

Connect

## Atos Edge AI & IoT

8 Nov. 2022

Emanuele Paracone Cloud Consultant – Cloud Enterprise Solutions – Italy





### Atos at Glance

### Atos

#### Global leader

- Secure and decarbonized digital
- Cloud and managed security services worldwide
- IoT Services & Solutions
- Identity governance and administration

#### Pioneer in

- Edge server technology
- Quantum technology with the Atos Quantum Learning
- Best-in-class computing power

Supported by the talent and diversity of 107,000 employees in 71 countries we generate an annual revenue of €11 billion.

We offer our clients a range of market-leading digital solutions and products alongside consultancy services digital security and decarbonization offerings.

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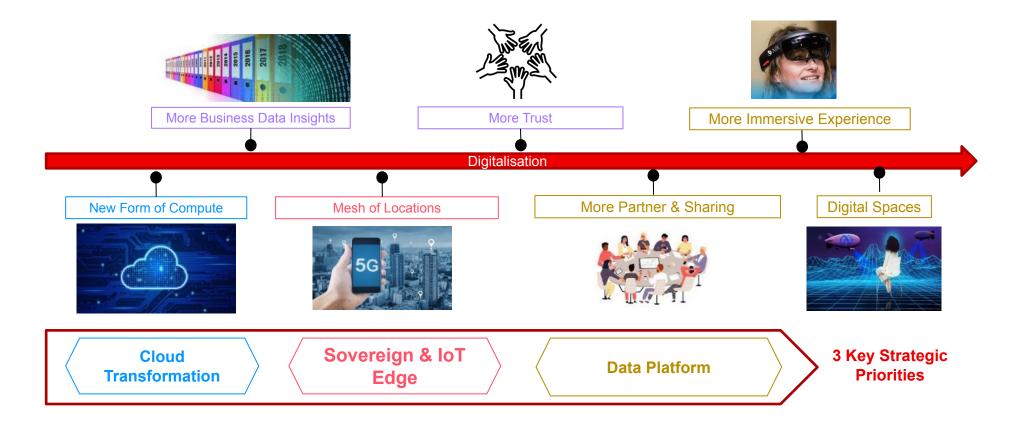


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### Atos Strategic Technology Vision aligned with Red Hat Strategy

Clients' path to Digital Transformation





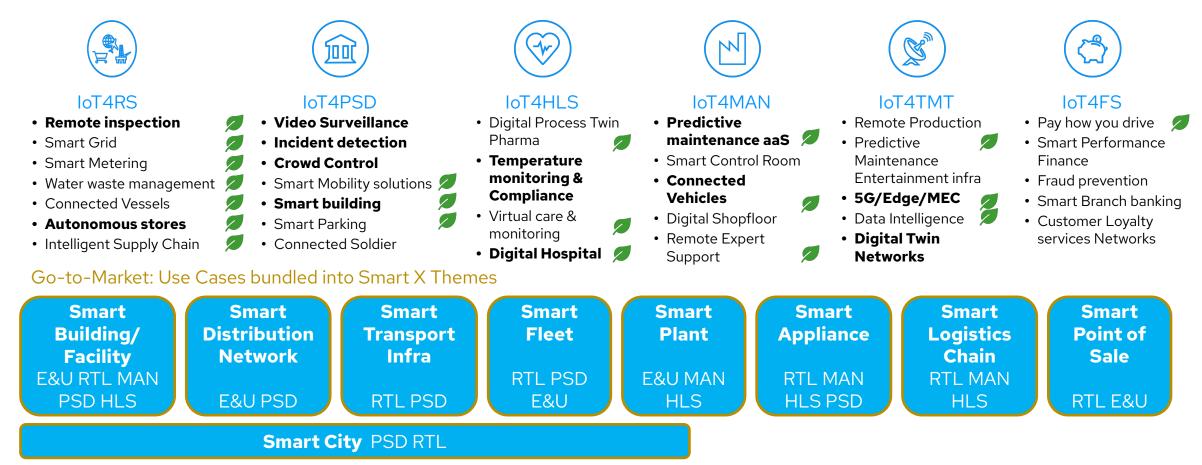
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### IoT Offerings for every industry

