



# GN2-JRA1 GUIs



# GÉANT2 JRA1 Partners

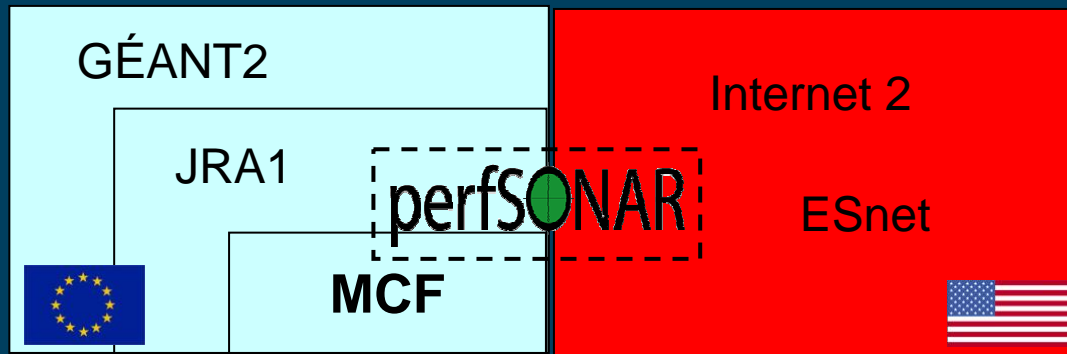
Connect. Communicate. Collaborate

- Arnes
  - Belnet
  - Carnet
  - Cesnet
  - DANTE
  - DFN
  - FCCN
  - GRNet
  - ISTF
  - PSNC
  - Nordunet (Uninett)
  - Renater
  - RedIRIS
  - Surfnet
  - SWITCH
- PerfSONAR partners
- ESnet
  - Internet2
  - University of Delaware.



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# JRA1 and perfSONAR



- Is a joint effort between GÉANT2-JRA1, Internet2 and ESnet.
  - [http://www.perfsonar.net/jra1-wiki/index.php/Main\\_Page](http://www.perfsonar.net/jra1-wiki/index.php/Main_Page)
- RNP (Brazil) and the University of Delaware have joined the effort.



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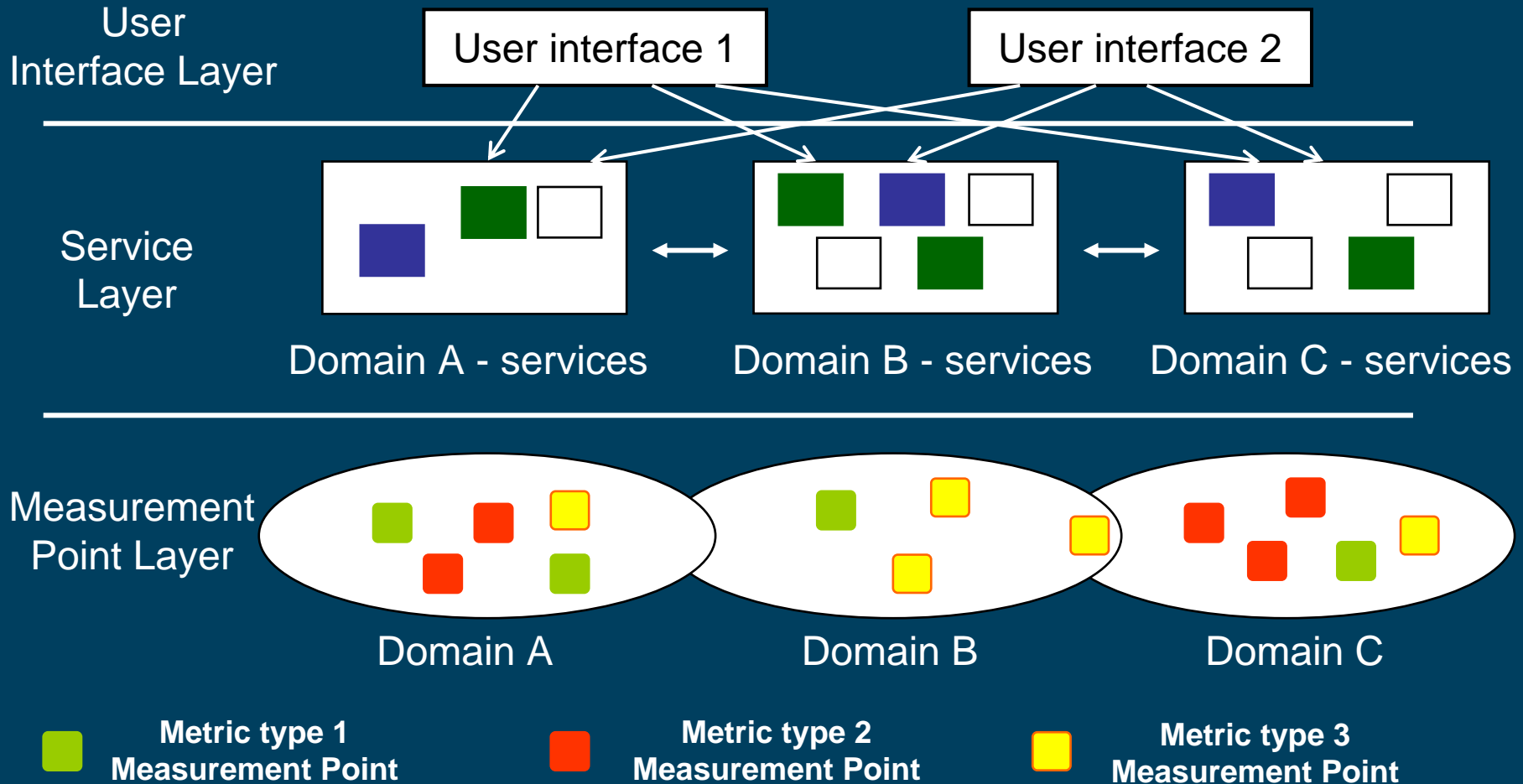
# perfSONAR

