



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Configuring Computer Instruments e-IVR IP Phone Pager, with Avaya 9600 IP Phones – Issue 1.0**

### **Abstract**

These Application Notes describe the procedure for configuring Computer Instruments IP Pager to interoperate with specific Avaya 9600 Series IP Telephones.

Computer Instruments *e-IVR*<sup>™</sup> IP Phone Pager allows internal paging communication by voice or text messaging via an IP Phone. A text message can be displayed (on the IP Phone display screen) alone or accompanying a voice page.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

# 1. Introduction

These Application Notes describe the procedure for configuring Computer Instruments e-IVR IP Phone Pager to interoperate with Avaya 9600 Series IP Phones. In this compliance test, some IP Phones were registered with Avaya Aura<sup>®</sup> Communication Manager and some with Avaya IP Office.

Computer Instruments e-IVR<sup>™</sup> IP Phone Pager allows internal paging communication by voice or text messaging via an IP Phone. A text message can be displayed (on the IP Phone display screen) alone or with an accompanying voice page.

The e-IVR IP Pager is integrated with the 9600 Series IP Phone via the WML interface.

These Application Notes assume that Avaya IP Phones are already installed and basic configuration steps have been performed. Only steps relevant to this compliance test will be described in this document.

## 2. General Test Approach and Test Results

This section describes the general test approach used to verify the interoperability of Computer Instruments e-IVR IP Phone Pager with the Avaya 9600 Series IP Phones. This section also covers the test results.

### 2.1. Interoperability Compliance Testing

The general test approach included verification of basic phone registration with the e-IVR IP Phone Pager and paging features. Pages were made to individual phones and to groups of phones. The pages were initiated using both the Avaya IP Phone and the e-IVR IP Phone Pager web interface. The main objectives were to verify the following:

- Text to Speech (TTS)
- Audio Text
- Recorded Messages
- Live Pages

### 2.2. Test Results

Computer Instruments e-IVR IP Phone Pager successfully passed the compliance testing.

### 2.3. Support

Technical support for the e-IVR solution can be obtained by contacting Computer Instruments:

- URL – [support@instruments.com](mailto:support@instruments.com)
- Phone – (888) 451-0851 and option 2

## 3. Reference Configuration

**Figure 1** illustrates the reference configuration used during testing. In the reference configuration, the e-IVR IP Phone Pager interoperated with Avaya 9600 series IP Phones by registering with the IP Phone Pager application running on a Windows IIS web server. Pages

were initiated from the IP Phone using the browser menu display options and through the IP Phone Pager web interface. Pages were made with endpoints including the Avaya 9620, 9630, 9640, and 9650 IP Telephones.

