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Deliverable D2.7

Services Portal or Solution

Deliverable D2.7

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Abstract

This deliverable contains the Project Brief for the Insight Portal, illustrated by user scenarios that highlight its planned purpose as a solution for integrating multiple, disparate activities.

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Executive Summary

Following the analysis documented in Deliverable *D2.3 Analysis, Strategy and Action Plan for Services Portal or Solution*, a range of similar and convergent activities were identified across the GN4-2 project. It was agreed that the most effective and efficient use of resources would be to feed back the results of this analysis into planning and scoping an integrated NREN Services and Management portal – the Insight Portal. This deliverable contains the Project Brief for the Insight Portal, illustrated by user scenarios that highlight its planned purpose as a solution for integrating multiple, disparate activities.

The development of the Insight portal is currently at a relatively early stage and for the time being is focused on understanding the linkages and interfaces to the underlying data service elements to be included. No serious issues have been identified so far that might interfere with the planned development. A modular approach involving an AGILE service development process will be used to ensure the progressive and incremental growth of the portal and include additional service and control modules over time.

1 Introduction

This deliverable follows on from Deliverable *D2.3 Analysis, Strategy and Action Plan for Services Portal or Solution* and was originally intended to define the structure for the delivery of a separate Services Portal for NREN stakeholders.

The results detailed in D2.3 can be summarised as follows:

- Deliverable 2.3 recommends the implementation of a lightweight, easily managed portal to support services developed by GÉANT, the NRENs and, potentially, third parties. The portal should conform to the GÉANT visual identity guidelines and be generally accessible, with access control limited to the underlying service sites.
- The services portal should be designed for NREN staff rather than to be used (or accessed) by end users from the R&E community.
- Once the overall strategy and approach have been agreed, an initial planning phase of three months is anticipated, in advance of any development, during which approval will be sought from the key stakeholders.

Following up on this report, a series of meetings and discussions started within the GN4-2 project to assess the needs and opportunities for the delivery of a Services Portal in detail.

During these meetings, opportunities were also discussed for developing a consolidated portal offering for NRENs and other stakeholders to encompass more functions and reduce the complexity of the GÉANT service interface to the NRENs.

Significant input was received from GN4-2 NA1 Task 4 (ICT) and NA3 Task 1 (European and Global NREN Account Management) teams.

Through this engagement, it became clear that a number of convergent activities within the project were using the same or related human resources. It was therefore decided that combining these separate initiatives would result in the potential for a more holistic solution to incorporate the requirements for both Services and Operational portals, and to halt separate developments within the Services Portal to allocate available resources more efficiently as part of a single action.

In the development of this combined portal (the Insight Portal) the findings and recommendations of Deliverable 2.3 will be taken into account. This document outlines the Project Brief for the Insight Portal and the User Scenarios that are being considered in developing this service.

2 Project Brief ‘Insight Portal Proof of Concept’

2.1 Background and Objective

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.

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

Bringing together information from 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. The main focus of development will be on providing easy navigation, transparency, and an attractive, modern and consistent interface.

By adopting a modular approach and scalable setup, a number of information sources can be incorporated initially while new ones can be added at later stages.

2.2 Business Case

Currently 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.

GÉANT users require a tailored mix of information depending on their roles as members of the organisation or NRENs, and/or as GN4-2 project partners.

The current setup means that navigation across the various platforms is cumbersome and information can easily be missed, leading to:

- Lack of transparency – difficulties in tracking down and combining/comparing information across different platforms.
- Errors and duplication – as many sources contain similar information and are maintained manually.

This situation is also reflected in NREN feedback gathered through the annual Satisfaction Survey and Partner Relations Meetings, which shows that there is a call for a higher level of transparency and easier access to meaningful information across all service and activity areas. Transparency, or the lack thereof, has moreover been one of the most criticised areas in the satisfaction survey over the last few years. There is also a strong demand for easier access to information on services and activities from the NREN community.

2.3 Project Scope and Exclusions

The Insight Portal will act as a Dashboard and Interface to the different platforms and information sources in the GÉANT ecosystem. Raw data from these various platforms will be accessed via APIs and displayed in a consistent and intelligent manner.

The existing platforms will not be impacted through this development and will remain unchanged and active in their current functions. All maintenance and edits will continue to be carried out on the respective platforms.

The platforms within the scope of the Insight portal include:

- Partner Portal.
- OTRS.
- Tools Portal including the Poller & Weather map.
- EventR.
- Global Map.
- NetSuite CRM.
- Compendium.
- Product Lifecycle Management (PLM).
- GÉANT Intranet.
- The Gateway (a small static portal page within the public geant.org website).

