



Western Regional Network • <http://westernregional.net> • (505) 277.3486

Western Regional Network (WRN) Policy Committee Meeting

Thursday, February 9, 2012

The Sheraton San Diego Hotel & Marina
1380 Harbor Island Drive
San Diego, CA 92101
Room: Fairbanks D
1 p.m. - 5 p.m. PST

Attendees:

Robert Aylward

John Charles

Louis Fox

Maira Gerety - via phone

Gil Gonzales

Ron Johnson

Dave Lassner

Marla Meehl

Dave Reese

Amy Philipson

1. **Roll Call - Gonzales**

2. **Additions to the Agenda - Gonzales**

3. **Task List Update - Meehl**

- o David Lassner will approach Dave Lambert and James Hilton about plans going forward on the UCAN organizational structure - Closed
- o Overtaken by events
- o Published papers
- o CENIC and PNWGP are pilot projects - accepted anyone who applied
- o New Internet governance
 - Directly elect Board Members
 - Appoint counsel member
- o Jim and Ron will develop a proposed NLR/WRN framework for possible joint venture - Obsolete
- o ALL - review WRN WPC and WTC assignments per agreement - **COMPLETE**
 - Dave will draft a resolution to simplify and to match actual process
- o Marla will coordinate a call with NM, Utah, EAGLE-Net (EN), CENIC, and FRGP to look at joint fiber interests
- o Gil/Dave will pursue new members
 - Texas
 - Northern Tier - becoming reality with Chicago connection
- o CENIC will set up a BGP session to I2 and Level3 via Denver for back up - **COMPLETE**
- o CENIC, Arizona, and UNM should discuss Arizona/New Mexico fiber builds - In-progress
- o Gil G. - Agreed to take Project Organizational Option and reconsider in a year while Gil works to educate attorneys - 8/10/10
 - Could roll under NLR, LLC

- Pete will work with PNWGP to test TSIC connection - **COMPLETE**
 - Pete will look at keeping TR/CPS traffic on commodity as back up instead of backing up to CENIC then could drop TR and use on CPS - **COMPLET**
 - WTC - look at how to engineer and isolate (VLAN and encryption) traffic as needed for CAI and FCC connectors specifically to support for profit entities - **COMPLETE**
 - WTC - design a routed WRN network to support for profit WRN traffic - **COMPLETE**
 - WTC - will look at Pacific Wave peering for each member - **COMPLETE**
4. **Meeting Minutes - attached - Meehl ([11/04/2011](#), [01/19/2012](#), [01/27/2012](#))**
- **RESOLUTION #1**, motion to approve the minutes for [11/04/2011](#), [01/19/2012](#), [01/27/2012](#) as submitted.
 - Ron J. motions
 - Amy P. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
5. **Resolution on WPC and WTC Terms**
- Agreed to change "additional terms" to "an additional term"
 - **RESOLUTION #2**, The WRN Agreement, Section 3.1.1, specifies that WPC members serve for two year alternating terms and may be reappointed without limitation to an additional term. The WPC hereby agrees that, unless notified by the Party to the contrary, a WPC member's term shall be automatically extended for an additional two-year term upon expiration of their term. This does not supersede the Parties right to appoint replacement WPC Members as necessary per the Agreement.
 - David R. motions
 - Marla M. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
 - **RESOLUTION #3**, The WRN Agreement, Section 3.2.1, specifics that WTC members serve for two year alternating terms and may be reappointed without limitation to an additional term. The WPC hereby agrees that, unless notified by the Party to the contrary, a WTC member's term shall be automatically extended for an additional two-year term upon expiration of their term. This does not supersede the Parties right to appoint replacement WTC Members as necessary per the Agreement.
 - David R. motions
 - Marla M. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
 - Agreed don't need to keep track of members terms
 - Agreed Marla will track Chair, Vice Chair, and Secretary terms
6. **New WPC Chair**
- **RESOLUTION #4**, motion to reaffirm Gil Gonzales as Chair of the WPC.
 - Dave R. motions
 - Amy P. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
 - **RESOLUTION #5**, motion to reaffirm Dave Reese as Vice Chair of the WPC.
 - Ron J. motions
 - Amy P. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
 - **RESOLUTION #6**, motion to reaffirm Marla Meehl as Secretary of the WPC.
 - Dave R. motions
 - Ron J. seconds
 - Motion passes: 9 Yes, 0 No, 0 abstain, 1 absent (Steve Smith)
 - WTC needs to do the same
 - Marla will notify Pete Siemsen
7. **ARI - WRN Agreement Review**
- NSF ARI WRN Proposal approved by Steve Meacham
 - ARI UNM
 - ABQ-EI Paso
 - Looking at 3 options for fiber
 - State Department of IT needs to decide if they can issue an IRU
 - ARI LEARN
 - San Antonio and El Paso
 - Get 40G cards for I2 Ciena path (no maintenance or installation can be paid from NSF funds - LEARN will pay any of these costs)
 - Share I2 hardware
 - Getting pricing

