



Avaya Solution & Interoperability Test Lab

Application Notes for ITEL Reporting for Contact Center v5.0.450.2 with Avaya Business Communication Manager, Release 6.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for the ITEL Reporting for Contact Center v5.0.450.2 and the Avaya Intelligent Contact Center software to successfully interoperate with Avaya Business Communication Manager (BCM) Release 6.0.

ITEL Reporting for Contact Center 5.0 uses the XML Contact Center Reporting Interface (XML stream, logs into Avaya BCM Release 6.0, and retrieves all of the data that is currently in the BCM). It is a Contact Center application which gathers real time data and historical statistical data from the BCM Intelligent Contact Center (ICC) and uses these two data sources to populate real time screens and create historical reports.

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

The objective of this interoperability compliance testing is to verify that the ITEL Reporting for Contact Center (RCC) v5.0.450.2 software can parse data that is currently in the Business Communication Manager (BCM), write the data to its own database and then use the data to populate the reports.

1.1. Interoperability Compliance Testing

The focus of the compliance testing was primarily on verifying whether the ITEL RCC v5.0.450.2 software can establish an HTTP/HTTPS session with Avaya BCM release 6.0, retrieve all data from the BCM, and populate the data to the real time screens and create historical reports.

1.2. Support

Technical support for ITEL can be obtained by contacting ITEL via email at support@itel-business-solutions.com or by calling +44 (0) 1244 670200.

2. Reference Configuration

Figure 1 illustrates the test configuration used during the compliant testing event between the BCM rel. 6.0 and the ITEL RCC v5.0.450.2.

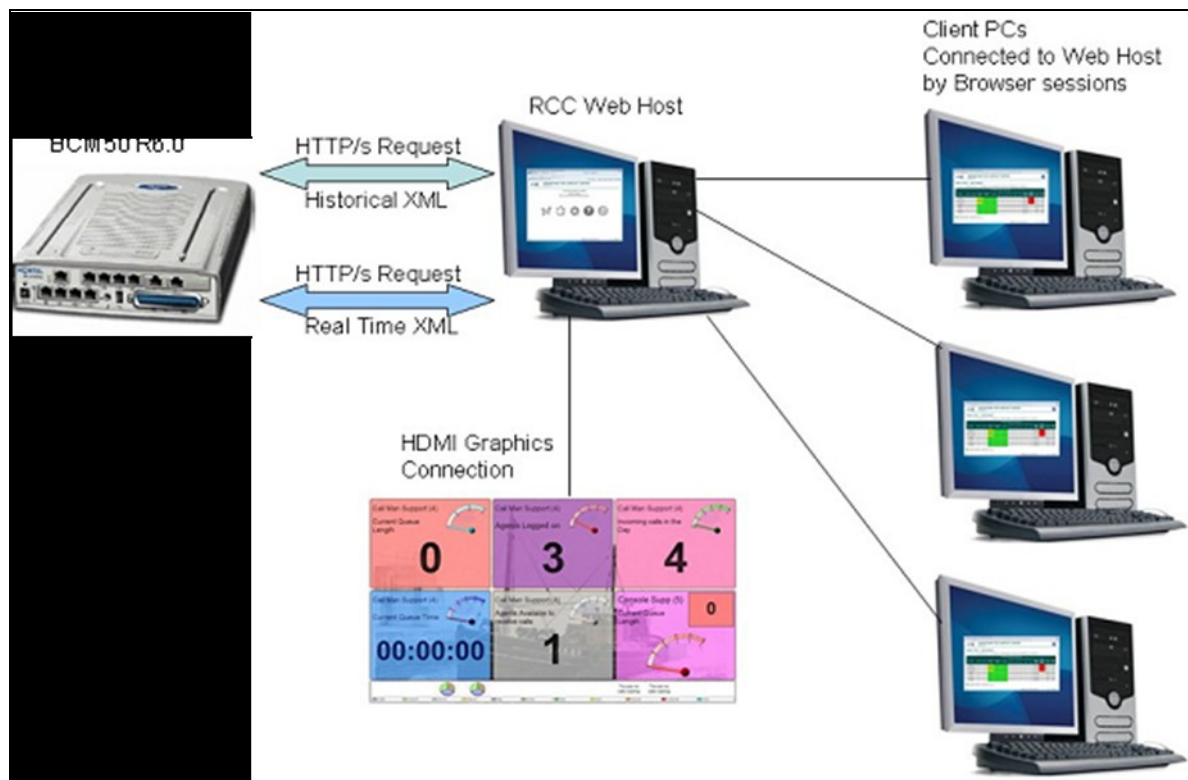


Figure 1: Test Bed Connection Diagram for RCC

3. Equipment and Software Validated

BCM rel.6.0 with the XML Contact Center Reporting Interface enabled (key coded).

Equipment		Software/Firmware
Avaya BCM50r5		System software version : 10.0.1.02.115 SW Version : Avaya BCM50 Release 6
Avaya Telephones		
	I2007 (IP) – Used as agents on BCM 2004P2 (IP) – Used to call into the BCM agent sets.	0621C7G 0602B76
ITEL RCC		v5.0.450.2

4. Configure on BCM

This section describes the steps to configure the BCM for the RCC.

4.1. Configure Line and Agent

The BCM configurations for RCC can be performed through Business Element Management only. The configuration procedure is provided below.

- Download Business Element Manager (BEM) software from <https://IP Address of BCM Server/index.htm> and install it on a Windows PC.
- Double-click the BEM icon installed to launch Business Element Manager as shown on **Figure 2** below.
- Enter a valid User ID and Password.

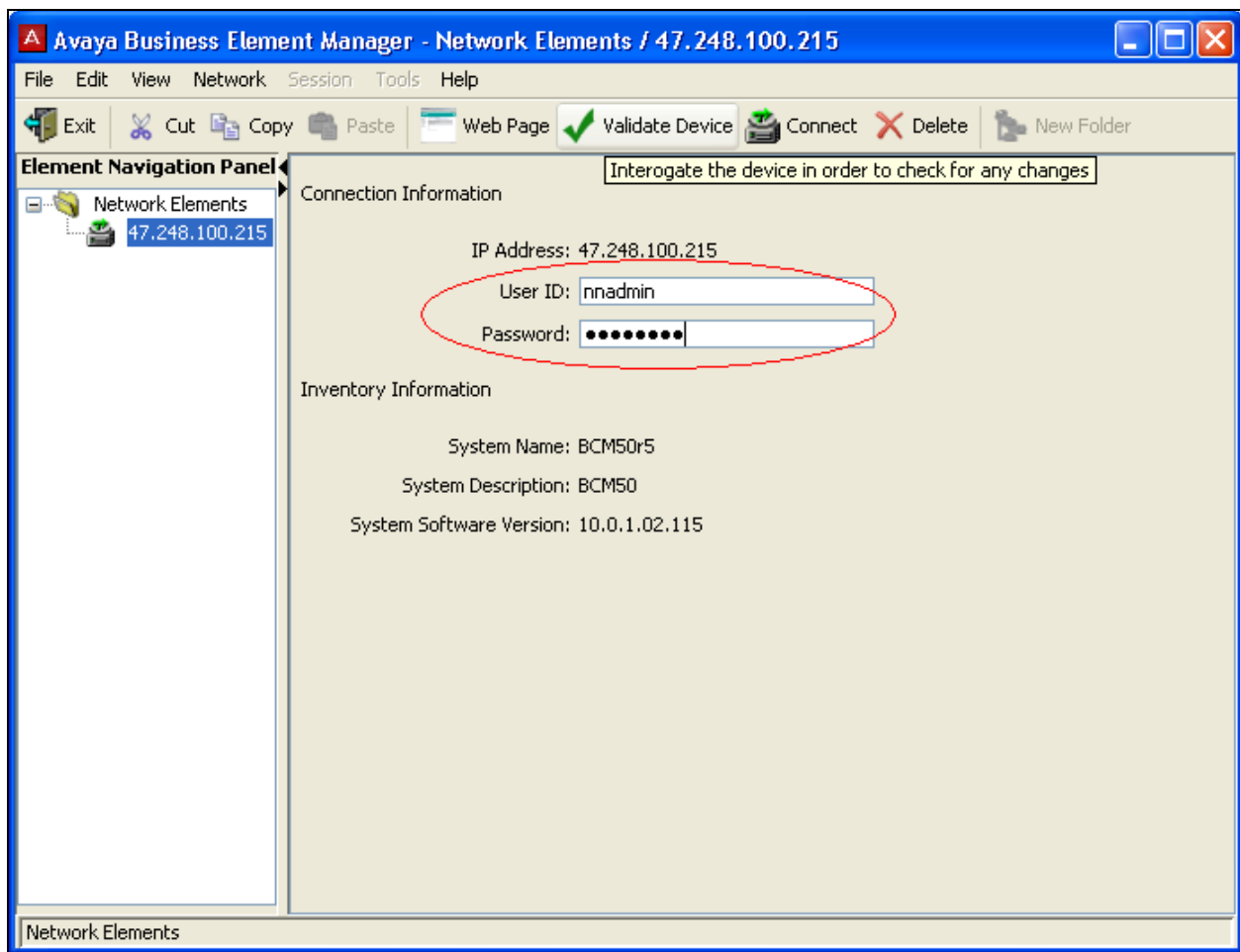


Figure 2: Login Screen

To configure a line, navigate to Telephony > Lines > All Lines from the Configuration tab as shown in **Figure 3** below, select a line that is available, one line corresponds to one Directory Number (DN).

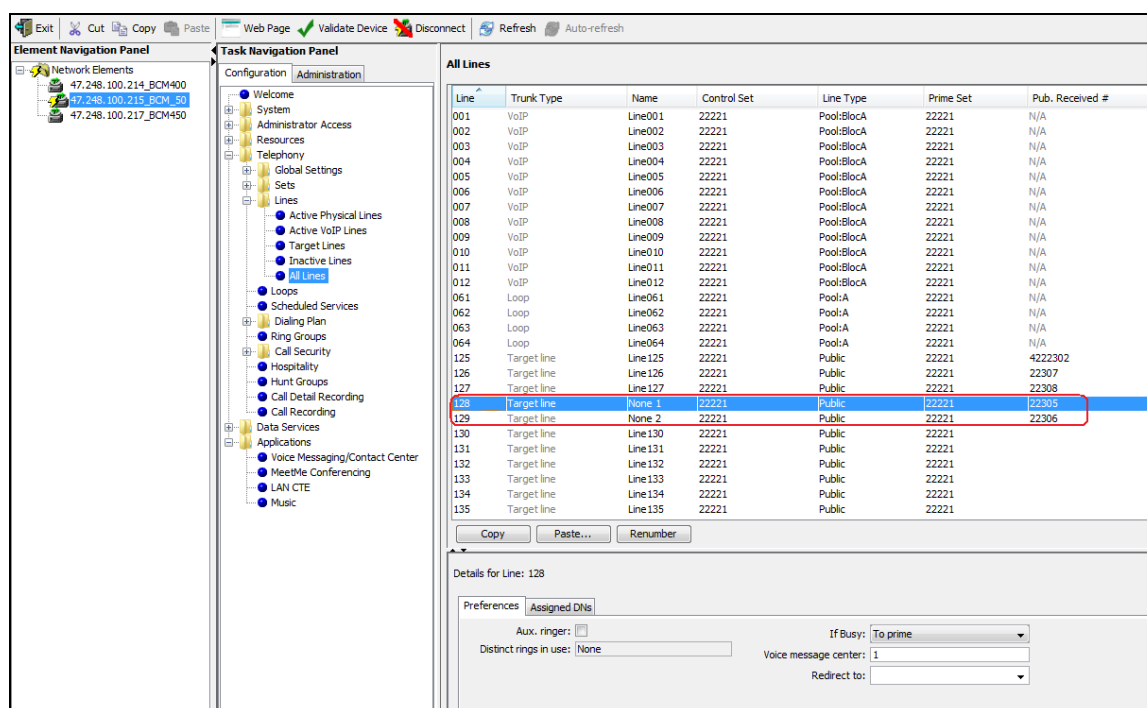


Figure 3: Line Configuration

As shown in **Figure 3**, for example, line 128 is known as the target line. The DN 22305 is known as the public received number. Line 128 corresponds to DN 22305. When a user dials DN 22305, line 128 will ring.

Go to the Configuration tab and then navigate to Telephony > Sets > Active Sets, select one DN to configure a set as an agent.

- Select the Capabilities and Preference tab (as shown on **Figure 4**).
- Select a DN and then access the Button Programming tab for that DN.
- Select Key 1 from the phone screenshot demo.
- Select “Feature: CC Login/Logout (F904)” from the Value drop-down menu in the dialog box and click on the OK button to complete.
- Do the same for Key 2 from the phone screenshot demo with dialog box of Value as “Feature: CC Busy/Ready (F908)” as show on **Figure 5**.

