	230	231	232	233
235	236	237	238	239	240	241	242	243	244
245	246	247	248	249	250	251	252	253	254
255	257	258	259	260	261	262	263	264	265
266	267	268	269	270	271	272	273	274	275
276	277	279	280	281	282	283	284	285	286
287	288	289	290	291	292	293	294	295	296
297	298	299							

Phone Assignment

Phone Unassigned

User Template

Select a new template for user settings Make a selection

NOTE
You must select a template before you can add a user.

Add Start Over Cancel

Navigate to **Home > Phone System > Handsets > Analog Handsets** and click one of the **New Analog handset** link. Note that there are 6 FXO ports and 2 FXS ports next the WAN port of the PBX. Port 7 is the first FXS port and Port 8 is the second FXS port. When you make use the FXS port, an analog phone or a FAX machine should be connected to that port.

- 1) Select the analog user we just created in the **Owner** field



- 2) Do not select anything in the **Extension** field.
- 3) Select user owner's extension in the **Caller ID Number** field.
- 4) Enter a name in the **Caller ID Name** field.
- 5) Enter a description in the **Description** field.
- 6) Click the **Add** button.

allworx

Home > Phone System > Handsets > Add Analog Handset

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Analog Handset

Port: 07

Owner: analog user 01 (analoguser01)

Extension: --- (optional, see TIP)

Caller ID Number: user owner's extension

Caller ID Name: analog user 01

Description: analog user 01

TIP
If an *Owner* other than 'admin' is selected the handset will automatically be added to the owner's *In Office* call route.
If an *Extension* is selected, the extension will be created with a call route to ring this handset. This is typically used in the case of a conference room or lab phone that does not require an owner.

Add Cancel

5.12 Configuring Caller ID for Analog phones

To configure Caller ID for the user, navigate to **Home > Phone System > Handsets > Analog Handsets** and click the **Modify** link of the newly created entry.

Enter an external Caller ID Name in the **external Caller ID Name** field. This field will be used as the Display part of the **From** header when the phone sends the Invite message for the outbound call.

Enter an external Caller ID Number in the **external Caller ID Number** field. This field will be used as the user part of the **From** header when the phone sends the Invite message for the outbound call.

Leave other field as defaults and then click the **Update** button.

allworx [Home > Phone System > Handsets > Modify Handset](#) logged in as System Administrator (admin) ▼

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Handset

Do Not Disturb: disabled Call Forwarding: disabled

Phone Type: Analog
Port: 07
Owner: {none}

Internal Caller ID Name: analog user 01 up to 47 characters: letters digits , , \ _ ' -

Internal Caller ID Number: 107 - analog user 01

External Caller ID Name: 4085555557 up to 47 characters: letters digits , , \ _ ' -

External Caller ID Number: 4085555557 (up to 24 digits)

Description: analog user 01

Phone Status Visibility: Normal

Dialing Privileges Group: Dialing Privileges (Default)

Handset Features

Hold Music Selection: Line-In

Can Place Calls

Can Receive Calls

Second Call Handling: Busy

Message Waiting Stutter Dialtone

Message Waiting Light (requires SDMF and/or MDMF below)

Caller ID Display (requires SDMF and/or MDMF below)

Caller ID Type I (SDMF)

Caller ID Type II (MDMF)

Auto Off-Hook Dialing: (digits dialed automatically every time phone is taken off hook)

Auto Answer DTMF String:

(DTMF digits sent when a call is answered. To send the extension dialed, use \$xN where N is the number of trailing digits of the extension to send. To send the DNIS number, use \$nN where N is the number of trailing digits of the DNIS number to send. Set N to 0 to send all the digits. Use the letter P to generate a one second pause during the DTMF payout.)

[Update] [Start Over] [Cancel]

5.13 Mapping DIDs to appropriate extensions

For the DIDs we have assigned to the extensions, we must make sure incoming calls to these DIDs will get routed to correct extensions and ring the correct phones. Navigate to **Home > Phone System > Outside Lines > Direct Inward Dial Routing Plans** and then click the **Details** link to map each DID to its extension. Assuming you have already mapped some DIDs to the extensions, your mapping table may look something like the following:

allworx [Home > Phone System > Outside Lines > DID Routing Plan](#) logged in as System Administrator (admin) ▼

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Routing Plan Information [modify](#)

Description	Routing Plan 1
Default Extension	0 - Operator
Default DNIS Name	{none}
DID Blocks using this plan	(408) 555-5555 / 5 numbers

Phone Number to Extension Mapping

Search match Phone Number, Extension, DNIS Name, or Default Prompt Language

Bulk Edit

▲ Phone Number	Extension	DNIS Name	Action
(408) 555-5555	278 - Qa User 01	{none}	Modify
(408) 555-5556	256 - Qa User 02	{none}	Modify
(408) 555-5557	*431 - Auto Attendant 1	{none}	Modify
(408) 555-5558	{plan default}	{plan default}	Modify
(408) 555-5559	{plan default}	{plan default}	Modify

Earlier we have created extension **278** and assigned 408-555-5555 as its Caller ID for outbound call. Click the **Add number to table** link to map the same DID for incoming calls to this extension.

Select **(408) 555-5555** from the **Phone Number(s)** drop-down list.

Select **278 from the Extension** drop-down list.

Check the **Update** button.

allworx [Home](#) > [Phone System](#) > [Outside Lines](#) > [DID Routing Plan](#) logged in as System Administrator (admin) ▼

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Routing Plan Information

Description

Default Extension

Default DNIS Name up to 47 characters: letters digits . , \ _ ' -

DID Blocks using this plan: (408) 555-5555 / 5 numbers

Phone Number to Extension Mapping

Search match Phone Number, Extension, DNIS Name, or Default Prompt Language

⊞ Bulk Edit

▲ Phone Number	Extension	DNIS Name	Action
(408) 555-5555	278 - Qa User 01	{none}	Modify
(408) 555-5556	256 - Qa User 02	{none}	Modify
(408) 555-5557	*431 - Auto Attendant 1	{none}	Modify
(408) 555-5558	{plan default}	{plan default}	Modify
(408) 555-5559	{plan default}	{plan default}	Modify

5.14 Viewing External Dialing Rules configured for SIP trunk

To see the External Dialing Rules configured for this SIP trunk, navigate to **Home > Phone System > Dial Plan**. The external dialing rules in the screen shot below are pretty much the same as the defaults except the area code and the Service Group has been changed to according to this example.

allworx [Home > Phone System > Dial Plan](#)

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[Internal Extension Length](#) | [Internal Dial Plan](#) | [External Dialing Rules](#) | [Dialing Privileges Groups](#) | [Service Groups](#)

Allworx phones must be rebooted after changes to the Internal Extension Length, Internal Dial Plan, or External Dialing Rules. [Reboot Phones](#)

Internal Extension Length [modify](#)

User and System Extensions are 3 digits in length.

Internal Dial Plan [modify](#) [view the Phone Functions Reference Card](#)

Plan	
1xx	User and System Extensions
2xx	
0	Operator
9 + external number	External Call access (follows External Dialing Rules below)
8 + enterprise number	Enterprise calling
5nnn	Internal station access (reserved for system)
350-399	
34nnn	Speed dial numbers
6 + user extension	Message Center
700 call park	
701-709 call retrieve	
7xxx call pickup	Call Functions (park/pickup/audit pin code)
78 + pin code	
3 + user extension	Leave a voicemail for extension
403 door relay	
408 conference center	
42n do not disturb	
43n auto attendants	PBX Functions
44nn call queues	
4950-4999 call retrieve	
45xxx call forwarding	
46n paging	

External Dialing Rules

North American Numbering Plan Administration (NANPA) enabled [Modify](#)

Area Code	Exchange	Number Dialed	Service Group	Action
any		9+1+aaa-xxx-nnnn	All CO Lines & SIP Gateways	Modify

aaa - area code xxx - exchange nnnn - number

Type	Number Dialed	Service Group	Action
Emergency	9+911	see Dialing Privileges Group for source of call	
Phone Services (211,311,411,511,611,711,811)	9+n11	All Trunk Devices	
Operator	9+0	All Trunk Devices	
Long Distance Services	9+1010...	All Trunk Devices	Modify
International Calls	9+011...	All Trunk Devices	
Public SIP Directory	8+nnnn (4 digits)	All SIP Proxies	
PIN Code	78+nnnnn (5 digits)	All CO Lines	
Outside Line Seizure	9#	All Trunk Devices	

Emergency Call Email Notifications are not enabled. [Modify](#)

