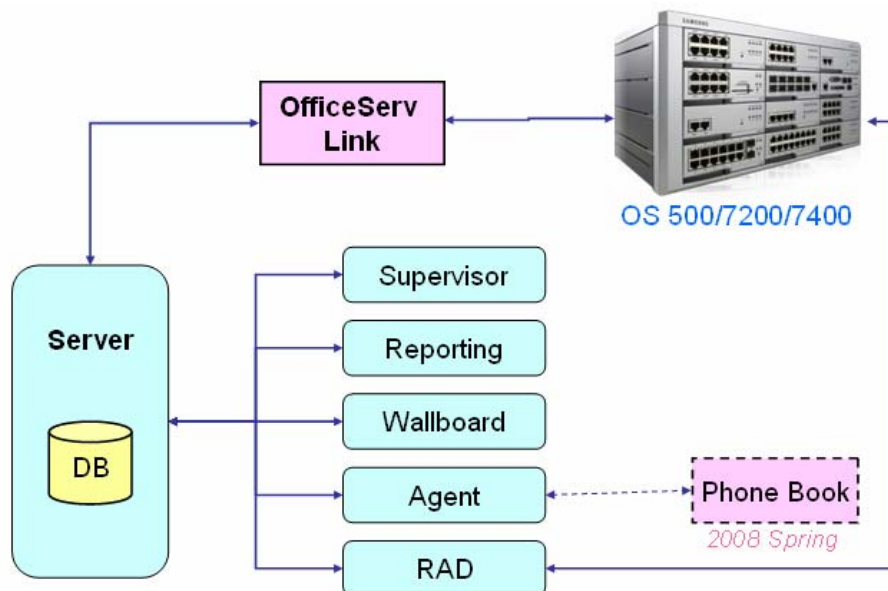


S/W Architecture

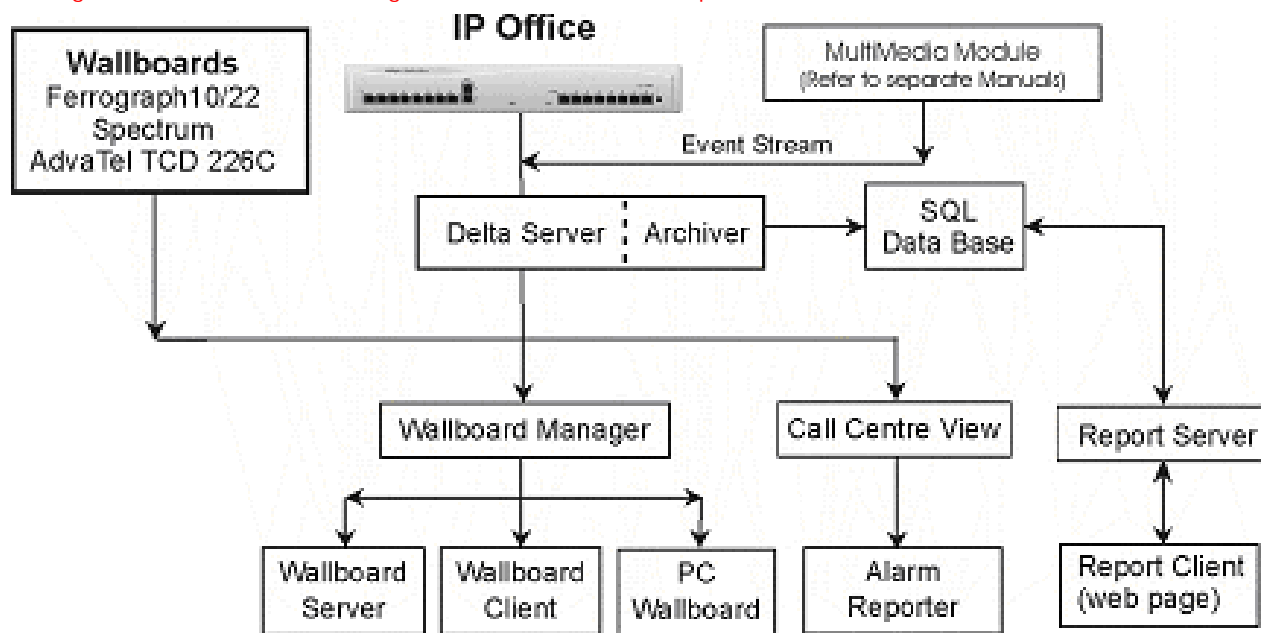
- **Server:** ACD system configuration
Avaya ACD programmed via IP Office manager program and Voicemail pro
- **Supervisor:** web-based management/configuration of call center (e.g. Call routing)
Avaya system is a call reporter no call routing can be configured, this is completed by the IP Office system
- **Reporting:** web-based call center statistics (call, group¹, agent, etc.)
Avaya Call Center View
- **Wallboard:** call center activity monitoring module
Avaya PC Wallboard
- **Agent:** client program for call center agent
Phone Manager Pro
- **RAD (Recorded Announcement Device):** playing wait comfort message to waiting callers
Voicemail Lite