#### Transforming data into business outcomes







### IoT is the key enabler for Digital Journey for Customers

We cover the end-to-end Value Chain for our customers' IoT Use Cases

IoT Value Chain			
Things	Edge Computing	<ul> <li>IoT Platforms</li> <li>Connected vehicle, Urban data platform (Fiware)</li> <li>3<sup>rd</sup> party: Worldline, MindSphere, Azure IoT, AWS IoT, Google IoT, Vision IoT, PTC, SwAG, Litmus</li> <li>Building customer-specific platforms</li> <li>Atos Analytics PaaS</li> <li>Atos Data Lake Engine</li> <li>3rd party analytics platforms</li> </ul>	Smart-X business services
		Data Insights as a service	
Integration & Innovation			
Security & Decarbonization – Products & Services			

**Operations & Industrialization** 





### Al and IoT analytics at the Edge

#### Atos is delivering end to end solutions – focused on outcome as a service



Smart Cities Video Protection, Violence detection, Traffic management



Factories Quality Inspection, Physical Security, Access Control, Predictive maintenance



Energy & Telco Augmented Technician, Perimeter Inspection



Retail Shelf Monitoring, Retail analytics



Healthcare Patient Monitoring

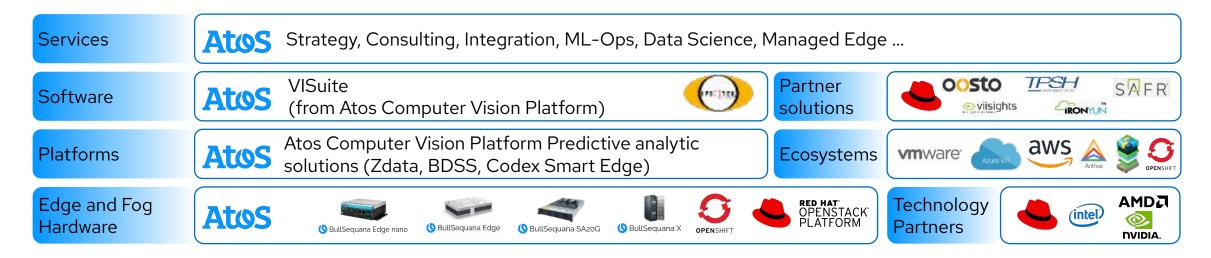


Intelligent train

station



Smart venues Contactless access control Crowd management







### Atos Red Hat Partnership over 10 years

Average 30% Growth per year: Atos Contract value > €400M

#### Major Cloud Successes :

- Atos Managed OpenShift AMOS (since 2018)
- Built in Red Hat Open innovation Labs
- All Industry sectors across EMEA
- Strong Collaboration with Red Hat services





**Red Hat** 

intel



### Atos and Red Hat for Edge Computing

#### Average 30% Growth per year: Atos Contract value > €400M



#### Innovative Edge Infrastructure

A swarm of µEdge streaming data captured from any device to powerful Edge servers for analytics inference designed to run anywhere



ΘΘ

#### Extensive 5G Capabilities

Private bubbles from a few meters to kilometers, with network slicing to service multiple core functionalities on an effective and scalable environment

#### Outcome-as-a-Service

Business outcomes are driving our efforts, from initial engagement, technology to consumption model, it only matters if the customer wins



#### Flexible Cloud Enabled Edge Platform

From Edge to Cloud, we build reusable components on seamless scalable cloud-based architecture



#### Codeless Secure Data Pipelines

Modern data pipelines are like a copy-paste, from anything to cloud. No need for hundreds of lines of code.



