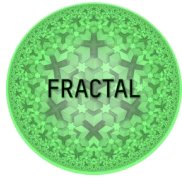


D9.1 Web presence and periodic update

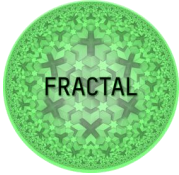
Deliverable Id:	D9.1
<i>Deliverable name:</i>	<i>Web presence and periodic update</i>
Status:	Final
Dissemination level:	Public
Due date of deliverable:	2020-30-11 (M3)
Actual submission date:	2021-31-01
Work package:	WP9 Exploitation, Dissemination, Training and Standardization
Organization name of lead contractor for this deliverable:	Haltian
Authors:	Matti Vakkuri, Haltian Polina Feshchenko, JYU
Reviewers:	Ester Sola, ZYLK Alfonso González, ZYLK Qiuting Huang, ACP
Abstract: This deliverable will provide publicly available project information including an introduction to the project and objectives, the partners involved, the expected results and the impact the results will have on the targeted industries. Publicly available deliverables will be made available for download. Additionally, it will include another web-related presence such as Twitter page and LinkedIn project page.	



Project	FRACTAL		
Title	Web presence and periodic update		
Del. Code	D9.1		

Contents

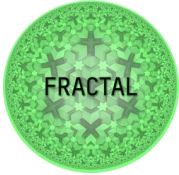
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3	List of figures.....	8
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	Project	FRACTAL		
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1 Summary

The goal of the Work package WP9-Exploitation, Dissemination, Training and Standardization, Task 9.2, Deliverable 9.1 is to provide publicly available project information including an introduction to the project and objectives, the partners involved, the expected results and the impact the results will have on the targeted industries. Publicly available deliverables will be made available for download. Additionally, it will include another web-related presence such as Twitter page and LinkedIn project page.

In Social media FRACTAL has been and is planning to utilize the most-widely accessed online communities including Facebook, LinkedIn, and Twitter. Each social media channel that FRACTAL will decide to use will be updated and effort is invested to keep the audience engaged on a daily basis. This can be done by creating useful and thought-provoking content – the types of which we will find out during the analysis. A consistent and coherent code of conduct for the project involvement in social media, covering both what we publish, and user behavior is required.

	Project	FRACTAL		
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2 Web pages

FRACTAL web pages have been created and they are available. <https://fractal-project.eu/project/> The purpose of the web pages is to provide publicly available project information including an introduction to the project and objectives, the partners involved, the expected results and the impact the results will have on the targeted industries.

A project website was established for the FRACTAL project as websites are public and accessible from all over the world for 24 hours a day. This communication instrument enables us to reach a large target audience very economically and deliver a lot of information to interested parties. The creation of a blog within the website allows us to publish news, workshops, conferences, publications, presentations etc. about the ongoing project work to the public. This allows more interactive communication within and outside the FRACTAL Consortium.

The web pages were created in a collaboration with Haltian's subcontractor in FRACTAL project, University of Jyväskylä.

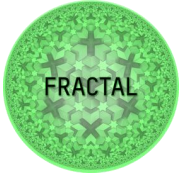
2.1 Description of the web pages

The homepage <https://fractal-project.eu/project/> is the top page in the website hierarchy and the central place where users navigate website from. All the important pages on the website are linked from this page. The relationship between homepage and the main category pages is represented by website's menu or main navigation. FRACTAL site visitors will use the navigation to understand how information is structured on a website and to find what they are looking for. This ensures that all main category pages are represented on the menu or the main navigation.

More detailed info about web pages is in the Appendix 1.

