Your first choice for building the smart digital future
FIWARE is for free, for all, forever.

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FIWARE Foundation is a non-profit organization that drives the definition and encourages the adoption of open standards — implemented using Open Source technologies and reference architectures — to ease the development of smart digital solutions across multiple domains, based on FIWARE technology.

Together with its 430+ global members and partners, FIWARE Foundation drives the definition, and the Open Source implementation, of key open standards that enable the development of portable and interoperable smart digital solutions, in a faster, easier, interoperable and affordable way, following an Open Source approach that avoids vendor lock-in, whilst also nurturing FIWARE as a sustainable and innovation-driven business ecosystem.

The foundation achieves that through the support of a fast-growing global community that shares a common vision and combines their efforts toward making FIWARE the Open Source technology of choice for industries, governments, universities and associations to reach their full potential and scale up their activities, thereby, entering new markets and growing their businesses. Founded in 2016, the foundation has Atos, Engineering, Red Hat, NEC, Telefónica and Trigyn Technologies among its Platinum members.
There is more than meets the eye

We accelerate the emergence of innovative marketplaces of **smart portable and interoperable solutions**, guiding industries, governments, universities, and civil society to develop their smart vision.

SMART CITIES  SMART INDUSTRY
SMART ENERGY  SMART AGRIFOOD
FIWARE IS ALL OVER THE WORLD

FIWARE Members • FIWARE iHubs

iHubs Locations
Amersfoort
Athens (2X)
Austin
Badajoz
Cologne
Funchal
Geneva
Grasse
Lagoa
La Plata/Buenos Aires
Lund
Málaga
Mexico City
Monheim am Rhein
Montevideo
Perugia
Saint-Quentin
Santa Cruz de Tenerife
Seville
Tunis
Wolfsburg

Planned new locations*
- Morocco
- Spain
- U.S.
- Cairo area
- Dakar area
- Lübeck
- New Delhi area
- South Africa

* Locations are still subject to change.

For further information on our members*, visit: www.fiware.org/about-us/join

* The companies featured here are some examples and do not represent the overall number of FIWARE Foundation members and strategic partners.
With the world’s population rising at an unparalleled speed, a lack of natural resources and more automated services are just the tip of the iceberg concerning issues that public administrations are dealing with. In an attempt to tackle contemporary problems stemming from large crowds living in relatively small spaces, smart solution providers step in by introducing innovative technology, such as waste management, intelligent industrial LED lightings, smart irrigation systems, to name but a few, that can be taken up by public service providers to improve citizens’ daily life.

FIWARE sees smart environments as an ecosystem driven by an efficient administration of public services. ICT-based solutions, with technologies such as big data, Internet of Things (IoT), artificial intelligence (AI), and robotics fuse into every single industry and become the backbone of our social sphere. Being smart goes beyond technology: it requires public administrations to move away from inward, fragmentary-oriented organizational structures towards highly collaborative frameworks (that include private businesses, not-for-profit organizations, social enterprises and citizens) in order to deliver seamless public services and, thus, drive the advancement of an information society.

Each country surely has its own goals and challenges (the word ‘smart’ itself may mean different things across continents), but by establishing sustainable structures and offering new approaches to citizens, authorities, local companies, and other stakeholders to engage within the management of services, public service providers can pave the way for economic development, ultimately increasing the quality of life for their citizens and visitors.
The future will gravitate around the management of context data. Context data describes what is going on, who is involved, where, when, why. Context is meaningful in farms, describing the state of the crops and soil. In the industry field, it can help factory managers improve efficiency in industrial systems. At energy plants, it can be helpful to describe the status of the plant and the predicted energy demand. Finally, in cities, data collection generates valuable insights that help public administrations and businesses to improve the way we live, work and engage with one another.

The processing of context data will drive smart decisions in the future. Smart decisions will ultimately improve daily processes, raising the productivity of people, and businesses. Capturing, managing, processing, analysing and visualizing context data will be at the core of solutions in Smart Cities, Smart Industry, Smart Agrifood and Smart Energy.

Context data is a blend of information coming from multiple sources. But the data owners are at the driver’s seat when deciding who can access their data, when, how, where and what for. This means that they can exercise full sovereignty over their data, eventually deciding whether they want to monetize their data or not and who will have to pay for it. That’s why context information management provides the basis for the new Data Economy.

FIWARE lays out the fundamental context management standards needed for the creation of interoperable platforms and digital infrastructures. By enabling the blending of tools for integrating multiple context data sources and helping to process and analyze context management at a large scale, FIWARE stands out as your first choice for building the smart digital future.

Standards are driving the smarter tomorrow

Common open standards are an important element of data infrastructure worldwide. They help technology users and providers publish and use data in ways that can drive new business models, create open ecosystems and help public administrations to implement policy goals to deliver more effective public services and hence, boost citizens’ living standards. A long-established champion of open standards, FIWARE will always strive to ensure that standards drive the open source technology market, that data is available to the widest range of users, for the widest range of purposes. Anytime. Anyday. Anywhere.