#### Cloud Native Build

Using containers from µEdge to Cloud allows a great flexibility and synergy between all components along the data chain



#### DevSecOps

Planning, designing and building modern secure CI/CD pipelines for app dev environments with regulatory support



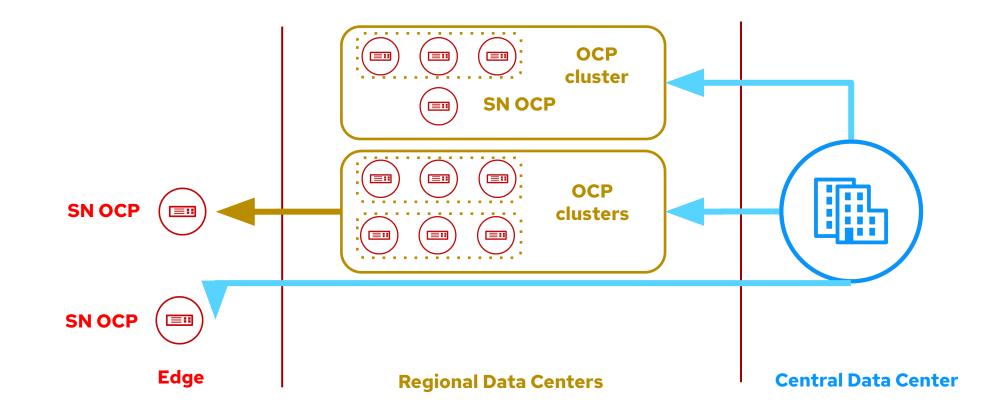
#### Managed Services

World's most comprehensive catalog of services based on Kubernetes to support build and management of modern applications



### Single Node OpenShift

Platform consistency between datacenters and edge









Atos

### AMOS Value Added Features

9 AMOS

#### **Container Image Handling**

static analysis of vulnerabilities advanced container registry image signing

#### **Application Migration Tooling**

Atos Cloud Assessment (ACAT) Remediation Tools (CCAT) Migration from OCP 3.x to 4.x

#### **External Log-aggregation**

OpenShift generated artifacts can be stored on external Aggregator

#### **Self Service Portal**

Available for Project and User management

#### **Customer Identity**

Management integration Integrate the existing customer's directories with SSO





### Sovereign & IoT/Edge

#### To get the real value of the local or sovereign data

FROM

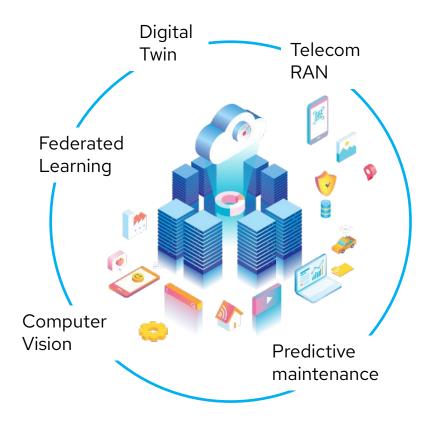
TO

Data-centers Public cloud IT OT

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Computing Continuum with interconnected ecosystem Edge & Cloud distribution Energy efficient local data processing (data gravity) Low latency services (5G/IoT) Sovereignty

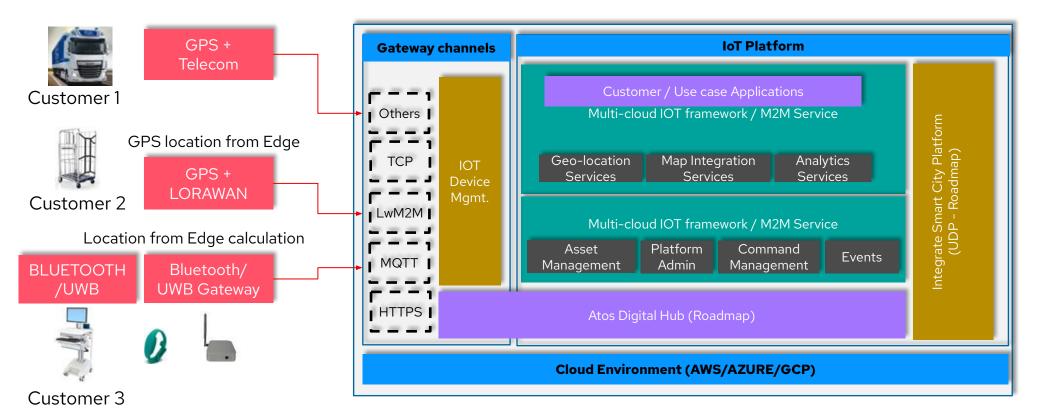
Cybersecurity mesh, IAM, MDR Private Network/5G IT & OT convergence to IoT Edge platform & intelligence Predictive maintenance Sovereign Cloud Trusted Data Spaces