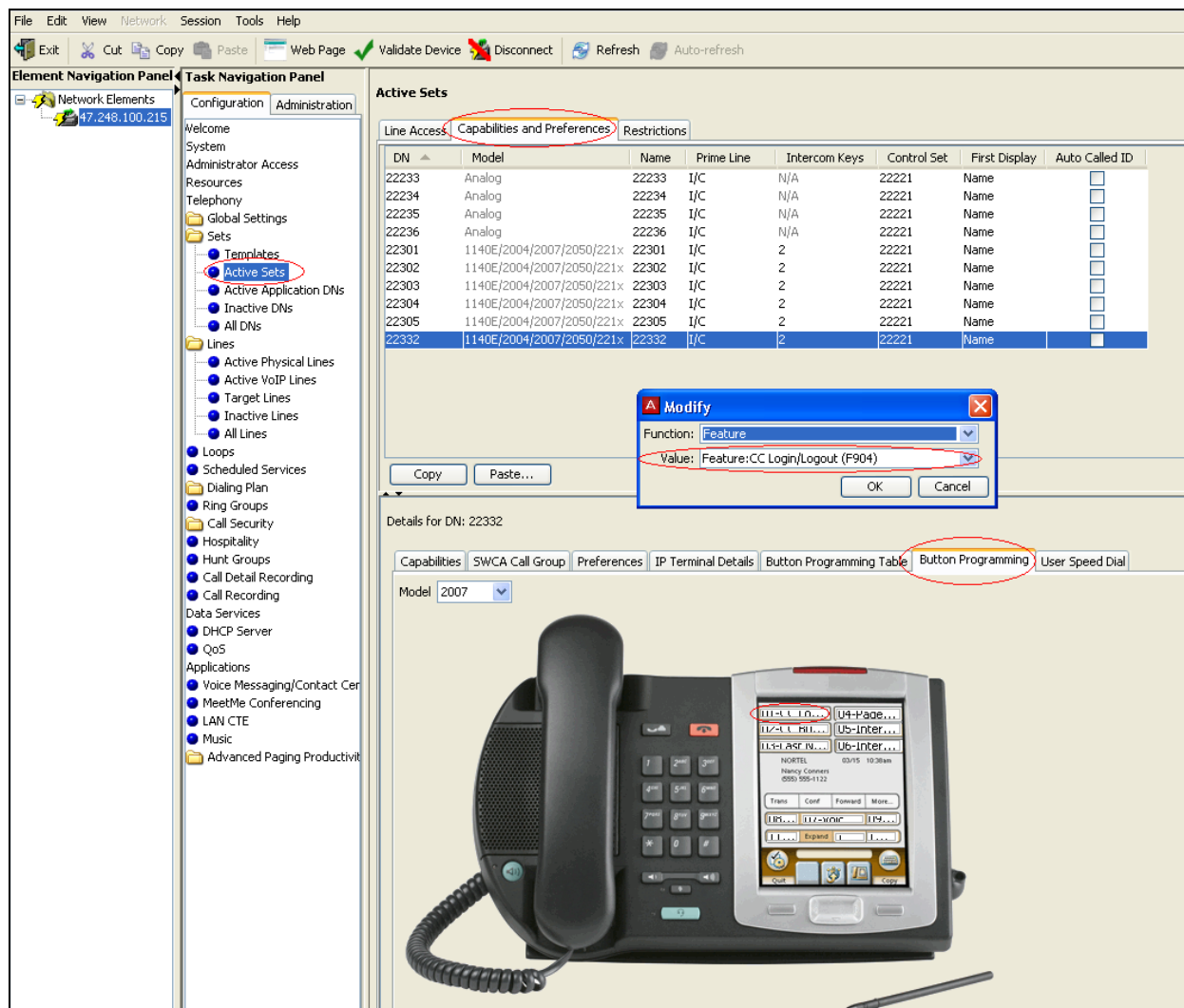


Figure 4: Active Sets – Feature CC Login/Logout

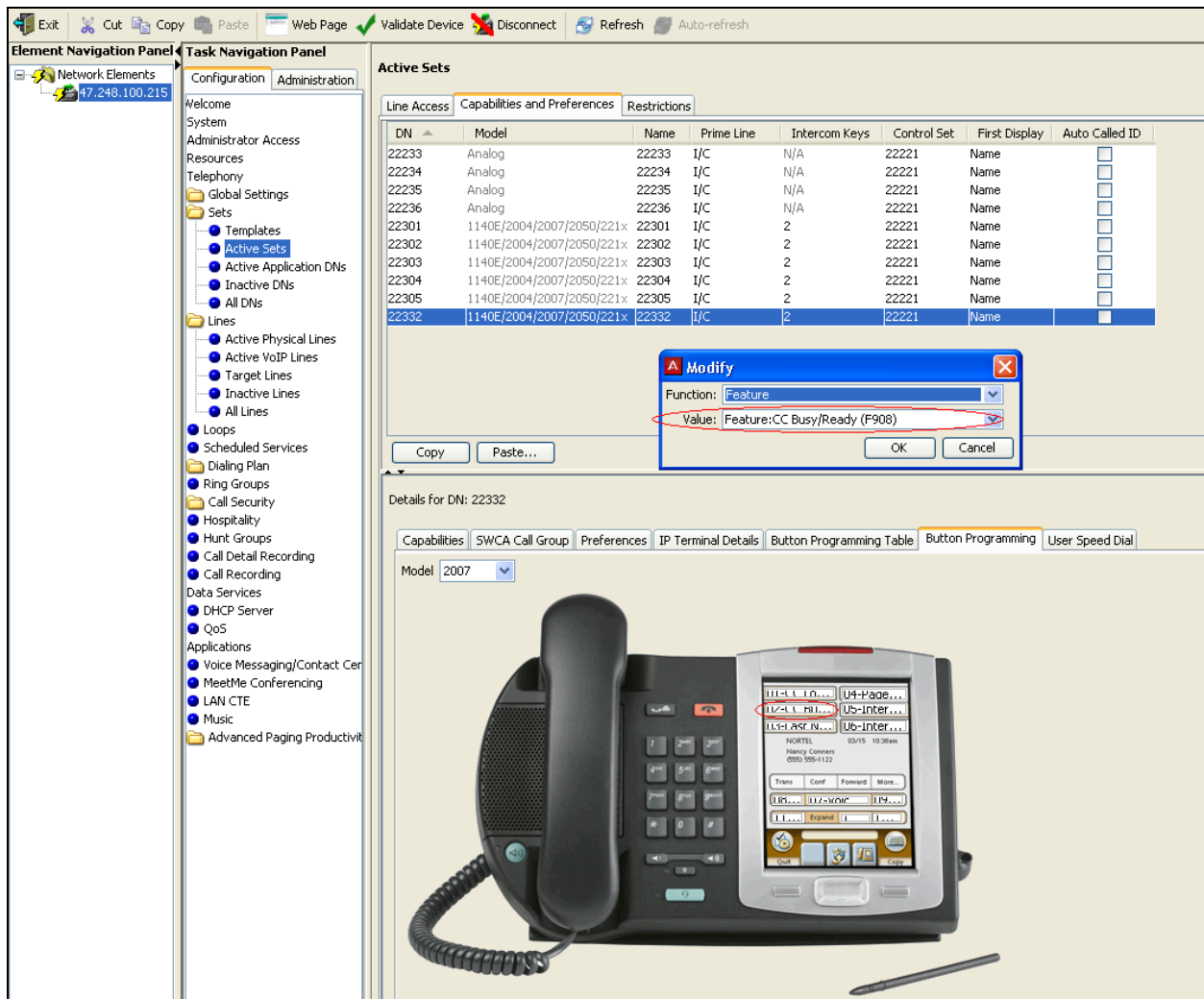


Figure 5: Active Sets – Feature CC Busy Ready

The Line Pool access has to be provided to the agent set to make outgoing calls. To configure Line Pool access, go to the Configuration tab, navigate to Telephony > Dialing Plan > Line Pools. Select **BlocA** and click on the Add button to add a DN to the Line Pool Access as shown in **Figure 6**.

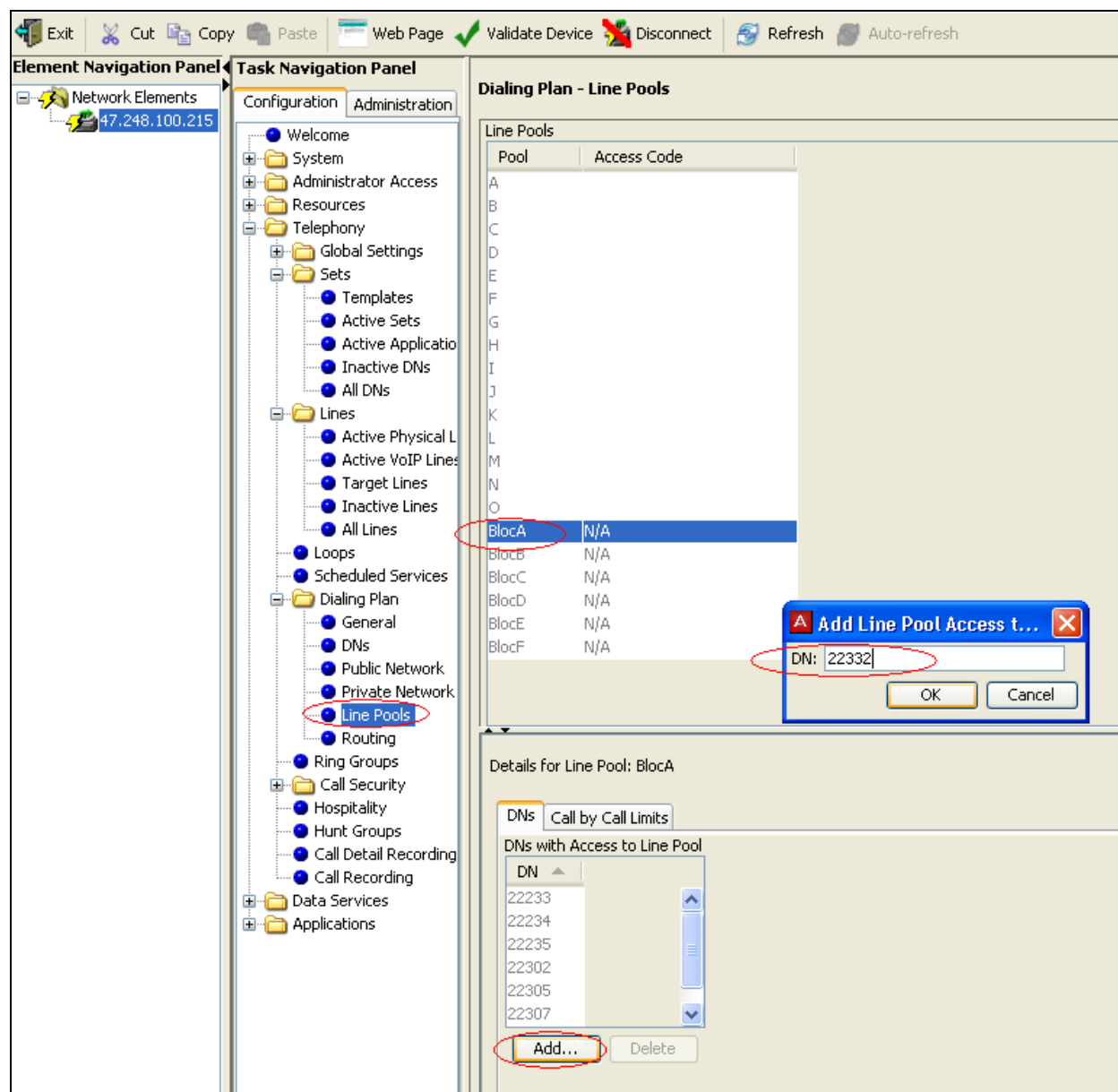


Figure 6: Line Pool Access

Figure 7 shows the added DN in the **BlocA** Line Pool.

The screenshot displays the Avaya Network Manager interface. On the left, the **Task Navigation Panel** shows a tree view of network elements. The **Configuration** tab is active, and the **Line Pools** item under the **Dialing Plan** folder is selected. The main panel on the right, titled **Dialing Plan - Line Pools**, contains a table of line pools. The table has two columns: **Pool** and **Access Code**. The pools listed are A, B, C, D, E, F, BlocA, BlocB, BlocC, BlocD, BlocE, and BlocF. The **BlocA** pool is selected, and its details are shown in the **Details for Line Pool: BlocA** section. This section has two tabs: **DNs** and **Call by Call Limits**. The **DNs** tab is active, showing a list of DNs with access to the line pool. The DNs listed are 22234, 22235, 22302, 22305, 22307, and 22332. The DN 22332 is highlighted and circled in red. Below the list are **Add...** and **Delete** buttons.

Pool	Access Code
A	
B	
C	
D	
E	
F	
BlocA	N/A
BlocB	N/A
BlocC	N/A
BlocD	N/A
BlocE	N/A
BlocF	N/A

DN
22234
22235
22302
22305
22307
22332

Figure 7: Line Pool Added

4.2. Configure Contact Center Reporting Data stream

After launching the Business Element Manager as shown in **Figure 2**, follow the steps below to launch the Contact Center on the BEM:

- From the Task Navigation Panel as shown in **Figure 3**, under the Configuration tab, Navigate to Applications > Voice Messaging/Contact Center.
- Click on the Launch CallPilot Manager (not shown).

The Contact Center will appear as shown in **Figure 8**.

On the left menu column, click on the Contact Center to display a menu options list. Then click on the General Properties as shown in red oval of **Figure 8** below.



Figure 8: Contact Center Main Screen

The Contact Center Properties page will be shown in **Figure 9** below. Provide information to enable the CC reporting data stream by following the steps below:

- Enter the password on the CC Reporting Server Password textbox (CCRS is the default password).
- Re-enter the password to confirm.
- Check on the Enable CC Reporting Data Stream check-box.
- All other attributes are left as default values.
- Click on the Submit button to save the set up information.

