

Duke Office of Information Technology

Minutes

April 5, 2007

Attending: Pakis Bessias, John Board, Ken Hirsh for Dick Danner, Kevin Smith for Nevin Fouts, Susan Gerbeth-Jones, Daron Gunn, John Pormann for Craig Henriquez, Bob Newlin for David Jamieson-Drake, Ben Riseling for David Jarmul, Dan Murphy, Tim Bounds for Caroline Nisbet, George Oberlander, Mike Pickett, Molly Tamarkin, Christopher Timmins, Trey Turner III, Robert Wolpert

Guests: Kevin Miller, Chris Cramer, Klara Jelinkova, Rob Carter and Kevin Witte, all from OIT

Start time: 4:04

Announcements:

1 – Mike Pickett – The ePrint soft quota was approved by DSG.

2 – Klara Jelinkova – We were looking for an IT consultant, a peer to Rob Carter, and we found one in Mark McCahill from the University of Minnesota. Mark wrote the original Gopher. I think he's going to be a great asset to Duke. I had newspapers calling me from Minnesota and Minnesota Public Radio asking about why he is leaving to come to Duke. It's clear that Duke is really the place to be. Mark is going to be working closely with the ITS group Bob Price is starting, working on eLearning and collaborative services. He'll also help see how we can start bringing in some collaborative learning spaces and making that happen inside the new area that Julian is bringing up. Mark will be architect of that change on the systems side.

3 – John Board – The new CIO-elect of Brown University is sitting to my left. Mike Pickett will be taking over there on July 1. Mike Pickett – I just want everyone to know that I am not running away from anything. This is still the place to be. I had told Tracy a couple of months ago that I was so happy I couldn't imagine ever leaving. Brown is one of few universities that could lure me away. I am going to miss you. Tracy has been great, a good mentor. And before that Betty Leydon, and you guys around the table. When I really mess it up badly up there in Providence, I know where I'll be pounding on the door.

I. eNotify – Ginny Cake

Ginny Cake – We came to this group four or five months ago to talk about this, so this is an update. A year ago we replaced our paging environment for our message and event notification system. With that came a side application called eNotify – an emergency event notification system. It sends text or verbal messages in several ways: email, home phone, office phone, cell phone. It can give notifications in ways that cascade down, given people's best ways of being reached. It can force people to respond or not. We've been trying to determine the best ways to use that in the university and health system. Tallman Trask has gotten people together to talk about ways to use it in

test mode to see how it works. We have done so around the severe weather process. It's now manual, for when we close schools because of weather. We're working with DHTS and in their support organization to be able to send out emergency notification for system outages, because in their system people really need to know, and with the mobility of their environment, just sending an email isn't going to get them. We're also working with a nursing group. This is being led from Project Office, but the owners are Pat Driver and John Robinson. They plan on putting out a report in May. They presented their findings at the technology meeting. We found that if you send people notices that they're going to be getting these notices, that helps. The way people respond needs to be very easy, so people who don't get the notices often don't have to figure out every time how to respond. In talking with Dr. Trask, we decided there had to be a governance structure. If there are different departments or groups that want to use this system, it'll have to go through him. The system has to have trunking, etc., so it has to be provisioned correctly.

John Board – What is the ability to notify many people? Can you feasibly notify the whole university? Ginny – If you put in enough ports it can do that. John – What number are we targeting? Ginny – That depends on what we're trying to do. John – So we can't send out cancelled classes notification? Ginny – No. We already have email, etc., to do that. Manual notifications are done now to the upper levels. eNotify allows us to go deeper into the organization. So at the same time Tracy is notified, I get notified, Chris gets notified. It happened when we had severe weather. Everyone was notified within 17 minutes. That was 200 people.

Chris Cramer – Can we add ports in a hurry if we need to notify everyone of something? Ginny – It depends on whether you want a response or not. We have found out that most people looked at their cell phone, didn't recognize the number, then didn't answer. They had to call back in. You have to understand human behavior. Some of the beauty is that it gives you multiple ways to communicate. So we can do the preferred ways first, but it automatically sends an email and you can respond via the computer.

John – I assume this falls under the existing mass communications policy. Ginny – Yes.

John – What possibilities are there for making it available for below the Allen Building level, to the schools? Are there schools that want this? Ginny – I think the intent is for quick emergency notification, not for regular notification about a conference that's going on. It's for emergencies, bad outages, hazmat issues, that sort of thing. Tammy Closs – I think this is different than basic notices. We're looking at things to do for students that combine messaging that can go through email, group lists, residence halls. There's been some investigation of MobileU and Rave wireless. For what you're talking about, someone has to sign up because it's people's personal emails. It's possible you can do an emergency notification. You sign up for a group and everything that goes to that group you can get that message. Larry Moneta is doing that.

