



Composit[®] Contact Center Overview
Release Version 4.3
February 2007

The information contained in this document is proprietary and is subject to all relevant copyright, patent and other laws protecting intellectual property, as well as any specific agreement protecting TADIRAN TELECOM LTD.'s (herein referred to as the "Manufacturer") rights in the aforesaid information. Neither this document nor the information contained herein may be published, reproduced or disclosed to third parties, in whole or in part, without the express, prior, written permission of the Manufacturer. In addition, any use of this document or the information contained herein for any purposes other than those for which it was disclosed is strictly forbidden.

The Manufacturer reserves the right, without prior notice or liability, to make changes in equipment design or specifications.

Information supplied by the Manufacturer is believed to be accurate and reliable. However, no responsibility is assumed by the Manufacturer for the use thereof nor for the rights of third parties which may be affected in any way by the use thereof.

Any representation(s) in this document concerning performance of the Manufacturer's product(s) are for informational purposes only and are not warranties of future performance, either express or implied. The Manufacturer's standard limited warranty, stated in its sales contract or order confirmation form, is the only warranty offered by the Manufacturer in relation thereto.

This document may contain flaws, omissions or typesetting errors; no warranty is granted nor liability assumed in relation thereto unless specifically undertaken in the Manufacturer's sales contract or order confirmation. Information contained herein is periodically updated and changes will be incorporated into subsequent editions. If you have encountered an error, please notify the Manufacturer. All specifications are subject to change without prior notice.

Table of Contents

Introduction.....	4
Features	4
Beyond Call Centers	4
Scalable	6
Multimedia support.....	7
Open standards.....	7
Applications	8
Contact Center	8
Features	10
Agent Proxy	10
Agent ReRoute.....	11
Outbound Service Assigned to Campaign	11
Computer Telephony Interface	12
Dialer	12
Web integration	12
Conference Bridge Manager.....	12
IVR	13
Call logger integration.....	14
Easy to Program Easy to Use.....	14
Administration.....	14
Real-time monitoring.....	16
Agent tools	16
Summary.....	18

Table of Figures

Figure 1 Composit Contact Center Diagram	6
Figure 2 Composit with traditional telephony	8
Figure 3 Composit with remote IP Agents	9
Figure 4 Distributed Composit Servers	10
Figure 5 Agent Smart Bar	11
Figure 6 Conference Bridge Manager Interface	13
Figure 7 User Module in Administrator	14
Figure 8 TDI Programming Screen	15
Figure 9 Campaign Monitor Agent Activity Monitor	16
Figure 10 Accept/Reject Message Window	17
Figure 11 Customer Data pop-up screen.....	18
Figure 12 Agent Scoreboard with Thresholds	18

Introduction

Many companies are looking to deploy open software that allows faster and better communications with their customers. There are two components to accomplish this. One component is to install new software that has your customers' information. However, this only accomplishes half of the requirement. The new software still requires human intervention and is not accessible by your customer.

The Composit Contact Center is the missing component that ties it all together. A development software platform from Tadiran Telecom[®], the Composit Contact Center, provides a solution that pulls all functionality together. It allows automation of business processes, inbound and outbound functionality of voice, fax and email. Composit is a development platform that allows for the deployment of IP call centers, IVR platforms and email/fax routing engines that are very flexible and scalable.

The Composit provides many benefits that companies are looking for today. These include:

Scalable from the small entry business that needs monitoring and reporting of incoming voice calls to a full blown contact center that requires multimedia support – the Composit can fit all applications.

Increased productivity by automating repetitive routines along with routing of voice, fax or emails through skills-based or dynamic routing.

Low total cost of ownership using industry standards and off-the-shelf hardware and operating systems, allowing for easy, rapid deployment of applications.

Application and development engine that allows companies to design, develop and deploy business processes that benefit all departments in an organization, not just the call center.

Features

Beyond Call Centers

The Composit starts to shine when you get past the obvious and start to look deeper into other possibilities. Take for example a distribution company that is looking to improve its image to its customers.

ABC Company has five offices in the U.S. They distribute, sell and service water purification equipment. Their first thoughts are for the call center with 10 agents locally and 12 agents in the remote offices. The Composit, along with the Coral[®] IPx family of Telephony solutions, can bring the remote agents into the local call center across the company's WAN infrastructure. However the company has many more needs that can be addressed by the Composit. These needs include:

1. There are 250 vendors across the U.S., and all have different buying levels. Why should a company that purchases 10 times the revenue of another be treated the same? Once the company has been identified by the

Composit Contact Center, the company's incoming priority can be set higher than others. This priority can be tagged not only to incoming voice calls, but to faxes and emails as well.

