

## Oartech

March 2, 2007

### Introductions

Antioch University - Bruce Friend  
Ashland - Kurt Eckert, Brad Kramer, David McCumber  
Bowling Green State University - Matt Haschak, Mike Smith  
Denison University - Teresa Beamer  
Hocking College - Ben Dalton  
Kent State University - Ransel Yoho  
Ohio Northern University - Bob Beer  
Ohio University - Brandon Saunders  
OSC - Nancy Drugan Koehler, T. J. Sander, Paul Schopis, Ann Zimmerman  
Shawnee State University - Mike Pinson  
Sinclair Community College - Daniel O'Callaghan  
University of Akron - Debra Keller, Deb White  
Wittenberg University - Scott Powell  
Wright State University - Shane DaWalt, Patti Vendt

### Oarnet updates

Client Services, Ann Zimmerman

Slides are available at <http://www.osc.edu/oarnet/oartech/presents/>

Client Services representative for Northwest Ohio is Dana Rogers. Findlay POP is complete. Heidelberg, Tiffin, University of Findlay, University of Northwestern, and Rhodes State are all getting line upgrades.

Client Services representative for Northeast Ohio is Maryann Zbydnowski. Oberlin College is getting 2nd DS3, Cleveland POP is on line, and OAI-NASA has a gig connection in progress.

Client Services representative for Southern Ohio is TJ Sander. Oarnet is putting a mini-POP in Marietta. Marietta College and Washington State CC are collaborating to split the expenses for a gig connection with a possible consortium between schools, government and healthcare. Columbus State CC is renewing their connection. Jefferson CC looking at upgrading with a small collaboration area.

Oarnet is becoming a co-location site for Ruckus. Each school will have to sign their own contracts with Ruckus. The bandwidth used will be intra-Ohio. Oarnet is still interested in working with video conferencing at all sites. At Miami University, an IPTV interconnect has been setup for sports events. In 2 broadcasts, they spent less money than a single use of a satellite truck. It also enabled the use of all intra-Ohio bandwidth and allowed them to work with Ohio Learning Network. Oarnet is setting up a disaster recovery model for work with the larger universities, again, using intra-Ohio bandwidth. The remaining T1 schools are getting upgraded to true broadband. Oarnet is also trying to change the name of the network from TFN to OSCnet because the TFN name is associated with the Taft government and thus somewhat political.

Ruckus is a legal music alternative for music and movie downloads. The cost of the service is paid for by the advertisements. For an extra fee you can get the service without the advertisements. Oarnet does not endorse it, but will be co-locating a server at Oarnet to allow the bandwidth used to be intra-Ohio bandwidth. If you are considering the service, ask a lot of questions when you sign your contract. When they first came up there was some questionable ads on the service. The campuses that are using it find a subscription rate of about 25%, but it has not eliminated the illegal music/movie sharing.

### Backbone Update

Paul Schopis

Oarnet will be closing ring 4. They have the IRUs in hand. OU had an outage due to ice damage. The ice weighed the cable down and a semi-truck took it out. Findlay POP is operational and new Philadelphia

POP is ready to go live. They are waiting on the parts to come in.

Current gateways are running at 75% as many schools have increased their bandwidth due to the new prices. They have connected to WVfiber for transit and peering content. The results are mediocre, the service works, but they are not completely happy with it. They also have a connection with Time Warner Telecom.

Oarnet is still bringing up ITech K-12 on the network. They are still working on getting the cross connects in due to budget issues. About half the sites are connected. Oarnet is also working on an inter-connect with MERIT. The new date to come up is 4/15/07 and they will light it with multiple GigE lambdas on the first day. The connection will be migrated to 10Gbps in the summer. It looks like they will be sharing a port with MERIT to NewNet (the new Internet 2). Oarnet is looking at using collaboration to reduce commodity internet pricing. A Pittsburgh connection is under way with a planned April/May turn on date and is waiting on final funding.