Some highlights from our work with our long-standing partners:

- In 2016, the European Commission published the 2016 Rolling Plan for ICT Standardisation in which ETSI was requested to create an ISG (Industry Specification Group) aimed at the definition of a standard Context Information Management (CIM) API with FIWARE NGSI as a candidate. In the beginning of 2017, ETSI created the CIM ISG which was successfully brought to market with the so called ETSI NGSI-LD API specifications in January 2019.

- FIWARE Foundation has (together with its members) actively participated in standardization activities within ETSI (NGSI-LD API specifications), W3C (Web of Things), GSMA (IoT Big Data Ecosystem project) and TM Forum (via the Front-runner Smart Cities program).

- In 2018, FIWARE Context Broker was selected as the new Connecting Europe Facility (CEF) Building Block, help building the next generation of European digital public services.

- FIWARE Foundation and its Community have been actively contributing to the development of the International Data Spaces Association Reference Architecture Model (IDS-RAM 3.0).

Here are some of our global partnerships, collaborations and references:
Developing and integrating smart solutions

FIWARE brings a curated framework of open source software platform components which can be assembled together and with other third-party components to build “Powered by FIWARE” platforms that support the development of smart solutions in a faster, easier and affordable way.

The core component of any “Powered by FIWARE” platform is the so-called Context Broker, which supports the FIWARE NGSI API, a simple yet powerful API for solving a basic need in any smart solution: how to gather, manage and provide access to context information. The FIWARE NGSI API enables the integration of FIWARE platform components, the interoperability of smart solutions/services running on top of “Powered by FIWARE” platforms as well as their portability (replicability) across different “Powered by FIWARE” platforms.

The FIWARE NGSI API has evolved over time, following inputs from the global community of developers that have long been supporting the technology. The NGSIv2 version has been widely used in multiple scenarios and has served as the basis for the NGSI-LD API specifications, recently published by the European Telecommunications Standards Institute (ETSI). The Orion Context Broker provides an open source reference implementation of the NGSIv2 API specifications and will soon also provide a reference implementation of the ETSI NGSI-LD API specifications.

Building around the FIWARE Context Broker, a rich suite of complementary FIWARE components facilitate (among other things):

- The interface with IoT devices, robots and third-party systems, capturing updates on context information and translating required actuations;
- The monitoring, processing and analysis of current and historic data using event rules, advanced Big Data and AI algorithms, dashboard and analytical support tools, etc; supporting smart decisions or the smart automation of processes;
- The management, publication and monetization of context data and services, preserving defined access and usage control policies.

The FIWARE Context Broker technology can easily be integrated with blockchain technologies to provide a trustworthy and immutable tracing of certain updates on context.

FIWARE Context Broker technology: a building block for connecting Europe

The European Commission (EC) has formally adopted FIWARE Context Broker technology as CEF Building Block within their Digital CEF (Connecting Europe Facility) Building Blocks program, part of the CEF Telecom program. This means that the EC officially recommends public administrations as well as industrial players within the European Union (EU) member states to adopt this technology in order to foster the development of digital services, which can be replicated (ported) across the EU.

FIWARE Marketplace

The FIWARE Marketplace is a one-stop-shop, providing entrepreneurs with first-hand access to a wide range of “Powered by FIWARE” solutions and platforms, FIWARE-ready technologies as well as related training, coaching, consultancy, integration and support services. The “Powered by FIWARE” and “FIWARE-ready” labels help entrepreneurs to gain visibility and credibility, essential to building partnerships and gaining market traction.

Check out the 180+ global solutions that are already in our Marketplace: www.marketplace.fiware.org

FIWARE - Paving the way

In the future digital sphere, context data must be pervasive and accessible in right-time. It creates a digital continuum, blurring the frontiers between application domains. FIWARE is bringing the standards of reference at every step to be taken by organizations in their transformation journey towards:

- Becoming truly smart, breaking the silos;
- Collaborating with other organizations towards a sustainable market;
- Fostering open innovation;
- Enabling the Data Economy.
The Open Source platform of choice for building Smart Solutions

Efficient & Open
Vertical solutions (some being IoT-enabled) bringing efficiency but in silos
Historic and static data published as open data

Exploiting Data across verticals
Breaking information silos through shared context data space with standard API
Enabling Overall City-level Governance Solutions

Collaborating towards a sustainable market
Common Info Models Full interoperability between cities and within the city
Enabling portability of solutions across cities

Supporting Open Innovation
Right-time context info published as open data to third parties
Authorization and access control (API management)

Enabling the Data Economy
City as a platform including also 3rd party data enabling innovative business models
Open and commercial data enabling multi-side markets

In the past few years, Algeciras, a municipality in the province of Cadiz, Spain, has been striving to preserve and improve the quality of the night sky in an attempt to drive its astro tourism industry. Aided by technology, it has been reducing the environmental impact produced by the municipality’s public lighting systems - with real-time monitoring of the quality of its night sky. Cadiz’s efforts have already resulted in tons of new tourists looking for memorable stargazing experiences.