2. Having multiple functions under one roof, ABC Company would like to handle distribution, service and retail requests differently (Notice that the word 'incoming call' is not mentioned. A request spans voice, fax, email and web). The Composit can totally support separate routing rules and messages per campaign.
3. Distributors want easy access to their account, so they can see the status of orders and order simple parts over the telephone while they are in the field. The IVR (interactive voice response) functionality of the Composit allows callers to identify their company and access SQL or ODBC databases for placing orders and getting their account status. Text-to-speech functionality allows the Composit to read back their information over the telephone.
4. When distributors place orders with ABC Company, they can fax, email or use the IVR to send their orders. The Composit can integrate to Microsoft[®] Exchange or a fax server and send back an order acknowledgement to the distributor automatically. The orders can also be queued up to an operations agent, who inputs the orders, thereby cutting down processing time.
5. Retail calls are precious. If consumers' calls do not get answered quickly, the chances of getting that sale diminish. The Composit can capture abandon calls and create a call list. This call list can be placed into an outbound dialing function to the agents of the Composit.
6. Calling customers and notifying them of upcoming service calls or marketing specials can be programmed into the Composit. Databases from the company's records can be used to perform an out dial call and give preprogrammed messages to ABC Company's customers. An IVR can be programmed to wait for a caller's response upon answer.
7. The installation/service department has limited field technicians. They need to work smarter and faster to keep up with the growing demand. Possible items the Composit can address here are:
 - a. Clearing of service tickets from an IVR. The Composit can capture date, time, ANI (automatic number identification) of customer's home telephone, service ticket (from IVR) and field technician's employee number (from IVR), freeing service dispatchers to take customer calls.
 - b. After a service call is cleared, the Composit can go into an out dial mode and call the customer the next day, for example. During the call, the Composit can inform the customer that this is a follow-up call to determine if the service was performed satisfactorily. If not, the customer can request to either speak to a service agent or request a call back through the IVR.
 - c. Using the customer's database, the agent that took the service call can be recorded. Subsequent calls for the service ticket by the customer or

the technician can go specifically to this agent, making the whole operation run smoother.

8. ABC Company has deployed a web site. They want to show a high level of customer service by contacting customers when it convenient for the m. They have created a web page that allows the customer to input a date, time and telephone number when they want to be reached by ABC Company. At that time, the Composit will generate an out dial mode and call the customer when an agent is idle.

These are just examples of the hundreds of possibilities that can be developed with the Composit Contact Center. By focusing on procedures and practices within the company/organization, the value and power of the Composit comes into focus. It empowers a company (across all levels) and gives them the tools to overcome communications obstacles that stand in the way of growth.

Scalable

The Composit is a very scalable and flexible platform.

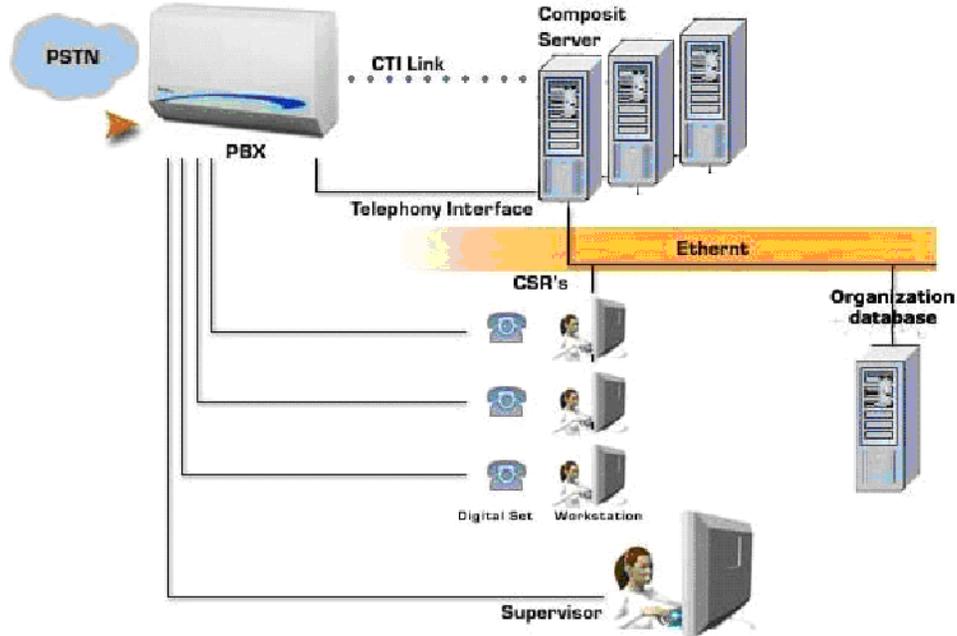


Figure 1 Composit Contact Center Diagram

The functional limits of the Composit Contact Center are shown below.

