



Snap4City

Development Environment

From Data to Smart Cities. Together.

INTEROPERABLE • INTELLIGENT • SUSTAINABLE • FOR A BETTER TOMORROW

SMART
PEOPLE
SMART
PLACES
SMART
SOLUTIONS



Parking



Waste
Management



Smart
Lighting



Environment
Monitoring



Mobility



Ports & Logistics



Energy
Management



AI & MLOps
Agentic AI

Snap4City Development Environment

Home Dashboards Data Models Applications Tools

Search anything...

City Live Map



Total Sensors

1,428
↑ +12%

Active Services

24
↑ +6%

Air Quality Trend



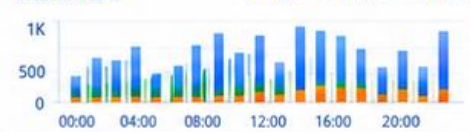
CO₂ (avg)

18.5 µg/m³
↓ -6%

Energy Consumption

2.4 GWh
↓ -11%

Traffic Flow



Data Models



Dictionary & Ontology

- Schemas (JSON-LD)
- Domain Dictionary
- Ontologies (SAREF)
- Linked Data

AI Tools & MLOps



Visual Editor



MCP Agentic Tools



Data Interoperability



```
# Read data from IoT devices
import snap4city as s4c
data = s4c.get_sensors_data("parking")
df = s4c.to_dataframe(data)

# Process and publish
result = df[df['status'] == 'free']
s4c.publish("smartcityparking", result)
```



SAME DATA
BRIGHTER CITIES

SnapAdvisor AI Copilot

How can I help you today?
I can assist with development, data analysis, city operations and smart city solutions.

- Create an AI workflow for city data
- Build an MCP agent for smart mobility
- Set up an MLOps pipeline
- Generate insights from urban data
- Help me with model deployment
- Support decision making with AI

Ask SnapAdvisor...



STANDARDS



REAL-TIME
DATA

BUILD > INTEGRATE > ANALYZE > DEPLOY > SMARTER CITIES



SCALABLE
SOLUTIONS



PEOPLE-CENTRIC
SOLUTIONS

Value for buyers and delivery partners

City and enterprise teams



Developers



System integrators



A shared operational view

Combine information across departments and connect it to daily decisions.

A reusable application toolbox

Use visual flows and APIs while keeping the flexibility of custom code.

A foundation for differentiated services

Build domain applications and connect customer systems on a common platform.

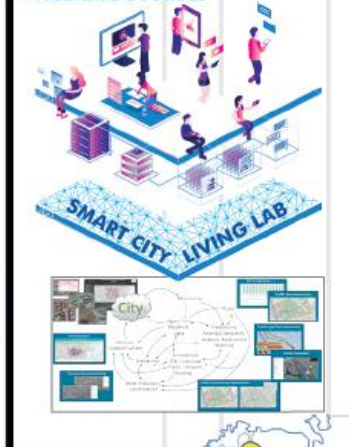


THE POWER OF AGENTIC AI AT THE SERVICE OF YOUR OPERATIONS AND PLANS

OPERATION AND PLAN - CONTROL ROOMS - DECISION SUPPORT SYSTEMS - WHAT-IF ANALYSIS - OPTIMIZATION - APPLICATIONS - AGENTS

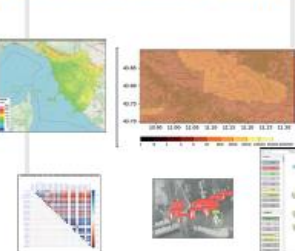
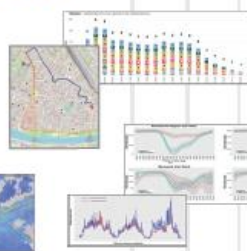
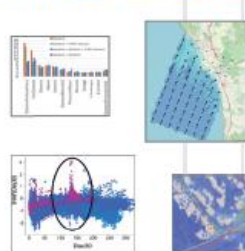
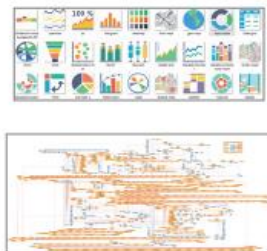


- DEVELOPMENT ENVIRONMENT AND METHODOLOGY
- VISUAL PROGRAMMING, ML, AI, HPC
- TRAINING COURSES



LOW-CODE DEVELOPMENT, VISUAL PROGRAMMING, SMART APPLICATION DEV.,
DIGITAL TWIN DEV. PLATFORM, PROCESSING LOGIC, MICROSERVICES
API-DRIVEN DEV., EDGE & CLOUD DEV.

ARTIFICIAL INTELLIGENCE, AI-POWERED DIGITAL TWIN, ADVANCED ANALYTICS,
PREDICTION, OPTIMISATION, SIMULATION, MACHINE LEARNING,
GENERATIVE AI, AGENTIC AI, AI AGENTS, RAG, GRAPH AI, MLOPS

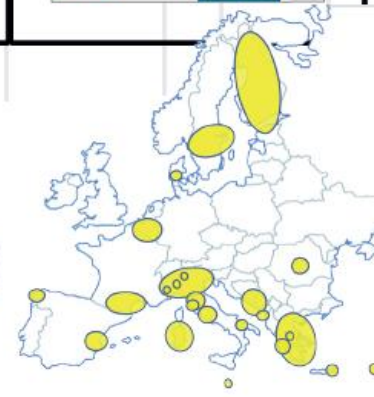


KNOWLEDGE GRAPH, SEMANTIC KNOWLEDGE,
KNOWLEDGE-DRIVEN, CONTEXT-AWARE DATA,
SEMANTIC REASONING, DATA HARMONIZATION

INTEROPERABILITY, SEMANTIC INTEROPERABILITY,
CROSS-PLATFORM, OPEN STANDARDS
VENDOR-AGNOSTIC, LEGACY SYSTEMS

ANY DATA INGESTION, REAL-TIME, INTEGRATION,
IOT/WOT, HETEROGENEOUS DATA,
EDGE-TO-CLOUD DATA INTEGRATION,
BIDIRECTIONAL EVENT DRIVEN

FULL INTEROPERABILITY, ANY: DATA, BROKERS, NETWORKS AND VERTICALS



Powered by
FIWARE

FREE
TRIAL

PEN Test
Passed

EU GDPR
COMPLIANT

SNAP4
Appliances and Dockers
Installations

EUROPEAN OPEN
SCIENCE CLOUD

Node-RED

JS Foundation

E015
digital ecosystem

NVIDIA

01

Interoperability: any format, any protocol, any API, visual programming node-red, Python, brokers, etc. Server Sides Business Models, ETL, ELT, ..