Ginny – Tallman sees this as something maybe the police department can use.

Statement – Something like, a meteor is coming. Mike Pickett – When talking to Tallman, it was clear that that was his interpretation. If people felt there was a good reason why it's an emergency, they would come to him and he would decide.

III. State of the Network – Kevin Miller

Kevin Miller – [passes out handout] Duke was allocated some new IP space based on demand. The upper half was given to medical center, the lower half to the university.

We plan to use them for wireless in particular on one of those where we're seeing some crunch. There may be library databases that need space. We're definitely above 93 percent in some cases. We'll be cleaning that up and get some availability on 152.3 for sure. Question – Do you have any intuition about how many IP addresses aren't being used? Kevin – Yes, when we submitted our application, we took a look at that. Ninety percent is allocated and about 65 percent is in use. So there is space not being used. There were only a few cases where it's a real problem in that we've allocated more than is necessary. And we're working with some of those places. Robert Wolpert – Is there any opportunity to move some IP addresses to non-routable IP space. Kevin – There is some possibility. But getting more space wasn't a problem. We need more for library databases. Chris Cramer – We've said for a while that that's not the best way to restrict access. Tammy Closs – I talked with Rafael Rodriguez a few weeks ago and he's thinking they're going to need more. Is that part of this new address? He seemed to think it'll need more. Kevin – We have 8,000 IP addresses there and none of them have been used. It's harder to go back to say we've gotten tight here and we need more space. It's easier to say we need big bunches.

Kevin – The next thing is, National TransitRail is our new external connection. It's low-cost because it relies on no-cost peering. There's a symbiotic relationship between eyeballs and content. We have eyeballs and they have content. We turned it up Friday morning and it's now about 50 percent of our Internet traffic in just a few days because we prefer it in some ways. Google and iTunes are there and those represent significant use.

John Board – How does that work? Whose fiber is that? Kevin – It's built on national land to rail.

Molly Tamarkin – Is there a concern that certain areas are getting preferential treatment? Kevin – Some sites will be faster through NTR than other sites. But we have a diverse set of connections, and I would say we have the best response we can get out of any given site. The data we have doesn't really say it's going to be faster on Quest vs. NTR, so we have to go with our best guess. We can do some tweaks on an individual basis.

Kevin – Number 3, the campus-wide private networks we can create – Duke interchange and the university core. The link from NTR comes through the new core as you go through Yahoo, Google, etc. The next step is to start thinking about specific transitions into the new core and we'll be talking to people about that if you have any ideas.

Kevin – Number 4, we're going to enable a new external connection soon. We wanted some lower-cost bandwidth so we went with Time Warner Telecom. This also gives us some redundancy. That helps some applications in particular – Linux Mirror is one. That will be soon and we'll be looking at all the providers and making the routing decisions to optimize our service. John – How long are we locked in with Quest? Kevin – I think we reconsider Quest later this year, Level 3 either this year or next year. On the horizon, a few interesting points. We're going to be testing in Trent Hall in June on some interesting features. Lots of it is MVA, so I don't want to get into any details. It could give us some pretty good benefits. Because of our relationship with Cisco, we're able to get early access to these things. We're preparing to pilot an SSL-based VPN service. It makes it easier to connect to the VPN. Just go to a Web page and it downloads a small applet. It's easier and it would integrate with Webauth. Finally, we have NetMRI that we're in process of deploying. It gives delegated access to look into

switches and do some searches. If you're interested, drop me a line. This collects a lot of data about the network. I want to talk a little about wireless. There have been some problems recently. [refers to handout] In the new wireless network, we have access points and controllers that aggregate a lot of access points. We're operating 12 controllers and 1,165 access points. We've had two main problems in the last three weeks. In both cases we seem to be at a better point. First was what we're calling client mobility problem – you have a laptop in one area, close it, walk to another area and the wireless connection won't come back. We diagnosed this with Cisco. It went a lot of rounds. I have to thank Bill Day. Cisco claimed it's a feature, we claim it's a bug. But we do have a workaround configuration change that solved that. We made some configuration changes on March 26, so if anything's happened since then it's a new problem. We've tried to communicate as best we could. It's sometimes hard to replicate the problem, so as much information as we can get is important. The other problem is a controller lockup issue. The symptom is that a particular area or users may have an outage that could be a minute or 5 minutes. We have a number of controllers in each zone, so if an access point sees a controller is frozen it'll look for another, but that takes a minute or so. Cisco sees these problems as a bug. We've had three updates in the last two weeks in attempts to fix the bugs. We got a new one three days ago and we've not seen the problem since then. It's essentially an OS upgrade that runs on the controller. With one button everything is updated. The controller is the point that can fix the access points. We're not the only ones seeing this problem. We're seeing a good response. N.C. State and UNC are seeing them, too.

