



Netherlands Institute for Radio Astronomy

LOFAR Network Reconfiguration

LSM 2014-04-29
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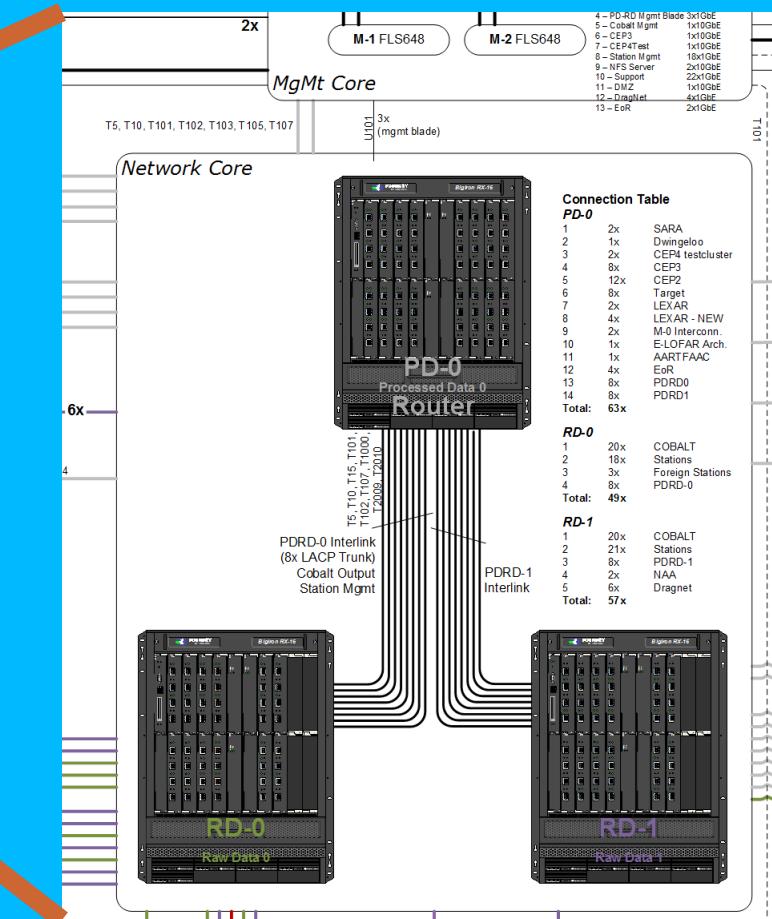
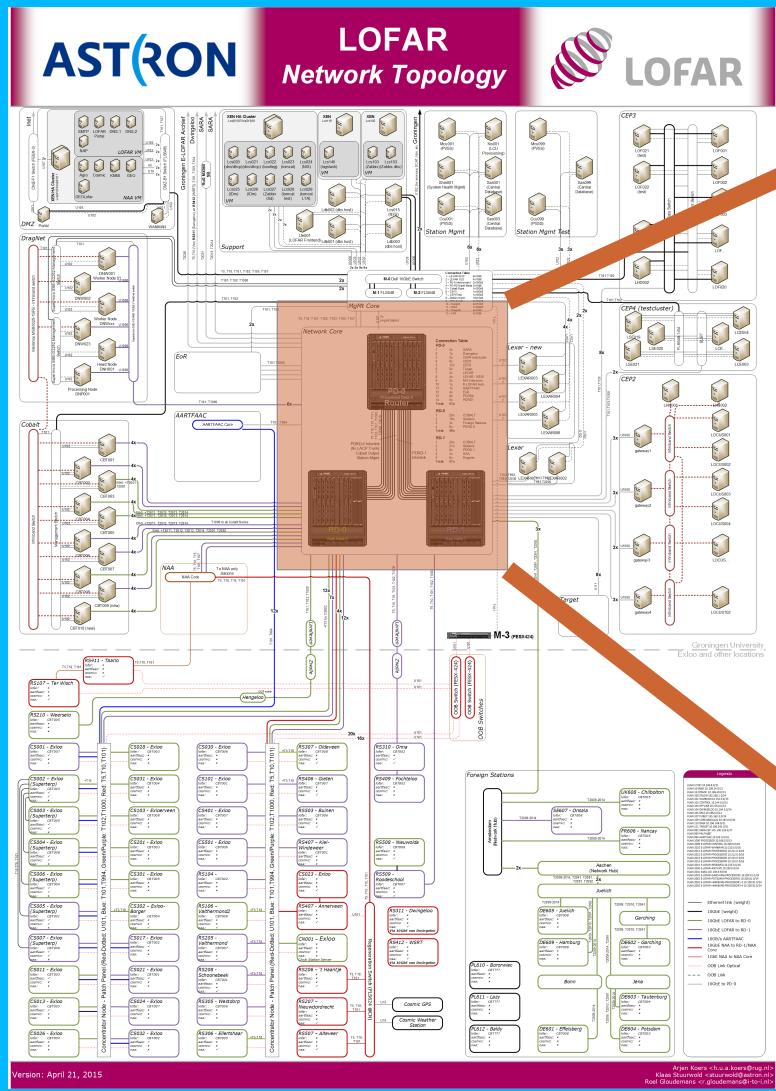
Why and what