For playing voice prompts, the ACD can use either of RAD (Recorded Announcement Device) or IVR (Interactive Voice Response). The RAD is conceptually a light-weight IVR which plays wait comfort messages only. IVR provides advanced features such as self-menu, callback, DTMF detection, and call recording. For more information on IVR, refer to the IVR V1.5 Feature List.

The Avaya equivalent will be the voicemail lite for basic messages, or the full IVR will be provided via the voicemail pro.



Avaya's Compact Contact Center (CCC) provides the user with the necessary tools to facilitate the management of call traffic. The diagram below shows the concept:



[Figure 1] ACD Architecture

Various call routing options

- Routing by CLI
Avaya via IP Office group programming
- Routing by DID
Avaya via IP Office group programming
- Routing by IVR
Avaya by Voicemail Pro
- Routing by Day/Date/Time
Avaya via IP Office group programming
- Call overflowing
Avaya via IP Office group programming
- Skill-based routing
Avaya via IP Office group programming (limited capability)

Supervisor

- System management through web
Avaya via IP Office Programming/Voicemail Pro
- Call center management through web
 - Group management
 - Create/Modify
 - Agent assignment
 - Completion code assignment
Avaya via IP Office programming
 - Routing configuration
Avaya via group programming
 - Schedule management
- Centralized agent management
 - Agent status monitoring
Avaya Call Center View
 - Messaging
Avaya Call Center View
 - Forced-logging
 - Blending
Avaya Not Applicable
 - Callback list distribution
Avaya Not Applicable
 - Multi-group login up to 8 groups
Avaya only limited by size of database
 - Phone-only agent
Avaya by Phone Manager Pro IP
 - Customizable break type
Avaya Not Applicable
- Call monitoring by queue, agent, IVR,

Agent

- Popup window with customer information on call arrival
[Avaya Phone Manager Pro](#)
- Convenient call handling
 - Answer/Hold/Transfer/Conference
 - DND/Auto Answer/Completion Code[Avaya Phone Manager Pro](#)
- Conversation recording
[Avaya Phone Manager Pro](#)
- Emergency assistance request
[Avaya Not Applicable](#)
- Call Center activity monitoring (agent, group and calls)
[Avaya Client Wallboard](#)

Wallboard

Provides call center monitoring at one peak. (See Figure 3)

- Server activity monitoring
 - Call statistics (Inbound, outbound, IVR), agent statistics
- Group activity monitoring
 - Agents statistics, multi group information, call statistics
- Agent activity monitoring
 - Status, elapsed time per status, call statistics
- Max 10 views and max 24 items per view (view: a set of monitoring item)
- Alarming color and log
- Messaging
- Adjustable data reset interval
[Avaya PC Wall board manager](#)

2.5 Reporting

- Group/Agent statistics
 - Agent Performance
 - Call service rate
 - Elapsed time per status (Break, Available, etc.)
 - Log In/Out
- Call statistics
 - Callback/VIP/IVR call
- Exporting to Excel
[Avaya Call Center View](#)

2.6 RAD (Recorded Announcement Device)

- Light-weight IVR which provides the minimal functionalities required for playing wait comfort messages only
 - Environment settings
 - Comfort message registration and execution per group ID

Avaya Voicemail Lite – q announcements only

Pended Features

This chapter describes the features to be considered in the future release.

