Avaya Solution & Interoperability Test Lab

Application Notes for INTICUBE SPECTO-iView with Avaya Interaction Center - Issue 1.0

Abstract

These Application Notes describe the procedures for configuring INTICUBE SPECTO-iView to successfully interoperate with Avaya Interaction Center (IC).

INTICUBE SPECTO-iView is a call monitoring and statistic reporting solution that integrates with Avaya Interaction Center. This solution shows in a graphical fashion the current status of the contact center and the performance of the contact center from various perspectives. SPECTO-iView supports only the Voice channel in Avaya IC. Email and Chat channels are currently not supported. Feature functionality was validated and performance testing was conducted in order to verify operation under load.

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 the compliance-tested configuration used to validate Avaya Interaction Center Release 7.0 with INTICUBE SPECTO-iView 2.0.

SPECTO-iView is a call monitoring and statistical reporting solution that integrates with Avaya Interaction Center. SPECTO-iView supports only the Voice channel in Avaya IC. Email and Chat channels are currently not supported.

SPECTO-iView provides the iStat server application for collecting the statistical data, iREALTIME client application for real-time data reporting, iHISTORICAL client application for historical data reporting and iADMIN client application for administering and creating the iView database on Microsoft SQL Server 2000. iStat monitors events from the Avaya IC Servers – Telephony Server (TS), Agent Data Unit (ADU) Server and Electronic Data Unit (EDU) Server – and creates the real-time data and historical data. It sends real-time data to iREALTIME using TCP/IP and stores historical data in the iView database. iHISTORICAL is used to generate the historical reports from the iView database.

This solution was tested using Avaya Interaction Center Release 7.0 and the S8500B Media Server running Avaya Communication Manager 3.0. The Avaya Interaction Center was deployed across three physical servers as shown in Figure 1. The iStat server application was loaded on the Avaya Interaction Center Secondary Server system. The iREALTIME, iHISTORICAL and iADMIN client applications were loaded onto three other PCs.

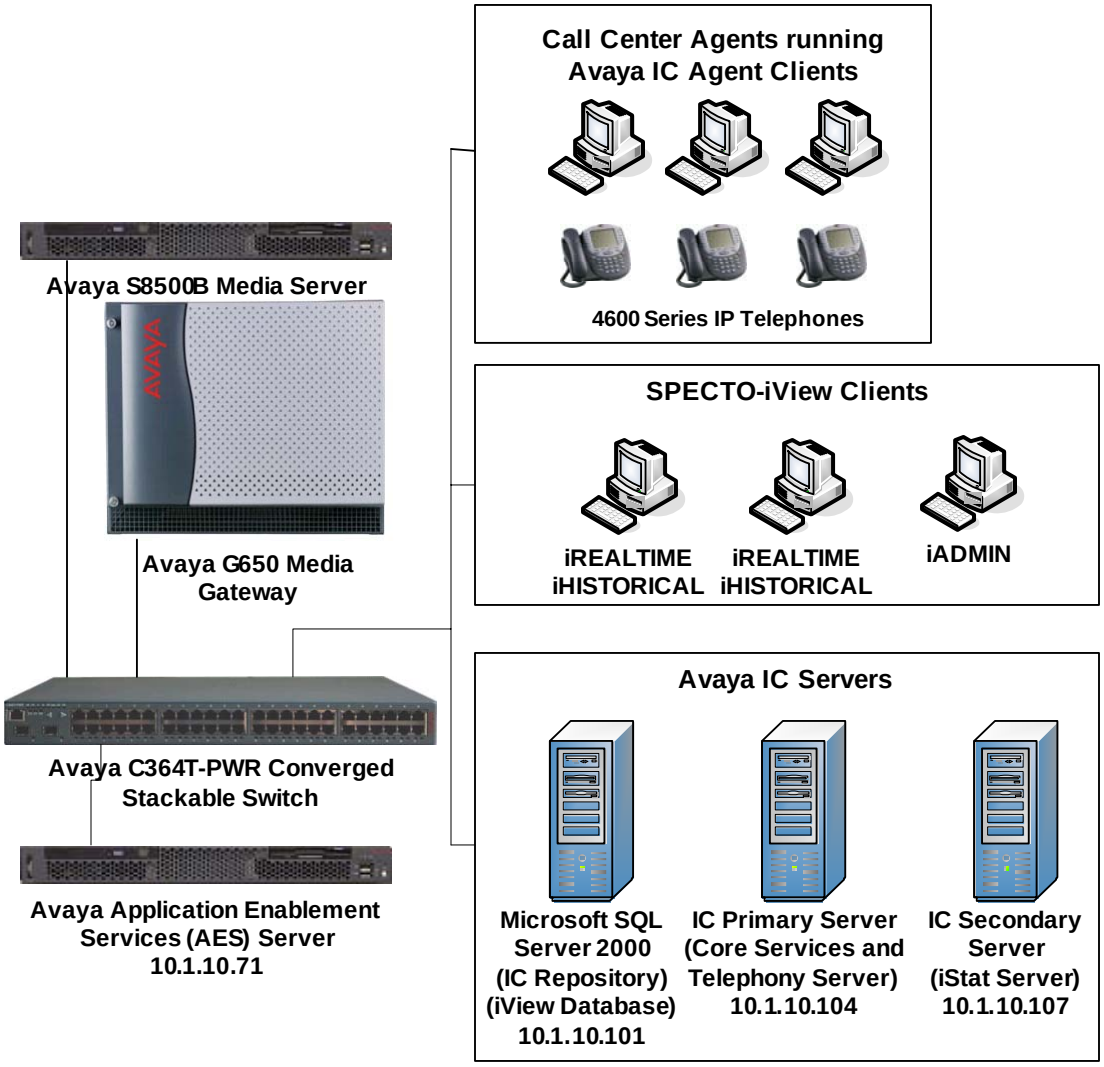


Figure 1: INTICUBE SPECTO-iView Compliance Test Sample Configuration

2. Equipment and Software Validated

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

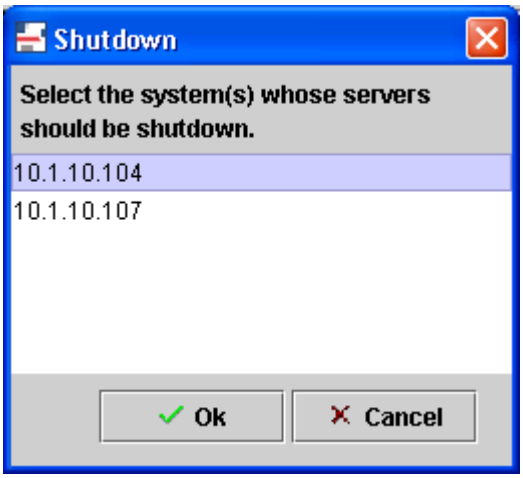
Equipment	Software
Avaya S8500B Media Server	3.0 (R013x.00.1.346.0)
Avaya G650 Media Gateway • TN2312BP IP Server Interface • TN799DP C-LAN Interface • TN2302AP IP Media Processor	- HW07, FW022 HW01, FW015 HW20, FW107
Avaya Interaction Center	Release 7.0
Avaya Application Enablement Services	r3-0-0-build-50-1-0
Avaya C364T-PWR Converged Stackable Switch	4.3.12
INTICUBE SPECTO-iView	2.0