The main elements of the navigation are:

- HOME
- PROJECT
- USE CASES
- PARTNERS
- CONTACT

	Project	FRACTAL		
	Title	Web presence and periodic update		
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HOME page gives a brief summary description of the FRACTAL project and includes News & Updates section. (<https://fractal-project.eu/>)

PROJECT web page gives a project overview and the overall objective of the FRACTAL project. (<https://fractal-project.eu/project/>)

USE CASES are all described in brief in this page. (<https://fractal-project.eu/use-cases/>)

- Edge computing technologies applied for engineering and maintenance works
- Automotive air path control
- Smart meters for everyone
- Low-latency Object Detection as a generic building block for perception in the edge for Industry 4.0
- Autonomous Mobile Marine Inspection Laboratory
- Automatic accurate stopping and safe passenger transfer based on Computer Vision and AI-enhanced techniques
- Intelligent Totem
- SPIDER autonomous robot use case
- Shuttle with Cognitive Capabilities based on FRACTAL Nodes for Improved Throughout, Reliability and Availability in Warehouse Systems

PARTNERS web page consists of general descriptions of all partners participating in FRACTAL program. (<https://fractal-project.eu/partners/>)

CONTACT web page has FRACTAL contact information and possibility send a message to FRACTAL project main contacts. (<https://fractal-project.eu/contact/>)

FRACTAL web pages have been created by using standardized approach including appropriate security measures including SSL certificate.

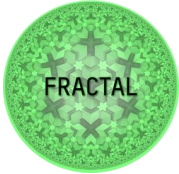
	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		



Figure 1 – Valid SSL certificate

2.2 Social media

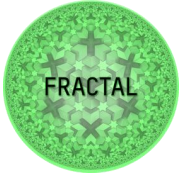
FRACTAL project's social media visibility is available in several different channels

- Twitter info is visible in https://twitter.com/project_fractal
- LinkedIn (due in 31.1.2021)
- Facebook
- Youtube - Fractal project overview <https://youtu.be/ajbwuLOBBzQ>

2.3 Periodic updates

The web pages will be updated on a regular basis reflecting updates and changes in the program. The update check is done every two weeks or by update requests. The main idea is that web pages are as static as possible and the channel for instant communicating is through social media channels.

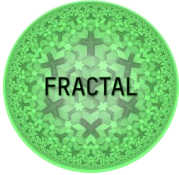
The communication about the updates will be done in weekly email reminders and monthly meetings starting in February 2021.

	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

It is noted that the web pages are static and updates of e.g. news and events will be done through social media channels of FRACTAL e.g. Twitter @project_fractal.

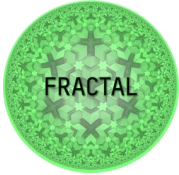
In a summary web presence process is following

- Weekly reminder email to partners about content updates
 - o Info email how to contribute in
- Monthly meeting with partners about content and updates
 - o Updates on the procedures how to contribute
- Follow-up meeting with WP9 leader every two weeks

	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

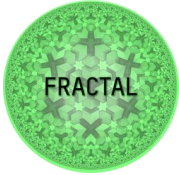
3 List of figures

Figure 1 – Valid SSL certificate 6

	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

4 List of tables

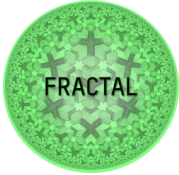
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	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

5 List of Abbreviations

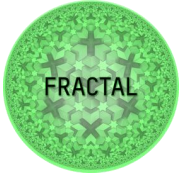
AI	Artificial Intelligence
SSL	Secure Sockets Layer

