

Table of Contents

1	SIP Carrier	2
1.1	Warnings.....	2
1.2	Vendor Contact	2
1.3	Versions Verified	2
1.4	PreInstall.....	2
1.5	Install	2
1.6	Required Post Installation Steps	2
2	IC Configuration Guide	3
2.1	Line Configuration	3
2.1.1	Line Menu.....	3
2.1.2	Identity (Out) Menu	4
2.1.3	Audio Menu.....	5
2.1.4	Transport Menu	6
2.1.5	Session Menu.....	7
2.1.6	Authentication Menu	8
2.1.7	Proxy Menu.....	9
2.1.8	Access Menu	10
2.1.9	Region Menu	11
3	SIP Proxy Support.....	12
4	Fax Caveats	12
5	E911 Support	12

1 SIP Carrier



1.1 Warnings

Check the *SIP Carrier Matrix* of the Interactive Intelligence Testlab website for certification status and supported features.

<http://testlab.inin.com>

1.2 Vendor Contact

<http://www.earthlinkbusiness.com/>

1.3 Versions Verified

Interaction Center 4.0 SU3

Required Engineering Specials (ES):

SU3-IC-112062_IC-111930

SU3-IC-113868_IC-113836

1.4 PreInstall

EarthLink Business will provide users with a set of authentication credentials, a block of DID's, and a reference server (IP Address, FQDN, or other means to connect to the service). These must be obtained before setup can begin.

1.5 Install

EarthLink Business requires a fully configured SIP enabled IC server. One SIP line must be created. The configuration for these lines will be covered in the Line Configuration section below.

1.6 Required Post Installation Steps

Confirm capacities and capabilities of purchased service.

2 IC Configuration Guide

2.1 Line Configuration

The line page has a vast majority of the configuration options required for SIP Carrier setup. This is the section that configures the connection to the carrier's servers, any authentication or registration information, and basic configuration needs.

Any reference to a menu, while talking about the line configuration, will refer to the options on the left side of the line configuration page, and tabs will refer to the standard tab interface across the top of the line configuration page.

2.1.1 Line Menu

The screenshot shows a window titled "Line Configuration - Earthlink" with a tabbed interface. The "SIP Line Configuration" tab is active. On the left is a vertical menu with options: Line, Identity (In), Identity (Out), Audio, Transport, Session, Authentication, Proxy, Registrar, Headers, Access, Region, and Recorder. The "Line" menu item is selected. The main area contains the following settings:

- Active
- Line Usage: General Purpose (dropdown)
- Domain Name: 3RD-ClayICA.3rdPartyCert.com (text field)
- Maximum Number of Calls:
 - Combined
 - Inbound/Outbound
- Inbound: [] No Limit
- Outbound: [] No Limit
- Enable T.38 Faxing
- Enable Fax Detection

At the bottom, there are navigation arrows, a Confirm auto-save checkbox, and OK, Cancel, and Apply buttons.

Figure 1: Line Menu Line Configuration Page

2.1.1.1 Active

The active box should be checked. This activates the line. If this box is not checked, the line will not be available for any function. This can also be affected by right clicking on the line in Interaction Administrator, dropping to the *Set Active* menu option, and selecting Yes.

2.1.1.2 Domain Name

This box should contain the Fully Qualified Domain Name (FQDN) of the IC server. It will automatically be appended to all REGISTER requests sent by Interaction Center and used in the FROM header on outgoing SIP messages.

2.1.1.3 Enable T.38 Faxing

EarthLink Business's SIP Carrier service *does not support* the T.38 faxing protocol by default. Leave this box unchecked if you do not wish to use T.38 Faxing.

