

Avaya Solution & Interoperability Test Lab

Application Notes for Digital Dynamics IP Telephony Application Suite with Avaya IP Telephones - Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of the Digital Dynamics IP Telephony Application Suite with Avaya IP Telephones and Avaya Communication Manager. The Digital Dynamics IP Telephony Application Suite is comprised of multiple workplace productivity utilities and applications designed to run on Avaya IP Telephones. These IP Telephony applications leverage the advantages of a converged IP telephony network and are designed to increase workplace productivity by enabling greater collaboration and communication between application users.

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 the Digital Dynamics IP Telephony Application Suite with Avaya IP Telephones and Avaya Communication Manager. The Digital Dynamics IP Telephony Application Suite is comprised of multiple workplace productivity utilities and applications designed to run on Avaya IP Telephones. Once IP Telephones are registered with the Digital Dynamics IP Telephony Application Suite, each IP Telephone will receive applications pushed from the IP Telephony Application Suite. These IP Telephony applications leverage the advantages of a converged IP telephony network and are designed to increase workplace productivity by enabling greater collaboration and communication between application users.

For additional information on Digital Dynamics, please refer to Digital Dynamics IP Telephony Application Suite documentation [3].

Figure 1 illustrates the network configuration used to verify the Digital Dynamics solution. The configuration details provided in these Application Notes focus on the interfaces between Avaya Communication Manager, the IP Telephony Application Suite, and Avaya IP Telephones.

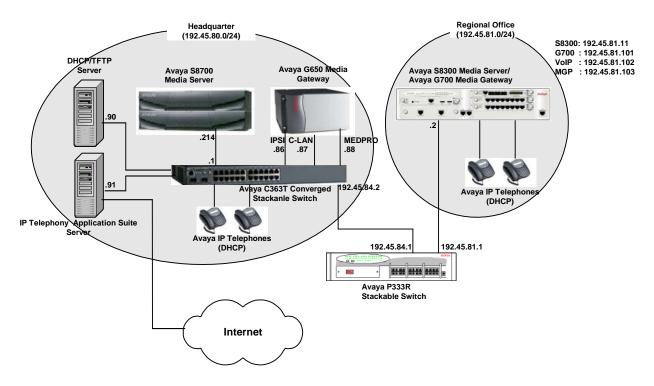


Figure 1. Test configuration of the IP Telephony Application Suite with Avaya IP Telephones

2. Equipment and Software Validated

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

Equipment	Software
Avaya S8700 Media Server with Avaya G650 Media	R013x.00.0.346.0
Gateway	
Avaya S8300 Media Server with Avaya G700 Media	R013x.00.0.346.0
Gateway	
Avaya C363 T Converged Stackable Switch	4.5.14
Avaya P333R Multilayer Stackable Switch	4.0.8
Avaya IP Telephones	
4620	2.2.3
4625	2.5
Digital Dynamics IP Telephony Application Suite	1.0

3. Configuring Avaya Communication Manager

The following sections show the relevant configuration screens for Avaya Communication Managers (Headquarter and Regional Office). **The screen shots included in this section focused only on the configuration of the IP trunk-group, signaling-group, and route pattern setting**. The difference between the two Avaya Communication Manager configurations was the dialing plan. The 5-digit 5xxxx extension range was used for the headquarter side, and 6xxxx extension range was used for the regional Office. Therefore, screen shots included in this section only cover the Avaya S8700 Media Server with Avaya G650 Media Gateway side. For the purpose of showing the final configuration, the "**display**" command was used through out the document, instead of "**add**" or "**change**".

From the Avaya Communication Manager System Access Terminal (SAT) interface, use the **add signaling-group X** command, where **X** is signal-group number. Configuring the signaling-group is a two-step procedure:

- Create a signaling-group and provide the following information:
 - Group Type : **h.323**
 - Near-end Node Name : CLAN
 - Far-end Node Name : **S8300**
 - Near-end Listen Port / Far-end Listen Port :1720
- After the trunk-group is created, specify the **Trunk Group for Channel Selection** field in the signaling group.