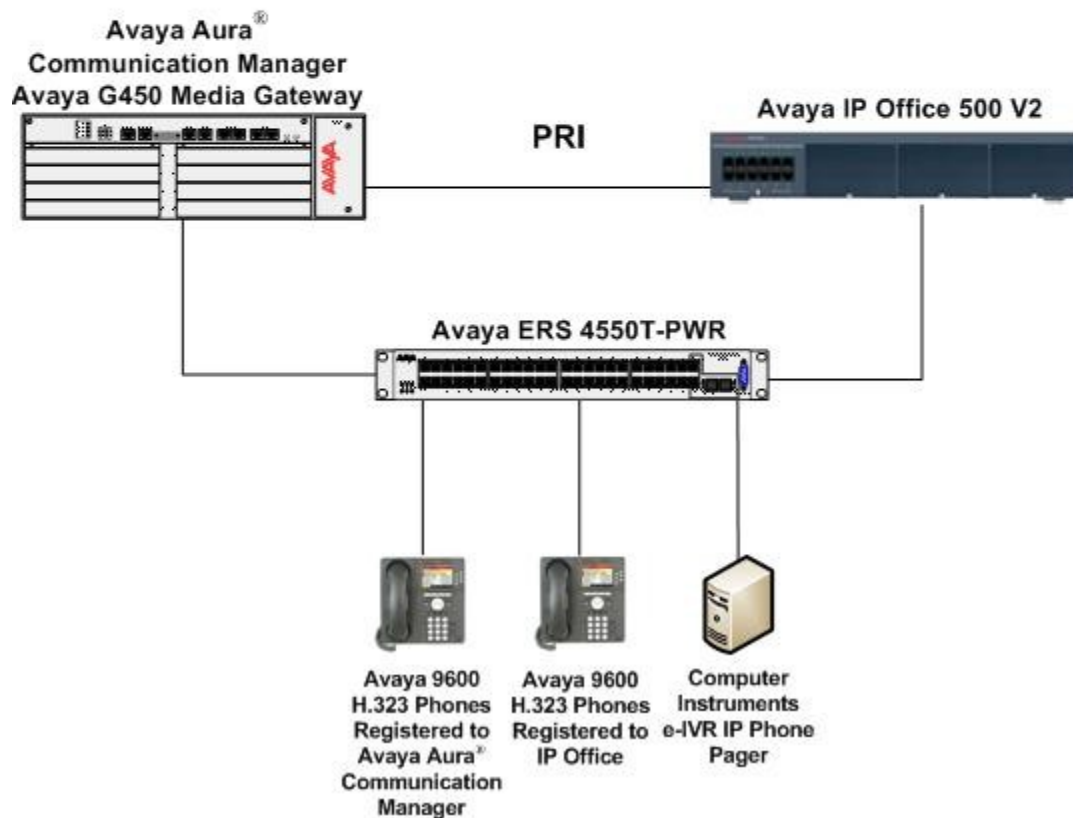


Figure 1: Test Configuration of e-IVR IP Phone Pager

## 4. Equipment and Software Validated

The following equipment and software were used for the test configuration.

Provider	Component	SW Version	Description
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Avaya	9600 Series IP Deskphone	Avaya One-X Deskphone Edition S3.103s	GA November 2011
Avaya	Avaya Aura <sup>®</sup> Communication Manager	6.0	GA October 2011
Avaya	IP Office 500V2	8.0	GA December 2011
Computer Instruments	e-IVR IP Phone Pager	2.0	GA March 2011

## 5. Configure Avaya 9600 IP Phones

This section describes the IP Phone configuration to support the network shown in Figure 1. The configuration of the IP Phone can be done manually or through DHCP. The compliance testing used DHCP to assign the IP Phone with the IP address of the IP Phone Pager application.

During the installation of the IP Pager application the IP Phone's home page is set by modifying the "WMLHOME" parameter in the 46xxsettings.txt file. Additionally the "SUBSCRIBELIST" and "TPSLIST" parameter are set so the phone can register with the IP Pager application.

Please refer to <http://instruments.com/support/index.html> for more detailed information.

Parameters added to 46xxsettings.txt file for compliance testing.

```
SET WMLHOME http://10.64.51.197/webpager/ippager.aspx?wci=page
SET SUBSCRIBELIST http://10.64.51.197/webpager/ippager.aspx?wci=page
SET TPSLIST 10.64.51.197
```

## 6. Configure e-IVR IP Phone Pager

- Login to IP Phone Pager
- Verify Phone Registration with IP Phone Pager application.
- Create Groups

