

RADVISION Video Solution for Contact Centers

*A comprehensive solution for
introducing video to existing contact centers
and
enhancing the visual experience of video
contact centers*

October 2005

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Introducing the Visual Contact Center

With the growing proliferation of broadband Internet and 3G mobile phones, more and more people have access to real-time video communications through video-enabled handsets, web cameras and video-phones in the office, at home and on the road.

Visual contact centers enable live video interaction and collaboration in a variety of industries, ranging from telecom to healthcare. Not limited to live agent interaction only, contact centers can show promotional or instructional video to customers while in queue, as well as provide self service video-IVR.

Video enables contact centers to deliver better user experience, enhancing productivity and opening new possibilities for revenue-generating applications.

Potential Applications

1. Customer service centers for 3G mobile operators and triple play operators
2. Hosted service centers offered by network service providers
3. Upgraded visual communications for any industry: automotive, education, entertainment & media, government, healthcare, insurance, outsourcing, travel, technology, utilities ,financial services and emergency services

Imagine sales agents being able to speak face-to-face with prospective clients hundreds of miles away without ever having to leave their post. Consider a prospective buyer relocating to a new area, viewing a house with his real-estate agent and all from the comfort of his home.

Imagine if 3G video phones can be used to call through to the news desk, call your family doctor or banker, visually view yellow pages & previews or connect to telemedicine and surveillance services. There is a virtually unlimited list of possible uses for visual contact center services.

Why add video to a Contact Center?

- Deliver better services and enhance responsiveness, improving the customer perception
- Enhance customer loyalty by improving the end-user experience
- Differentiate from the competition
 - Being able to see the agent/broker increases confidence in your team
 - Your “platinum level” customer will appreciate a more personal service
- Enhance effectiveness through additional self-service options with video IVR

RADVISION Video Solution for Contact Centers

RADVISION solution consists of a comprehensive technology platform that enables integrators and contact center equipment vendors to introduce and enhance the visual experience for *existing voice and video contact center deployments* by:

- Providing an add-on solution for existing, deployed contact centers, whether they are legacy TDM or IP based.
- Supplying a solution that does not require retraining and reassignment of agents - utilize the same equipment and software used for voice calls.
- Offering enhanced services to the client by increasing the use of self-service functionality with enhanced video IVR capabilities, ultimately improving the productivity of the agents.
- Increasing the number of potential callers with connectivity from and to all types of networks (IP, mobile 3G and ISDN)
- Enhancing the visual experience for the supervisor, the agents and the clients by transparently presenting any type of content
- Preparing your contact center for seamless connectivity with IMS based networks while supporting all legacy and current protocols (SIP and H.323)
- Opening up new revenue-generating applications

It offers cutting edge technology to allow inbound calls or outbound calls from or to any video-enabled terminal, providing full interoperability with PC-based, IP-based and mobile terminals/handsets.

Contact centers using a distributed architecture allow for optimal workforce management at all locations and provide overlay logic to present the locations as a single contact center.

The RADVISION solution is composed of software and hardware components for media processing, video telephony, content presentation and network bridging, creating an overlaid visual communications layer which complements the capabilities of existing contact center components - ACD, IVR, CTI, etc. The solution supports thousands of simultaneous calls and ensures a smooth migration to visual contact center capabilities with pay as you grow technology.

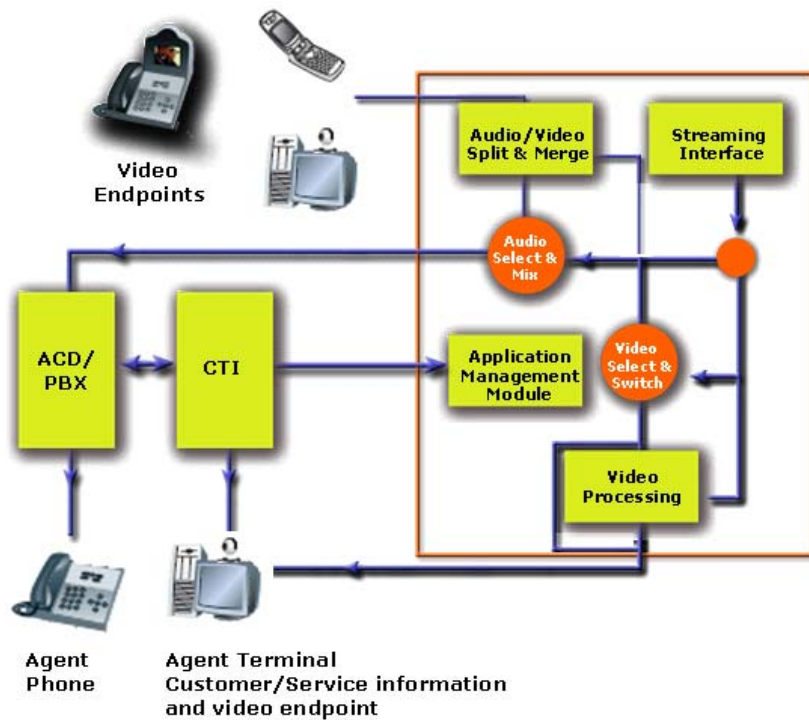
RADVISION has integrated its solution with various leading vendors of CTI, ACD and video contact center solutions.

