1. Agenda Bash
    a. Jeff: add localpref and NGI
2. Update on peering and I2PX
    a. Jeff Bartig: Not much to update. Focus has been on getting ready for NGI migration.
3. Network Weather Update
    a. Start of semester approaching rapidly. Otherwise things very quiet.
4. Internet2 network update
    a. Chris Wilkinson: working to start of migrations: start of system validations, route policies, etc. Will step gingerly into initial migrations then likely move more rapidly. Very eager to get things moved onto NGI platform.
    b. Michael Lambert: will migrations be site by site or service by service? Chris Wilkinson: generally by site, but are table topping that out right now.
    c. Localpref and NGI: There is no other more interesting topic. Existing situation: R&E network and i2PX. These were initially two physically separate network. Today are two VRFs on the same network. Localpref values have been uncoordinated. Became problematic when trying to merge – large research data transfers were going across I2PX.
        i. Propose raising R&E prefs up significantly. See chart.
        ii. Plan is to increase localpref pre-migration. Could result in suboptimal backup paths carrying traffic briefly.
        iii. Community strings can be used to manipulate localpref as needed; see chart. Would do this on a flag day before the migration.
        iv. Roy Hockett: will there be a community string to match localprefs post migration? This had not yet been considered. Question would be how long we would support both.
        v. Farmer: suggest a closing flag day after an extended but reasonable period of time. Would prefer to see harmony in schemes in the long run. Maybe instead of 51 use 52?
        vi. Tony Brock: anyone have a differing opinion? None spoke up.
        vii. Tony: is there a plan to document this on a website for the broader community? Jeff: yes, if we move forward with this plan, will absolutely update documentation accordingly.
        viii. Farmer: are there any other tags that need to be harmonized? Bartig: yes, many internal-use ones are being cleaned up as they are published. Reiterated that we make something that makes sense on the long term. Community is generally willing to sustain (well communicated) short-term pain for long-term correctness.
5. AOB
        i. Farmer: situation where have multiple I2 peerings (8 or 9). Some use local addresses, some use I2 addresses. How would one go about making it so that it was one way or another, preferably using I2 addresses. Bartig: would be open to doing this, but not during migration. Either do it soon or wait until after migration.

Local Preference

There is no other more interesting topic

Existing situation

Like most networks, we set the local preference for customer routes above those of peer networks

Multiply this times (at least) two, for R&E and I2PX

The values for local preference haven't changed, and since R&E and I2PX are in VRFs, their relative values don't matter

Simplified view of current values (I2PX has more nuanced knobs):

	R&E Participant	R&E Peer	I2PX Participant	I2PX Peer
High	260	160	240	
Default	200	100	220	100
Low	140	40	200	

Issue/Solution

Having the local preference values irrespective across VRFs makes it more difficult to create services that need routes leaked between VRFs - the Blended table for OSG is one example of this

A new set of local preferences is being implemented to prioritize R&E routes over I2PX routes

The impact of this change will only be relevant to leaked/blended routes. Behavior within the R&E and I2PX VRFs will not be changed.

	R&E Participant	**R&E Peer**	**I2PX Participant**	**I2PX Peer**
High	620	560	240	
Default	600	500	220	100
Low	540	460	200	

Implementation

In order to not have unpredictable routing during the migration of services to the NGI network, the least disruptive way is to implement the new local preferences on the Juniper network before BGP services start migrating

There will be a flag day in which the import policies of the Junipers will be updated at once. This could result in suboptimal routing - backup paths being utilized unnecessarily - but should not result in any packet loss or unavailability.

The change will be made on a date to be determined at 4-5am EDT/1-2am PDT to minimize impact

The communities that you rely on to influence local preference will not change (11537:260 will still set an R&E participant route to "high")

			Community	Old	New
R&E	Participant	High	11537:260	260	620
	Participant	Default		200	600
	Peer	High	11537:160	160	560
	Participant	Low	11537:140	140	540
	Peer	Default		100	500
	Participant	Below Peer	11537:60		480
	Peer	Low	11537:40	40	460
I2PX	Customer	High	11164:51240	240	240
	Customer	Default		220	220
	Customer	Low	11164:51200	200	200
	Peer	Default		100	100
	Customer	Below Peer	11164:51080	80	80
	Transit	Default		70	70
	Customer	Below Transit	11164:51050	50	50