Table 1 – List of abbreviations

	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

6 Appendix

Appendix 1 - Website Overview and Pages Description

	Project	FRACTAL		
	Title	Web presence and periodic update		
	Del. Code	D9.1		

7 Versions

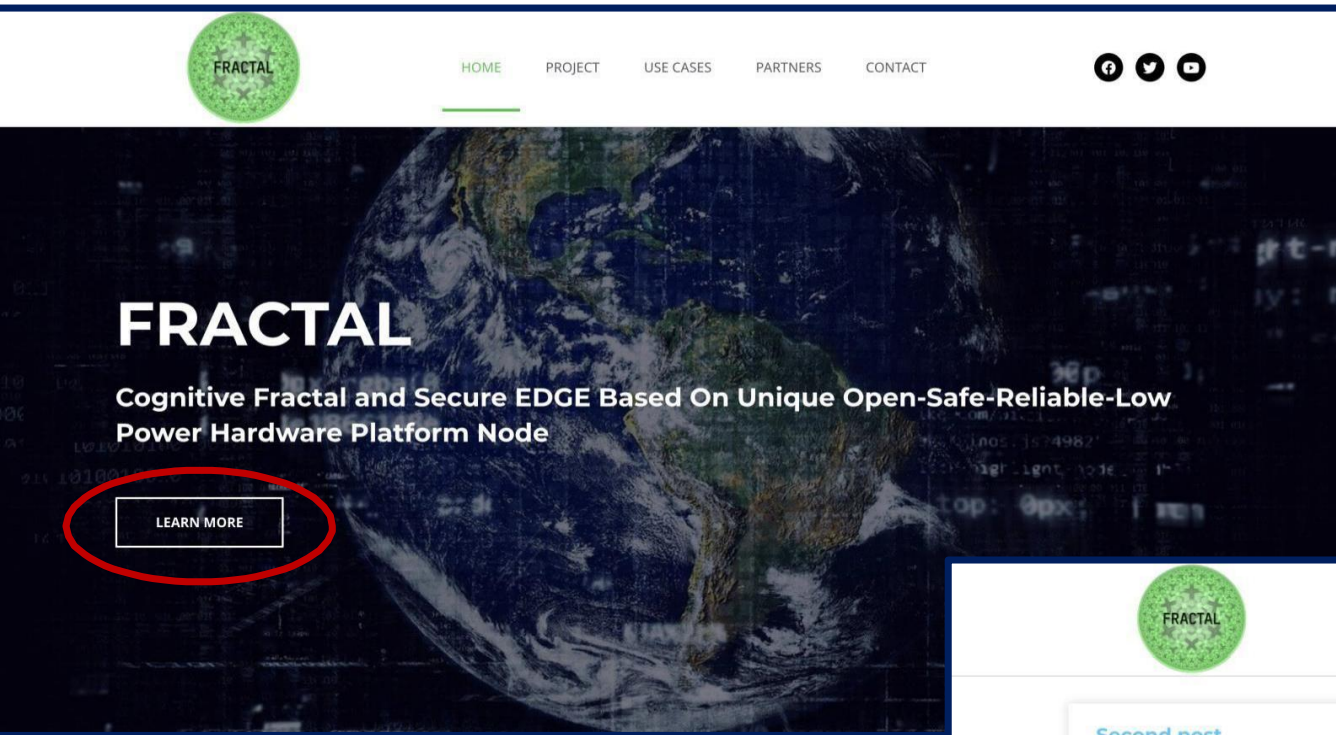
Version	Comment	Contributors	Reviewers
1.0	Version to reviewers	Matti Vakkuri, Polina Feshchenko	Ester Sola Alfonso González Qiuting Huang
1.1	Reviewed final version	Matti Vakkuri, Polina Feshchenko	