3. Configure the iStat Server and iView Clients

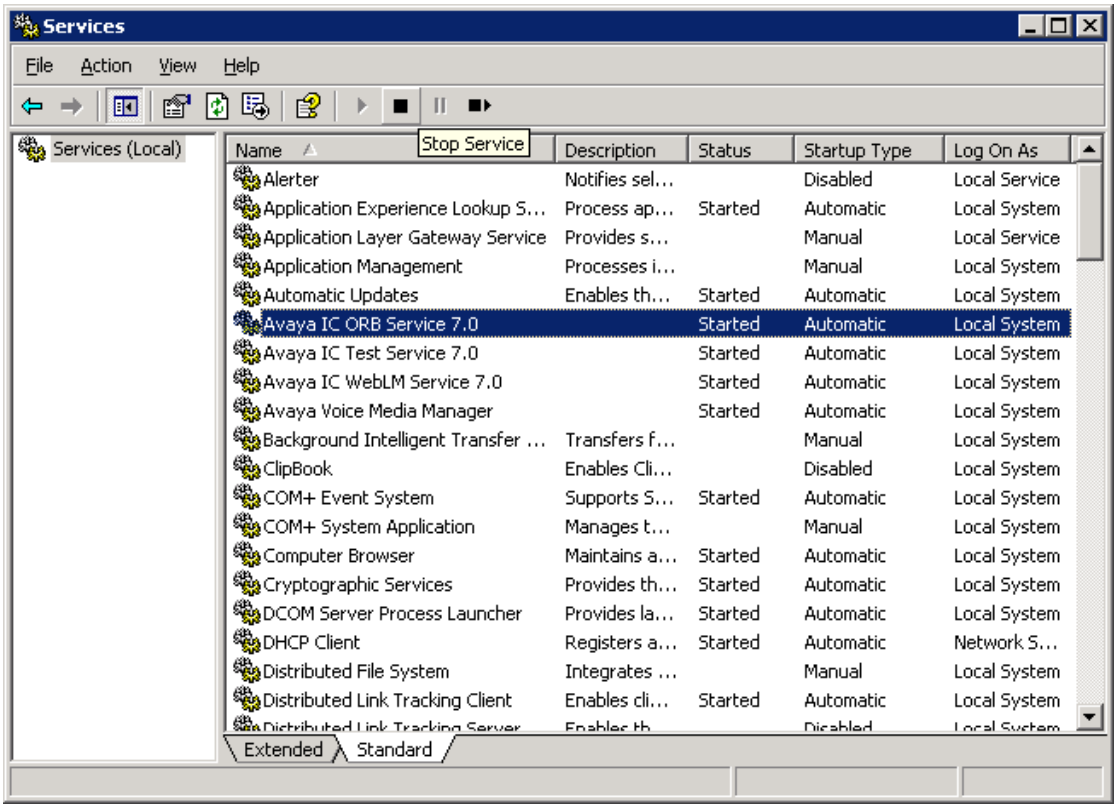
This section explains the file modifications and configuration necessary to support the SPECTO-iView iStat server application and iView client applications. The server was configured using IC Manager.

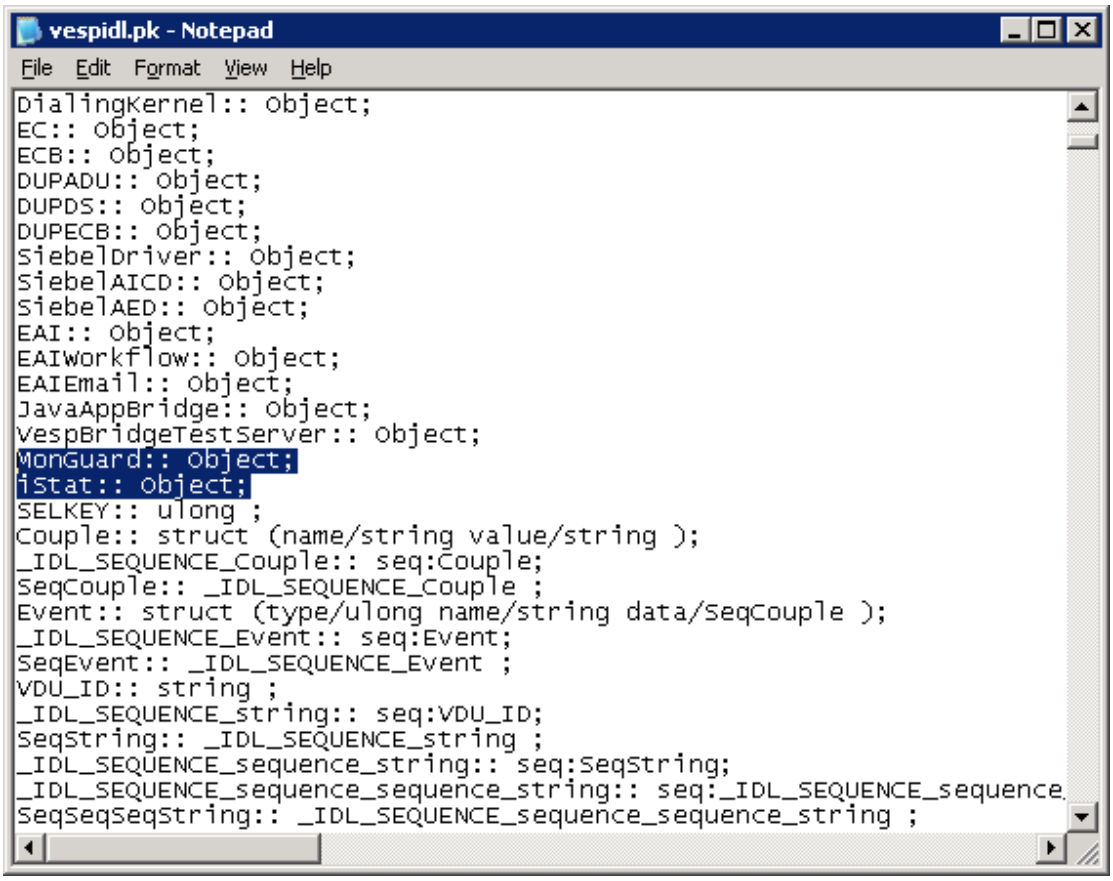
Note: SPECTO-iView includes the IC Server call MonGuard, which is used when there is more than one IC Telephony Server. In this sample configuration, MonGuard was not used.

Step	Description
	Install the iStat Server
1.	Insert the "SPECTO-iView Install CD" into the IC Secondary Server. Copy the following files from the CDROM path to Destination path shown below. CDROM path: \Server\ Destination path: %AVAYA_IC_HOME%\bin\ Files to be copied: iStat.exe, iStat.pdb, Monguard.exe, Monguard.pdb, BugslayerUtil.dll, stlport_vc646.dll

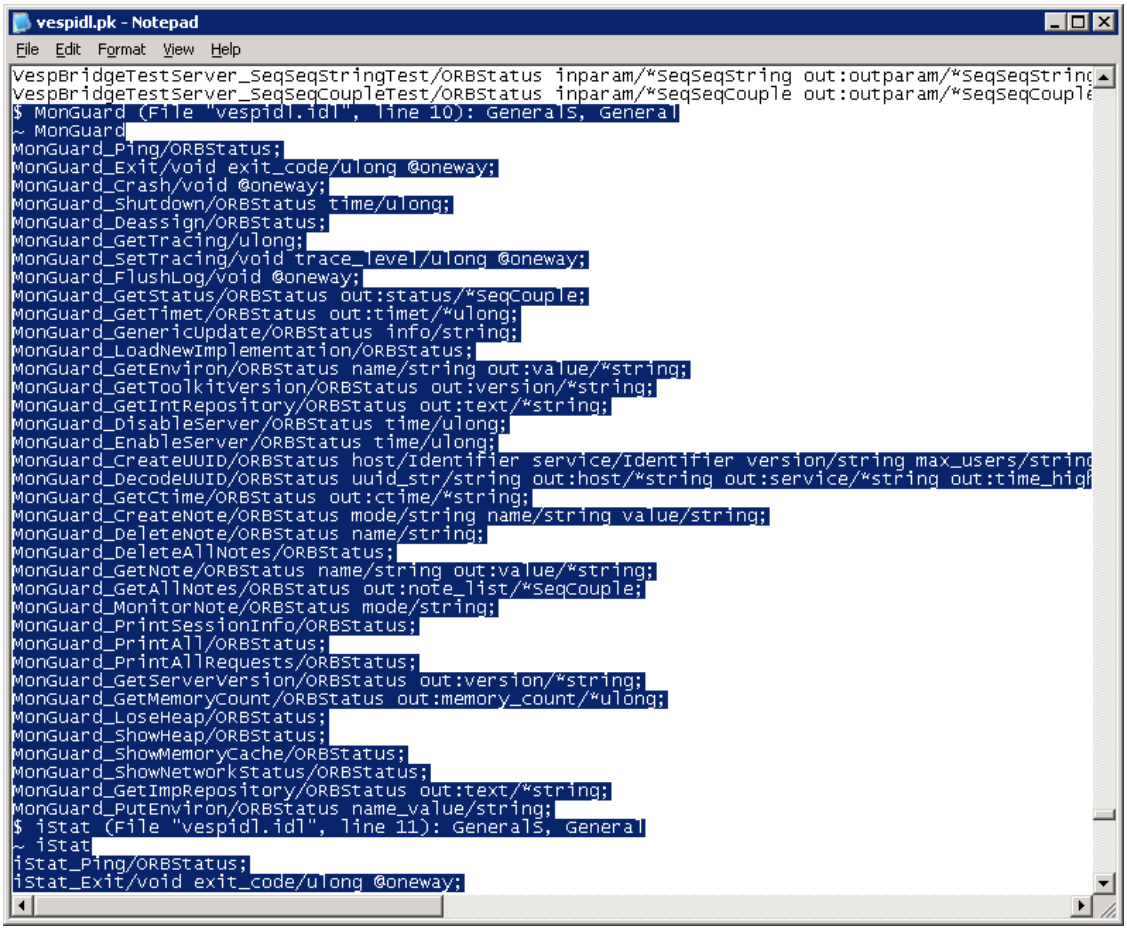
Step	Description
	Configure the iStat Server
2.	Logout all Avaya IC Agent clients. Start **IC Manager** from **Start → All Programs → Avaya Interaction Center 7.0**. Log in to IC Manager to shutdown all the IC Servers. Select **Server**, **Shutdown**. Select the first system in the list and click **Ok**. Repeat again for the rest of the IC Server systems. 

