Click to Meet

The easiest way to deploy and use two-way video across the enterprise
Until now, two-way video for the enterprise has been fraught with complication. Nevertheless, video applications such as distance learning, virtual meetings, telemedicine, and real-time global information exchange are compelling. Compelling enough that companies have put up with the shortcomings in return for the benefits of reduced travel, higher productivity and improved business relationships. However, because of the difficulties, few companies realize the full potential of their video investments. All that is about to change, and much for the better.

While end-point equipment vendors have tried to simplify user interfaces and enrich features, no one has addressed the operational issues of high costs, low reliability, complex deployment and poor ease of use as a whole. That is, no one until now! Only one company—FVC.COM—understands the complete challenge, which is as much about networking as it is about user interfaces. We've tackled both issues by developing Click to Meet, a network-provisioned video communications portal that gives everyone the same interface and the same features, no matter what end-point they're using.

With Click to Meet, users can enjoy the benefits of two-way video without all the hassle. They can make calls from their browser, with the click of a mouse—and because it's completely automated, there is no drain on IT/IS resources. There's nothing easier or more cost-effective than Click to Meet for enterprise-wide video communications. Click to Meet lets you bring relationships back into your business connections.

Click to Meet (CTM) is a web-based video communications portal for IP, ISDN and ATM. It delivers a broad array of real-time interactive video applications without complexity. CTM frees users from the underlying technology, giving them direct control of two-way video calls and multi-way conferences, while providing high-quality video across multiple network types. And the truly remarkable thing is that the power of video communication is all harnessed through a simple point-and-click interface, which everyone understands immediately without training.

Click to Meet at Work

Today's global networks make two-way video conferencing and data collaboration critical for time-sensitive communications. Here are just a few areas where Click to Meet can make a crucial difference.

- Business (all levels of information sharing, meeting and conferencing)
- Medical and Scientific (telemedicine, real-time procedures and instruction)
- Education (distance learning and information exchange, teacher access)
- Government/ Law Enforcement (secure virtual meetings, telejustice)
- Consumer/ SOHO (Personal communications and B2C applications)

Information realizes its richest shared value with Click to Meet!
FVC.COM pioneered videoconferencing on ATM to enable reliable, high-quality video over converged networks and to dramatically reduce the cost of operation. Endorsed and licensed by other vendors, FVC.COM’s video technology is at the heart of the largest video networks in the world. Now that IP-based videoconferencing technology has matured, we’ve applied our video networking expertise to make two-way video simple and affordable on any network. We have achieved this through Click to Meet, the industry’s first video communications portal. Click to Meet puts a human face on e-business, e-learning and all forms of electronic communications.

Click to Meet works its magic through the comfortable medium of the web browser. The interface reflects our belief that it’s people that connect, not devices. Subscribers use the same consistent, common user interface for two-way calls and multi-way meetings. New subscribers can be initialized in seconds.

**Any-to-Any Two-Way Video— Network, Technology and Vendor independent**

Founded on a standards-based architecture, Click to Meet gives users seamless point-and-click control of secure videoconferences between IP-, ISDN- and ATM-based networks. Click to Meet protects your investments by transparently integrating these standards and installed bases. It is so transparent that no matter what system is on the other end, no matter if the endpoints are high-end room systems or low-cost desktops, people can call each other, knowing nothing more than the name of the person they want to call. Click to Meet governs all the video resources, such as gateways and MCU’s, without involving administrators or video experts. It’s all completely automated, fault-tolerant, and secure.

*THE FACE-TO-FACE CONNECTION*

Click to Meet is available as a system that your company can install or available as a service, delivered to your company over the Broadband Internet by a growing list of Service Providers. Two-way video, multi-way video and data-collaboration applications really can be effortless: Click to Meet is as easy to deploy and maintain as it is to use. What a relief for your IT people, and what a benefit for your business!
Connections Without Complications

It's simple to direct-dial numbers, do a directory name search, add numbers, and schedule future calls and conferences involving any type of endpoint device on any network. If subscribers don't want to attend a meeting, they can click the Do Not Disturb button. CTM provides extensive call-status information, with real-time visibility: the directory shows who is out there, if the video device is on, and if the other subscribers are already in calls. Now there's no guesswork when calling someone. Subscribers don't even have to be at a video-enabled device to make or schedule calls; they can do it from any PC.

Once each subscriber has been added to the directory, and the video end points configured to register with Click to Meet, users don't need to remember what numbers to call—everyone is there in the directory. CTM is as easy to use as surfing the web. Directory names represent a unique identity—a person, not a device. In the future, this architecture will allow subscribers complete mobility: when a call is placed, the call will reach its intended recipient on whatever video-enabled device they happen to be at—in a conference room, at their desk or at home—without the caller knowing any differently. And all that simplicity and call flexibility is matched by multiple layers of system security.