Description	Composit Contact Center
Maximum Number of Agents	350
Architecture	Client/ server based
Maximum Number of Supervisors	32
Connection to Coral IPx Family	CLA or MAP using CSTA; T1 for IVR and

	queuing ports
Busy Hour Call Completion	12,000
CTI Link Messages per Hour	200,000
Agent Telephone Support	Traditional FlexSet or IP telephone
Agent Email Client	Microsoft Outlook 2000, XP, 2003
Email Server	Microsoft Exchange 5.5, 2000, 2003
Fax Server	RightFax, Faxsys
Database (read and write)	SQL, ODBC or IBM DB/2
Integration for Third-party Call Logger	Optional – NICE, Comverse or Wygant

Multimedia support

The Composit Contact Center supports more than just incoming voice calls. It can monitor Microsoft Exchange emails and third-party fax servers to route and queue specific incoming messages to campaigns or specific agents. Also, the Composit allows agents to create outbound voice, emails or faxes and assign them to specific campaigns. The Composit also has the ability to automatically generate these messages given certain actions or thresholds specified within the Composit.

Open standards

The Composit Contact Center is designed around open and standard off-the-shelf servers and LAN environments. Using Microsoft Server 2003 and SQL server, the Composit is easy to implement and maintain without the need for proprietary hardware. Reporting is important to any contact center for staffing and customer interactions. The Composit uses Business Objects as the reporting engine from events captured in the SQL database. This allows users to use any of the 32 standard report templates or create and customized reports on their own, easily and quickly.

The Composit is normally not a standalone application. It integrates with customer legacy databases and telephone systems. To ensure interoperability, the Composit uses and supports standard database connectivity such as SQL, ODBC and DB/2 protocols. To connect to legacy telephone systems, the Composit uses standard digital T1 circuits for IVR and message access by customers. It also uses CSTA protocol for signaling and screen pop-up applications on the agents' PCs running Microsoft Windows XP, Citrix or Terminal Services.

Applications

Contact Center

The Composit Contact Center is a very powerful routing and queuing engine. The Composit supports high traffic required by contact centers, supporting up to 12,000 busy hour call completions per hour. The Composit takes in all pieces of information and places the voice, fax or email into the desired campaign to be answered by the appropriate person. Some routing and queuing factors that are supported in the Composit include:

Agent/System	Voice	Fax	Email
Time of Day	Dialed Number	Dialed Number	Recipient email address
Day of Week	Caller's telephone number	Caller's telephone number	Sender's email address
Campaign Priority	IVR input		Subject line
Agent Skill Level	Database information		Keys words in email
Agent Availability			

As previously stated, the Composit also supports traditional, IP or hybrid call centers. The diagram below depicts a traditional single-site call center using digital telephones.

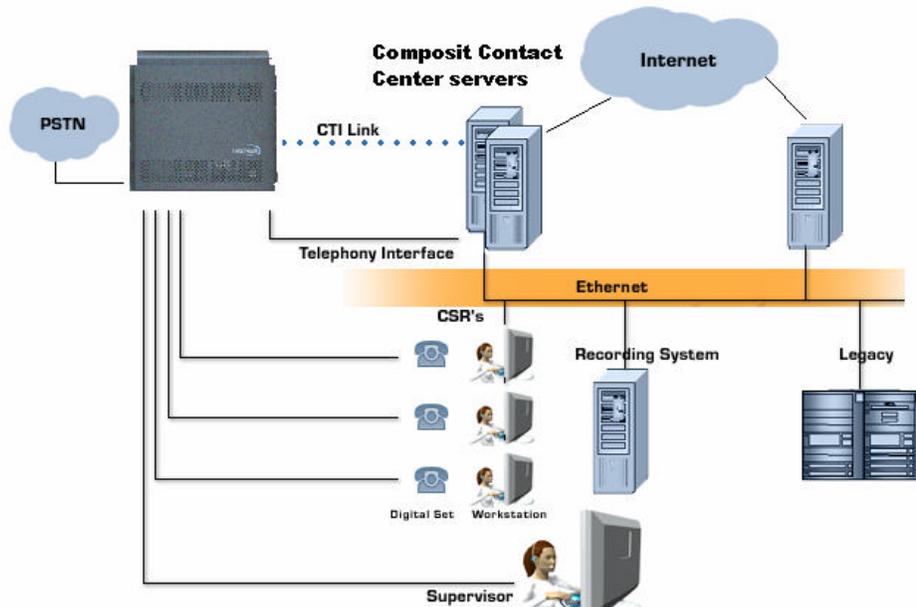


Figure 2 Composit with traditional telephony

The Composit can also support remote IP agents. Using the VoIP (Voice over IP) capabilities of the Coral IPx, Coral Sea Softswitch or other CSTA and VoIP-compliant telephone system, agents can reside anywhere in the world over a broadband IP connection and participate with the contact center.