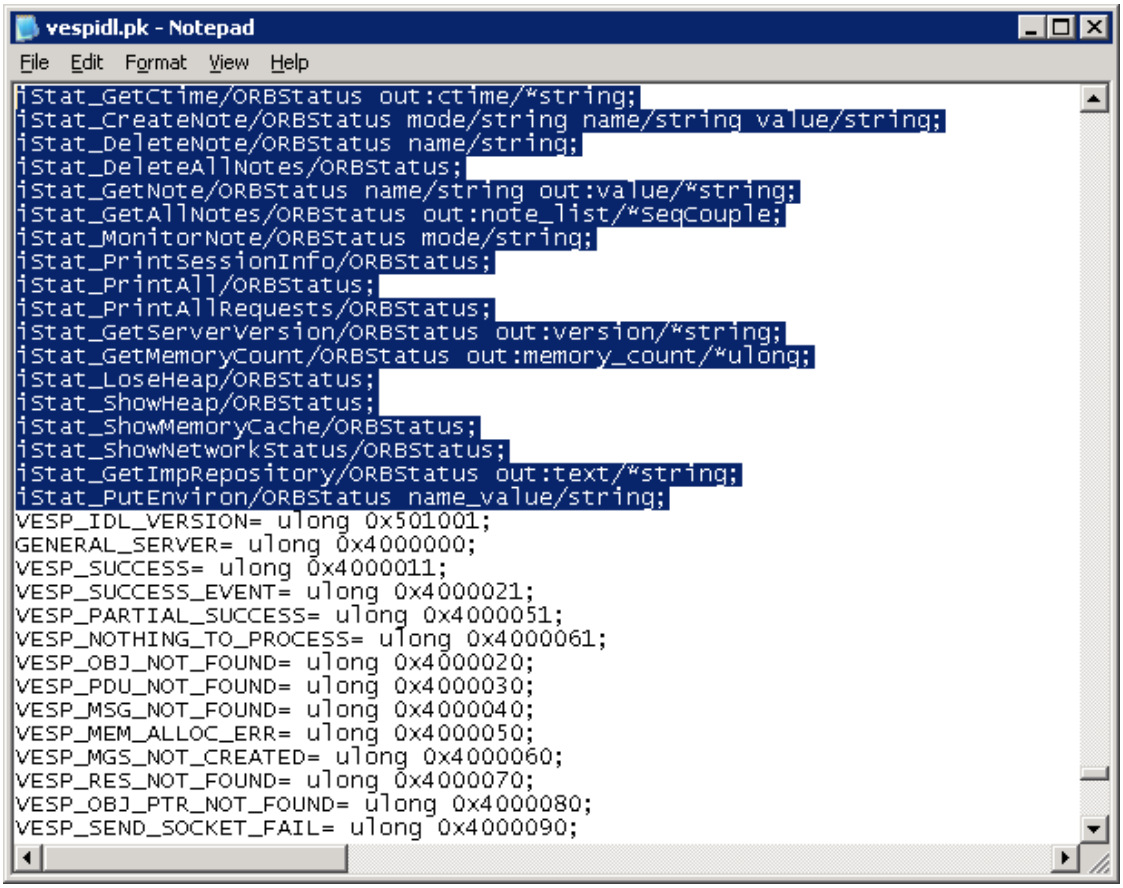
Step	Description
3.	Start **Services** from **Start → All Programs → Administrative Tools**. Stop the **Avaya IC ORB Service 7.0** service. Repeat for all IC Server systems.



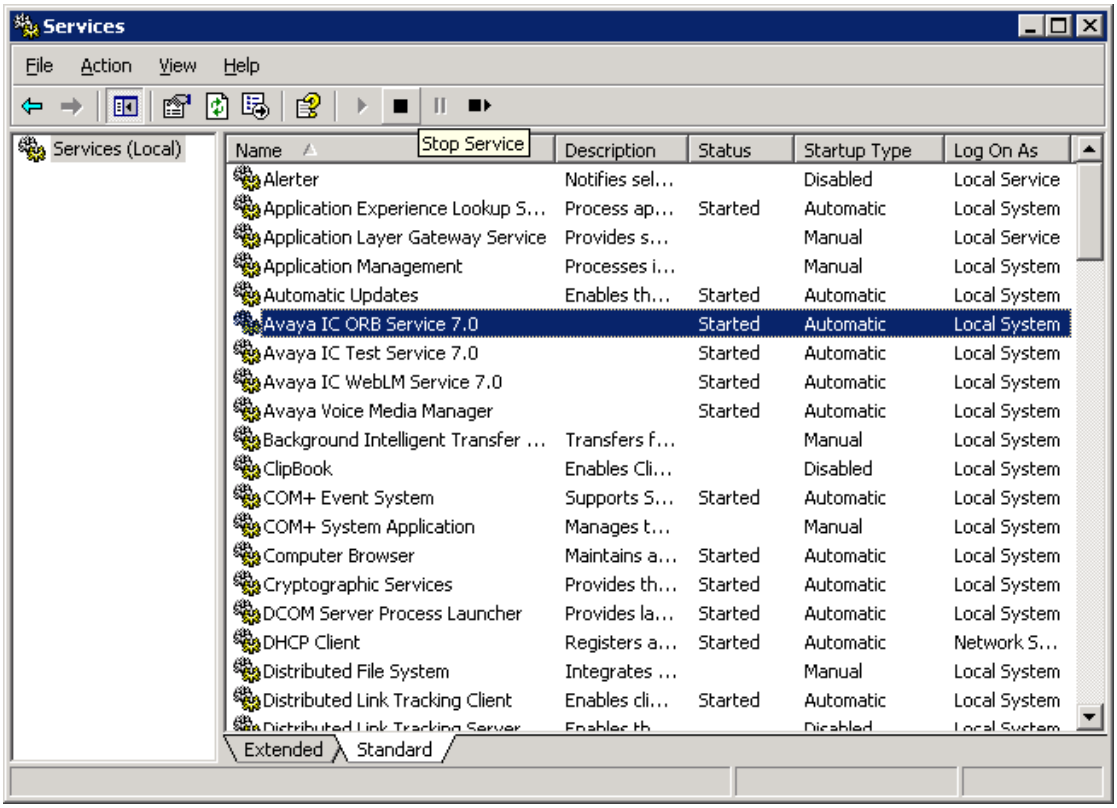
Step	Description
4.	Edit the file **vespidl.pk** on the primary system located in the directory **%AVAYA_IC_HOME%\etc**. Add the following lines to the end of the **Object** definition section of the file (after the last line of the format "XXXX:: Object"): MonGuard:: Object; iStat:: Object; 

