

Avaya Solution & Interoperability Test Lab

Application Notes for CalAmp ExtendTime on Avaya IP Telephone Web Browsers – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of Avaya web browser enabled IP Telephones and the CalAmp ExtendTime application. ExtendTime is a web-based time and attendance application that may be accessed through the web browser interfaces of Avaya 4600 Series IP Telephones. During compliance testing, ExtendTime features and functionality were successfully exercised from the web browser interfaces of Avaya 4610SW, 4620SW, and 4625SW IP Telephones. Information in these Application Notes has been 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 a compliance-tested configuration comprised of Avaya web browser enabled IP Telephones and the CalAmp ExtendTime application. ExtendTime is a web-based time and attendance application that may be accessed through the web browser interfaces of Avaya IP Telephones. ExtendTime users may:

- enter and view work status information clock in/out, break on/off, lunch on/off, and transfer work hours between departments and project codes.
- view messages, schedules, hours, and benefit information.
- perform directory searches.

Figure 1 shows a sample network configuration consisting of Avaya 4610SW, 4620SW, and 4625SW IP Telephones, a CalAmp ExtendTime application server, and a TFTP server. Note that actual network configurations may vary. The Avaya 4610SW, 4620SW, and 4625SW IP Telephones obtain firmware updates and web-related settings from the TFTP server. The web-related settings specify the URL (CalAmp ExtendTime application in this case) for the 4610SW, 4620SW, and 4625SW home pages. The solution described herein is also extensible to the Avaya 4621SW and 4622SW IP Telephones. The Avaya S8710 Media Server, Avaya G650 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: Sample configuration.

Solution & Interoperability Test Lab Application Notes ©2005 Avaya Inc. All Rights Reserved.

2. Equipment and Software Validated

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

Equipment	Software/Firmware
Avaya S8710 Media Server	3.0 (R013x.00.0.340.3)
Avaya G650 Media Gateway	-
Avaya 4610SW IP Telephone	2.2
Avaya 4620SW IP Telephone	2.2
Avaya 4625SW IP Telephone	2.5
Avaya C364T-PWR Converged Stackable	4.3.12
Switch	
CalAmp ExtendTime	6.0.0
SolarWinds.Net TFTP Server	5.0.46

3. Configure Web Access on Avaya IP Telephones

Step	Description
1.	In the 46xxsettings.txt file on the TFTP server, enter the following line in the 4610, 4620, and 4625 settings sections: SET WMI HOME http:// <box address.of="" calamp="" extendtime="" hostname.or="" ip="" server="">/AvayaET asp</box>
	SET WHENTOWE MUST ANOSHIMIC OF IT Address of Carring Exceletime servery/TrayaD1.asp
2.	Reboot the IP telephones. After the IP telephones complete rebooting, press the " Web " softkey and verify that the ExtendTime web login screen appears on the telephone displays.

4. Create CalAmp ExtendTime Users

This section describes the steps for creating ExtendTime web users only. Message creation and configuration is beyond the scope of these Application Notes.

The main page appears
. The main page appears
「日本 「「「「「」」「「」」」 「「「」」」」 「「」」「」」」 「」「」」」 「」「」」」 「」「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」 「」」」
meAmerica
105
ext Pay Period 🔉
/ime
name
Search Tins

Step	Description	
2.	Scroll down and click on "Add Employee".	
	Admin Home - Microsoft Internet Explorer	
	↓= Back + ⇒ - Ø Ø Δ Ø Search B Favorites Ø Media Ø S. + ■	
	Agdress 🕘 http://tecra2klepinski/ExtendTime/Home.asp	💌 🧬 Go Links »
	Search Results	
	Filter: Active Employees Tony Jommi Nikola Tesla	
	Current Employee	
	Add Employee Edit Employee Delete Employee Delete Employee	
	Employee ID: 1 SSN:	
	Employee does not use Automatic Clock Out	
	Time Sheet	
	06/26/2005 📴 07/02/2005 📴 Apply	
	Current Week Current Week Current Pay Period Next Week Next Pay Period Time Short Accessed	
	Edit TimeSheet	
	App. Mod. Type Day Date In Time In Date Out Time Out Reg 0T1 0T2 Unpaid	
	🔍 🧩 🗖 elook in Mor 06/27/2006 🖭 6:44 am 06/27/2006 💷 6:48 am 0.07 his	
	🔍 🧩 🔲 lunch Albor 06/27/2005 🔟 6:48 am 06/27/2005 🔟 6:49 am 0.02 hrs	
	🔍 🧩 🔽 work Mon 06/27/2006 🔟 6:49 am	
	All 🗌 Save All 🕑	
	work: 0.07 hts Total: 0.08 hrs	
	Add Work Shift Add Partial Shift Add Non-Work Shift	
	Schedule	
	รลก เชิง วากต่อตรก เชิง วากต่อตาก	
I		a <u>r</u> cocamitranet