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Main Logout Help

Contact Center Properties

CC Reporting Server Password:

Confirm Password:

Enable CC Reporting Data Stream: ☒

MMCC Public Hostname:

Reserved Channels:

Supervisor Help Request Timeout: (seconds)

Supervisor Help from: ☒ all skillsets ☐ agent's skillsets only

Enable Caller ID/Dialed Number ID: ☒ Caller Name with number backup ☐ Caller Number only ☐ Dialed Number ☐ None

Figure 9: General Properties

4.3. Create Agent list

The following steps will show how to add an Agent to an Agent List on the Contact Center:

- On the Contact Center page as shown in **Figure 8**, under the Contact Center menu options list, click on the Agent List.
- Click on the Add button as shown in **Figure 10** below.

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Main Logout Help

Agent List

ID	Name	Super.	Auto Ans.	Missed Call	Commands		
1	Agent1	Yes	No	Make Not Ready	Force Off		
2	Agent2	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
3	Agent3	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
4	Agent4	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
5	Agent5	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
6	Agent6	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
7	Agent7	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
8	Agent8	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
9	Agent9	Yes	No	Make Not Ready	Logged Off	Change	Reset Password Delete
10	Agent10	Yes	No	Make Not Ready	Force Off		
					Add		

[Add Many Agents](#)

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Figure 10: Add List

The page Add Agent details page will appear as shown in **Figure 11**. Follow the instruction below to enter details information for an agent.

- Agent ID and Name are generated automatically.
- Check on Supervisor check-box if the agent will be a supervisor else this box will remain unchecked.
- From Missed Call Option drop down menu list, select the “Make Not Ready (Return To Skillset)”.
- All the other attributes are left as default values or changed as required.
- Click on the Submit button to save the configured information.

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Main Logout Help

Add Agent

Agent ID: 11

Name: Agent11

Supervisor: ☐

Automatic Answer: ☐

☐ Override Skillset

Break Time:

☐ Not Ready Timeout:

☐ Manual Not Ready Timeout:

☐ Audible Not Ready Notification Interval:

Missed Call Option: Make Not Ready (Return To Skillset) ▼

Record-a-call: Disabled ▼
(Please note that Silent Recording may be illegal in certain jurisdictions - please consult your legal advisor before turning on this feature)

Max Message Length: (1-60 minutes)

Recorded Call Destination:

☐ Personal Mailbox

☐ Skillset Mailbox
(The recorded call will be sent to the mailbox of the skillset that the call currently belongs to)

☐ Mailbox:

SFTP Destination: None ▼

Submit Cancel

Figure 11: Add Agent

4.4. Create SkillSet list

A configured Intelligent Contact Center requires at least one skill set per agent or group of agents.

The following steps will show how to add a skill set to a SkillSet List on the Contact Center:

- In order to associate an agent directory number (DN) to a specific skill set, from **Figure 3**, select under Task Navigation Panel, Configuration tab > Telephony > Sets > Inactive DNs.
- Select one DN with Model as '*Application*' as shown on **Figure 12** below.

The screenshot displays the Avaya Contact Center Administration interface. On the left, the 'Task Navigation Panel' shows the 'Inactive DNs' option selected under the 'Sets' category. The main window displays a table of 'Inactive DNs' with columns: DN, Model, Name, Port, Pub. OLI, Priv. OLI, Fwd No Answer, and Fwd Delay. DN 22345 is highlighted in blue, showing a Model of 'Application' and a Port of '0145'. Below the table, the 'Details for DN: 22345' section is visible, showing the 'Line Assignment' tab with an 'Assigned Lines' table.


DN	Model	Name	Port	Pub. OLI	Priv. OLI	Fwd No Answer	Fwd Delay
22318	1140E/2004/2007/2050/221x	22318	0118				N/A
22319	1140E/2004/2007/2050/221x	22319	0119				N/A
22320	1140E/2004/2007/2050/221x	22320	0120				N/A
22321	1140E/2004/2007/2050/221x	22321	0121				N/A
22322	1140E/2004/2007/2050/221x	22322	0122				N/A
22323	1140E/2004/2007/2050/221x	22323	0123				N/A
22324	1140E/2004/2007/2050/221x	22324	0124				N/A
22325	1140E/2004/2007/2050/221x	22325	0125				N/A
22326	1140E/2004/2007/2050/221x	22326	0126				N/A
22327	1140E/2004/2007/2050/221x	22327	0127				N/A
22328	1140E/2004/2007/2050/221x	22328	0128				N/A
22329	1140E/2004/2007/2050/221x	22329	0129				N/A
22330	1140E/2004/2007/2050/221x	22330	0130				N/A
22331	1140E/2004/2007/2050/221x	22331	0107				N/A
22332	1140E/2004/2007/2050/221x	22332	0108				N/A
22345	Application	22345	0145				N/A
22346	Application	22346	0146				N/A
22347	Application	22347	0147				N/A
22348	Application	22348	0148				N/A
22349	Application	22349	0149				N/A

Details for DN: 22345

Line	Appearance Type	Appearances	Caller ID Set	Vmsg Set	Priv. Received #

Figure 12: Application DN

- On the Contact Center page as shown in **Figure 8**, under the Contact Center menu options list, click on the Skillset List.
- Click on the Configure link highlighted in red oval as shown in **Figure 13** below.



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Skillset	Name	CDN	Status	Commands
1	PV SKILL1	22351	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
2	SKILL2	22352	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
3	SKILL3	22353	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
4	PV-SKILL4	22354	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
5	PV SKILL5	22355	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
6	SKILL6	22356	Disabled	Properties Agents Day Night Service Mode Overflow Enable Unconfigure
7	SKILL7	22357	Disabled	Properties Agents Day Night Service Mode Overflow Enable Unconfigure
8	unused	---	--	Configure
9	unused	---	--	Configure
10	unused	---	--	Configure
11	unused	---	--	Configure
12	unused	---	--	Configure
13	unused	---	--	Configure
14	unused	---	--	Configure
15	unused	---	--	Configure
16	unused	---	--	Configure
17	unused	---	--	Configure
18	unused	---	--	Configure
19	unused	---	--	Configure
20	unused	---	--	Configure

Figure 13: Skillset List

The Skillset Properties page will appear as shown in **Figure 14**. Follow the instructions below to enter details information for a Skillset.

- Enter control DN (as *selected on Figure 12 above*).
- Enter the name of the Skillset as PV SKILL8 as an example.
- Enter the Break Time as 30 seconds as an example.
- Check on the Primary Alert check-box and specify duration of 30 seconds on the text-box.
- Check on the Secondary Alert check-box and enter a value of 1 minute on the text-box.
- All other attributes are left as default.
- Click on the Submit button to save the configured information.

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Skillset Properties

Skillset:

8

Control DN:

22345

Name:

PV SKILL8

MWI DN:

(optional)

Method:

Least Busy

Break Time:

00:30

(mm:ss) (Read [warning](#) before changing)

Delay Answer:

00:00

(mm:ss)

☒ Primary Alert:

00:30

(mm:ss)

☒ Secondary Alert:

01:00

(mm:ss)

Attendant Ext:

(optional)

Use Previous

10

calls to calculate EWT

EWT Increase Allowed:

☒

Initial Call Duration:

00:03:00

(hh:mm:ss)

Submit

Cancel

Figure 14: Skillset Properties

After clicking on the Submit button on **Figure 14**, a pop up message window will say “A new mail box has been created. Please initialize it before attempting to enable the skillset”, as shown in **Figure 15**. A user must initialize the mail box for the CDN of the skillset via his/her telephone handset.

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Skillset List

Skillset	Name	CDN	Status	Commands
1	PV SKILL1	22351	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
2	SKILL2	22352	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
3	SKILL3	22353	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
4	PV-SKILL4	22354	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
5	PV SKILL5	22355	Enabled	Properties Agents Day Night ServiceMode Overflow Disable
6	SKILL6	22356	Disabled	Properties Agents Day Night Service Mode Overflow Enable Unconfigure
7	SKILL7			
8	PV SKIL			
9	unused			
10	unused			
11	unused			
12	unused			
13	unused	---	--	Configure
14	unused	---	--	Configure
15	unused	---	--	Configure
16	unused	---	--	Configure
17	unused	---	--	Configure
18	unused	---	--	Configure
19	unused	---	--	Configure
20	unused	---	--	Configure

Windows Internet Explorer

A new mailbox has been created. Please initialize it before attempting to enable the skillset.

OK

Figure 15: Initialize Pop Up

4.5. Assign Agent to a SkillSet

On the Contact Center page as shown in **Figure 8**, under the Contact Center menu options list, click on the Skillset List and then click on the Agent link of the newly created skillset as shown in **Figure 16**.

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Skillset List

Skillset	Name	CDN	Status	Commands							
1	PV SKILL1	22351	Enabled	Properties	Agents	Day	Night	ServiceMode	Overflow	Disable	
2	SKILL2	22352	Enabled	Properties	Agents	Day	Night	ServiceMode	Overflow	Disable	
3	SKILL3	22353	Enabled	Properties	Agents	Day	Night	ServiceMode	Overflow	Disable	
4	PV-SKILL4	22354	Enabled	Properties	Agents	Day	Night	ServiceMode	Overflow	Disable	
5	PV SKILL5	22355	Enabled	Properties	Agents	Day	Night	ServiceMode	Overflow	Disable	
6	SKILL6	22356	Disabled	Properties	Agents	Day	Night	Service Mode	Overflow	Enable Unconfigure	
7	SKILL7	22357	Disabled	Properties	Agents	Day	Night	Service Mode	Overflow	Enable Unconfigure	
8	PV SKILL8	22345	Disabled	Properties	Agents	Day	Night	Service Mode	Overflow	Enable Unconfigure	
9	unused	---	--	Configure							
10	unused	---	--	Configure							
11	unused	---	--	Configure							
12	unused	---	--	Configure							
13	unused	---	--	Configure							
14	unused	---	--	Configure							
15	unused	---	--	Configure							
16	unused	---	--	Configure							
17	unused	---	--	Configure							
18	unused	---	--	Configure							
19	unused	---	--	Configure							
20	unused	---	--	Configure							

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Figure 16: Skillset List

The Assigned Agents page will appear as shown in **Figure 17**. Click on the Assign button as highlighted in red oval.

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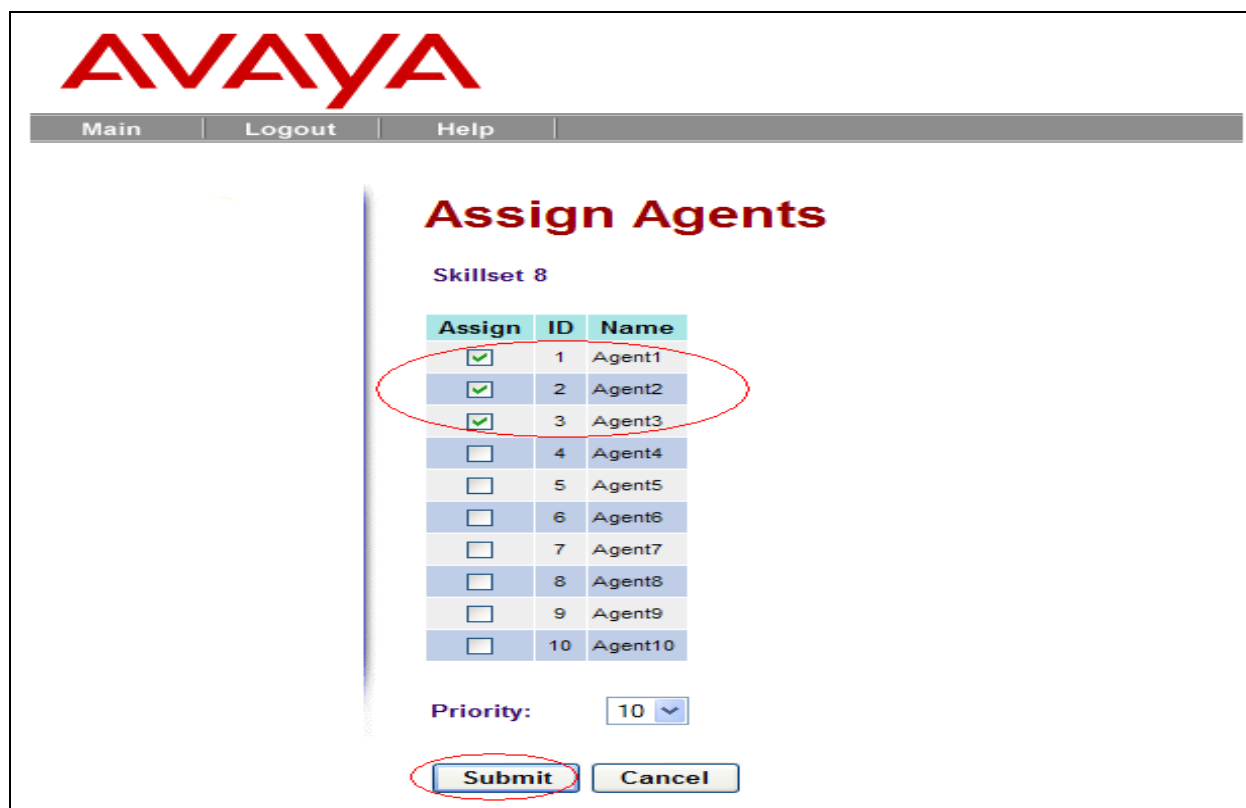
Assigned Agents

Skillset 8

ID	Name	Priority	Auto Login To SS	Commands
<div> <div>Assign</div> <div>Close</div> </div>				

Figure 17: Assigned Agents List

To assign agent(s) to the skill set, check the Assign check-box as shown in **Figure 18a**. Then click on the Submit button to save the configured information. **Figure 18b** shows the Assigned Agents.