Currently, the transportation of raw materials between warehouses and various workstations is still executed manually across the large majority of small and medium-sized production centers. This lack of automation causes an enormous loss of time for workers and prevents production centers from organizing transport operations efficiently. Durit, a company focused on the development and production of precision tools and engineering components - made from tungsten carbide - is trying to change that with FIWARE open source tech.

Paying attention to proper ventilation helps environments stay within the prescribed CO2 levels, and reduces the spread of viruses and bacteria. This seems particularly important during pandemic times but the concern should be extended to pandemic-free periods, not least across sensitive areas such as schools and daycare centers. WOBCOM’s WOB smart service facilitates proper ventilation by automatically measuring CO2 levels via sensors in everyday situations. Check out how Catholic daycare centers in Wolfsburg (Germany) have already opted for the solution.

For more impact stories, visit: www.fiware.org/impact_stories
Divided into sectors, the SMART WORLD BY FIWARE showcases how FIWARE is powering up Smart Cities with connected mobility, highlighting various domains and their interactions. The SMART WORLD BY FIWARE was introduced, for the very first time, in June 2019 at Aarhus’s IoT Week, in Denmark. Ever since, it has been present at major smart mobility events across the globe, featuring FIWARE’s solutions and achievements represented in this model.

In spite of the limitations brought on by COVID-19 with regards to showcasing the gigantic model at global leading events, activities related to the SMART WORLD BY FIWARE have not come to a standstill. On the contrary, a video storytelling has been created, explaining how each sector interacts with - and complements the other - in order to create smart environments and how Open Source technology facilitates the process.

Also, in December, the Smart MaaS stop motion video was released and features the Smart World by FIWARE and the infinite possibilities of ‘Powered by FIWARE’ solutions, based on a protagonist living and working in a Smart City. With this brand new video, people of all ages are able to enjoy FIWARE’s vision of a modern, smart digital future, from a safe distance. The goal of Smart MaaS is to build an open source, standardised mobility service platform, and reference architecture for the creation of new innovative mobility services. The Smart MaaS platform uses FIWARE infrastructures and technologies.

The SMART WORLD BY FIWARE is getting bigger, with three new modules being incorporated in the coming months. Until the end of the year, the gigantic model can be seen at Digitale Woche Kiel (Kiel, Germany), ITS World Congress (Hamburg, Germany), Smart Country Convention (Berlin, Germany), and SCEWC (Barcelona, Spain).

Once the 2021 fair season ends, the SMART WORLD BY FIWARE will be shown in a permanent exhibition at Forum Digital Technologies (Berlin), before the 2022 world tour starts off.
FARMING
This sector shows examples from the project “Internet of Food and Farming” (IoF2020), one of the largest EU projects to date. “City Agriculture” is an important component for the optimization of supply chains, i.e. the avoidance of long transport distances and production and consumption as close as possible to the consumer.

URBAN MEDIASPACE
The building is part of an effort to reshape former industrial areas of the Port of Aarhus into residential and commercial areas. It includes future-ready public housing, a library, culture center with an underground parking facility and a station and light rail system with trains running through and under the building.

RED CITY HALL
The Red City Hall shows the relation to the current political situation, the relationship between the energy change and the traffic change, in the backdrop of international movements such as “Fridays for Future.” Topics such as “traffic avoidance,” “alternative fuels,” or “ecological footprint” are discussed globally today.

ENERGY
The sector represents the concept of a funded project in North Germany, showing how the energy sector can support future green mobility. The gas is produced from the sun and wind, then stored and provided to the gas fuel station to support a local bus, running between the cities of Niebüll and Husum in Northern Germany.

URBAN MEDIASPACE

MOBILITY HUB
The sector demonstrates how various intelligent transport concepts are interlinked. FIWARE members across the world provide feasible and smart solutions for these types of implementation.

TOURIST CITY – MOUNTAIN AREA
The sector illustrates Werfenweng, a small community in Upper Austria, as a part of the “Samo” initiative – Soft Mobility. This is an example of fully integrated green and sustainable mobility – a role model for smart mobility of the future.

SMART HOUSE
The Smart House is supported by the IoT sensor hub, which combines and evaluates various data sources and environmental sensors. This model shows that air pollution measured on the ground changes road usage in urban areas.

KIEL HARBOUR
This sector showcases mobility developments around Kiel (Schleswig-Holstein, Germany), including technology for water level monitoring in coastal cities, data for the water warning systems, water storage in the streets in case of flood. It also features sensors detecting the occupancy and punctuality rate of naval vehicles in real-time, as well as opening and closing process automatization of movable bridges.

CITY HALL
The sector represents the city hall of Aarhus. Aarhus is among the smartest and most innovative cities in Europe today. It has been awarded the accolade of the city of culture and innovation on several occasions.

