

Eurostars Project

3DFed – Dynamic Data Distribution and Query Federation

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Deliverable 6.7

Intermediate Report on Performed and Planned Dissemination Activities

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Abstract:

The aim of Deliverable D6.7 (Intermediate Report on Performed and Planned Dissemination Activities) is to describe the dissemination activities carried out within the first 18 months of the project, as well as those planned for the upcoming 18 months, following the procedure described in the Dissemination Plan.

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1 Introduction

1.1 Executive Summary

This deliverable D6.7 “Intermediate Report on Performed and Planned Dissemination Activities” provides a high-level overview of the Dissemination activities executed by the 3DFed consortium during the first 18 months, from April 2021 to September 2022. This dissemination report provides further context and references by condensing and summarizing the objectives, target groups, and tactics proposed in the Dissemination Plan.

1.2 3DFed Overview

Datasets for modern applications are commonly distributed and increasingly too large to fit into a single server. Current distributed solutions are designed for central storage or at best static data distribution, which can result in poor query performance. Modern end-user applications, however, require results within milliseconds. Thus, there is an increasing need for intelligent and efficient data distribution and federated query engines to deal with these large amounts of data.

3DFed aims to develop generic approaches for the automatic redistribution and federated querying of large distributed datasets to facilitate the development of high-performance distributed data storage solutions. The final output will be a set of W3C-standard-conformant tools that implement automatic data distribution, federated query planning and execution, dynamic data exchange mechanisms, data storage profiling (containing useful information/statistics about the underlying data) and data monitoring.

1.3 3DFed Consortium

The DICE research group in UPB develops a large number of high-impact frameworks including CostFed, FEASIBLE, OntoWki, LIMES, AGDISTIS, FOX and many others. It is an active member of the Semantic Web community, leading or participating in many eminent Linked Data projects such as the DBpedia project, LinkedGeoData and LinkedTCGA. Finally, DICE has won several best research paper awards at top conferences (e.g. ISWC, ESWC) as well as several research challenges at I ’Semantics, ISWC and ESWC.

OpenLink Software is a SME established in the UK in 1992 and has a business development and sales subsidiary in the USA. Most product development takes place within the EU, including the UK, Netherlands and Bulgaria. OpenLink Software is a leading provider of RDF database technology and universal data access middleware. Its products include the Virtuoso DBMS. OpenLink has extensive experience in scalable RDF data management through its Virtuoso product. OpenLink is a key player in the linked data world, hosting such services as Dbpedia, the LOD cache, Open PHACTS and providing RDF database technology to Fortune 500 corporations such as Bank of America, Booz Allen Hamilton, Elsevier, French National Library, Globo, Syngenta and more.

“Sustainable AI makes the difference.” – The mission of elevait GmbH & Co. KG (in short: elevait) is to provide sustainable AI software products for companies of all sizes. Founded in 2021, elevait is a German AI software company with locations in Triberg in the Black Forest and Dresden. As a leading AI software provider in the enterprise environment, elevait combines modular, reusable software components, generic machine learning models and with the possibility to use company-specific, formalized knowledge. Through a productive and easy use of Artificial Intelligence, elevait offers its customers an immediate, unique competitive advantage.

2 Dissemination Plan

2.1 Dissemination Objectives

The 3DFed dissemination activities were conducted in order to reach the following objectives:

- Raising awareness about the project's vision and goals.
- Establishing collaborations with potential clients in order to obtain valuable information for Exploitation.
- Engaging expert teams and individuals for further cooperation on expansion and developments of our achievements.
- Ensuring maximum impact of the project's scientific and technological achievements.

2.2 Dissemination Target Groups

- **Decision makers:** The executive and technical managers within the companies, that might be the potential customers of approaches implemented in 3DFed.
- **Researchers:** The scientific researchers in the relevant fields, who have interest in topics such as Knowledge Graphs, RDF, Dynamic data exchange, query optimization, etc.
- **Technical Experts:** Those who are involved in the industrial use cases related to the project, and already have or want to gain hands on experience in such fields.

2.3 Dissemination Tactics

The communication and dissemination of 3DFed project is organised using several different tactics. Here the tactics are listed and briefly explained.

