

2020-03-12 Network Engineering Team Meeting notes

Date/Time

(Default schedule is second Thursday of Month.)

12 Mar 2020 0800 PT/0900 MT/1000 CT/1100 ET/1200 CLT

Meeting Online Connections:

Join Zoom Meeting

<https://fiu.zoom.us/j/602918755>

Meeting ID: 602 918 755

One tap mobile

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Dial by your location

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Join by SIP

602918755@zoomcrc.com

Join by H.323

162.255.37.11 (US West)

162.255.36.11 (US East)

221.122.88.195 (China)

115.114.131.7 (India)

213.19.144.110 (EMEA)

103.122.166.55 (Australia)

209.9.211.110 (Hong Kong)

64.211.144.160 (Brazil)

69.174.57.160 (Canada)

207.226.132.110 (Japan)

Meeting ID: 602 918 755

Meeting Recording:

TBD

Attendees

- [Jeff Kantor](#) (JK) (Rubin Observatory)
- [Unknown User \(rlambert\)](#) (RL) (Rubin Observatory) (absent)
- [Julio Ibarra](#) (JI) FIU/AmLight
- [Unknown User \(kollross\)](#) (MK) NCSA
- [Jeronimo Bezerra](#) (JB) FIU/AmLight
- [Albert Astudillo](#) (AA) REUNA
- [Renata Frez](#) (RZ) RNP/AmLight Brazil
- [Claudia Inostroza](#) (CI) REUNA (absent)
- [Paul Wefel](#) (PW) ESnet
- [Kate Robinson](#) (KR) ESnet
- [Gizella Kapus](#) (GK) ESnet (absent)
- [Vasilka Chergarova](#) (VCh) FIU/AmLight
- [Phil DeMar](#) (PD) FNAL
- [Richard Hughes-Jones](#) (RHJ) GEANT
- [Aluizio Hazin](#) (RNP)
- [Cristián Silva](#) (Rubin Observatory)
- [Joshua Hoblitt](#) (Rubin Observatory) (absent)

Guests

- [Stuart McLellan](#) (SM) RENATER
- [Vincenzo Capone](#) (VCa) GEANT (absent)
- [Ed Moynihn](#) (EM) NEARR, Global NOC, IU (absent)

