# MICE UG 22 Minutes

Meeting called to order on Wednesday, December 14<sup>th</sup> at 3:10  PM Central in the 511 Building Cafeteria.

**Roll Call**
- Number of Voting Members in Attendance: 21
- Number of Non-Voting Participants in Attendance: 0
- Number of Pending Connections in Attendance: 1
- Number of Guests in Attendance: 2
- Percentage of Voting Members in Attendance: 30%
- *See attached roll call sheet*

**Approval of Minutes**
- UG 21
    - Motion by David Farmer, Second by Jeremy Lumby, Motion Passes

**Reports**
- Board of Governors Report
    - Thanks to those who made donations since the last UG: Hoyos Consulting (cash), Compudyne (switch), Jeremy Lumby (cable & optics).
    - Richard Laager was appointed as Chief Manager.
    - Kayla Powers was appointed as Treasurer. (The bylaws do not require the Treasurer to be a board member.)
    - The application by Minnesota VoIP to be a remote switch operator was approved.
- Financial Report
    - Bills Paid
        - $400 to IRS for 501c6 application
        - $56 reimbursement to Richard Laager for Minnesota Secretary of State filing fee and certified copy fee (for documents required by 501c6 filing)
    - Account Balances
        - Bank Balance: $1,718.02
        - Paypal Account Balance: $1,859
            - Kayla Powers is working to move the PayPal balance to checking, but PayPal has blocked transfers after the first. She will be working with PayPal to sort this out.
    - Accounts Payable (Due)
        - None
- Industry Reports
    - MICE was the talk of the town at NANOG.
- Technical Committee
    - Packet loss troubleshooting
        - The previous changes improved the packet loss situation, but it is not completely eliminated. Jeremy Lumby suspects that it may be a bad stacking cable. It is unclear if we have the capacity to support disconnecting a stacking cable for testing. The packet loss is incredibly minimal, and with the new switch coming soon, we are just going to wait for that.
    - BFD
        - Participants who support BFD are documented on the website. If your network wants to do BFD, please let Richard Laager know so he can update the website.
        - BFD has been tested on a route server with some participants. The plan is to deploy it to both route servers, for all participants. It will be configured in

passive mode, so each participant has control; to use BFD, they have to initiate it by configuring their equipment in active mode.

**Old Business**
- 501c6 Status
  - o This was filed. A member asked for the specific date. [Post-meeting note from Richard Laager: It was filed on November 15th.]
  - o It is the board's understanding that we are allowed to assume we are tax-exempt until we hear back from the IRS. We expect that may take a while.
  - o Richard Laager noted that 501c6 is not 501c3. People cannot deduct donations to MICE as charitable contributions. Businesses may be able to deduct fees as business expenses, but need to consult their own tax advisor on that.

**New Business**
- Route Server Filtering
  - o There appears to be a consensus to filter out transit ASes, bogon ASes, default routes, 0.0.0.0/8, 127.0.0.0/8, RFC1918 routes, testing/documentation routes, multicast routes, plus the MICE IXP routes. Prefixes longer than /24 on IPv4 and /48 will not be filtered, but should be tagged with a MICE community, as this may make filtering easier for certain equipment/participants. All of this needs to be documented on the website. The changes should be tested first to see what they will block, and the affected participants notified. Anthony Anderberg noted that some of the route filtering already exists.
    - ▪ Nobody was clear on whether AS_TRANS (AS23456) should be filtered. It shows up in some guides. David Farmer was going to look into it. For now, it will not be filtered.
- Next Meeting Date, Time & Location
  - o The date is set as March 29th. The time and location are TBD. We are hoping to meet at the Hyatt Regency Minneapolis as part of MTA (Minnesota Telecom Alliance). We need better coordination this year, so we have a meeting room with proper facilities, and don't get kicked out by the hotel wanting to clean. Shaun Carlson is working on this. The 511 Building is our backup.
  - o The summer meeting in Eau Claire was a big success. If anyone is interested in hosting a summer meeting this year, now is the time to be thinking about it, as we would need to make that decision at our March meeting.
- Arista Donation
  - o US Internet has arranged for Arista to donate a 7504R switch, two 48-port 10G SFP+ line cards, and one 32-port 100G line card. Arista has agreed to unlock the switch so it will accept non-Arista optics. Cologix has agreed to provide the space and power; Jay is finalizing that contract. The switch will be located in a different rack. Some cross-connects may reach. A detailed cut-over plan is being discussed, but hasn't been finalized yet. Cologix is saying that cuts performed during the day will be no-charge; if a participant requires the cut to happen after-hours, there will be a small non-recurring charge.
- Databank is working on a remote switch.
- Fees discussion
  - o With the Arista donation, we are responsible for support after the first year. (We did ask if Arista would donate that, but they said no.) With the need to pay support costs and with the 501c6 filing complete, it is time for the board to take action on some sort of fees.
  - o There are three ways we considered handling fees: One-time fees, like SIX (Seattle IX), monthly fees, or yearly fees. The consensus is that annual fees are much easier for everyone (administratively) than monthly fees.
  - o Jay Hanke consulted with a large portion of the membership and built a proposal for 2017 port fees: 1G is $0 (limited to one port), 10G is $250/year for the first port and