Table 2 – List of document versions

Website Overview and Pages Description

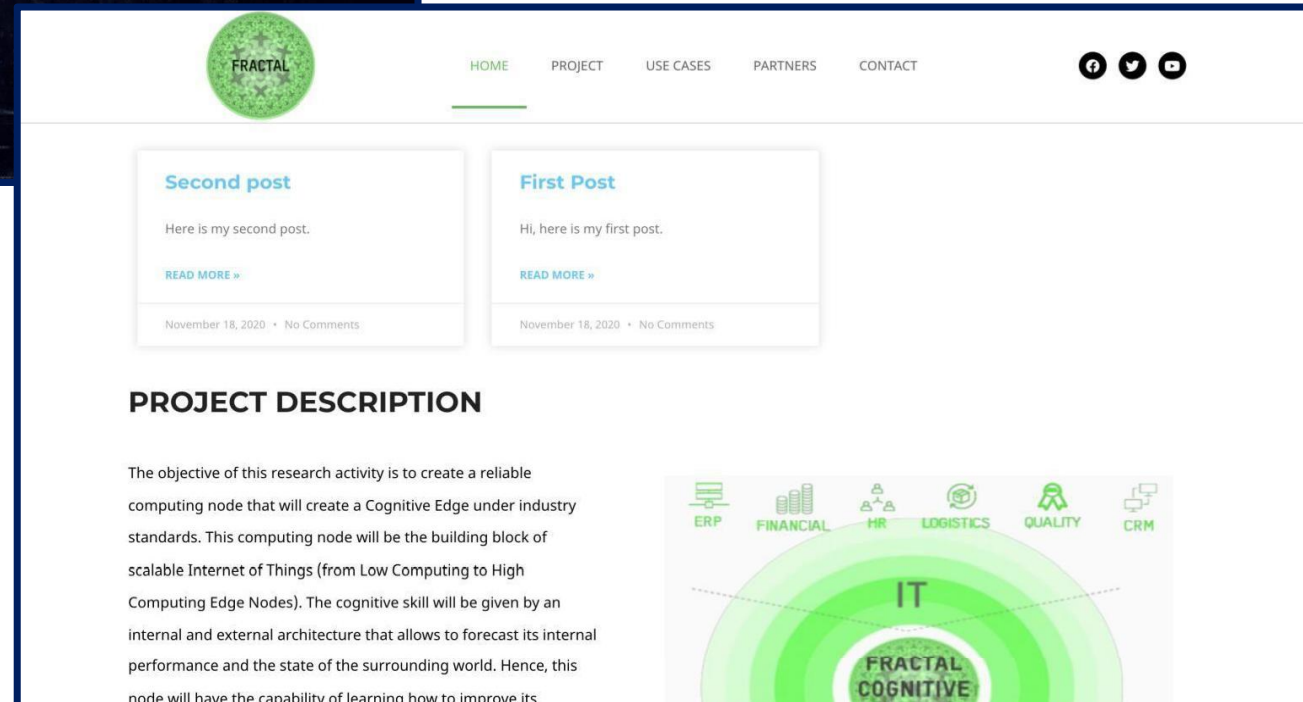
FRACTAL Project





“Home” Page of the FRACTAL Project Website

The front page contains the general overview of the project and introduction to its content. In the upper sections of the page there is a short introductory message and a call to action (button: Learn More), so the website user can go directly to the project page and read more details.