INITIATIVE FARMING
This sector features examples of “Digital Twin” and “Supply Chain” and shows the different robots, which are controlled by a FIWARE-based platform. “StoneOne” presents an example from the field of “Maintenance.” Besides, NEC Lab, Linz Center for Mechatronics and Engineering show how FIWARE’s reference architecture is successfully used in the “Industry 4.0” area.

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As more and more people move into urban areas, a thorough management of urban growth needs to be in place in order for global issues to be tackled and sustainable development fully achieved. To this end, B20, the private sector’s voice of the G20 community, addresses the global challenges and priorities defined by the G20 countries, by building solid consensus amongst business leaders, international organizations and civil society.

A recent recommendation from the B20 has been towards making Smart Cities the main focus of the G20’s efforts to implement Society 5.0 (Japan’s smart vision of the future) for SDGs. In line with its commitment from public administrations and private businesses towards the SDGs, FIWARE has been guiding cities and industries to deliver their digital vision, with the active involvement of all the relevant actors.

The FIWARE Community fully endorses the SDGs and is working hard to help deliver them. For instance, the Fighting Climate Change with FIWARE booklet features 30+ game-changing solutions that have become vital to the fight against climate change and are, ultimately, setting common standards for Smart Cities. Such solutions are based on FIWARE’s Open Source technology and fully aligned with the SDGs.

Additionally, with the Front-runner Smart Cities Program - jointly launched with TM Forum and aimed at defining a Common Reference Architecture and Data Models for Smart Cities – FIWARE Foundation engages in the global coalition that promotes the adoption of appropriate regulatory frameworks in data sharing and encourages cities to share experiences and best practices.

Together with its members, FIWARE strives to promote transparency, sustainability, accountability, and economic development led by smart, user-centric digital technologies. Going forward, the FIWARE Community plans to establish new sustainability targets that demonstrate its contribution to the achievement of the SDGs. This way, cities can take advantage of highly collaborative frameworks (private businesses, not-for-profit organizations, social enterprises, citizens, etc.) in order to deliver seamless public services and, thus, drive the advancement of an information society.

In the last few years, FIWARE adoption has grown considerably among cities worldwide. To showcase how 200+ cities (spread across 30 countries worldwide) are benefiting from FIWARE tech on a practical level, in June 2021, FIWARE Foundation launched the booklet FIWARE4Cities.

The first edition showcases 36 cities and 41 solutions from 13 countries, and is a footprint of how FIWARE has been helping cities worldwide to get their smart city projects off the ground. It aims to help cities understand the potential of open source technology and open common standards.

With the first edition gaining extensive traction, edition two is already underway and will feature around 30 global new cities. It will also showcase new solutions from the cities and companies already featured in the first edition of the booklet as well as several projects in which FIWARE is involved with and other initiatives led by FIWARE.

By the end of the year, 100+ cities will be added across three editions to showcase how they have turned to replicable, ready-to-use FIWARE-based solutions to improve the competitiveness of businesses and citizens’ participation.
FIWARE Digital Innovation Hubs (iHubs)

Serving as innovation engines, the FIWARE Digital Innovation Hubs (FIWARE iHubs) focus on building communities that will, in turn, enable local digital businesses to thrive not only at a regional but on a global level. The FIWARE iHubs network is growing bigger and reaching roughly 25 on a global scale. The new joiners to the FIWARE iHubs network span a range of industries and concrete offers:

>> Centifo Hub (Grasse, France): Set up by SCIC Tetris – a not for profit cooperative that brings together local actors involved in the ecological transition. With roots in the social innovation-based economy – the iHub is looking to build and help others (local authorities, SMEs, education and citizens) create demonstrators for sustainable solutions, and integrate FIWARE technologies into sustainable development initiatives with special interests in agriculture, circular economy and climate change adaptation. Its social science research center will also help to integrate organizational innovations in these projects.

>> FIWARE OIL iHub (Lund, Sweden): Focused on the domains of smart cities, smart building, smart energy, smart water, smart agrifood, smart shipping, smart transport, smart industry, and smart health, the iHub aims to – among other objectives – leverage on the existing open smart city network in Lund (LOSOC) operated by FIWARE Foundation member Sensative AB and powered by the FIWARE compliant IoT platform Yggio as a living lab for smart research and innovation projects.

FIWARE iHUBS
Think Globally, Act Locally

FIWARE Foundation is a growing global community with a common effort of achieving a solid headway towards making FIWARE Open Source technology the best instrument for companies to scale their activities, enter new markets and grow their businesses.

Ever since COVID-19 hit the world, FIWARE has grown roughly 30% in terms of membership, a reflection of how important digitalization is for cities and the overall economy. Check out who our new joiners are:

Code for Japan
Founded in 2013 and open to the public, CodeforJapan creates various mechanisms that allow anyone - from citizens to business executives to government representatives - to fully grasp regional issues and how to solve them, thereby fostering innovation and entrepreneurial culture.