02

Data Model: standard and custom data models, dictionary, ontology; Data Spaces, MDS; data models FIWARE, etc.

03

Artificial Intelligence: ML, AI, DL, Fed.AI, LLM, DRL, Agentic AI, MCP tools, generative AI, ... SnapAdvisor Copilot for developers, MLOps supp.

04

Visual Intelligence: visual programming for visual intelligence tools, Business intelligence, CSBL services, training, etc.

05

Smart Applications: dashboard builder, wizard, exploiting AI tools, Advisor Copilot, CSBL services, mobile Apps, multi services

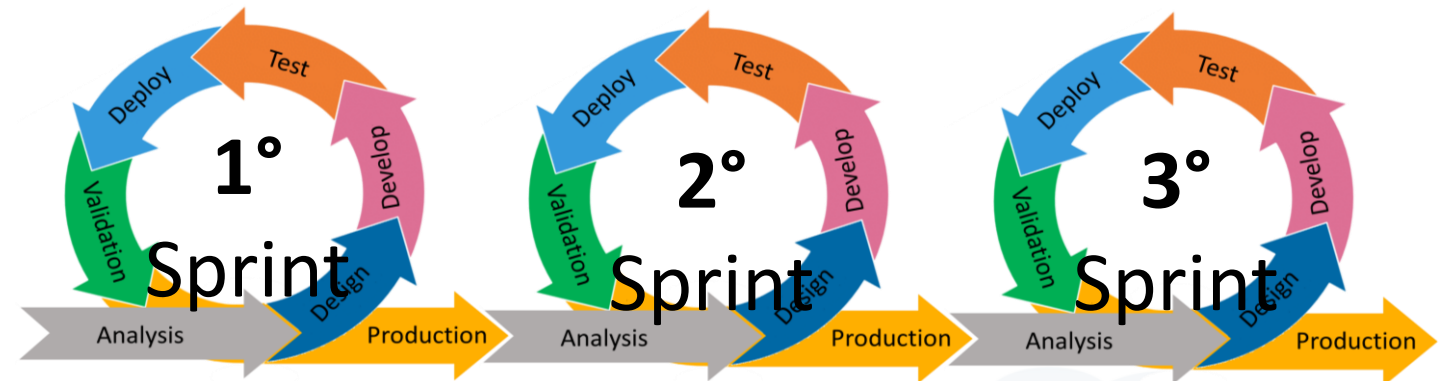
06

SnapAdvisor Copilot: expert on developing Snap4City application and AI algorithms, your custom expert of any domain

07

Deploy: development tools can be deployed with the platform on premise, public and private clouds, CPU/GPU clusters, VM and/or K8S, etc.

Agile Development Life Cycle by sprints



- **Licence free open source platform**
 - **A community**
- **Deploy:**
 - from single server (intel, ARM) to no limits, scalable and reliable, core platform Open Source
 - full scale regional/national platform in Active-Active data centers full DRS, HA, FT

<https://www.snap4city.org/944>

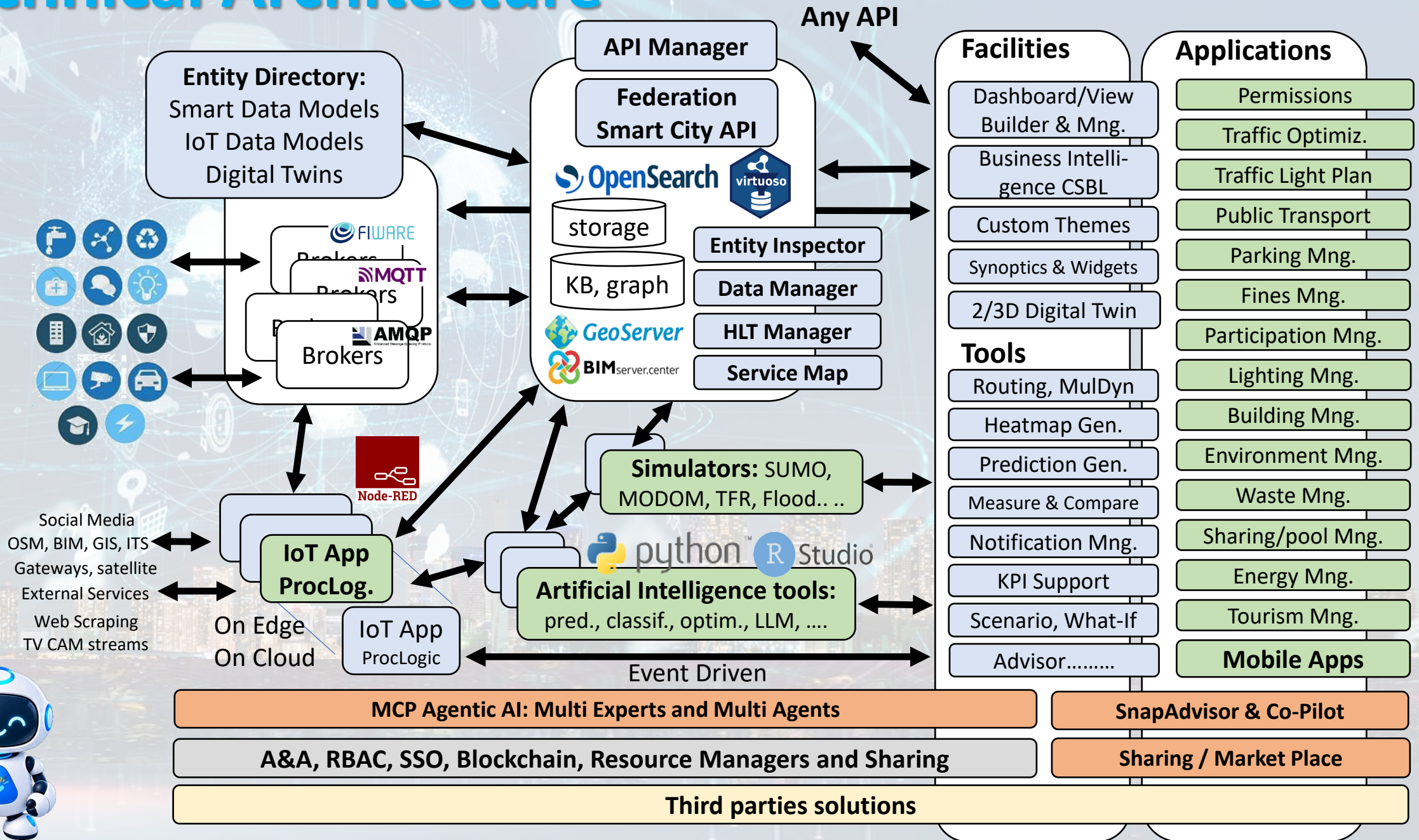
On Line Training Material (free of charge)