Step	Description	
3.	Specify the First Name, Last Name, Employee Number, and Badge Number.	The Badge
	Number is the login ID that the employee uses to log into the ExtendTime web a	application from
	the IP telephones.	11
	🚰 brand_name - Add Employee - Microsoft Internet Explorer	
	Eile Edit Yiew Favorites Tools Help	
	→ Back → → ✓ Ø Ø △ Ø Search ■ Favorites Ø Media Ø Solar Solar E	
	Address 🍘 http://tecra2klepinski/extendtime/EmployeeAdd.asp	▼ 🖓 Go Links »
	Admin Status Board 🏼 🏖 📀 டாட	
	• Home - Reports - Assign Labor levels - Schedules - Message Center - Import - Configuration -	
	Caramp Extend Inne	
	Apply Employee Information	
	First Name: John Last Name: User	
	Middle Name: Title:	
	Employee Number: 3 Badge Number: 3	
	Start Date: 6/27/2005 The End Date:	
	SSN: Time Zone; (GMT-07:00) Arizona	
	Status: Active	
	Contact Information	
	Phone 1: Street:	
	Phone 2: City:	
	Payroll Information	
	Payroll Policy: default payroll policy Salary Type: Salaried	
	Employee Type: Non-Exempt Pay Rate: U	
	Enforce Schedule: No	
	Employee labor level	v 1
		🚉 Local intranet

Step	Description
4.	Scroll down and complete the Web Login ID, Password, and Confirm Password fields. The
	Web Login ID is intended as a web administration login ID, which can be used to configure the
	ExtendTime application. Click on "Apply".
	🔹 brand_name - Add Employee - Microsoft Internet Explorer
	Elle Edit View Favorites Iools Help → Back + → - ∞ 1 0 0 0 Gearch GalEavorites @PMedia 0 1 1 - → 10 1 - →
	Address 🕘 http://tecra2klepinski/extendtime/EmployeeAdd.asp
	Employee Benefits
	Accrual Rule: None> Benefit Start Date: 6/27/2005
	Initial Times (Hrs)
	There are no benefits defined for this accrual template.
	No Custom Personal Fields are defined
	Allow this Employee to Access the system through the web
	Web Login ID: 3
	Password:
	Confirm Password:**
	IP Access Policy: [Unlimited access]
	Allow Employee to clock in/out through the web
	Allow Employees to submit Time Sheets for:
	Vork Hours
	Default Clock-In Time: ☑ Non-Work Hours (Vac/Sick/Etc)
	☐ Default Non-Work Hours to "Paid"
	Shift Length in minutes; 480
	Apply
	(c) Copyright 2002 TIME AMERICA INC.
	■ 「 で で))))))))

5. Interoperability Compliance Testing

The interoperability compliance testing included feature functionality and serviceability testing. The feature functionality testing evaluated ExtendTime web application usability on the Avaya IP Telephone web browser interfaces. The serviceability testing introduced failure scenarios to determine if the ExtendTime web application is accessible and operable after failure recovery.

5.1. General Test Approach

The general approach was to exercise ExtendTime menus and hyperlinks, and perform web application actions from the Avaya 4610, 4620, and 4625 IP Telephones web browser interfaces. The main objectives were to verify that:

• ExtendTime Clock Punch (Clock In/Out, Break On/Off, Lunch On/Off, Work Transfer), View (Messages, Schedules, Hours, Benefits), and Directory search operations are

RL; Reviewed: SPOC 8/24/2005 Solution & Interoperability Test Lab Application Notes ©2005 Avaya Inc. All Rights Reserved. successful when the IP telephone is in various call states, including idle, active, hold, consult transfer, and consult conference.

- The page navigation functions (scroll up/down/top/bottom of page, Back, Home, Refresh, Page Left, Page Right) on the IP telephone work correctly with ExtendTime.
- The IP telephone users may switch back and forth between the telephony and ExtendTime displays without losing content or state.
- When the ExtendTime display is active, the calling/called phone numbers are displayed on the top line of the phone display on incoming/outgoing calls.
- The ExtendTime web application functions properly on the IP telephone after resets of the IP telephone and the ExtendTime server.
- The ExtendTime web application functions properly on the IP telephone when the telephony functions on the IP telephone are down (for example, due to Avaya Communication Manager reset).
- The telephony features of the IP telephone function properly when the ExtendTime server is down.

5.2. Test Results

All test cases completed successfully, with the following observation obtained from testing:

1. The View Schedules and Review Hours pages contain entries that when selected, returned the message "Web 500: Internal Server Error". CalAmp provided a resolution where those entries point to the current page, essentially performing a refresh. This resolution was deemed acceptable because those entries were not intended as hyperlinks (were not intended to provide more detail), but rather static information. CalAmp expects to include the resolution in a future release of ExtendTime.

6. Verification Steps

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

- 1. Ping each Avaya web browser enabled IP Telephone from the ExtendTime server and verify connectivity.
- 2. On each IP telephone, press the "**Web**" softkey and verify that the ExtendTime web login screen appears on the telephone display.
- 3. On each IP telephone, log into the ExtendTime web application and exercise the menus and hyperlinks, and perform ExtendTime application actions.

7. Support

For technical support on the CalAmp ExtendTime application, contact CalAmp Technical Support at <u>extendtime@calamp.com</u>.

8. Conclusion

These Application Notes illustrate a compliance-tested configuration comprised of Avaya web browser enabled IP Telephones and the CalAmp ExtendTime application. ExtendTime is a webbased time and attendance application that may be accessed through the web browser interfaces of Avaya IP Telephones. During compliance testing, ExtendTime features and functionality were successfully exercised from the web browser interfaces of Avaya 4610SW, 4620SW, and 4625SW IP Telephones.

9. Additional References

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

Product documentation for the CalAmp ExtendTime application may be found at <u>http://calamp.com/pro_ip.html</u>.

©2005 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by [®] and TM are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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.