### M2M Gateway on the Cloud

#### Enables device management for diverse range of IoT devices & use cases



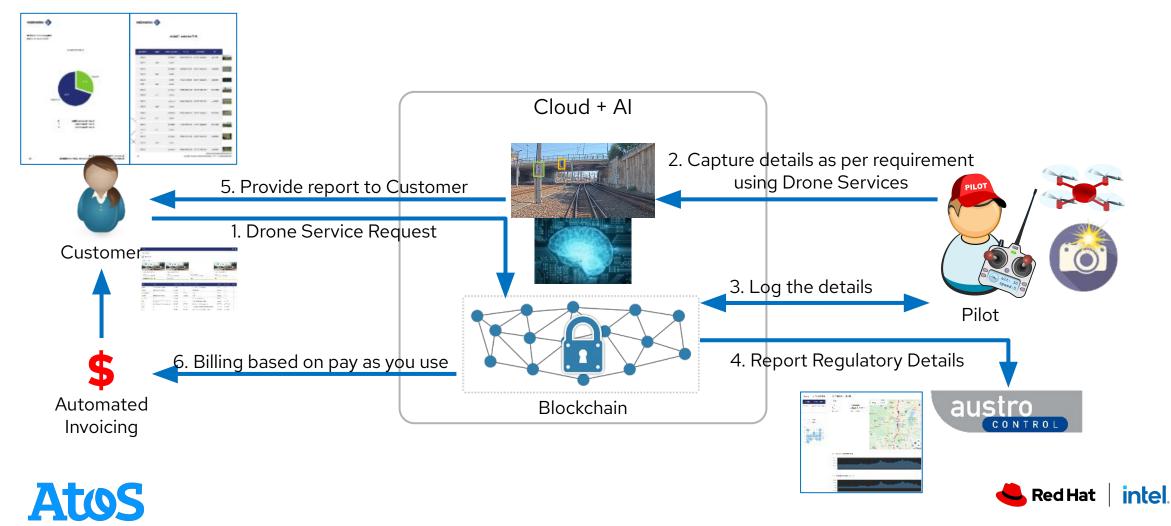
- Handling of Upstream sensor data & Downstream Device Management
- Plug & Play Communication Layer to handle Indoor/Outdoor scenarios and Connectivity Protocols





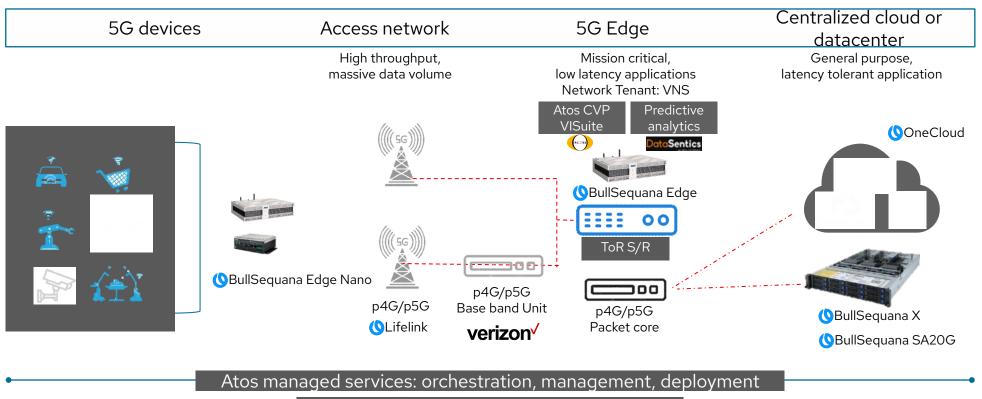
### The Atos UAV Solution - ARCA ingeniosa