2.4 Constraints and Assumptions

To achieve successful user adoption and sustainable usage of the platform, the following requirements should be met:

- The Insight Portal will comprise two areas: an “open” area targeted at providing information to external users/stakeholders enabling them to access publicly available product and technical information with a greater level of detail than that found on the www.geant.org public website; and a “closed” area that will provide control and management information and services for internal (NREN) stakeholders. The “open” area will support the public website information but will not replace it.
- All platforms within the “closed” area should be federated, which already applies to all platforms operated by the GÉANT organisation or GN4-2 project.

- Tailored access for different NREN users (technical, management). It is assumed that this can be achieved via CoManage/Group Management (the internal GÉANT tools used to manage group and user access via federated sign-on).
- The impact of the GDPR will need to be factored in the development of the Insight Portal. By design, the portal will combine and integrate access to a range of data sources and systems, so it will be necessary to ensure that the constraints imposed by the GDPR are mitigated. In particular the requirement of "Privacy by Design" may require some data to be excluded following analysis of its composition, collection and processing.

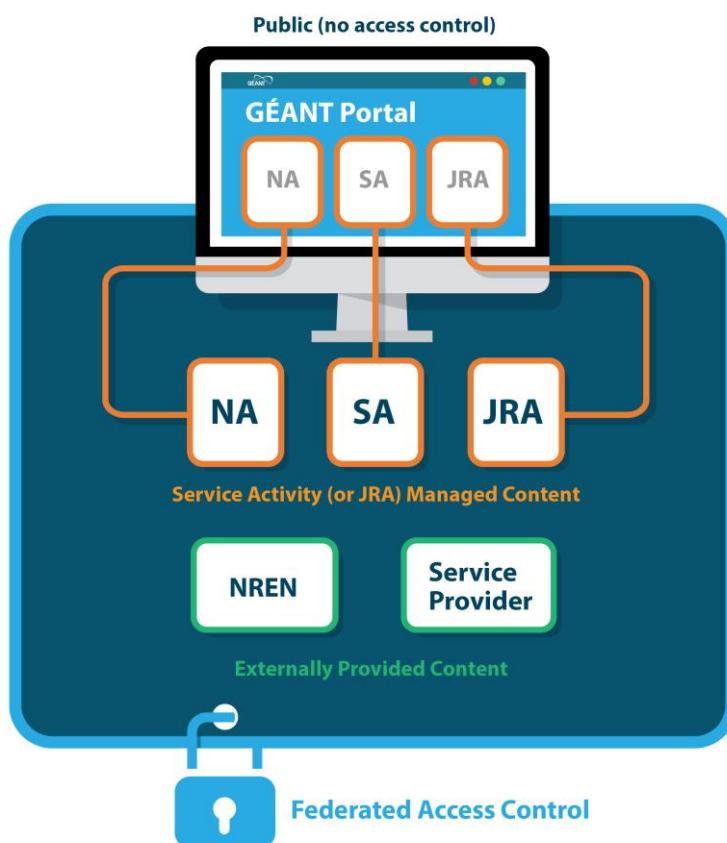


Figure 2.1: Open (public) and closed (federated control) user access to the Insight Portal

2.5 Users

The Insight Portal targets the following main groups of users:

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

Further differentiation of these roles is envisaged but will be subject to a detailed technical and functional assessment.