The following screen shot shows the first step. The important signaling-group related parameters that were different from the default values are highlighted.

display signaling-group 50	Page 1 of 5
SIGNALING	GROUP
Group Number: 50 Group Type:	h.323
Remote Office?	n Max number of NCA TSC: 0
SBS?	n Max number of CA TSC: 0
IP Video?	n Trunk Group for NCA TSC:
Trunk Group for Channel Selection:	
Supplementary Service Protocol:	a
T303 Timer(sec):	10
Near-end Node Name: CLAN	Far-end Node Name: S8300
Near-end Listen Port: 1720	Far-end Listen Port: 1720
F	ar-end Network Region: 1
LRQ Required? n	Calls Share IP Signaling Connection? n
RRQ Required? n	
	Bypass If IP Threshold Exceeded? n
	H.235 Annex H Required? n
DTMF over IP: out-of-band	Direct IP-IP Audio Connections? y
	IP Audio Hairpinning? y
	Interworking Message: PROGress
	DCP/Analog Bearer Capability: 3.1kHz

To add a trunk group, enter **add trunk-group Y**, where **Y** is the trunk-group number. The following two screens (Page 1 and Page 4) show the trunk configuration. The important trunk related parameters that were different from the default values are highlighted.

display trunk-group 50		Page 1 of 20
	TRUNK GROUP	
Group Number: 50	Group Type: isdn	CDR Reports: y
Group Name: DigDyn	COR: 1	TN: 1 TAC: 103
Direction: two-way	Outgoing Display? y	Carrier Medium: IP
Dial Access? y	Busy Threshold: 255	Night Service:
Queue Length: 0		
Service Type: tie	Auth Code? n	TestCall ITC: rest
	Far End Test Line No:	
TestCall BCC: 4		
TRUNK PARAMETERS		
Codeset to Send	Display: 6 Codeset to Send	d National IEs: 6
Max Message Size		
Supplementary Service P	rotocol: a Digit Handling	(in/out): enbloc/enbloc
Trunk Hunt: c	±	
		ital Loss Group: 18
Incoming Calling Number -		Format:
Bit Rate: 1	-	async Duplex: full
Disconnect Supervision -	-	
Answer Supervision Timeo	ut: O	

Two ports were enabled for the IP trunk, since two IP Telephones were connected to each Avaya Communication Manager. Specify each port to the signaling-group that the IP trunk will utilize.

displ	ay trunk	-group 50		Page	4 of	20
			TRUNK GROUP			
			Administe	red Members (min/max):	1/2	
GROUP	MEMBER 2	ASSIGNMENTS	Total	Administered Members:	2	
	Port	Code Sfx Name	Night	Sig Grp		
1:	IP			50		
2:	IP			50		
3:						
4:						

Enter **change signaling-group X**. This is the second step for configuring the signaling-group. The following screen shown below is the signaling-group. Set the Trunk Group for Channel Selection to the trunk group number.

display signaling-group 50			P	age	1 of	5
	SIGNALING	GROUP				
Group Number: 50 G	roup Type:	h.323				
Remo	te Office?	n	Max number o	f NCA	TSC:	0
	SBS?	n	Max number	of CA	TSC:	0
	IP Video?	n	Trunk Group fo	r NCA	TSC:	
Trunk Group for Channel	Selection:	50				
Supplementary Service	Protocol:	a				
T303 T.	imer(sec):	10				
Near-end Node Name: CLAN		Far	-end Node Name: S	8300		
Near-end Listen Port: 1720		Far-e	nd Listen Port: 1	720		
	Fa	ar-end 1	Network Region: 1			
LRQ Required? n	(Calls S	hare IP Signaling	Conne	ection	ı? n
RRQ Required? n						
		Вура	ass If IP Thresho	ld Exc	ceeded	l? n
			H.235 Annex	H Rec	quired	l? n
DTMF over IP: out-of-ba	and	Di	rect IP-IP Audio	Connec	ctions	? y
			IP Audio I	Hairpi	nning	l;
			Interworking Mes	sage:	PROGI	ess
	I	DCP/Ana	log Bearer Capabi	lity:	3.1kH	[z