2.1.1.4 Remainder of Line Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.2 Identity (Out) Menu

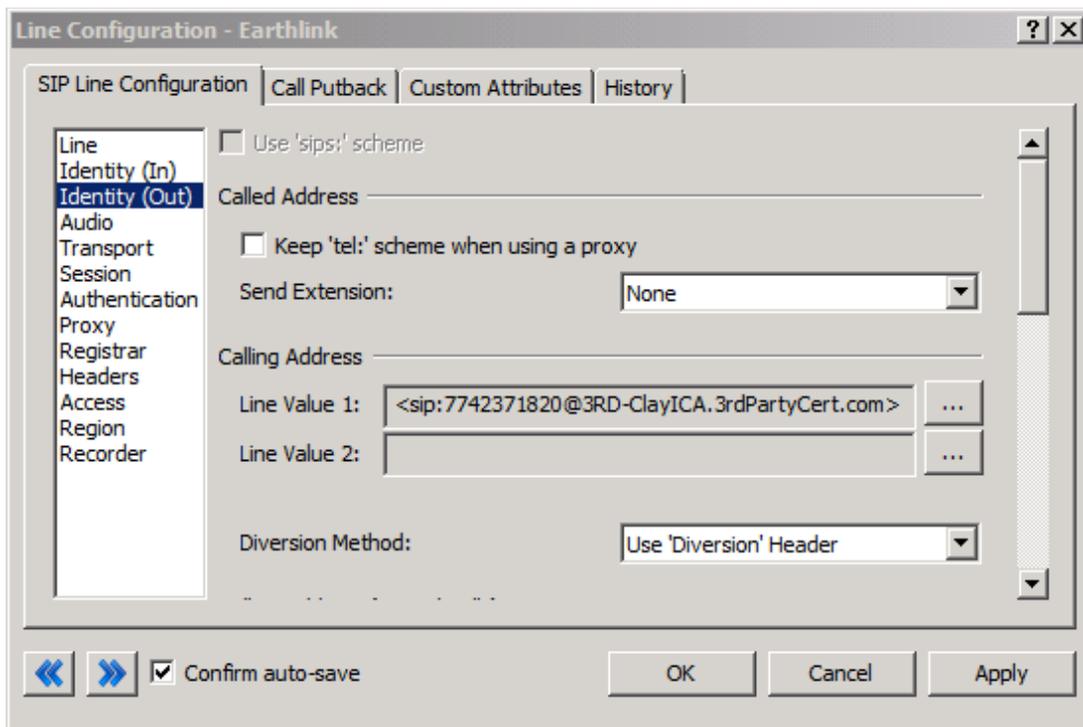


Figure 2: Identity (Out) Menu Line Configuration Page

2.1.2.1 Calling Address

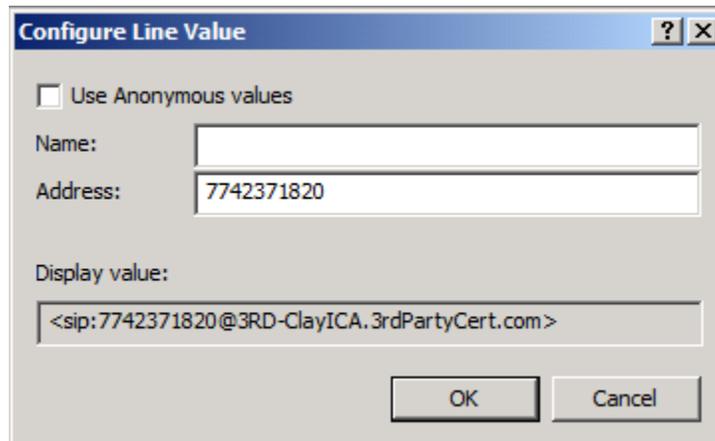


Figure 3: Configure Line Value Dialog

Click the “...” button next to the Line Value 1 box to bring up the Configure Line Value dialog shown in Figure 3. In the Address box, enter the Main DID to be used as the Default User portion on outgoing calls.

