

NXi's Video Remote Interpreting (VRI) System

A NEW SERVICE FOR ON-SITE INTERPRETING (OSI) COMPANIES

Read on to learn how NXi's Video Remote Interpreting system can provide your customers and interpreters with the best video-based interpreting technology on the market.



IMAGINE...

Imagine... your customers can walk up to a PC, select a shortcut on the desktop, and open a simple program or a web page in their browser. With a few simple clicks, they choose a language, and perhaps other desired skills, from an on-screen menu and select "Call." They are quickly connected to one of your foreign language interpreters working at home or office in a completely secure video and audio session of unparalleled quality—and the only logo they ever see is yours.

Imagine... you, your supervisors, and your interpreters can log into the VRI system, and see exactly what interpreters of what language type are currently logged in. You can see all active VRI calls in place as well.

Imagine... the VRI system collects information on all its activities. You have a complete audit trail of all logins and calls in the system. The VRI system can be configured to generate your billing reports and invoices.

Imagine... one of your clients in a hospital needs a Vietnamese interpreter with medical terminology skills at midnight, but you don't have an interpreter logged in with that skill set right then. NXi's VRI system lets the customer choose this language and skill-set, and the VRI system will itself call one or more cell phones to alert a Vietnamese speaking interpreter with skills in medical terminology. An interpreter can then log into their nearby web cam equipped computer or video phone, and your customer gets the interpreter they need.

Imagine... you can easily work with other interpreter-provider companies (of your choosing) to cross-cover each other. Suppose your customer needed a particular dialect of Arabic at midnight, and you don't support this dialect. NXi's VRI system lets you select partner interpreter-provider companies you are willing to work with. If one of your partner companies has an interpreter speaker for this type of Arabic, then the VRI system can find and connect this person to the hospital from anywhere in the world. Your company gets the credit for good service (and part of the revenue), and your customer is happy! You can advertise 24/7/365 support for many languages with partner companies.

Imagine... you or your supervisors are the administrators for your own VRI "domain". You can add new interpreters and assign skills to these interpreters, or ask NXi to do this for you. "Skills" can include languages spoken, familiarity with terminology like legal or medical, and gender. You can create new skills to track if desired. You can change many settings in your company's own VRI system!



OVERVIEW

Video-based interpreting technology offers many advantages over traditional "in-person" interpreting services, both for the interpreter and the customer. It saves interpreters the expense of traveling to and from the customer site, so they can spend more time interpreting and less time moving from place to place. It also makes it much easier for customers to quickly gain access to your interpreters on the fly, when and where they need them without scheduling in advance.

Customers appreciate the ability to

- Have "on-demand" interpreting sessions without scheduling in advance
- Have brief sessions of any duration as needed without minimum interpreting times
- Instantly gain access to interpreters with special skills or languages from any PC or video device

HOW DOES IT WORK?

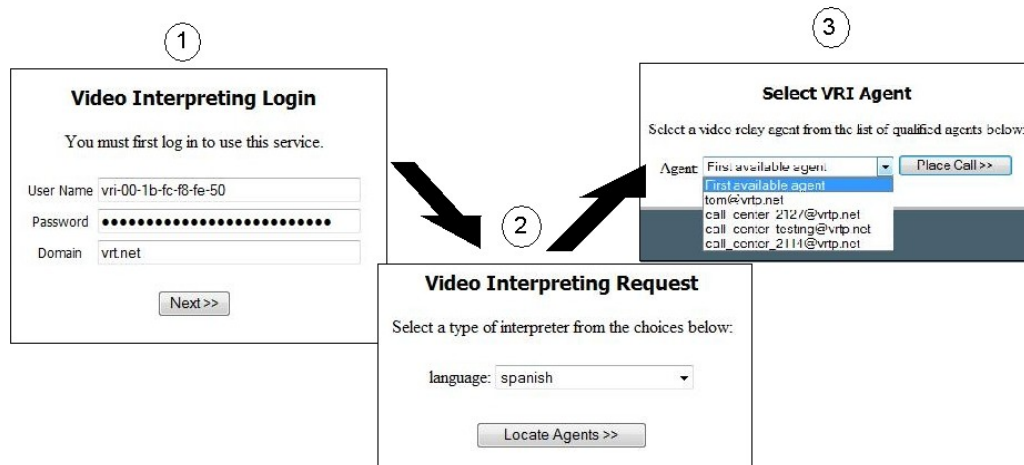
First, NXi will provide you with an NTS “domain” for the exclusive use of your interpreters and supervisors. The servers for your domain will be kept in NXi’s data centers and NXi will perform all maintenance required to keep your domain running smoothly. Your customers and interpreters will each be provided with software to initiate and participate in video interpreting sessions. Your administrative staff will be given administrator-level accounts, which give them power to manage user and group accounts within your domain, create reports, and to view the real-time logins and sessions happening in your domain.