Enter **change aar analysis A**, where **A** is the Automatic Alternate Routing (AAR) number. Automatic Alternate Routing (AAR) was used to route calls to the appropriate route pattern. When a user from Headquarter dials 6xxxx, AAR will use the route pattern 50.

display aar analysis 6	7	דת סג	GIT ANALY	פדפ האסו		Page 1 of 2
	F	AR DI	GII ANADI	JIJ IADI		Percent Full: 1
Dialed	Tot	al	Route	Call	Node	ANI
String	Min	Max	Pattern	Type	Num	Reqd
б	5	5	50	aar		n
7	7	7	999	aar		n
8	7	7	999	aar		n
9	7	7	999	aar		n

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Enter **change uniform-dialplan U**, where **U** is the first digit of the extension. The Uniform Dial Plan screen is shown below. The 5-digit 6xxxx extension range was used for the Avaya Communication Manager side (Regional Office).

display uniform-dialplan	6		Page 1 of	E 2
UI	JIFORM DIAL PLAN	TABLE		
			Percent Full	: 0
Matching Insert	Node	Matching	Insert	Node
Pattern Len Del Digits	s Net Conv Num	Pattern Len Del	Digits Net Conv	Num
6 5 0	aar n		n	
			~	
	n		n	
	n		n	
	n		n	
	n		n	

Enter **change route-pattern R**, where **R** is the route-pattern number. Route Pattern 50 routes calls to trunk group 50, and no digit will be deleted.

d	isp	play	rout	e-pa	attei	rn 50	1							I	Page	1 of	E 3	
						Patt	ern 1	Number	r: 50	Patt	ern Na	ame:	50					
										Se	ecure S	SIP?	n					
		Grp	FRL	NPA	Pfx	Нор	Toll	No.	Inse	rted						DCS	/ IXC	
		No			Mrk	Lmt	List	Del	Digi	ts						QSIC	3	
								Dgts								Intv	v	
	1:	50	0					0								n	user	
	2:															n	user	
	3:															n	user	
	4:															n	user	
	5:															n	user	
	6:															n	user	
			C VAL		TSC			ITC	BCIE	Serv	ice/Fea	ature				-	LAR	
		0 1	23	4 W		Requ	lest							-	Forma	at		
													Sub	addre	ess			
	1:	УУ	УУ	y n	n			rest	E .								none	
	2:	УУ	УУ	y n	n			rest	t								none	
	3:	УУ	УУ	y n	n			rest	t								none	
	4:	УУ	УУ	y n	n			rest	t								none	
	5:	УУ	УУ	y n	n			rest	t								none	
	6:	уу	уу	y n	n			rest	E								none	

4. Configuring the Avaya IP Telephones

The following steps describe the registration process of an Avaya IP Telephone. To configure an Avaya IP Telephone, the following should be configured in the DHCP Server:

- DHCP IP address range / Network Subnet Mask
- Default Gateway of the network
- Create Avaya Option 176, and provide the following info:
 - Call Server IP address (CLAN / S8300 Media Server)
 - o Call Server Port Number (1719)
 - File server (TFTP Server)

The Avaya IP Telephone will contact the DHCP Server and obtain the following information:

• IP address of the IP Telephone / Network Subnet Mask

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- Default Gateway of the IP Telephone
- Call Server IP address (CLAN / S8300 Media Server)
- Call Server Port Number (1719)
- File server IP Address

For the Avaya IP Telephone to register to the IP Telephony Application Suite, add the following line to the 46xxsetting.txt file for each IP Telephone type.

SET WMLHOME HTTP:// IP Telephony Application Suite IP

Address:8888/digdynavaya/wml/main.jsp

The next screen shows the Web setting for each IP Telephone type.

