

SUMMARY FOR ARCHITECTURE & NEW TECHNOLOGY COMMITTEE

DATE: October 24, 2016

TIME: 10 a.m. – 12 p.m.

LOCATION: Dumke Room, Eccles Broadcast Center

IN ATTENDANCE:

Mark Beekhuizen	David Blackburn	Joe Breen	Jeff Folsom
Matt Irsik	Jim Livingston	Chris Roberts	Steven Seal
Jon Thomas	Rob White		

COMMITTEE SUPPORT: Scott Sherman, Emily Rushton

UNABLE TO ATTEND:

Rebwar Baesmat	Derick Bingman	Pieter Bowman	Dean Church
Tim Ebner	Demian Hanks	Matt Harting	Sylvia Jessen
Josna Kotturappa	Jim Logue	Chris Stucker	Wes Tolman
Daniel Trentman	Thomas Wolfe		

AGENDA ITEMS DISCUSSED:

- Private IP space open discussion to identify Community of Practice issues
- Open floor

Private IP space open discussion

Clayton Barlow (Enterprise Architecture) opened up the discussion by requesting suggestions from the committee for members of the Network Architecture Community of Practice. He made the point that changes to private IP space have thus far been reactive vs. proactive, and suggested the University use private IP space as part of a larger IP space strategy. He asked the portfolio and others in the room to discuss challenges they face when dealing with IP space at the U.

One member pointed out some key issues, including IP space allocation and making use of what we have in a managed way that can accommodate department needs. He talked about IPv6 and how we're making use of that now, and mentioned the idea of having truly private IP space that isn't affected by any changes made to the broader network.

The discussion continued, with other members and non-members alike discussing their own issues, questions, and concerns with the use of private IP space. One attendee brought up an issue their department is facing with certain buildings due to routing issues, and mentioned that documented information regarding IP space was not available in the IT knowledge base (KB). There was general agreement from the group that IP space info should be well documented and available in the KB, with links to proper documents, schemas, etc.

There was also general agreement from the group that most are unhappy with the current use of private IP space, and someone asked why UIT started using private IP space. Barlow said the reason was primarily due to a lack of general IP space, and that tactical decisions had to be made to fix an urgent problem regarding IP space. What he hopes to do now, with the Community of Practice, is to determine how to manage IP space in the future and move forward without additional risks or perpetuating bad architecture.

Barlow pointed out that there are gaps in communication regarding what central IT does vs. the small pockets of IT across campus that have their own workflows and processes. One member brought up UIT communication methods to the broader IT professional community, and CTO Jim Livingston made a few comments on communication in general. He reminded the group that there has been a lot of communication surrounding private IP space, and that key persons were invited to the private IP space discussions around health sciences. Livingston said central IT moved forward based on feedback from those discussions, and reminded the group that they weren't able to take every single suggestion into consideration because changes to IP space have to consider the broader campus as a whole.

Barlow said UIT recognizes there are problems with the network, and there's not much standardization across campus. Some groups on campus have their own network standards, or don't follow standards, which doesn't work well with the broader network configurations set up by UIT. Barlow reiterated that changes must be made that serve the broadest portion of the campus most effectively – it's about strategic planning for the entire organization.

The group then got into a discussion on whether or not the University should operate as an enterprise or ISP (regarding the network). In the enterprise approach, the University of Utah is the network and internal IP space would be visible throughout the University space. In the ISP approach, UIT acts as the service provider to each individual department, which in turn has its own network with its own internal configurations. Interim CISO Corey Roach explained that thus far the U has made changes regarding the network as if it were an enterprise, and to change tactics now would be a step backwards in perspective. One member agreed but said we've also had a lot of ISP behavior, and questioned how much of that should be maintained going forward to allow departments segmented, designated IP space for research, experiments, etc.

There was some discussion about RFC 1918 and its original intention, of which was to create a very finite and constrained resource, and that it should not route to anything else. But if operating as an enterprise, it's technically *not* being routed to anything else because the entirety is the network and enterprise as a whole. Barlow said we are an enterprise, but we need to come up with a good communication system and standards of practice regarding IPv4 space.

One member suggested creating a rule that doesn't allow groups to create their own private IP space without first requesting it and getting it registered.

A few attendees shared more concerns and individual experiences, along with suggestions on using 10-space going forward. Barlow then repeated his call for recommendations of people to join the Community of Practice.

Livingston brought up communication again, as well as the reasons why the UIT policy regarding responding to large campus email lists exists. He said there needs to be a safe place for discussions such as these, and suggested that communication be added to the next ANTC agenda. He also suggested that future strategy regarding the network be agile, more secure, affordable, and sustainable, and reiterated the need for members on the Community of Practice. At this time, a number of members in the room either volunteered themselves or volunteered names of others.

There was further discussion regarding better ways to communicate as well as suggestions from members. There was a general acknowledgement that the ServiceNow Knowledge Base and Service Catalog should be the central resource for IT professionals.

Open floor

It was mentioned that the Teaching & Learning Portfolio will be sending out requests for funding requests, and a brief discussion followed regarding who sets the funding request guidelines and restrictions for what can and cannot be requested. One member had a quick question regarding two-factor authentication and whether it has been tested on VPN clients (Duo has been tested; RSA is still in testing).