1st part	2nd part	3rd part	4th part	5th part	6th part	7th part	8th
Overview	Dashboards	IOT App, IOT Network	Data Analytics	Data Ingestion processes	System and Deploy Install	Smart City API: Web & Mob. App	Design and Develop Smart Solutions

Full Training Course (on-line)

Technical Architecture



Visual Development Environment



My IOT Sensors and Actuators

Add My New Device

Select Latitude/Longitude on Map

Entities/Devices Management

Device Identifier	IoT Sensor	Device Type	Model	Category	Manufacturer	Status	IP	Entity	Location
ArQualitySensorVMM4M2001	ArQuality	ArQualitySensor	custom	PM25	ArQuality	active	192.168.1.1	ArQuality	ArQuality
ArQualitySensorVMM4M2002	ArQuality	ArQualitySensor	custom	PM25	ArQuality	active	192.168.1.2	ArQuality	ArQuality
ArQualitySensorVMM4M2003	ArQuality	ArQualitySensor	custom	PM25	ArQuality	active	192.168.1.3	ArQuality	ArQuality
ArQualitySensorVMM4M2004	ArQuality	ArQualitySensor	custom	PM25	ArQuality	active	192.168.1.4	ArQuality	ArQuality
ArQualitySensorVMM4M2005	ArQuality	ArQualitySensor	custom	PM25	ArQuality	active	192.168.1.5	ArQuality	ArQuality

Service Map (Toscana)

Data Inspector

My Data Dashboard Dev Kibana

29,146,065

My Dashboards in My Organization

3D MAP GLOBAL DIGITAL TWIN - NEWGUI

Client-Side Business Logic - Test

Proc.Logic / IoT App

Node-RED

TSMinIndex

Jupyter2-(75) Hub - Python

Jupyter2-(75) Hub - Python

FIRENZE - TRAFFAIR - AIRQUALITY HEATMAPS - NEWGUI

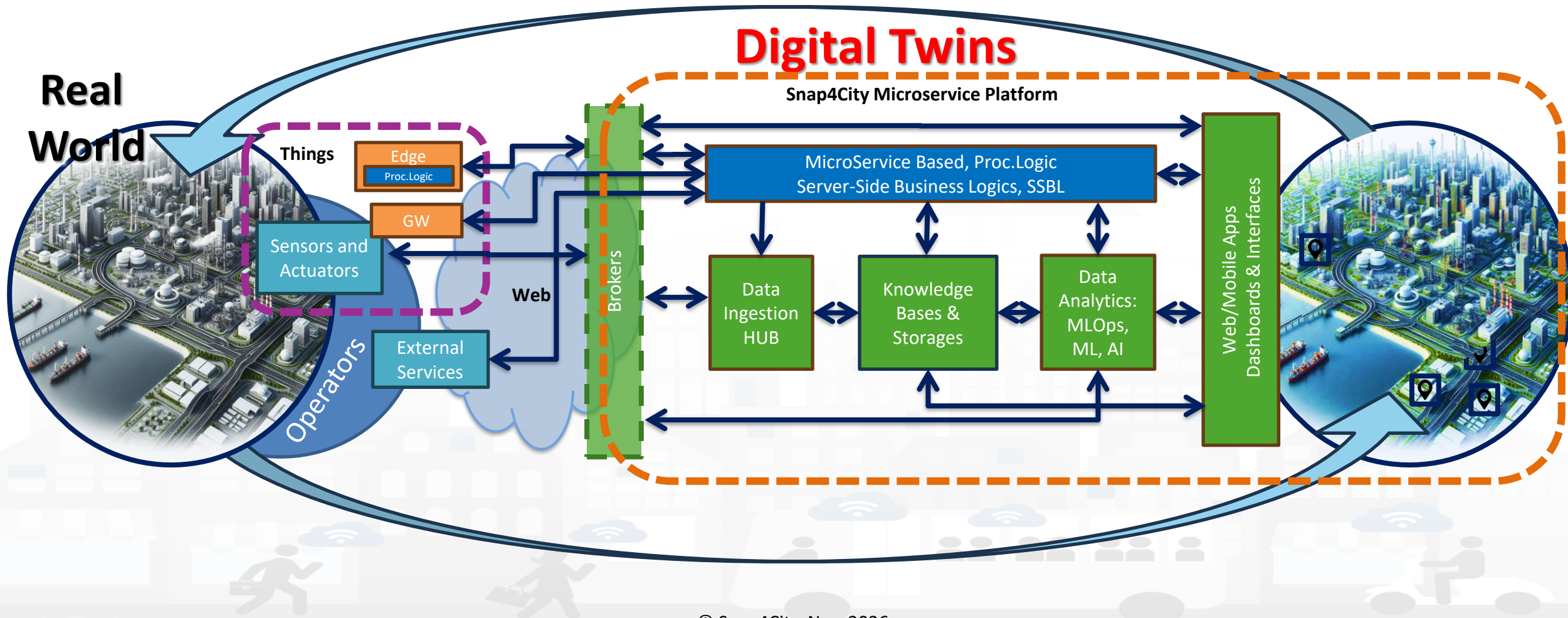
Custom Widgets / Synoptics



A&A, SSO, Blockchain, Res

Data Analytics

Digital Twin Development Platform



Standards and Interoperability

Compliant with:

- **IoT:** NGSI V2/LD, LoRa, LoRaWan, MQTT, AMQP, COAP, OneM2M, TheThingsNetwork, SigFOX, Libelium, IBIMET/IBE, Enocean, Zigbee, DALI, ISEMC, Alexa, Sonoff, HUE Philips, Tplink, BACnet, TALQ, Protocol Buffer, KNX, OBD2, Proximus, ..
- **IoT model:** FIWARE Smart Data Model, Snap4City IoT Device Models
- **General:** HTTP, HTTPS, TLS, Rest Call, SNMP, TCP, UDP, SOAP, WSDL, FTP, FTPS, WebSocket, WebSocket Secure, GML, WFS, WMS, WCS, RTSP, ONVIF, AXIS TVCam, CISCO Meraki, OSM, Copernicus, The Weather Channel, Open Weather, OLAP, VMS Milestone, TIM, HERE, OGC, ...
- **Formats:** JSON, GeoJSON, XML, CSV, GeoTIFF, OWL, WKT, KML, SHP, db, XLS, XLSX, TXT, HTML, CSS, SVG, IFC, XPD, OSM, Enfuser FMI, Lidar, glTF, GLB, DTM, GDAL, Satellite, D3 JSON, ...
- **Database:** Open Search, MySQL, Mongo, HBASE, SOLR, SPARQL, ODBC, JDBC, Elastic Search, Phoenix, PostGres, MS Azure, ..
- **Industry:** OPC/OPC-UA, OLAP, ModBUS, RS485, RS232, ..
- **Mobility:** DATEX, GTFS, Transmodel, ETSI, NeTex, ..
- **Social:** Twitter, FaceBook, Telegram, ..
- **Events:** SMS, EMAIL, CAP, RSS Feed, ..
- **OS:** Linux, Windows, Android, Raspberry Pi, Local File System, AXIS, ESP32, etc.

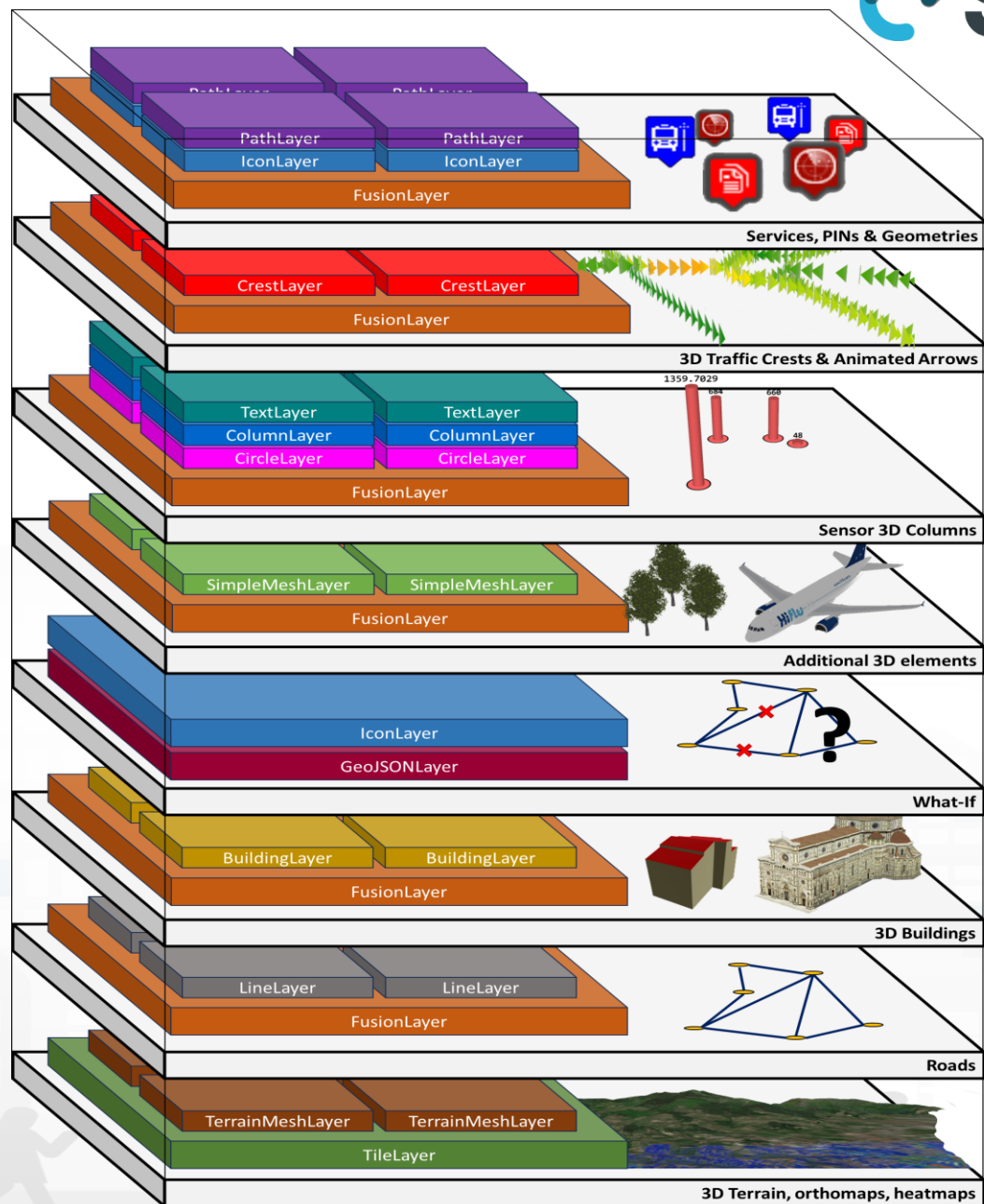
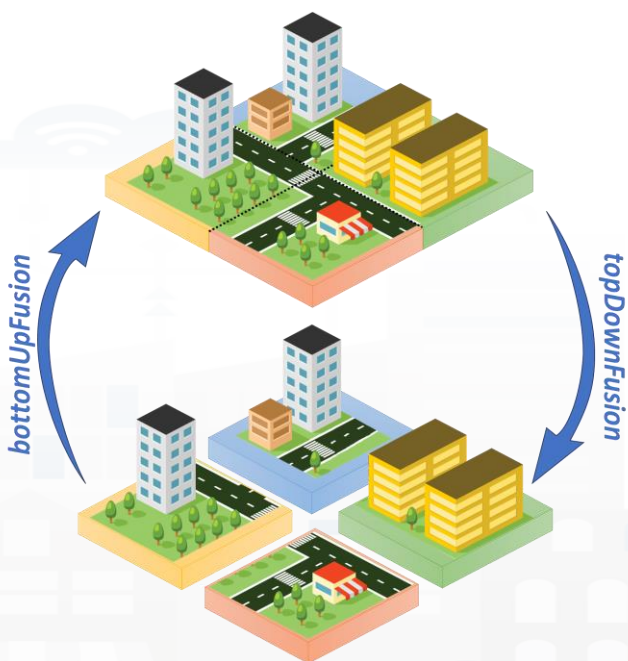
<https://www.snap4city.org/65>