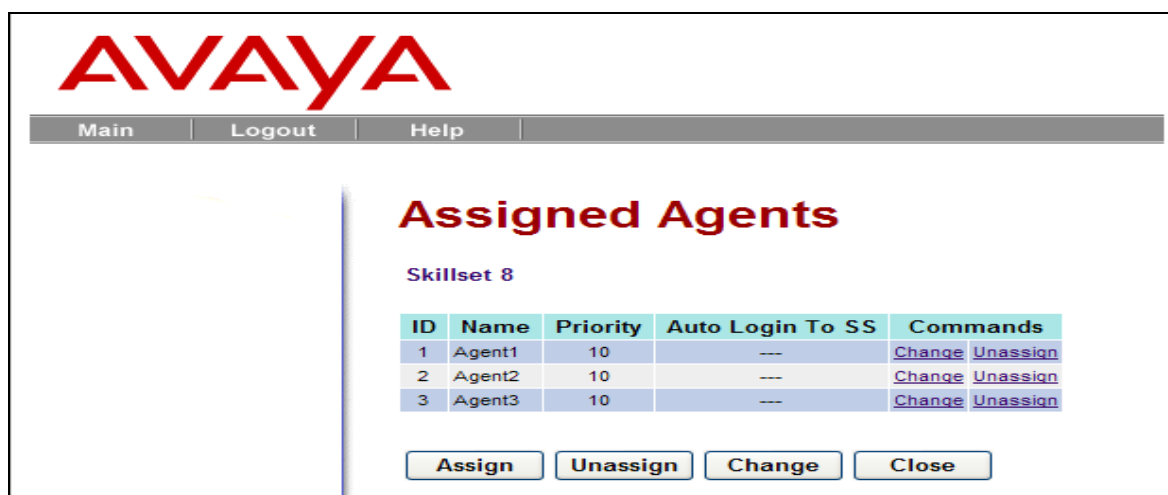
The screenshot shows the Avaya 'Assign Agents' interface for 'Skillset 8'. It features a table with columns 'Assign', 'ID', and 'Name'. Agents 1 through 10 are listed. Agents 1, 2, and 3 have their 'Assign' checkboxes checked and are circled in red. Below the table, the 'Priority' is set to 10. The 'Submit' button is also circled in red.

Assign	ID	Name
<input checked="" type="checkbox"/>	1	Agent1
<input checked="" type="checkbox"/>	2	Agent2
<input checked="" type="checkbox"/>	3	Agent3
<input type="checkbox"/>	4	Agent4
<input type="checkbox"/>	5	Agent5
<input type="checkbox"/>	6	Agent6
<input type="checkbox"/>	7	Agent7
<input type="checkbox"/>	8	Agent8
<input type="checkbox"/>	9	Agent9
<input type="checkbox"/>	10	Agent10

Priority: 10

Submit **Cancel**

Figure 18a: Assigned Agents



The screenshot shows the Avaya 'Assigned Agents' interface for 'Skillset 8' after submission. It displays a table with columns 'ID', 'Name', 'Priority', 'Auto Login To SS', and 'Commands'. Agents 1, 2, and 3 are listed with their assigned priority of 10. Each row has 'Change' and 'Unassign' links. At the bottom, there are buttons for 'Assign', 'Unassign', 'Change', and 'Close'.

ID	Name	Priority	Auto Login To SS	Commands
1	Agent1	10	---	Change Unassign
2	Agent2	10	---	Change Unassign
3	Agent3	10	---	Change Unassign

Assign **Unassign** **Change** **Close**

Figure 18b: Assigned Agents after Submit

4.5.1. Day Routing Table configuration

This section describes how to set up daily day routine for agents who belong to a specific skill set. These routines involve a sequence of action steps to greet callers calling into a contact center.

From Skillset List page shown in **Figure 16**, click on the Day link. The page Day Routing Table will appear as shown in **Figure 19**. Then click on the Insert link as highlighted in red oval.

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Day Routing Table

Skillset 8

This routing table **DOES NOT** guarantee fax delivery to the skillset mailbox ([more information](#)).

Step	Information	Commands
End		Insert

Close

Figure 19: Day Routing Table

The Routing Step page will appear, as shown in **Figure 20**, showing detailed configuration for this specific step, Step 1 in this example. The following steps below describe how to complete Step 1 as an example:

- Click on the radio button of the attribute Distribute for.
- Enter the time, 1 second, in the text box.
- All the other fields are left at default values.
- Click on the Submit button to complete Step 1.

Skillset 8 Step Number (New)

Step Type:

☐ Greeting: 1, SS1 1st Greeting ▾
 Forced Play: ☐

☐ EWT Greeting Table: ▾
 Forced Play: ☐

☒ Distribute for: 00:01 (mm:ss)

☐ Transfer to Extension:

☐ Transfer to mailbox:

☐ Transfer to external:

Outdial Method: Line ▾ (Line/Pool #)

☐ Transfer to Auto-Attendant: None ▾ Greeting Table #
 (Select "None" for default AA prompt.)
 Note: AA company greetings will be skipped.

☐ Transfer to Operator

☐ Transfer to CCR: 1 ▾

☐ Disconnect

Intelligent Caller Input Routing: (for Greeting/EWT Greeting step only)

☒ None

☐ Basic

☒ Auto-Attendant 1 ▾ Table None ▾
 (Select "None" for default AA prompt.)
 Note: AA company greetings will be skipped.

☒ Operator 0 ▾

☒ Skillset Mailbox 9 ▾

☒ CCR 2 ▾ Tree 1 ▾

☐ Advanced


Retries 2 ▾

Caller Input Rules Table ▾

Figure 20: Routing Step 1

After finishing with the insertion of the Step 1 by clicking on the Submit button, the Day Routing Table page will re-appear with the step 1 in the table as shown in **Figure 21**.

Figures 22-25 are examples of insertion of more sequencing steps, which an administrator can set up, to assign routines to the agents belonging to a particular skill set.



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Day Routing Table


Skillset 8

This routing table **DOES NOT** guarantee fax delivery to the skillset mailbox ([more information](#)).

Step	Information	Commands
1	Distribute For 00:01	Insert Modify Delete
End		Insert

[Close](#)

Figure 21: Day Routing Table



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Routing Step

Skillset 8 **Step Number** (New)

Step Type:


☒ **Greeting:** 1. SS1 1st Greeting [v](#)

Forced Play: ☐

☐ **EWT Greeting Table:** [v](#)

Forced Play: ☐

Figure 22: Additional Step



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Day Routing Table

Skillset 8

This routing table **DOES NOT** guarantee fax delivery to the skillset mailbox ([more information](#)).

Step	Information	Commands
1	Distribute For 00:01	Insert Modify Delete
2	Greeting 1, Normal, No Transfer	Insert Modify Delete
End		Insert

[Close](#)

Figure 23: Second Step



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Routing Step

Skillset 8 **Step Number** (New)

Step Type:

☐ **Greeting:** 1, SS1 1st Greeting
Forced Play: ☐

☐ **EWT Greeting Table:**
Forced Play: ☐

☐ **Distribute for:** 00:30 (mm:ss)

☒ **Goto step:** 3

☐ **Transfer to Extension:**

Figure 24: Additional Steps

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Main Logout Help

Day Routing Table

Skillset 8

This routing table **DOES NOT** guarantee fax delivery to the skillset mailbox ([more information](#)).

Step	Information	Commands
1	Distribute For 00:01	Insert Modify Delete
2	Greeting 1, Normal, No Transfer	Insert Modify Delete
3	Distribute For 00:30	Insert Modify Delete
4	Greeting 2, Normal, No Transfer	Insert Modify Delete
5	Goto Step 3	Insert Modify Delete
End		Insert

Close

Figure 25: Sample Routing Table with 5 Steps

4.5.2. Night Routing Table configuration

This section describes how to set up daily night routine for agents who belong to a specific skill set. These routines involve a sequence of action steps to greet callers calling into a contact center.

From Skillset List page shown in **Figure 16**, click on the Night link. The Night Routing Table page will appear (not shown). Then click on the Insert link to go to Routing Step details page as shown **Figure 26** below to insert the sequencing steps to treat the incoming call to Contact Center.

Figures 26-28 are examples of the insertion of the routing steps that can be used to treat the night time callers calling into contact center services.



Main	Logout	Help
------	--------	------

Routing Step

Skillset 8 Step Number (New)


Step Type:

☒ Greeting: 4, SS1 Night Greeting

Forced Play: ☐

☐ EWT Greeting Table:

Figure 26: Night Routing Table Step 1



Main	Logout	Help
------	--------	------

Routing Step

Skillset 8 Step Number (New)

Step Type:

☐ Greeting: 1, SS1 1st Greeting

Forced Play: ☐

☐ EWT Greeting Table:

Forced Play: ☐

☐ Distribute for: 00:30 (mm:ss)

☐ Goto step: 1

☐ Transfer to Extension:

☐ Transfer to mailbox:

☐ Transfer to external:

☐ Outdial Method: Line (Line/Pool #)

☐ Transfer to Auto-Attendant: None Greeting Table #

(Select "None" for default AA prompt.)

Note: AA company greetings will be skipped.

☐ Transfer to Operator

☐ Transfer to CCR: 1

☒ Disconnect

Intelligent Caller Input Routing: (for Greeting/EWT Greeting step only)

☒ None

☐ Basic

☒ Auto-Attendant 1 Table None

(Select "None" for default AA prompt.)

Figure 27: Night Routing Table Step 2

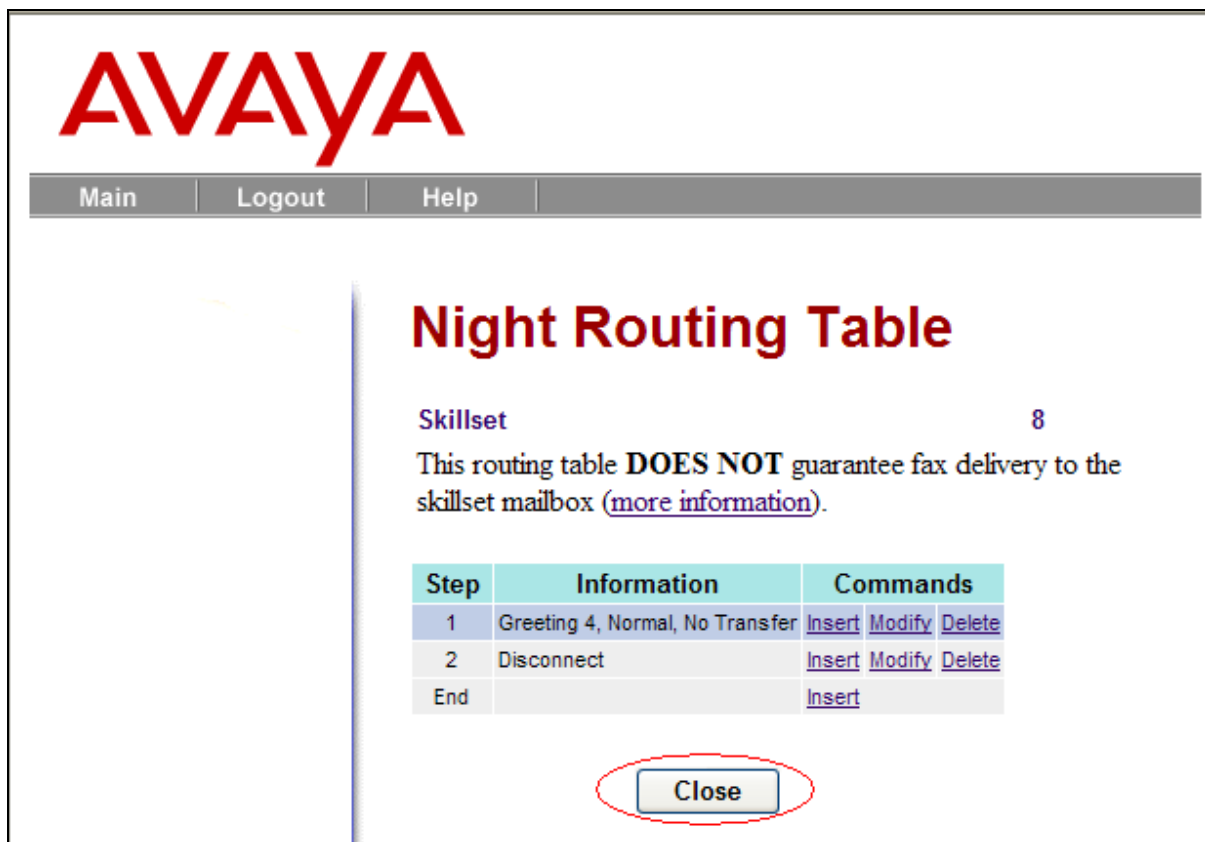


Figure 28: Sample Night Routing Table with 2 Steps

Click on the Close button as shown in **Figure 28** above to return to the Skillset List page as shown in **Figure 16**. Then Click on the Enable link to enable the skillset.