Question – When you latch on to one of these fixes, can you back out of it? Kevin – Yes. We have been asking Cisco that all along. I think both of these problems are in a resolve state. The controllers we're continuing to watch, but we're hoping that these are behind us. Mike Pickett – From the perspective of one who's been bitten by this, at least it's good that you're working on it. Kevin – We appreciate all the information we can get about problems, because this is affected by location and sometimes even by time of day.

John – Is this related to multicast? Kevin – No.

John – Is there going to be a lot of upgrading this summer? Kevin – Not this summer, no significant plans.

John – Any test efforts for next generation? Kevin – That'll probably be October or November before we'll have an end-capable product. We've gotten a verbal commitment to be very early adopters of that so we will update as appropriate.

IV. A&S dcal conversion – Molly Tamarkin

Molly Tamarkin – We moved from Meeting Maker to dCal. On March 9, 2006, there was a demonstration to CLAC about Oracle Calendar. My project started March 10 when I started getting requests. So our project started a little more than a year ago. I was waiting for OIT to roll this out. In June 2006, Michael Gettes said to start hounding OIT about that. I started that, and soon it became an official project in OIT. We started in August with the Math department. In October, OIT went campus-wide. We spent fall testing things, doing demos, setting up a time frame. Feb. 11 was migration weekend. We had some pressure because of Daylight Saving Time, knowing that some users would experience some pain. When we looked at the data on Sunday afternoon, we noticed that the period between then and the DST change, all of the one-off meetings

were an hour off. That was the only glitch we saw. We communicated that and brought up the old Meeting Maker server so people could compare their calendar and make sure their times were right. They could adjust for the three weeks. Other than that, things went very well. There were printing concerns; it worked a little differently. The color support isn't the same and isn't as good as Meeting Maker. Other than that it probably was one of the best projects I've been involved with, in that it went well and had such an impact on so many people. It was a clear benefit to get everyone on the same calendar system. One thing we need to do now is more user education. The staff assistants are using it, but they're trying to make it work like Meeting Maker. I invited Gwen Waller to come talk to staff assistants to explain how she's using it. Yesterday we turned off the Meeting Maker server. When we first migrated, the first pass was current plus three weeks of history. By the end of February, probably all the histories were migrated, with exception of a few items that had weird characteristics. So when we went live, all the data wasn't there, but we got it over soon.

John Board – From a user perspective, what has been most attractive? What's the size of the community that's migrated? Rob Carter – There were 800 users and slightly more than that in resources, so around 1,800 entities. Molly – The resource piece still needs some work, some guidelines. The biggest draw was the ability to schedule meetings across the university. Also the Web client is easier, much better for Linux platforms. It's faster, more attractive, more appealing in an esthetic sense. I think it will be better when folks stop trying to make it work like Meeting Maker. It has more capabilities. For example, you may want to schedule a group meeting. In Meeting Maker you would open a bunch of individual calendars to see who's available. In dCal you can open a group calendar. We made use of the Project Lifecycle methodology; the OIT and A&S wikis; the website for communication to customers and emails. We were concerned about going live because of DST, but one of compelling reasons for going ahead was that we had already prepared people for a big change.

Susan Gerbeth-Jones — Is there a plan to merge LotusNotes to dCal. The Marine Lab is closed and FMD uses LotusNotes, but everyone else using dCal. Molly – OIT had already migrated from LotusNotes to dCal, so we had a lot of help there. The biggest one is Biology is moving over. Klara Jelinkova – Back to the question about integration of LotusNotes and dCal, you're really talking about exporting calendars going across systems. We haven't worked on it. Susan – They also use a different system for booking rooms. Klara – We can help them migrate to dCal if that's what they want to do, but integrating the systems is much more complicated. Mike Pickett – FMD comes up within the Tallman Trask area. There are 1,500 Lotus users on campus side, 15,000 on hospital side. So when will there be enough people who want to move to the new calendar? Until you see a lot of pain they won't move.

George Oberlander – In Auxiliaries, people use their own calendars, or they don't even keep a calendar. So the net gain would be significantly reduced. One nice thing, we did a big conversion of email when I took over Duke Gardens. There are a variety of tools to migrate calendars, from Notes to something else or from something else to Linux.

Bob Newlin – I'm a big fan of Notes and like having things integrate with Blackberries and such. But when a large part of campus was on the previous IBM system, it was terrible but a lot of people used it. The secretaries were using free time to schedule meetings. Some moved to LotusNotes and secretaries had to go back to the phone to schedule meetings. There's enormous benefit in a large office like the provost's office to be able to do that. Molly – I was trying to schedule a meeting in the Provost's Office

recently. Of the five people, four were using dCal. I mentioned to the staff assistant that it would be worth it to get an account so she could see the schedules.