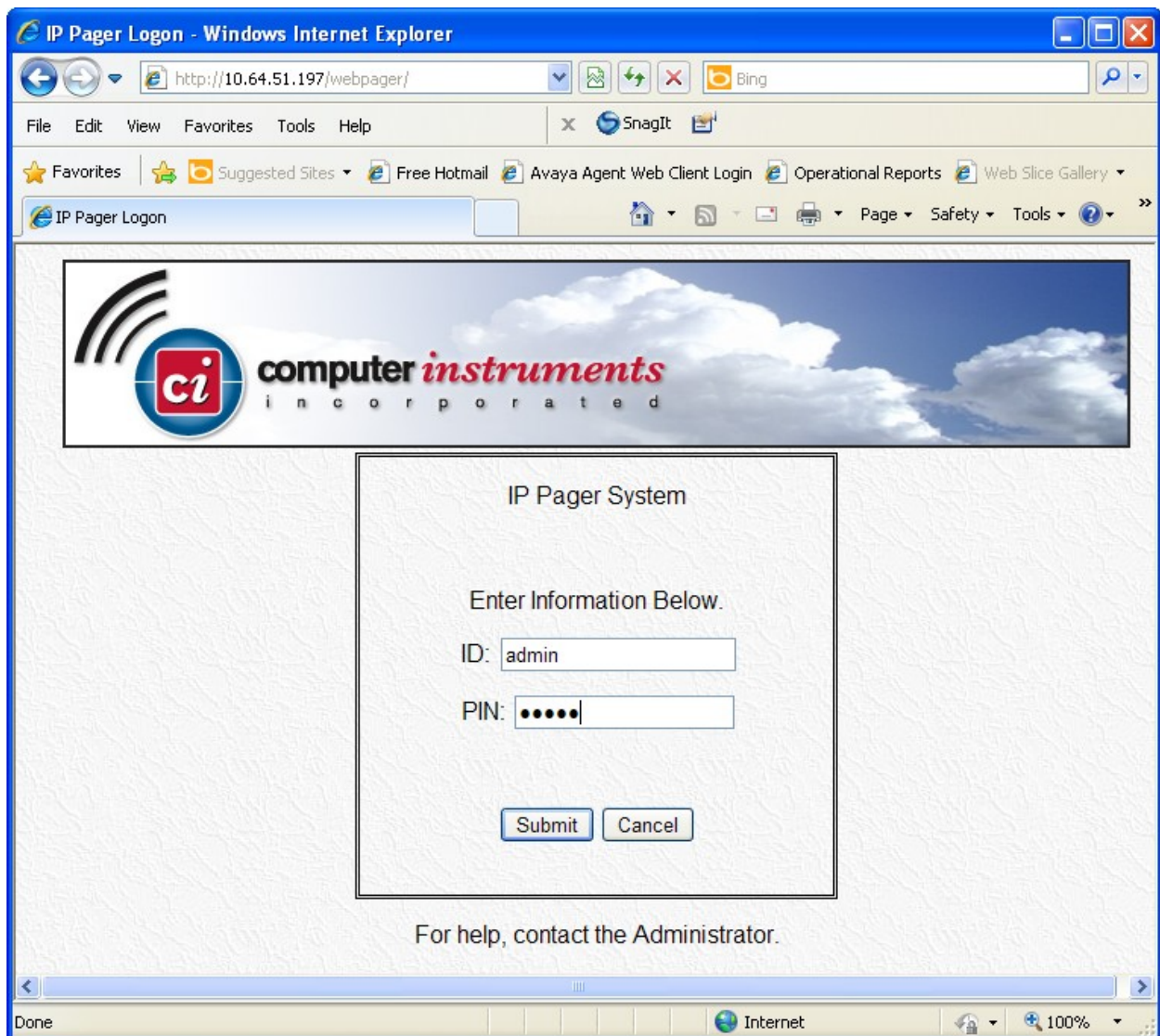
### 6.1. Login to IP Phone Pager

From a Windows Internet Explorer Web Browser enter the URL of the IP Phone Pager Application.

<http://<location of IP phone Pager Application>/webpager/>

In the compliance testing the application was running at <http://10.64.51.197/webpager/>

Log in using the appropriate credentials.