- **Scientific Publications**

With a focus on researchers and technical experts who are interested in the project's results, the project team uses scientific publications as a beneficial dissemination tactic to engage more interested audience, maintain collaborations, and ensure the impact of project outcomes. The following papers have been published so far, under the acknowledgement of 3DFed:

- **A Survey of RDF Stores & SPARQL Engines for Querying Knowledge Graphs** Waqas Ali · Muhammad Saleem · Bin Yao · Aidan Hogan · Axel-Cyrille Ngonga Ngomo Article in The VLDB Journal · October 2021 DOI:10.1007/s00778-021-00711-3
- **Efficient Distributed Path Computation on RDF Knowledge Graphs Using Partial Evaluation** Qaiser Mehmood · Muhammad Saleem · Alok Kumar Jha · and Mathieu d'Aquin Article in World Wide Web · November 2021 DOI: 10.1007/s11280-021-00965-5
- **Efficient RDF Knowledge Graph Partitioning Using Querying Workload** Adnan Akhter · Alexander Biggerl · Muhammad Saleem · Axel-Cyrille Ngonga Ngomo K-CAP Conference · November 2021 DOI:10.1145/3460210.3493577

- **Website**

One of the main communication and dissemination channels is the project website: www.3DFed.com. The website was set up and launched in September 2021. The 3DFed project website is the key tool for communicating information about project activities, news and events, as well as to convey results to a wide range of target groups. The website was created in line with the visual identity (shown in Figure 1) and is continuously maintained by **elevait** with contributions from all partners. The website contains a Home page with a brief introduction, along with a section on ‘News’, where the most relevant news about the project and important topics are published. An image of the website homepage is shown in Figure 2. The website also includes the following pages:

- **Team:** The consortium partners and team members are briefly introduced here.
- **Publications:** The publications which are related to the project are listed here.
- **Results:** All the project deliverables are listed here.
- **Contact us:** A contact form is embeded in this section.

- **Social Media: Twitter**

In 3DFed, communication and dissemination activities are also carried out through project channel in Twitter¹. The Twitter channel is aimed at reaching a wide variety of project’s target audience, in order to raise awareness and initiate collaborations. Figure 3 shows the home page of the 3DFed Twitter account.

- **Social Media: ResearchGate**

Researchgate is a professional network for scientists and researchers, to connect, share and access scientific output, knowledge, and expertise. The platform is used by 17 million members from all over the globe, with a mission of connecting the world of science and making research open to all. In 3DFed the project deliverables are published on ResearchGate page. The 3DFed ResearchGate project is shown on Figure 4 and accessible under 3DFedEuroStars².

- **Blog Posts**

In 3DFed, in addition to the project’s website, other related websites will be used to disseminate the achieved results. This might include publishing reports, results, use cases, challenges or lessons learned through the project, on official channels of consortium parties, or relevant blogs and forums. Such blog posts are planned for the 2nd 18 months of the project, when more tangible results are available.

- **Flyers & Leaflets**

The dissemination activities in 3DFed aim to spread awareness regarding the activities and outcomes of the project, in order to maximise the impact of the project’s work through public events and conferences, and engage with the key target groups. Within the second 18 months of the project life, the team has planned to benefit from this tactic as well.