Note: *If the configuration needs to be modified, the skillset must first be disabled before the user makes changes.*

4.5.3. Assign Lines to a SkillSet

This section describes how to assign a line to a Skillset. The following steps will show how to configure it.

- Go to the Auto Attendant section.
- Click on the Lines Administration link.
- Select the line that needs to be configured.
- Click on the Change link as shown on **Figure 29** below.

Mailbox Administration •

Auto-Attendant •

[General Properties •](#)
[Lines Administration •](#)
[Change Many Lines •](#)
[CLID Routing Table •](#)
[Greeting Tables •](#)
[Holidays •](#)
[Company Greetings •](#)
[Customized Digits •](#)

Custom Call Routing •

Networking •

Contact Center •

Reports •

Configuration •

Operations •

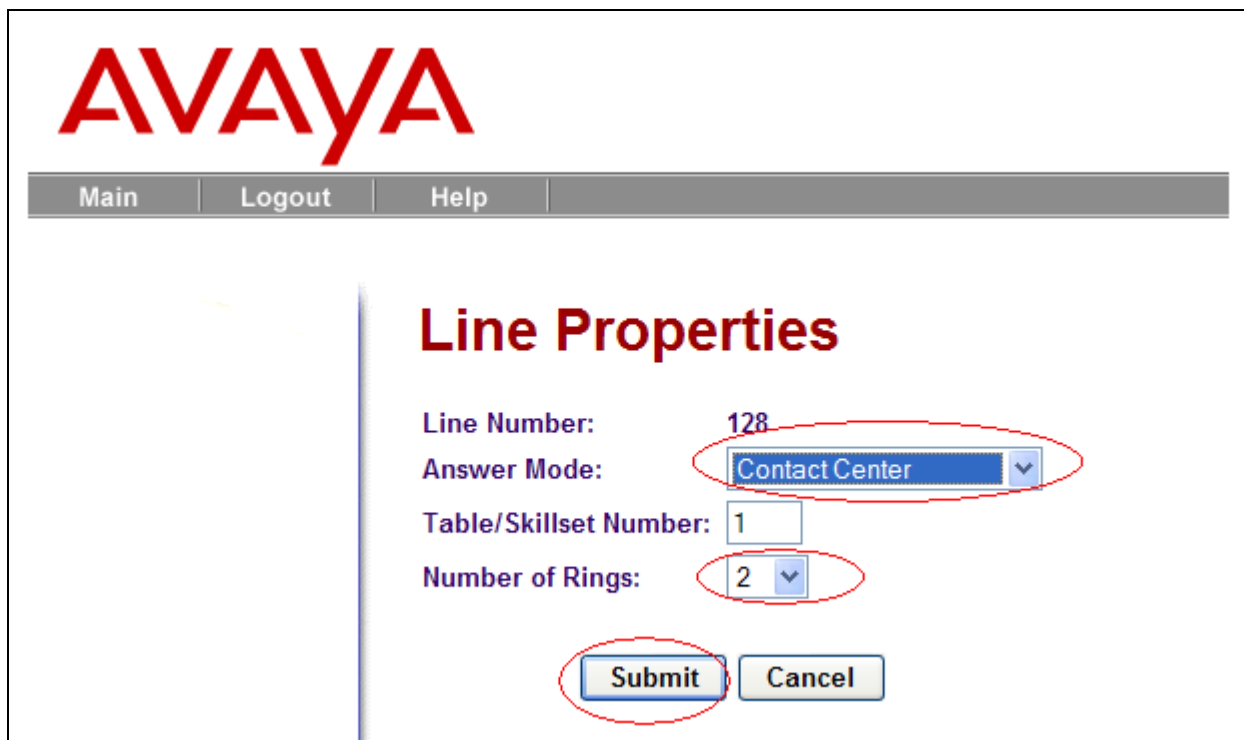
Lines Administration

Line	Answer Mode	Table/Skillset	Rings	Command
1	Contact Center	Skillset 7	3	Change
2	Auto-Attendant	Table 1	3	Change
3	Auto-Attendant	Table 1	3	Change
4	Auto-Attendant	Table 1	3	Change
5	Auto-Attendant	Table 1	3	Change
6	Auto-Attendant	Table 1	3	Change
7	Auto-Attendant	Table 1	3	Change
8	Auto-Attendant	Table 1	3	Change
9	Auto-Attendant	Table 1	3	Change
10	Auto-Attendant	Table 1	3	Change
11	Auto-Attendant	Table 1	3	Change
12	Auto-Attendant	Table 1	3	Change
13	No	---	0	Change
14	No	---	0	Change
15	No	---	0	Change
16	No	---	0	Change
17	No	---	0	Change
18	No	---	0	Change
19	No	---	0	Change
20	No	---	0	Change
21	No	---	0	Change

Figure 29: Lines Administration

After clicking on the Change link of **Figure 29**, the Line Properties page of line 128 (not seen in **Figure 29**) will appear as shown on **Figure 30** below. Follow these steps to configure the Line Properties:

- Select “Contact Center” from the pull down menu of the Answer Mode attributes.
- Enter the Table/SkillSet number corresponding to the Skillset.
- Specify the Number of Rings from the pull down list.
- Click on the Submit button to finish assigning the Skillset to the CDN.



The image shows the Avaya Line Properties configuration interface. At the top is the Avaya logo. Below it is a navigation bar with links for Main, Logout, and Help. The main content area is titled "Line Properties". It contains four configuration fields: "Line Number" set to 128, "Answer Mode" set to Contact Center (selected from a dropdown), "Table/Skillset Number" set to 1, and "Number of Rings" set to 2 (selected from a dropdown). At the bottom are "Submit" and "Cancel" buttons. Red circles highlight the "128", "Contact Center" dropdown, "2" dropdown, and "Submit" button.

Figure 30: Line Properties

After configuring the Line Properties, **Figure 31** shows the assigned skill set associated with Line 128.

127	Auto-Attendant	Table 1	3	Change
128	Contact Center	Skillset 1	2	Change
129	Contact Center	Skillset 1	2	Change
130	Auto-Attendant	Table 1	3	Change
131	Auto-Attendant	Table 1	3	Change
132	Auto-Attendant	Table 1	3	Change

Figure 31: Sample of a Line with an assigned Skillset

5. Configure and generate report for Contact Center

This section describes the steps on how to configure the ITEL RCC software application on a designated PC, known as the Web Host PC, to report on Contact Center call activity on a Business Communications Manager.

5.1. Configure ITEL RCC

This section describes how to configure the ITEL RCC.

Prior to configuring the ITEL RCC it is assumed that the installation has been successful and also while installation, the BCM Connection Data has been completed as shown in **Figure 32**, where IP address of BCM is entered along with the port 8088 and CCRS password (CCRS as default).

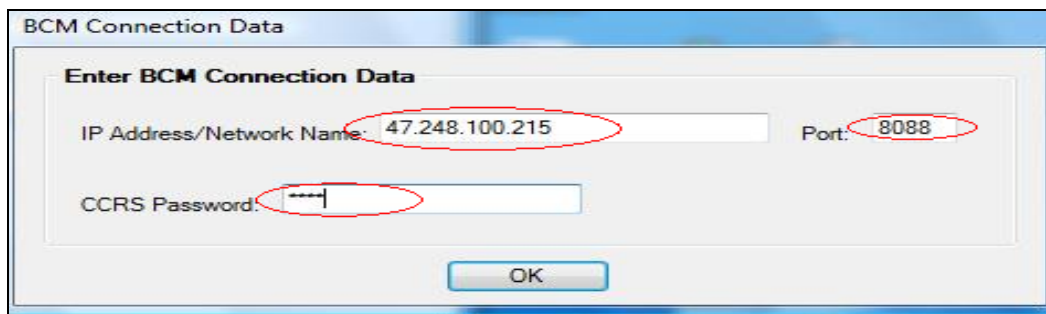


Figure 32: BCM Connection Data

ITEL RCC can be launched at the end of a successful installation by clicking on the link as shown in **Figure 33** or by typing <http://localhost/rcc> in the URL of an Internet browser window after the installation has been completed.



Figure 33: Launch RCC window at end of Installation

ITEL configurations for the Reporting for Contact Centre (RCC) can be performed through web browser as shown in **Figure 33a** below. The login credentials are: Username = **admin**, Password = **0000**. Users must change the password after login for the first time as shown in **Figure 33b**.

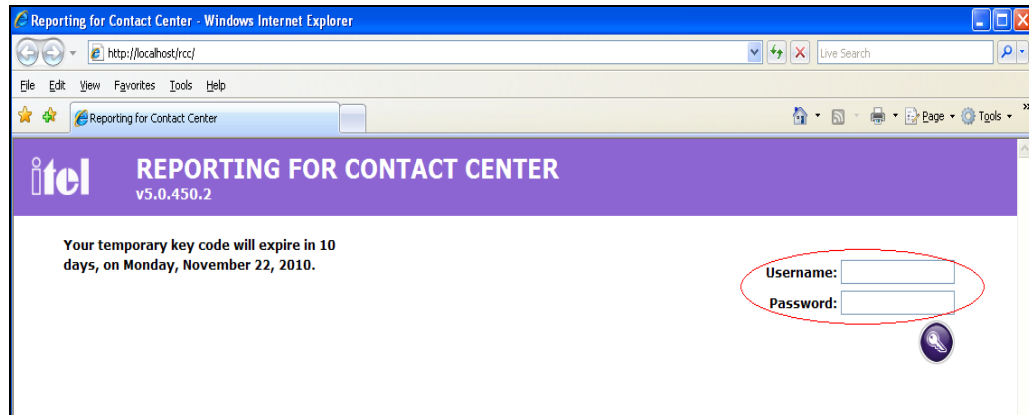


Figure 33a: RCC Main Page

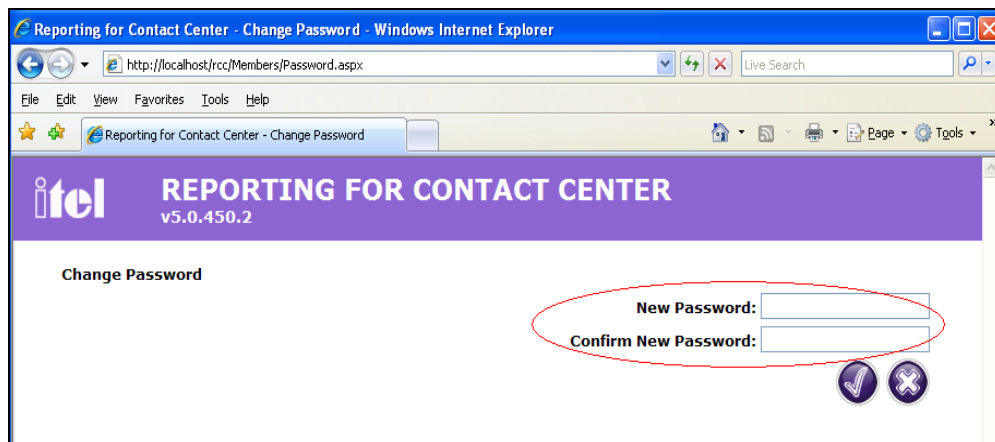


Figure 33b: RCC Password Change Page

During a new installation, The Contact Center Connection allows user to download all the Data from the connected BCM to the RCC application server as shown in **Figure 34a**. **Figure 34b** shows the status of the downloaded data.

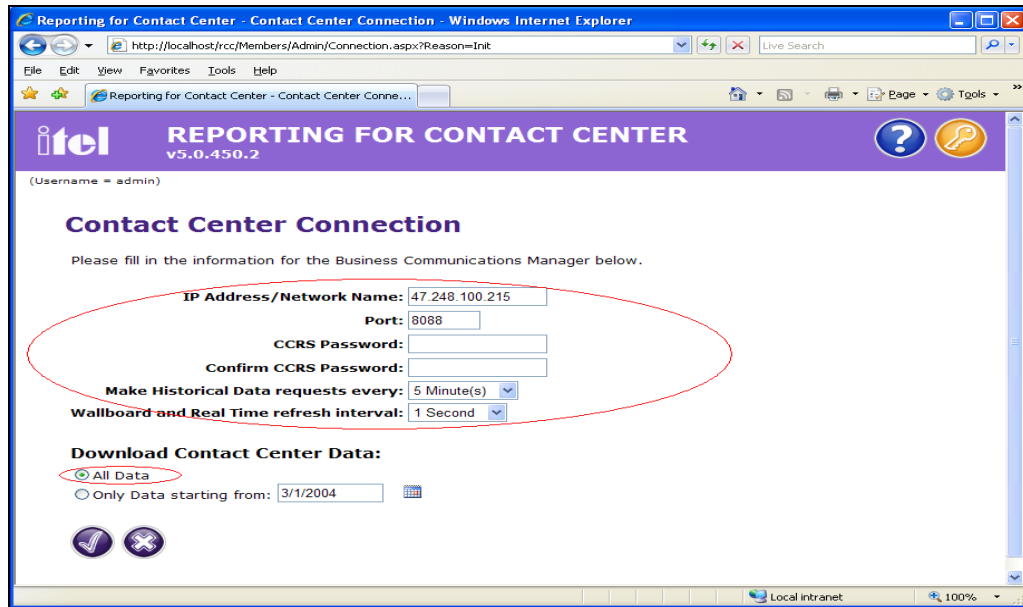


Figure 34a: Contact Center Connection

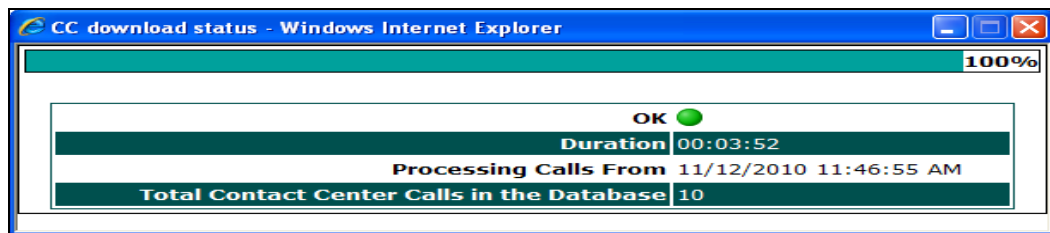


Figure 34b: Status of Data Download

Click on the Check mark button shown in **Figure 34a** to go to the Home page as shown in **Figure 35** below. Click on the Administration Menu icon and then click on the Contact Center Connection Menu as shown in **Figure 36** below.