### 6.1.1. Initial Page after Login

The screenshot shows a Windows Internet Explorer browser window titled "Computer Instruments - Web Phone Pager - Windows Internet Explorer". The address bar displays "http://10.64.51.197/webpager/IPPagerOld.aspx". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The Favorites bar shows links to Free Hotmail, Avaya Agent Web Client Login, Operational Reports, and Web Slice Gallery. The main content area features the Computer Instruments logo and a title "IP Phone Pager". A left-hand navigation pane, labeled "IP Phone Pager", contains a "Hide" button and a tree view with the following items: Administration (Groups, Phones, Users, Reporting, Reserved, Help/About), Send Page (Content, Send), and a Logout button at the bottom. The main content area contains several form fields and controls: "TopLine:" with a text input; "Display:" with a text input and a vertical scroll bar; "Priority:" with radio buttons for "Normal" (selected) and "Barge"; "Beeps:" with radio buttons for "None" (selected), "1", "2", and "3"; "Text2Speech" with radio buttons for "Text2Speech" (selected), "eIVR Audio Text", "Record Now", and "Live"; "TTS Voice:" with a dropdown menu showing "Microsoft Sam"; and "Speak:" with a large text area and a vertical scroll bar. At the bottom of the form are "Prev" and "Next" buttons. The footer of the page reads "Copyright Computer Instruments, Inc. 2007-2008". The browser's status bar at the bottom shows "Done", "Internet", and a 100% zoom level.

### 6.2. Verify Phone Registration with IP Phone Pager

As a result of the configuration performed in section 5 the IP Phones should be registered with the IP Phone Pager application.

From initial page after login, select "Phones" from the navigation tree.

Verify that IP Phones are registered with the IP Phone Pager application.

The screenshot shows the 'Administer Phones' application running in a Windows Internet Explorer browser. The address bar shows the URL 'http://10.64.51.197/webpager/IPPe'. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The Favorites bar shows links to 'Administer Phones', 'Suggested Sites', 'Free Hotmail', 'Avaya Agent Web Client Login', and 'Operational Reports'. The application header features the 'computer instruments' logo and the title 'IP Phone Pager'. A left-hand navigation pane contains a tree view with 'IP Phone Pager' expanded, showing sub-items: 'Administration' (Groups, Phones, Users), 'Reporting', 'Reserved', 'Help/About', 'Send Page', 'Content', and 'Send'. The main content area displays a table of registered IP phones with columns for 'Delete', 'Select', 'Extension', 'IPAddr', 'Model', and a status checkbox. The table lists four entries: 40001 (10.64.52.130, Model 9620), 62004 (10.64.51.131, Model 9630), 62005 (10.64.51.135, Model 9640), and LocalIP (10.64.51.197). Below the table is a 'Select ALL' button and a search bar with 'Search' and 'Clear' buttons. At the bottom, there is an 'Add to Group' button and a dropdown menu showing 'Test Group'. A 'Logout' button is located at the bottom left of the application area. The browser's status bar at the bottom shows 'Internet' and a 100% zoom level.