SETTINGS4620 ######## Web Settings for 4620 IP Phone ######### ### Please refer to the description on these terms above in SETTINGS4610 ##SET WMLHOME http://192.45.80.112 SET WMLHOME HTTP://192.45.80.91:8888/digdynavaya/wml/main.jsp ##SET WMLCODING ASCII ## SET WMLPROXY my.proxy.company.com ## SET WMLPORT 8080 ## SET WMLEXCEPT 192.45.80.112 ##SET TPSLIST 192.45.80.112 ##SET SUBSCRIBELIST http://192.45.80.112:9999/subscribe goto END ####### END OF 4620 IP Phone Settings ####### # SETTINGS4625 ######## Web Settings for 4625 IP Phone ######### ### Please refer to the description on these terms above in SETTINGS4610 SET WMLHOME HTTP://192.45.80.91:8888/digdynavaya/wml/main.jsp ##SET WMLHOME http://192.45.80.112 ##SET WMLCODING ASCII ## SET WMLPROXY my.proxy.company.com ## SET WMLPORT 8080 ##SET WMLEXCEPT 192.45.80.112 ##SET TPSLIST 192.45.80.112 ##SET SUBSCRIBELIST http://192.45.80.112:9999/subscribe goto END

When an IP Telephone completes the initialization process, a Web button will be added on the Avaya IP Telephone screen. If a user clicks the Web button and provides the Login Name and Password, the user will have access to all applications that are assigned to the user.

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5. Configure Digital Dynamics IP Telephony Application Suite

The Digital Dynamics IP Telephony Application Suite can be configured using a web based console interface. The following screen shows the Login screen. Enter a proper administrator's Login Name and Password, then click **Continue**.

digital dynamics' <i>IP Telephony Applications</i>	digdynsrv - dev Welcome Guest! Sign Off
Edit Application Properties Edit Application Properties Please enter the admin password in order to set up the Application Properties. Login Password Continue	Sign Off

Once the Authentication process is completed, the **Edit Application Properties** window appears. The **IP App Host** field should be configured properly using the IP Address of the IP Telephony Application Suite. Note that the **Ext's Maximum Length** is set to **5**, meaning 5-digit extensions were utilized. After the change, click the **Update** button to save the change.

DigDyn IP App Suite	tal dynamics' elephony Applicati	on		Р Арр	Suite (Version 1.0.0) digdynsrv - dev Welcome Guest! Sign Off
мрисацоня	Edit	Арі	olication Properties		Sign Off
_					
			pplication Properties		
	Debug Mode:	۲	Yes -		
	IP App Host: eg: http://192.168.1.1:8080	۲	http://192.45.80.91:8888		
	Use Proxy:	۲	No		
	Proxy Server IP Address: eg: 192.168.1.1	۲	000.000.000.000		
	Proxy Server Port: eg: 80	۲	80		
	Proxy Authorization?:	۲	No 💌		
	Proxy Server username:	۲	someuser		
	Proxy Server password:		******		
	Ext's Maximum Length:	٢	5 💌		
	Run Resource Scheduller Notification Server	۲	no		
	Default Timezone: Default Display Date Format:	@ @	US/Eastern • 01/30/2004 01:30 PM •		
			Update		

After the update is completed, click the **Applications** button. To add administrator, select the **Administrators** button.

	ligital dynamics' P Telephony App ons Utilities	lications	IP App Suite (Version 1 digdynsru - Welcome Admin, Sy Sign C
Welco	me Admin, System		
System	Apps	admin user	
Admir	nistrators	0	
Applic	cation Users	0	
Applica	itions	admin user	
dema	Current Events	0	
demo	Resource Scheduler	0	
dema	Survey	0	
demo	System Status	٩	

From the Add/Edit Admin window, provide the following:

- Login Name
- Password
- Confirm Password
- First Name
- Last Name
- E-mail Address
- Move the **Administrators** application from the Available Applications folder to the Assigned Applications folder.