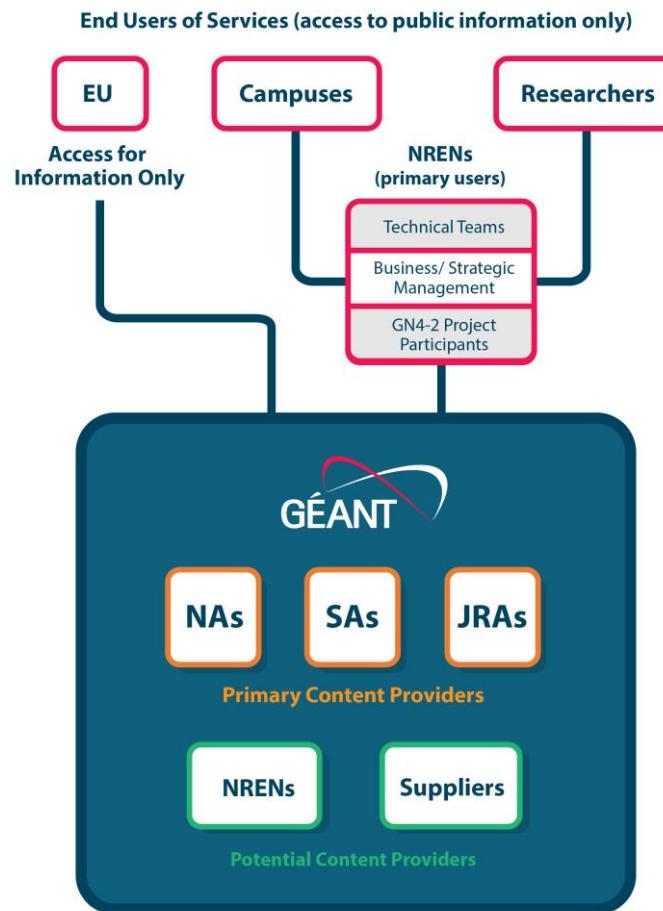


Figure 2.2: Insight Portal user types access

An initial assessment of the different usage models for the defined user groups is given in section 3.

These use cases will be further refined during the prototyping stages of the development based on detailed user feedback.

2.6 Interfaces with other Projects

Various parallel ongoing developments on different platforms and systems will need to be considered throughout all project stages:

- New development of Poller (successor of CACTI) [[Tools](#)].
- Setup of NetSuite finance system [[NetSuite](#)] and CRM.
- Revision of Partner Portal.

Potential further developments may also be ongoing and need to be assessed when starting the project. There should be sufficient information flow throughout the process to ensure interoperability and that duplication of work is avoided.

2.7 Project Product Description

The Insight Portal will have the following features:

- All platforms will be connected to the Insight Portal through one uniform API (individual platforms will continue to exist).
- Platforms can be added in using a modular approach.
- Data can be displayed in various forms (text, links, visuals, etc.).
- Editing of platform content happens on each platform itself, the insight portal combines and displays the data.

The platforms and information sources considered to be included/displayed are:

- Partner Portal – Service, Finance and Operational Information.
- OTRS – open tickets.
- EventR – next events, registered events, analytics of event participation.
- Tools Portal – Poller (CACTI Successor), weather map.
- NetSuite – paid invoices, outstanding payments, payment schedule.
- NetSuite CRM – Contact Information.
- Confluence wiki – GN4-2 Activities, TFs and SIGs.
- Cloud IaaS.
- Compendium.
- PLM.
- Global Map.
- Box [Box] – individual databases.

2.8 Project Approach

The development of the Insight Portal will be undertaken using in-house resources and staff. This is because the need to interface with large numbers of other internal systems would result in any external resource requiring substantial support and guidance and would negate any possible benefits from using an external supplier.

The project approach foresees the modular, progressive development of the portal rather than a “big bang” adoption type so that benefits can be accrued early on and stakeholder feedback can be obtained already in the early phases of development. A focus on using existing off-the-shelf software and solutions rather than bespoke development will reduce risk and speed up the implementation process. The project resources involved in development will include:

Role in Project	Responsibilities	Funding via
Sponsor	oversight and assurance of approval on exec level	GEANT Ltd
Project Manager, Product Owner	coordinate process, stakeholder engagement, provision of user requirements, prioritisation of user stories	NA3 T1
Technical Lead, Developer	assess technical requirements and feasibility, responsible for data visualisation and overall development	NA3 T1
Developer	Flask Development, Front End Framework Development	NA3 T1
Designer	UI and Graphic Design	NA2 T2
Designer	UI and Graphic Design	NA2 T2
SharePoint Expert	SharePoint Integration	NA1 T4

Table 2.1: Team structure (preliminary and subject to change)

3 Insight Portal – User Scenarios

Two separate user scenarios/personas have been developed to guide the implementation of the Insight Portal and to ensure that it supports user needs and is accurately customer focused. These scenarios are outlined below.

These scenarios will be refined through user feedback as the development of the portal progresses, and additional scenarios developed to reflect user requirements and patterns.

3.1 Scenario 1 – NREN Manager

The Manager of an NREN (hereinafter ‘User’) is preparing the annual report for the NREN’s Board/Funder and would like to obtain an overview of its engagement in GÉANT and the value of its membership. To do this, the User would like to see information about the services and activities used as part of their GÉANT membership and the associated costs.