NEWS & UPDATES



Conference X

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LEARN MORE →

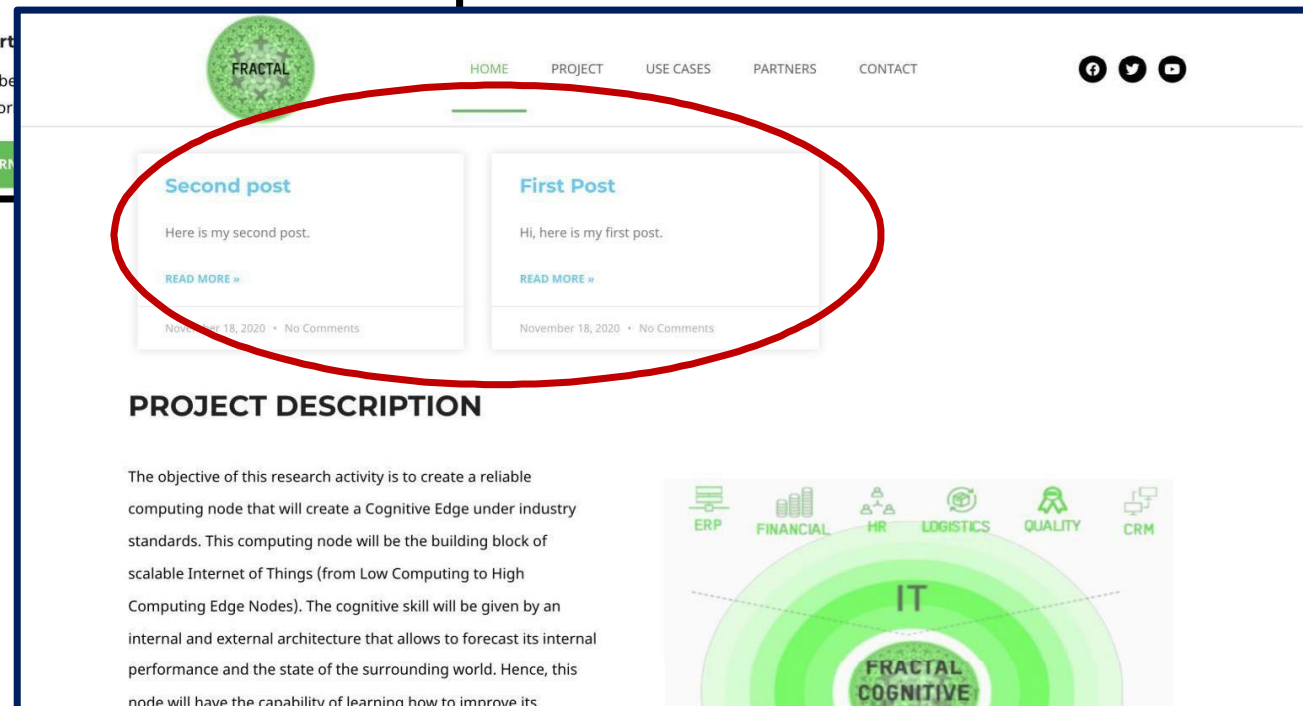


Import

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LEARN MORE →

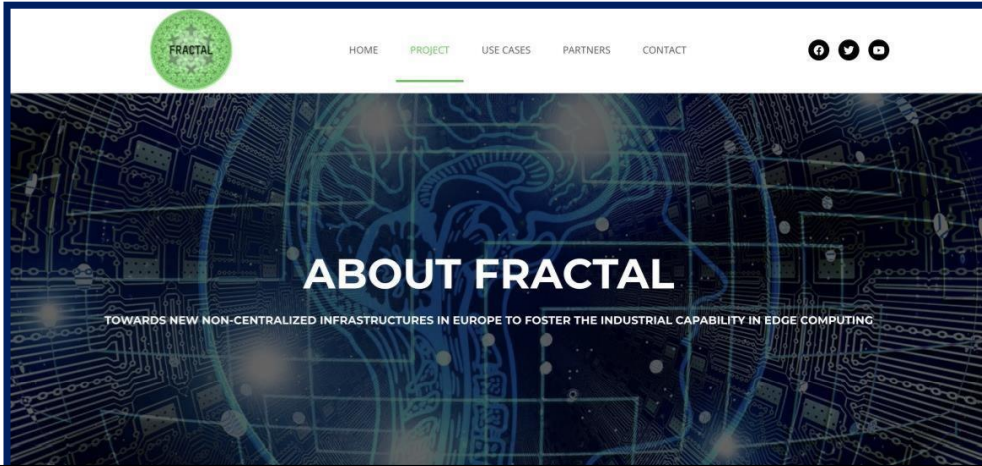
“Home” Page of the FRACTAL Project Website



The page also has the following elements:

- **News & updates section** (leading to separate page with news publications about conferences, papers, etc.)
- **Recently published posts** (project related posts, with a possibility to leave comments by website visitors)

“Project” Page of the FRACTAL Website



PROJECT OVERVIEW

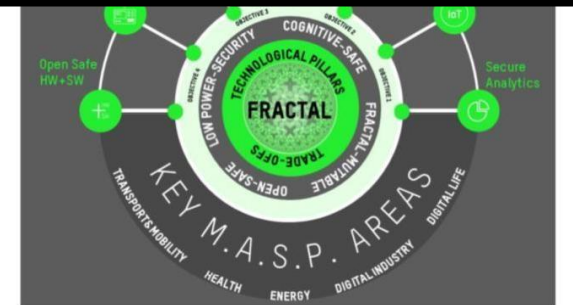
To achieve industrial edge computing, new devices are required to satisfy a new set of challenging requirements such as time-predictability, dependability, energy-efficiency, and security.

