Avaya Solution & Interoperability Test Lab

Application Notes for JADS Comm eCLIC with Avaya 4600 Series IP Telephone Web Browsers - Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of Avaya web browser enabled 4600 Series IP Telephones and JADS Comm eCLIC. eCLIC is a web-based application that may be accessed through the web browser interfaces of the IP Telephones. eCLIC takes advantage of the display screen on the IP Telephones to deliver data integrated web applications to the users. During compliance testing, eCLIC features and functionality were successfully exercised from the web browser interfaces of the Avaya 4630SW IP Telephones and Microsoft Internet Explorer.

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

1. Introduction

These Application Notes describe the compliance-tested configuration used to validate Avaya web browser enabled 4600 Series IP Telephones and JADS Comm eCLIC 1.0. eCLIC is a web-based application that may be accessed through the web browser interfaces of the IP Telephones and Microsoft Internet Explorer. eCLIC takes advantage of the display screen on the IP Telephones to deliver data integrated web applications to the users.

eCLIC consists of two components – eCLIC Server and eCLIC Editor.

The eCLIC Server is a web application platform that:

- Collects, analyzes and presents data to the Avaya IP Telephones.
- Manages the data exchange between the different phone models.
- Integrates with other systems such as Property Management Systems (PMS) and Enterprise Resource Planning (ERP) systems.

In this release, the eCLIC server serves web pages for 4630 phones only. The home URL for the other 4600 Series IP Telephones must be set to a different URL. Current features supported for non-4630 IP Telephones include receiving topline messages and web page push.

The eCLIC Editor is a design tool that aids in the development of web applications for the Avaya 4600 Series IP Telephones. It is integrated into the web admin pages of the eCLIC Server. The eCLIC Editor helps to reduce the cost of developing new web interfaces for the Avaya IP Telephone.

In this release, applications developed with eCLIC Editor can only be used on the 4630 and 4630SW IP Telephones. Future releases will include developing applications for all Avaya IP Telephones.

Figure 1 shows a sample network configuration consisting of Avaya 4610SW, 4621SW, 4622SW, 4625SW and 4630SW IP Telephones, and an eCLIC application server. Note that actual network configurations may vary. The Avaya 4610SW, 4621SW, 4622SW, 4625SW and 4630SW IP Telephones obtain firmware updates and web-related settings from the Microsoft Internet Information Services (IIS) 5.0 residing on the eCLIC application server. The administrator runs Microsoft Internet Explorer on the PC to administer the eCLIC application server. Users run Microsoft Internet Explorer on the PCs to exercise the features of the eCLIC application. The Avaya S8300B Media Server, Avaya G350 Media Gateway and Avaya C364T-PWR Converged Stackable Switch support the verification and illustration of the solution and are not discussed in these Application Notes.