A Scalable End 2 End Automated Service Delivery Platform



### Atos 5G Private MEC architecture

#### All-in-one easy to deploy architecture



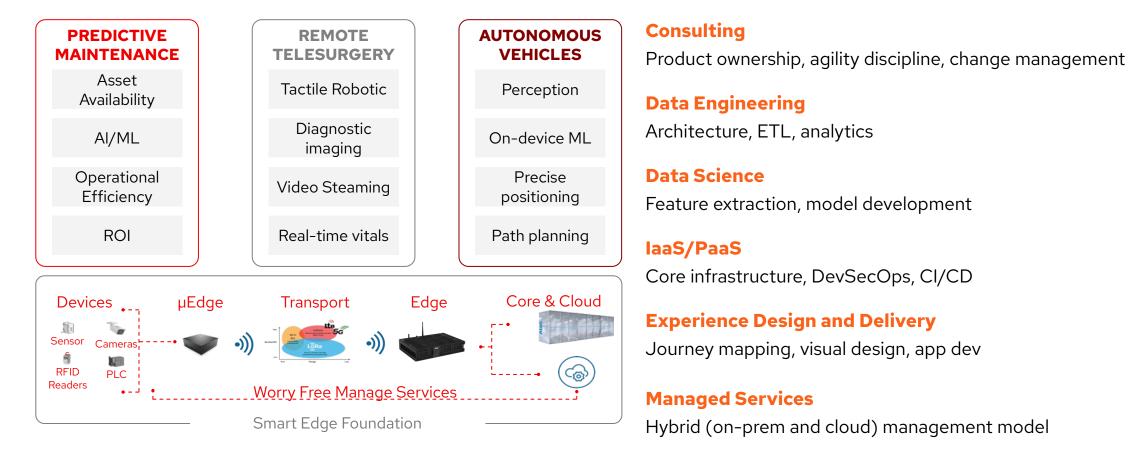
Atos CyberSecurity services expertise





### Smart Edge Services enabled by Atos and Red Hat

#### Focus on new value chains

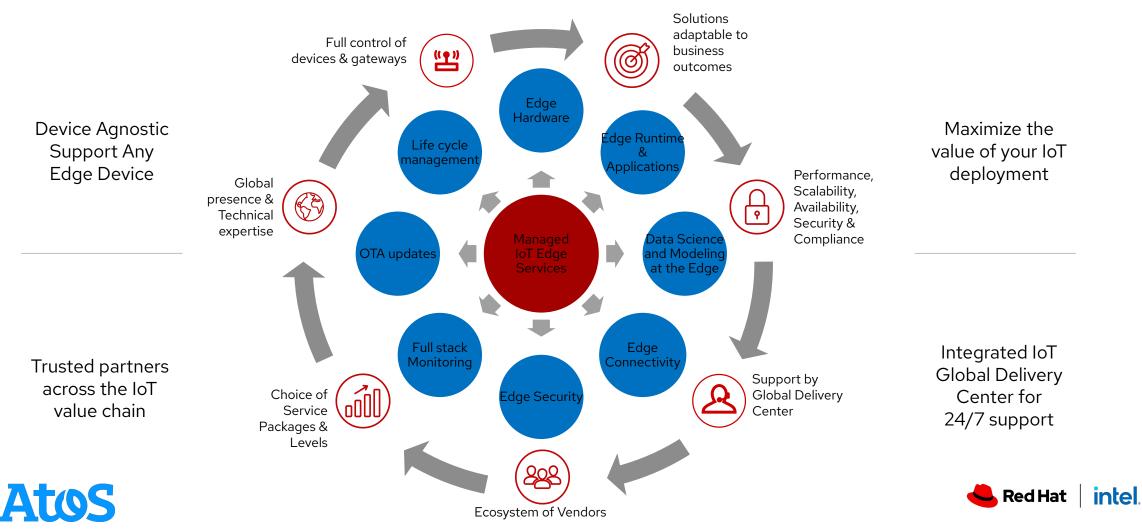


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### Managed IoT Edge Services with Red Hat