Click the **Add** button to add the administrator. Click the **Applications** button to go back to the Applications window.

digital dynamics' <i>IP Telephony</i> Applications Applications Utilities		IP App Suite (Version 1 digdynsrv Welcome Admin, Sy Sign (
Search Admins Column(s) 1 00		Add/Edit Admin
Name (First Last): Email: Limit: 50 × Search Search Results (2 records) Login Name Email admin System Admin info@digdyn.com joe joe brozovich joe@digdyn.com	* Login Name:	Add/Edit Admin. Please select the applications that you want this Admin to Administrate. NOTE: The 'Administrators' application enables the ability to create, edit, and delete other Administrator accounts. Only assign the administrators application to users that require this functionality. Available Applications Administrators Application Users Survey Current Events System Status Resource Scheduler <<<<>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
	<u></u>	Add

The following two screens show how to add Application users. To add an Application user, select the **Application Users** button.

	digital dynamics' IP Telephony Appl ions Utilities	IP App Suite (Ve digd Welcome Ad			
Welco	me Admin, System		My Portal		
System	Apps	admin	r		
Admi	nistrators	۲	_		
Appli	cation Users	۲	_		
Applica	ations	admin	r		
demo	Current Events	0	_		
demo	Resource Scheduler	٩			
demo	Survey	٩			
demo	System Status	0			

From the Add/Edit Users window, provide the following:

- Extension
- First Name
- Last Name
- Pin
- Confirm Pin
- Move all applications from the Available Applications folder to the Assigned Applications folder.

After the completion, click the **Submit** button to add a user. Click the **Applications** Button to go back to the Applications window.

digital dynamics' <i>IP Telephony Applications</i> Applications Utilities		IP App Suite (Version 1.0. digdynsrv - de Welcome Admin, Syste Sign Off
Search Users Column(s) 1 Search App Database CCM UserId / Ext		Add/Edit Users
Combising Fixt Name (First Last): Email: Phone Name: Department Limit: 50 Y Search Search Results (4 records from App Database) Ext Source Source	* Extension: * First Name: * Last Name: * Department: Department: Location: Is this the Yes No	Select applications the User may access.

5.1. Configure the Current Events Application

To configure the Current Event application, log in to the IP Telephony Application Suite as Administrator. As shown below, the Administrator can configure four applications. Select the **Current Events** button to configure.

digital dynamics' IP Telephony Appl Applications Utilities	licatio	ns	
Welcome Admin, System			My Portal
System Apps	admin	user	
Administrators	0		
Application Users	0		
Applications	admin	user	
demo Current Events	0]	
dema Resource Scheduler	0		
demo Survey	0		
demo System Status	0		

The Current Events window appears. Click the Add New Event button to create an event.

digital dynamics' <i>IP Telephony Applications</i>	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Regis:	welcome Admin, system
	ease Select the Event that you want to work with Current Event(s) Event Name Display Date avaya1 12/12/2005 08:00 PM 12:30 Event 12/13/2005 12:30 PM Add New Event	Sign Off

From the Add New Event page, supply the following info:

- Event Name
- General information
- Start Display Date & Time (This is the time the server will push the current event to IP Telephones
- End Display Date & Time (This is the time the server will stop pushing the current event message)

Click **Add** button to add the New Event.

digital dynamics' <i>IP Telephony Applicat</i> Applications Events	Demo Version - Expires: 01/11/2006 01:00 AM Ions Contact Digital Dynamics Software for a Register	Events Scheduler (Version 1.0.0) digdynsrv - deu red Copy Welcome Admin, System Sign Off
DEMO Parchiteto et vertradigetgracem	Add New Event	DEMO Purchase at www.eliydyn.com
	* Event Name General Information Maxlength is 250 characters. Location Contact number, or email or address	
DEMO Purchase at www.cliptpa.com	* Start Display Date End Display Time End Display Time Add Back	DEMO Purchase al www.diptym.com

Once configured correctly, the event message will appear in the Applications window.

Applications Utilities							
Welcor	ne Admin, System						
System	Apps	admin u	user				
Admir	nistrators	0					
Applic	ation Users	٩					
Applica	tions	admin u	user				
demo	Current Events	٩					
demo	Resource Scheduler	0					
demo	Survey	٩					
demo	System Status	0					

5.2. Configure the Resource Scheduler Application

To configure the Resource Scheduler application, log in to the IP Telephony Application Suite as Administrator and select the **Resource Scheduler** button to configure. The Equipment Search page appears. The following describes the terms used in the Resource Scheduler.

