Methods of Presenting Audiovisual and Computer-based Information on the VTEL Vista™ Platform

Serving the Video Communications Industry

Presentation Requirement	Vista Solution	
	Live	**Pre-prepared**
3D Object	Place under document camera and select this camera to transmit to the far end or capture using "Snapshot" function which will send still image to both ends while showing presenter in live video.	Place under document camera and capture as a high-quality JPEG image(s) and save to a slide tray to use in the conference. Far end sees both presenter and slide
Overhead Projector Foils or paper hard copy.	Using SmartView™, the presenter simply places each foil or sheet in turn onto the document camera base (back lit for foils). SmartView recognises each change and captures and sends each foil as a JPEG image. No buttons need to be pressed. Far end sees presenter and slides.	Each foil may be captured and stored in a slide tray. Slideshow may be sent and advanced/reversed (as simply as a 35mm slide projector show) during the conference. Far end sees presenter and slides.
Capture Live Video Image	Any live image from any source (including the Vista PC graphics) may be captured using the Vista "Snapshot" function which is then displayed as a Vista slide and sent to the far end.	Any captured image may be saved as a slide in a slide tray ready for use during the conference.
Annotation	Any live image may be captured using the "Snapshot" function, sent to the far end and then may be annotated by either end using the toolset in the Vista Slideshow facility. Annotation appears continuously and simultaneously at both ends of the call.	Any image saved as a slide and presented using the "Slideshow" feature may be annotated at both ends. Annotation appears continuously and simultaneously at both ends of the call.
Whiteboard	VTEL offer a fully-integrated whiteboard solution for videoconferencing with it's SmartBoard system. The presenter merely has to write on the board for it to be seen at both ends of the call. No other user input or setup is required. Annotation over an existing slide or snapshot image is also easily accomplished. Far end sees presenter and whiteboard output simultaneously.	Whiteboard material may be pre-prepared and captured to slides for presentation during the conference. The whiteboard may then be used to annotate these images during the call.
Digital Camera Images	A digital camera may be connected directly to one of the Vista's USB ports. Once retrieved, each JPEG image may be presented using Internet Explorer (supplied with the system)	Once stored on the system hard disc, the JPEG images may be imported directly into a Vista slide tray and presented as a slide show in the conference. Far end sees presenter and slides.
Internet Pages	Internet Explorer used to display the web page in the usual way. "PC" selected as camera input (scan-converted PC graphics) which is transmitted to far end.	Internet Explorer used to display web pages. Vista slide facility used to capture IE images to JPEG slide tray for presentation during call. Far end sees presenter and slides.

Presentation Requirement	Vista Solution	
	Live	**Pre-prepared**
PowerPoint Slides	PowerPoint slides may be presented live by selecting PC as the camera source. PC graphics are scan-converted to s-video and transmitted to the far end. Presenter must switch between his camera and the PC video	Method 1: PowerPoint slides may be imported directly to SlideShow using the supplied utility which converts the PowerPoint slides to JPEG slides. These can then be used during the conference call. Method 2: The PowerPoint application may be shared with the far end using the Vista application sharing function. The graphics appear at the far end in the same resolution (up to XGA* 1024 x 768) as the local end. Also any animation is seen simultaneously at both ends.
Sharing Data on a Participant's Laptop	If a participant needs to share information on his/her laptop, there are two means of achieving this on the Vista system. Method 1: The laptop is connected to the same LAN as the Vista and the Vista runs the software over the network and displays it to or shares it with the far end. Method 2: Using the front/side-mounted USB sockets of the VX/MX models, the data may be transferred using a USB memory stick (e.g. Disk-on-Key) which can quickly and safely transfer up to 1GB of data for display on the Vista. **	
Simultaneous Editing	In situations where simultaneous editing of data is required, the application may be shared using the Vista application sharing function. For example, if an Excel spreadsheet is shared, both ends see the spreadsheet in normal PC resolution (up to XGA* 1024 x 768) and both ends may modify the data on the sheet and see the results live as if the participants were seated together at a single PC. Note: Simultaneous editing is not possible on competitive systems that simply share images from a participant's laptop.	

Notes

* In order to present the XGA output of the Vista PC at full resolution (i.e., not scan-converted to video), single-monitor installations must employ an XGA-capable display device and dual-monitor systems must employ an XGA-capable display device for the right-hand display.

** On the Vista PRO which has rear USB sockets, we recommend employing a USB extension cable to present a convenient plug point for the USB memory stick.