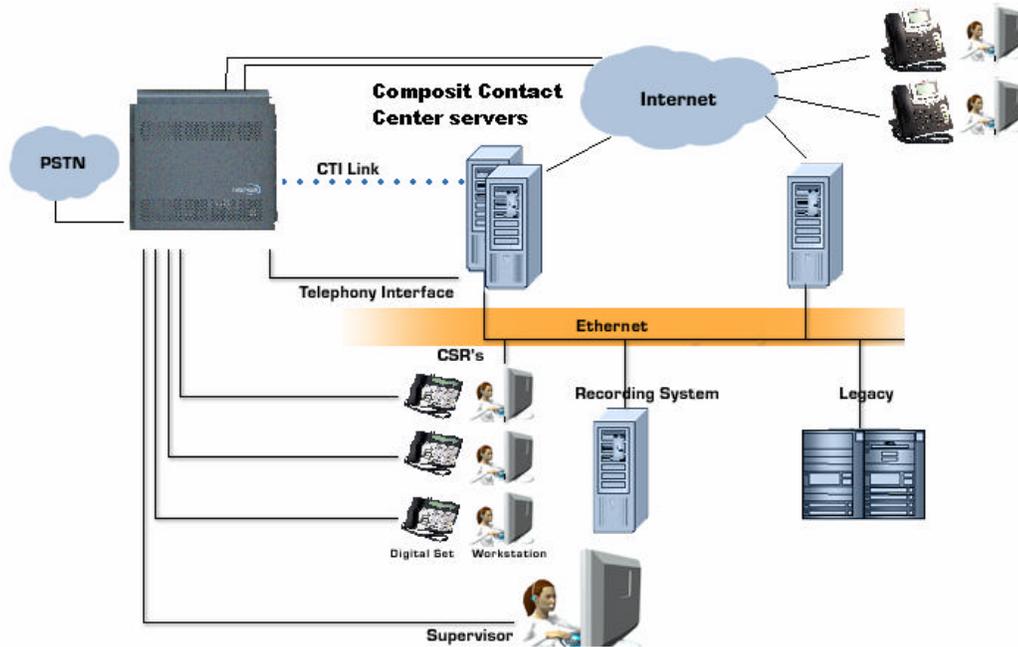


Figure 3 Composit with remote IP Agents

The Composit also has the capability to tie separate Composit servers into a single operational contact center. Using IP and database sharing, agents across different Composit servers can be connected to a Coral IPx system and work as a single, comprehensive system. Deploying the Composit in this fashion allows for expanded agent and IVR port growth, load balancing and disaster recovery.

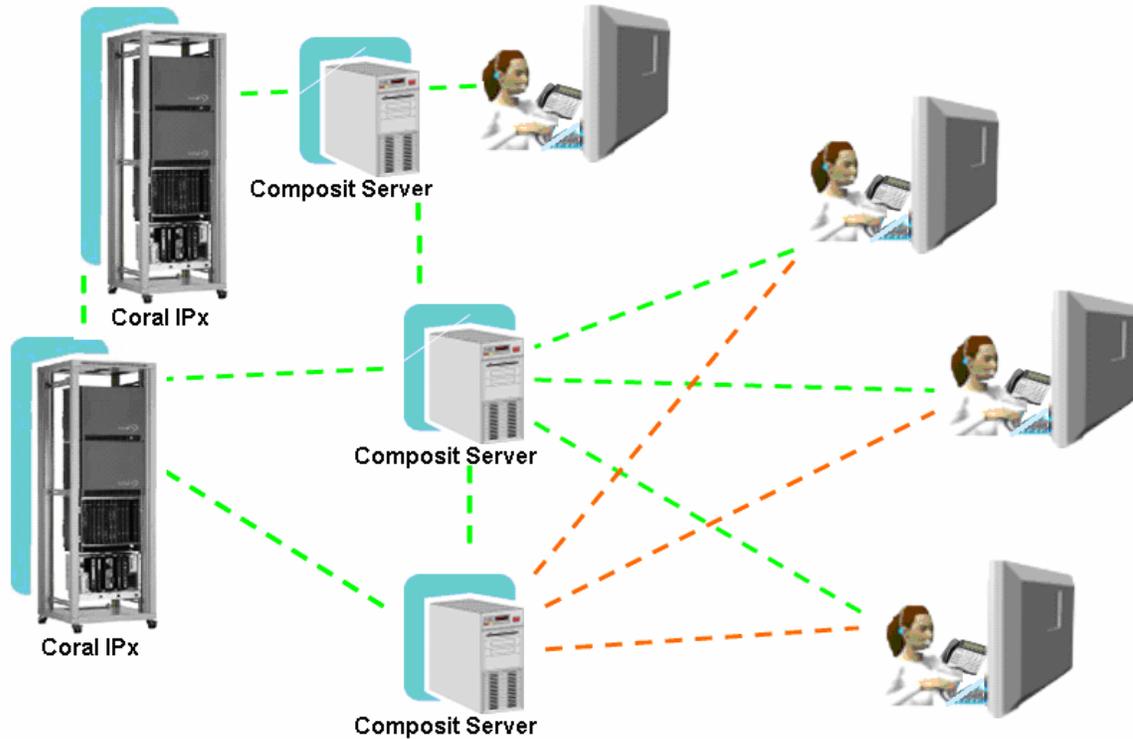


Figure 4 Distributed Composit Servers

Features

The Composit Contact Center has innovative features that streamline the operations and efficiencies within a call center.

Agent Proxy

Agent Proxy empowers the caller into the Composit. We all know the longer callers have to wait, the more frustrated they become. It is also expensive for businesses as many callers are calling in on trunks that have per-minute charges or at the very least cause businesses to install more trunk circuits than they really need.