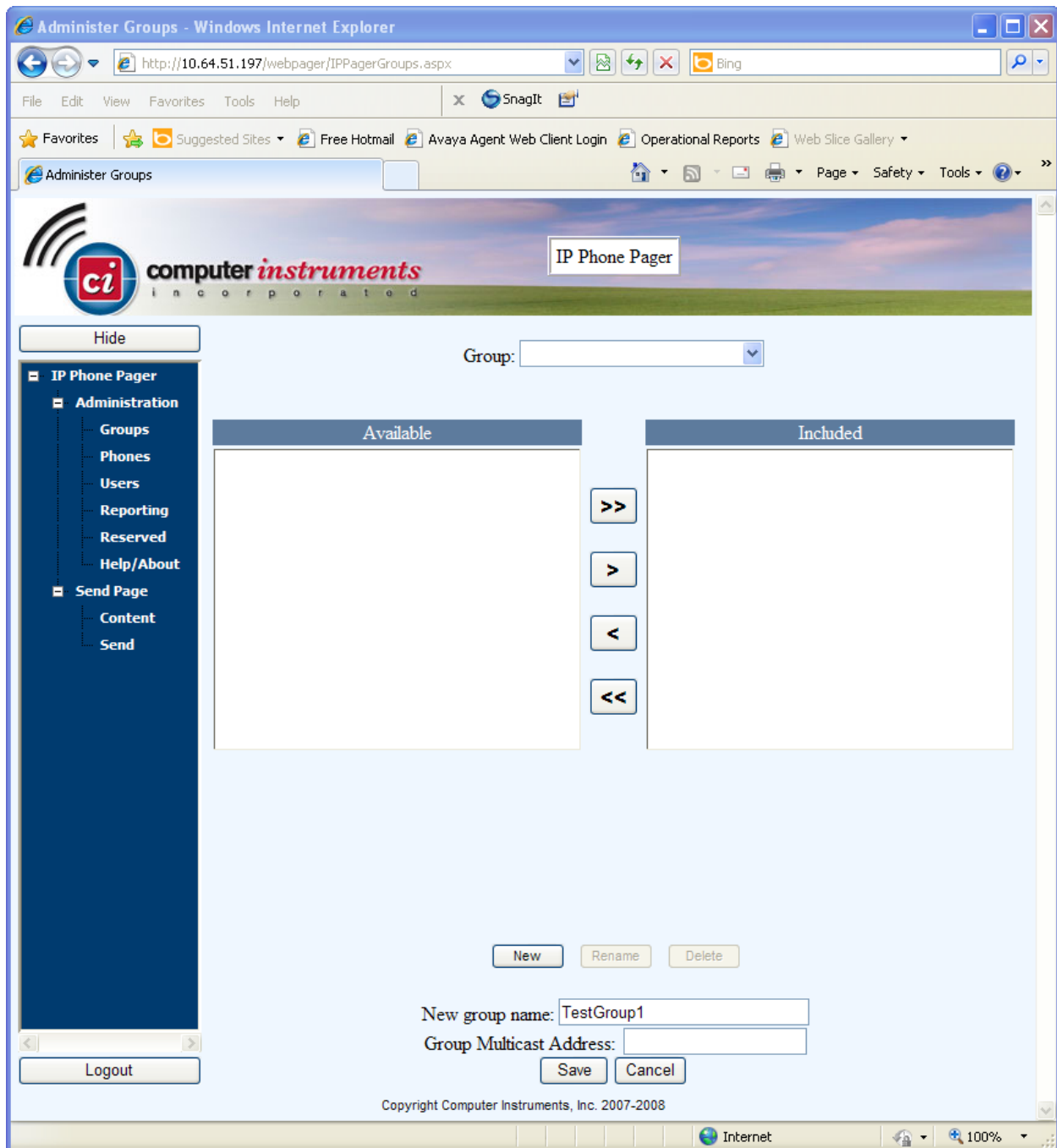
		Extension	IPAddr	Model	
<a href="#">Delete</a>	<a href="#">Select</a>	40001	10.64.52.130	9620	<input checked="" type="checkbox"/>
<a href="#">Delete</a>	<a href="#">Select</a>	62004	10.64.51.131	9630	<input checked="" type="checkbox"/>
<a href="#">Delete</a>	<a href="#">Select</a>	62005	10.64.51.135	9640	<input checked="" type="checkbox"/>
<a href="#">Delete</a>	<a href="#">Select</a>	LocalIP	10.64.51.197		<input checked="" type="checkbox"/>

At this point pages could be initiated to individual IP Phones.

### 6.3. Create Groups

From the navigation tree select “Groups” to create a group. Provide a name for the group in the “New Group Name” field and select “Save”.