- Main Objective is to build a framework to retrieve the data seamlessly and to trigger on-demand actions.
  - Use the GGF NM-WG schema to request and retrieve the data.
  - For more information contact [nicolas.simar@dante.org.uk](mailto:nicolas.simar@dante.org.uk)
- Several services have been implemented, each providing their own specificities
  - Stores and publishes monitoring information retrieved from Measurement Point Services (Measurement Archive service)
  - Creates and/or publishes monitoring information related to active and passive measurements (Measurement Point service)
  - To discover where the services are located and their capabilities (Lookup services)
  - Topology service, Authentication service.



# perfSONAR Framework

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# Wide deployment

perfSONAR services are already largely deployed

- Abilene (US)
- ACAD (Bulgaria)
- CARNet (Croatia)
- CESNET (Czech Republic)
- ESnet (US)
- GÉANT (EU)
- MREN (Serbia-Montenegro)
- PIONIER (Poland)
- RNP (Brazil)
- SWITCH (Switzerland)
- Uninett (Norway)



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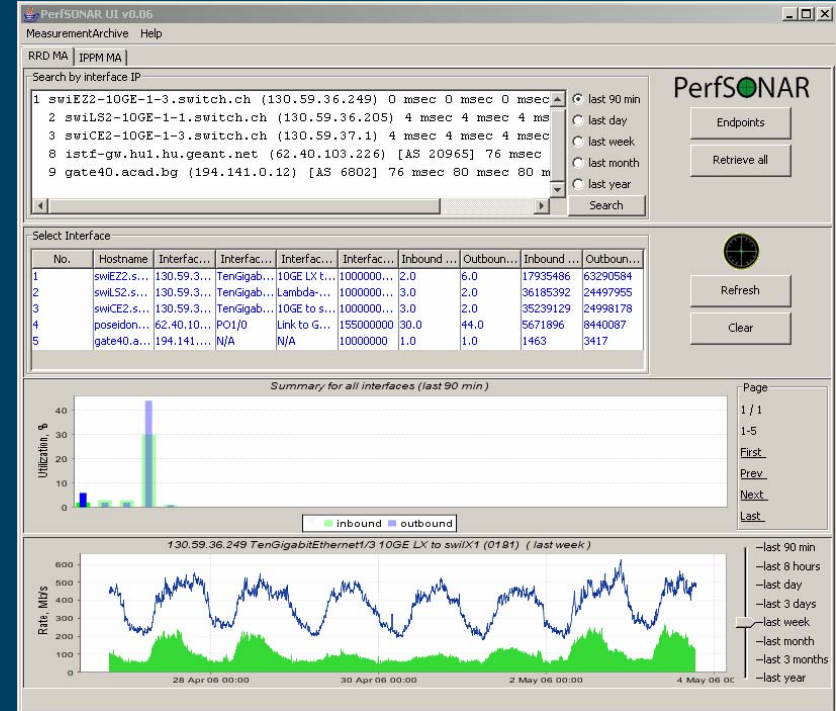
# Wide deployment

- The perfSONAR services are being used by EGEE for their network diagnostic tool.
- The perfSONAR services will be used for monitoring L2 circuit offered to LHC (L2 status monitoring).

# perfsonarUI

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- Developed by ISTF for JRA1.
- Open source, publicly accessible, stand alone graphical user interface client.
- Capable of querying the perfSONAR Measurement Archives.
- Display the data in a concise manner.





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# CNM

- Customer Network Management (CNM)
  - Developed by DFN, taken on board by JRA1.
- Shows the network topology and node and link statistics.
- Easy navigation between different networks through hierarchical topology maps.
- Time navigation function.
- Customisable views and access limitations.

# Visualisation tools target audience



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	End-User	Project	PERT/NOC staff	Network Manager
<b>CNM</b>	Customized view of network topology and metrics.	<b>Customized view of project network and metrics</b>	View of complete network topology and additional metrics	<b>Customized view of network topology and metrics and planned dashboard</b>
<b>NEMO</b>	<b>Easy to use Unrestricted Topology and metric Visualization</b>	General topology and metric visualization	General topology and metric visualization including link to on demand testing	<b>Intuitive network topology and performance Overview</b>
<b>VisualperfSONAR</b>	<b>View of general traffic statistics for IP path and geographical path Representation</b>	View of detailed traffic statistics for IP path and geographical path Representation	<b>View of detailed traffic statistics for IP path and geographical path Representation</b>	View of general traffic statistics for IP path and geographical path representation
<b>perfSONARUI</b>	<b>Seamless access to all perfSONAR services</b>	Seamless access to all perfSONAR Services	<b>Seamless access to all perfSONAR Services</b>	Seamless access to all perfSONAR services