- Server/Supervisor
 - Multi-switch feature enhancement (up to eight)
Avaya Not Applicable
 - Campaign (Outbound) feature enhancement
Avaya Not Applicable
 - Survivability
Avaya Not Applicable
 - VIP level per CLI/DID
Avaya Not Applicable
 - Dynamic wait comfort message interval
 - ACD DB import/export through web
 - Agent call monitoring (record, intrude, join, pick up, hold)
 - Email channel feature
- Reporting
 - Support for Crystal Report
Avaya Report Manage
 - Summary report per switch
 - Trunk usage
 - Automatic report delivery
- Agent
 - Phone-book plug-in (e.g. Outlook, GoldMine, ACT)
 - Web-based Agent
 - Thin client Agent
 - Greeting per agent
 - Programmable agent's initial login status
- Wallboard
 - Adjustable data reset interval per group
 - Log of # times when the alarm threshold is exceeded
 - Average abandon time
 - Alarm notification via mail or pager/SMS

How the Avaya Works

Call Routing

All ACD routing is completed by the IP Office telephone system, this is configured within group programming:

Hunt Group Sales

HuntGroup | Voicemail | Fallback | Queuing | VoiceRecording

Name: Sales

Extension: 500

No Answer Time (secs):

Overflow Time (secs): 60

Ring Mode:

- ☐ Group
- ☒ Hunt
- ☐ Rotary
- ☐ Idle

☐ Call Waiting On

Extension List

Extension	User
205	Brian Rogers
204	Dawn Smith
208	Pam Green

Overflow Group List

Name

OK Cancel Help

The UCD group is limited to :

- **Linear/Hunt Mode:** Each extension is rung in order, one after the other, starting from the first extension in the list each time.
- **Circular/Rotary Mode:** Each extension is rung in order, one after the other. However, the last extension used is remembered. The next call received rings the next extension in the list.
- **Idle/Most Idle Mode:** The extension that has been unused for the longest period rings first, then the extension that has been idle second longest rings, etc.

So for instance if you wish to have skills based routing you would have to set up multiple groups