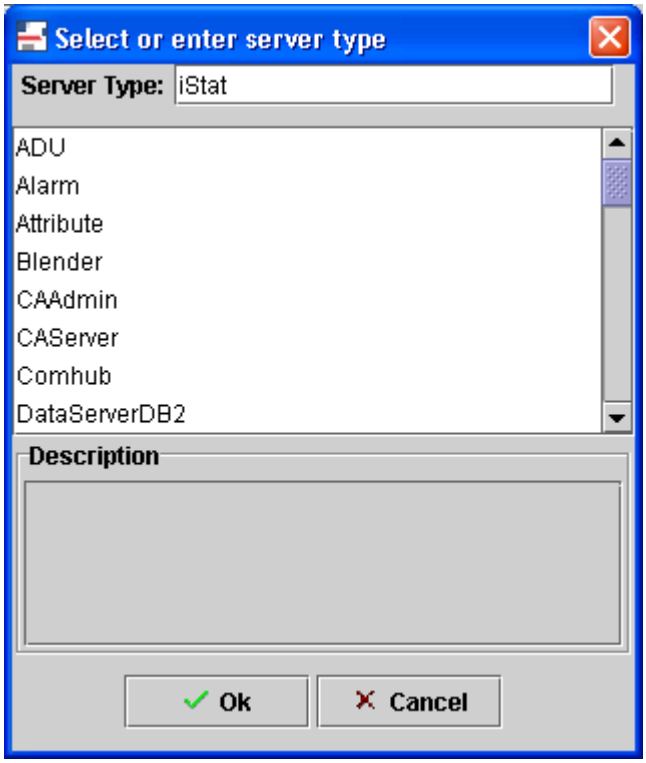
Step	Description
5.	Add the lines that describe the capabilities of the IC servers **MonGuard** and **iStat** to the end of the **Interface** definition section (See below for example). The lines to be added can be found in the SPECTO-iView Installation and Administration Guide, Chapter 3.1, Section B-2.

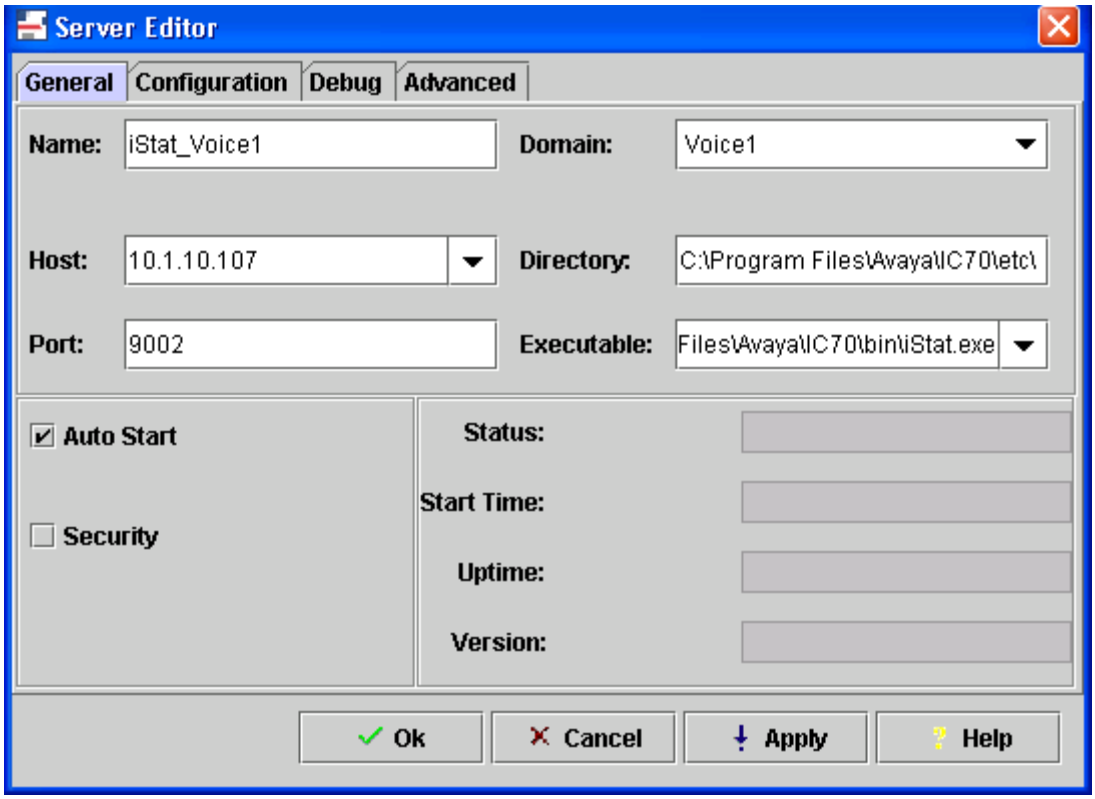


Step	Description
	The end of the added lines should be before the line starting with "VESP_IDL_VERSION".  Select **File** → **Save** to save the file.
6.	Copy the modified **vespidl.pk** file to the directory **%AVAYA_IC_HOME%\etc** on all the IC Secondary Server systems.

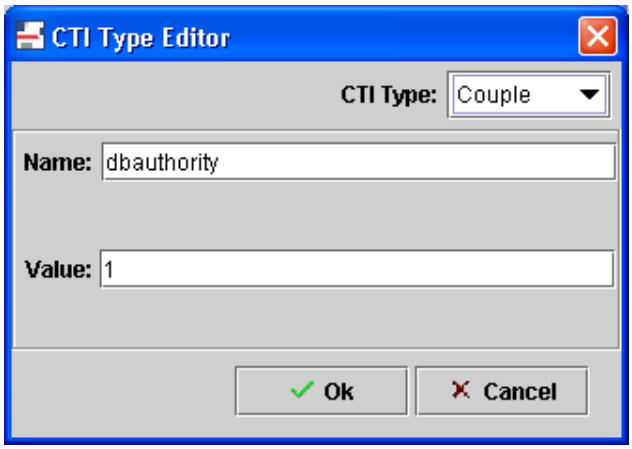
Step	Description
7.	Start **Services** from **Start → All Programs → Administrative Tools**. Start the **Avaya IC ORB Service 7.0** service. Repeat for all IC Server systems.



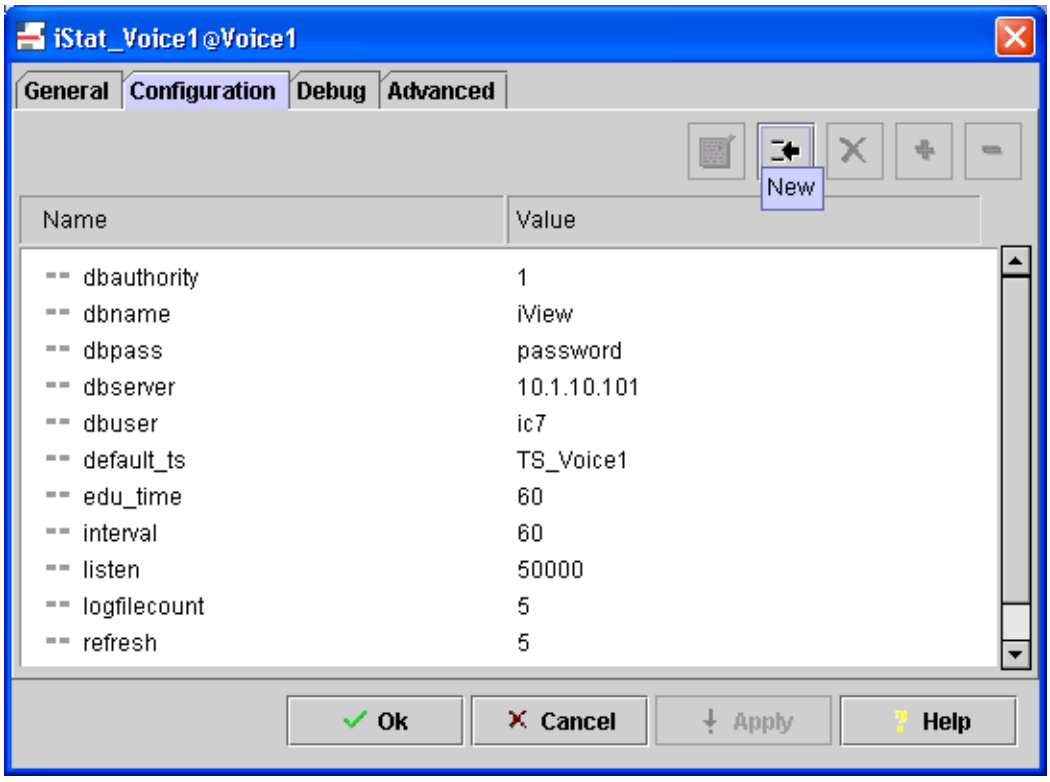
Step	Description
8.	Log in to IC Manager. To create the iStat Server, select **Server** → **New** in IC Manager. Type **iStat** for **Server Type**. Click **Ok**. 

