Volume 1, Number 1 - 1/12/2007 – “ARTN Newsletter - Quarterly News Rollup”

Welcome to the ARTN Newsletter 1st Edition!

By Tom Bohn, B2 Networks LLC

Hello and welcome to the first edition of a new quarterly newsletter designed to keep you informed about developments related to the Alaska Rural Telehealth Network (ARTN)! The newsletter will be released the second week of the first month of each quarter, and will contain news and information about network developments and the services and people integral to the ARTN’s use and development. We’re proud of how far we’ve come in the past few months, and there is much to tell.

Future editions of the newsletter will be distributed via email to the membership of the ARTN Executive, Clinical and Technical committees, but will also be made available on-line at the new ARTN website, which is currently under development. Look for that website in the future at http://www.artn.org – the website will include general news and information related to the ARTN but will also serve as a portal to an ARTN blog-server where ARTN members will be able to share news, viewpoints, technical and clinical information related to their use of the ARTN Telehealth system. The new website will also provide portal access to SNMP-driven network management and monitoring tools, allowing IT and IS managers at participating organizations one central site for access to real-time analysis of wide area network links, as well as historical analysis information.

Tom Bunger, B2 Networks LLC, emplaces Cisco 7606 platform at ARTN core.

We hope that the newsletter format will provide a rich but efficient information vehicle capable of keeping participants up to date on project activity, scheduling and logistics, while also serving as a forum for information sharing on telehealth topics of all sorts: clinical, technical and administrative or managerial.

The newsletter welcomes content contributions from the ARTN membership and from interested parties with news and information to share with the network’s membership. Please forward contributions/news bites/information to: artn-support@b2ak.com – and please include the keywords “ARTN newsletter” in the subject line!

ARTN Deploys to South Peninsula Hospital

By Tom Bohn, B2 Networks LLC

It's official: South Peninsula Hospital (SPH) is now connected to the ARTN and is providing clinical distance delivery imaging services via the new connection. Work began on deployment of the SPH site (chosen as a "Beta" installation location for the project) in late September of 2006 and basic connectivity services were established and in a test mode in time for the first ARTN project committee meetings in late October. Limited video capabilities of the initial link were explored during October 2006 committee meeting sessions and continued efforts were underway at that time to explore the various remote site PACs integration issues presented by the new link.

November and December 2006 were utilized for continued ARTN/SPH collaborative testing of remote PACs functionalities including:

- **ARTN Managed VPN Portal Service©** concentration of SPH business partners (including remote nighthawk readers, McKesson Horizon© PACs support personnel and GE Medical© imaging system technical support personnel) at the Anchorage-based Internet ingress portal
- Testing PACs access in Homer from Vancouver-based McKesson technical support centers
- Baselining study transfer times across a 3Mbps dual-DS1 loop bonded WAN link from Homer through the Anchorage ARTN core and out to a remote reader on the Anchorage business broadband network

Other distance delivery services were also tested and developed, included:

- remotely-delivered **ARTN Managed and Secured Internet Service©** access capacity in Homer via the ARTN WAN backbone
- VoIP toll bypass infrastructure integration at Homer for remote delivery of Anchorage dialtone via the **ARTN Managed Toll Bypass Solution©**
- Aggregation of remote teleworkers in the Homer area as well as the Wasilla/Palmer area via consumer broadband loops in combination with the **ARTN Managed VPN Portal Service©** using hardware clients and ARTN's Anchorage-based Internet ingress systems

The "Beta" **ARTN Video Services Cart©** was delivered to SPH in mid-December, featuring a Tandberg© Edge 85 MXP HD-capable H.323 videoconferencing codec/endpoint, a clinical grade VTC cart and a 37-inch Mitsubishi© HD 1080p monitor.

This system – designed to plug into the Video Conferencing Service interface in the ARTN remote site Cisco© networking platform – provides SPH with the ability to send and receive HD-quality IP video signaling, display high-definition multimedia content and to accept a wide variety of high-definition video scoping instruments for display via Tandberg DuoVideo© or H.239 conferencing methods to the ARTN WAN.

Mitsubishi 37" attached to ClearOne Titan cart via Chief VESA mount…

SPH now utilizes the ARTN WAN link for a wide variety of distance delivery healthcare practice purposes including teleworker aggregation, distance delivery clinical imaging services, general purpose information and Internet access and various IP-driven business communications applications.