CUSTOMER SIDE

In order to use VRI, the customer organization needs at least one computer with (a) Internet access, (b) computer speakers, and (c) a web camera. The customer may turn as many such computers as they desire into “VRI Stations” capable of handling video interpreting sessions. A 5-minute installation process is all it takes to turn a computer into a VRI station. (See “Appendix” section of this document for details.)

Once the customer has a working VRI station, starting an interpreting session is a three-step process:

- Step 1: Double click the “VRI Services” web browser icon, or program start icon, on the desktop and click “Next” to log in.
- Step 2: Select a foreign language (and optional “skills,” such as gender or medical or legal terminology) and press “Locate Agents.”
- Step 3: Choose “Next Available Agent,” or select a particular translator, and click “Place Call.” A fully secure, top quality VRI session is quickly established!

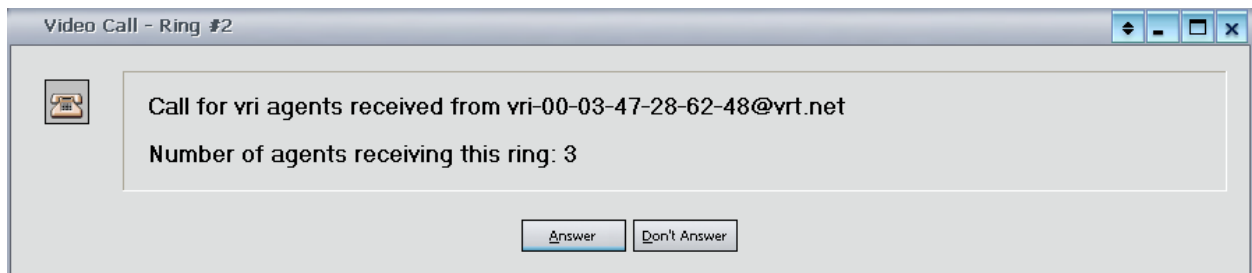


INTERPRETER SIDE

The interpreter will run a program called the “NTS Client” in order to receive calls. (Note: The customer-side may use this same software, or the customer may use a web browser).

Each interpreter belongs to one or more “groups,” which specify what kinds of languages and special skills the interpreter is capable of providing. You create a group for each “skill”, so there will be groups for different languages, as well as groups for gender or expertise in terminology. When a customer selects a given language such as “Spanish”, and “Medical Terminology” from the drop-down box and presses “Place Call,” the NTS system will look for interpreters that belong to both the Spanish group and the Medical Terminology group among all logged-in interpreters. Interpreters who belong to all desired groups will receive a “ring box” that will pop up on their desktop with an audible sound and optional flashing light. The ring box will contain information about the customer, and will also list how many *other* interpreters are also receiving this same ring box.

If the interpreter presses the “Answer” button, their web cam will be activated and they will be quickly connected to a video interpreting session, where they can see and hear the customer-side and the customer can see and hear them.



BENEFITS FOR YOUR COMPANY

You receive a fully branded video solution

NXi's approach is have your OSI (On-Site Interpreting) company offer video under your brand and logo. Your customers will see your logo on the desktop browser icon, and your logo on the main web page used. To the customer, the video-based translation service is your product offering. NXi will handle the central servers and technology needed.

Top-quality video and audio

Video is beginning to be accepted for interpreting services, but most offerings today have network security issues or network connection complexities, and many are costly or suffer from quality problems. The NTS solution has the best video and audio quality available - its first application was in American Sign Language interpreting over the Internet.