Desktop Deployment Made Easy

To complement the simplicity of Click to Meet, we've developed an equally simple desktop codec called V-Meeting. It's a practical, affordable way to deploy video from the desktop. V-Meeting is an inexpensive video-conferencing client that's tightly integrated with CTM. It's a software codec that leverages the power of today's fast PCs while eliminating the need for any expensive or complicated hardware installation. There are no confusing controls, there's nothing to learn or configure: V-Meeting's simplified interface—and smart networking features such as asymmetric call rates and VPN support—make it an ideal solution for telecommuters as well as in-office users. At last, V-Meeting's fast, painless desktop setup makes desktop video deployment easy, without making any demands on your IT resources. And of course it's fully interoperable with any other video end point you choose to use with CTM.

User-Controlled Self Service

CTM subscribers can manage all their call and conference needs completely on their own:

- Make two-way video calls
- Make multi-way video calls
- Perform data collaboration
- Schedule any type of call

The Click to Meet interface makes face-to-face communication and collaboration easy and intuitive—it's as simple as a phone call, only three times as effective: voice, video and data. From a personalized CTM Portal Interface, users get access to a full range of directory services, where they can see and manage:

- Real-time user status
- Global directory of names
- Personal favorites list
- Personal recent calls list
- Personal calendar of scheduled calls

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Getting up and running with V-Meeting is as easy as plugging in a USB camera and drivers, downloading the V-Meeting software and registering as a Click to Meet subscriber. All network configuration is done automatically by the CTM resource manager. Passive observers don't even need a camera—by invitation, they can see meetings as a one-way broadcast. V-Meeting even dynamically detects and overcomes any VPN contention to reach the designated gatekeeper when a subscriber dials in from home over a VPN. Viola! Instant video and audio quality that's equal to conventional hardware installations—at a fraction of the time and cost.

FVC gives you free choice over how you want to deploy Click to Meet. Based on your network characteristics, your in-house or outsourcing policies, or the breadth of your deployment needs, CTM can be supplied as an in-house system, or as a service.

Our video portal architecture is designed for future support of distributed deployment, so that you or your service providers will be able to manage video traffic efficiently without wasting bandwidth or paying unnecessary long-distance toll charges. CTM's architecture will allow advanced networking features such as least cost routing (LCR) with distributed MCUs and gateways to maximize network efficiency, whether across your own backbone or a service provider's backbone.

The CTM architecture complements the user interface in simplicity and strength. Seamless resource management, carrier-grade reliability and the scalability to support hundreds of thousands of users over all existing and future flavors of broadband network connectivity makes CTM the video architecture of choice. It is fully standards-based, and end-point, gateway and MCU-independent. A global dialing plan and gatekeeper-directed calling makes call setup and management user-transparent, reliable and secure. The automated management of its resources and its broad scalability means carefree administration from the IT department—that's the magic of CTM's automated architecture.

Standards-Based Device Independence

CTM provides the means for enterprises to fully exploit the reduced operational and management costs of convergent systems and standards. That's because Click to Meet is a standards-based solution. As a video networking company, FVC.COM is focused on open solutions that serve the whole of the market, a vision that directed CTM development to be end-point, gateway- and MCU-independent. That means that you can choose the end point you like, without being locked into any vendor. This device flexibility allows you to access all the features of Click to Meet through your end point of choice—and be able to take advantage of other Click to Meet capabilities as they become available.

Click to Meet is all about adaptability, something wise IT departments delight in: Your organization can deploy your optimal setup without compatibility fears. CTM supports a growing list of Click to Meet certified end points, gateways and MCUs, including our own and best-of-breed components from other vendors. Click to Meet delivers true any-to-any conferencing: it makes the connections, no matter the connectors.
We realize how important it is to be able to collaborate and share applications in conjunction with video communications. Click to Meet’s smooth web-based integration provides the perfect platform for meshing video with data collaboration services. CTM supports Webex as well as the popular chat, whiteboard, application-sharing, web-conferencing and file-sharing data-collaboration tools based around the T.120 standard. And rest assured that CTM-initiated data-collaboration services are as easy to use as its smooth videoconferencing features.

The benefits are considerable:

- Broader reach to non-video enabled participants
- Overcoming some of the limitations of T.120
- More streamlined setup of data-collaboration events

A web developer’s kit that has access to open APIs makes CTM extensible to meet future needs. With it, you can integrate CTM with other B2B applications, or simply put a different skin on the CTM portal interface to blend it with related applications.

**Gatekeeper-Directed Calling**

An intuitive global dialing plan removes the worry of making up unique numbers or making users give out their IP address in order to be reached—it simplifies video access and matches the level of privacy a person has with their phone. A combination of standards-based user-level and network-level security mechanisms ensure there are no security risks or difficulties deploying Click to Meet on your network, and ensure that only authorized subscribers get to use it.