Dialing Privileges Groups

Name	Action
Dialing Privileges (Default)	View Copy

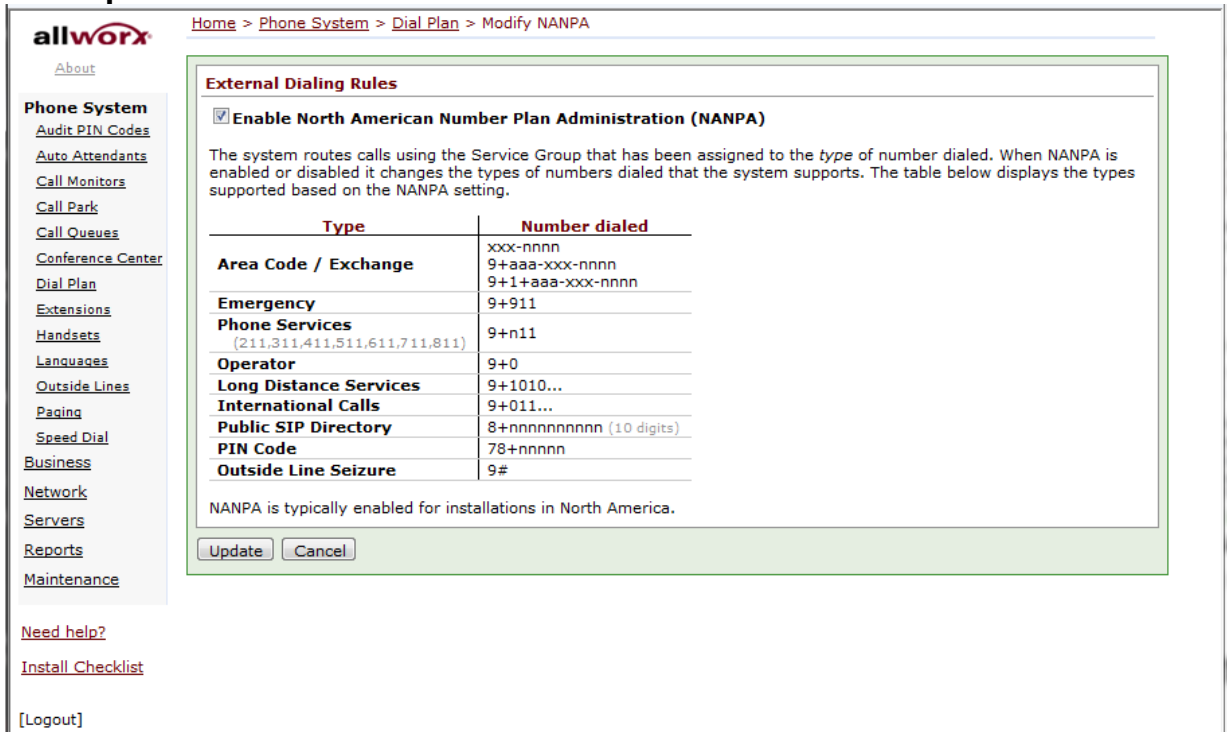
Service Groups [add new Service Group](#)

Group	Service(s)	Action
All CO Lines	(no services)	
All CO Lines & SIP Gateways	(no services)	
All Digital Lines	(no services)	
All SIP Gateways	(no services)	
All SIP Proxies	EM-4552 (SIP Proxy)	
All Trunk Devices	EM-4552 (SIP Proxy)	

5.15 Enabling NANPA

To enable North American Number Plan Administration (NANPA), from **Home > Phone System > Dial Plan > External Dialing Rules**, click the **Modify** link for **North American Number Plan Administration (NANPA)**.

Check the **Enable North American Number Plan Administration (NANPA)** checkbox. Click the **Update** button.



allworx Home > Phone System > Dial Plan > Modify NANPA

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External Dialing Rules

Enable North American Number Plan Administration (NANPA)

The system routes calls using the Service Group that has been assigned to the type of number dialed. When NANPA is enabled or disabled it changes the types of numbers dialed that the system supports. The table below displays the types supported based on the NANPA setting.

Type	Number dialed
Area Code / Exchange	xxx-nnnn 9+aaa-xxx-nnnn 9+1+aaa-xxx-nnnn
Emergency	9+911
Phone Services (211,311,411,511,611,711,811)	9+n11
Operator	9+0
Long Distance Services	9+1010...
International Calls	9+011...
Public SIP Directory	8+nnnnnnnnnn (10 digits)
PIN Code	78+nnnnn
Outside Line Seizure	9#

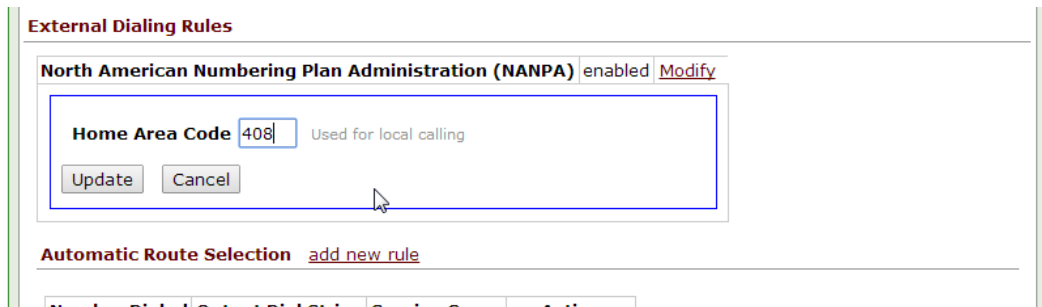
NANPA is typically enabled for installations in North America.

Notice that, besides dialing **9** first to call outside of the PBX, you can also dial **8**, followed by a 10-digit number when a **1** is not needed to precede the 10-digit number for the call.

5.16 Setting Area code for 7-digit dialing

Set the Area Code to allow 7-digit dialing. From **Home > Phone System > Dial Plan > External Dialing Rules**, click the **Modify** link next to the **Home** entry and the **All others** entry.

Enter the Area Code (**408** in this example) in the **Area Code** field.



External Dialing Rules

North American Numbering Plan Administration (NANPA) enabled [Modify](#)

Home Area Code Used for local calling

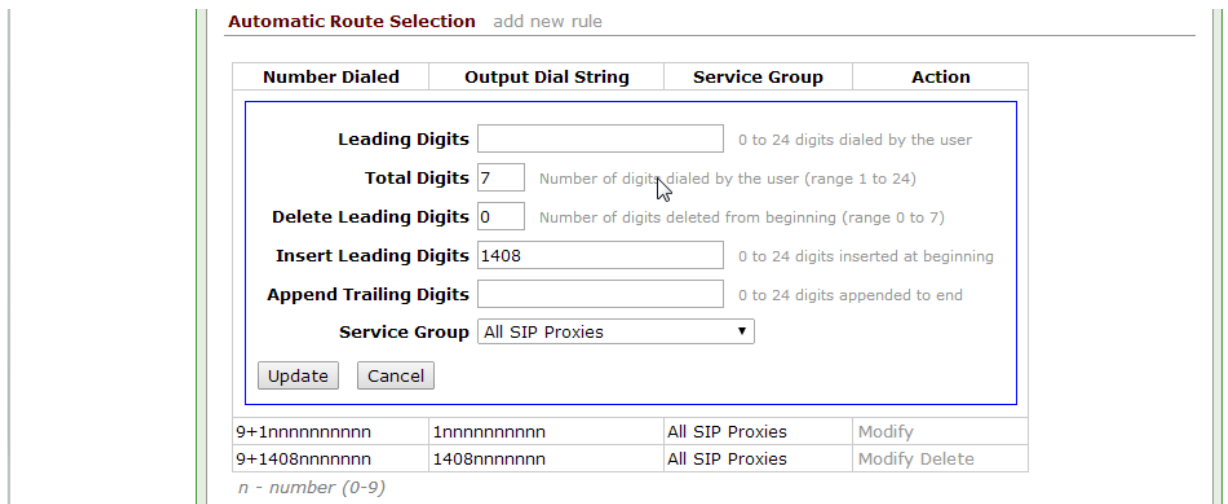
Automatic Route Selection [add new rule](#)

Number Dialed	Output Dial String	Service Group	Action
9+1nnnnnnnnn	1nnnnnnnnn	All SIP Proxies	Modify
9+1408nnnnnnn	1408nnnnnnn	All SIP Proxies	Modify Delete

n - number (0-9)

Under Automatic Route Selection:

Click **Modify** next to Number Dialed plan
 Select All SIP Proxies in the Service Group field.
 Click the **Update** button.



Automatic Route Selection [add new rule](#)

Number Dialed	Output Dial String	Service Group	Action
9+1nnnnnnnnn	1nnnnnnnnn	All SIP Proxies	Modify
9+1408nnnnnnn	1408nnnnnnn	All SIP Proxies	Modify Delete

n - number (0-9)

Now you can dial **9** followed by a 7-digit number for calls that are within the same area code. For all other area codes, dialing **9** first must be followed by **1** and then followed by the 10-digit number. For calls that do not require to be preceded by **1**, you can always dial **8**, followed by a 10-digit number.

5.17 PBX Call features

PBX Call Features - navigate to **Home > Phone System > Dial Plan > Internal Dial Plan** and then click **View** to see the information from **Phone Function Reference Card**, including the PBX features invoked by Allworx IP phones and analog phones.

- My Account
- My Call Details
- My Conferences
- My Extension
- My Presence
- My Products
- Directory
- Distribution Lists
- Call Queues
- Phone Functions
- Shared Files

Phone Functions Reference Card

Voicemail Shortcuts

The following shortcuts are available while listening to a voicemail message when using the Audio Message Center:

*1 REPLY to this message.	*6 Play the NEXT message.
*2 FORWARD this message.	*7 REWIND the message 10 seconds.
*3 DELETE this message.	*8 FAST FORWARD the message 10 seconds.
*4 REPLAY this message.	*9 CALL BACK the user who left the voicemail.
*5 Play the PREVIOUS message.	*# SKIP to the end of the message.

Changing Message Center Settings

The Message Center System Settings listed below can be changed while logged into the Allworx Audio Message Center (press 4 from the Main Menu):

- Presence setting
- Name recording
- Presence greetings
- PIN
- Whether or not your inbox should accept voicemail

Phone Functions for Allworx IP Phones ([show](#) analog phones)

Note: Items on the phone's LCD screen ARE INDICATED LIKE THIS. Physical buttons to push *are indicated like this*.

LCD Contrast

To adjust the contrast of the phone's display, press the CONFIG soft key, select PREFERENCES, then LCD SETTINGS. Use the ▲ ▼ keys to change the contrast, then press **Select (✓)**. Do the same for brightness, if your phone has a backlit display.

Outside Line Access

- Dial **9 + phone number**.
- Dial ***79 + PIN + phone number** (if you have been assigned a PIN).
- Select a line appearance and dial a phone number.

Personal Speed Dial

TO SET UP:

1. Press the CONFIG soft key.
2. The PERSONAL SPEED DIAL selection should be highlighted; press **Select (✓)**.
3. Use the ▲ ▼ keys to choose a desired speed dial number, then press **Select (✓)**.
4. Use the keypad to enter the extension or phone number, then press **Select (✓)**.
5. Use the keypad to enter a name to associate with the entered number.