01

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Layers VS Fusion Layers



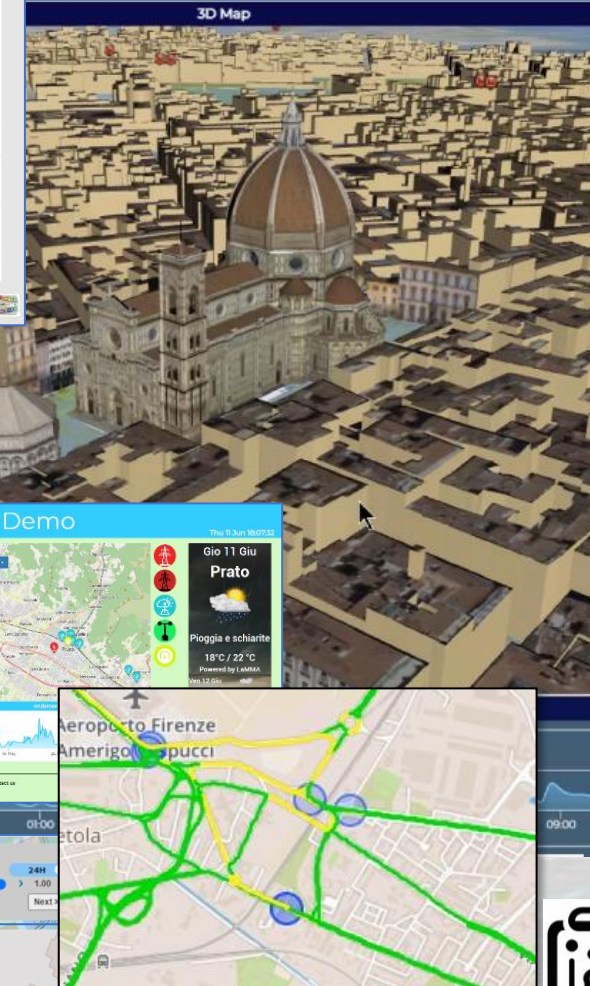
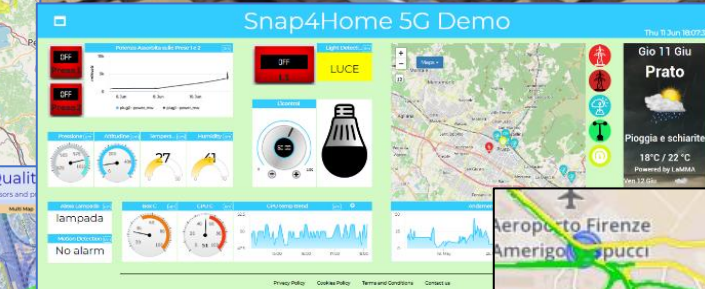
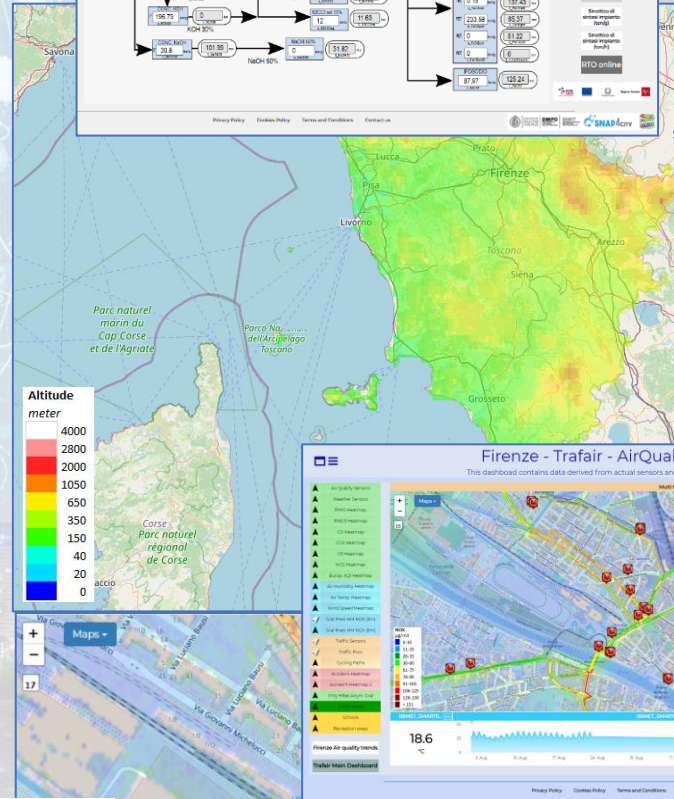
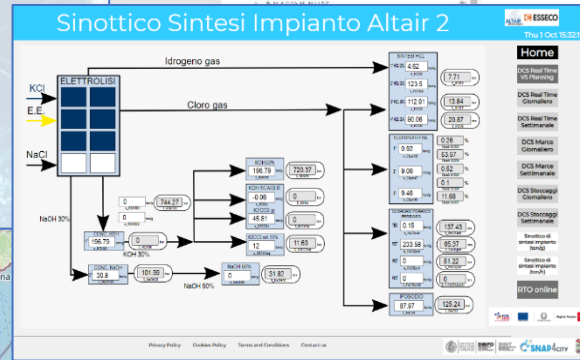
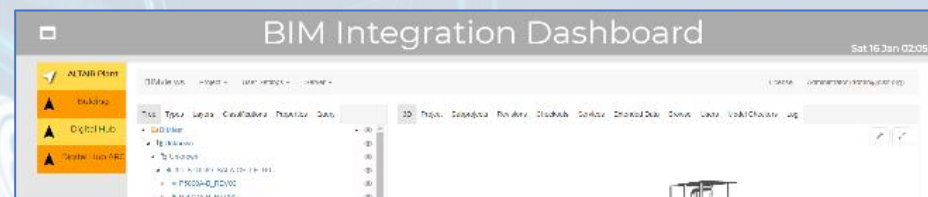
High Level Types