2.1.2.2 Remainder of Identity (Out) Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.3 Audio Menu

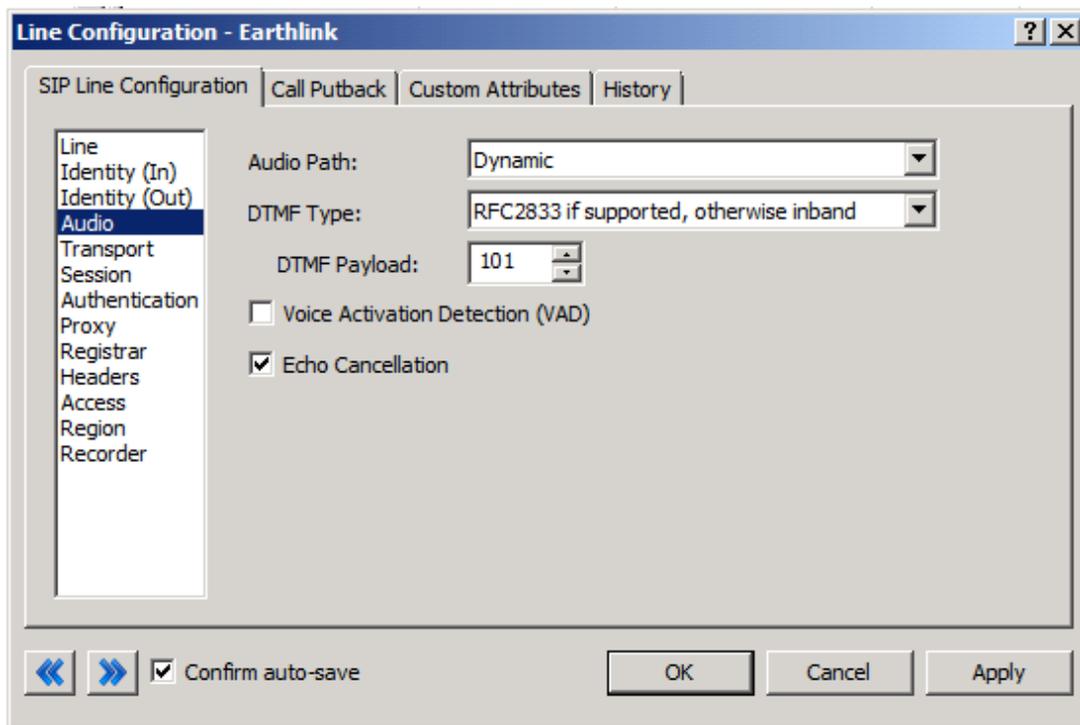


Figure 4: Audio Menu Line Configuration Page

2.1.3.1 Audio Path

This is, for the most part, the choice of the client with respect to the business being done on the server. However, there are several important caveats.

- Dynamic audio for SIP carriers has significantly less delay as compared to Always-In audio (~100ms).
- The audio will be brought into the Media Server when set to Dynamic Audio for any call that is recorded, conferenced, placed on hold, or is navigating the IVR.