On a campaign by campaign basis, the Composit can extend an option to the caller to leave a message and call back number and receive a call when the next idle agent becomes available. If chosen, the caller's place in queue remains as if they are still listening to queue messages or music on hold. When the proxy is presented to the next idle agent, the agent can hear the message the caller left and automatically dial the call back number. If the agent gets a ring, no answer or voicemail, the agent can simply reschedule the call back for another time.

This feature not only saves money on trunking expense, it also saves on the overall cost of the call center as it smoothes the traffic out in a call center.

During off hours of the call center operation, callers can use this feature and request an automatic call back when agents are logged into the Composit and are idle.

Agent ReRoute

Because of the flexible routing of the Composit, callers can be prescreened before being placed in queue for an idle agent. For example, callers can identify themselves in the IVR portion of the Composit (either by caller ANI or IVR input). The Composit can evaluate this information and then determine what to do with the call. The call back into a call center can be an extremely frustrating experience for customers, if it's not handled properly. If they do not get the same agent, then they're forced to reinvent the wheel and rehash the previous call. With the Composit, the previous agent can be written into the customer's history in their data record in the legacy database. The Composit can read this and prompt the caller, for example, by stating "John Smith was the last person you talked with. If you wish to hold press 1 or press 2 to be transferred to the next available agent."

Another option is to divert calls because of certain conditions. Two examples of this capability are:

1. If a caller is overdue on their account, instead of sending them to the service campaign, divert the call to collections or the accounting department.
2. Gatekeeper to specific department or functions. For example, a company may have delivery personnel on cellular telephones trying to call into the new load campaign of agents who handle customers only. The Composit can look at the ANI of the caller, compare it to a table and divert the call to the correct campaign. It can divert these calls even though the call came from a specific number or a selected IVR option.

Outbound Service Assigned to Campaign

The Composit Contact Center has a desktop application for agents. The Agent Smart Bar allows agents to answer incoming service (voice, fax or email) requests, as well as basic telephony functions such as Hold, Retrieve from Hold, Transfer, Conference and End Call. It also has status control for the agent to signal the Composit including Ready to receive calls, Paperwork (receiving only consultation calls), Break (up to 10 break and paperwork types are provided).



Figure 5 Agent Smart Bar

Along with these functions, the Composit agent can initiate new voice calls, emails and faxes. When a new outbound service is initiated, the agent can register their time to either private action or to a particular campaign.

Computer Telephony Interface

The Composit Contact Center has CTI (computer telephony integration) capabilities and desktop productivity tools that are designed to enhance a company's call center and/or telephone activity. By automating customer lookup, the Composit Contact Center can personalize the caller's experience in the contact center.

Unlike other call center platforms that use a proprietary data link, the Composit Contact Center uses an industry standard CTI protocol called CSTA. CSTA is a protocol for CTI that makes it possible to write code that communicates with a PBX. Typical applications include receiving notifications for incoming calls, placing calls, redirecting calls or placing conference calls.

Dialer

The Composit supports outbound dialing in the following applications.

Manual Outbound - Agents can use their Agent Smart Bar to dial, send emails, faxes, and SMS messages to any number or addresses manually. The destination can be retrieved from an internal contact list, or from Microsoft Outlook's contact list/address book.

Automatic Agent Dialer- The Composit Contact Center can automatically maintain a dialing list to provide a progressive dialer to the Agent extension. The dialing list can be created from the legacy database, a customer request via a web page or SMS, or by an agent that scheduled a follow-up call to a customer.

Automatic IVR Dialer – an IVR Dialer uses IVR ports to automatically dial from a preprogrammed list. Once connected to the customer, the Composit can play informational announcements, such as commercial and informative messages. Different IVR scripts can be played depending on whether the call was answered by a person or answering machine / voice-mail. The IVR system can receive customer input and give the customer the option to be transferred to a service representative.

Web integration

The Composit Contact Center allows customers to access contact center services directly from the company's website. Customers can request a return call and perform other automatic services from the Internet.

Conference Bridge Manager

The Conference Bridge Manager keeps track of available conference bridges in the Coral IPx through a graphical user interface. It allows for integration through MS Outlook for sending emails or appointments to potential participants.

The participant can accept or decline the invitation as with any other appointment. If they accept, they are given a phone number to call and password instructions to enter when it is time for the conference.

When they call in for the conference, they are answered by a verbal announcement asking for the password information. At this time they are escorted into the conference bridge.

