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Deliverable D2.10
Services Portal or Solution

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Authors: Karl Meyer (GÉANT Association)

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Abstract
This deliverable provides an update on the progress of delivery of the Insight Portal and the current status of its test implementation.
Table of Contents

Executive Summary 1
1 Introduction 2
2 Summary of Project Brief and Objectives 2
  2.1 Background and Business Case 2
  2.2 Project Scope and Users 3
  2.3 Product Description 4
3 Status of Progress of Insight Portal 4
  3.1 Services Management 5
    3.1.1 Open Tickets 6
    3.1.2 Services Summary 6
    3.1.3 Services Overview 7
  3.2 Membership and Finance 7
  3.3 Traffic Statistics 8
  3.4 Eventr 10
    3.4.1 Individual Participation 11
    3.4.2 Statistical Analysis Functions 12
4 Future Developments 13
References 14
Glossary 14

Table of Figures

Figure 2.1: Insight Portal user types access 3
Figure 3.1: Insight homepage 5
Figure 3.2: Services Management 6
Figure 3.3: Services Overview 7
Figure 3.4: Membership and finance 7
Figure 3.5: Traffic Statistics 8
Figure 3.6: Weather Map Graphs 9
Figure 3.7: Weather Map Visualisation 9
Figure 3.8: Global Map 10
Figure 3.9: Eventr 10
Figure 3.10: Eventr calendar 11
Figure 3.11: Eventr registrations 11
Figure 3.12: Total Participation 12
Figure 3.13: “Web of Participation” 12
Executive Summary

Following the analysis documented in Deliverable D2.3 Analysis, Strategy and Action Plan for Services Portal or Solution, it was agreed that the most effective and efficient use of resources in setting up a services portal would be to converge development resource to provide an integrated NREN Services and Management portal – the Insight Portal. The Project Brief for the Insight Portal, illustrated by user scenarios that highlight its planned purpose as a solution for integrating multiple, disparate activities was set out in Deliverable D2.7 Services Portal or Solution [D2.7].

This document summarises the current progress and status of development of the Insight Portal (Deliverable D2.10) and in particular highlights its service management elements.

Using a modular approach and scalable setup, a subset of services has been initially implemented with further services to be integrated during the lifecycle of the portal. At this stage of development, functions have been implemented primarily for GÉANT Staff users but other groups will also be targeted going forward, including GÉANT NRENs and project participants.
1 **Introduction**

This deliverable follows on from Deliverable *D2.7 Services Portal or Solution* [D2.7] which set out the project brief and business case for the development of the Insight Portal as the most cost-effective delivery mechanism for service-based information to the NRENs and to provide an integrated management portal for NREN stakeholders.

The delivery plan for the Insight Portal is to provide progressively more user groups with access to data from a growing number of resources. This report provides a snapshot progress report on the current status of development of the portal.

2 **Summary of Project Brief and Objectives**

2.1 **Background and Business Case**

The current GÉANT information ecosystem is very diverse, including a wide variety of different platforms and information sources tailored to specific needs and roles within the organisation, the NRENs and the Project Participants.

A multitude of platforms (for specific activities, topics or services) are in place with different content, scope and purposes fulfilling various functions for the GÉANT organisation and community and the GN4-2 project.

This setup means that navigation across the various platforms is cumbersome and information can easily be missed, leading to lack of transparency and errors and duplication.

The objective of the Insight Portal is to address these various needs and develop an easily accessible and transparent single entry point for all GÉANT ecosystem-related information for external and internal users (GÉANT NRENs, GN4-2 Project participants, and GÉANT staff), and eventually to make available additional insights drawn from the various linked information sources such as service control and monitoring dashboards [See D2.7].