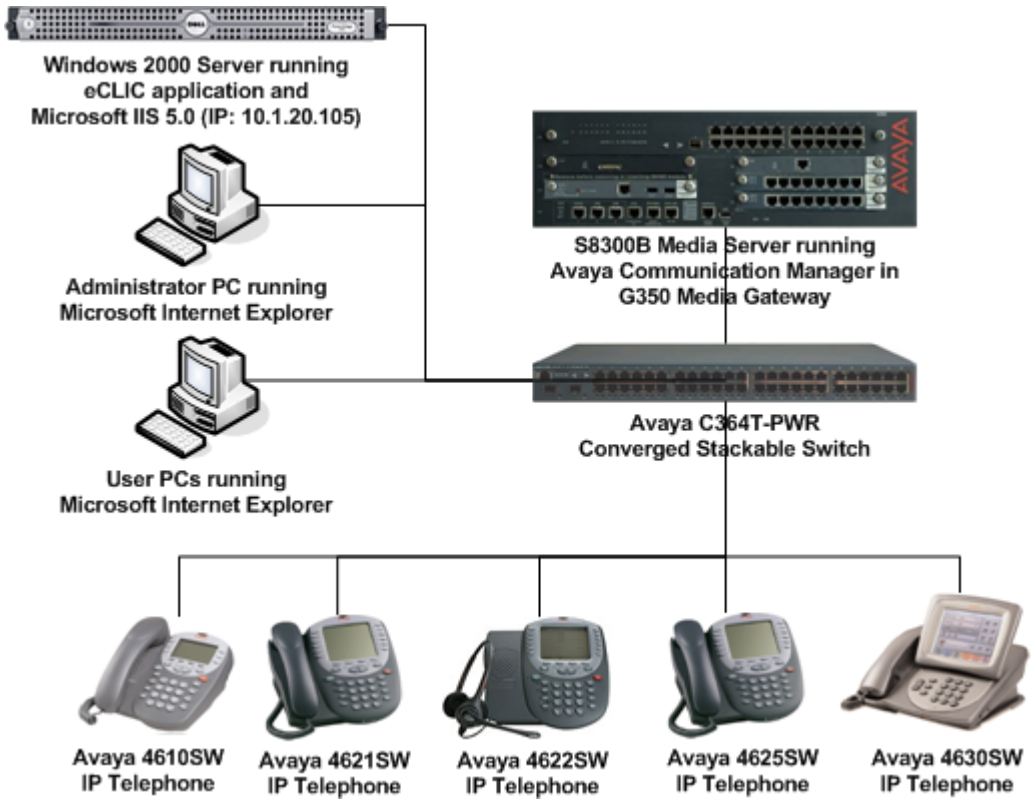


Figure 1: JADS Comm eCLIC with Avaya IP Telephones

2. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment	Software/Firmware
Avaya S8300B Media Server	3.1.2 (R013x.01.2.632.1)
Avaya G350 Media Gateway	Firmware V25.28.0
Avaya 4600 series IP telephones	4610SW (R2.4) 4621SW (R2.4) 4622SW (R2.4) 4625SW (R2.5) 4630 (R2.0.3)
Avaya C364T-PWR Converged Stackable Switch	4.3.12
JADS Comm eCLIC	1.0

3. Configure Web Access on Avaya IP Telephones

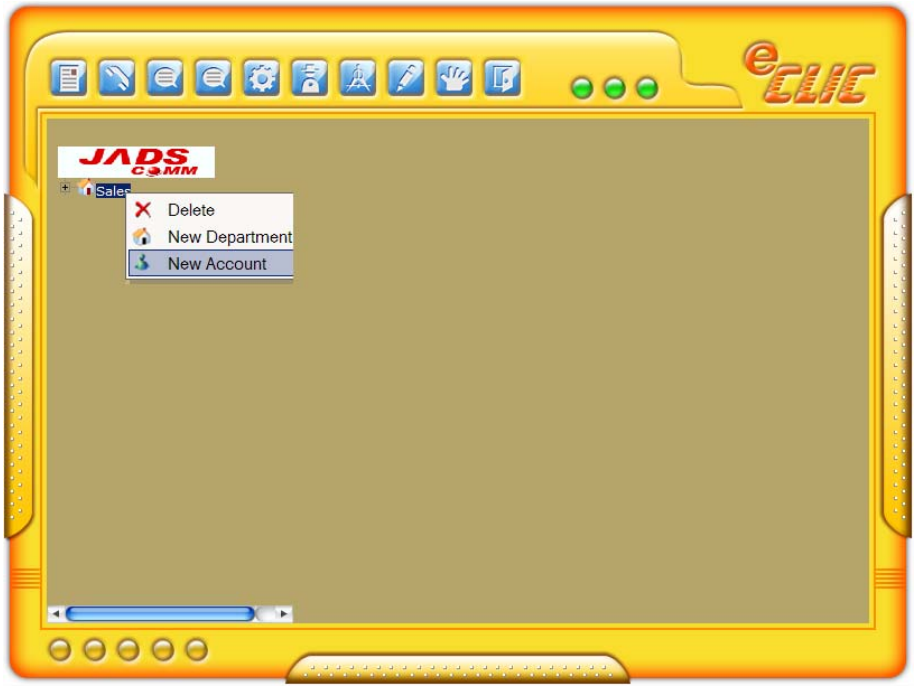
Step	Description
1.	In the ***46xxsettings.txt*** file on the Microsoft IIS server, enter the following line in the 4610, 4621, 4622 and 4625 IP Telephone settings sections: SET TPSLIST 10.1.20.105 SET SUBSCRIBELIST http://10.1.20.105/eCLIC/package/subscribe.asp **Note**: 10.1.20.105 is the IP address of the eCLIC application server.
2.	In the same ***46xxsettings.txt*** file on the Microsoft IIS server, enter the following line in the 4630 IP Telephone settings sections: SET WEBHOME http://10.1.20.105/eCLIC/package/4630.html **Note**: 10.1.20.105 is the IP address of the eCLIC application server.
3.	Reboot the IP telephones. After the IP telephones complete rebooting, press the **Web** soft key and verify that the eCLIC application screen appears on the telephone displays.

