

2nd SIG-NGN Meeting

4th & 5th April 2019, Stockholm, Sweden

SIG-NGN is the Special Interest Group on Next Generation Networks.

This meeting was the second meeting of the SIG and hosted by **SUNET** in Stockholm.



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Theme

"whiteboxing" & "optical"

Remote Participation

Meeting ID: 338 012 664

Join Zoom Meeting: <https://geant.zoom.us/j/338012664>
Find your local number: <https://zoom.us/u/acBzohYblm>
Join by SIP 338012664@109.105.112.236 or 338012664@109.105.112.235
Join by H.323 109.105.112.236 or 109.105.112.235

Directions

Meeting location: SUNET, Tulegatan 11, Stockholm, Sweden.

Direction provided on the [SUNET website](#).

Quick Links

[All Presentations](#)

Checkout the discussion on [NREN.slack.com](#) ([sign up here](#))

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Contact the [NGN Steering Committee](#)

Registration

[Attendee List](#)

Agenda (all times are in CET)

Thursday, 4th April 2019 - "White boxing"

| Time | What's happening |
|-------------|---|
| 09:00-12:00 | GÉANT GN4-3 WP6 White boxing workshop This is open to all SIG-NGN attendees Coordinators: <i>Xavier Jeannin (Renater), Ivana Golub (PSNC), Tim Chown (Jisc)</i> In this session we present the work ongoing in the new GÉANT GN4-3 project in the area of white boxing and P4, to solicit input and feedback from the SIG-NGN community on uses cases and services. |
| 09:00-09:10 | Welcome and introductions - <i>Ivana Golub, PSNC, GN4-3 WP6 co-leader</i> |
| 09:10-09:40 | White boxing for NRENs, where we are today, lessons learnt, uptake strategy - <i>Xavier Jeannin, Renater</i> |
| 09:40-10:20 | Work planned and use cases (including new services) within the GÉANT project - <i>Xavier Jeannin, Renater and Christos Argyropoulos, GRNet</i> |
| 10:20-10:40 | Coffee break |
| 10:40-10:50 | Data plane programming, status, uptake strategy - <i>Xavier Jeannin, Renater</i> |
| 10:50-11:10 | Designing a routing platform for the R&E academic community - <i>Frédéric Loui, Renater</i> |
| 11:10-11:30 | Network monitoring and security (DDoS mitigation) with P4 - <i>Marco Savi, FBK</i> |
| 11:30-12:30 | Lunch |

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| 12: 30- 13: 00 | Discussion around white box adoption (Updated) <ul style="list-style-type: none"> • Use cases, services, innovation, new features, concerns, ... • Uptake - quick-wins and challenges • How should we build a strong community around white boxing and data plane programming (inc. P4) ? |
| | SIG-NGN |
| 13: 00- 13: 15 | Welcome & Introduction - <i>Rob Evans, Jisc, Rudolf Vohnout, CESNET, Edoardo Martelli, CERN, Lars Fischer, NORDUnet, Jac Kloots, SURFnet</i> |
| 13: 15- 14: 00 | "Whiteboxing at LINX" - <i>Flemming Heino (LINX)</i> |
| 14: 00- 14: 45 | "A Plethora of P4 Particulars" - <i>Aaron A. Glenn</i> |
| 14: 45- 15: 30 | "P4-to-VHDL: How We Built the Compiler for FPGA Devices" - <i>Pavel Benacek & Jan Korenek (CESnet). (Video P4-INT I Pv7 Demo)</i> |
| 15: 30- 16: 00 | <i>Tea and coffee break</i> |
| 16: 00- 16: 45 | "FPGA and NPU technologies into our next generation production network" - <i>Yatish Kumar (Lawrence Berkeley National Laboratory)</i> |
| 16: 45- 17: 30 | "ESnet6 High-Touch Services: Telemetry and Rate Monitoring." - <i>Richard Cziva (ESnet)</i> |
| 17: 30- 19: 30 | <i>Pause (or provide feedback at Menti.com 67 00 73)</i> |
| 19: 30- 20: 30 | Meet for drinks on the roof top bar Urban Deli (pay for yourself). |
| 20: 30 | Dinner at Urban Deli on Sveavägen 44 (Hosted by SUNET) |

Friday, 5th April 2019 - "Optical"

| Time | What's happening |
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| 09: 00- 09: 30 | <i>SIG-NGN Steering Committee Catchup</i> |

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| 09: 30- 09: 40 | Variable T/F Infrastructure and Testbed - <i>Josef Vojtech (presented by Rudolf Vohnout), CESnet</i> |
| 09: 40- 09: 55 | "How to measure and analyze non-data applications in fibres?" - <i>Jan Radil & Rudolf Vohnout (CESnet)</i> |
| 09: 55- 10: 45 | "Disaggregated optical systems" - <i>Kent Lidström (Smartoptics)</i> |
| 10: 45- 11: 15 | <i>Tea and coffee</i> |
| 11: 15- 11: 45 | "GEANT lab automation and network evolution." - <i>Guy Roberts (GÉANT)</i> |
| 11: 45- 12: 00 | "Optical time frequency: its a relative thing" - <i>Guy Roberts (GÉANT)</i> |
| 12: 00- 12: 45 | "OpenROADM Multi Service Agreements" - <i>Rob Smets (SURFnet)</i> |
| 12: 45- 13: 00 | Wrap up, Summary and Next Steps - <i>Rob Evans, Jisc, Rudolf Vohnout, CESNET, Edoardo Martelli, CERN, Lars Fischer, NORDUnet, Jac Kloots, SURFnet</i> ...and provide feedback at Menti.com 67 00 73 |
| 13: 00 | <i>Finish</i> |