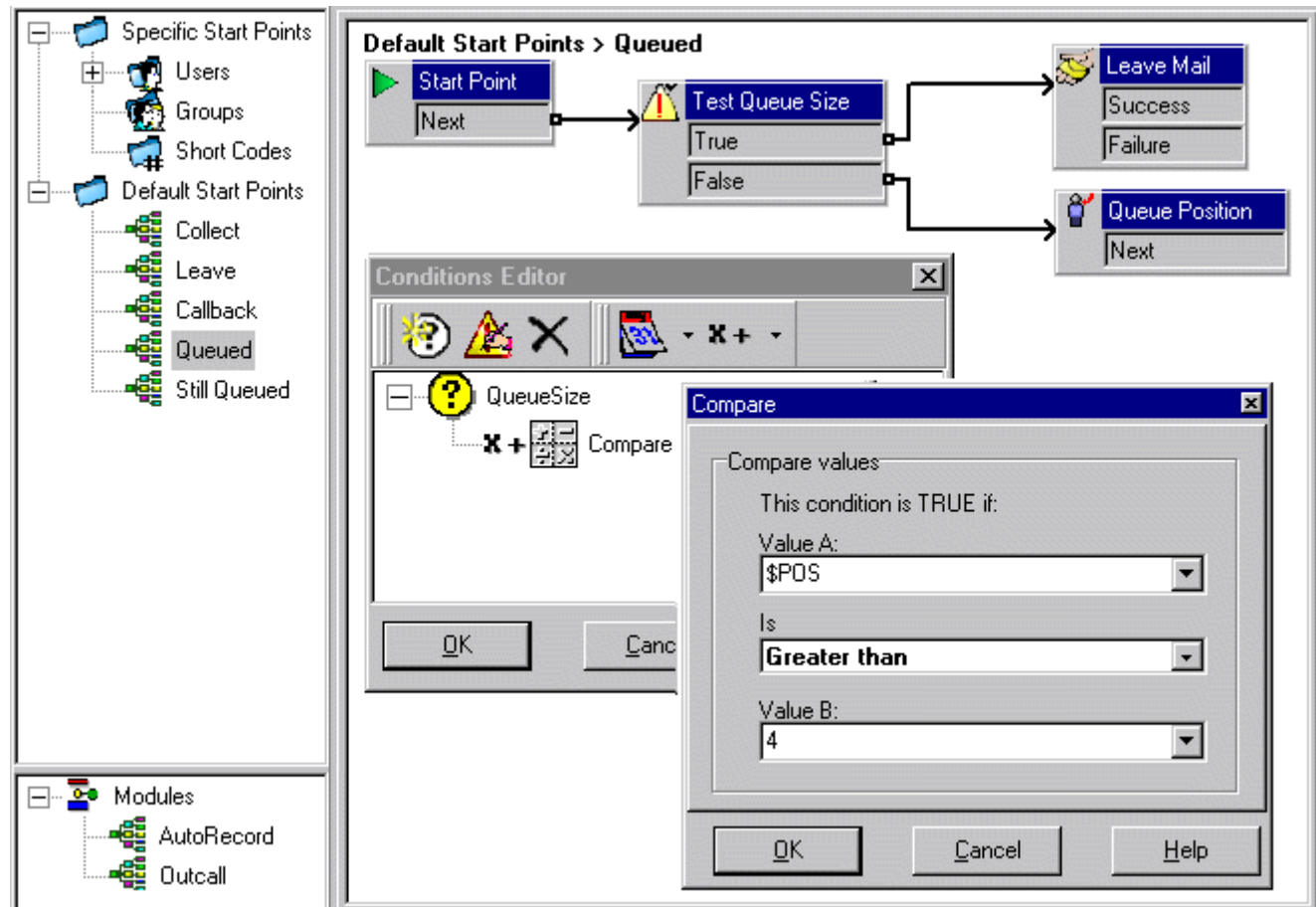
Queuing Messages

Queuing messages are provided by either:

Voicemail lite – this gives 1st and 2nd queuing message

or

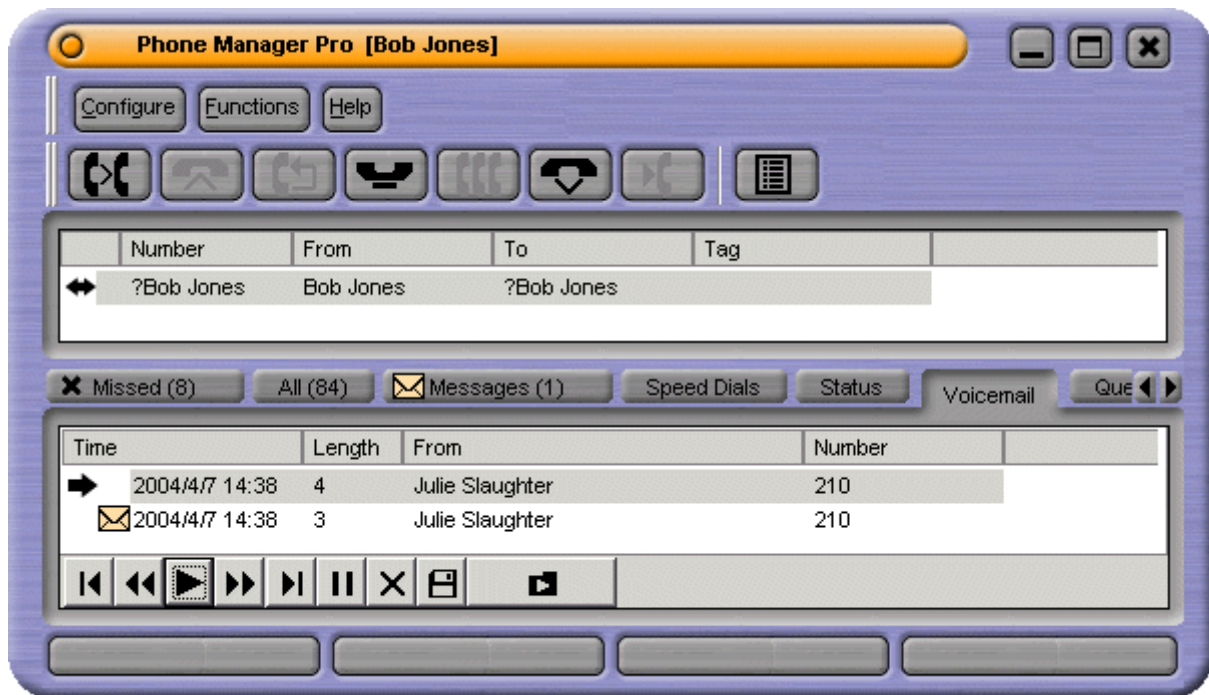
Voicemail Pro – Multiple message/time in queue/aa/ database screen pop:



Client Software

The client will use an application called Phone Manager Pro in Agent mode when using the ACD.