Using a modular approach and scalable setup, a subset of services has been implemented initially with further services to be integrated during the lifecycle of the portal.
2.2 Project Scope and Users

The Insight Portal will ultimately act as a Dashboard and Interface to the different platforms and information sources in the GÉANT ecosystem. The existing platforms are not impacted by this development and will remain unchanged and active in their current functions. The services within the launch scope of the Insight portal include:

- GÉANT Weathermap – Information relating to traffic levels and network utilisation across the GÉANT backbone.
- GÉANT Compendium.
- Membership and finance information.
- Calendar Functions including event participation statistics for TFs and SIGs.
- Services Portal:
  - Ticket Management using an API call to the OTRS support ticket system;
  - Service Summaries – Information relating to all available services;
  - Service Overviews – Interface to enable additions/upgrades and modifications to existing services.

The Insight Portal targets the following main groups of users (at this stage of development, functions have been implemented primarily for GÉANT Staff):

- GÉANT NREN members with or without formal GÉANT roles (GPPC, GA, APMs, etc.).
- GN4-2 project participants.
- GÉANT staff.
2.3 Product Description

The Insight Portal has the following features:

- All platforms are accessed via the Insight Portal through already defined APIs or via HTML. No new API developments will be undertaken by the Insight activity.
- Platforms are added in using a modular approach.
- The insight portal provides access to data but editing of platform content happens on each platform. This because the ability to edit data would require the Insight Portal to have knowledge of the underlying business and operational rules of each data repository which is beyond the scope of this activity.

The platforms and information sources included/displayed are:

- Partner Portal – Service, Finance and Operational Information.
- OTRS – Open tickets.
- Eventr – Next events, registered events, analytics of event participation.
- NetSuite – Paid invoices, outstanding payments, payment schedule.
- Compendium.

3 Status of Progress of Insight Portal

The development of the Insight Portal is currently at a relatively early stage, during which the focus has been on understanding the linkages and interfaces to the underlying data service elements involved and mechanisms to control access to information.

Development has been undertaken using in-house resources and staff using a modular, progressive approach so that benefits can be accrued early on and stakeholder feedback could be obtained already in the early phases of development.

The insight portal provides an intuitive web-based front end to access a range of internal resources [Figure 3.1].

In some cases, the ability to access and display information based on individual or group identity attributes (for example the ability to “roll-up” NREN information) is restricted, in which case the Insight portal will be used as a navigational element to the existing data sources.

As at 1 December 2018, the Portal is in a beta phase with approximately 50% of initial data integrations completed and UI development ongoing. This report describes the current progress of the portal, and the final portal may differ in its details from what is described below.
The layout of the portal has been configured to permit the inclusion of additional services as and when required without the need to redesign it. This is an element of the modular nature of the portal.

Figure 3.1 shows the Insight Portal’s home page, displaying the icons for the data areas available at present, each leading to the relevant sub-menus. This design allows the addition of further menus and sub-menus as required in the future. The homepage currently offers access to four types of data resources, including:

- Services.
- Membership and Finance.
- Traffic Statistics.
- Eventr.

The data currently accessible in each of these areas are detailed in the next sections.

### 3.1 Services Management

This resource area provides data regarding GÉANT services used by the NRENs. These include both GÉANT project services (for example GÉANT IP or GÉANT Lambda) as well as services offered by the GÉANT Association, for example the Trusted Certificate Service (TCS).
Status of Progress of Insight Portal

Figure 3.2: Services Management

Figure 3.2 highlights the Services element menu, which integrates three separate systems, and the sub-menus linking to the three relative core services currently implemented, including:

- Open Tickets.
- Services Summary.
- Services Overview.

These services are described briefly below.

3.1.1 Open Tickets

This link will connect users directly to the third-party OTRS ticket management system. This approach ensures secure attribute management for access control to trouble tickets while preserving security and integrity.

3.1.2 Services Summary

This link will connect to a range of service-related pages to provide NREN users with access to the latest information regarding services within the GÉANT product and service portfolio. The partner portal will remain the primary source of information and documentation in the immediate future. The long-term location for this content is the subject of developments related to the implementation of EOSC compatibility and therefore is outside the scope of any Insight redevelopments.
3.1.3 Services Overview

![Services Portal Image]

This section of Insight provides NREN users with access to details of existing implemented services as well as an interface through which to upgrade or modify services. This information in turn links to the existing Partner Portal content and interfaces. However, redevelopment of this functionality is outside the current scope of Insight. Figure 3.3 shows the home screen for the Services page, displays the services enabled for the user’s NREN and allows access to the relative management interfaces.