The aim of FRACTAL is to create a reliable computing platform node, realizing a so-called Cognitive Edge under industry standards. This computing platform node will be the building block of scalable decentralized Internet of Things (ranging from Smart Low-Energy Computing Systems to High- Performance Computing Edge Nodes).

Cognitivity is provided by Artificial Intelligence methods, supported by internal and external architectures that allow the (platform) node to proactively adapt to changes in the surrounding world. Hence, this node will have the capability of learning in real-time how to improve its performance and dependability despite the uncertainty of the environment. However, while these features are critically important, focusing only on them leaves aside the enhancement opportunities brought by the continuous emergence of more powerful solutions in the area of Cyber-Physical Systems (CPS), Systems of Systems (SoS) and Internet of Things (IoT). For instance, opportunities coming from advanced microelectronics, high-performance computing, smart system integration, and improved cloud services have traditionally been mostly neglected. Missing those opportunities may easily make the node fail to meet the stringent requirements for increased autonomy coming from the new application domains.

As a result of the integration of these cognitive systems into an edge fractal network, there will be an intrinsic crucial advantage, a combination of safety, adaptability and emergence of new possibilities. Therefore, new industrial functions will flourish through the created space of possibilities of our cognitive systems. This scalable fractal network will transfer all those cognitive advantages to a new Cognitive Edge, a computing paradigm that lies between the physical world and the cloud.

scalable and non-ergodic IoT (ranging from Low-Energy Computing to High-Performance Computing Edge Nodes). The cognitive skills will be enabled by an internal and external architecture that allows forecasting its internal state and the state of the surrounding world. This node will have the capability of adapting to improve its behaviour (performance, safety, security, power efficiency, etc.) and deliver new services against the uncertainty of the environment.



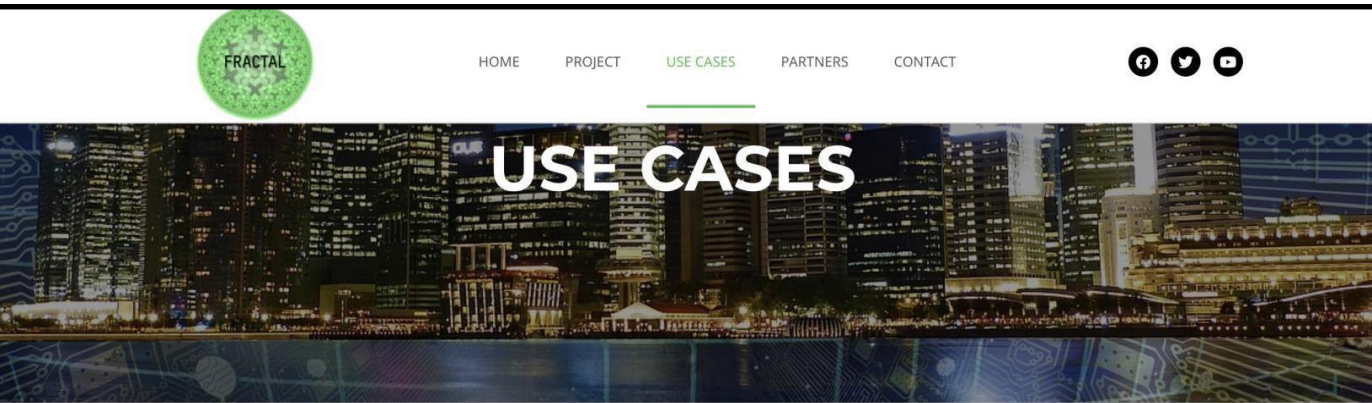
Main pillars of FRACTAL plus the four Objectives.