APSCI's ARTN Project Awarded Funding by Murdock Charitable Trust/Rasmuson Foundation

By Randall Burns, ASHPIN Director

As many of you know, in the face of very serious public health issues facing rural Alaska, local hospital and clinic leaders have looked for ways to help their rural facilities face the challenges inherent in providing services in remote and isolated locations. The decision to create the Alaska Rural Telehealth Network (ARTN) came with the understanding that technology can bridge many of the gaps in health service delivery encountered by rural hospitals and clinics. This project provides an opportunity for frontier healthcare facilities to increase the quality of care that they offer while alleviating the expense to families (and third party payers) of unnecessary patient and family member travel to larger, more urban facilities, travel that is often now required because local treating professionals lack adequate assessment tools.

Amazingly, ASHNHA's Program Services Company, Inc. (APSCI), on behalf of the ARTN, has raised over $5 Million to support design, construction, and implementation of this important, private telehealth network.

The vision of the twelve (12) ARTN member facilities and the Alaska State Hospital and Nursing Home Association would not have been possible without the support of a variety of important funders. The ARTN is proud to list its benefactors:

Denali Commission - $2 Million
Hospital and Clinic Members (ARTN matching funds) - $1.2 Million
Alaska Legislature/State of Alaska - $1 Million
Rasmuson Foundation – $900,000
The M. J. Murdock Charitable Trust - $500,000

The Murdock and the Rasmuson grants were the last grants received, and they placed us at our initial goal of $5.4 Million.

In the past we have publicly thanked Tessa Rinner and the members of the Denali Commission for their initial funding, which gave us the support we needed to go forward. The Alaska Legislature was also very supportive of our project, and the work done by ASHNHA CEO Rod Betit and many of the hospital administrators and their city managers and council members in expressing support for this legislative capital appropriation assisted greatly in our success in raising $1 Million from the State. Particularly, it should be known that without the initial support of Representative Peggy Wilson from S. E. Alaska, it is doubtful our $1 Million request would have made it to the Senate and House Finance Committees for their consideration.

Finally, we must be extraordinarily thankful for the support of the two foundations.

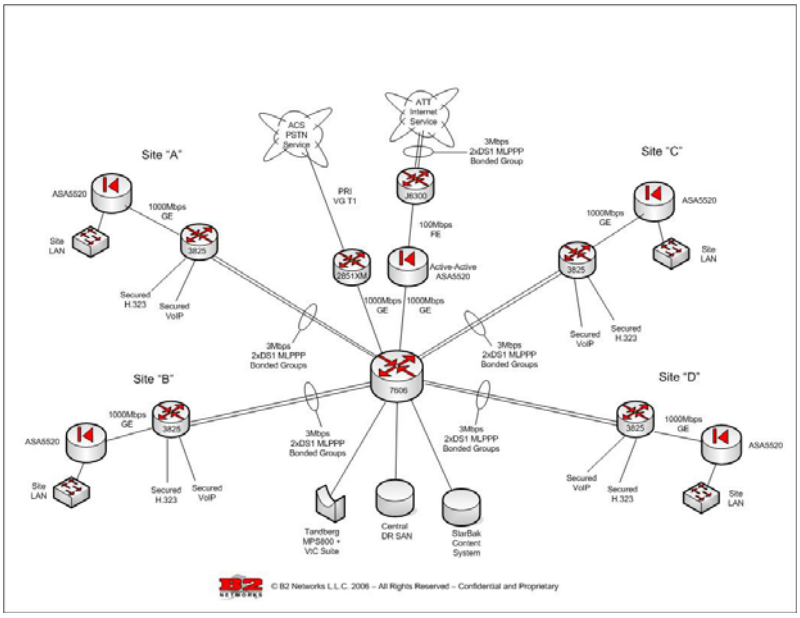
We began working with both of these foundations in mid-2005, and, from the outset, appreciated the fine support of Murdock Project Officer Jan Kennedy and Rasmuson Project Officer Joel Neimeyer.

As you may know, the M. J. Murdock Charitable Trust was created by the will of the late Melvin J. (Jack) Murdock, who was co-owner of Tektronix, Inc., a business that he and long time friend and partner Howard Vollum founded in 1946 and which became one of the world's prominent electronic instrumentation companies and a major employer in Oregon. He was unfortunately killed in a float plane accident in 1971, while he was still in his mid-50's. Because of his commitment to and success in the Northwest, the Trust endowed by his will supports grant

(**"APSCI's ARTN Comes To Life!" …continued from Page 3**)

making efforts in five states: Alaska, Idaho, Montana, Oregon, and Washington. The mission of the Trust is to enrich the quality of life of Pacific Northwest residents in creative and sustainable ways.