- **Equipment Type** is any resource that can be scheduled or shared (Conference Room, Interview Room).
- **Equipment** is a schedule (or reservation) of the resource.

Select the **Add Equipment** button to schedule the resource. By clicking the List All button, the administrator can select an Equipment Type which has been already created, but not activated.

i 2006 Res tware for	eource Scheduler (Version 1.0.0) digdynsrv - dev Welcome Admin, System
	Sign Off D
Name Conference Ro AV Cart Laptop Interview Room	AV Cart

From the Add Equipment page, which schedules for the Equipment Types, provide the following info:

- **Equipment Type** (Resource)
- Extension of Equipment Type
- Name
- Location

After the completion, click the **Add** button to activate the resource. Once the **Add** button is selected, the IP Telephony Application Suite will push the Resource Scheduler to the assigned users.

digital dynamics' IP Telephony Applications DigDyn IP App Suite	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Resource Scheduler (Version 1.0.0) digdynsrv - dev Welcome Admin, System
Applications Equipment Equipment Types	Add Equipment Wittrafforfym.com	Sign Off D
	* indicates required Add new Resource	
	* Type:	
DEMO Purchase at www.rdfgdyn.com	Description:	DEI Purchaise at wr

5.3. Configure the Survey Application

To configure the Surveys application, log in to the IP Telephony Application Suite as a user with administrator privileges. Select the **Surveys** button from the Applications window, and the **Current Survey(s)** page displays. Click the **Add New Survey** button to create a new survey.

<u>B</u>		tal dyna elepho		lications	Demo Version - Expires: 01111/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System
Applic	ations	Surveys	Reports	Set PieChart	Colors	Sign Off
	D	EE IA se st www.	Algebrace		the Survey that you want to work with Current Survey(s) and www.cfig.cp.mecom Active Survey Name Survey Across Truncs survey1	DE Purchite at we
				I	Update Active Status	
	\square		Лб		Add New Survey	

From the Add New Survey page, provide the Survey Name, and click the Add button.

digital dynamic IP Telephony Aj		Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsry - dev Welcome Admin, System
Applications Surveys Repor	s Set PieChart	Colors	Sign Off
DEM(Puchico at www.digdy.	Add Survey * Survey	Add New Survey * indicates required Name take the survey Add Back	DE. Purchasco at wit

	ital dyna Felepho		lcations	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System
Applications	Surveys	Reports	Set PieChart	Colors	Sign Off
D	A E C		ew/Update sur	* indicates required	DE[Purchase at we
		Т	* Survey ne user can re-1	/ Name survey1 take the survey	
			Quest	tions Answers	
				Add Question	
	R	M6		Update Delete Back	

From the Survey Details page, click the **Add Question** button.

From the Add New Question page, provide a survey questionnaire for users to participate. Click the **Add** button to continue.

A P Telephony Applications			cations	Demo Version - Expires: 0111112006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System	
Applications	Surveys	Reports	Set PieChart (Colors	Sign Off	
D)	Add New Question	DE[Purchaico ait wi	
				* indicates required		
			Add que	estion		
			Survey:	survey1		
			* Quest	tion: Is it raining outside?		
				Add Back		

The next screens show the user's possible response type to the question. Click the **Add Answer** button to continue.

digital dynamics' IP Telephony Applications		lcations	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System	
Applications	Applications Surveys Reports Set PieChart C		Set PieChart	Colors	Sign Off
D)	Question Details	DE[Purchaise at we
				* indicates required	
			Questio	on Details	
			Survey	survey1	
			* Quest	tion: Is it raining outside?	
			Answer		
		10		Add Answer Update Delete Back	

From the **Add New Answer** page, provide the response type to the survey question. For this sample survey, the response types were "**Yes**" or "**No**". Click the **Add** button.