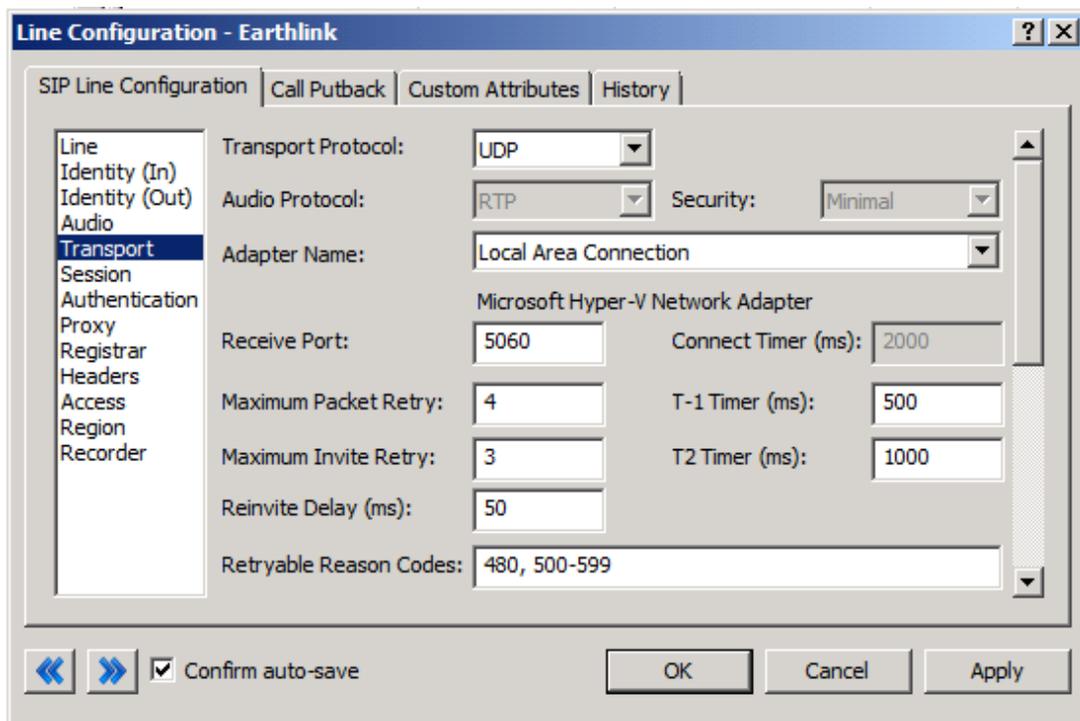
2.1.3.2 DTMF Type

This is up to the discretion of the user. EarthLink Business supports both In-Band and Out-of-Band (RFC2833) DTMF Types.

2.1.3.3 Remainder of Audio Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.4 Transport Menu



The screenshot shows the 'Line Configuration - Earthlink' dialog box with the 'Transport' menu selected. The configuration is as follows:

Field	Value
Transport Protocol	UDP
Audio Protocol	RTP
Security	Minimal
Adapter Name	Local Area Connection
Network Adapter	Microsoft Hyper-V Network Adapter
Receive Port	5060
Connect Timer (ms)	2000
Maximum Packet Retry	4
T-1 Timer (ms)	500
Maximum Invite Retry	3
T2 Timer (ms)	1000
Reinvite Delay (ms)	50
Retryable Reason Codes	480, 500-599

At the bottom, there are navigation arrows, a checked 'Confirm auto-save' checkbox, and 'OK', 'Cancel', and 'Apply' buttons.

Figure 5: Transport Menu Line Configuration Page

2.1.4.1 Transport Protocol

This option should be set to UDP.

2.1.4.2 Receive Port

This option should be set to 5060 (the standard SIP port), unless an agreement for an alternative port has been agreed upon with EarthLink Business.