FRACTAL will provide autonomy, context awareness and intelligence in the edge by means of an open-safe-reliable and power-efficient cognitive edge node

The **strategic objectives** to implement and prioritize the different requirements of a FRACTAL node are:

- **O1:** Design and Implement an Open-Safe-Reliable Platform to Build Cognitive Edge Nodes of Variable Complexity
- **O2:** Guarantee extra-functional properties (dependability, security, timeliness and energy-efficiency) of FRACTAL nodes and systems built

Project page tells more about FRACTAL project idea, strategic goals and objectives. It contains all the information to introduce the website user into the details of the project and to obtain the understanding on such issues like - what is it about, what are the possible outcomes and overall agenda.



“Use Cases” Page of the FRACTAL Website

Edge computing technologies applied for engineering and maintenance works (PROI)	+
Automotive air path control (AVL)	+
Smart meters for everyone (ACP)	
Low-latency Object Detection as a generic building block for perception in the edge for Industry 4.0 (SIEM)	
Autonomous Mobile Marine Inspection Laboratory (IRT)	

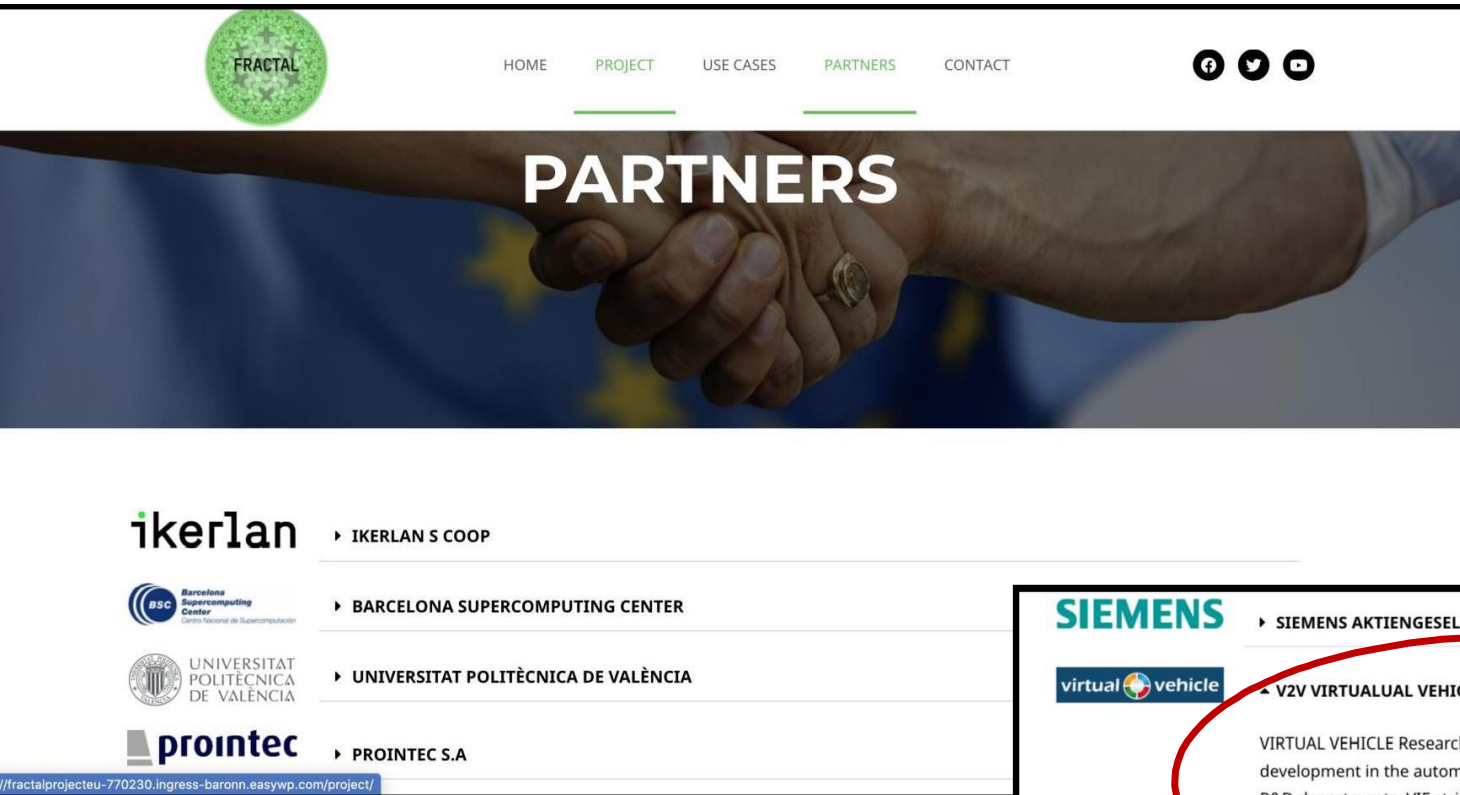
Edge computing technologies applied for engineering and maintenance works (PROI)	+
Automotive air path control (AVL)	+
Smart meters for everyone (ACP)	-