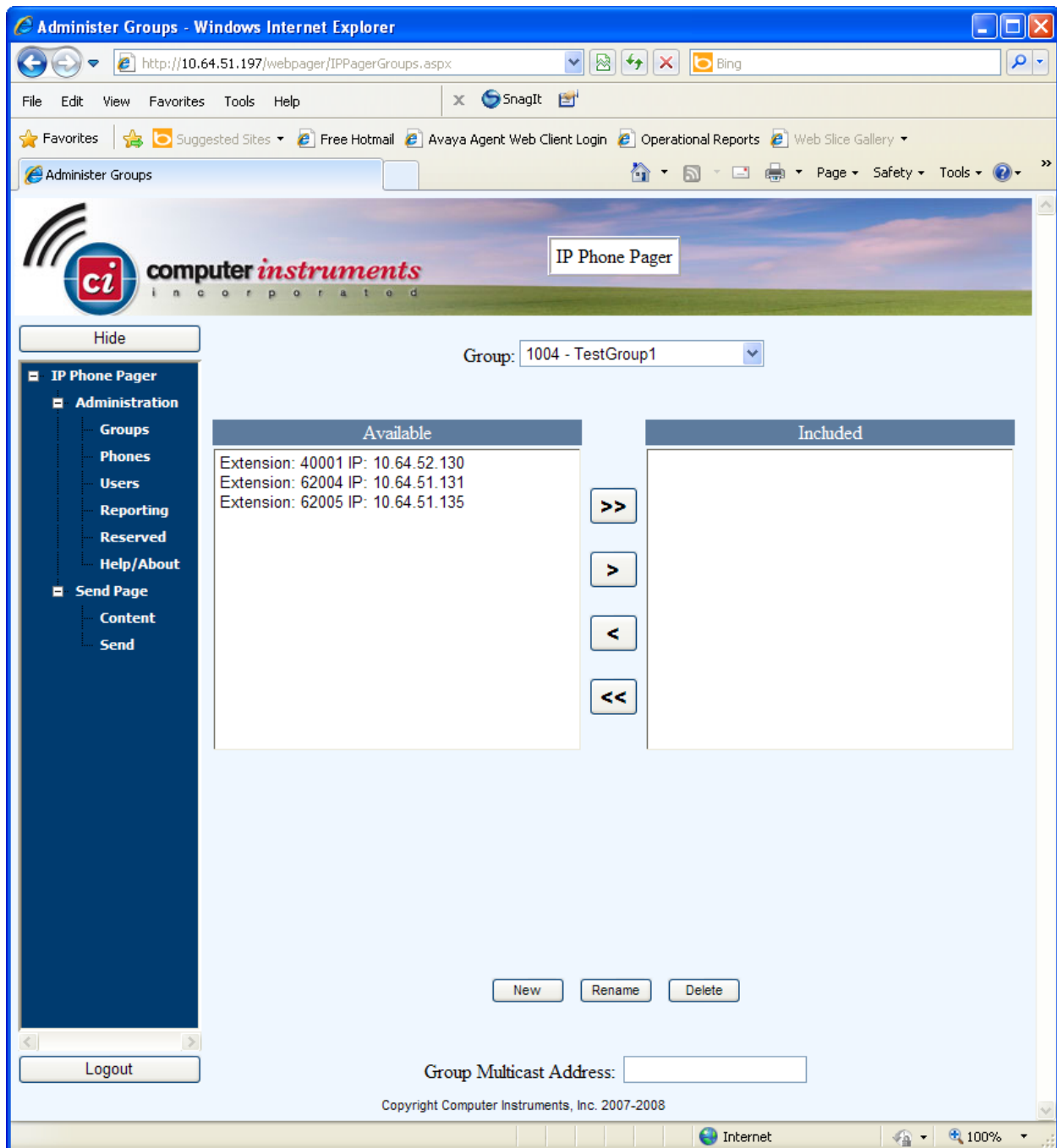


Once the new group has been created IP Phones can be added by moving the phones from the “Available” window to the “Included” window.