Note: The ▲ ▼ keys act as a backspace and the # key can be used to put spaces between the characters in the Speed Dial Description.

TO USE:

1. Pick up a free line.
2. Press the SPDIAL soft key.



3. Press the number on the keypad corresponding to the desired speed dial.

Phone Directory

Press the **▲ ▼** keys to display the company directory and either use the keypad to spell the person's last name or scroll to the desired entry, then press **Select (✓)** to place a call.

Check Voicemail Messages

If your phone supports the Visual Message Center, press the **Messages** button once for the Visual Message Center or twice for the Audio Message Center. If your phone does not support the Visual Message Center, press the **Messages** button once to access the Audio Message Center. You can also dial ***6 + your extension** from any office phone or from within the company Auto Attendant to access the Audio Message Center.

Change Presence Setting

Press the **Presence** soft key (if your phone display has one) or press and hold the **Mute/DND** button until a list of presences appear on the display. Use the **▲ ▼** keys to choose a desired presence, then press **Select (✓)**.

Do Not Disturb

Press the **Mute/DND** button to place the phone in Do Not Disturb mode. The phone will not ring, the **Mute/DND** button will be illuminated amber, and any calls to the user will go to the next destination in your extension call route (usually your voicemail inbox). Press the **Mute/DND** button again to end Do Not Disturb.

Intercom

Press the **Intercom** button, if your phone has one, and then dial the extension of the person you would like to talk to.

Call Forwarding

Dial ***45 + an extension** to forward any calls that come into the phone to that extension. To disable Call Forwarding, dial extension ***450**.

Transfer

ONE-TOUCH

If your phone is configured for ONE-TOUCH transfers and if it has **BLF** keys, press the **BLF** key for the intended recipient of the transfer. Hang up or wait on the line to announce the transfer.

LEGACY UNANNOUNCED (Blind) TRANSFERS

If your phone is configured to use the legacy unannounced transfer method use the following procedure to perform the transfer:

1. Press the **Transfer** button. The current call is placed on hold.
2. At the dial tone, dial the extension of the intended recipient of the transfer.
3. The call is immediately transferred.

DIALED TRANSFER

1. Press the **Transfer** button. The current call is placed on hold.
2. At the dial tone, dial the extension of the intended recipient of the transfer.
3. Hang up or wait on the line to announce the transfer.

TO A USER'S VOICEMAIL

1. Press the **Transfer** button. The current call is placed on hold.
2. At the dial tone, press the **MAIL** soft key, then dial the user's extension.

Parking

Press the **Park** button if your phone has one or press and hold the **Hold** button until the button flashes. The parking orbit extension will be displayed briefly on the phone's screen.

Consultation

1. Press the **Hold** button. The current call is placed on hold.
2. Select a new line, then dial the extension of the party you wish to consult.
3. Consult with the third party.
4. When finished consulting, press the **flashing button** corresponding to the original caller you put on hold.

3-Way Conference

After connecting to the first person, follow these steps to initiate a 3-way conference:

1. Press the **Hold** button.
2. Select another line, then call the second person.
3. Press the **Conference** button or **CONFERENCE** soft key, whichever is available on your phone.
4. Press the **flashing button** where the first person is on hold.
5. All three callers are now able to conference. The **Conference** button will be illuminated solid red.

Conference Center

Dial extension ***408** from any handset or Auto Attendant to enter the Conference Center. A Conference ID and Password will be required. This is an optional feature; check with your System Administrator to see if this feature has been enabled.

Paging Zones

ZONES

Dial ***46n** (where *n* represents the Paging Zone number 0 through 9) to broadcast to a Paging Zone. Handsets that are members of the Paging Zone will play the audio through their intercom. The System Administrator defines which handsets are members of which zones.

Ringtone Families

If you are in a confined area with other phones and want to differentiate your ringtones, you may be able to do so by selecting a different Ringtone Family. Family 5 is particularly useful in differentiating between call types (e.g. calls from a specific number). Your admin must first set up differentiated ringing for you on the Allworx server. To select a Ringtone Family:

1. Press the **CONFIG** soft key.
2. Use the **▲ ▼** keys to choose **PREFERENCES**, then press **Select (✓)**.
3. Use the **▲ ▼** keys to choose **RINGTONE FAMILY**, then press **Select (✓)**.
4. Use the **▲ ▼** keys to choose a family, then press **Select (✓)**.

Answer Other Ringing Phone

To answer a ringing phone, dial ***7** + the ringing phone's extension.

Blind (Unattended) Call Transfer – see the **Transfer** section from the Phone Function Reference Card.

Consultative (Attended) Call Transfer – see the **Transfer** section from the Phone Function Reference Card.

Three-Way Calling – see the **3-Way Conference** section from the Phone Function Reference Card.

Call Forward to Another Extension - see the **Call Forwarding** section from the Phone Function Reference Card.

Do Not Disturb - see the **Do-Not-Disturb** section from the Phone Function Reference Card.

Call Pickup - see **Home > Phone System > Internal Dial Plan > 7xxx call pickup**. When a phone is ring, any other phones can pick up the call by dialing **7**, followed by the extension of the ringing phone.

Call Park – see the **Parking** section from the Phone Function Reference Card.

Call Retrieve (retrieving a parked call) - see **Home > Phone System > Internal Dial Plan > 701-709 call retrieve**. The PBX will announce the location (extension) when the user parks a call. Any other phones can later on pick up the parked call by dialing **7**, followed by the extension of the parked call.

Call Waiting

When a call is up (the button for that call should be solid green), the PBX will indicate a new incoming call to the same DID with a flashing green button.

To answer the second call, the user must put the first call on hold first by pressing the **Hold** button (the button for the first call will change from solid green to flashing green).

The user answers the second call by pressing the flashing button for the second call (the button should change from flashing green to solid green).

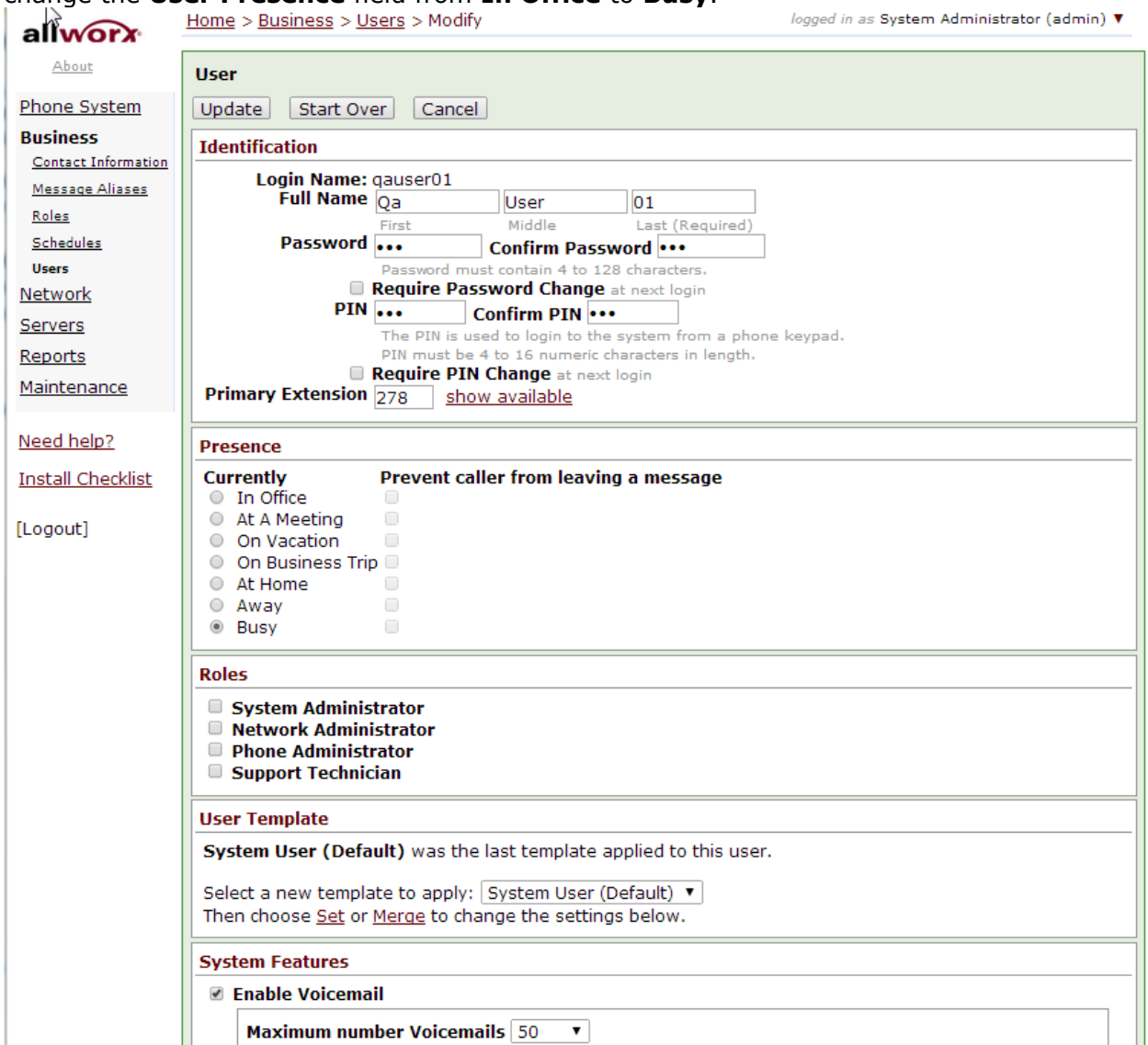
Call Hold and Call Resume

To put a call on Hold after a call is up (the button for that call should be solid green), press the **Hold** button to put the call on hold (the button for that call should change to flashing green).