© Snap4City, Nov. 2026

- POI, IOT Devices, shapes, ..
 - **FIWARE Smart Data Models,**
 - **IoT Device Models**
 - **Any custom data model**
- GIS, maps, orthomaps, WFS/WMS, GeoTiff, calibrated heatmaps, ..
- Satellite data, any kind..
- traffic flow, typical trends, ..
- Vector fields + heatmaps, ..
- trajectories, events, workflow, ..
- 3D Models, BIM, Digital Twins, ..
- OD Matrices of several kinds, ..
- Dynamic icons/pins, ..
- Synoptics, animations, ..
- KPI, personal KPI, ..
- social media data, TV Stream,
- routing, multimodal, constraints, ..
- scenarios, ...
- etc.

02

Data Model: standard and custom data models, dictionary, ontology; Data Spaces, MDS; data models FIWARE, etc.



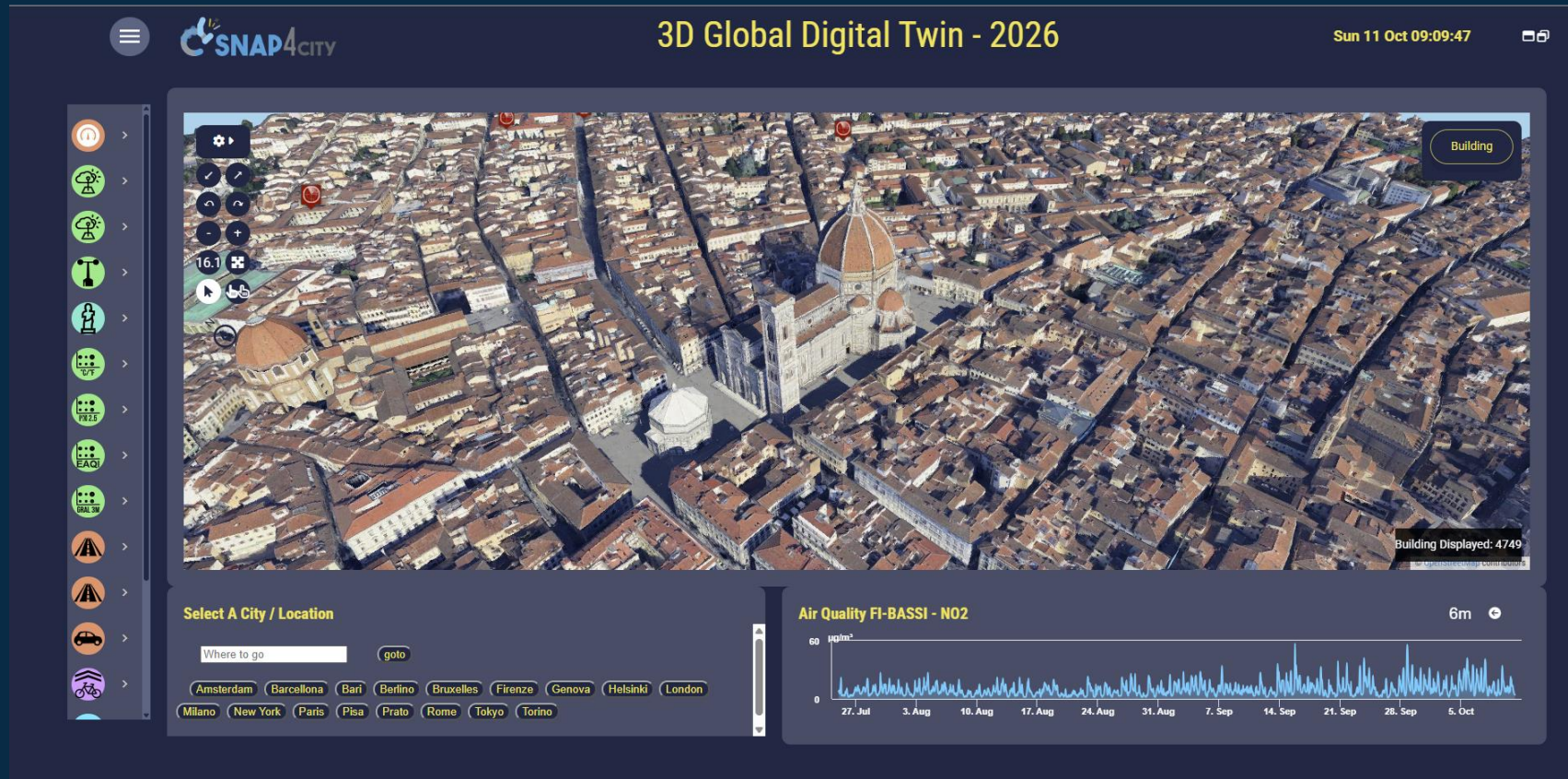
UNIVERSITÀ
DEGLI STUDI
FIRENZE

DINFO
DIPARTIMENTO DI
INGEGNERIA
DELL'INFORMAZIONE

DISIT
DISTRIBUTED SYSTEMS
AND INTERNET
TECHNOLOGIES LAB



Digital twins connect place, assets and data



City context

Combine 3D models with sensor readings, traffic information and time series.