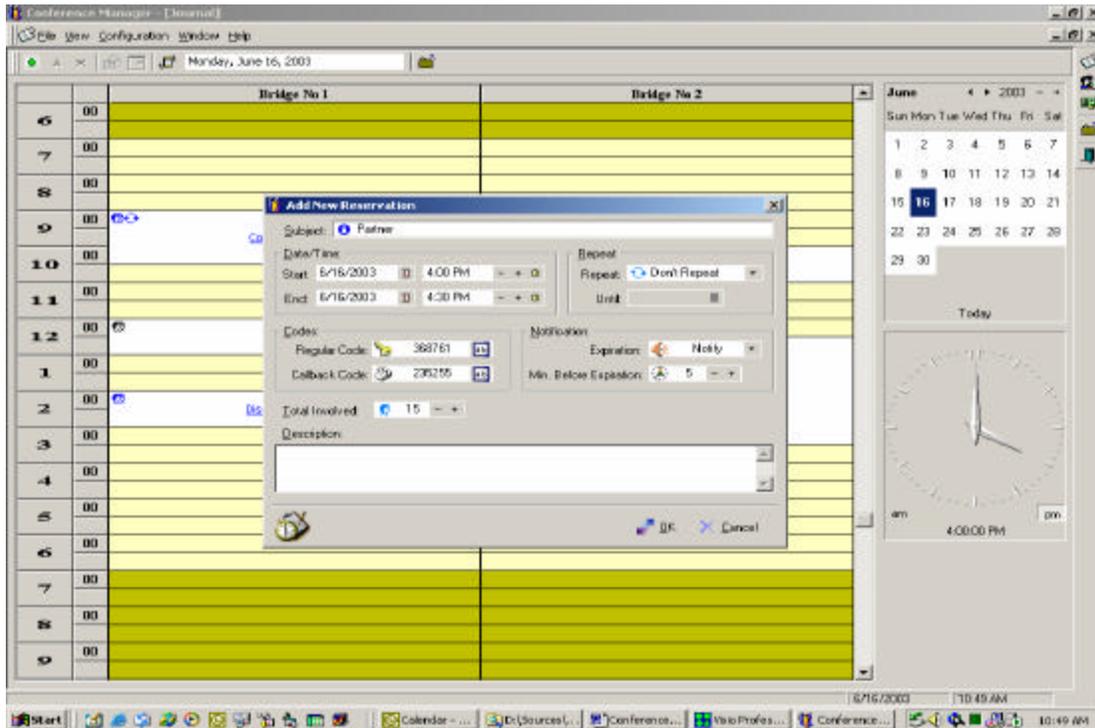


Figure 6 Conference Bridge Manager Interface

IVR

The IVR (Interactive Voice Response) is the gateway of the incoming calls to the Composit Contact Center. Whether configured as a standalone IVR or as a gateway to a complete contact center, the Composit IVR is a very powerful tool. Incoming calls are routed to one of the IVR channels, which then direct the customer through the company's business flow.

The customer can be identified by caller number or caller input information (such as customer ID). The Composit retrieves the customer details/profile from the company's information systems in various ways, such as database connection, TCP/IP, Web services, or by other methods.

While in the IVR, the customer can use automatic services and get general or personal information based on their profile. The information can be retrieved from the company's information systems and be delivered to the customer in several ways, such as by phone (using built-in Text-to-Speech capabilities), fax (Fax-on-Demand), email, SMS and the company's website.

The ability to integrate with third-party systems gives the Composit special capabilities, such as voice authentication and automatic speech recognition (NSC).

Special announcements can be recorded on-the-fly and then played to alert customers of an unusual or unexpected situation. This prevents system overload during busy times while providing customers with the same level of quality service.

Call logger integration

The Composit Contact Center has the ability to integrate to third-party call logging systems such as NICE, Comverse and Wygant. These systems automatically record voice conversations and, in some cases, agent screens in a contact center. The Composit Contact Center sends information on the caller and additional IVR input to the call logging systems, which allows supervisors to more easily parse the data.

Easy to Program Easy to Use

Administration

The Composit Administrator is a single, centralized tool for configuring and supervising the contact center. It is designed to be used by several profiles of users, including system integrators, administrators, supervisors, and, in some cases, agents.

The Composit Administrator provides a single 'desktop' shell to perform system-wide configuration and definition activities throughout the lifecycle of the contact center. It supports ongoing management, administration, operation, control, monitoring and reporting functions.