Step	Description
9.	In the **General** tab, specify a **Name**, select **Voice1** for **Domain**, select the IC Secondary Server IP Address for **Host**, specify the full path to the **iStat.exe** file for **Executable** and check **Auto Start**. Click **Apply**. 

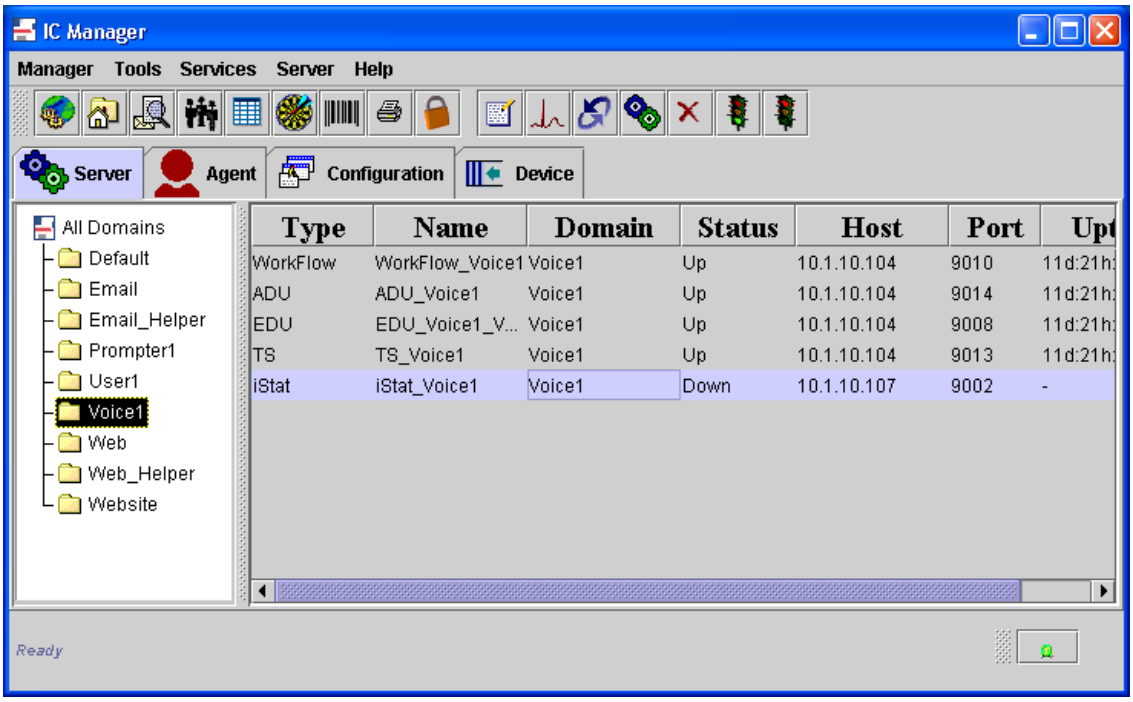
Step	Description
10.	In the **Configuration** tab, add the parameters for the iStat server. Click on the **New** button. In the CTI Type Editor window, select **Couple** for **CTI Type**. Set **Name** to the **dbauthority** and **Value** to **1**. Click **Ok**.



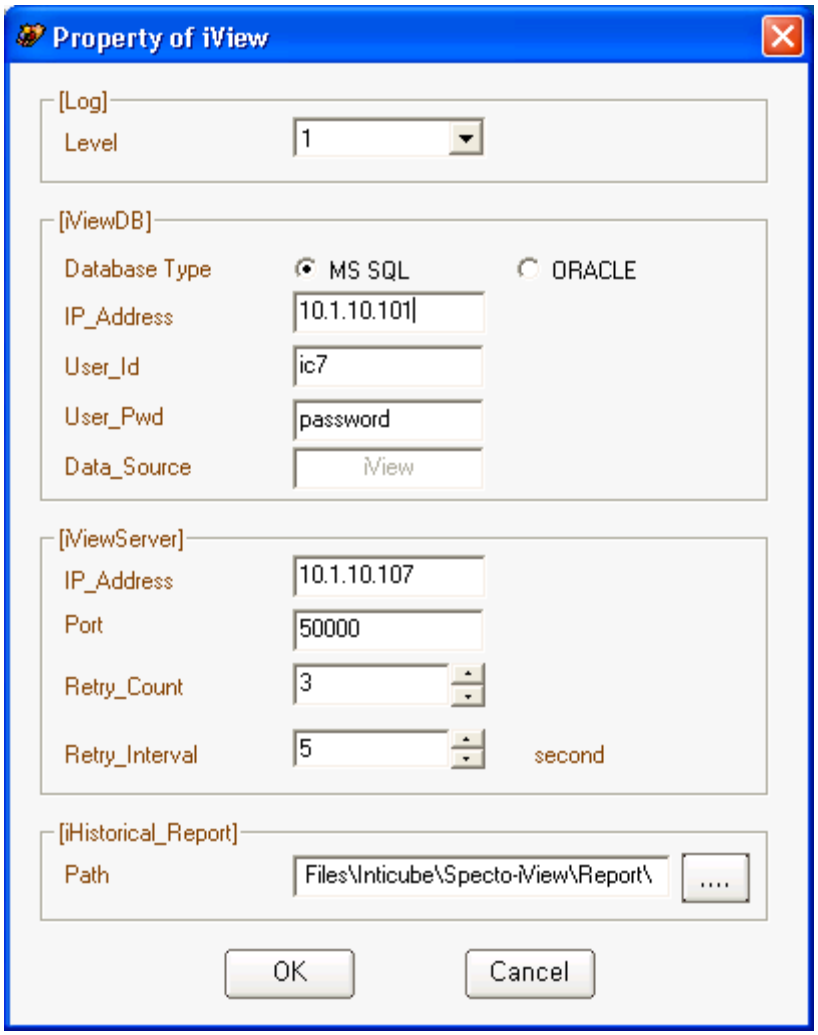
Set **dbname** to **iView**, **dbserver** to the SQL Server IP Address and specify a valid login and password for the SQL Server using **dbuser** and **dbpassword**. Set **default_ts** to the **Name** of the TS server. Set **edu_time** to **60**, **interval** to **60**, **listen** to **50000**, **logfilecount** to **5** and **refresh** to **5**. Click **Ok**.
Note: Please refer to the SPECTO-iView Installation and Administration Guide for the explanation of the fields.

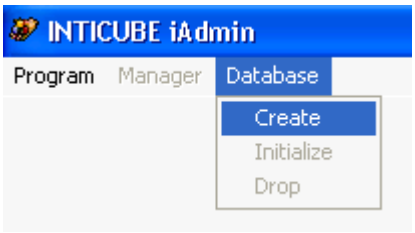
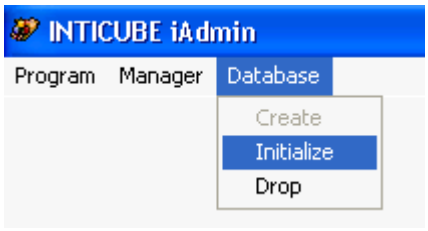
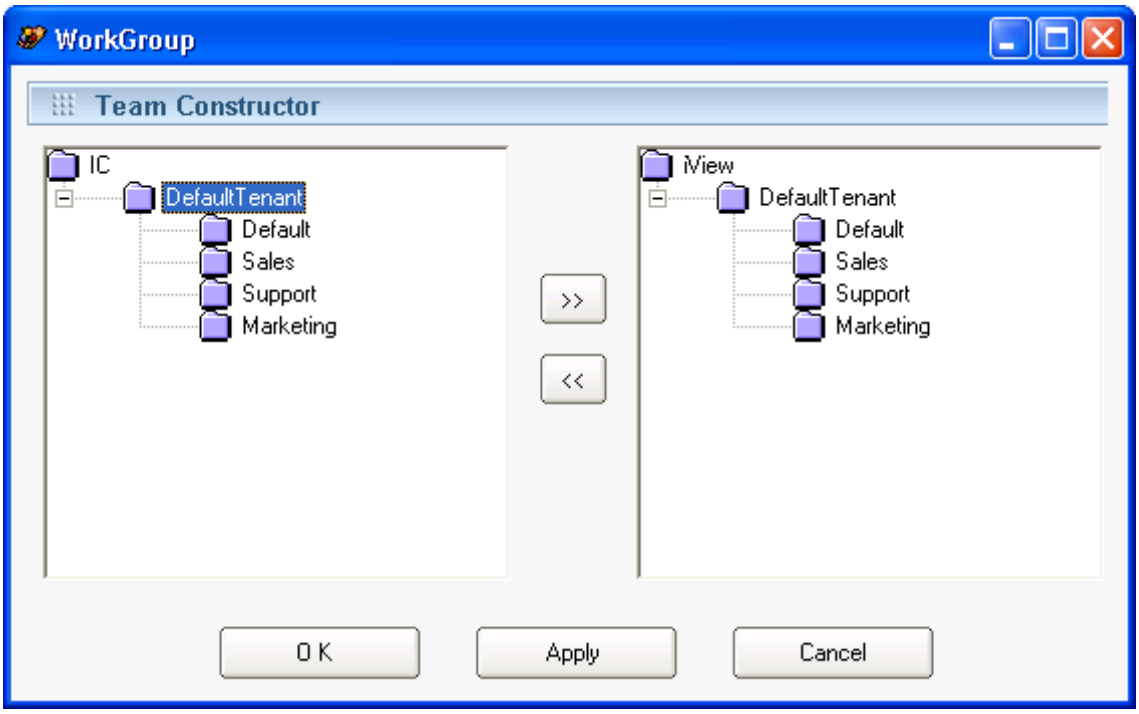