How to implement the RADVISION Video Solution for Contact Centers?

When a video call is received in the visual contact center, the following events occur:

1. The RADVISION platform will create a seamless split between the video stream and the audio stream
2. The audio stream will continue to the ACD like any regular audio call
3. The video part of the call will be handled separately (ACD-transparent) for in-queue handling
4. All video content (video-on-hold, video-clip, on-screen text, etc) will be originated from the RADVISION platform
5. The RADVISION platform will direct the video stream to the relevant agent
6. The video stream will automatically “follow” the audio stream via a CTI link that connects between the ACD, IVR or CTI part of the call-center.

The following diagram shows how this top-level call handling procedure is handled:



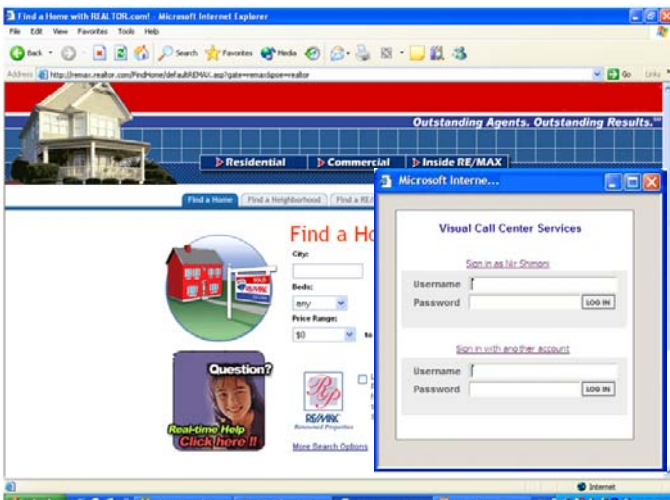
RADVISION solution is end-point agnostic and supports the following user environments:

1. Audio call via a PSTN phone with video via the PC (or any other video enabled device)
2. Audio and video via the same device (PC, video-terminal or 3G mobile phone)

In the first scenario the user will dial a pre-published number and in parallel will surf the Net to the desired Web page. The customer will click on a “link-to-video-call” button to activate the visual part of the conversation. In the second scenario, the customer will either click on a “link-to-video-call” button or dial a pre-published number to activate the call.

The following screenshots show sample deployments:

Entering the visual contact center portal



Travel Agent contact center services



Reference Case Scenarios

Telecommunications

RADVISION was contracted to video-upgrade an existing customer service contact center for Orange, one of the leading mobile operators in Israel. This contact center handles mobile subscribers for all inquiries, such as billing, technical support, roaming.

The contact center had to handle any mobile phone capable of real-time video calling. The existing Aspect based voice-only contact center was upgraded by RADVISION in a **2-month** period to provide full video-enabled customer services to the 3G mobile subscribers.

As the ACD was TDM based, the mobile network uses H.324M signaling. The RADVISION solution and the CTI are IP-based.

RADVISION incorporated its gateway technology to bridge between the different networks/signals. In this case, the transcoding function was used to transcode between the different audio and video compression formats used on the different networks. The solution also included a promotional video clip streaming to the caller while on-hold.

Pharmaceutical

RADVISION was contracted to video-upgrade an existing professional consulting call-center for a pharmaceutical company. This service was offered by a major drug manufacturer in order to provide better service to physicians, and by doing so, to encourage and enable physicians to prescribe the company's products.

Each physician was pre-registered in the contact center

- The physician, via his PC can request to talk to a specialist (“Click-to-video-call”)
- A log-in/Password screen pops-up to authenticate the physician
- As soon as the physician is authenticated the call-center performs a call-back: Audio to the PSTN phone and video/collaboration to the PC

It is important to note that the physician has no video terminal S/W resident on his PC prior to authentication. A download server in the contact center downloads the video S/W necessary immediately upon authentication. Both the physician and the contact center are protected by firewalls. The RADVISION solution will traverse these firewalls without jeopardizing the security integrity of the contact center. This project was developed on an Avaya based contact center.

Solution Features and Functionality

The RADVISION solution consists of four main functions. The functional architecture of the product allows for mix and match of capabilities and features according specific application needs:

Media Processing Function

- A/V Split
- Transcoding

Video Telephony Function

- On-Hold Video
- On the fly downloadable videophone
- Telephony Services
- Authorization

Content Presentation Function

- Video Streaming
- On Screen Text Messages

Networking Bridging Function

- Firewall Traversal
- 3G Mobile Gateway
- ISDN Gateway

The Media Processing Function

The RADVISION media processing function consists of two components:

A/V-split:

This 'drag and drop' function enables detachment of both video and audio streams. The component works with deployed voice-only call-center equipment with no need for upgrades or changes. Audio streams are processed as before; the video streams are processed by the RADVISION solution.