To resume the held call (the button for that call should be flashing green), press the flashing button (the button for that call should change back to solid green).

Call Forward Busy to PSTN Number

Navigate to **Home > Business > User**, click the **Modify** link of the user's extension and then change the **User Presence** field from **In Office** to **Busy**.



Home > Business > Users > Modify logged in as System Administrator (admin) ▼

User [Update] [Start Over] [Cancel]

Identification

Login Name: qauser01

Full Name:

First Middle Last (Required)

Password: Confirm Password:

Password must contain 4 to 128 characters.

Require Password Change at next login

PIN: Confirm PIN:

The PIN is used to login to the system from a phone keypad.
PIN must be 4 to 16 numeric characters in length.

Require PIN Change at next login

Primary Extension: [show available](#)

Presence

Currently	Prevent caller from leaving a message
<input type="radio"/> In Office	<input type="checkbox"/>
<input type="radio"/> At A Meeting	<input type="checkbox"/>
<input type="radio"/> On Vacation	<input type="checkbox"/>
<input type="radio"/> On Business Trip	<input type="checkbox"/>
<input type="radio"/> At Home	<input type="checkbox"/>
<input type="radio"/> Away	<input type="checkbox"/>
<input checked="" type="radio"/> Busy	<input type="checkbox"/>

Roles

System Administrator

Network Administrator

Phone Administrator

Support Technician

User Template

System User (Default) was the last template applied to this user.

Select a new template to apply: ▼

Then choose [Set](#) or [Merge](#) to change the settings below.

System Features

Enable Voicemail

Maximum number Voicemails: ▼



Call Answering maximum message record time ▼
Message Center maximum message record time ▼
 User has permission for Off-Site Access to outside lines (from Message Center Main Menu)
 User has permission to send voicemail to all users (by dialing 9 from the Message Center Send Menu)
Operator Extension ▼ (used when caller dials 0 during user's call answering message)
End message recording ▼ (for calls from Analog CO lines)

User has permission to modify extension's call routes
 User has permission to create conferences
 User has permission to administer Call Reporting
System-wide Active Calls Display ▼
 Call Recording Allowed
Maximum size Universal Inbox ▼ **MBytes**
 Enable Hot Desking

Maximum Login Time ▼
Caller ID Name up to 47 characters: letters digits . , \ _ ' -
Caller ID Number (up to 24 digits)

Call Queue Supervisor

Check boxes below to make the user a Call Queue Supervisor of the corresponding queue:

- Queue 0
- Queue 1
- Queue 2
- Queue 3
- Queue 4
- Queue 5
- Queue 6
- Queue 7
- Queue 8
- Queue 9

Recording Manager

Check boxes below to make the user a Recording Manager for the corresponding Auto Attendant or Call Queue:

Auto Attendants <input type="checkbox"/> *431 - Auto Attendant 1 <input type="checkbox"/> *432 - Auto Attendant 2 <input type="checkbox"/> *433 - Auto Attendant 3 <input type="checkbox"/> *434 - Auto Attendant 4 <input type="checkbox"/> *435 - Auto Attendant 5 <input type="checkbox"/> *436 - Auto Attendant 6 <input type="checkbox"/> *437 - Auto Attendant 7 <input type="checkbox"/> *438 - Auto Attendant 8 <input type="checkbox"/> *439 - Auto Attendant 9	Call Queues <input type="checkbox"/> Queue 0 <input type="checkbox"/> Queue 1 <input type="checkbox"/> Queue 2 <input type="checkbox"/> Queue 3 <input type="checkbox"/> Queue 4 <input type="checkbox"/> Queue 5 <input type="checkbox"/> Queue 6 <input type="checkbox"/> Queue 7 <input type="checkbox"/> Queue 8
---	---



*439 - Auto Attendant 9 Queue 8
 Queue 9

Feature Eligibility

User is eligible for Allworx Reach activations
 User is eligible for Allworx Interact Professional activations

Follow Me Calling

PIN required to accept call
 Require caller to record name
 Primary Phone (used for quick transfer from cell phone)

Auto Attendant Menus

Check boxes below to include the user in the Dial-By-Name and Dial-By-Directory menus for the attendant:

- *431 - Auto Attendant 1
- *432 - Auto Attendant 2
- *433 - Auto Attendant 3
- *434 - Auto Attendant 4
- *435 - Auto Attendant 5
- *436 - Auto Attendant 6
- *437 - Auto Attendant 7
- *438 - Auto Attendant 8
- *439 - Auto Attendant 9

User Message Alias

To add a message alias for this user, go to the User Message Add [page](#).

POP3 Mail Transfers

Email and Voicemail messages
 Email messages only
 No messages

Voicemail Notification and Escalation

Notification and Escalation Disabled
 Notification Mode

SMS Email Address:
single email address or system email alias

Escalation Mode

Level	SMS Email Address	Notification Period	Maximum Retries	Continue Notifications
	<small>single email address or system email alias</small>	1 - 1440 min.	0 - 100	<small>notifications for this level continue after escalation to higher level(s)</small>



Level	SMS Email Address <small>single email address or system email alias</small>	Notification Period <small>1 - 1440 min.</small>	Maximum Retries <small>0 - 100</small>	Continue Notifications <small>notifications for this level continue after escalation to higher level(s)</small>
1	<input type="text"/>	<input type="text" value="5"/>	<input type="text" value="0"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="text" value="5"/>	<input type="text" value="0"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="text" value="5"/>	<input type="text" value="0"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="text" value="5"/>	<input type="text" value="0"/>	<input type="checkbox"/>

Email Forwarding

NOTE
Support for forwarding email using external SMTP server is *disabled* at this time. Support can be enabled on Email Server page.

SMTP Server Configuration (overrides server default)

Server Address (enter IP address or DNS name)
 Server Port (enter 1 to 65535, typically 25)
 Display Name
 Sender's Email Address

Use authentication

User Name
 Password

Secure Connection

VPN Settings

Allow VPN Access

VPN Password
 Confirm VPN Password

NOTE
Allworx VPN support is currently disabled. You must install the Virtual Private Network (VPN) Feature Key to enable it.
 The VPN Password must be 14 characters long, contain at least one letter and at least one digit, and contain only letters (A-Z,a-z) and digits (0-9).

External POP3 Accounts

NOTE
Support for fetching mail from external POP3 accounts is *disabled* at this time. Support for fetching mail from external POP3 accounts is *disabled* at this time. Support for fetching mail requires installation of a disk.

Poll Period (minutes) (5 to 9999 minutes)
 Mail Server e.g. *pop.myisp.com* Username on Mail Server Password

Navigate to **Home > Phone System > Extension**, click the **View Call Routes** link of the user's extension, click the **Modify** link of **Presence: Busy** section. Select the **Dial number** radio button and then enter the PSTN number (preceded by **91** or **8**) to dial. Leave other fields as defaults and then click the **Update** button.



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Call Routes For Extension 278 - Qa User 01 (qauser01)

Presence: In Office [ACTIVE] [add new Call Route](#)

On calls from all callers:

First connection attempt:
Qa User 01 (Login ID:5100) for 4 rings (Single (int), Double (ext))
Finally:
transfer to *400 - Default Auto Attendant

[Modify](#)

Presence: At A Meeting [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: On Vacation [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: On Business Trip [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: At Home [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: Away [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: Busy [add new Call Route](#)

On calls from all callers:

dial 9 (408) 555-5559

[Modify](#)

Call Forward to No Answer to PSTN Number

Navigate to **Home > Phone System > Extension**, click the **View Call Routes** link of the user's extension, click the **Modify** link of **Presence: In Office** section. Select the **Dial number** radio button and then enter the PSTN number (preceded by **91** or **8**) to dial. Leave other fields as defaults and then click the **Update** button.



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Call Routes For Extension 278 - Qa User 01 (qauser01)

Presence: **In Office** [ACTIVE] [add new Call Route](#)

On calls from all callers:

First connection attempt:
Qa User 01 (Login ID:5100) for 4 rings (Single (int), Double (ext))
Finally:
transfer to *400 - Default Auto Attendant

[Modify](#)

Presence: **At A Meeting** [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: **On Vacation** [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: **On Business Trip** [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: **At Home** [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: **Away** [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 01 (qauser01)

[Modify](#)

Presence: **Busy** [add new Call Route](#)

On calls from all callers:

dial 9 (408) 555-5559

[Modify](#)

Call Forward Always to PSTN Number

Navigate to **Home > Phone System > Extension**, click the **View Call Routes** link of the user's extension, click the **Modify** link of **Presence: In Office** section. Select **Follow Me** → from the drop-down menu of the **First connection attempt** field and enter the PSTN number (preceded by **91** or **8**) to dial. Leave other fields as defaults and then click the **Update** button.



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Call Route For Extension 256 - Qa User 02 (qauser02)

Call Route Selection

Apply these changes to the selected presence(s):

- | | |
|-------------------------------------|------------------|
| <input type="checkbox"/> | Presence |
| <input checked="" type="checkbox"/> | In Office |
| <input type="checkbox"/> | At A Meeting |
| <input type="checkbox"/> | On Vacation |
| <input type="checkbox"/> | On Business Trip |
| <input type="checkbox"/> | At Home |
| <input type="checkbox"/> | Away |
| <input type="checkbox"/> | Busy |

On calls from all callers:

- Modify Primary Route**
- Modify On Busy Route** (used if a Primary Route connection attempt is busy)

Call Route

First connection attempt [add a destination](#) [delete this attempt](#)

Qa User 02 (Login ID:5101) for 4 rings (Single (int), Double (ext))

[add another connection attempt](#)

Finally...