Step	Description
11.	Select the iStat server in IC Manager. Click **Server** → **Start** to start the iStat server.

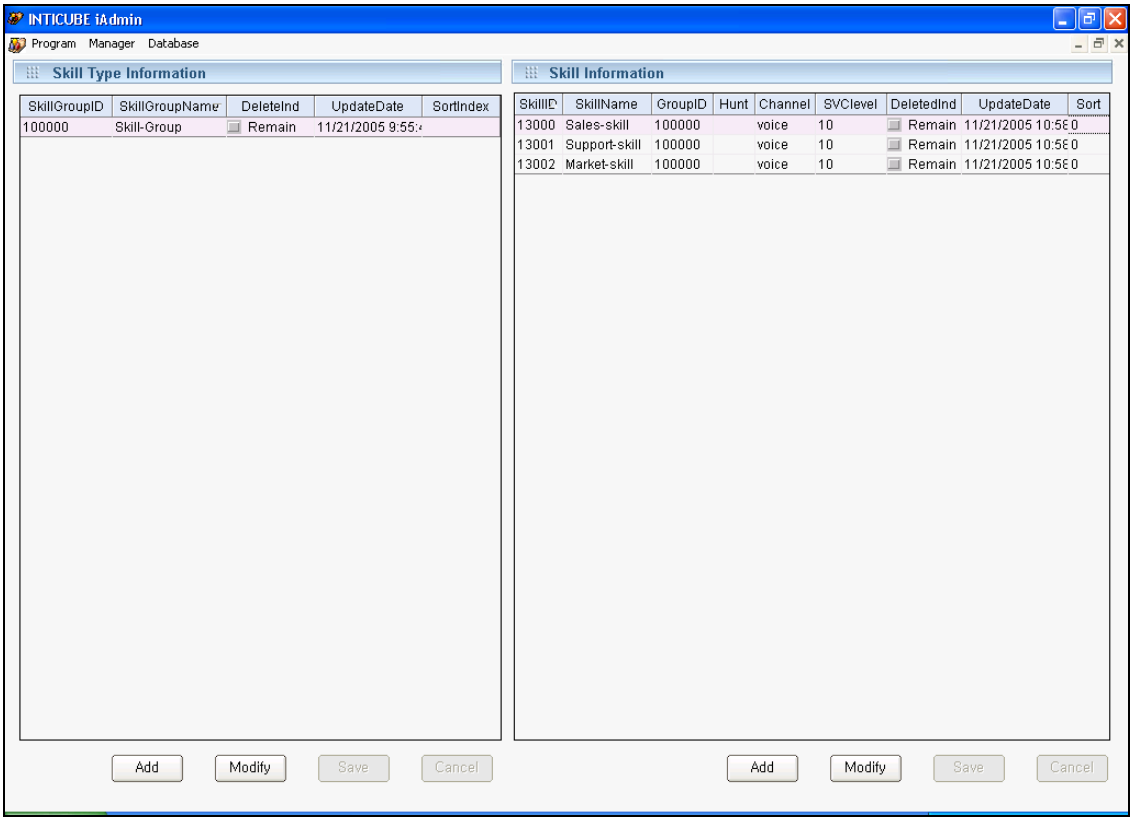


	Create the iView Database
12.	Start the program **iAdmin** from **Start → All Programs → inticube → Specto-iView**. Click **Program → Property**. In the **iViewDB** section, select **MS SQL** for **Database Type**, specify the IP Address of the SQL Server, the **User_Id** and **User_Pwd**. In the **iViewServer** section, set **IP_Address** to the IP address of the iStat server and **Port** to **50000**. The settings should match the iStat server configuration in Step 10. In the **iHistorical_Report** section, set **Path** to **C:\Program Files\Inticube\Specto-iView\Report** where the historical reports are stored. Click **Ok**.