An OIT partnership may come to fruition. The new governor is revitalizing the talks. Oarnet would be providing optical service only. This would provide more opportunities for the last mile and they hope this will drive the broadband connections into the rural areas and provide better opportunities for redundancy. If the service is shared, the cost could potentially be shared as well.

#### I2 and NLR update

There is a NewNet connection targeted for 3/12/07 and they are still working through some non-technical issues. Oarnet finance authorized getting an NLR connection for Oarnet in collaboration with PSC (Pittsburgh). They were not able to enter NLR behind the CIC members. The other difference with NLR from NewNet is that it is available to everyone not just I2 members.

Has there been any other discussion on the issues associated with disaster recovery needs? There has been some discussion, but they are not completely sure what the schools want to do. The schools that have major DR plans have been just planning to use the intra-Ohio bandwidth, but no other special services. They're just using their current bandwidth and not requesting any special bandwidth. Oarnet is willing to work with schools that are working together for DR. However, if you want to do this via a new lambda, you would have some extra costs. Cost for each site would be dependent on the bandwidth needed and equipment that would need to be installed in the POP.

#### CALEA Update

Paul Schopis

A handout was given out that has a response flow chart.

On advice from legal council Oarnet did not file for CALEA because Oarnet is an aggregator of private networks and is thus private and it is not clear what the FCC intent is from current orders and case law so conservative a approach was recommended to wait and see. Oarnet believes their risk is minimal with this stance. Oarnet will provide best possible assistance to an LEA with a lawful request and will develop some flavor of capture ability, but not sure if they will purchase it or develop it. Oarnet will not act as a trusted third party, but will assist in any way they can. They are not willing to shoulder the liability of the trusted third party. OSU also did not file. They feel they are not a public network, nor does wireless make them a public network even though there is no login.

#### Response Issues

The prime directive is to always turn the LEA request over to your legal council. Your attorney can verify that the LEA does have the jurisdiction and is a valid request. It is another liability to give

information that is not lawfully acquired. If an unlawful collection happens it can open the institution up for a lawsuit.

Be prepared to carry out an order when legal council gives the go ahead.

Most of the time, the LEA will come with the name of the individual they desire to place under surveillance. You have to be able to make a strong association between IP and the user. If you have no reasonable mechanism to give them the information and you are working with them in good faith you can tell them that. If they serve a warrant to Oarnet and Oarnet cannot give them information because the information is not available off your campus, the LEA must serve the warrant to the campus. By the same rule, if they serve a warrant to the campus and the data must come from the Oarnet equipment, then the LEA must serve the warrant to Oarnet. Oarnet cannot give the data under the warrant to the campus.

If the LEA comes in and wants you to give them data, you must send them to your legal counsel. Part of the act of good faith is to tell them what they need to do to get your help.

Critical thing you need to have for May 14th is how you plan to respond if you get a request from LEA. The flow chart that was handed out was from Dartmouth on how they respond to legal requests.

Oarnet's plan is when a request comes in is they will send them to legal council, but will put the wheels in place to comply with the request under the assumption that legal council will say to comply. We are hoping to setup a template for end sites to begin working on their plan.

Paul went through a set of slides from MERIT on CALEA. These discussed the various pieces of the law and who is responsible for each piece. Slides will be posted on website [They are not available at this time 6/12/2007]. Includes some packet formats as well as how the equipment would be put into place. You can't write the data to disk, only used a buffer to send the data to the LEA within 8 seconds. You cannot keep the data; it has to be passed immediately on. MERIT is taking the approach to explicitly meet the standards and is writing the software to meet the standards. They are building an "Open CALEA" model.

Would you, as Oarnet members, prefer that Oarnet purchase a couple of devices that can be brought out to the campus in the event of a request that can collect the data and send it on? They may not be able to operate the equipment for the school for legal reasons. Or would you prefer to just contract with a commercial entity? How much are the institutions willing to pay for this service?

Patti suggested that we need to have some discussion before the DOJ calls so we are prepared for this afternoon's conference. She has a question of how we can legally bring Oarnet in to help us meet a request that may come in.