With this application you can log in/out of the relevant groups and set your phone into different states:



- **Agent Mode operation** which allows the user to perform contact center functionality without needing a specially designed contact center telephone, for example one with dedicated keys such as log on/off. You can also easily activate Account codes (during or before the call) through the "Account Codes" tab which allows the user to tag the call with an alphanumeric account code via a single-click. Agent-mode users can set their phone on "Busy" or "Wrap-Up" and select which hunt group they are member of via simple button clicks.



Busy Wrap Up



Select Group membership



Busy Not Available



Start and



Stop Call Recording

If your Phone Manager Pro is also VoIP enabled, then you can act as a contact center agent entirely through your PC

- **Queue monitoring** allows you to monitor the number of calls waiting on up to 2 queues.

VoC

Comments and comparisons from meeting with Lake Technology 09/08/07

Lake Technology is a Platinum Samsung reseller that also sells the Avaya IP Office for all Call Centre applications. They have demonstrated a good understanding of the Avaya systems and are skilled in the deployment into the call centre environment.

1. The IPO has similar routing capabilities to the UCD functionality of the OfficeServ system, the IPO, the Avaya system uses 3 applications to provide the rest of the major call centre functions, Compact Contact Centre Manager (CCC) provides real time reporting and wall board functions, Phone Manager Pro provides the agent log in/log out and BLF functions. The third application is its Voice Mail Pro software that has built in IVR capability as standard and the ability to add TTS, this gives the equivalent of our proposed IVR system.
2. Avaya recommends that for systems over 5 agents a SQL server is used, in practice Lake stated that they always use MSDE and only on very few occasions have installed SQL, even large very busy sites are running on MSDE.
3. Avaya has a limit of 82 agents.
4. Real time reporting is only available on licensed extensions and not across the whole of the system.
5. The ability to deploy the Avaya system on a Citrix network was unclear, initially the statement was that it would not work but later this was retracted and it was stated that it would work. I do not think that Lake have tried to deploy this solution in the Citrix environment.
6. The Avaya system has a limit of 30 channels of VM Pro, this has not been an issue for all normal VM and Call Centre requirements with the exception of call recording, when this is required Lake use an external 3rd party solution from Oak Telecom. Our capacity limitations for IVR and IP-UMS will not be a problem
7. The initial reaction to just being able to log into 3 groups as an agent was seen to be restrictive, however as the ACD is capable of skills based routing this restriction was then seen as not a problem.
8. The Avaya system cannot alpha tag DDI calls, this is a problem on the Avaya system however Avaya is just in the process of releasing a new version of software that gives this extra functionality.

9. Avaya does not have a dialer function, this was seen as a big advantage of the Samsung solution. Also the Outbound wall board capability to match the dialer module

10. The Avaya wallboard has a function that is seen as very good, it can trigger a message to be displayed such as to warn of an agent not coming out of wrap-up after a pre-determined time. The ability to trigger personalized alarms (agent name) is a good differentiating feature.

11. The Avaya system cannot operate a call centre over multiple sites. As the Samsung ACD can operate in this way this again was seen as a opportunity for Samsung. Avaya however can hot desk over multiple sites which is a benefit over the Samsung system.

12. There were 2 clear messages from the meeting, the Avaya system's strengths were in the real time reporting tools and the easy install with simple to follow installation screens on the IPO and object based programming of the VM (similar to the IVR). We must do our best to make the installation process as simple as possible.

In conclusion

We already have all the components to be successful.

1. OS7000 series platform with simple ACD routing (UCD) and real time reporting (CMS-ACD) with ad-hoc voice recording (SVMi-20) or full voice recording (CMS-VR)
2. The addition of ACD and IVR adds all of the missing components to match the Avaya solution and adds further features, the major ones being skills based routing, outbound dialer and wallboard, larger capacity, higher capability of the routing engine.
3. We have a progression of system to cover informal call centers using the system with CMS-ACD and the formal call centre using the system with ACD/IVR, informal call centers that require the features of the ACD and IVR solutions will also have this available. This allows us to price the ACD and IVR functions appropriately according to the correct market and not to under price them to compete with low end products from other manufacturers.

We must ensure a good installation and configuration experience for the installation engineers, this is the first step in making sure we get a successful product.