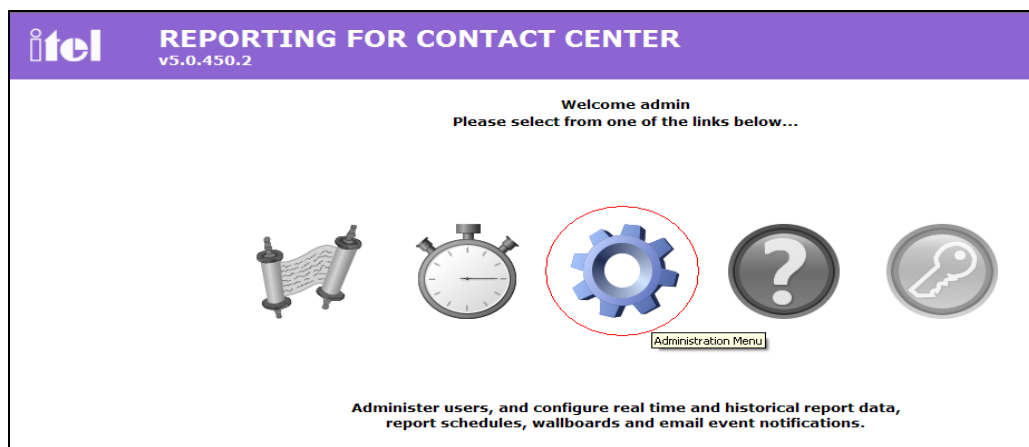


Figure 35: Administration Menu Icon

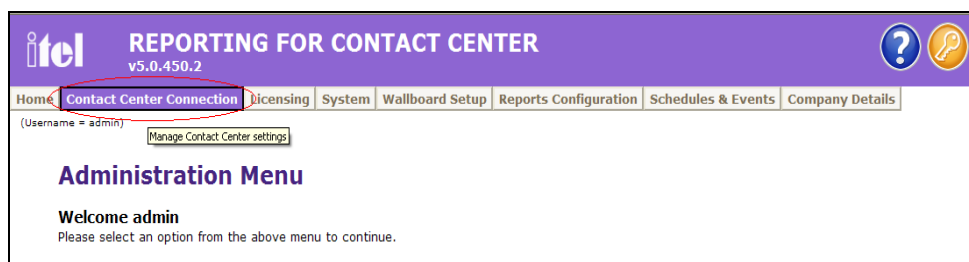


Figure 36: Administration Menu

The Contact Center Connection details page will appear as shown in the **Figure 37** below. A user is required to enter the CCRS password (CCRS is default password in this case).

Figure 37: Contact Center Connection

At the “Make Historical Data requests every” attribute, from the drop down menu, user can choose the duration of how long the RCC can make request for data from BCM. It can be from 5, 15, 30 minutes or 1 hour as shown in **Figure 38** and **Figure 39**

Figure 38: Historical Data Request Time

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Home | Contact Center Connection | Licensing | System | Wallboard Setup | Reports Configuration | Schedules & Events | Company Details

(Username = admin)

Contact Center Connection

Please fill in the information for the Business Communications Manager below.

IP Address/Network Name:

Port:

CCRS Password:

Confirm CCRS Password:

Make Historical Data requests every:

- 5 Minute(s)
- 15 Minute(s)
- 30 Minute(s)
- 1 Hour(s)

Wallboard and Real Time refresh interval:

☒ ☐

Figure 39: Historical Data Request Time Options

5.2. Generate the historical reports for Contact Center

The following steps describe how to generate historical report for Contact Center on the connected BCM system.

- Go to the Administration Menu page as shown in **Figure 36**.
- Click on the Home tab menu as shown in **Figure 40** below.

REPORTING FOR CONTACT CENTER
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Home | Contact Center Connection | Licensing | System | Wallboard Setup | Reports Configuration | Schedules & Events | Company Details

(Username = admin)

Administration Menu

Welcome admin

Please select an option from the above menu to continue.

Figure 40: Home Menu Tab

Click on the Historical Reports icon as shown in **Figure 41** below.

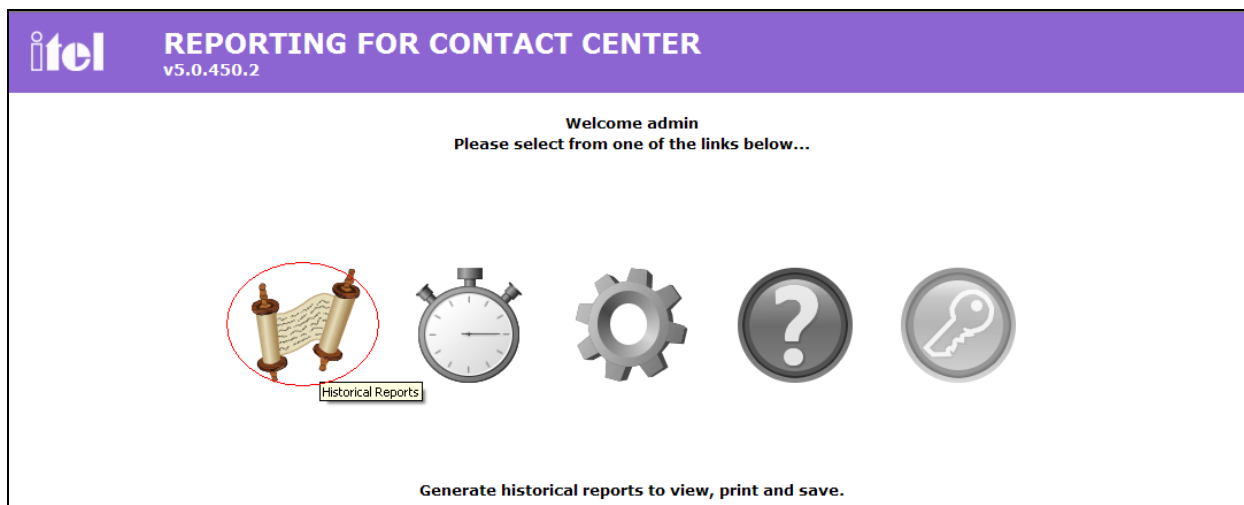


Figure 41: Historical Reports Icon

The Historical Reports page is shown in **Figure 42** below:

- Select interval time: From Date – To Date, From Time – To Time.
- Click on “Abandoned CLID/DNIS by CLID/DNIS” and “Answered CLID/DNIS” checkboxes as examples.
- Click on the right arrow icon to go to the next page.

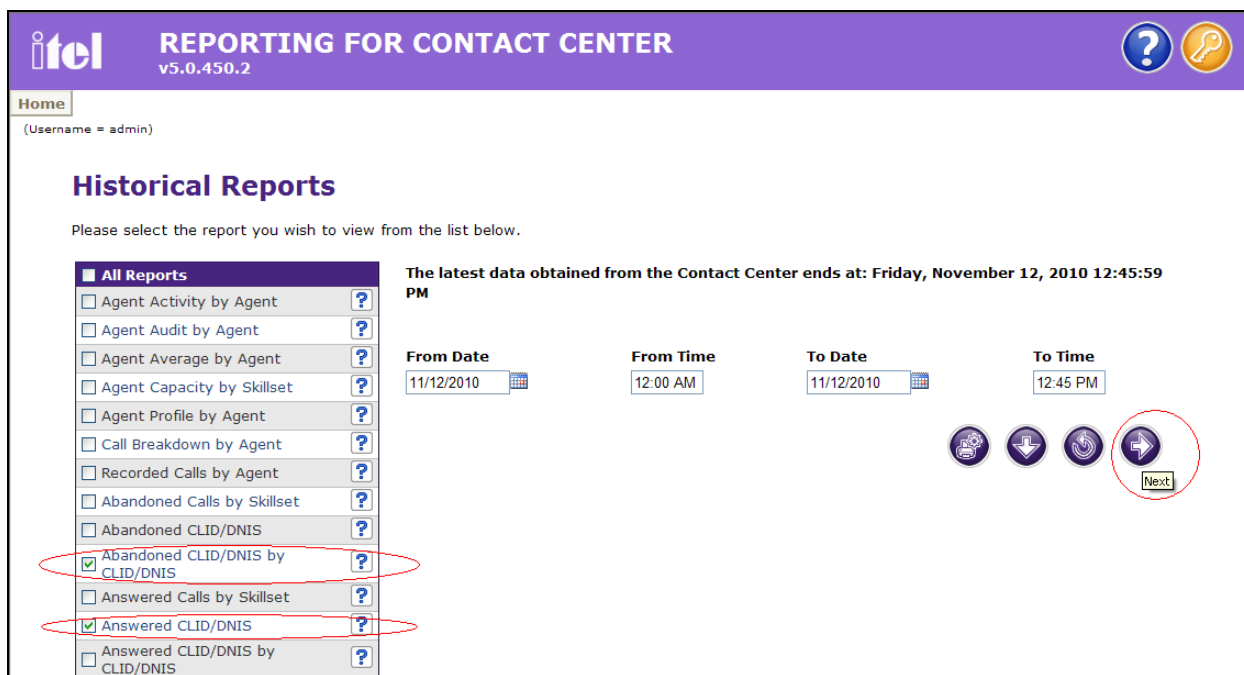


Figure 42: Historical Reports Page

Historical Reports Parameters page are shown in **Figure 43** below.

- Click on “All Skillsets” checkbox to select all skillsets
- Click on the View icon to see the report.

Figure 43: Historical Reports Parameters

The details report for abandoned calls is shown in the **Figure 44** below.

Report Viewer - Windows Internet Explorer

Company Name

Report/Schedule Title: Abandoned CLID/DNIS by CLID/DNIS

Report Period: Fri, Nov 12, 2010 12:00 AM to Fri, Nov 12, 2010 2:08 PM

Report Created: Fri, Nov 12, 2010 2:25 PM

Data Timestamp: Fri, Nov 12, 2010 2:23 PM

Skillsets: PV SKILL1, SKILL2, SKILL3, PV-SKILL4, PV SKILL5

Date	Time of Day	CLID	DNIS	Skillsets	Time to Abandon
Fri, Nov 12, 2010	11:28:06 AM	55094	22305	PV SKILL1 (1)	00:00:30
Fri, Nov 12, 2010	12:09:56 PM	55100	22305	PV SKILL1 (1)	00:00:17
Fri, Nov 12, 2010	12:10:00 PM	55094	22305	PV SKILL1 (1)	00:00:13
Fri, Nov 12, 2010	12:10:30 PM	55100	22305	PV SKILL1 (1)	00:00:22
Fri, Nov 12, 2010	12:10:32 PM	55094	22305	PV SKILL1 (1)	00:00:18
Fri, Nov 12, 2010	1:59:14 PM	55100	22305	PV SKILL1 (1)	00:00:12
Fri, Nov 12, 2010	1:59:16 PM	55094	22305	PV SKILL1 (1)	00:00:10
Fri, Nov 12, 2010	1:59:45 PM	55094	22305	PV SKILL1 (1)	00:00:20
Fri, Nov 12, 2010	1:59:40 PM	55100	22306	SKILL2 (2)	00:00:25

Note : Reports do not include calls in progress

Page 1 of 1

Figure 44: Abandoned Call Report

The details report for answered calls is shown in **Figure 45** below.