The Murdock Trust's belief in the value of this project to rural Alaskans was key to its support of our $500,000 request and, in turn, the Trust's support was very helpful in encouraging the support of the Rasmuson Foundation. Trust Project Officer Jan Kennedy reported that the Trust board was excited about the ARTN project and thrilled to be a part of our efforts to create a telehealth network for rural and remote healthcare providers.



Simplified Representation of ARTN WAN Architecture ©2006 B2 Networks LLC / APSCI

The Rasmuson Foundation's grant was our completion grant and was therefore doubly important to the project. The amount granted to the ARTN project is very large for the Foundation and, as Joel Neimeyer stated, indicated the full support of the Foundation for the benefits the ARTN project brings to rural residents presently without access to key telehealth services.

The ASHNHA Program Services Company Board of Directors joins the staff and administrators of all twelve of the ARTN sites in expressing our sincerest and joyous thanks for what this funding has meant to the communities we collectively represent and for the services these providers can, over time, bring on line with the express intent of substantially improving the quality of local healthcare service delivery.

Wrangell (Wrangell Medical Center)
Petersburg (Petersburg Medical Center)
Sitka (Sitka Community Hospital)
Cordova (Cordova Community Medical Center)
Valdez (Providence Valdez Medical Center)
Seward (Providence Seward Medical & Care Center)
Soldotna (Central Peninsula General Hospital)
Homer (South Peninsula Hospital)
Talkeetna (Sunshine Community Health Center)
Glennallen (Cross Road Medical Center)
Kodiak (Providence Kodiak Island Medical Center)
Unalaska (Iliuliuk Family & Health Services)

ARTN Managed Toll Bypass Solution© Goes Live

By Tom Bohn, B2 Networks LLC

The ARTN Management Team has turned the network's first voice PRI trunk into the ACS© Anchorage voice dialtone cloud – enabling the **ARTN Managed Toll Bypass Solution©**. As of January, 2007, ARTN participants will be able to take advantage of an Anchorage local H.323-compliant voice call gateway: any number local to the Anchorage metro area will become a "local" call for the remote site.

The **ARTN Managed Toll Bypass Solution©** provides remote sites the ability to trunk existing PBX and key voice systems to the ARTN WAN – allowing local 7-digit Anchorage calling from the integrated remote voice system.

"The benefits are enormous – probably enough to cover all the costs of connectivity to the new network," said Duane Christiansen, IT Analyst for the Homer-based South Peninsula Hospital. "With the savings we'll realize over an average month's long distance voice communications, we'll likely be able to cover our costs for the new WAN and its managed service components."

"Plus we get all the benefits of the new services available across the WAN. So it's kind of a no-brainer for us," Christiansen continued.

Designed for flexibility, the toll bypass point of presence model can scale with the addition of further voice gateways, or toll bypass POPs. Such additional voice gateways are under consideration – targets of opportunity such as the Seattle, Portland and Vancouver metropolitan areas are currently being assessed for potential integration into this new managed service.

ARTN Managed VPN Portal Service© Provides AK Business Link to GE, McKesson and Others

By Tom Bohn, B2 Networks LLC

The new **ARTN Managed VPN Portal Service©** is now aggregating demand for VPN access services at the ARTN core facility located in Anchorage, AK, and presenting medical business partners a standardized interface and method for interconnection to their remote rural partners in Alaska.

"We think it's just awesome," said RAPC's BJ Hendricks. "To think it's come this far this quickly really is amazing. Just yesterday it would take our company up to four hours to receive a single CT study from one of our ARTN partners and we now have that transfer time down to a matter of minutes."

The VPN portal service is currently supporting site to site VPN connectivity aggregation, typically from remote service partners, but the new system does allow some home teleworkers to "telecommute" from their home offices. When fully implemented the new portal will provide remote access (RAS) VPN capacity using the Cisco Systems© VPN software client: ARTN participants will be able to provide secured software client-based access to their remote business partners via a stable and secure infrastructure, without the hassle of having to build out and support multiple individual VPN aggregation systems. ARTN participants will be able to apply varying security policies to their VPN partners' connections, and will be able to selectively enable access to a single host or application, or to a wide range of network addresses and functionalities.