2.1.4.3 Remainder of Transport Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.5 Session Menu

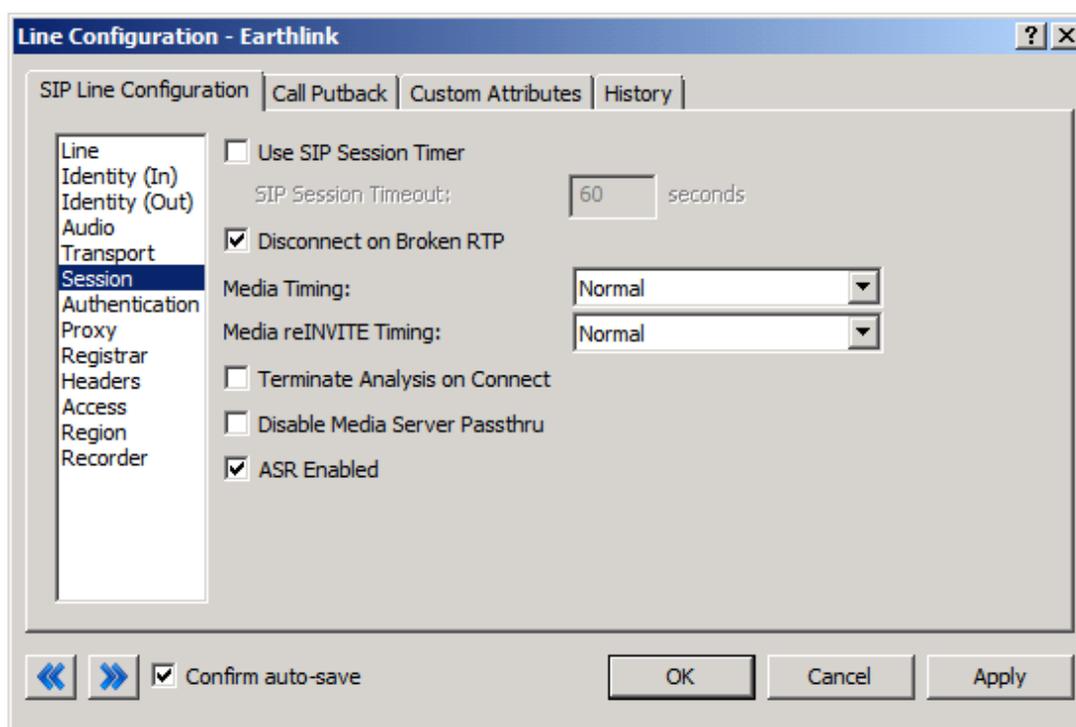


Figure 6: Session Menu Line Configuration Page

2.1.5.1 Media Timing/Media reINVITE Timing

This dropdown pair controls Delayed Media support. Setting both to Normal is the recommend method by Interactive Intelligence for all SIP Carriers.

2.1.5.2 Remainder of Session Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.6 Authentication Menu

The screenshot shows a window titled "Line Configuration - Earthlink". It has four tabs: "SIP Line Configuration", "Call Putback", "Custom Attributes", and "History". The "SIP Line Configuration" tab is selected. On the left side, there is a vertical list of menu items: "Line", "Identity (In)", "Identity (Out)", "Audio", "Transport", "Session", "Authentication" (highlighted in blue), "Proxy", "Registrar", "Headers", "Access", "Region", and "Recorder". The main area of the window contains a checkbox labeled "Authentication" which is currently unchecked. Below this checkbox are three text input fields: "User Name:", "Password:", and "Confirm Password:". At the bottom of the window, there are navigation arrows (left and right), a checked checkbox labeled "Confirm auto-save", and three buttons: "OK", "Cancel", and "Apply".

Figure 7: Authentication Menu Line Configuration Page

This box must be checked to enable authentication to the SIP Carrier. The User Name and Password fields should be filled out with the appropriate information provided by the SIP Carrier.