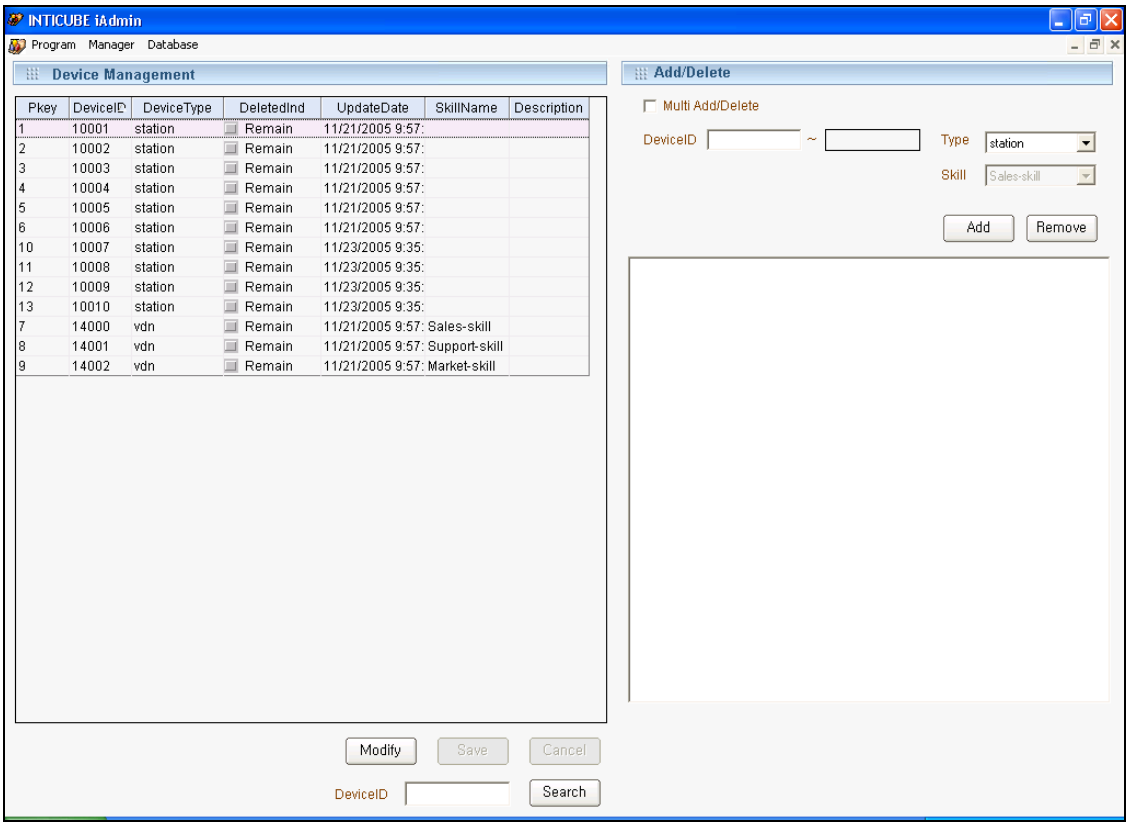


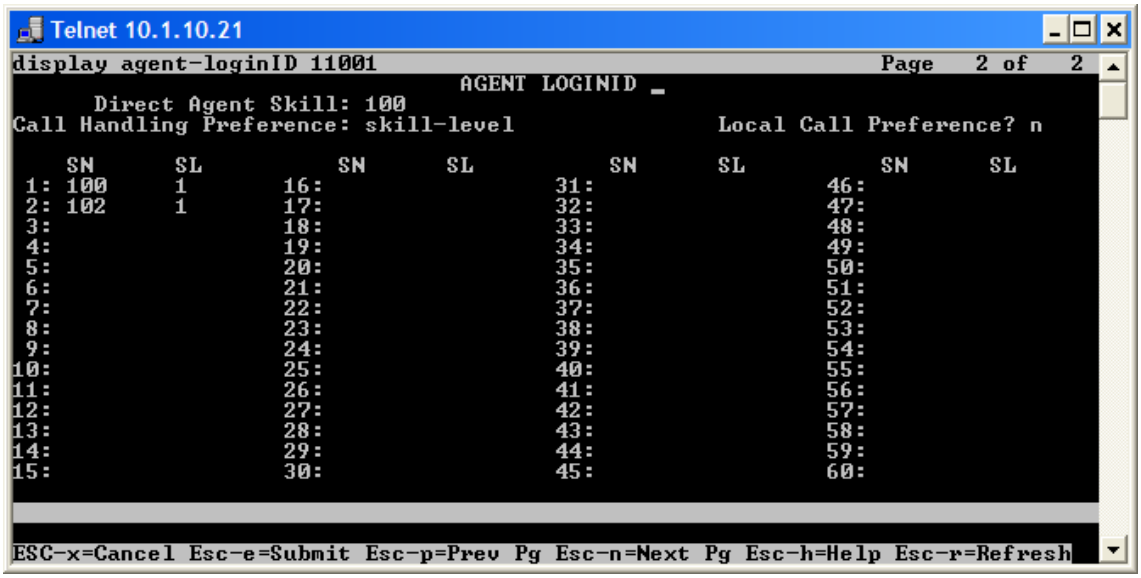
13.	Select **Database → Create** to create the iView Database and tables. 
14.	Select **Database → Initialize** to initialize the tables in the iView database. 
	Configure the iView Server
15.	Start the program **iAdmin** from **Start → All Programs → inticube → Specto-iView**. Select **Program → Workgroup**. Click on **DefaultTenant** on the left Tree View and select the **>>** button to map the workgroups in IC to iView. Click **OK**. 

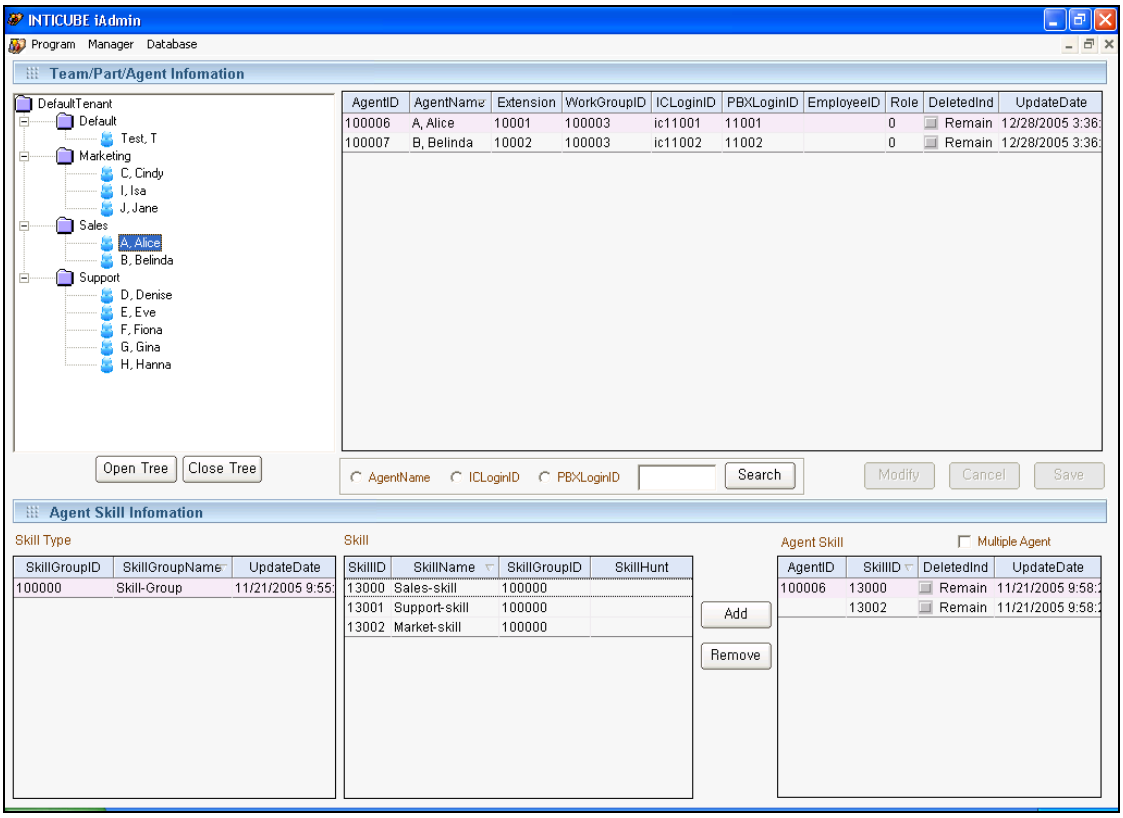
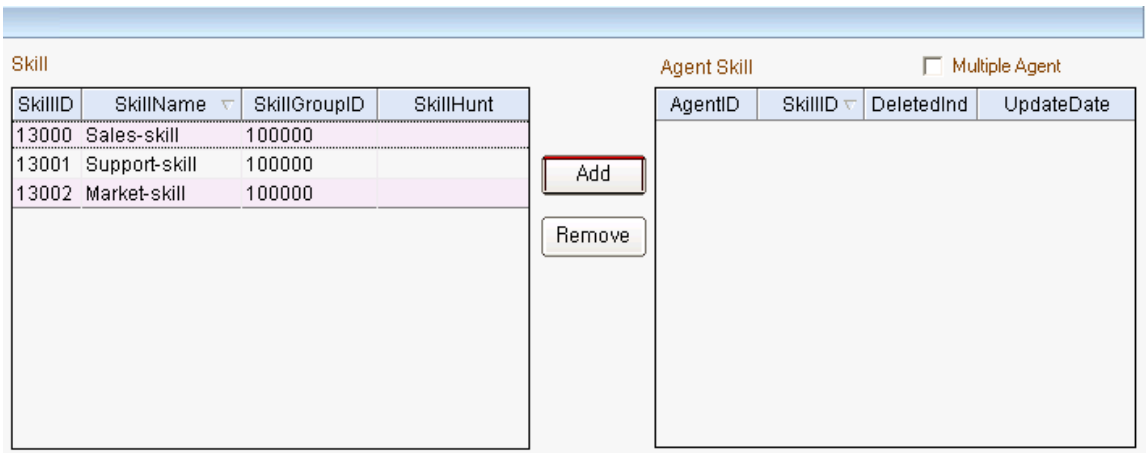
16. Select **Manager → Skill Manager** in the **iAdmin** program. Enter all the agent skills that will be monitored by SPECTO-iView. Click **Add** for **Skill Type Information** on the left-hand side. Specify a value for **SkillGroupID** and a name for **SkillGroupName**. For each agent skill to be monitored, click **Add** for **Skill Information** on the right-hand side. Set **SkillID** to the **Group Extension** of the Hunt Group. Specify a name for **SkillName** and select **voice** for **Channel**. Set **SVClevel** to the required service level for this skill.



17. Select **Manager → Device Manager** in **iAdmin** program. Enter all the phone extensions used by the agents and all the Vector Directory Numbers (VDNs) that route calls to the agent skill group specified in Step 16 as DeviceIDs.



18.	To find out the skills assigned to each agent, log in to Avaya Communication Manager and enter the command **display agent-loginID <login ID of agent>**. For example, Alice with agent-loginID 11001 has the skills 100 and 102 assigned to her. 
19.	To check the description of a skill, enter the command **display hunt-group <skill number>**. Note down the **Group Extension** field for each skill assigned to each agent. They must match the **SkillID** field in Step 21. 