Open & Agile Smart Cities (OASC)
The Open & Agile Smart Cities (OASC) is a network that connects cities and communities worldwide to learn from each other and exchange digital, data-driven solutions based on Minimal Interoperability Mechanisms (MIMs). The vast majority of the 150+ cities that are part of the OASC network have already adopted FIWARE technologies.

Smart City Institute Japan (SCI-Japan)
The Smart City Institute Japan (SCI-Japan) has been established as a not-for-profit organization by Mitsubishi UFJ Research and Consulting Co., Ltd. and Nikkei, Inc. The organization aims to provide a membership program for public, private, and social sector organizations engaged in the development of smart cities in Japan.

ATB Institut für angewandte Systemtechnik Bremen
ATB Institut für angewandte Systemtechnik Bremen is an RTD institute offering the utmost flexibility and performance orientation including extraordinary competence and outstanding innovativeness. ATB works in long-term partnerships with both national and international projects which include various topics, implementing ICT solutions in different industrial sectors and areas.

WSB.expert
The company provides development, support and consulting for business integration software based on the well-established methodology of IBM middleware. Highly specialized in business integration and delivering solutions for companies facing interface challenges, WSB.EXPERT is looking forward to working with the FIWARE Community to deliver simple, optimized and scalable process integrations.
FIWARE University Roadshow

Launched in 2020, the FIWARE University Roadshow aims to mobilize universities - specially professors, lecturers and researchers - offering Computer Science or Software Engineering courses to incorporate FIWARE technology and workshops within their curriculum. Over 35 universities are currently planning to integrate FIWARE modules into their lectures, whilst the University of Messina, the University of Murcia, the Electronic Technologies Department at the University of Seville and the University of Milano-Bicocca have already launched the FIWARE University Roadshow within their curriculum.

The FIWARE Scientific Advisory Board

In March 2021, the FIWARE Scientific Advisory Board (FISAB) was officially launched to provide support and advice to the FIWARE Foundation Board of Directors. The objective of FISAB is to continuously explore developments and innovations in the field of open source, open data, big data, context information management, standardization of interfaces and standard data models, blockchain, artificial intelligence, and digital twin.

The following experts and renowned academics from universities, research centers and institutes, technical academies and foundations have been elected to advise the Board on upcoming trends in cutting-edge technologies. Antonello Monti, RWTH Aachen University; Antonio Skarmeta, University of Murcia; Joaquín Salvachúa, Universidad Politécnica de Madrid; Luis Muñoz, University of Cantabria; Néjib Moalla, Université Lumière Lyon 2; Niall Aughney, Irish Manufacturing Research; Paolo Traverso, Fondazione Bruno Kessler.

During the FIWARE Smart Fest (June 08-09), FISAB got together to reinforce their commitment to fostering developments and innovations in the field of Open Source, open data, Big Data, context information management, standardization of interfaces and standard data models, blockchain, AI and Digital Twin. During the session, attendees from the academic community also learned about the latest scientific trends in ICT, Open Source, and data management. Directors of departments and/or Research Centers and distinguished professors also joined the panel to address the scientific steps and future technical perspectives which will guide the research of the future.

Want to know more about FISAB, and the FIWARE University Roadshow? Contact Tonia Sapia.
With the purpose of disseminating existing commercial offerings around FIWARE, the FIWARE Marketplace provides access to a wide range of “Powered by FIWARE” solutions/platforms, “FIWARE-ready technologies” as well as training, coaching, consultancy, and support services. The “Powered by FIWARE” and “FIWARE-ready” labels help entrepreneurs to gain visibility and credibility, essential to building partnerships and gaining market traction.

Besides acting as a single one-stop-shop for companies to learn about and purchase ‘off-the-shelf’ solutions, platforms, IoT devices, software enablers centered around IoT and Open Source - and based on or supported by FIWARE technologies - the FIWARE Marketplace is the ideal starting point for technology enthusiasts to find up-to-date information on disruptive technologies. Over 180+ global solutions are already featured in our Marketplace and the number of offerings continues to grow. Check out who the latest joiners are:

>>> Snap4City: Scalable Smart aNalytic APplication Builder for Sentient Cities. a “powered by FIWARE” solution provides flexible methods for the agile creation of a large range of smart city applications that exploit heterogeneous data, thereby, enabling services for stakeholders across many different areas.

>>> SRM Consulting: Created initially for the execution of cartographic production works, the organization went on to become a company with a highly innovative and technological apparatus and solutions. One of these solutions is MavDrone, an extension of the solution Ipsilum Aerial Solution (IAS). IAS is a platform developed for the command and control of drone fleets and has already been used in several mapping and mission monitoring projects.

>>> Seneco: The sensor-based, connected Citygrid solution ensures that street lights/lamps always light up when presence is detected, and dim down after some time. When a lamp fails, the information can be dispatched immediately so maintenance can be planned accordingly. The solution is already being deployed across several European cities.

Apply [here](#) to be certified and featured in the FIWARE Marketplace.
Reference architectures are tangible proof points that combine partner technology with FIWARE technology to create an innovative design to simplify the process of creating solid, ready-to-use environments for smart applications to be run on.