- The User first accesses a central Landing Page using Single Sign-On (SSO). The Landing Page should be clearly branded as GÉANT, and provide the entry to the Insight Portal and possibly a teaser referring to what the Insight Portal does (one/two liner). The page should provide a link to the overall Public Gateway.
- After sign-in, the User is redirected to a personalised Dashboard. The Dashboard can be personalised using a drag-and-drop function selecting from a list of all areas available.
- In this case the User sees the overview of their NREN in GÉANT including:
 - My Membership:
 - NREN Contacts (GA, APMs, GN4-2 Participants);
 - My annual Subscription (overall sum, development over time, Link to Latest Cost Share Overview (restricted access);
 - My additional payments (TCS, Lambda) (restricted access);
 - My GN4-2 contribution (restricted access);
 - Summary key changes in the last year (e.g. new services adopted, new GN4-2 joiner – information provided by Account Manager);
 - My Services Overview:
 - Overview of Services adopted compared to available Portfolio (this should be a simple and straightforward overview. Services not adopted should be displayed but greyed out. The option to get more information on each service via link to respective service information is given);
 - Service overviews are clustered per area;
 - Services outside the Cost Share are indicated with asterisk or similar;
 - My Connectivity Services:
 - Services list including status;

- Traffic statistics;
- Open OTRS tickets;
- My T&I:
 - Yes/no, no. of eduroam instances, REFEDS member, federation name...
- My Cloud:
 - Yes/no, role, more info tbd;
- My Other Services:
 - Tbd;
- My event participation:
 - List of upcoming events that, the NREN has signed up to via EventR;
 - List of past events signed up to via EventR;
 - Overview of active Contributions at TFs/ SIGs/STFs.

3.1.1 Further Considerations

The adoption of the modular, progressive development approach outlined above will mean that a number of design decisions will need to be made early on in the development process. These include:

- Whether the dashboard should display the section titles only, linking to the respective information. It should be noted that this would add another layer to the navigation, but while the number of steps to access the information should be minimised, the display should never be cluttered.
- If the side navigation menu should allow to access the wider GÉANT Service Areas for all areas listed above (Connectivity, T&I, Clouds, Events....).
- Possible restricted access content only visible to users previously approved by NRENs.
- At the moment two different options are being explored to organise the information:
 - One personalized dashboard including everything related to ‘My NREN’ as outlined above;
 - Or, Sections for each area with subsections related to the NRENs, e.g. Traffic stats – my traffic stats, cloud services – my cloud services

3.2 Scenario 2 – APM

The APM of an NREN is working with some of its users who are requesting an international service solution connecting to the US through a 10Gbps dedicated link via GÉANT. In this scenario, the User would like to assess the NRENs current connectivity status and utilisation, service options and possible international connections:

- The User first accesses a central Landing Page using Single Sign-On (SSO). The Landing Page should be clearly branded as GÉANT, and provide the entry to the Insight Portal and possibly a teaser referring to what the Insight Portal does (one/two liner). The page provide a link to the overall Public Gateway.

- After sign-in, the User is redirected to a personalised Dashboard. The Dashboard can be personalised using a drag-and-drop function selecting from a list of all areas available.
- First the user would like to see the connectivity services currently subscribed to by their NREN, including:
 - IP capacity including visual of link utilisation;
 - GÉANT Plus circuits;
 - Lambda circuits (plus information as to how many they can still request without surcharge);
 - Any other connectivity services.
- The user should have the option to:
 - Request a service from here (via link to the Partner Portal);
 - Get more information on the individual services (technical specs, delivery time, costs.) (via link to the Partner Portal);

He/she concludes that sufficient capacity via their IP is provided and no Lambdas are yet in place so both services Plus & Lambda may be applicable.
- Next the User wants to identify possible routes to the end site in the US by checking:
 - A global connectivity map highlighting the access points and capacity available from GÉANT to the US;
 - Traffic utilisation across GÉANT and to the US via the weather maps for the GÉANT network and the international links.
- The User now has an idea about the possible route and knows that sufficient capacity is available and requests the preferred service option to be implemented.

4 Timeline and Status

The project timeline for the Insight portal tracks the delivery of a Proof of Concept (PoC) to key stakeholders in March 2018. This PoC will focus on integrating access to the following platforms:

- Partner Portal.
- OTRS.
- Tools Portal incl. Poller & Weather Map.
- EventR.
- Global Map.

Other platforms will be integrated or access provided to them over the remainder of 2018. A detailed timeline and pre-requisites are shown in Figure 4.1 on the next page.

As of 27 November 2017, the RAG status of the Insight Project is green (on schedule with delivery and no substantial issues recorded). The project's current status is shown in detail in Figure 4.2.