20.	Select **Manager → Agent Manager** in **iAdmin** program. The upper left window shows the agent information retrieved from IC Repository. Click on **DefaultTenant** and click **Open Tree**. 
21.	Click on an agent in the tree. Use the procedures in Steps 18 and 19 to find out the skill assignment on Avaya Communication Manager. In the **Agent Skill Information** section, select the matching skills to be assigned to the agent and click **Add**. 

4. Interoperability Compliance Testing

The Interoperability Compliance Testing included both feature and performance testing.

The real-time data reporting capability of iREALTIME client application was verified against the Basic Call Management System (BCMS) reports for accuracy. Testing was performed manually, such as logging in and out the agents, putting the agents into different work modes such as After Call Work (ACW) and Auxiliary Work (AUX), and placing calls to the agents through the VDNs. The real-time reports from iREALTIME were then verified against the BCMS real-time reports.

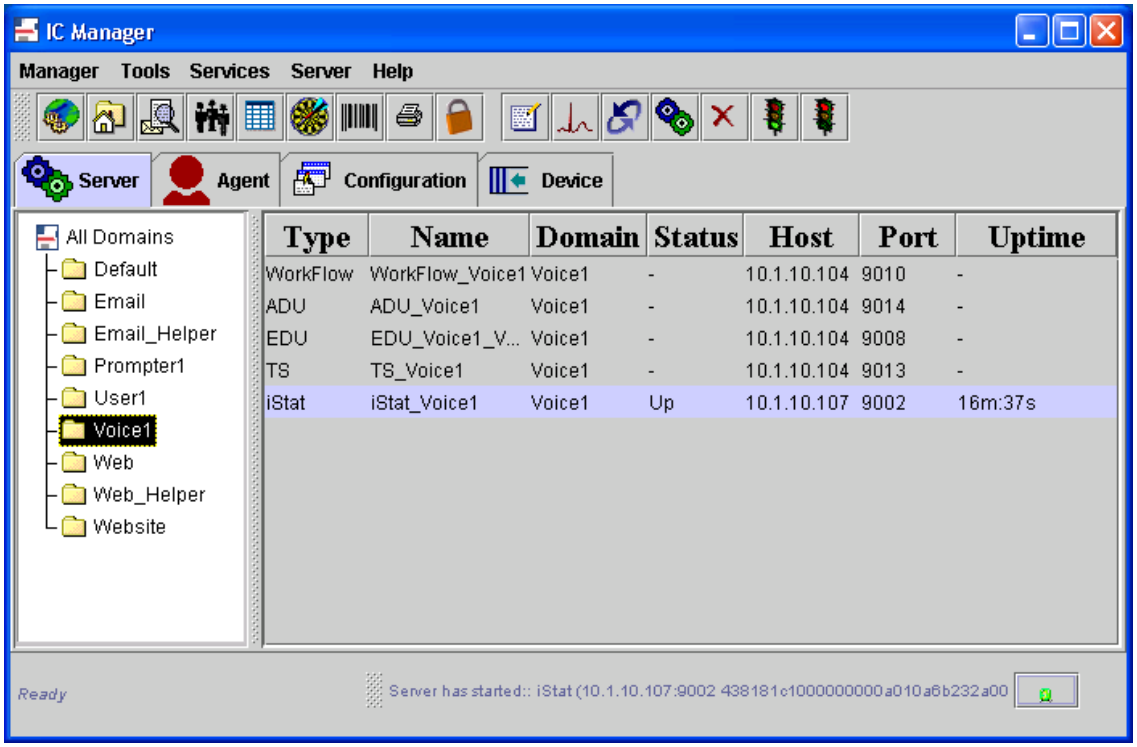
To test the accuracy of the iHISTORICAL historical reports, a call generator was used to place 200 calls to the agents. At the end of the report interval, the iHISTORICAL client application was then used to generate the historical reports for the interval. The reports were then verified against the Avaya Call Management System (CMS) historical reports for the same interval.

4.1. Test Results

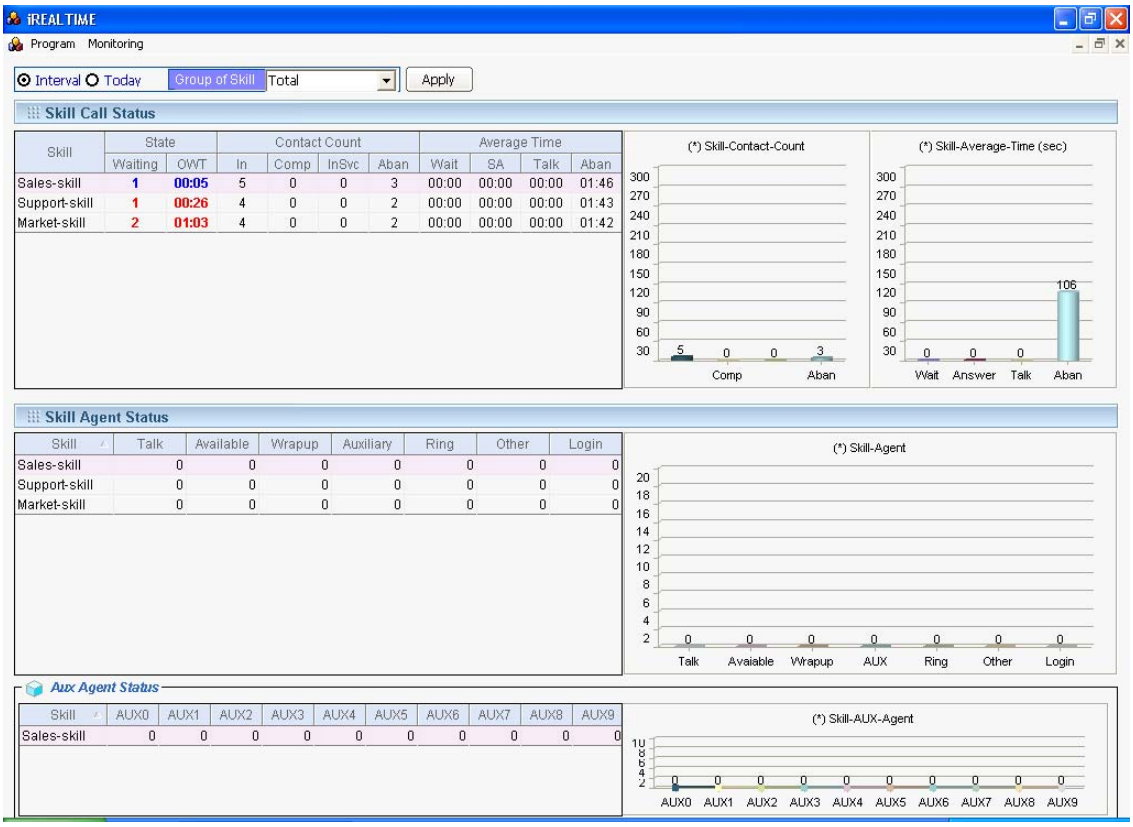
All test cases passed successfully.

5. Verification Steps

The following steps can be used to verify system operation after a field installation:

Step	Description
1.	Select the iStat server in IC Manager, click **Server → Start**. Verify that the iStat server **Status** is **Up**. Click **Tools → Alarm Monitor** and check that there are no errors. 

Step	Description
2.	Start iREALTIME. Click **Monitoring → Skill Monitor**. Click **Apply**. Place calls to the VDNs and verify that the real-time status display is updated.



6. Support

For technical support on INTICUBE SPECTO-iView, contact the INTICUBE Support Team at:

- Phone: +82 (2) 6005-3481 or +82 (2) 6005-3814
- Fax: +82 (2) 6005-3838
- Email: lubina@inticube.com

7. Conclusion

These Application Notes describe the required configuration steps for INTICUBE SPECTO-iView 2.0 to successfully interoperate with Avaya Interaction Center (IC) Release 7.0. All test cases were completed successfully.

8. Additional References

The following documents can be found at http://support.avaya.com:

[1] Avaya Interaction Center Release 7.0 Installation and Configuration, 07-300100, Issue 3, July 2005

The following documents are available from INTICUBE:

- INTICUBE SPECTO-iVIEW 2.0 Installation and Administration Guide
- INTICUBE SPECTO-iVIEW 2.0 iREALTIME User Guide
- INTICUBE SPECTO-iVIEW 2.0 iHISTORICAL 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.