We’ve designed CTM directory services to be people-centric. All of the network addressing information is hidden from the user; in fact, even the IT manager doesn’t need to worry about many configuration details, or how CTM finds a person or device in the network. All calls are brokered by the CTM resource manager’s gatekeeper, which resolves video numbers and IP addresses for call participants in order to initiate video calls in a secure manner. This technique—gatekeeper-directed calling—securely exchanges each subscriber’s call capabilities across firewalls to initiate and track every call.

Gatekeeper-directed calling provides a number of unique security features unavailable with any other solution:

- CTM services can be delivered safely through firewalls
- There’s no possibility of eavesdropping on multi-way calls
- Only authorized CTM subscribers can make video calls
- Every video call is tracked down to the minute

**Call Detail Records**

Thanks to gatekeeper-directed calling, all call details are logged. This provides your organization with a host of usage monitoring and assessment options for carrying out billing, usage analysis and capacity planning. You can examine utilization virtually any way you like—by subscriber, by department, by time of day or duration—and bill people or departments accordingly. This gives you the big picture in assessing network demands, for planning the rollout of additional subscribers and end points as your network grows.
Seamless Resource Management

Click to Meet is a model of seamless resource management. It automatically drives all gateway and MCU resources, finding and reserving those with available capacity as demands are made. Resources are reserved when there's a scheduled event, so nothing gets double-booked. Load balancing is a given. If an MCU fails, Click to Meet just removes it from its list of available resources and uses others until it becomes available again. The flexibility of the CTM architecture makes it simple to add more MCUs and gateways when more capacity is needed.

CTM's architecture is designed to be open, standards-based and network-centric, so that it can scale to whatever size and configuration your business requires. Server clustering, redundant gatekeepers, and seamless resource management all serve to ensure high reliability and easy growth. And because CTM manages its resources without intervention, one thing you won't have to scale is your IT department: Click to Meet's easy setup and automated resource management virtually eliminates the need for any day-to-day administrative overhead.

Click to Meet Architecture Overview

Whatever your WAN setup, CTM can utilize distributed or centralized deployment for optimum efficiency, security and carrier-grade scalability. With Click to Meet, there's no need to worry about any impact on your data services if you prefer to run your video traffic over a parallel network, CTM can segregate video from data traffic and help you control video traffic loads with application-specific routing.

Stateless resource management through the CTM resource manager ensures true reliability and scalability. It keeps all the information about registered subscribers and calls-in-progress in a readily accessed SQL database on a RAID subsystem. If the gatekeeper dies, another immediately fires up to retrieve the data and preserve the state information about all registered subscribers—nobody loses a connection. To CTM subscribers, it is just video as usual: clean transmissions and no problems.

In multiple MCU setups, the Click to Meet server will automatically recognize which MCU is available and which seats are usable for the call load. This intelligent resource management for call distribution is completely transparent to the user. This "round robin" type of resource management even works across gateways for outbound load balancing, so you always have the resources needed to accept.
incoming calls. Click to Meet is a network administrator's dream: it will steadily go about its conference-management business without any need for IT attention.

Service and Support

Click to Meet is all about choice: it works with all protocols, all networks, and all end points. And we've made it easy to serve your particular enterprise needs by making it available as a system or a service—either way, you can obtain Click to Meet through CTM-certified partners, and they'll even help you deploy it. (But with its automated management, you won't need much help.)

FVC will provide regular software upgrades and full tech support is available—but the CTM architecture is so well engineered that maintenance is a breeze. Because CTM is network-centric and end-point independent, every new feature will benefit every user, not just a few select end points. Putting the Click to Meet system to work is like opening a present: you just unwrap it and enjoy its benefits.

Easy video communication has finally arrived, and its name is Click to Meet. In fact, the whole of Click to Meet is about ease-of-use and reduced administration. Ease-of-use means improved business performance, and leveraged equipment and low support costs mean more bang for the buck. All the user needs to know is how to use a mouse and who to call—the rest is completely intuitive. And all the back-end processes are completely automated, so there are no IT-department penalties.

It's a breakthrough system that couples quality with affordability.

With Click to Meet, you can leave the troubles of traditional enterprise video behind, and replace them with an automated, web-based solution that's as simple to deploy, maintain and support as it is to use—and you can still use the equipment you already have. CTM doesn't simply provide a lower Total Cost of Management—it's easy setup and intuitive interface make it a pleasure to use. Its smooth integration of IP, ISDN and ATM supports existing deployments and enables communication advances for desktop mass-deployment over broadband IP.

Whether system or service, whether IP, ISDN or ATM, and whether this end point or that, Click to Meet puts two-way video to work with the click of a mouse. Make your business connections count: CTM gives you face-to-face communications across the globe. We've raised the bar on video communications. Contact FVC to see how you can put a face on e-communications.

SUMMING IT UP