Examples of Input Devices used with the VTEL Vista Product Range

The standard Vista remote control (ships with every product).

This RCU may be used like a standard TV controller and provides one-button access to many of the regularly used functions like volume up/down, audio and video mute, selecting camera source, panning and zooming the camera etc. Mouse and mouse-button controls are also provided.

Additionally, the lid of the RCU may be opened to reveal a full QWERTY keyboard and, with the unit re-orientated, may be used for dialing add-hoc numbers, entering text on slides and so on.

Wireless Keyboard and Mouse

As Vista is built on an industry-standard PC, the huge range of input, output and storage devices that have been developed for the PC are able to be used with Vista.

VTEL supply a wireless keyboard and mouse option but most other standard keyboards, mice, rollerballs, graphics tablets etc. designed to work in the Windows environment may be employed with Vista.

Graphics Tablet

The VTEL graphics tablet has proven the most popular optional user input device of all. By the use of a template overlay, the entire system may be controlled simply by touching the stylus on the appropriate icon. Many multi-button functions have been reduced to a single action in this way making system control faster and simpler.

Additionally, the tablet acts as a standard electronic drawing tool allowing the natural creation of free-hand drawings and annotation either to create slides in advance of a call and/or live in the presentation.

Examples of Input Devices used with the VTEL Vista Product Range

Document Camera with SmartView™

The long-standing friend of the video presenter, the document camera is still an indispensable and versatile tool. It can present free-hand drawings, 3D objects, printed paper including all kind of documents, printed photographs and, with an illuminated base, overhead projector foils and photographic slides.

SmartView is VTEL's secret weapon for the document camera making the use of this powerful tool easier than with any other system on the market. With SmartView, all the presenter needs to do is place prepared documents or foils, one at a time on the stand base. SmartView recognises that the image has changed and sends it to the far end. No further intervention is necessary allowing the presenter to concentrate on the content and not the technology.

SmartBoard

Once again, VTEL have taken a powerful tool and integrated it so deeply into the Vista product that using it is second nature. You just write – Vista does the rest!

SmartBoard provides four different coloured pens and an eraser and the presenter needs only to select a pen and start drawing. As soon as the pen tip touches the whiteboard surface, Vista switches on the powerful Penpal™ graphics system and reproduces the pen's every movement on the system screen, in the right colour and simultaneously at both ends of the conference call!

This is perfect for any conference call but comes into it's own in education & training, in marketing meetings or engineering & design sessions where concepts are best explained with a simply picture rather than a 1000 words.

Examples of Input Devices used with the VTEL Vista Product Range

Quickfind™ Camera Control System

Finding the speaker with the camera in a room full of participants automatically and with zero user input is a challenge. In a training room, for example, when the trainer is standing at the lectern, you want the main camera to be fixed there, but when a trainee from the same room has a question, you want to hear and see them quickly and naturally. When the trainer answers, you need to be back on her and when she walks to the whiteboard, you need the camera to follow.

What you really need is several camera operators and a director dedicated to the presentation! As this is hardly practical for most of us, many different systems have been developed to try to make this happen automatically.

One, compelling solution has been audio camera tracking where microphones pick up the sound from the room and a computer tries to work out where the sound is coming from and then point the camera that way. The theory sounds great but, in practice, it hardly ever works properly because the computer gets thrown by echoes from hard surfaces like walls and furniture.

VTEL have found that the best solution is to give each student table a push-to-talk microphone together with a system which allows a camera preset to be set up for each microphone position. VTEL calls this system Quickfind and it works extremely well every time. In addition, floor mat switches may be placed anywhere the presenter is likely to stand (e.g. at the lectern, at the whiteboard etc.) so that the camera automatically follows. There is also a fully-integrated Color Video Touchpanel option which allows control of the videoconferencing system and up to two VCRs. The 26 cm LCD screen also displays live video from local sources. Up to 16 microphones/mats can be accommodated and one or two cameras controlled.

Like many VTEL solutions, this can be a completely "hands-off" solution allowing the presenter to concentrate on the content of the presentation.

USB Devices

Another benefit of working with a pc-based videoconferencing solution is the advent of the USB interface. USB had become the Plug & Play connection of choice for many peripheral devices including:

Digital Cameras	Mouse /Keyboard
CD-R and CD-RW Drives	MP3 Players
DVD Drives	Printers
USB Floppy Drives	Scanners
External Hard Drives	Speakers
USB Memory Sticks	Wireless LAN
Zip Drives	Cable /DSL routers and switches
Microphones	
Modems