As disruptive technologies such as Blockchain, AI, and Distributed Ledger Technologies (DLTs) - to mention but a few - assume key roles in accelerating the development, governance, and operation of businesses in a more trusted, accountable, and transparent manner, FIWARE has added these technologies to its ‘Powered by FIWARE’ architectures, allowing users to learn how to design applications using the latest technologies and experience its benefits on a practical level.

For instance, DLTs bring value to FIWARE because they can be used to store transaction logs managed in any ‘Powered by FIWARE’ solution. Therefore, these logs cannot be manipulated and can hence, provide the basis for auditing processes: warranting transparency in Smart Cities and animal welfare in livestock farming, and certifying quality in Smart Factories, for instance. Additionally, FIWARE brings great value to DLTs by being able to address one crucial question: how to ensure that the data stored in a Distributed Ledger (e.g., the IOTA Tangle) is not fake data? FIWARE can guarantee that between the time that such data is generated by a sensor, robotic system or information system and is stored into a Distributed Ledger: no human intervention takes place and, therefore, the data cannot be manipulated.

Finally, the FIWARE Tech Roadmap contemplates the evolution of some of its components, by leveraging on some of the advantages that DLTs have to offer:

- The components supporting the monetization of APIs and data resources are relying on DLTs such as IOTA Tangle to log usage records, which are later the basis for a trustworthy process and payment to API/data providers;

- The components dealing with Identity Management and Access Control can use DLTs to manage access control policies so that they cannot be manipulated and can then be stored and handled in a distributed manner.

FIWARE Foundation offers a series of training workshops in the form of online webinars. These are designed to appeal to a variety of audiences and are ranked according to their level of expertise. Wrapped under the umbrella of #WednesdayWebinars and Business Boost Webinars, these virtual experiences cover all there is to know about FIWARE from a technical and a business standpoint. They hereby look at what each of the FIWARE components brings and how apps can be developed using them. They also explain the vision and value proposition of FIWARE in the domains of Smart Cities, Smart Agrifood, Smart Energy, and Smart Industry as well as showcasing the kind of initiatives members of the FIWARE Community are carrying out beyond the development of the technology.

Catered to audiences from Asia to North America, these live knowledge-sharing sessions cover a broad range of topics by industry experts on latest and trending skills and technologies. Besides learning about the components present in solutions, platforms, IoT devices, and software enablers based on - or supported by - FIWARE technologies, participants can also stay up-to-date with the leading technologies and trends in digitization for the coming years and hear how they can navigate the economic, political and social elements brought on by the current digital revolution.

Click here and stay-up-to-date with our upcoming webinars.
Having supported startups and SMEs since 2014 with the FIWARE Accelerate Program — in which over 1,000 startups received €80 million in funding from the European Commission — in April 2020, FIWARE began a new chapter with the FIWARE Accelerator. Recognized as an important matching unit between venture capitalists and entrepreneurs, the program focuses on driving high-potential startups and enterprises to develop and bring onto the market innovative smart solutions, based on FIWARE technology.

By offering tailored funding and open call opportunities, business development guidance, global visibility and network, prototype testing within the global FIWARE Community, and access to a global portfolio of relevant industry players, VCs, standardization and research institutions, private and public entities, FIWARE Accelerator strives to bring SMEs and startups to the forefront of innovation, based on Open Source development models.

**Different skills put to work for the greater good**

The program works closely with major accelerators and incubators to create business opportunities and deliver technical training for startups and SMEs. Check out who the newest partners are:

**Zabala**

The company was established in 1986 and currently operates as an international innovation management consultant with offices in France, Belgium, the UK and Colombia. With over 30 years of experience in the preparation of European research and innovation (R&I) project proposals, Zabala has been a long-term partner of FIWARE and is currently managing over 31 million EUR in cascade funding opportunities. The synergies with FIWARE’s work and what it means for the startups enrolled in the FIWARE Accelerator is of great dimension;

Following its early involvement with the accelerator “SpeedUP Europe” — in which FIWARE Open Source was deployed to create solutions for clean tech, Smart Cities and Smart AgriFood — Gateway49 has been created in cooperation with Lübeck’s Chamber of Commerce and Industry and Glocal Consult. The company supports early stage startups working in the fields of life science, food, Smart Cities, logistics and new digital technologies;

The company is a regional internet service provider in Wolfsburg. It is building a fibre optics network in Wolfsburg, together with Stadtwerke Wolfsburg AG. With a strong focus on Smart Cities and Mobility topics, WOBCOM will work with FIWARE to increase the number of startups and users of smart digital solutions, like FIWARE. Investors day and pitches will be co-organized. During the 3 year collaboration, coaching and training activities will be organized as well as hackathons and challenges;

**bwcon**

This is a leading business initiative for the promotion of Baden-Württemberg (Germany) as a hub for innovation and high-tech. As a partner of the programme, bwcon will be promoting the use of FIWARE technology, stimulating the creation of innovative smart solutions, as well as collaborating on virtual events, technical workshops and mentoring for startups and SMEs.