2.1.7 Proxy Menu

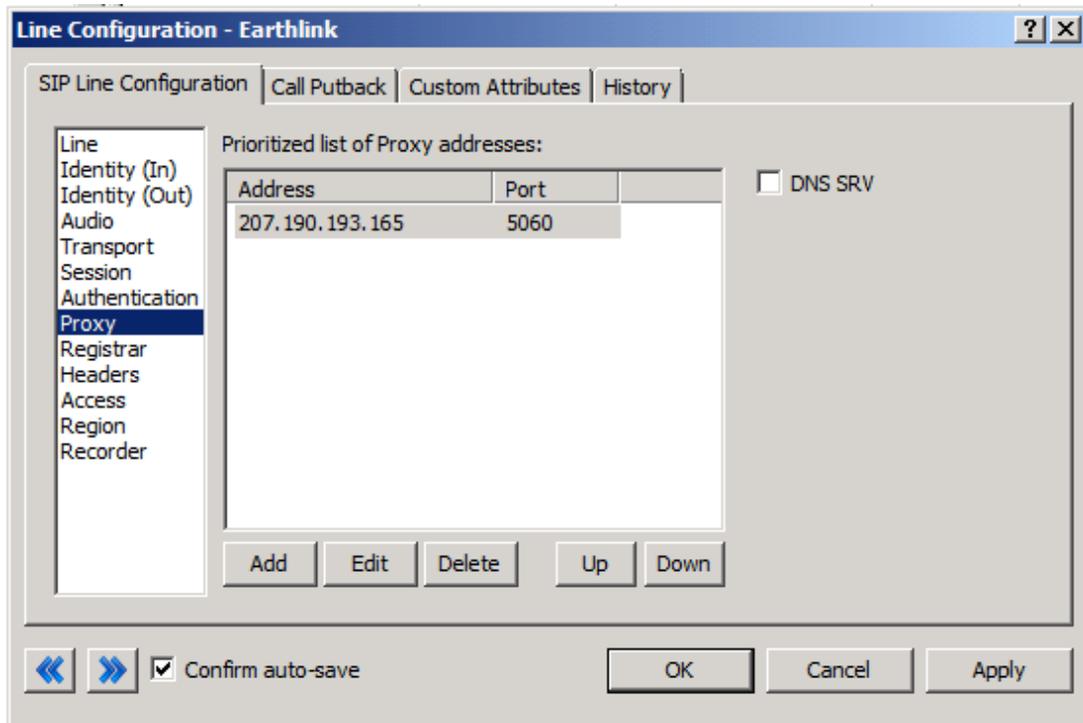


Figure 8: Proxy Menu Line Configuration Page

2.1.7.1 Prioritized list of Proxy IP addresses

This box is somewhat of a misnomer in the case of some SIP Carriers. In the case of EarthLink Business there may not be a single IP that is needed. In this case, they provide a Fully Qualified Domain Name (FQDN) to a machine or cluster that handles the requests. To enable the service to work properly, this FQDN is entered into the Address box and the port number (generally 5060 unless otherwise directed) is entered into Port Number box. Additionally, the IP Addresses that the FQDN resolves to can be entered in place of the FQDN to enable proper service functionality.

2.1.7.2 Remainder of Proxy Menu Options

These have no major direct impact on the SIP carrier configuration, and should be addressed according to business needs.

2.1.8 Access Menu

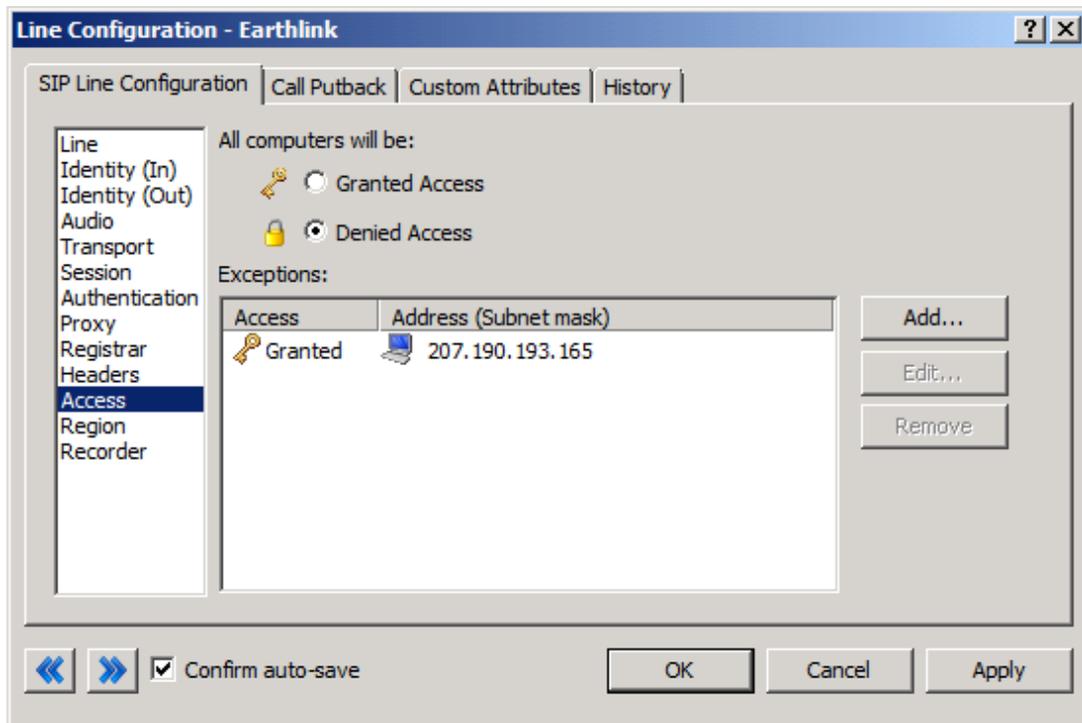


Figure 9: Access Menu Line Configuration Page

2.1.8.1 All computers will be

This should be set to Denied Access to limit the remote endpoints that this line will accept calls from.