- LOFAR Network needs redesign:
 - Simpler design for current needs
 - Prepare for expansion (stations, clusters)
 - Deal with hardware out of warranty
- Implement new design *18 - 29 May*:
 - Joint effort with CIT Groningen
 - Revise LOFAR Core Network @ CEP
 - Clean up cabling in Concentrator Node (CN) @ Exloo
 - Replace optics @ 17 stations

New Core Network Design

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Planning



| | @CEP | @CN | @Stations | @ASTRON |
|--------|----------------|----------------|----------------|---------------------|
| Mon 18 | Dismantle | Rewiring | | Monitoring reconfig |
| Tue 19 | Place switches | Rewiring | | |
| Wed 20 | Install cables | Rewiring | Replace optics | Network tests |
| Thu 21 | Install cables | | Replace optics | Network tests |
| Fri 22 | Install cables | | Replace optics | Network tests |
| | | | | |
| Mon 25 | <i>Holiday</i> | <i>Holiday</i> | <i>Holiday</i> | <i>Holiday</i> |
| Tue 26 | | | Replace optics | System tests |
| Wed 27 | | | Replace optics | System tests |
| Thu 28 | | | Replace optics | System tests |
| Fri 29 | | | | |

System Availability

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| | Intl stations | Dutch stations, unmodified | Dutch stations, new optics | Clusters @ CEP | AARTFAAC |
|--------|---------------|-------------------------------|-------------------------------|-------------------|----------------|
| Mon 18 | Local mode | U | U | U | U |
| Tue 19 | Local mode | U | U | U | U |
| Wed 20 | Local mode | U | U | U / R | U |
| Thu 21 | Local mode | R | U / R | U / R | Available |
| Fri 22 | Local mode | R | U / R | U / R | Available |
| | | | | | |
| Mon 25 | Local mode | <i>Holiday</i> | <i>Holiday</i> | <i>Holiday</i> | <i>Holiday</i> |
| Tue 26 | R | R | U / R | R | Available |
| Wed 27 | R | R | U / R | R | Available |
| Thu 28 | R | R | U / R | R | Available |
| Fri 29 | R | R | R | R | Available |
| Sat 30 | Available | Available | Available | Available | Available |

U = Unreachable, R = Reserved for testing

System Availability

AST^{RON}

- Release procedure:
 - Per cluster
 - Software Support → Science Support
 - Science Support → users
- No guarantees before Friday May 29th.
- Contingency:
 - Move work on some stations to June. Priorities:

| Priority | Stations |
|----------|---|
| 1 | CS003, CS007 |
| 2 | RS106, RS406, RS407 |
| 3 | RS306, RS307, RS503 |
| 4 | CS011, CS026, CS028, CS030, CS031, CS032, CS101, CS103, CS401 |