John – Are there any other plans for dCal conversions? Mike – None that we know of. Pratt was considering it, but didn't like the lack of colors. Klara – We're working on that, so we may be able to work with people. Molly – The lack of custom colors is a valid concern. The other one I heard was that it would be nice to have calendar overlays – for the academic calendar, holiday calendar, etc. Bob Newlin – We have that in Notes. Most people don't use it, but some people do. Klara – There also is a new release of Oracle Calendar that has more enhanced capability including integrated accounts with email – not just Oracle standard email, but any IMAP system. So this summer when we look at new releases, there might be some chance to improve that.

V. Technology Architecture Group – Mike Pickett

Mike Pickett – We had a search for a new technology architect and identified two finalists. As the interviews progressed, it became clear that there were vastly different ideas about what the architect's role should be. Because this role is so key, we decided to not fill the position until we had a clearer, shared view of the responsibilities of the architect. In the four years since we hired Michael Gettes, we have really changed the whole landscape – Julian, Tammy, Billy, the Operations group, CIO. It's a very different type of place. I think what we're seeing is the difference in what the role of the CIO side of the house should be. Meanwhile there are lots of things we have to keep doing. OIT is slated to do a lot of things in the coming year, things like storage project deliverables in late spring or early summer. We're scared to let them go ahead without knowledge that the architecture is right, elegant, balanced, a sense of where industry is going, what's going on in schools and departments. So what Tracy has asked us to do is to identify people like Rob Carter, Mark McCahill, a group of people who have responsibility within their organizations – Kevin Miller would be consulted for any network questions, for example. Tracy will be appointing a group of people to serve on this group. I'll be convening this group. But the other thing that will happen other than convening the group is thinking about how we make sure this group plugs into what's going on in the schools and departments. How do we bring in those experts from schools and departments to educate the IT people and to let information flow back the other way. We could have it so the group meets biweekly so they know the things inside the OIT groups, but periodically meets with a larger group of architects for the university to talk about what's going on in the university and beyond. This would be a good group to kick off exploration groups, look at what's going on in the big picture. I would like to see brown bag updates and other meetings for updates on what's going on of a technical nature. Over the next few weeks we'll be forming and reviewing the architecture for the storage team deliverables. I'll drastically need some stamps on them to say go ahead or it needs more work. We'll write a paper saying here's the great parts, here are the questionable aspects, recommend for next steps.

John – Membership will be known soon? Mike – Yes, and Tracy would appreciate suggestions. One area we've talked about is covering areas not traditionally thought of. For example, some of the enterprise applications, SAP. Those are the kind of people we may tap who you may not have heard of but who know what's going on.

VI. Wikis and blogs – Kevin Witte

Kevin Witte – We talked about wikis last time. The same team that's been working since fall and made recommendation to senior leadership on wiki side is in process of evaluating technologies in the blog realm. Essentially, we have to look for products that can scale. Blogspace, etc., they're single use, single blog applications. What we have to do is find software that can handle thousands of blogs in the same way so we're not chunking out separate instances for everyone who wants a blog. We're looking at technologies that allow us to scale up. WordPress MU, tied to WordPress, is synchronized to major releases for WordPress. It's a blogger.com kind of software. Users can set up their own or multiple blogs, but can see other blogs, too. We're also looking at Roller, which is an Apache project. It's being used by Sun and IBM for their blog spaces. Blogs.sun.com, Roller is the engine behind that. It's also at N.C. State and Yale to deliver blog space for both. At blog.yale.edu you'll see Roller. The other product is Lyceum, another fork of WordPress, is also making its best effort to stay synchronized with WordPress. It's coming out of iBiblio. It's used at UNC and Johns Hopkins. These are top three contenders at the moment that we're evaluating against our functional and technical requirements. We hope to recommend something in the near term. Another meeting is scheduled for a week from Tuesday. We hope to whittle down to two contenders.

Molly Tamarkin – Is it fair to say the technical requirements of a blog tool are easier to meet than a wiki tool because it's usually a one-to-many announcement. Kevin – A lot of the requirements are the same, and they spill over to event calendars, for example. But yes, it's true to one extent or another. In a wiki you're looking to create spaces that one or more people can have access to. The blog model is more open in that respect. The requirements are different, there's some overlap in the tech requirements. It's not quite the same.

Klara – Are we thinking about leveraging something like the portal. We have all these tools we are rolling out but they're not really integrated into one space. It would be interesting to work on an integration roadmap as we're rolling them out. Kevin – My team is already looking at the integration points of Confluence. We're looking at that for the blog and wiki. We're thinking about how we can get your blog on the portal, or how you can see your friend's blog on your portal.

John – Of course, the longer we debate, the more moot it will be because people will just be using blogspot. Kevin – Right. The nice thing is that this is a really well-known area. Everyone who cares knows what a blog is, so we don't have to educate them about that. We just need to do something.

End time : 5:23

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