digital dynamics' IP Telephony Applications				lications	Demo Version - Expires: 01111/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System	
Applic	ations	Surveys	Reports	Set PieChart	Colors	Sign Off	
	D	A State) —	Add New Answer Purchaev at www.cliptym.com	DE! Parelisies at wi	
					* indicates required		
				A	dd Answer		
				s	urvey: survey1		
				G	Question: Is it raining outside?		
				*	Answer: Yes		
	D)		V7(0) [Add Back	D)E	

digital dynamics' IP Telephony Applications		lications	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System		
Applic	Applications Surveys Reports Set PieChart C		Set PieChart	t Colors	Sign Off	
	D	A B B B B B B B B B B B B B B B B B B B) –	Add New Answer Purchase at www.flgfyn.com	DE[Purchisso at wi
					* indicates required	
				-	Add Answer	
				-	Survey: survey1 Question: Is it raining outside? * Answer: No	
			70		Add Back	DE

After adding all possible response types, click the **Update** button. The IP Telephony Application Suite will push the Survey application to the assigned users.

digital dynamics' IP Telephony Applications			lcations	Demo Version - Expires: 0111112006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	Survey (Version 1.0.0) digdynsrv - dev Welcome Admin, System
Application	ns Surveys	Reports	Set PieChart (Colors	Sign Off
Pur	NED ()	Question Details	DE[Purchase at wit
				* indicates required	
			Questic	on Details	
			Survey:	: survey1	
			* Quest	tion: Is it raining outside?	
			Answer	rs: <u>No</u> Yes	
Pur	DEL terrer its create			Add Answer Delete & Back Withgtmacem	DE[Purchase at wi

5.4. Configure the System Status Application

To configure the System Status application, log in to the IP Telephony Application Suite as a user with administrator privileges. Select the **System Status** button from the Applications page, and the System Status page appears. Click the **Add New System** button.

digital dynamics' IP Telephony Applications	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	System Status (Version 1.0.0) digdynsrv - dev Welcome Admin, System
ApplDigDyn IP App Suite ms	System Status Z M O	Furchieto at we
	Current Servers Type Name Status Web Server 1111 UP Add New System Refresh	

From the Add New System page, provide the following info:

- **Type** of the system
- Name of the system
- **IP address** of the system
- **Port**, which the system uses

After the completion, click the **Add** button and the IP Telephony Application Suite will push the System Status application to the assigned users.

<u>M</u>	digital dynamics' <i>IP Telephony Applications</i>	Demo Version - Expires: 01/11/2006 01:00 AM Contact Digital Dynamics Software for a Registered Copy	System Status (Version 1.0.0) digdynsrv - dev Welcome Admin, System
Аррис		Add New System	Sign Off DDDDDD Purchiter at we
		* indicates required Add System	
	* Type * Name * IP Address or DNS	Name	
	Purchase at www.flg.fgn.com	t for MySQL is: 3306, and for SQL Server is: 1433	

5.5. Configure the Speed Dial Application

To configure the Speed Dial application, log in to the IP Telephony Application Suite as an Application User. Select the **Speed Dials** button, and the Current SpeedDial(s) page appears. Click the **Add SpeedDial** button.

digital dynamics' IP Telephony Applications	Demo Version - Expires: 0111112006 01:00 AM Contact Digital Dynamics Software for a Registered (Speed Dial (Version 1.0.0) digdynsrv - dev Copy Welcome 1, user - Ext: 50001
Applications Speed Dials Search		Sign Off
Pleas	Purchase at WXXXdigdpincem	DEMO relitée et www.elipelpu.com
	Current SpeedDial(s)	
	Name Phone Number Order	
	<u>user2</u> 50002 1 🔇	
	<u>user3</u> 50003 2 🕥	
	Reorder SpeedDiats	
DEMO	Add SpeedDial	DEMO

From the **Add/Edit SpeedDial** page, provide the **Name** and **Phone Number** to create a speed dial. Once the **Submit** button is selected, the IP Telephony Application Suite will push the Speed Dials application to the assigned user.