$1,000/year for additional ports up to a total of four ports (with one member grandfathered at more than 4x 10G—they will be moving to 100G ASAP), and 100G is $3,000/year for each port. Remote switch operators pay for the ports they use, but MICE does not charge participants who connect to a remote switch; what the remote switch operator charges on their switches is their business. Payment status will be public. Disconnections will not happen until we run out of ports; this policy will be reviewed as we see how this goes. Mid-year connections or upgrades will be pro-rated; details TBD. [Post-meeting note by Richard Laager: Kayla Powers would prefer prorating to the day, as that's what she is used to. We would use the date the new port is ready.] Participants must provide their own optics.

o There was much discussion about whether 1G ports should be free, why the LAG limits exist, and whether the first 10G port should be the same as subsequent 10G ports. There was concern that making the 1G ports free was unfair, unnecessary, and/or devalued them. There was concern that the different 10G pricing was unfair and/or unnecessary.

o Jay Hanke explained that port real estate is a concern; a 1G port takes up the same space as a 100G port. Reid Fishler is also concerned about the number of fibers in the cabinet, complicating maintenance. There is also a question of whether it is worth trying to invoice for a small (sub $100) fee. The proposal is trying to balance the various factors to encourage upgrades from 1G to 10G; we do not want to create pricing disincentives that result in people running their port congested. Also, there are some 1G members with very little traffic (less than 100M) and we want to keep costs low. We want to encourage small members to connect.

o Richard Laager notes the LAG limits are not likely to be a problem in practice, as cross-connect costs dominate the pricing calculations in most cases.

o In accordance with a founding principle of MICE, the board will "err on the side of connectivity". Thus, the board is open to approving exceptions in exceptional circumstances (which will likely be temporary). For example, if a 1G port is nearing congestion and the participant is waiting on upgraded 10G hardware to arrive, the board would likely approve an exception for 2x 1G LAG. In such a case, the member would be expected to pay the 10G port rate.

o While not being considered for 2017, some members have suggested a participant fee (all participants, including those on remote switches, pay) and/or membership fees. The idea for membership fees would be that voting rights are contingent upon paying a token fee. This formalizes tracking who is a member, and would allow a separation of those who only want to participant in traffic exchange from those who also want to be members in its governance. This could allow for an increase in the quorum percentage, which some members wanted previously.

o At the end of the discussion, Richard Laager took several non-binding polls to help guide the board. Note that these were informal polls, so the wording was loose and not quoted perfectly here:
  - Should we charge for 1G ports: 3 yes, 10 no
  - Should the first and subsequent 10G ports be billed differently or the same: 12 different, 2 same
  - Should there be a participant or member fee: 7 yes, 3 no
  - Should we adopt the fees proposal as discussed: 17 yes, 0 no

**Open Discussion / Announcements**
- Next Meeting Date, Time & Location
  o Shaun Carlson discussed marketing ideas for the MTA meeting. We may want pins or ribbons for MICE members, etc.

**Upcoming Meetings**
- UG 23: Spring 2017, Wednesday, March 29th @ 10 AM – Hyatt Regency Minneapolis (*Tentative*)

- UG 24: Summer 2017, TBD

Meeting adjourned 4:53 PM Central by unanimous consent (no objections).