Network Security

NTS has been cleared for use on numerous high-security networks, including many U.S. federal agencies such as the IRS, SSA, and numerous Department of Defense sites. The technology requires only a single outbound network port to a known central server location. This "pin hole" opening in an organizations firewall will be accepted much more readily than standard "H.323" video calls.

Easy implementation for you and your customer

Installation on the computer side is a simple, five-minute process. The hardware is inexpensive since it uses an inexpensive web cam (\$50 to \$80) and existing PCs. The technology is fully hosted and managed by NXi Communications, leaving you to focus on providing the best interpreting services possible.

Note: The NTS system will shortly allow a customer to use a standard H.323 video phone or device if desired. Your interpreters will still only need the NTS client software described above. Contact NXi for details.

Create new sources of translator session-minutes for your company

NXi's products are used today in over 150 organizations, including most U.S. federal agencies, state and local government agencies, Fortune 500 companies, and organizations of all types. Many of these organizations are interested in interpreting services, and an NTS-capable interpreting company could easily generate new business from existing NTS customers.

TECHNOLOGY AND INTEGRATION

Unlike more expensive hardware-based video solutions, VRT requires only a standard PC and inexpensive and easy-to-install webcams. Our video is at the leading edge of the industry, with sufficiently high frame-rate and resolution that its first application has been in video remote interpreting of American Sign Language (ASL), the visual language used by the deaf.

Some high-level information about our audio and video are as follows:

- Video with 30 frames per second and 352 x 288 pixels. 256k bit data rate on the network is recommended, and performance is adequate down to 110 kbps.
- Hi-Def video (1024x720) is coming out soon (2Q09).
- Video codec follows H.263(++ or H.264.
- Wide Band Audio (ACELP.wide) with 16 kHz -- far better than telephony quality.
- Synchronous transmission of audio and video. This means that lips stay in sync with voice sounds.
- Support for most PCs using Windows 2000/XP/Vista/Windows7, webcams, graphics cards, audio hardware, etc.
- Also compatible with standard video phones or devices, including the “rolling cart” type used in some hospitals or other customer-sites.

SECURITY AND FIREWALL ISSUES

INTS has been installed on high security networks for over ten years. NTS sites include U.S. federal agencies including many U.S. Department of Defense sites and U.S. federal agencies.

In operation, NTS video requires only one (for a browser approach) or two (for the NTS program approach) outbound network ports to a known central server location. No inbound "listening" ports are needed across the organization's firewall. Network security personnel who won't allow standard H.323 video calls will typically allow NTS video.

- Audio, video, and data are encrypted and secure.
- NTS can, with proper configuration, meet the privacy, regulatory, and security needs of almost any customer or industry. Contact NXi to discuss any special security requirements.

BILLING AND CALL DATA REPORTING (CDR)

NTS has full Call Data Reporting capabilities and can be integrated as needed with a provider's existing systems for billing. Options include:

- Reporting customer and call information to a provider's web-based data system using an XML/SOAP interface.
- Generating stand-alone CDR reports via a web interface.
- NTS's full CDR reporting will be available 2Q09, but ad hoc reports may be created today.

CREATING CROSS-COVER PARTNERSHIPS

Suppose a customer needs a particular language at midnight. You may not support that language, or have an interpreter available at that time. The NTS system allows you to set up partnerships with other interpreting companies to "cross cover" each other as desired.

NXi believes your customers are your customers, and NXi will only engage your partner company's interpreters if you have authorized this in advance.

Your customer will only see your logos and "brand", even in a roll-over situation to a partner interpreting company. You can negotiate revenue-sharing with your partner companies, or let NXi arrange this for you. NXi will assist you in the setup needed for these business relationships.

With partnerships, your company can offer 24/7/365 coverage of many more languages.