Transcoding:

The transcoding function enables decoding/encoding of media streams in different encoding algorithms. Every rich media environment (mobile/IP/ISDN) uses different compression algorithms; the contact center needs to serve callers from different domains. The transcoding component decodes and encodes each media-stream that needs to be processed by one of the contact center components (agent/IVR/recorder, etc). When the processing is complete, the RADVISION solution encodes the media back to the original device and in the original format

The Video Telephony Function

The RADVISION video telephony function consists of four components:

On-Hold

- Relevant for promotional on-hold, telephony on-hold (upon agent's request) and call transfer (blind on supervised)

Downloadable Videophone

- Enables "on the fly" download of a videophone to the potential caller browsing the Internet
- A download server will reside in the contact center and will upload the application upon a "click to video-call" request. The application will automatically "find" the web-cam on the PC and use it.

- Relevant when wanting to allow “anyone” to connect to the contact center with no need to pre-install any application. Installation and configuration is completed with no need for user intervention.

Telephony services

- Enables a video-overlay environment to empower any contact center with video/collaboration services
- The RADVISION solution is a “slave” of the ACD/CTI/IVR engines and sends a specific content or connect scenario to a specific agent according to “orders” received by the telephony function. This enables support of most telephony services including: call-transfer, call-hold, call pick-up and call divert etc.

Authorization

- Allows only authorized callers to contact the contact center
- The download server requests an authorization (LDAP) from the CRM database before continuing the process.
- Enables security and service to subscribed users only, especially for professional services (financial, pharmaceutical, etc)

The Content Presentation Function

The RADVISION content presentation function consists of two components:

Video Streaming

- While on call with a customer, the streaming feature enables transmission of a pre-recorded video-clip
- This is relevant for promotional on-hold, improving customer support (stream out an instructions, “how to”, clip) and visual content, for example travel agents who wish to present resort/hotel short clips to attract prospective clients.

On screen Text Messages

- While on call (or on hold) the text feature will enable transmission of text-based information
- Relevant for showing users their place in the queue, while on-hold (e.g., “you are number 9 in the Queue”)

The Network Bridging Function

The RADVISION network bridging function consists of three components:

Firewall Traversal

- Allows any IP terminal to call the contact center
- Real-time communications is often blocked by network and personal firewalls. RADVISION firewall traversal allows standard communication to pass through firewalls without compromising system security.
- Allows “foreign” IP callers to connect to the call-center, without “touching” current firewall settings

3G Mobile Gateway

- Allows connectivity between the contact center and 3G (UMTS)-based mobile phones
- These phones allow real-time video communication
- Enables bridging of mobile subscribers to the contact center, increasing potential traffic for new emerging services based on 3G

ISDN Gateway

- Provides a bridge to legacy ISDN videoconferencing systems
- Commonly used by education institutes and enables connectivity to room-based systems (classrooms)

RADVISION - The Video Experts

RADVISION's suite of multimedia products is the preferred communications solution for service-oriented organizations. As the pioneers of Voice and video over IP with over a decade experience, RADVISION has intimate knowledge of multimedia solutions - making RADVISION the ultimate partner for customizing and tailoring products and solutions to your requirements. RADVISION has assisted numerous partners and industry leaders in specifying, designing, implementing and deploying multimedia products and services. RADVISION's leadership and participation in international telecom standards organizations, provides the company with not only a clear understanding of today's challenges, but also unmatched insight to tomorrow's vision.

RADVISION is offering video contact centers world wide, with video overlay for existing ACD/CTI environments or enhancing the experience for existing Video Solution For Contact Centers, for a large variety of industries. RADVISION is currently involved in deployments for mobile and wire-line operators, telemedicine hosted services and financial applications.

About RADVISION

RADVISION (Nasdaq RVSN) is the industry's leading provider of products and technologies for videoconferencing, video telephony, voice over IP, and collaborative communications solutions. RADVISION offers the broadest and most complete set of video conferencing networking systems and next generation protocol toolkits and platforms on the market today, enabling enterprises, equipment vendors, and service providers to develop and deploy new converged networks, services and technologies. Today, hundreds and thousands of end-users around the world communicate over a wide variety of networks using products and solutions built around RADVISION's rich media communications platforms and/or software development solutions. These include RADVISION's award-winning videoconferencing infrastructure solutions as its highly scalable IP/ISDN interworked gateways, feature rich conferencing bridges, and advanced gatekeeper applications. RADVISION's enabling technologies of OEM systems include developer toolkits for SIP, MEGACO/H.248, MGCP and H.323, 3G-324M wireless multimedia delivery, and the ProLabTM Test Management Suite. For more information please visit our website at www.radvision.com.