Priorities	PoC March 2018 (First demo & stackholder feedback)
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Platform	Item	Item details	Planned Integration	Interoperable?
Partner Portal	Membership	*NREN Contacts *Annual Subscription (restriction applies) *Additional Payments (TCS, Lambda) (restriction applies) *GN4-2 contribution (restriction applies)	Mar-18	Yes
	Service overview	*Compare the adopted services to available portfolio	Mar-18	
	Connectivity services	*Status of all services (list): IP capacity including visual link utilisation, Geant Plus circuits, Lambda circuits Any other services *Request service from insight portal or via link to partner portal *Get information on individual service (tech spec, delivery time, cost...)	Mar-18	
	My cloud	*yes/No, role, maybe	Mar-18	
OTRS	Open tickets	*be able to track tickets through easy reference of the OTRs number	Mar-18	Yes
Tools Portal incl Poller & Weather map	traffic statistics	*Get insight into the traffic utilisation of NREN connections to Geant & traffic across Géant and its global links	Mar-18	Yes
EventR	Event Participation	*List upcoming events *Past events signed up via EventR *Overview of active contributions at TFs/SIGs/STFs....	Mar-18	Yes
Global Map	Identify possible routes to end site		Mar-18	Yes
NetSuite CRM	View & administer organisational details	*View organisational details and the contact person of NREN staff involved in Géant *Administer organisational details and the contact person of NREN staff involved in Géant	Q3/Q4-2018	
	Transparency on financial matter	*Know how much they have to pay p.a, what they have paid and when next payment is due *View invoices and contracts associated to specific products and services	Q3/Q4-2018	
Compendium	NRENs compendium Survey		Q1-2018	TBC
PLM			tbd if linked only	Yes
Géant Intranet	Manpower Report, project events		tbd if linked only	
Gateway			Link only	

Figure 4.1: Insight Portal project timeline

Insight Portal Project

Overall RAG Status



Justification – RAG Status Green – New achievable baseline agreed

Project Manager- Daniel Soroczak

Date: 27 November 2017

Latest Achievements

- Technical Architecture completed by Christian Gittenbeek
- Roles and responsibilities clarified (Sabrina McCollum – Agile Product Owner to own the stories)
- Requirements prioritized (Top Portals: Partner Portal, OTRS, Tool Portal, EventR, Global Map) based on the input from NRENs and Developers (feasibility and easiness for integration)
- Work segmentation approach agreed (one portal brought to Insight at the time)
- Requirements started to be rewritten into Agile User Stories that are preferred by Developers

Major Issue or Risk (I – r)

#	Short Description	Owner	Target Close
R1	Scope Creep – if too much requirements is included into Demo Product (MVP), it may not be ready by end of March. In order to avoid it, we assumed that Service Information for NRENs comes as priority for DEMO and remaining requirements will be a subject to next releases	Daniel	Mar 31

Upcoming Activities

- JIRA accounts to be created for Project Team (central repository for user stories) – 29 Nov
- Stories to be completed and prioritized by Sabrina and Daniel – Dec 8th
- Work estimated by Mandeep and Developers; stories to be allocated with the amount of effort required for turning them into the real code (in man-days) – 15 Dec
- Final selection of user stories that can be incorporated into Minimum Viable Product to hit end of March date (scope to be locked for Demo release) – 20 Dec
- High-Level Plan created with corresponding dates – 22 Dec
- Coding to start – January 2018

Major Decisions Required

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Major Milestones

#	Short Description	Status	Owner	Due Date
1	Users stories completed and handed over to Mandeep	Pending	Sabrina	Dec 8
2	Allotted time per work items (stories)	To-Do	Mandeep	Dec 15
3	Scope for Demo Product (MVP) agreed and closed	To-Do	Sabrina, Mandeep, Daniel	Dec 20
4	High-Level Project Plan created (Insight features with allocated dates)	To-Do	Daniel	Dec 22
5	Coding started	To-Do	Developers	Jan 2018
6	PLM Gate (Service Design/Development)	To-Do	Mandeep	TBC
7	Demo Product (MVP) Ready	To-Do	All	Mar 31

Major Dependencies

#	Description	Status	Owner	Date
D1	Resource and task prioritization	Pending	Mandeep	Mar 31

Escalated Resource Constraints

#	Role Description	Date Required

Figure 4.2: Insight Portal project status

5 Conclusions

The development of the Insight Portal is currently at a relatively early stage, during which the focus is on understanding the linkages and interfaces to the underlying data service elements involved. No serious issues in this area that might prevent the development of the portal as planned have been identified so far.

A modular approach involving an AGILE service development will be used. This approach foresees a progressive and incremental development path which will see a growing number of individual service and control modules added to the portal over time.

References

[Box]	https://www.box.com/
[GDPR]	http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0679
[NetSuite]	http://www.netsuite.com/portal/home.shtml
[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
TF	Task Force