Report Viewer - Windows Internet Explorer

Company Name

Report/Schedule Title **Answered CLID/DNIS**

Report Period **Fri, Nov 12, 2010 12:00 AM to Fri, Nov 12, 2010 2:08 PM**

Report Created **Fri, Nov 12, 2010 2:25 PM**

Data Timestamp **Fri, Nov 12, 2010 2:23 PM**

Skillsets **PV SKILL1, SKILL2, SKILL3, PV-SKILL4, PV SKILL5**

Date	Time of Day	CLID	DNIS	Skillsets	Time to Answer
Fri Nov 12, 2010	9:46:28 AM	55094	22305	PV SKILL1 (1)	00:00:06
Fri Nov 12, 2010	9:48:48 AM	55094	22305	PV SKILL1 (1)	00:00:15
Fri Nov 12, 2010	10:21:38 AM	55094	22305	PV SKILL1 (1)	00:00:06
Fri Nov 12, 2010	10:22:22 AM	55094	22305	PV SKILL1 (1)	00:00:13
Fri Nov 12, 2010	10:35:51 AM	55094	22305	PV SKILL1 (1)	00:00:06
Fri Nov 12, 2010	10:36:18 AM	55094	22305	PV SKILL1 (1)	00:00:17
Fri Nov 12, 2010	11:50:28 AM	55094	22305	PV SKILL1 (1)	00:00:13
Fri Nov 12, 2010	11:50:43 AM	55100	22305	PV SKILL1 (1)	00:00:19
Fri Nov 12, 2010	11:55:41 AM	55094	22305	PV SKILL1 (1)	00:00:11
Fri Nov 12, 2010	11:56:23 AM	55100	22305	PV SKILL1 (1)	00:00:07
Fri Nov 12, 2010	11:58:16 AM	55094	22305	PV SKILL1 (1)	00:00:06
Fri Nov 12, 2010	11:58:22 AM	55100	22305	PV SKILL1 (1)	00:01:03
Fri Nov 12, 2010	12:00:47 PM	55094	22305	PV SKILL1 (1)	00:00:32
Fri Nov 12, 2010	12:00:52 PM	55100	22305	PV SKILL1 (1)	00:00:26
Fri Nov 12, 2010	12:06:56 PM	55094	22305	PV SKILL1 (1)	00:00:11

Figure 45: Answered Call Report

Similarly, the Call Break Down by Agent and Abandoned Call by Skillset report are shown respectively in **Figure 46** and **Figure 47** below.

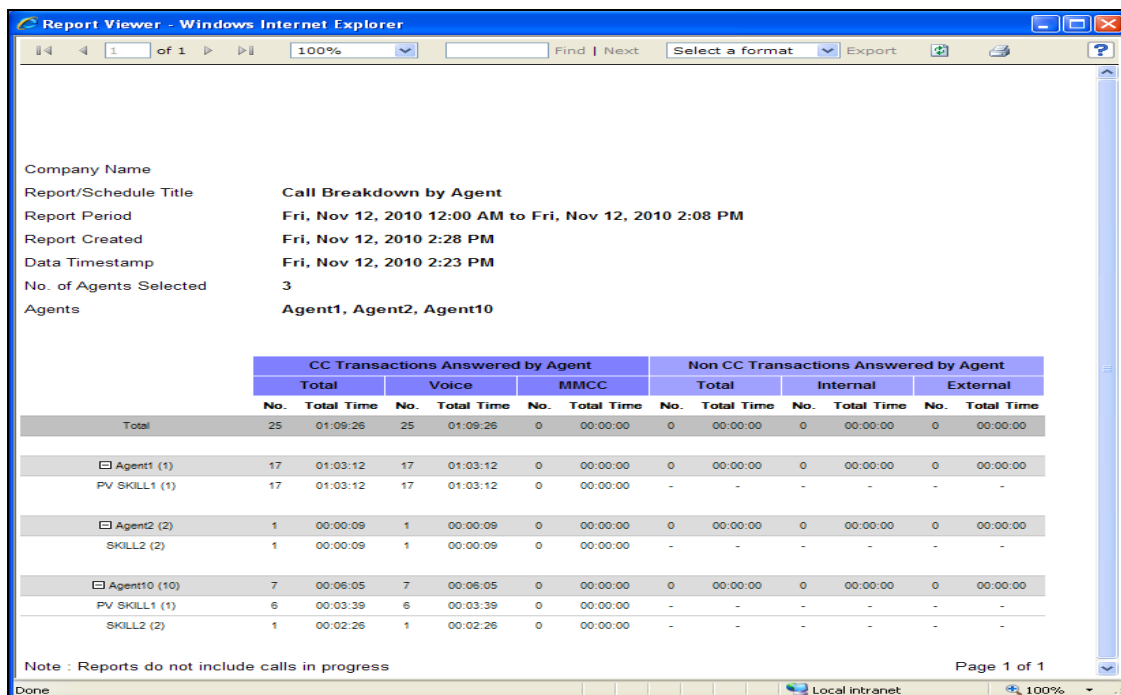


Figure 46: Call Breakdown by Agent Report

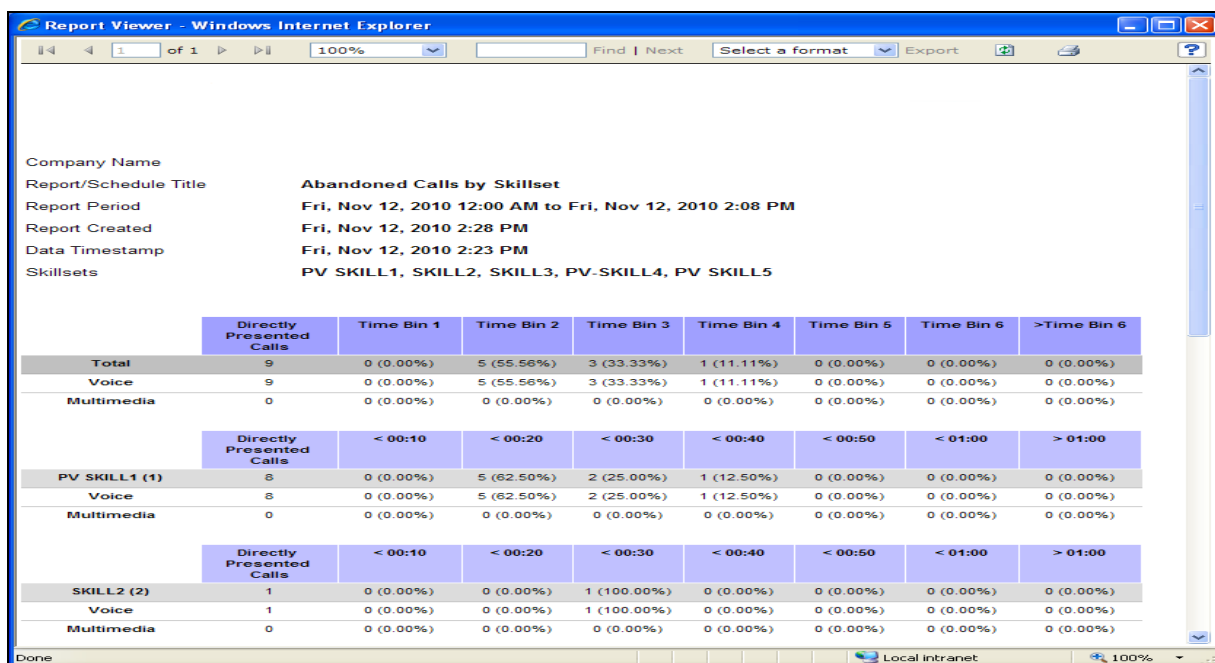


Figure 47: Abandoned Calls by Skillset Report

For getting a complete latest list of Contact Center Calls in the database, go to the Historical Reports home page and click on the down arrow button as shown in **Figure 48** below.

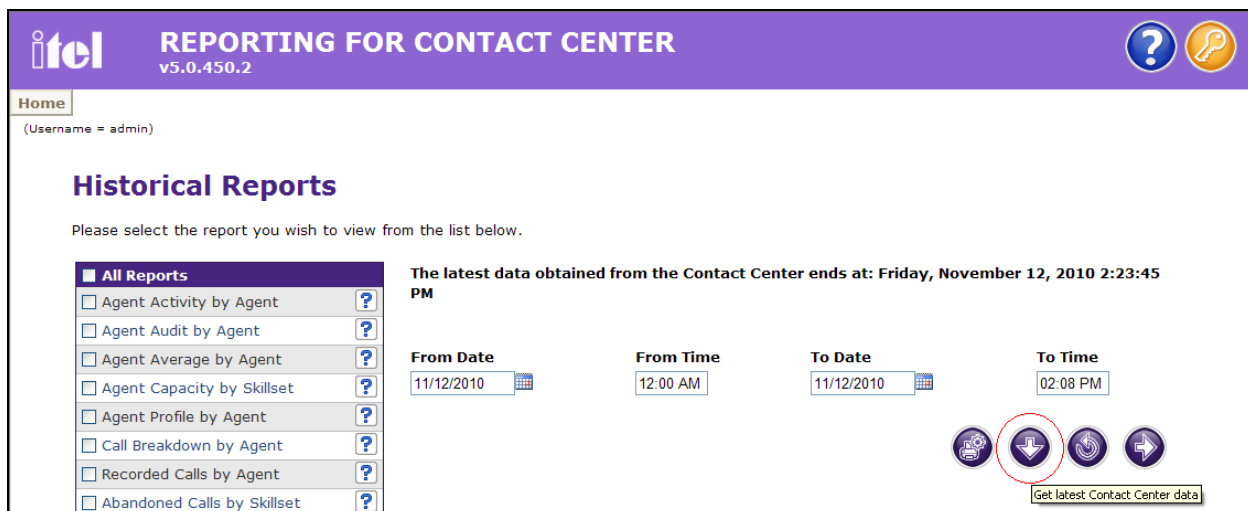


Figure 48: Latest Contact Center Data

The CC Download Status window appears as shown in **Figure 49** below.

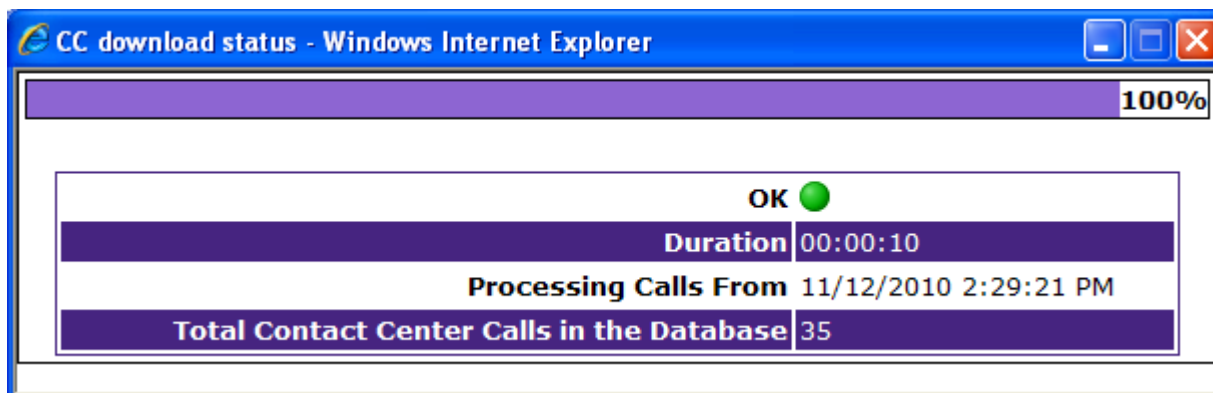


Figure 49: Data Download Status Window

5.3. Generate the real time screens for Contact Center

This section describes the steps on how to generate real time screens for Contact Center.

Go to the Home page and click on the Clock icon to load Real Time Screens as shown in **Figure 50** below.

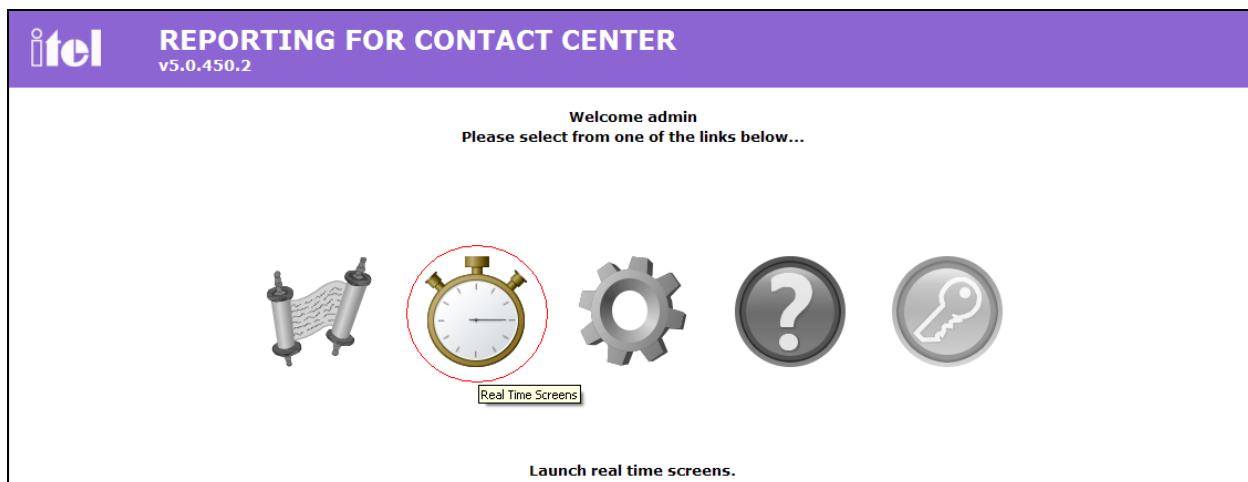


Figure 50: Real Time Screens Icon

Real Time Screens page is shown in **Figure 51** below.

- Click on “All Skillsets” checkbox to select all skillsets.
- Click on the Tick icon to open the Real Time screens.