Lunch

Questions for DOJ

Background - Paul Schopis

The goal is to come up with policy and procedures needed to work together with Law enforcement requests for IP packet capture and forwarding. We are technical, how will you come to us with a request? Can they offer some scenarios with them coming to us and how they would expect us to work with them?

Find out how we can involve Oarnet when necessary to help us comply with a request.

How much assistance can we expect from the LEA in fulfilling the request?

What kind of consistency from the LEA can we expect?

Does all this apply to the local agencies as well as the federal?

Discussion with DOJ

Kris Kersada from the FBI and her technical person.

If you provide access to only your faculty, students and staff then you are not within the scope of CALEA. It is only if you provide access to the general public does it come under CALEA.

They don't expect the experience of dealing with the LEA to change. They don't expect there to be a problem as long as there is cooperation and a reasonable response.

How can we involve Oarnet when necessary to help us comply with a request?

Indicate to the LEA that you need Oarnet's help and they can then go to Oarnet and request the cooperation from Oarnet. They are looking for cooperation in finding the correct location to request the information. They are not allowed to tell us how we would comply with the request or what equipment to use, but they would work with us if there is a problem on the technical side to help us comply with the request.

Paul explained that the packet capture and redirection is a problem on the campuses. We really don't have that capability. Is packet capture and port mirroring enough?

Yes. In the vast majority of cases this is all that is needed. The main hurdle is identifying the location for an effective capture and who they need to talk to that can understand the request. They appreciate the willingness to work with law enforcement.

Can we expect a call at 2am requiring data within an hour?

This is would be very unusual.

They are often just looking for where the most logical access point is and finding the person that understands the network and where they need to go to get the required resources. Having a plan for contact would go a long way with complying with a request. Up-to-date network maps, what software is necessary, etc... would facilitate their needs.

Is the positive reaction to a willingness to help apply across multiple LEAs?

She can't say for sure, but for the most part they really appreciate people working with them. Other agencies will rely on the existing relationship that Oarnet already has with the FBI.

They wouldn't expect us to file CALEA as they view us as private.

Your responsibility to LEA needs to be kept in your mind when you make the decision to open your network up to public access. Don't let this discourage working with the communities, just keep in mind the responsibilities when you work with them.

What can we expect? Ken Law or other LEA would bring a court order that would identify the information they require. It is required for law enforcement to secure the information. If it is urgent, the LEA would provide some help in complying with the request. Legal counsel review of request is very common. However, you can't just give the request to the lawyer and wait for a reply before doing anything. There are things you can do while the request is being reviewed so that you are ready to comply when the approval is given. You should have policies in place to know how the requests should be handled.

After call discussion

Ohio is split into 2 districts (southern and northern). Ken Law is

involved with the Dayton Infragard group and thus in the southern region. Rob White is the northern region, but is not as involved in the Columbus Infragard groups.

Dayton Infragard topic for next meeting  
CSI, FBI, SWO cases for southwest Ohio  
Patty will send announcements out to OARtech list.

A member attended a seminar that said that under the e-discovery laws, if you come across some thing that may be potentially have a case; you should image any system that might be touched by litigation.

Do we want to work on a template response to law enforcement requests? The template should include a contact person for Oarnet. Today it would probably be Paul. When requested from homeland security, you have to give a name, not an organization. The relationship with law enforcement is important.

There were 3 or 4 institutions have actually received a request in the past. Some requests have come through the campus police.

How long do people keep logs?  
Some keep as long as 90 days. Many do not have a policy. At Oarnet the flow logs are kept for 72 hours and then are anonymized.

Patti Vendt is interested in building a template for response to law enforcement. She will be contacting others that have indicated interest helping Kurt Eckert, Aaron Laferty, OU, Paul Schopis, Deb White, and Terri Beamer.

Meeting was adjourned at 2:00.

Teresa Beamer  
Computing Services  
Denison University