#### Holistic and Vendor-agnostic services



### Priorities

Developer velocity
Deploy applications
anywhere



Act with speed and agility and adapt to the needs of the business

Operational Agility Minimize operational challenges



Provide new solutions for a variety of distributed application environment Business innovation

Address new opportunities



Enhance innovation, increase productivity, and offer better products and services

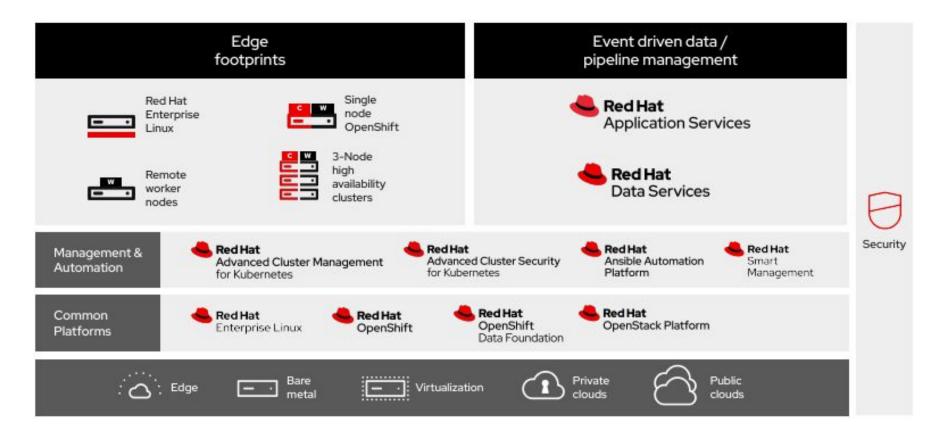






### Red Hat Edge

#### Red Hat Portfolio

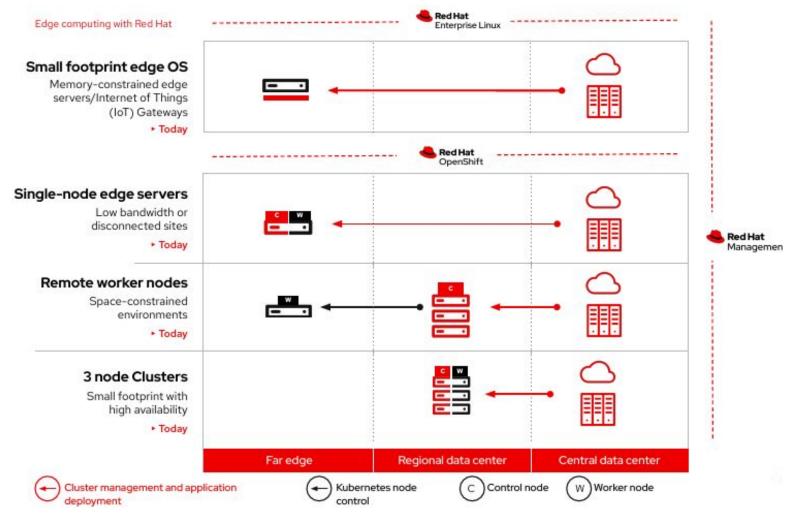






### Red Hat Edge

#### **Common Patterns**



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### Atos IoT Capabilities at a glance



Atos addresses customer challenges with end-to-end IoT capabilities



Atos invested pre-integrated Ready-to-go IoT solutions with high profile brand-name customers



Atos delivers IoT@Scale and offers innovative right-of-use and outcome based commercial models



Atos has implemented more than 100 IoT use cases, enabling business outcomes in all our Industries



Unique expertise on carbon footprint management and decarbonization actions





### Atos a trusted partner to help drive positive change



Our 107,000 business technologists across the globe outstanding response to our clients' challenges



Focus o **innovation and expertise** in IoT and Edge technologies and services to deliver proven business outcomes @ scale



Industry expertise with strength in connected and secure services, supporting our clients to meet their digital transformation challenges



Atos is committed to a sustainable future, enabling our clients to achieve their decarbonization goals through our Green IoT solutions



Investing in Human Capital to enable acceleration in digital economy; creating an inclusive, diverse and ethical environment to futureproof employee experience







### Connect

# Thank you



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