**Gateway 49**

Designed to stimulate networking and facilitate fruitful relationships between companies, research institutions, and centers of excellence, Polo Tecnologico (Italy) aims to set up a group of hi-tech enterprises. A structured and integrated system, it offers several services to its members, including scouting, brand visibility, investors’ searches, identification of calls for proposals and funding, and much more. Via the collaboration with Polo Tecnologico, FIWARE will further help high-potential startups and enterprises to develop and bring to the market innovative smart solutions.

**Innoloft**

In June, the 6th FIWARE Accelerator Partner was welcomed on board. Innoloft is building a B2B tech ecosystem empowered by a network of different organizations. Together with other partners, Innoloft helps boost business and cutting-edge smart solutions from startups to global players.

Since the launch of the FIWARE Accelerator, 110+ open calls have been promoted by the initiative, culminating in several dozen opportunities for funding, partners introductions and tender processes within European-led projects. Other similar agreements with international accelerator initiatives are currently under analysis and will soon be materialized.
FIWARE PRESENCE AT GLOBAL EVENTS

As part of FIWARE’s offerings, members and partners have the opportunity to join FIWARE Foundation (as co-exhibitors at FIWARE booths or as keynote speakers) at some of the world’s leading conferences.

As face-to-face conferences have been cancelled right and left following the COVID-19 pandemic, the FIWARE Community has been heavily present in global digital events instead. In fact, as most meetings have become virtual, allowing participants from all over the world to join in, the FIWARE Community members have been exposed to broader visibility, and network opportunities with new contacts.

FIWARE SMART FEST

Guided by our Open Source thriving community, we are constantly adapting and harnessing the knowledge, content, and collaboration experiences that our community deserves.

On that front, on June 08-09, the FIWARE Smart Fest took place and gathered hundreds of members of the FIWARE Community to discuss issues around Smart Cities, Smart Industry, Smart AgriFood, Smart Energy, as well as disrupting technologies such as AI, Digital Twin, machine learning, blockchain, and much more. Some highlights from the event:

- >> 1000+ attendees
- >> 120+ speakers
- >> 10 active media partners covering the event
- >> 2 Position Papers and 1 White Paper released:

FIWARE for Data Spaces: The paper describes how smart applications - from multiple domains - can add up to the creation of Data Spaces, based on FIWARE software building blocks.

FIWARE for Digital Twins: This position paper enlightens readers on how smart applications - coming from diverse domains - can aid the launch of smart solutions, based on the Digital Twin concept and on FIWARE software building blocks.

Artificial Intelligence Within Cities: Launched in collaboration with Matthew James Bailey, the White Paper focuses on the role played by Artificial Intelligence (AI) in shaping the future experience of Smart Cities.

With the COVID-19 regulations being gradually lifted, the FIWARE Community is thrilled to be able to engage and network in person once again and will, in the next few months, meet next at:

- **Digitale Woche Kiel** *(Kiel, Germany - September 12-19)*
  
  See in person the FIWARE Smart World - built entirely by Lego bricks - showcasing how FIWARE already today enables more than 200 cities and supports verticals like Energy, Industry, Cities, AgriFood, Water and Tourism worldwide to fulfill their digital strategies. Moreover, we are in final negotiations to take part in the Smart Cities Day as part of the official city program, providing a special opportunity for our FIWARE members and Accelerator Partners visiting the event.

- **ITS World Congress** *(Hamburg, Germany - October 11-15)*
  
  FIWARE is thrilled to run a roughly 100 m2 partner booth with EDAG at the event. ITS is the most important international industry event in the field of intelligent transportation systems and services. Big visual attractions like the FIWARE SMART WORLD and EDAG’s CityBot will make FIWARE one of the most attractive booths.

- **Smart Country Convention** *(Berlin, Germany - October 26-28)*
  
  Once again a Premium partner at the event, FIWARE will be present with a 200m2 booth and more than 15 members and partners who contribute to the digitalization of the public sector and smart cities, regions and destinations. Planned to deliver a similar attendee’s rate as seen in 2019 when FIWARE hosted its global Summit at the fair, SCCON is Germany’s biggest event for digitization in the public sector.

Here is what is coming up next:

- **18 August**: i4Trust Open Call 3rd Webinar
- **07 October**: TOKEN Platform Launch

Check out the full list of events that FIWARE will be attending.
WHAT’S HOT & HAPPENING

## July 14

FIWARE CEO **Ulrich Ahle** presents at the *Smart Communities & Digital Economy* event, organized by Gaia-X Hub Slovenia. Ulrich introduced how FIWARE is contributing to the creation of data spaces and the advantages of the FIWARE Open Source platform for smart communities.