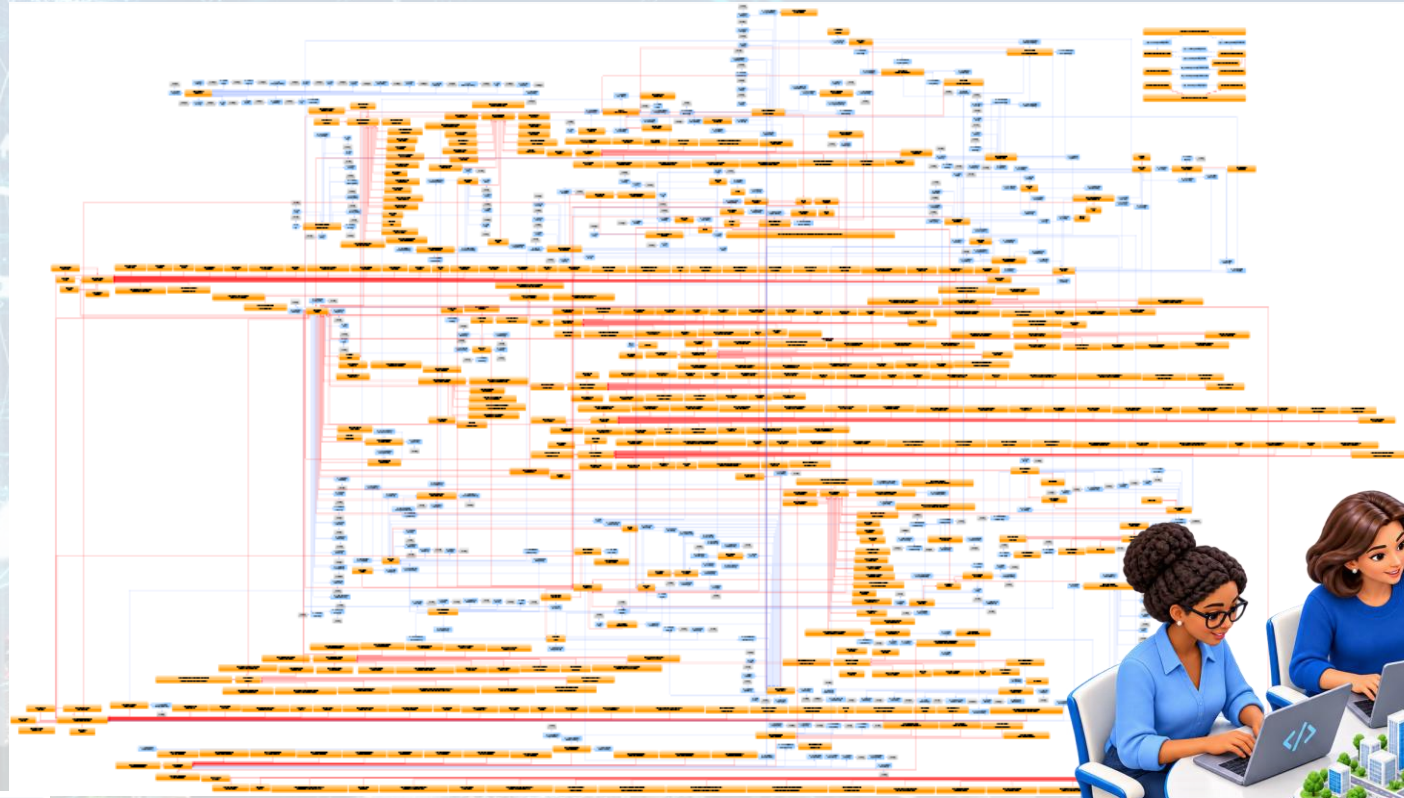
One view for exploring how the city changes.

Expert System *semantic queries*

via:

- **Smart City API** for Apps and third party
- **MicroServices** data driven develop via visual language Node-RED

Extensible ontology License Free: 1.6.8



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Linked Open Data

<https://www.snap4city.org/19>



Km4City Ontology elements 1.6.8

- **Km4C:** Km4City 1.6.8, licence free
- Using all licence free vocabularies
 - **DCTERMS:** for metadata Dublin Core Metadata Initiative
 - **FOAF:** friends of a friends
 - **Good Relation:** entities relationships
 - **iot-lite:** IOT Vocabulary
 - **OTN:** Ontology of Transportation Networks
 - **OWL-Time:** time reasoning
 - **SAREF** Smart Appliances REference extension for building devices available at <https://saref.etsi.org/saref4bldg/>
 - **Schema.org** for people and organizations
 - **SSN:** Semantic Sensor Network Ontology (see <https://www.w3.org/TR/vocab-ssn/>)
 - **WGS84** Datum of Geo-Objects
 - **GTFS**, General Transit Feed Specification, and **Transmodel**, for public transport infrastructures: lines/rides time schedules, real-time records, paths, etc.;
 - **BOT:** Building Topology Ontology. <https://w3c-lbd-cg.github.io/bot/>
 - **S4CITY:** SAREF extension for Smart City. <https://saref.etsi.org/saref4city/v1.1.2/>