2.1.8.2 Exceptions

Each IP Address provided by EarthLink Business should be added to the list to grant them access to this Line. As of 10/3/2013, this list cannot be configured with FQDN or DNS SRV records.

2.1.8.3 Remainder of Access Menu Options

These have no major direct impact on the SIP Carrier configuration, and should be addressed according to business needs.

2.1.9 Region Menu

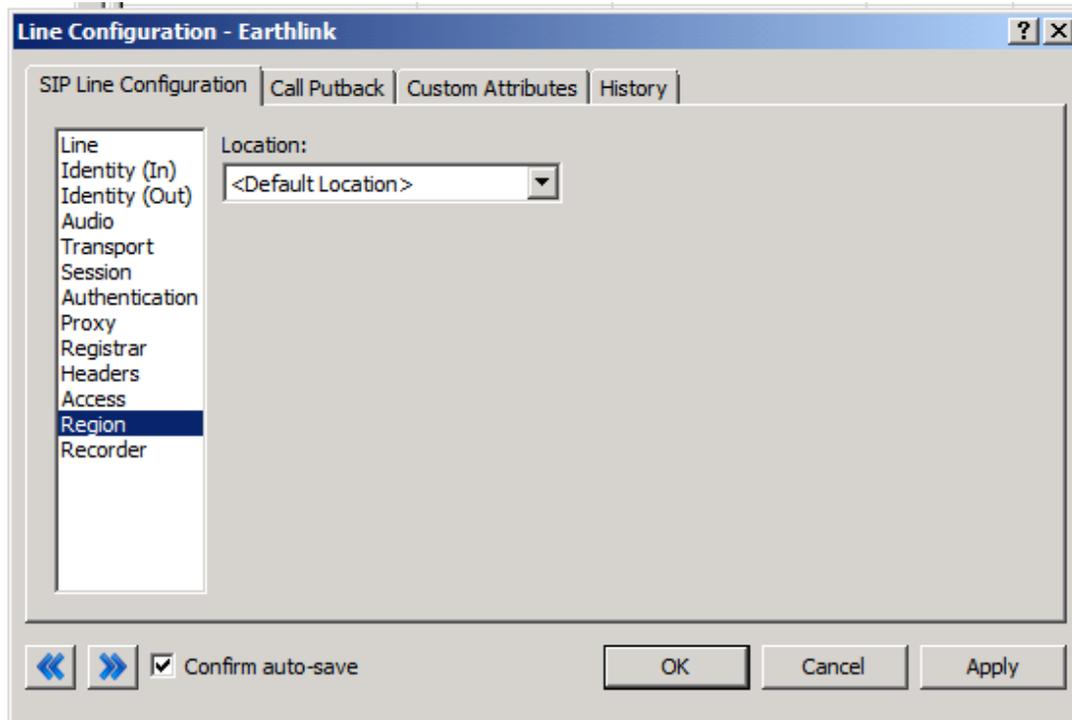


Figure 10: Region Menu Line Configuration Page

Location should be set according to business needs. However, the user should take care to assure the location supports the proper codecs supported by the SIP Carrier.

In the case of EarthLink Business, only G.711 mu-law and G.729 are supported, so selecting a location that does not have either of these as an option would cause the line not to function properly. EarthLink Business does not have a particular business model preference for either codec, so this is up to the discretion and needs of the user.

3 SIP Proxy Support

For EarthLink Business the Interaction SIP proxy is not supported. This information is included for completeness and in the case that it may be supported in the future.

4 Fax Caveats

EarthLink Business does not support T.38 faxing. However, if the customer would like to use an analog fax machine connected to the network, the way to do this is with an analog to SIP FXS device connecting an analog fax machine to the IP network. The FXS device will pass the SIP information on allowing for G.711 pass-through (which is the carrying of the fax signal through the voice packets on the network).

5 E911 Support

EarthLink Business currently supports E911.