Smart metering is a hot topic and one of the top use cases for the internet of things. The goal is to read the meters remotely by connecting them to the internet. This allows utility providers to remotely read the meters and would not be required to visit the customers and physically read the meters. In order to support smart metering, the meters and its infrastructure around the need to be electrified which is often not the case. Especially legacy utility meters such as gas, and water meters often work with pure mechanical principles. Such meters lack power supply and an electronic interface for accessing the meter stand. Electrifying the infrastructure and replacing these meters with a smart device that is connected to the internet is a big investment.

```

graph TD
    MM[Mechanical meters] -- "meter reading" --> DC[digital camera]
    DC --> WC[Wireless connectivity  
ACP modem + antenna]
    WC --> FE[Fractal edge processing  
for image analysis]
    FE --> I[Internet]
  
```

On this page, the use cases driving the FRACTAL project are outlined. Each case can be expanded and the user can read more about it.



“Partners” Page of the FRACTAL Website

“Partners” page contains information about project partners. It has a list of all partner organizations and their logos. Besides, each entity has a short introduction section. The description opens on click.

SIEMENS ▶ SIEMENS AKTIENGESELLSCHAFT OESTERREICH

virtual vehicle ▶ V2V VIRTUAL VEHICLE

VIRTUAL VEHICLE Research Center (VIF) has positioned itself as an independent, international platform for research and development in the automotive industry. It addresses the gap between academic research and the needs of industrial R&D departments. VIF strives for full vehicle analysis using a multi-disciplinary approach and conducts research in various areas, including mixed criticality multi-core systems, embedded control systems for (hybrid) electric vehicles, ADAS, and automated driving challenges, hardware/software co-simulation, model-based design and test, and virtual engineering.

UNIVERSITÄT SIEGEN ▶ UNIVERSITÄT SIEGEN

QUALIGON ▶ QUALIGON GmbH

BEEWEN ▶ BEEWEN GmbH & Co. KG

XILINX ▶ XILINX GmbH

“Contact” Page of the FRACTAL Website

Contact page has two sections – one provides the user with the **contact details** of the persons in charge of the project, - and the other gives an option to submit a **contact form** (is linked to the project general email). **Social media** icons are directing the user to the corresponding social media channels of the FRACTAL project.

FRACTAL

HOME PROJECT USE CASES PARTNERS **CONTACT**

Facebook Twitter YouTube

Contact

Project Coordinator
Aizea Lojo (IKERLAN): alojo@ikerlan.es

Technical Coordinator
Leire Rubio (IKERLAN): lrubio@ikerlan.es

Innovation Coordinator
Jaume Abela (BSC): jaume.abella@bsc.es

Name

Email

Message

SEND MESSAGE

Facebook Twitter YouTube



Header/menu section is visible on every page and stays visible along the whole page, while scrolling. It contains social medial icons and project logo.

Footer section has a twitter timeline and the user can directly access project twitter account also from here. It has an embedded Facebook timeline as well. The coordinating companies and European commission are mentioned. Terms of Use of the website can be accessed from here. Footer is the same on every page of the website.