3.2 Membership and Finance

This information is currently located in static, file-based systems administered by the GÉANT Finance teams and this area of the portal currently provides links to this stored information. Figure 3.4 highlights the Membership and Finance menu with the sub-menus presently linking to “placeholder” information in anticipation of later developments.

![Membership and Finance Image]
3.3 Traffic Statistics

This area of the portal provides consolidated navigation to a range of network information and analysis systems, through sub-menus providing simplified links to external resources (Figure 3.5)

![Traffic Statistics Diagram]

Figure 3.5: Traffic Statistics

Traffic data is currently available in three main areas:

- Compendium Data – Annually reported NREN statistics published by GÉANT – Opens in a new window.
- Traffic Utilisation – Access to the “weathermap” real-time network utilisation service. This service is embedded within the Insight portal for ease of navigation.
- Global Map – Embedded access to the interactive global map service.
Figure 3.6: Weather Map Graphs (external data source operating within a web frame)

Figure 3.7: Weather Map Visualisation (using web frame to provide access to future systems)
3.4 Eventr

This section will provide users with analyses of NREN participation within Special Interest Groups and Task Forces. It comprises four key sections – two relating to individual participation and two providing statistical analysis.
3.4.1 Individual Participation

These elements help individual users manage their participation in GÉANT community events:

- Eventr Calendar – Provides a searchable listing of all events listed in the Eventr Database.
- My registrations – A filtered list showing registrations made by the individual signed in to Insight.

Figure 3.10 and Figure 3.11 show data presented directly in Insight extracted from an external site and from the Eventr system respectively.

Figure 3.10: Eventr calendar

Figure 3.11: Eventr registrations
3.4.2 Statistical Analysis Functions

These elements provide summary participation statistics. This enables NRENs and GÉANT to assess participation across Task Forces and Special Interest Groups to ensure attendance is representative of the whole community and to maximise the benefits of SIG and TF participation.

- **Total Participation** – A summary showing the levels of participation in TFs and SIGs across NRENs.
- **“Web of Participation”** – Providing a drill-down analysis of the number of individuals attending events from each NREN.

Figure 3.12 shows a new visualisation presenting data extracted from Eventr, while in Figure 3.13 Eventr data is displayed collected from an external site.

![Figure 3.12: Total Participation](image)

![Figure 3.13: “Web of Participation”](image)
4 Future Developments

As at 1 December 2018, the Portal is in a beta phase with approximately 50% of initial data integrations completed and UI development ongoing. The main focus of development will be on providing ease of navigation, transparency, and an attractive, modern and consistent interface. Bringing together access to the various GÉANT platforms and sites in one place, providing quick links to these sources, all through a tailored interface in line with the GÉANT brand, will enhance and simplify users’ experience.

A subset of services has been implemented initially with further services to be integrated following a modular approach during the lifecycle of the portal.

Further developments and enhancements to Insight will be considered during the implementation to ensure development resource is carefully targeted to maximise value to the user community. At present functions have been implemented primarily for GÉANT Staff users but will be gradually extended to the other user groups (GÉANT NREN members and project partners).

As the development of the portal is still in progress, the final portal may differ in its details from the version presented here.
References

[Box] https://www.box.com/
[D2.7] https://www.geant.org/Projects/GEANT_Project_GN4/deliverables/D2-7_Services-Portal-or-Solution.pdf
[Tools] https://tools.geant.net/portal/

Glossary

APM Access Port Manager
CRM Definition
GDPR General Data Protection Regulation
GPPC GÉANT Programme Planning Committee
IaaS Infrastructure as a Service
OTRS Open-source Ticket Request System
PLM Product Lifecycle Management
SIG Special Interest Group
SSO Single Sign-On
TCS Trusted Certificate Service
TF Task Force