digital dynamics' <u>IP Tolophory</u> Applications DigDyn IP App Suite Applications Speed Dials Search	Demo Version - Expires: 01111/2006 Contact Digital Dynamics Software	Speed Dial (Version 1.0.0) digdynsrv - dev Welcome 1, user - Ext: 50001 Sign Off
DEMO Furchisto at www.sdigdyn.com	Add/Edit SpeedDial	TVI O
	Add/Edit SpeedDial	
	Name:	
	Phone Number:	
	Submit Back	

5.6. Configure the Stock Portfolio Application

To configure the Stock Portfolio application, log in to the IP Telephony Application Suite as an Application User. Select the **Stock Portfolio** button and the Current List of Stock Symbols page appears. Provide **Stock Symbols**, and click the **Add to Portfolio** button. After the completion, the IP Telephony Application Suite will push the Stock Portfolio application to the assigned user.

digital dynamics' IP Total and Applications Applications Portfolio	Demo Version - Expires: 01111/2006 01 Contact Digital Dynamics Software for	
DEMO Purchise at www.digdpn.com	Current list of Stock Symbols	DEMO Purchieto at www.cfijatym.ccm
	Your Current Stock Symbol(s) Ticker Price Change Time High Low Open No stock tickers found. Delete Reload	
DEMO Purchineo at www.ucflydyn.com	Other Stock(s)	DEMO Purchase at www.flytyn.com

6. Verification Steps

The following steps were used to verify the configuration

- Use the **ping** command to verify connectivity from the IP Telephony Application Suite to all devices.
- Each Avaya IP Telephone was registered and verified that the Web softkey is added.



- After pressing the Web softkey, verified the login screen is displayed.
- Press the softkey under the Ext label, and enter the extension. This is a number field. Use the **Num** softkey to enter the Extension number.
- Press the softkey under the Pin label, and enter the Pin number. This is a number field. Use the **Num** softkey to enter the Pin number.

• Press the **Login** button to finish.



• The IP Telephony application list will be displayed after a user login.



• All applications were checked and verified from each Avaya IP Telephone.

7. Interoperability Compliance Testing

Interoperability compliance testing covered connectivity and feature functionality. Feature functionality testing verified that the Digital Dynamics IP Telephony Application Suite communicates with Avaya IP Telephones reliably.

7.1. General Test Approach

All test cases were performed manually. The test was conducted two phases. The first phase of the test was accomplished using Intra-Switch scenario. The second phase of the test was performed using an IP trunk between PBXs (Inter-Switch scenario). The second phase test was needed to simulate a user from the Headquarter coming to the regional office, and utilizing the same Avaya IP Telephone setting that the user used to have in the Headquarter. The following features and functionality were verified from the Avaya IP Telephones by accessing each application:

- Current Events Application
- Resource Scheduler Application
- Survey Application
- System Status Application
- Speed Dial Application
- Stock Portfolio Application

7.2. Test Results

All test cases passed. Avaya IP Telephones were successfully registered to the IP Telephony Application Suite, and did not find any flaw during the compliance test. The Digital Dynamics IP Telephony Application Suite worked reliably with Avaya IP Telephones.

8. Support

For technical support on the Digital Dynamics IP Telephony Application Suite, call Digital Dynamics Support at (800) 330-3830 or send email to <u>support@digdyn.com</u>.

9. Conclusion

These Application Notes describe the configuration steps required for integrating the Digital Dynamics System with Avaya IP Telephones. The systems interoperated successfully, providing a suitable solution to increase workplace productivity by enabling greater collaboration and communication between application users.

10. References

This section references the Avaya and Digital Dynamics documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at <u>http://support.avaya.com</u>.

- [1] Administration for Network Connectivity for Avaya Communication Manager, Issue 8, June 2004, Document Number 555-233-504.
- [2] *Administrator's Guide for Avaya Communication Manager*, Issue 8, June 2004, Document Number 555-233-506.

The following Digital Dynamics product documentation is provided. For additional product and company information, visit <u>http://www.digdyn.com</u>.

[3] Digital Dynamics IP Telephony Application Suite Administrator Manual, Version 1.0

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