Goals

- Coordination of networking activities across Rubin Observatory

Discussion items

Time (PT)	Item	Who	Notes
	NET Action Items Status	Jeff Kantor	<p>Reminder: Work on your action items: International Communications (aka Long-Haul Networks)</p> <p>Documentation updates schedule:</p> <p>January - Continued work on Rubin Observatory Network Verification Plan (including JIRA).</p> <p>February - Completed draft Rubin Observatory Network Verification Plan (including JIRA).</p> <p>March - Schedule and prepare for Rubin Observatory Networks Pre-Verification Review. Submit LSST Change Request to update LS E-78 Rubin Observatory Network Design (including Chilean, International, and US networks), to baseline Technical Document, and related milestones in PMCS.</p> <p>April - Develop draft Rubin Observatory Operations Network SLAs.</p>
	Update on CONUS Networks	Paul Wefel Jeroni mo Bezerra	<p>CONUS Networks, including ESnet:</p> <p>No updates, ATL - CHI circuits are up and running, production. ESnet6 optical system being deployed East - West. Phase 1 (East Coast) is done. Phase 2, 5 ongoing (Midwest). Rubin Observatory waves are incorporated into ESnet6 optical plan. Start of upgrade work on 2 x 100 G ATL - CHI, probably in June, or July.</p>
	Chilean /International Networks Update	Unknown User (rlambert) Albert Astudillo Jeroni mo Bezerra	<p>Developments in La Serena and end-to-end service to NCSA for upcoming Auxiliary Telescope Traffic and general (internet, mail, voice) traffic:</p> <p>Introducing Cristián Silva New IT manager in La Serena, taking over Summit - Base IT and networks. Joshua Hoblitt, Eduardo Toro, Julio Constanzo assisting. Jeff Kantor is still responsible for Base - Archive networks and still chairing NET.</p> <p>Near term work to coordinate: IT-1762 (and placeholder SUMMIT-3917) - Plan for atarchiver/LATISS switch-over to LSST network (e.g. ungang atarchiver network ports), LSE-309 backbones/separation of traffic.</p> <p>LS - NCSA 20G tests conducted with UDP, have not been successful with TCP. Need to complete TCP tests and fail-over tests (today and tomorrow). Servers are 10G connected, not critical to tune DTNs in using TCP. GEANT can get 30G /100 G with TCP Europe - Australia. JK - Tested (but unreliable) 20G is fine for LATISS, tested reliable 20G is needed for ComCAM.</p>
	NCSA - CC-IN2P3 Networks update	Unknown User (kollross)	<p>NCSA - CC- IN2P3 network:</p> <p>RHJ - Met RENATER/GEANT/IN2P3, there is a circuit between Lyon and Geneva, which can be used for LSST. Will be doing test at least at 20G between Lyon - Geneva, onto GEANT, and then to London. Making network map for what is currently there. Would like to better understand what traffic is expected on transatlantic link. Referred to Fabio Hernandez at IN2P3 and Michelle Butler at NCSA.</p>
	Other Discussion Topics	By topic	<p>Rubin Observatory Network Technical Document Update: Julio IbarraJeff Kantor</p> <p>https://docs.google.com/document/d/1ZvpaHwIzHHMuqRXJEomIqQNH_8tP_EfiV6S1SzyonU/edit</p> <p>Target to be ready for LCR to LSE-78 and submit LCR to baseline prior to Pre-Verification Review, so need by May 1, 2020.</p> <p>(NOTE: Potential impacts of Simplified Image Access proposal.)</p> <p>Rubin Observatory Network Verification: Jeff Kantor</p> <p>Rubin Observatory Networks needs to be formally verified as ready for System Integration and Commissioning. 2019-07-11 Meeting published a list of requirement to be verified and a diagram of the JIRA test artifacts that must be done. (NOTE: Confluence can't render the JIRA test artifacts attachment, but it is a valid JPG file. Download it to view it.) Also Network Verification Plan and Matrix are now superseded by LDM-732 (attached), generated from the LSST V&V JIRA Project (LVV), referenced on LSST-NET home page.</p> <p>Network Pre-Verification Review charge circulated, review package due May 1, review May 18 - 19 (virtual meeting).</p> <p>Rubin Observatory Networks, SLAs for Operations: Jeff Kantor</p> <p>FIU flow-down SLAs provided, will use as template for others. Waiting for:</p> <p>Revising Operations Proposal, proposed acceleration of ops funding for networks to implement dedicated path from Boca - Atlanta in FY22. Proposal update was due for review at the beginning of March, but the proposal submission to the funding agencies is now delayed pending decisions on the expansion of DOE Lab roles in operations. The Directors and Proposal Reviews are not delayed but are descoped in some areas.</p> <p>Virtual NOC: Jerónimo Bezerra, Unknown User (rlambert), Albert Astudillo, Unknown User (kollross) Vincenzo Capone</p> <p>We filled out GlobalNOC network assessment questionnaire. Ed's Advanced North Atlantic (ANA) Consortium, Networks for European, American, and African Research (NEAAR) group is a GlobalNOC customer, neutral and helping to facilitate. Renewal for ANA transatlantic connections coming up soon, may change links somewhat. Ed is in these discussions and can be liaison. EXISTING ACTION ITEM</p> <p>Network Security:</p> <p>The US Federal government is asking us to respond to securing networks against exploiting LSST images to find satellites. The project has drafted a response (DMTN-108) and some of us have provided comments, and JB provided description of options for attenuation monitoring, data encryption at L2, L3.</p>

	Network Design and End-to-End Test Plan and QoS planning	Jerónimo Bezerra Unknown User (rlambrt)	Installing perfSonar nodes on summit, in base on LSST Network. DTN-based testing between LS and NCSA in work. Need to be ready by April, enable LATISS switch and ComCAM connections.
	Other business	Any	NET/SAACC Meetings will be virtual meetings. Will consider time zones and splitting into multiple virtual meetings. West Coast USA - France is time span. Could start at 0800 PT and go most of a single day as well. Aluizio Hazen - SP - SCL spectrum link: RNP having some problems SP - Curitiba, RNP decided to run plan "b" to work around this, will swap capacity with Northern Brazil, go SP - Porto Alegre. Document in internal review, start provider notifications next week. Process from DCIs to establish connection between RedClara - REUNA in Santiago, launched this Monday. May have some impact, still analyzing. Need RNP, REUNA, RedClara to discuss. No revised date at this point, will report back in a few weeks.
	Wrap up and next meeting	Jeff Kantor	Wrap up and Next meetings: 09 Apr 2020 22 Apr 2020 Virtual Face to Face NET meeting in Miami (following SAACC meeting) All meetings at 0800 PT/0900 MT/1000 CT/1100 ET/1200 CLT (subject to time changes)

Action items

- ☒ Jeff Kantor Provide DRP size curve from DM sizing model to GEANT/RENATER. 26 Mar 2020
- ☒ Jeronimo Bezerra , Paul Wefel confirm implementation of 2 x 100G in October, 2020 (without dedicated wave from Boca - Atlanta) 26 Mar 2020
- ☒ Julio Ibarra [Jeff Kantor](#) , [Heidi Morgan](#) Put out announcement, doodle poll re NET/SAACC meetings (virtual) 26 Mar 2020
- ☐