## July 22

Ulrich Ahle speaks about “Urban-X: Open Source and Open Standards for Digital Twins of Smart Communities” during the IPCEI-CIS Matchmaking event, organized by the German Federal Ministry for Economic Affairs and Energy (BMWi). IPCEI stands for “Important Project of Common European Interest”. Under this framework, 11 EU Member States have joined forces to create a common cloud and edge infrastructure and its associated smart services for the future. To achieve an integrated IPCEI on Next Generation Cloud Infrastructure and Services (IPCEI-CIS), Germany and France are jointly coordinating this process. Urban-X deploys a multi-provider, trusted and sovereign open data platform for cross-domain Digital Twins in European cities and regions, whilst also enabling synergies with existing initiatives such as FIWARE and Gaia-X.

## July 30

The **CEFAT4Cities Virtual Hackathon** is launched. Organized by dozens of partners, including FIWARE and the CEFAT4Cities project, the competition aims to foster the development of new smart services, solutions or applications across smart cities, smart tourism, eGovernance, and open data. Besides winning prizes worth up to 10K euros (among other things), participants also get to build solutions for key stakeholders such as European cities, for instance. Apply [here](#).

## August 30

Official launch of the International Hackathon promoted by EDAG, IOTA, and FIWARE. Aimed at addressing challenges in smart mobility and smart cities solutions – using advanced software technologies offered by the three organizations - the hackathon is a hybrid event and takes place in October. Winners will be announced during the Smart Cities Expo World Congress (Barcelona, Spain), and will also be featured in social media and press release announcements.

For further information, contact [Tonia Sapia](#).
WHAT A YEAR!

FIWARE, iSHARE and FundingBox team up for the I4trust Initiative, which will provide small and medium-sized enterprises (SMEs) across various sectors and locations in Europe with the tools, coaching, mentoring and financial support needed for the creation of Data Spaces, thereby facilitating trustworthy and effective data sharing.

FIWARE Foundation announces collaboration with the India Urban Data Exchange (IUDX) Program, toward building an Open Source platform that facilitates secure, authenticated, and managed exchange of data amongst various data sources and consumers. The collaboration is a major milestone in the globalisation of the standards and technologies developed by the FIWARE ecosystem.

The AI-Marketplace platform is officially launched to connect AI experts, providers, and manufacturers to jointly develop AI solutions for more efficient product creation. FIWARE, with its experience in building digital and open source-based platforms, is contributing its expertise in building a marketplace for digital services that deploy FIWARE components and TM Forum APIs.

FIWARE Foundation joins forces with international publication Renewable Matter to further drive coverage of its initiatives around urban challenges, smarter living and secure data exchange. As part of the partnership, the FIWARE Community will access insightful content on the latest cutting-edge innovations and visions for development that puts people and respect for the planet first.

FIWARE Foundation joins living-in.eu, the global movement supporting public authorities, cities and communities in their digital transformation. Given FIWARE’s long-lasting commitment to guiding cities to understand the potential of open source technology and open common standards toward creating sustainable, greener living space for their citizens, the partnership is a natural step towards fostering a cohesive and digital Europe.

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FIWARE Foundation and Digital Twin Consortium® enter into a collaborative agreement to accelerate the development, deployment, and wide-scale adoption of open digital twin technologies. Together, the organizations will drive interoperability, based on information exchange by harmonizing technology components and other elements.

MEET OUR BOARD OF OFFICERS

Ulrich Ahle - CEO
Following his extensive experience in the industrial sector (including Vice President and leader of Manufacturing, Retail & Transportation Consulting & Systems Integration at Atos Germany), helping clients to digitize their business, Ulrich joined the foundation in September 2016. He is on the Board of the International Data Spaces Association and was also on the Board of prostep ivip Association for 16 years, before becoming an Honorary Member in 2019.

Stefano De Panfilis - COO
Stefano joined Engineering Ingegneria Informatica S.p.A. in 1984 and went from Director of R&D Laboratories Department (overseeing 100+ researchers in Europe and beyond) to Chief Innovation Officer of the Engineering Group in 2011. He joined FIWARE Foundation in 2017. Besides his role as COO, he is responsible for the FIWARE Lab Nodes and is also a member of the FIWARE Technical Steering Committee.

Juanjo Hierro - CTO
After a thriving trajectory at Telefónica Spain’s R&D Labs (including Industrial IoT Unit’s CTO), Juanjo joined the foundation in 2017. His involvement with FIWARE dates back to 2011, when he was already coordinating activities related to the FIWARE Lab Nodes and is also a member of the FIWARE Technical Steering Committee.

Cristina Brandtstetter - CMO
With a strong track record of success over her 20+ years international career in Operations, Change Management, Strategy, M&A, Marketing & PR, Product Management, Consulting, build-up organisations of industry/vertical teams and diversified go-to-market channels (among many other areas), Cristina joined the foundation in June 2019 to lead the organization’s Marketing, Press and PR teams, with a strong focus on corporate portfolio and partner activities.
PRESS CONTACT

For further information about us or for interview requests, please contact:

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valdirene.deoliveira@fiware.org

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