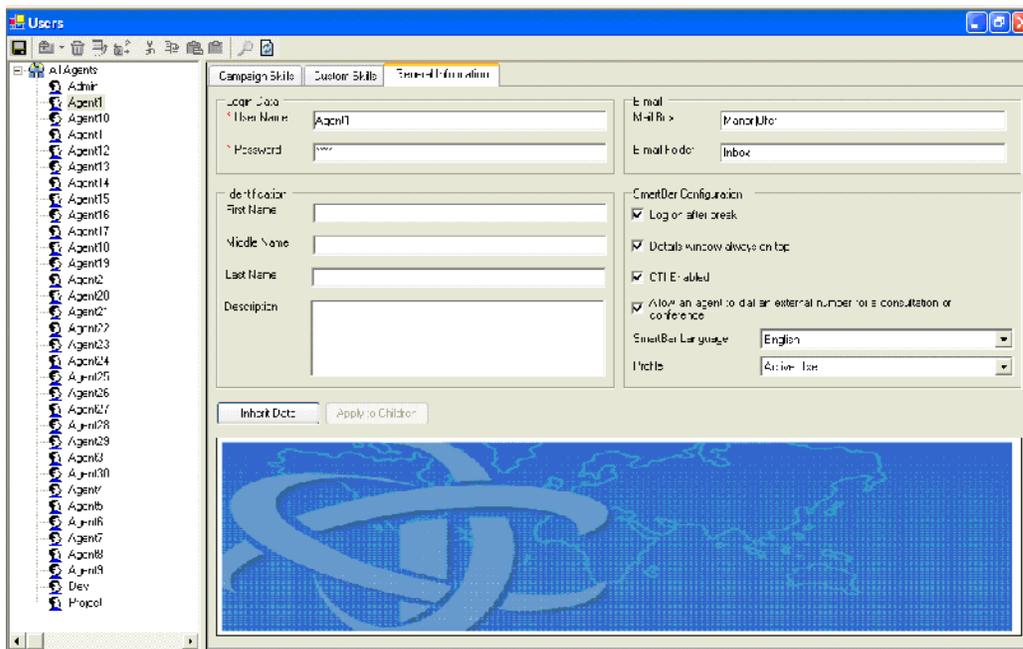


Figure 7 User Module in Administrator

To create scripts from answering calls or emails to queuing service request, administrators use a simple interface called Table Driven Interface or TDI. TDI is an intuitive tabular scripting tool that allows non-programmers to easily map business flows and build applications to handle incoming flow scenario at the IVR lifecycle. A script is a list of sequential actions and options by which each action can comprise a number of parameters that dictate its precise behavior.

The Composit TDI provides a full range of actions and options designed to meet all contact center requirements during the IVR lifecycle. These actions and options can be used to affect the destination of a call (such as by using a menu), gather information from the caller, present information to the caller and make logical decisions that affect the call routing based on the information gathered from the user.

In addition, the Composit TDI provides the following options:

- Map a specific destination number within a particular campaign. This allows automatic routing of a call to a campaign by specifying a specific or related extension number (DNIS), reducing the need for menu options.
- Composit TDI provides script resolution, allowing different scripts to be activated according to required destination (campaign), time of day, and call type (Inbound, IVR Dialer and Back-Queue-Calls).

Step Name	Command	Configuration	Voice Fi	Output	Input	Operat	Value	Step - OK	Step - Fail	Alter	Report
Welcome	Play		M4CC					Get Custom			<input type="checkbox"/>
Get Customer ID	GetDTMF	Default	M3EC M	Customer				Get Custom	Choose Ca		<input type="checkbox"/>
Get Customer Data	Get Data	CcompositApp			More...			Check Cust	Choose Ca		<input type="checkbox"/>
Check Customer L	Condition				Hebrew	==	Customer	Change Lan	Choose Ca		<input type="checkbox"/>
Change Language	SetLanguage				Hebrew			Choose Ca			<input type="checkbox"/>
Choose Campaign	Menu	Default	M4C4		11111111				Find Agent		<input type="checkbox"/>
Choose Campaign	Change Campaign				Sales			Find Agent			<input type="checkbox"/>
Choose Campaign	Change Campaign				Support			Find Agent			<input type="checkbox"/>
Choose Campaign	Change Campaign				Events			Find Agent			<input type="checkbox"/>
Choose Campaign	DictoAgent										<input type="checkbox"/>
Find Agent	DictoAgent										<input type="checkbox"/>
Error	DictoAgent										<input type="checkbox"/>

Figure 8 TDI Programming Screen

The second level of programming of the Composit is designed for the professional developers called Flow. The Composit Flow is an advanced business flow design program. It utilizes an intuitive, easy-to-learn Visio-based graphical user interface. This enables users to easily map business flows and build custom applications by dragging and dropping modular building blocks into a flow diagram to quickly and easily define contact center functionalities.

In the Composit Flow, system services, such as telephony, voice response, host emulation, integrating with third-party information systems (database, TCP/IP, web-services, etc), and agent management are broken down into smaller units.

For example, telephony service is broken down into Enable Telephone Line, Disable Telephone Line, Answer Call, Hold Call, Retrieve Held Call, and more service units.

Each service unit is called a Building Block. Each building block is represented as a Visio graphical icon, and each service is represented by a group of icons in a Visio stencil. Using the Visio interface, the user drags building block icons from Visio stencils to the drawing space, allowing them to be assembled into flow-chart drawings.

When the entire flow-chart drawing is ready, the Composit Flow generates TCA (Telecommunications Center Application) files, which are applications that can be executed by the Composit engine.

During generation, the application is checked to make sure that all building blocks are connected, all required input parameters are present, and all required events are handled.

Real-time monitoring

The Composit Monitor is a comprehensive out-of-the-box solution providing companies and organizations with all the necessary information to observe real-time information in the contact center. It is highly flexible and customizable. Supervisors and administrators can dynamically design and build customized monitor pages using the 150 information fields that are provided with the system.