ARI WRN - CENIC - Denver - Kansas City (KC) - Chicago

- Denver - KC is NSF ARI
 - Level3 one option but only Denver to KC
 - NSF funded for 10 years and one year of O&M
 - WRN agreed to pay additional years of O&M
 - WRN agreed to pay KC to Chicago
 - Total WRN up to \$100K
 - Have to do minimum 10 year IRU
 - \$423K Denver - KC Level3 Cost
 - Zayo a possibility KC to Chicago - Marla will ask
- I2 Request
 - Could do same I2 Ciena card option as CENIC/I2 and LEARN/I2
 - 10x10 to Chicago and give I2 some waves
 - 100G, 10x10, 4x10 cards are not currently qualified as Buy America
 - Dave and Gil will coordinate with Mike at LEARN for discussions with I2
 - I2 capitalized pricing
 - May be less expensive to purchase a capitalized wave from I2 for 8 years
 - **RESOLUTION #7, *******
- NLR Request - taking off table due to uncertainties
- Other

- ARI CENIC - Seattle-LA

- Agreement with I2 to equip the route
 - Would purchase 2 Brocades for LA and Sunnyvale
 - Pending Ciena Buy America for remaining equipment
- Consider a resolution to share NSF ARI resources as WRN resources

8. Membership Update

- ARI / Texas LEARN
 - Gil and David will approach LEARN
 - Need to consider cost model
 - Work on I2 port configuration and consider moving KC to Chicago
- Arizona Schools
 - CENIC working on fiber plan for Arizona
 - CENIC working on pricing model that enables Arizona to become a WRN member
- UNM, UA, ASU, and NM meeting on fiber options
- CENIC working on lower bulk Level3 pricing
- Others
 - North Dakota and South Dakota future member considerations

9. Internet2 Discussion - All - No discussion

- UCAN
- CIO Forum / Connector Forum
- Member Meeting - Arlington, VA 22-25, 2012

10. NLR Discussion - All - No discussion

- CBREC
- State/RON Visits

11. WRN Meeting Funding - No discussion

- Resolution, agreed to fund future WRN meetings from the WRN Maintenance fund.
- Agreed future meetings at LAX

12. Network Architecture Update

- Pete will work with PNWGP to test TSIC connection
 - This came up when PNWGP was considering getting a connection to TSIC in Seattle. I called Schyler Batey today for an update. PNWGP never got a connection to TSIC, and they are no longer considering it. They consider their 2 providers (Level 3 and NTT) to be enough. Schyler asked if we are happy with TSIC, and I said yes. He said he knows that TSIC is inexpensive, and PNWGP may consider TSIC as an alternative to one of their current providers, and the fact that PNWGP might be able to get TSIC out of Denver over WRN would be an incentive.
 - BTW, PNWGP's Level 3 connection is in the gigapop site on the UW campus. It's not in the Westin building downtown, where the WRN switch is. In order for PNWGP to provide WRN members with access to Level 3 in Seattle, it would take some time (like 8 weeks) and money for a circuit and a switch to bring Level3 to the Westin building.
- WTC - look at how to engineer and isolate (VLAN and encryption) traffic as needed for CAI and FCC

connectors specifically to support for-profit entities.

- The last WTC conference call was 11 months ago (!). At the time, the consensus was that the isolation issue is driven by the CAI or FCC connectors. We think VLANs isolate traffic "enough," but don't know the legal requirements. If VLANs aren't enough, encryption is an obvious solution. The CAI and FCC connectors should do the encryption - they shouldn't to trust anyone to handle encryption for them. We don't want to do it for them. The WTC thought that VLANs are sufficient to address this, but maybe we don't understand the problem.
 - WTC - design a routed WRN network to support for-profit WRN traffic.
 - We discussed this in the last WTC call. At the time, the discussion was related to "do we want to acquire NLR's old CRS routers and use them to build a routed network"? The answer was "no" - the CRS's were thought to be old, expensive power hogs. We were daunted by the prospect of converting WRN into a routed network. I think the WTC needs the WPC to provide a use case to help define the issues raised by carrying for-profit traffic.
 - General status: WRN is running smoothly. CENIC is managing it well. Once in a while, they ask members to allocate a VLAN or two (recent ones were for Phoenix and Hawaii), and then CENIC configures the switches. CENIC has the hands-on interaction with the switches.
13. **WRN Educause, others - No discussion**
14. **Next meeting**
- Bea will schedule a call in the next couple weeks
 - Agreed not to try and schedule regular calls
 - Agreed not to set a face to face at this time