SYSTEM MONITORING, CONFIGURATION, AND SETUP

The centralized NTS servers support a notion of "domains," An NTS "domain" is a community of users, groups, settings, and scripts within the NTS system. NXi will set up your OSI Company with its own domain. Your company will be given user-level accounts for translator-agents, and also administrator-level accounts for configuring your domain. These administrator-level accounts may run "Live View" Monitors to see current system activity such as (i) active logins by translator-agent users within your domain, and (ii) active translation sessions involving your translators. Your administrator-level personnel may also, with NXi's support and assistance as needed, control the settings and preferences used by NTS for your environment.

Your customer organizations are also typically set up in their own "domain" within the NTS system as well. In this way customer personnel, and/or your personnel, can view or run reports or Live Monitors specific to each customer.

NXi's technicians and developers are available to assist in the setup, maintenance, and support of any NTS domain or site.

DEMONSTRATIONS

Please call NXi's offices during our business hours, 8 AM to 5:30 PM MST, for live demos of the installation and use of VRT. Ask for NXi's Chief Technology Officer, Mr. Tom McLaughlin. NXi will discuss with you how the extensive power and configurability of NTS can add video to your current On-Site Interpreting operations.

Setting up a demonstration of NTS's VRT services is easy.

The demonstration of NXi's video for translation services requires that you have at least one computer on the internet with a web camera and computer speakers (or headset). If you wish to see a demo of both the customer-side, and the translator-side, then two such computers will be needed.

Go to NXi's web site at www.nxicom.com for full instructions on setting up a demonstration for both the "customer side" and the "interpreter side".

PRICING MODEL

NXi's typical approach is to charge the end-customer an annual site-license fee that is based on the size of the organization. This charge is not large, and is meant to cover NXi's costs in installation and maintenance expenses in setting up the needed webcams and audio hardware on PCs at a customer site.

Then, NXi receives a fixed per-minute amount for billable minutes from your company of VRI calls using the NTS system. This per-minute amount is in the 20-25 cents/minute range. Your company will handle all interactions and billing with your customers. NXi can assist in creating the CDR records needed from the NTS system.

APPENDIX: “Further Details”

WHAT IS THE NTS PRODUCT?

The video product described here has been developed by NXi Communications, Inc, and is called “NTS.” NTS has been under development for over 10 years, and today is used by over 200 organizations including most U.S. federal agencies, Fortune 500 companies, U.S. Department of Defense sites, state and local government agencies, and organizations of all types.

NTS has been tested for network security and approved for deployment on numerous high security networks, including federal agencies like the IRS, Social Security Administration, the National Institutes of Health, as well as Department of Defense sites like the Army Corp of Engineers, the Navy-Marine Corp Intranet, the Defense Logistics Agency, DOD bases, and many others. Network security is very important to most organizations, and unlike competing products, NTS has strong credentials in this area.

For most of its history, NXi has focused on text and video communications for the accessibility and accommodation needs of the deaf. NXi has extensive experience and technology in linking or conferencing “relay operators” into calls between deaf and hearing persons. This experience and technology applies readily to conferencing foreign language translators to customers.

NTS version 7, released in June of 2008, greatly improves the video and audio modules used in NTS, making NTS-7 a great platform for Video Remote Interpreting.

HOW DOES NTS WORK?

NTS is a “client-server” product where any number of NTS server computers create a platform for end-points like browsers, video terminals, and the NTS client software. Both the foreign language interpreters and the customers run such “client-side” software or devices.

NTS is a true distributed architecture where additional servers automatically create redundancy and load-balance, and allow an NTS system to scale to large numbers of users. NXi Communications maintains and supports multiple data centers with NTS servers.

For interpreters and for customers, installation and use of the NTS system is very simple.

On the customer side, “video terminals” may be used, but most customers will prefer a standard low-cost computer. The local computer needs a network connection, a web cam with a microphone, computer speakers (or a headset), and the NTS video software. The NTS video software runs on a browser like Microsoft Explorer, and is also available in a small program. The customer may use either software approach.

Installation at a customer site is a short five-minute process. At the local site, a technician will run a simple setup program provided by NXi but customized and branded for your company.

NXi's CONTACT INFORMATION:

NXi Communications, Inc.
4505 S. Wasatch Blvd, Suite 120
Salt Lake City, UT 84124

Telephone: 801-274-6007
Web site: www.nxicom.com
Email: sales@nxicom.com