### 6.3.1. Select Group

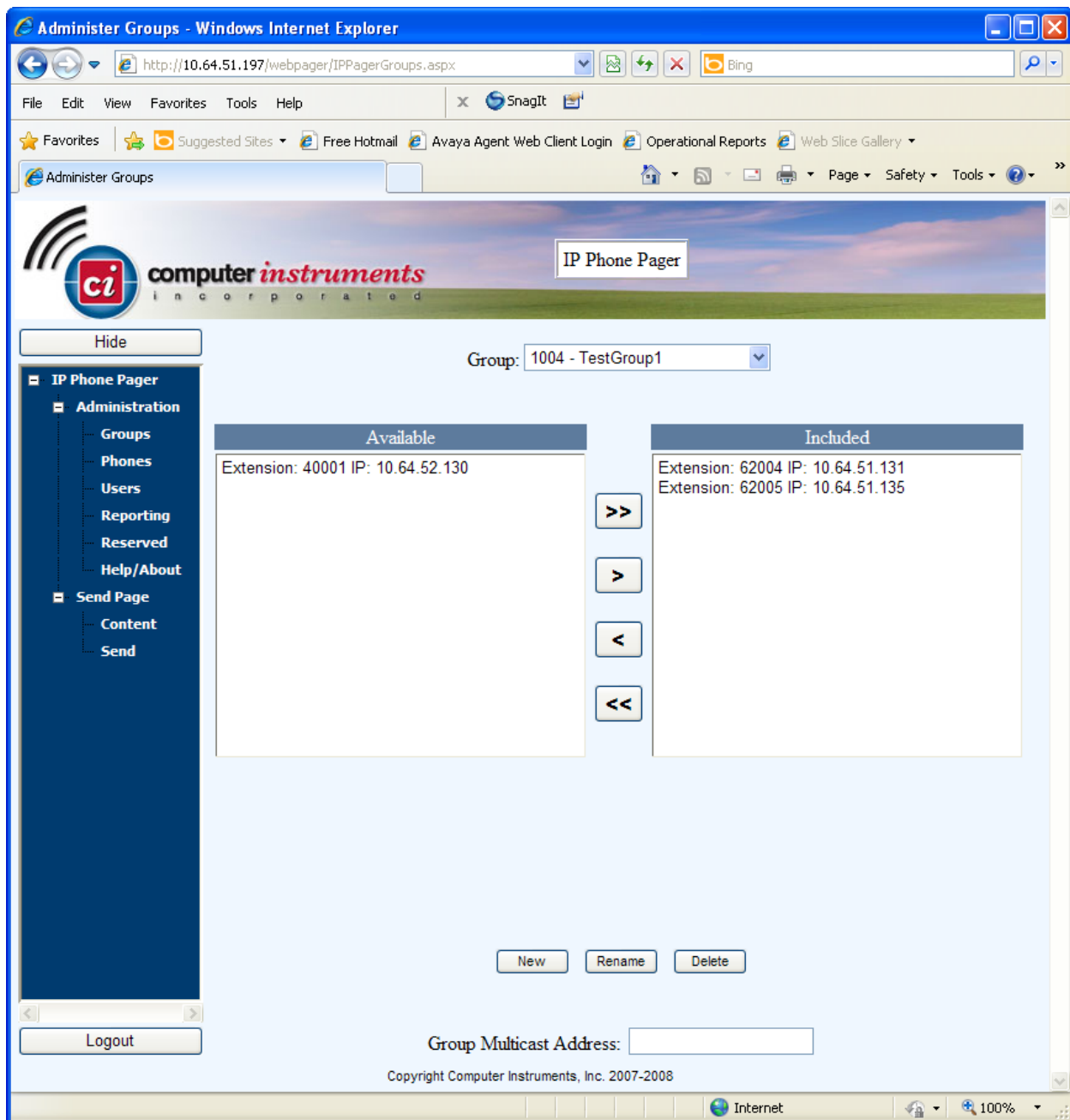
From the “Group” pull-down box select a group. If this is a new group then all registered phones should be listed in the “Available” window.





### 6.3.2. Add Phones to Group

From the “Available” window select phone(s) and move them to the “Included” window by selecting the appropriate Arrow buttons.



At this point pages can now be sent to a group of phones.