4. Create JADS Comm eCLIC Users

This section describes the steps for creating users for the eCLIC application only. Development and deployment of web applications is beyond the scope of these Application Notes.

Step	Description
1.	On the Administrator PC, open Microsoft Internet Explorer and enter the URL ***http://10.1.20.105/eCLIC/main.html***. Enter the appropriate credentials and click **Login**. 

Step	Description
2.	In the main page that follows, click the button **Authority** to display the page to add new users. 
3.	Right click on the picture **JADS Comm** and click **New Department**. 

Step	Description
4.	Click on **New Department** to display a textbox to change the department name. Enter an appropriate name (for example **Sales**) and click **Save**. 
5.	Right click on the Department **Sales** created in Step 4 and click **New Account**. 

Step	Description
6.	Expand **Sales** and click on **New Account** to edit the properties. Specify the **ID**, **Password**, **C. Name**, **First Name**, **Last Name**, **Sex**, **Language**, **Title**, **Mobile**, **Ext** and **E-mail**. **ID** and **Password** are used by the user to log in to the web interface through Microsoft Internet Explorer and through the Avaya 4630SW IP Telephone web interface. Check **Short Message** to enable the user to send short messages to other users' IP Telephone. Click **Save**. 

5. Interoperability Compliance Testing

The interoperability compliance testing included feature functionality testing. The feature functionality testing evaluated the features of the eCLIC Server application on both the Avaya IP Telephone web browser interfaces and Microsoft Internet Explorer. Sample web applications were developed and deployed using eCLIC Editor and tested on the Avaya 4630SW IP Telephone web browser interface.

5.1. General Test Approach

The general test approach for eCLIC was to exercise the menus and hyperlinks, and perform web application actions from the Avaya 4630SW IP Telephones web browser interface and Microsoft Internet Explorer. The main objectives were to verify that:

- Web applications developed using eCLIC Editor displayed and functioned correctly on the 4630SW IP Telephone. The web applications included static HTML web pages, data retrieval from database and click-to-dial functionality.

- Short messages sent using Internet Explorer were received and displayed correctly on the 4610SW, 4621SW, 4622SW, 4625SW and 4630SW IP Telephones. Scheduled short messages sent using Internet Explorer were delivered at the correct time and were received and displayed correctly on the 4610SW, 4621SW, 4622SW, 4625SW and 4630SW IP Telephones.

5.2. Test Results

All test cases passed successfully.

5.3. Verification Steps

The following steps may be used to verify communication between eCLIC and Avaya web browser enabled IP Telephones, and to check the configuration:

1. Ping each Avaya web browser enabled IP Telephone from the eCLIC server to verify connectivity.
2. On the 4630SW IP telephone, log into the eCLIC web application and exercise the menus and hyperlinks, and perform eCLIC application actions.
3. From a PC, start Microsoft Internet Explorer and login to an account with the privilege to send messages. Send a short message to a 4600 Series IP Telephone other than the 4630SW and verify that the message is received and displayed correctly.

6. Support

For technical support on JADS Comm eCLIC, contact the JADS Comm Support Team at:

- Phone: + 886-2-66023820
- Email: paul_l@telesys.com.tw

7. Conclusion

These Application Notes illustrate a compliance-tested configuration comprised of Avaya web browser enabled 4600 Series IP Telephones and eCLIC 1.0. All feature functionality test cases were completed successfully.

8. Additional References

Product documentation for Avaya products may be found at http://support.avaya.com.

- *4600 Series IP Telephone LAN Administrator Guide*, Document ID 555-233-507, Issue 3, April 2006

The following document is available in the JADS Comm eCLIC 1.0 CDROM:

- eCLIC Server User Guide

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya Developer*Connection* Program at devconnect@avaya.com.