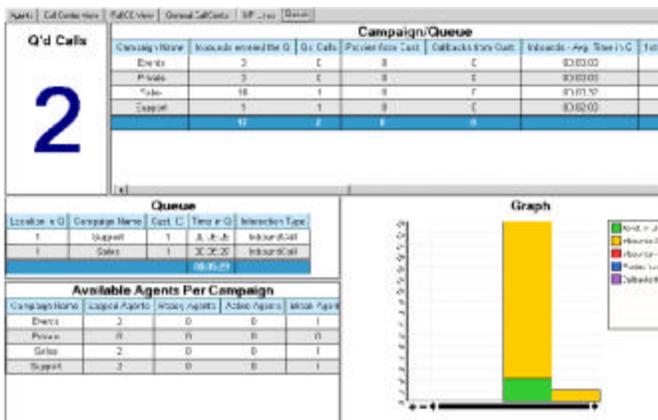


Figure 9 Campaign Monitor



Agent Activity Monitor

When the supervisor signs onto the Composit Monitor application all customized information is restored automatically from a profile created for each supervisor.

Agent tools

As stated earlier, the agent interacts with the Composit Contact Center through the Agent Smart Bar. The advanced, yet user-friendly, interface allows service representatives to control their telecommunications environment while keeping up-to-date with the status of the contact center.

The Agent Smart Bar application allows status control and telephony control by the user. It also allows:

- An indication of the current status and duration of the agent and telephone call.
- Agents to optionally update their skill levels (skills per campaign, per media and ability-based skills) so that additional calls can be directed to the agent's station.

- Scheduling for follow-up calls to a customer.
- Programmable hot keys, allowing SmartBar options (as well as other pop-up options and screens) to be activated quickly using the keyboard instead of the mouse.

Prior to accepting a voice call, email or fax, service representatives are presented with service request information. This information is presented for the following interactions: incoming calls/emails/faxes, dialer requests, as well as transferred/consult/conference calls originating from another agent.

Accept and reject actions are tracked by the Composit and reports can be viewed by the supervisor.



Figure 10 Accept/Reject Message Window

The customer information presented to the agent is configurable and can be collected from the customer inputs in the IVR stage or from the company's CRM information system. This option can be disabled when using external CRM systems.

This information is presented for the following interactions: incoming calls/emails/faxes, dialer requests.

In addition, this information is presented to a third-party agent during a call transfer, conference, or consult.

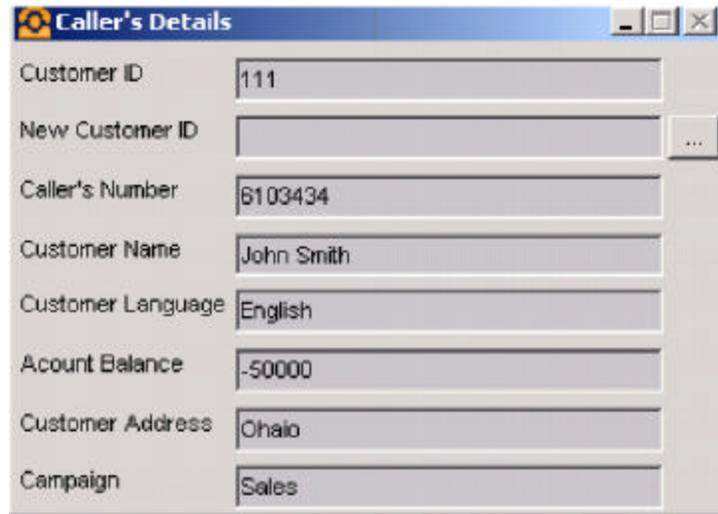


Figure 11 Customer Data pop-up screen

The Composit Agent Monitor provides the service representative with the relevant information of the agent's current call, the campaign queue status, and other statistical information. The option to set different colors according to threshold values is provided, allowing the agent to absorb contact center status at a glance.

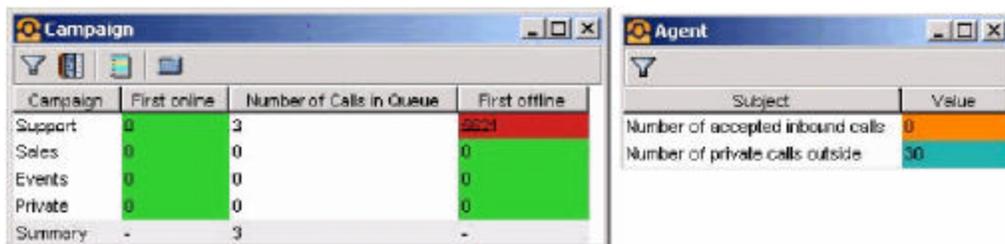


Figure 12 Agent Scoreboard with Thresholds

Summary

The Composit Contact Center is an extremely powerful, yet easy-to-deploy application engine that combines contact center, multimedia support along with IVR and CTI functionality. Built around open standards, the Composit Contact Center is the smart choice for companies looking for call centers, IVR and dialer applications.