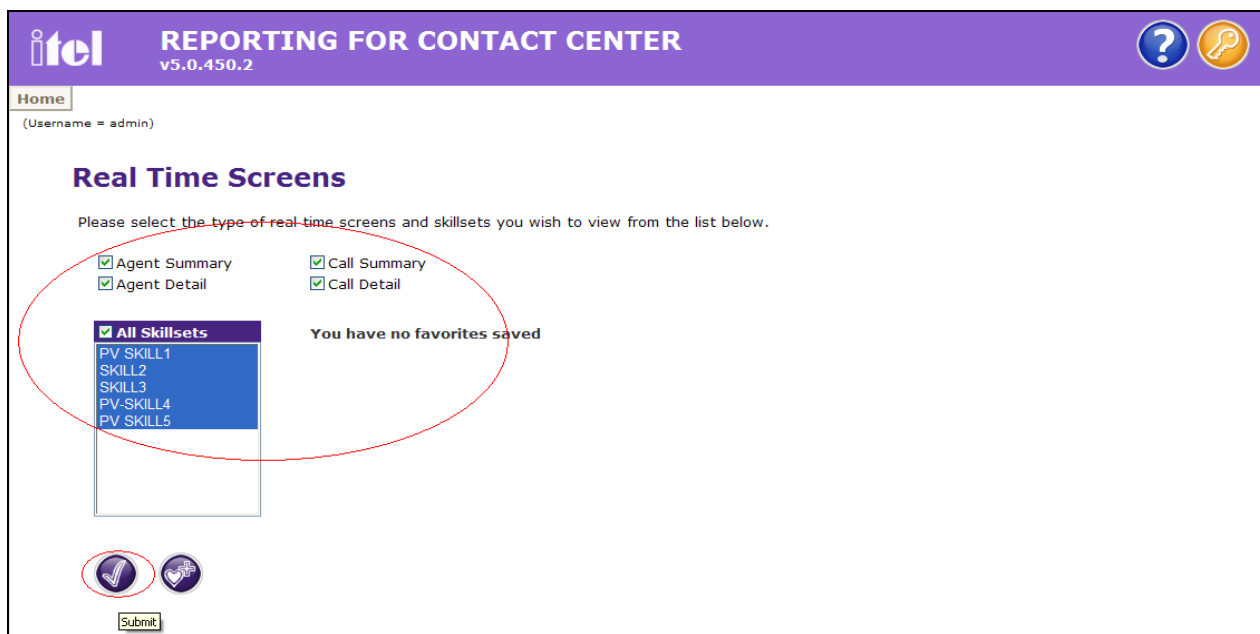


Figure 51: Real Time Screens Page

Real Time - Agent Summary, Real Time - Agent Detail, Real Time - Call Summary and Real Time – Call Detail reports are shown in **Figure 52**, **Figure 53**, **Figure 54** and **Figure 55** respectively. The status of the Agent(s) or calls will be updated in real-time.

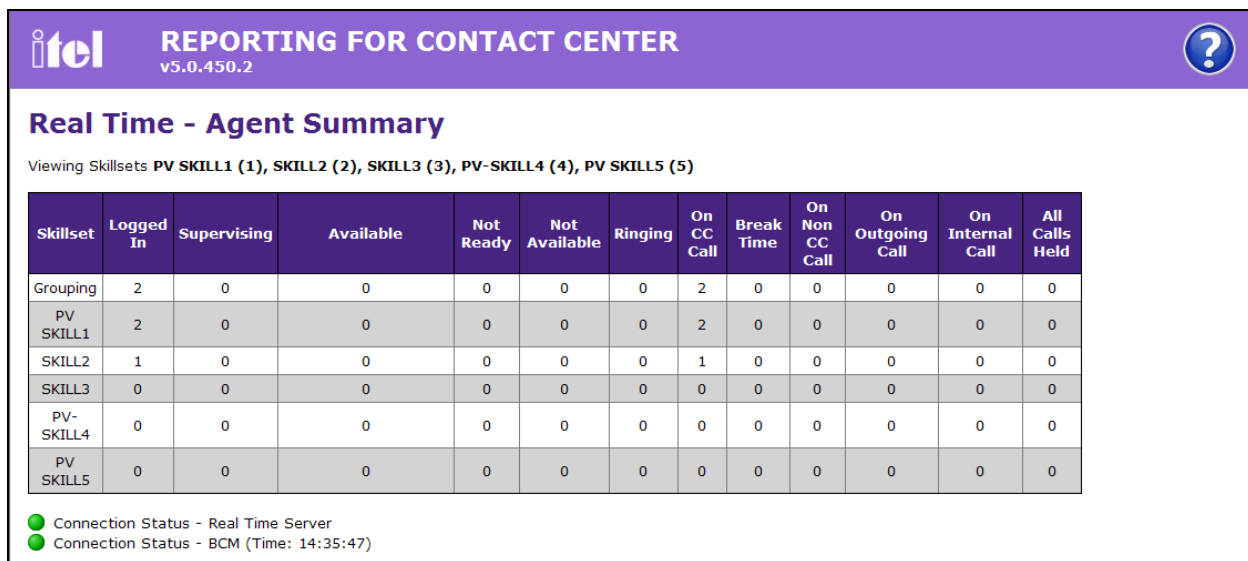


Figure 52: Real Time – Agent Summary

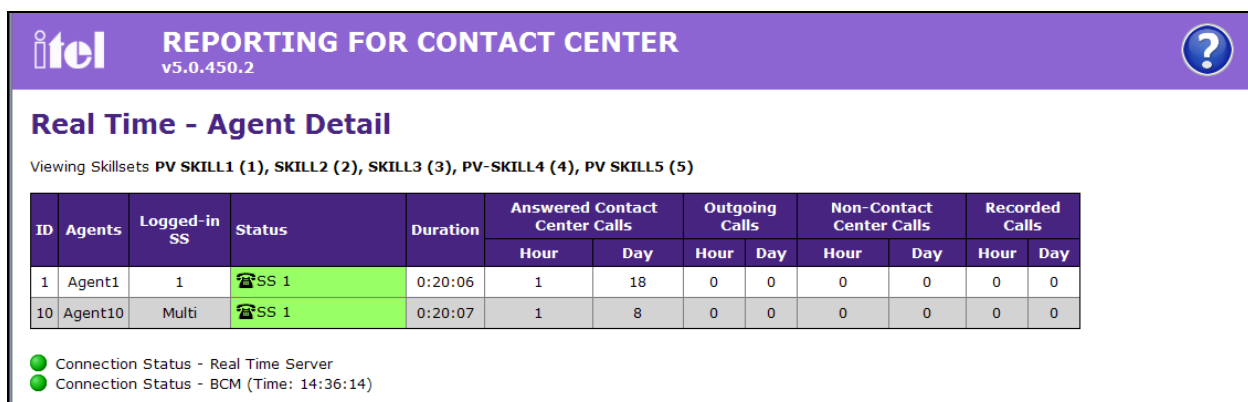


Figure 53: Real Time – Agent Detail

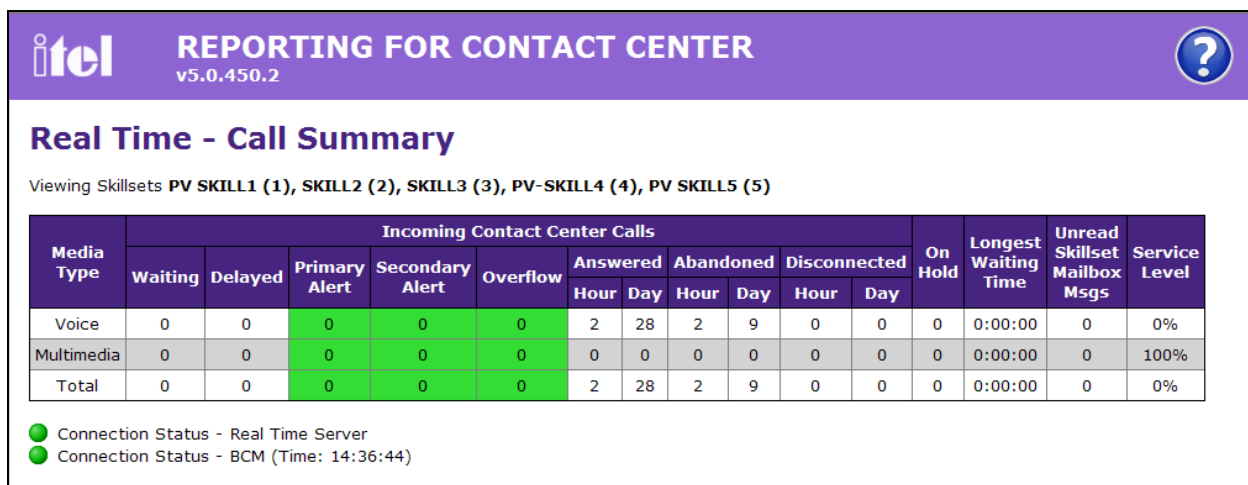




Figure 54: Real Time – Call Summary



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Real Time - Call Detail

Viewing Skillsets PV SKILL1 (1), SKILL2 (2), SKILL3 (3), PV-SKILL4 (4), PV SKILL5 (5)

Incoming Contact Center Calls															
Skillset	Waiting	Delayed	Primary Alert	Secondary Alert	Overflow	Answered		Abandoned		Disconnected		Longest Waiting Time	Unread Skillset Mailbox Msgs	Service Level	Skillset Mode
						Hour	Day	Hour	Day	Hour	Day				
Grouping	0	0	0	0	0	2	28	2	9	0	0	0:00:00	0	90%	-
PV SKILL1	0	0	0	0	0	2	26	1	8	0	0	0:00:00	0	50%	Day
SKILL2	0	0	0	0	0	0	2	1	1	0	0	0:00:00	0	100%	Day
SKILL3	0	0	0	0	0	0	0	0	0	0	0	0:00:00	0	100%	Day
PV-SKILL4	0	0	0	0	0	0	0	0	0	0	0	0:00:00	0	100%	Day
PV SKILL5	0	0	0	0	0	0	0	0	0	0	0	0:00:00	0	100%	Day

Connection Status - Real Time Server

Connection Status - BCM (Time: 14:37:10)

Figure 55: Real Time – Call Detail

6. General Test Approach and Test Results

The compliance test included HTTP/HTTPS operation to allow ITEL RCC to collect data from the Intelligent Contact Center in the Avaya BCM.

6.1. General test approach

The general test approach is to verify whether the ITEL RCC software can establish an HTTP/HTTPS session with the Avaya BCM, retrieve all data from the BCM, populate the data to the real time screens and create historical reports.

6.2. Test Results

All executed test cases have been passed. The ITEL RCC successfully gathers real time and historical statistical data from the BCM Intelligent Contact Center (ICC), populates on the real time screens and creates the historical reports. The following observation was made during the compliance testing:

- While getting a complete latest Contact Center Calls in the database from the Historical Reports page, the time in the Historical Reports page is not updated according to the time seen in the Download status window. Refer to **Figure 56** below for the reported observation. User needs to hit **F5** (Refresh) on the Historical Reports page to refresh the latest time after the update is completed.

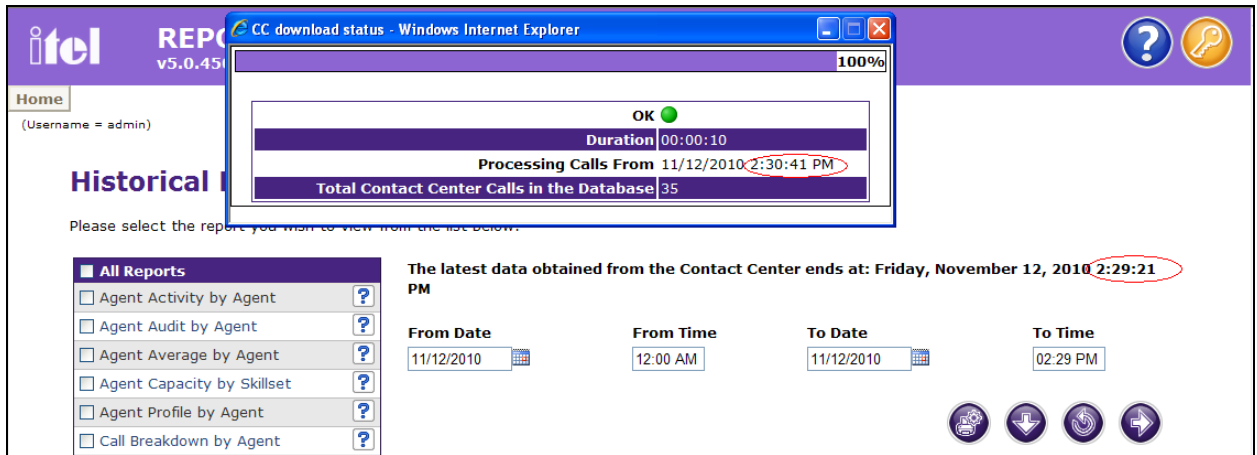


Figure 56: Observation showing Time not being updated

7. Verification Steps

This section includes some steps that can be followed to verify the solution is working.

Make calls into the Contact Center to generate skill-set call activity and verify that:

- ITEL RCC is connected to a BCM. It will pull all the stored data from the BCM until the RCC database is up-to-date.
- ITEL RCC provides real time and historical statistics on system and agent performance in BCM Intelligent Contact Center.
- ITEL RCC provides real time and historical data at a set frequency interval. The intervals can be set by the end user.

8. Conclusion

All of the executed test cases have passed and met the objectives outlined in **Section 6.1**, with an observation explained in **Section 6.2**. The ITEL RCC v5.0.450.2 software is considered compliant with BCM rel. 6.0.

9. Additional References

Product documentation for Avaya products may be found at:

<https://support.avaya.com/css/Products/>

Product information for ITEL products can be found at

<http://www.itel-business-solutions.com/> and <http://www.rcc5.net/>

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