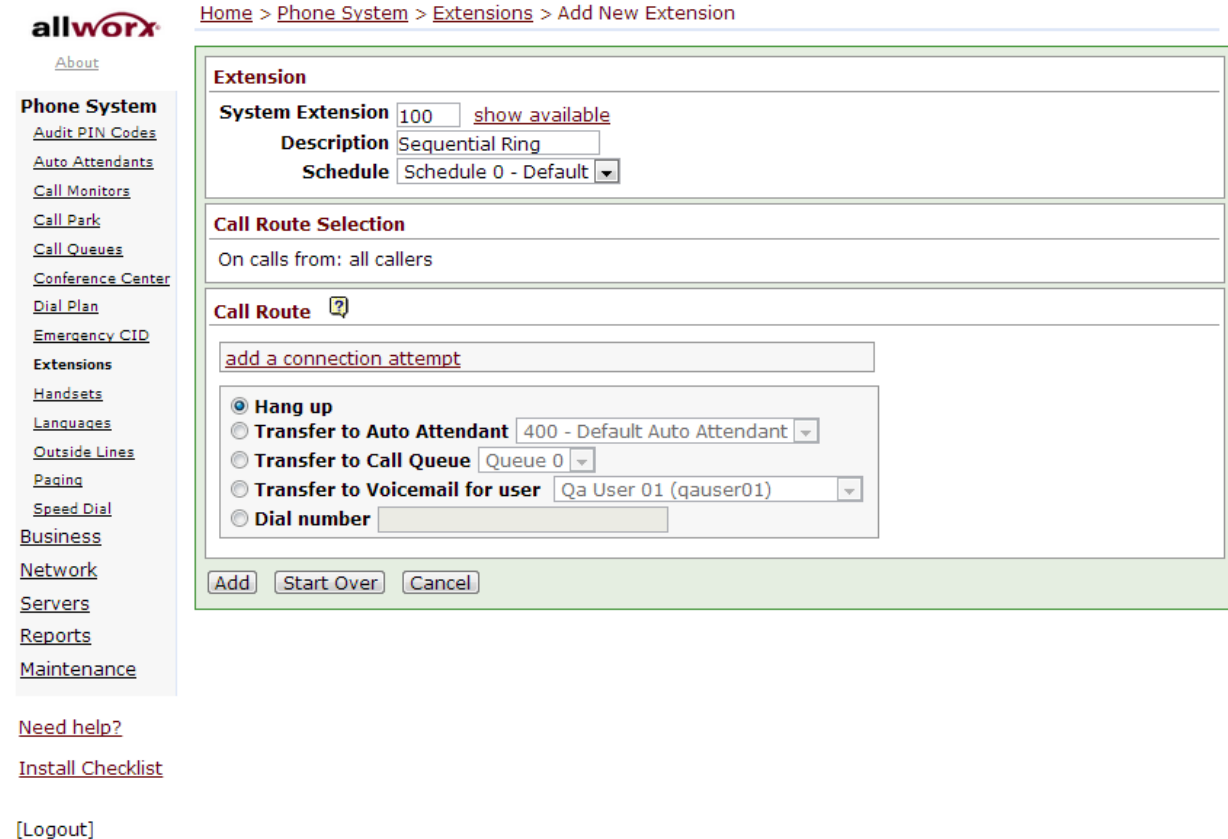
- Hang up
- Transfer to Auto Attendant *400 - Default Auto Attendant
- Transfer to Call Queue Queue 0
- Transfer to Voicemail for user Qa User 02 (qauser02)
- Dial number

Update Start Over Cancel

5.18 Sequential Ring

Navigate to **Home > Phone System > Extension** and click the **add new extension** link to create a new extension for handling the Sequential Ring feature. From there, enter an unused extension in the **System Extension** field, enter a description in the **Description** field and then click the **add a connection attempt** link to configure the first extension to ring.

[Home > Phone System > Extensions > Add New Extension](#)



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Select the first extension to ring by selecting its user in the **First connection attempt** section, leave other fields as defaults and then click the **add a connection attempt** link to configure the next extension to ring.



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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route [?](#)

First connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

[add another connection attempt](#)

Finally...

Hang up

Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

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Select the second extension to ring by selecting its user in the **Second connection attempt** section, leave other fields as defaults and then click the **add another connection attempt** link to configure the next extension to ring.



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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route [?](#)

First connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

Second connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

[add another connection attempt](#)

Finally...

Hang up

Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

When you are done with adding the next extension to ring, click the **Add** button. Extension **123** should show the call routes for the sequential ring of your choices.



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[Home](#) > [Phone System](#) > [Extensions](#) > [View Call Routes](#)

Call Routes For Extension 256 - Qa User 02 (qauser02)

Presence: In Office [ACTIVE] [add new Call Route](#)

On calls from all callers:

<i>First connection attempt:</i> Qa User 02 (Login ID:5101) for 4 rings (Single (int), Double (ext))	Modify
<i>Finally:</i> transfer to Voicemail for Qa User 02 (qauser02)	

Presence: At A Meeting [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

Presence: On Vacation [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

Presence: On Business Trip [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

Presence: At Home [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

Presence: Away [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

Presence: Busy [add new Call Route](#)

On calls from all callers:

transfer to Voicemail for Qa User 02 (qauser02)	Modify
---	------------------------

5.19 Simultaneous Hunting Policy

Navigate to **Home > Phone System > Extension** and click the **add new extension** link to create a new extension for handling the Simultaneous Hunting Policy feature. From there, enter an unused extension in the **System Extension** field, enter a description in the **Description** field and then click the **add a connection attempt** to configure the extension to ring.



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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route

[add a connection attempt](#)

Hang up

Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

Select the extension to ring by selecting its user in the **First connection attempt** section, leave other fields as defaults and then click the **add a destination** link to add another extension to ring at the same time



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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route [?](#)

First connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

[add another connection attempt](#)

Finally...

Hang up

Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

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Select another extension to ring at the same time by selecting its user in the in the new entry of the **First connection attempt** section, leave other fields as defaults and then click the **add a destination** link to add another extension.



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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route [?](#)

First connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

Second connection attempt [add a destination](#) [delete this attempt](#)

for rings ()

[add another connection attempt](#)

Finally...

Hang up

Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

When you are done with adding all the extensions to ring at the same time, click the **Add** button. Extension **111** should show the call routes for the Simultaneous Hunting Policy of your choices.



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Call Routes For Extension 256 - Qa User 02 (qauser02)	
Presence: In Office [ACTIVE] add new Call Route	
On calls from all callers:	
<i>First connection attempt:</i> Qa User 02 (Login ID:5101) for 4 rings (Single (int), Double (ext))	Modify
<i>Finally:</i> transfer to Voicemail for Qa User 02 (qauser02)	
Presence: At A Meeting add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify
Presence: On Vacation add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify
Presence: On Business Trip add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify
Presence: At Home add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify
Presence: Away add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify
Presence: Busy add new Call Route	
On calls from all callers:	
transfer to Voicemail for Qa User 02 (qauser02)	Modify

PBX Auto-Attendant to PSTN Numbers (for example: the first number assigned to Sales, the second number assigned to Support and the third number assigned to Billing). When the Auto-Attendant prompts the caller for DTMF digits, we want the Auto-Attendant to call one of these 3 PSTN number, depending on what digit it receives.

Navigate to **Home > Phone System > Extension** and click the **add new extension** link to create a new extension (each extension will be used for handling one PSTN number to call). From there, enter an unused extension in the **System Extension** field, enter a description in the **Description** field, select the **Dial number** radio button, and enter a PSTN number (preceded by **91** or **8**) to dial and then click the **Add** button.



Home > Phone System > Extensions > Add New Extension logged in as System Administrator (admin) ▼

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Extension

System Extension [show available](#)

Description

Schedule

Call Route Selection

On calls from: all callers

Call Route [?](#)

[add a connection attempt](#)

Hang up

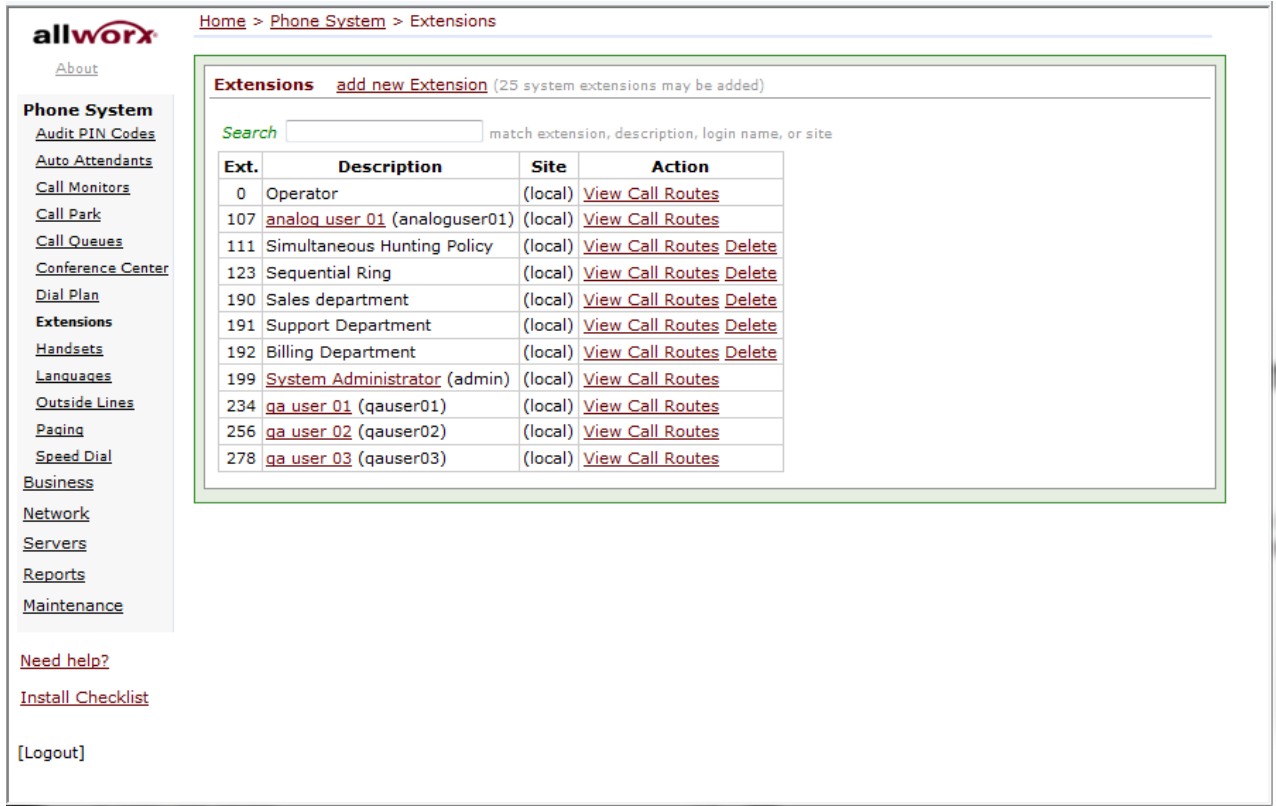
Transfer to Auto Attendant

Transfer to Call Queue

Transfer to Voicemail for user

Dial number

In this example, we have created 3 extensions, 190, 191 and 192, for the PBX Auto-Attendant to dial the 3 PSTN Numbers, as follows:



allworx Home > Phone System > Extensions

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Extensions [add new Extension](#) (25 system extensions may be added)

Search match extension, description, login name, or site

Ext.	Description	Site	Action
0	Operator	(local)	View Call Routes
107	analog user 01 (analoguser01)	(local)	View Call Routes
111	Simultaneous Hunting Policy	(local)	View Call Routes Delete
123	Sequential Ring	(local)	View Call Routes Delete
190	Sales department	(local)	View Call Routes Delete
191	Support Department	(local)	View Call Routes Delete
192	Billing Department	(local)	View Call Routes Delete
199	System Administrator (admin)	(local)	View Call Routes
234	qa user 01 (qauser01)	(local)	View Call Routes
256	qa user 02 (qauser02)	(local)	View Call Routes
278	qa user 03 (qauser03)	(local)	View Call Routes

Navigate to **Home > Phone System > Auto Attendants** and click the **Modify** link in the **x431 – Auto Attendant 1** section. From there, select extension **190** for the Digit **1** field, select extension **191** for the Digit **2** field, select extension **192** for the Digit **3** field, leave other fields as defaults and then click the **Update** button.



allworx Home > Phone System > Auto Attendants > Modify logged in as System Administrator (admin) ▼

Auto Attendant (x*431)

Features and Prompts

The Allworx allows you to selectively enable certain features and prompts for each Auto Attendant. This is useful if you have recorded your own custom greetings or messages and no longer wish to play the default Allworx prompts.

TIP
You may find it helpful to make some changes, then dial the Auto Attendant to test the effect of the new settings.

Description Auto Attendant 1

Schedule Schedule 0 - Default ▼

Include Remote Users disabled ▼ enable to include multi-site users dial-by-name, dial-by-directory

Dial-By-Name Menu (#1) enabled ▼

Dial-By-Name Prompt play ▼ "Press #1 to dial by name."

Dial-By-Name Spell Option spell first or last name ▼

Dial-By-Directory Menu (#2) enabled ▼

Dial-By-Directory Prompt play ▼ "Press #2 for a listing of all users and their extensions."

Dial-By-Directory List Order list in name order ▼

Dial It Now Prompt play ▼ "If you know your party's extension you may dial it now."

Repeat Options Prompt play ▼ "Press * to listen to these choices again."

Speed Dial Numbers not allowed ▼ (support for dialing *250-*299, *24000-*24999 from main menu)

Default Extension not used ▼ transfer to this extension if no input for 8 seconds

Menu Shortcuts ⓘ

Auto Attendant **menu shortcuts** allow a caller to press a single digit to transfer to an extension.

Digit	Extension
0	0 - Operator ▼
1	278 - Qa User 01 ▼
2	256 - Qa User 02 ▼
3	not used ▼
4	not used ▼
5	not used ▼
6	not used ▼
7	not used ▼
8	not used ▼
9	not used ▼

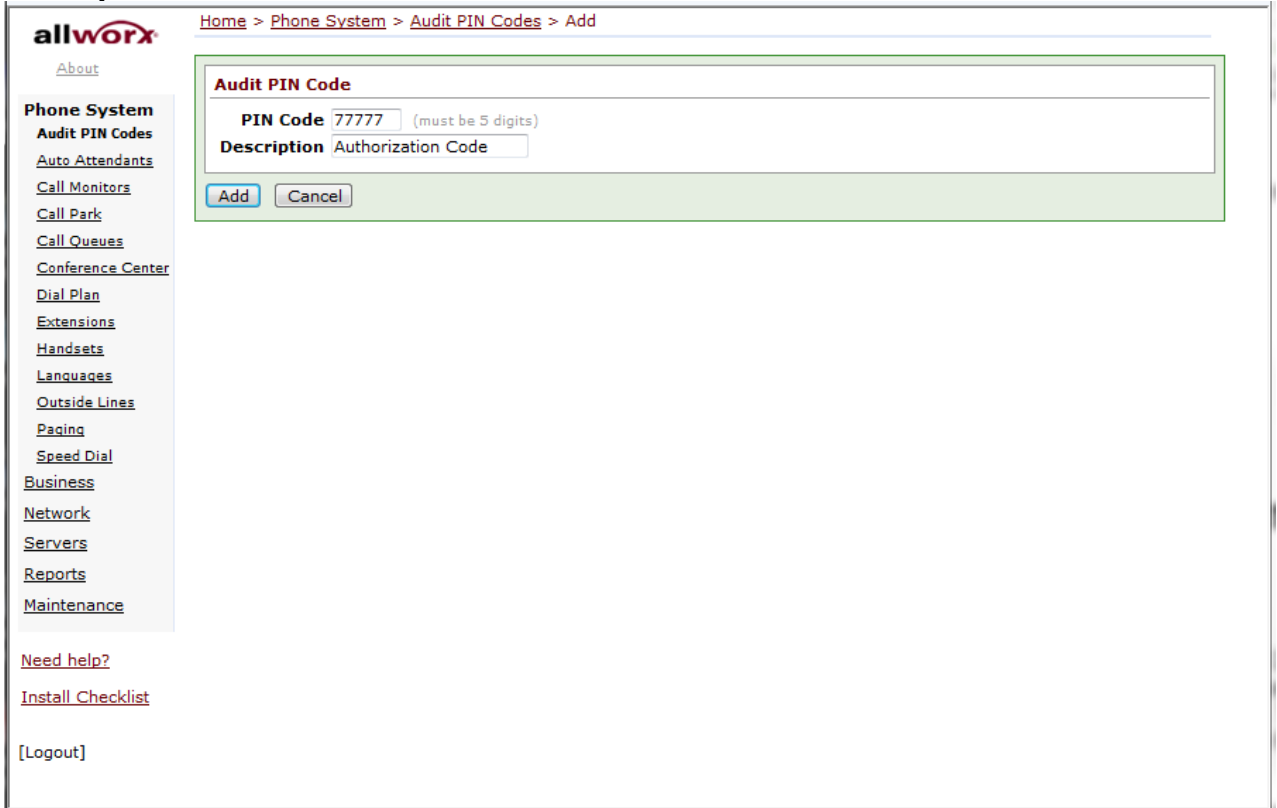
Update Start Over Cancel

PBX Account Codes – Allworx PBX does not support Account Codes.

PBX Authorization Codes – Once the PBX Authorization Code is enabled, users that do have the dialing privileges would not be able to dial **9** to make outside calls. These users must dial **78** followed by the Authorization Code before they can dial the number they intend to dial after the digit **9**.

To enable the PBX Authorization Codes, navigate to **Home > Phone System > Audit PIN Codes** and click the **add new PIN Code** link to create a new PIN code. From there, enter a

5-digit number (**77777** in this example) in the **PIN Code** field, enter a description in the **Description** field and then click the **Add** button.



The screenshot shows the 'allworx' web interface. The breadcrumb trail is 'Home > Phone System > Audit PIN Codes > Add'. The left sidebar contains a 'Phone System' menu with items like 'Audit PIN Codes', 'Auto Attendants', 'Call Monitors', 'Call Park', 'Call Queues', 'Conference Center', 'Dial Plan', 'Extensions', 'Handsets', 'Languages', 'Outside Lines', 'Paging', 'Speed Dial', 'Business', 'Network', 'Servers', 'Reports', and 'Maintenance'. Below the sidebar are links for 'Need help?', 'Install Checklist', and '[Logout]'. The main content area is titled 'Audit PIN Code' and contains a form with two fields: 'PIN Code' with the value '77777' and a note '(must be 5 digits)', and 'Description' with the value 'Authorization Code'. At the bottom of the form are 'Add' and 'Cancel' buttons.

The default Dialing Privileges Group do not require the users to use PIN code for making outside calls. To enforce the PIN code for dialing outside calls, first we should change the default Dialing Privileges Group to require PIN code for making outside calls. Navigate to **Home > Phone System > Dial Plan > Dialing Privileges Groups**, click the **View** link of **Dialing Privileges (Default)** and then click the **Modify** link of **Dialing Privileges Group**. From there, select **Dial *79+PIN, to access outside line** in the **Seize Rule** field, leave other fields as defaults and then click the **Update** button.

allworx Home > Phone System > Dial Plan > Modify Dialing Privileges Group *logged in as System Administrator (admin)*

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Allworx phones must be rebooted after changes to the Internal Extension Length, Internal Dial Plan, or External Dialing Rules. [Reboot Phones](#)

Dialing Privileges (Default)

Dialing Privileges Group

Name: Dialing Privileges (Default)

Emergency Service Group: All Trunk Devices For 911 calls

NOTE
If you are using a SIP Proxy to complete "Emergency" calls, you must contact your ITSP and verify that your account is correctly configured to handle the calls.