## 7. Verification Steps

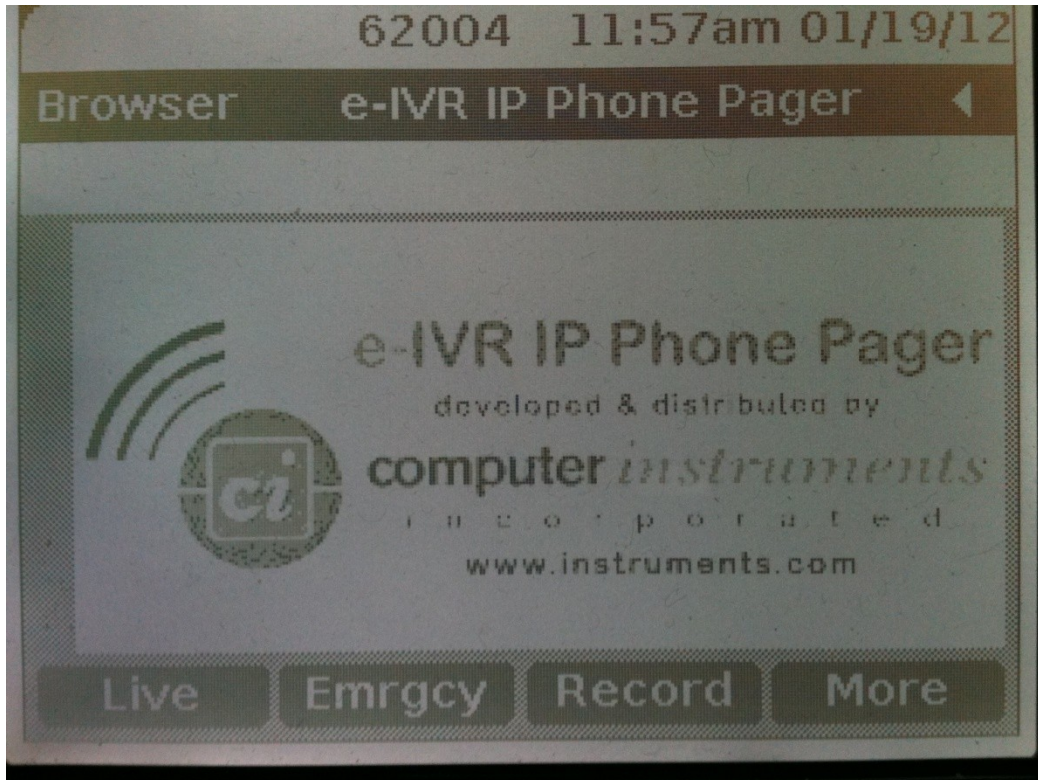
The following steps may be used to verify proper configuration of the Avaya 9600 Series Deskphone and the e-IVR IP Phone Pager Application.

### 7.1. Verify Avaya IP Phone

From the Avaya IP Phone perform the following steps:

1. Press the Menu key
2. Scroll to select Browser
3. Press OK

e-IVR Web Page should now be displayed on the phone.



Audio paging can be verified by selecting an option from the phone display.

## 7.2. Verify e-IVR IP Phone Pager

1. Login to IP Pager Application via Windows Internet Explorer web Browser. (See **Section 6.1**)
2. Verify Registered Phones (see **section 6.2**)
3. Verify Groups
  - a. From Navigation tree select "Groups"
  - b. Select group from "Group" pull-down box

Administer Groups - Windows Internet Explorer

http://10.64.51.197/webpager/IPPagerGroups.aspx

File Edit View Favorites Tools Help

Administrator Groups

computer instruments incorporated

IP Phone Pager

Hide

Group: 1004 - TestGroup1

Available		Included
Extension: 40001 IP: 10.64.52.130	>>	Extension: 62004 IP: 10.64.51.131 Extension: 62005 IP: 10.64.51.135
	>	
	<	
	<<	

New Rename Delete

Group Multicast Address:

Copyright Computer Instruments, Inc. 2007-2008

Logout

Internet 100%

## 8. Conclusion

Computer Instruments e-IVR IP Phone Pager passed compliance testing. These Application Notes describe the procedures required to configure Computer Instruments e-IVR IP Phone Pager to interoperate with Avaya 9600 Series IP Deskphones to support the reference configuration shown in figure 1.

## 9. Additional References

The following Avaya product documentation can be found at <http://support.avaya.com>  
[1] Avaya one-X Deskphone H.323 Administrator Guide Release 6.1, May 2011, Document Number 16-300698

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