Figure 1: The 3DFed Project’s Visual Identity

¹https://twitter.com/3DFed_EuroStars

²<https://www.researchgate.net/project/3DFed-EuroStars>

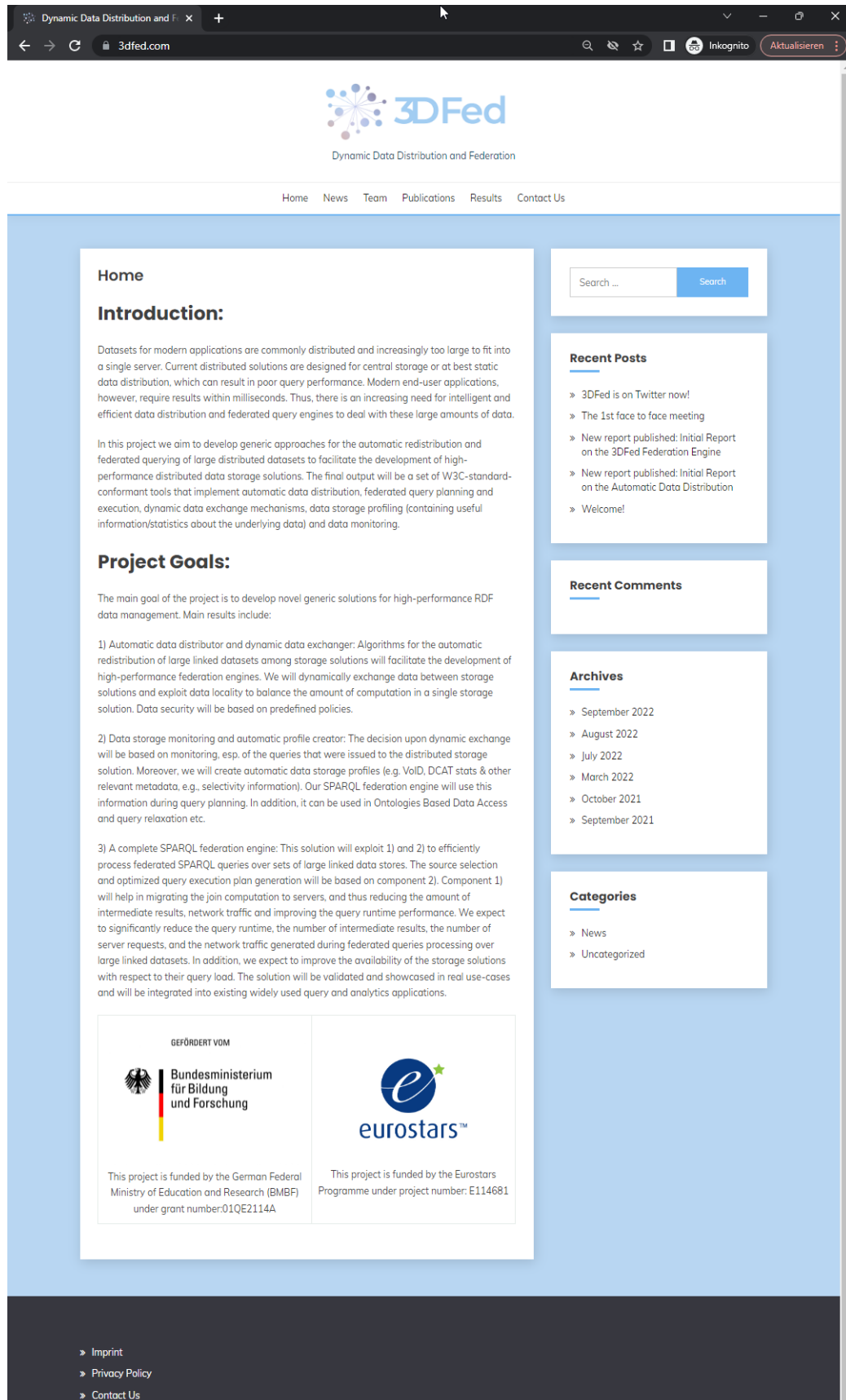


Figure 2: The 3DFed Project's Website Homepage



Figure 3: The 3DFed Project's Twitter Account

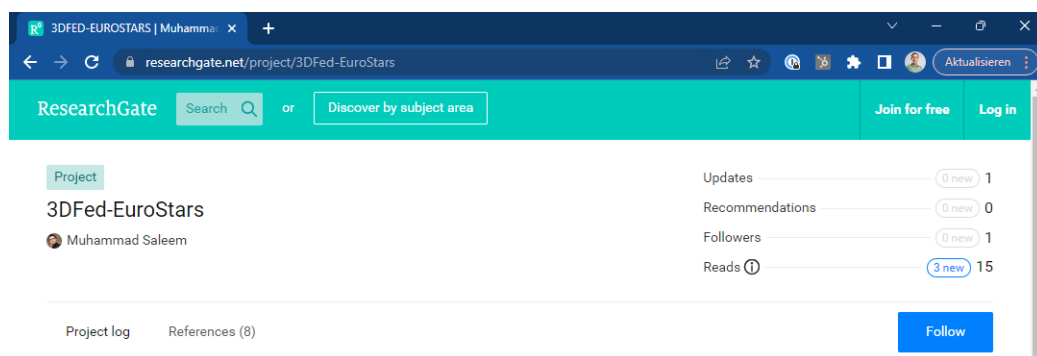


Figure 4: 3DFed Project on Researchgate

2.4 Dissemination Plan Summary

Target Group	Objective(s)	1st half (achieved)	2nd half (planned)
Scientific Publications			
Researchers Technical experts	Establishing collaboration Engaging experts Ensuring impact	3 papers published so far	5+ more papers in relevant conferences, e.g. ESWC, ISWC, ...
Project Website			
All	Raising awareness Establishing collaboration Engaging experts Ensuring impact	Website published www.3DFed.com 12 pages 6 updates	12 updates 2 blog posts
Social Media: Twitter			
All	Raising awareness Establishing collaboration	Established on August 2022 @3DFed_EuroStars	Tweets on publications, new deliverables, events, milestones, blog posts, ...
Social Media: Researchgate			
Researchers Technical experts	Establishing collaboration Engaging experts	Established on Nov 2021 3DFedEuroStars 2 deliverables added	All publications and deliverables
Blog Posts			
All	Raising awareness Establishing collaboration Engaging experts	-	Blog posts on finalized reports and attractive achievements
Flyers and Leaflets			
All	Raising awareness Establishing collaboration Engaging experts	-	Preparing and distributing flyers in relevant conferences and events

Table 1: 3DFed Dissemination Plan

3 Conclusion

This Dissemination Report provides the complete overview of the dissemination activities implemented in the scope of the 3DFed project until Month 18, in accordance with the provisions of the contractual commitments and project objectives.

The main objective of the dissemination activities of this period was to prepare the basic means as well as spreading the concept and project vision, in order to proceed with communicating the results and outcomes through the upcoming tasks. From the evaluation of these activities, it is deduced that the performance of the 3DFed dissemination activities is quite satisfactory and in accordance with the initial strategy. However, the project team should pay extra effort in order to reach the dissemination targets of the second half of the project.