Seize Rule: Dial *79+PIN, to access outside line

Outside Line Selection Method:

- Use External Dialing Rules for number dialed
- Use External Dialing Rules, but restrict to these services:

(check box to allow service to be used)

[check all](#) [uncheck all](#)

EM-4552 (Login ID: 4085555559)

EM-4552 (Login ID: 4085555555)
- Ignore External Dialing Rules and always use this service or Service Group:

Service Group: All Trunk Devices

[Update](#) [Start Over](#) [Cancel](#)

If you like, you may also want to create a special Dialing Privileges Group to allow certain users to dial without the PIN code. Navigate to **Home > Phone System > Dial Plan > Dialing Privileges Groups**, click the **Copy** link of **Dialing Privileges (Default)** and then, after the screen refreshes, click the **View** link of **Copy of Dialing Privileges (Default)** and then click the **Modify** link of **Dialing Privileges Group**. From there, enter a name (**Dialing Privileges (Special)** in this example) in the **Name** field, select **Dial 9, or *79+PIN, to access outside line** in the **Seize Rule** field, leave other fields as defaults and then click the **Update** button.



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Allworx phones must be rebooted after changes to the Internal Extension Length, Internal Dial Plan, or External Dialing Rules. [Reboot Phones](#)

Dialing Privileges (Default)

Dialing Privileges Group

Name Dialing Privileges (Default)

Emergency Service Group All Trunk Devices For 911 calls

NOTE
If you are using a SIP Proxy to complete "Emergency" calls, you must contact your ITSP and verify that your account is correctly configured to handle the calls.

Seize Rule: Dial 9, or *79+PIN, to access outside line ▼

Outside Line Selection Method:

- Use External Dialing Rules for number dialed
- Use External Dialing Rules, but restrict to these services:

(check box to allow service to be used)

check all uncheck all

✓ EM-4552 (Login ID: 4085555559)

✓ EM-4552 (Login ID: 4085555555)
- Ignore External Dialing Rules and always use this service or Service Group:

Service Group: All Trunk Devices ▼

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To assign different dialing privileges to different users, navigate to **Home > Phone System > Handsets**, click the **Modify** link of the selected user, select Dialing Privileges (Default or Special) in the **Dialing Privileges Group** field and then click the **Update** button. Note that for users that are required to use PIN code, instead of dialing **9 1 8005551212**, these users must dial **78 7777 1 8005551212**, according to this example.

allworx [Home](#) > [Phone System](#) > [Handsets](#) > [Modify Handset](#)

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Call Appearance

Call Forwarding: disabled

Phone Type: SIP Model: Allworx 9112
 MAC Address: 00-0A-DD-81-D7-A4

Owner: qa user 01 (qauser01) ▼

Internal Caller ID Name: qa user 01 (up to 47 characters: letters digits . , \ _ ' -)

Internal Caller ID Number: use owner's extension ▼

External Caller ID Name: 408-555-5555 (up to 47 characters: letters digits . , \ _ ' -)

External Caller ID Number: 4085555555 (up to 24 digits)

Description: qa user 01

Dialing Privileges Group: Dialing Privileges (Special) ▼
 Dialing Privileges (Default)
 Dialing Privileges (Special)

SIP Registration

User ID: 5100
 Binding: 5100@10.10.107.12:5060
 Login ID: 5100
 Password: ●●●●●●
 (expires: Sep 26, 2011 07:18 pm)

Call Appearance Features

Provide Hold Music
 Can place calls
 Can receive calls

Caller ID Blocked – Anonymous Caller ID – The PBX allows you to configure the Display part of the **From** header to any alphanumeric characters (i.e.: **anonymous**) but it does not allow the User part of the **From** header to have any non-digit characters. If you must change the User part of the **From** header, you can use the header manipulation capability from EdgeMarc. To configure the user's Caller ID as **anonymous** in the Display part of the **From** header from the PBX, navigate to **Home > Phone System > Handsets** and click the **Modify** link of the selected user. From there, enter **anonymous** in the **External Caller ID Name** field and then click the **Update** button.

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Call Appearance

Call Forwarding: disabled

Phone Type: SIP **Model:** Allworx 9112
MAC Address: 00-0A-DD-81-D7-A4

Owner: qa user 01 (qauser01) ▼

Internal Caller ID Name: qa user 01 (up to 47 characters: letters digits . , \ _ ' -)

Internal Caller ID Number: use owner's extension ▼

External Caller ID Name: anonymous (up to 47 characters: letters digits . , \ _ ' -)

External Caller ID Number: 4085555555 (up to 24 digits)

Description: qa user 01

Dialing Privileges Group: Dialing Privileges (Special) ▼

SIP Registration

User ID: 5100
Binding: 5100@10.10.107.12:5060
Login ID: 5100
Password: ●●●●●●●●
(expires: Sep 27, 2011 11:18 am)


Call Appearance Features

Provide Hold Music

Can place calls

Can receive calls

900/976 Call Blocking – To prevent the users from making certain calls, the PBX allows you to block these calls identified by the area codes. To block certain outbound calls identified by area codes, navigate to **Home > Phone System > Dial Plan** and click the **View** link of the Dialing Privileges Group. From there, click the **Modify** link of Toll Restriction to add the area codes of the numbers to be blocked under **Blocked Numbers** and then click the **Update** button.


Home > Phone System > Dial Plan > Modify Dialing Privileges Group

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Dialing Privileges (Default)

Toll Restriction

Blocked Numbers

Enter phone numbers as if they were dialed without the Allworx system installed. Do not enter the 9, or 78+PIN, that is used for accessing an outside line.

You can enter partial or complete phone numbers. If a partial phone number is entered, the system will match all numbers that begin with the partial number entered. See the examples below for typical uses.

Examples:

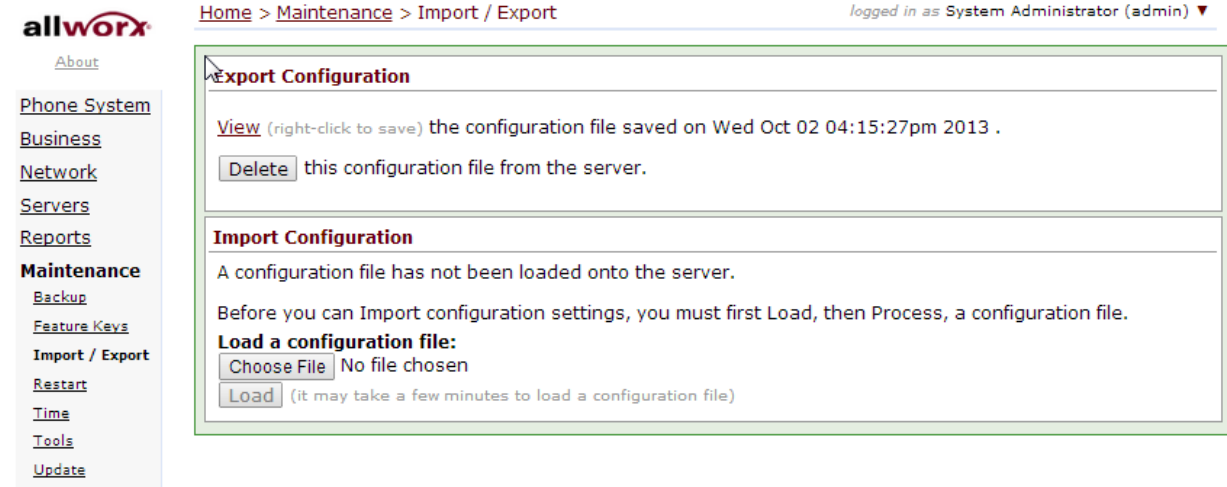
- to block calls to 900 numbers (1-900-###-####) enter '1900' in the Blocked Numbers table.
- to block calls to 900 numbers (1-900-###-####), but allow calls to 1-900-555-1212, enter '1900' in the Blocked Numbers table, and '1-900-555-1212' in the Exceptions to Blocked Numbers table
- to block calls to 209-555-1122 where a 1 is required for dialing the number enter '1-209-555-1122'.
- to block calls to 716-555-3344 where a 1 is *not* required for dialing the number enter '716-555-3344'.
- to block calls to 555-3344 where a 1 and area code are not required for dialing the number enter '555-3344'.

Exceptions to Blocked Numbers

5.20 Backing up the PBX configurations

Backing up the PBX configurations:

To back up your PBX configurations, navigate to **Home > Maintenance > Import / Export > Export Configuration**.

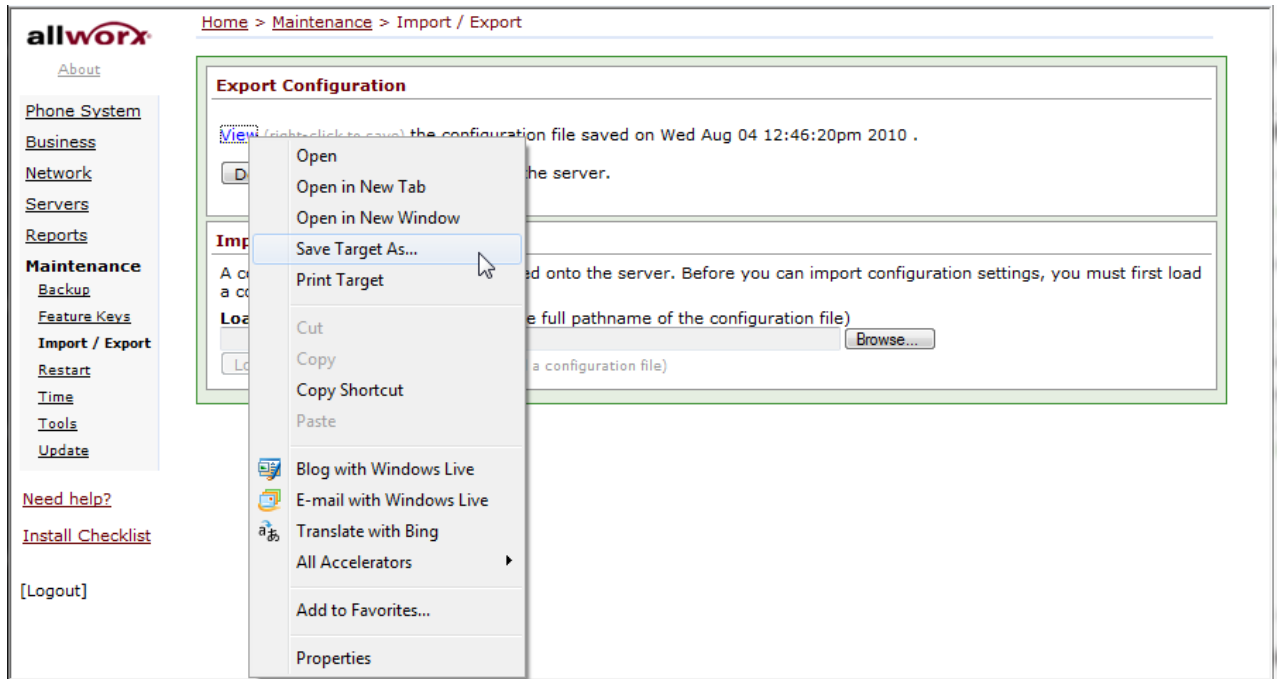


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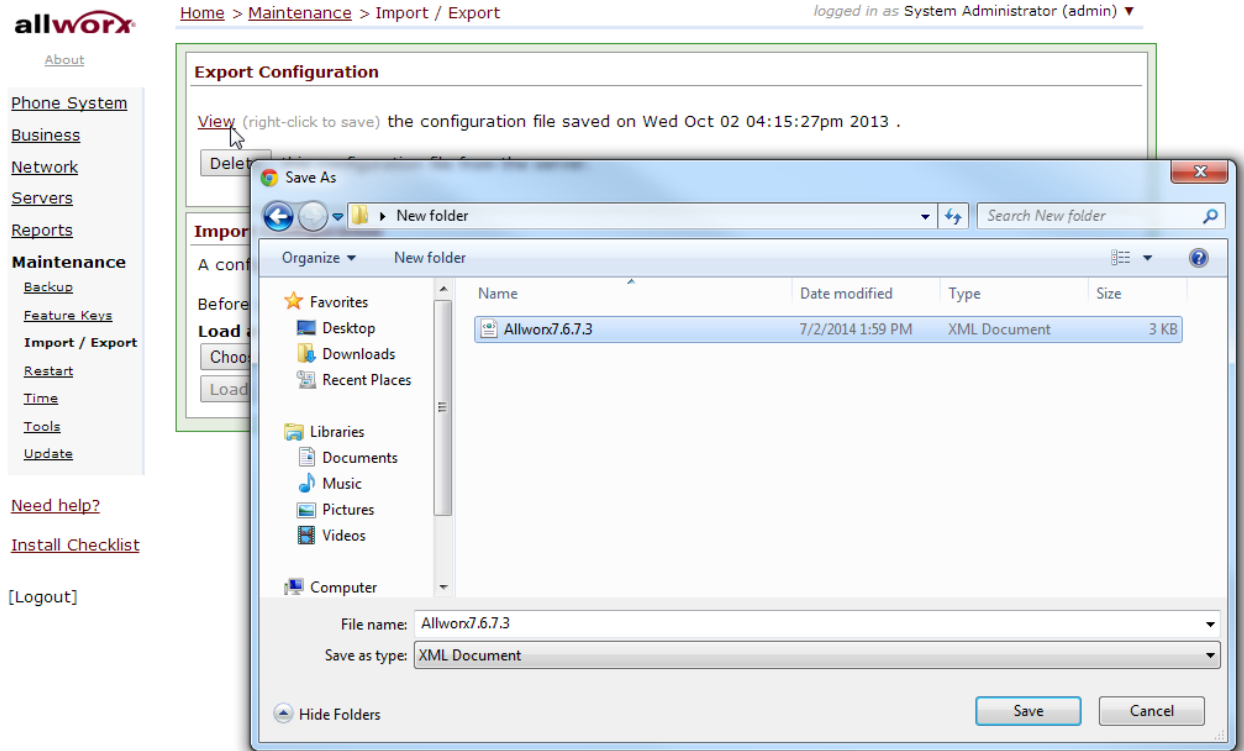
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Right-click the **View** link and, from the pop-up menu, click the **Save Target As...** link.



From the pop-up screen, select the path and enter the file name in the **File name** field. Note that the file name for PBX configuration should end with **.xml**. Click the **Save** button to save the PBX configuration file.



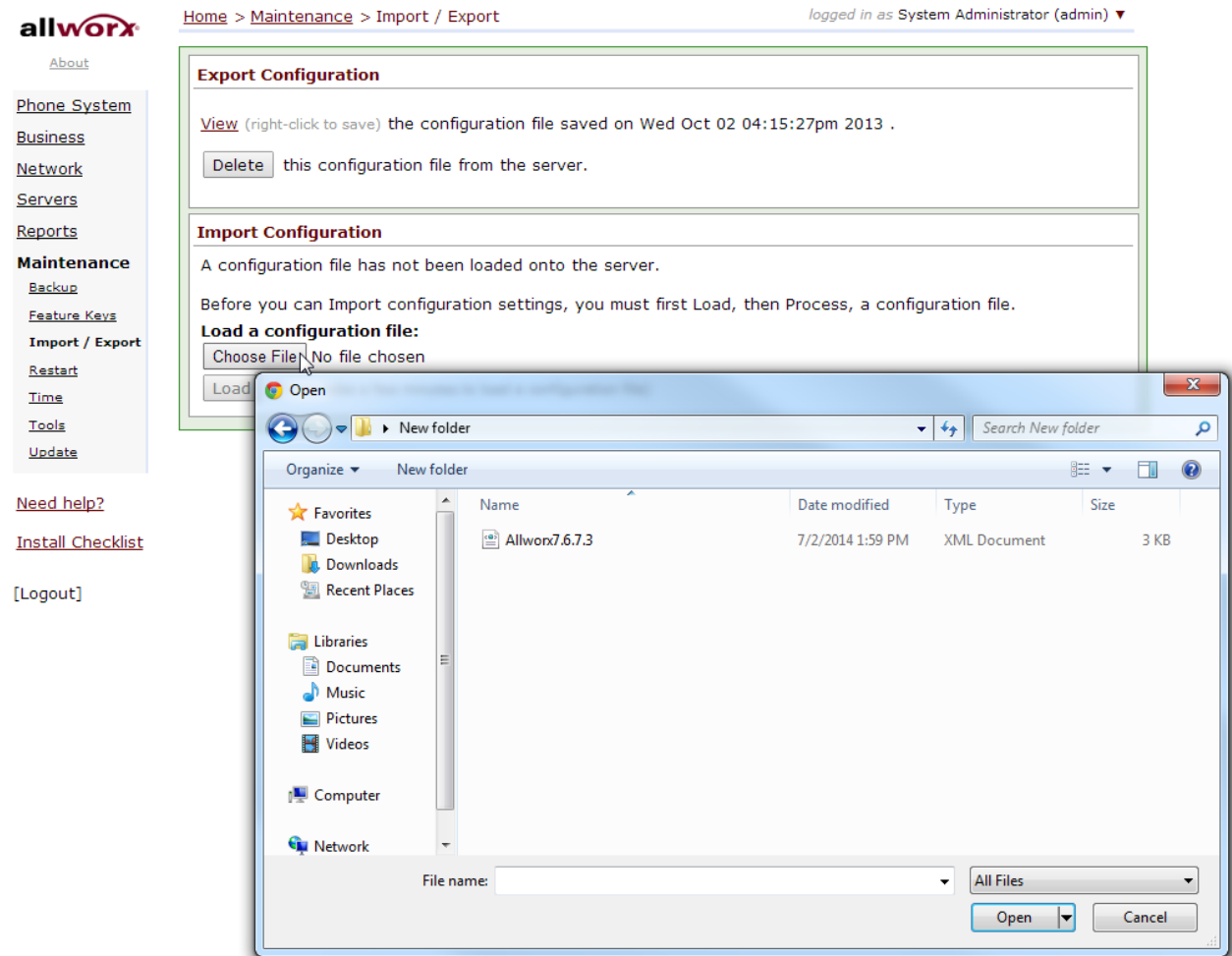
5.21 Restoring the PBX configurations

Restoring the PBX configurations:

To restore your PBX configurations, navigate to **Home > Maintenance > Import / Export > Import Configuration**.

Browse and load a previously saved PBX configuration file in the **Load a configuration file** field.

Click the **Load** button.



The screenshot shows the Allworx web interface. The breadcrumb navigation is **Home > Maintenance > Import / Export**. The user is logged in as **System Administrator (admin)**. The **Import Configuration** section displays a message: "A configuration file has not been loaded onto the server. Before you can Import configuration settings, you must first Load, then Process, a configuration file." Below this, the **Load a configuration file:** section has a **Choose File** button and a **Load** button. A file selection dialog box is open, showing a file named **Allworx7.6.7.3** (XML Document, 3 KB) selected in a folder named **New folder**. The dialog box also shows a **File name** field and **All Files** selected in the file type dropdown.

For advanced configurations and support please contact the Edgewater Technical Assistance Center support@edgewaternetworks.com or call [408.351.7255](tel:408.351.7255).