01

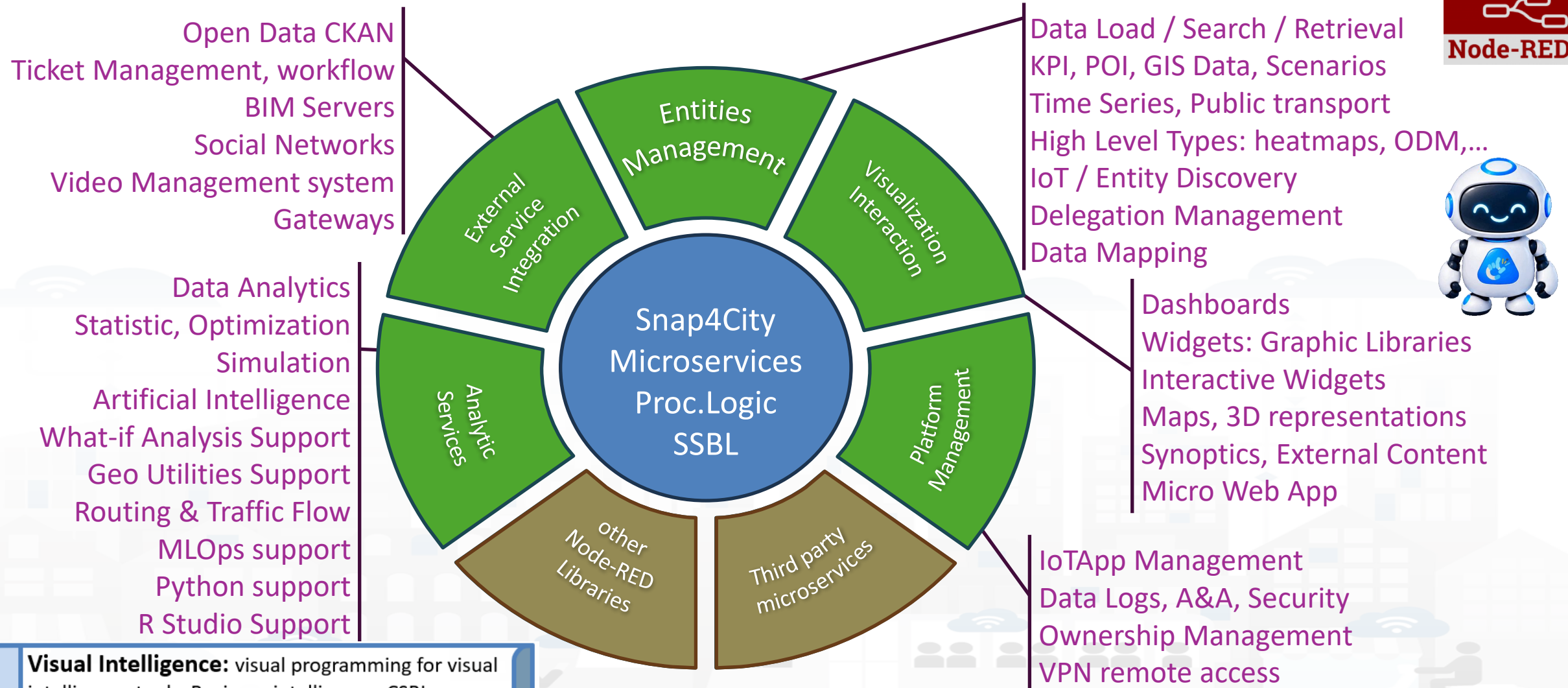
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> 60.000 downloads (up to 2024)

Areas

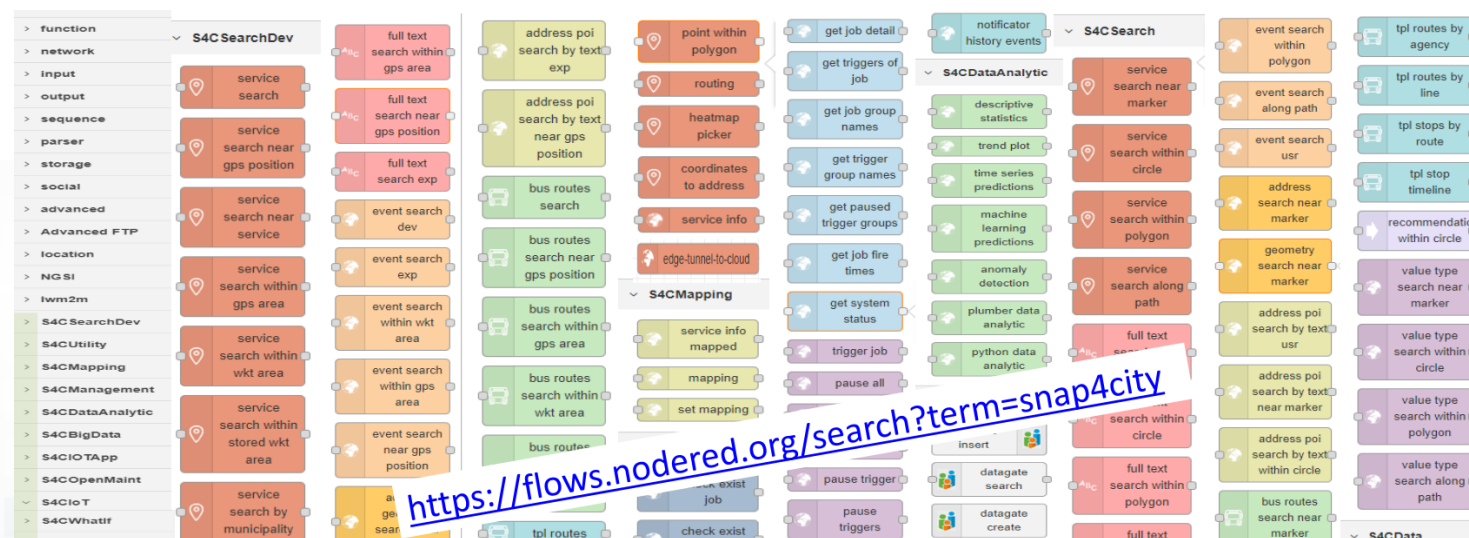


Visual development with room for custom code

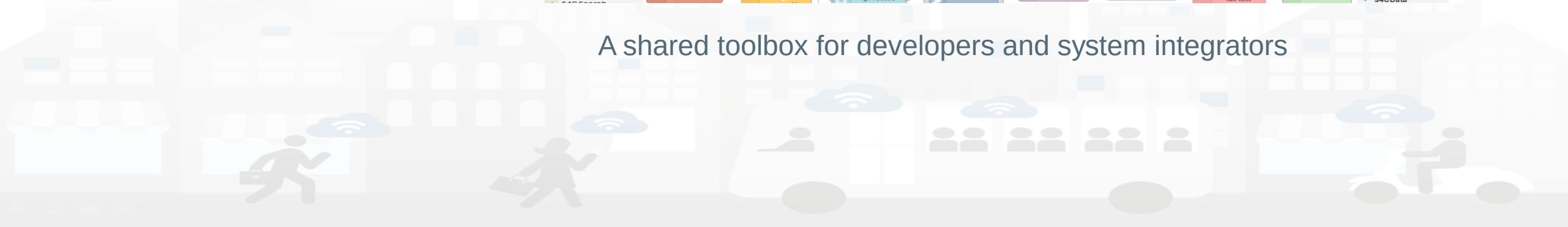
Reusable Node-RED microservices

Compose ingestion and processing flows.

Add Python or R analytics and connect external services through APIs.



A shared toolbox for developers and system integrators



Development and copilot

<https://www.snap4city.org/download/video/Snap4Tech-Development-Life-Cycle.pdf>

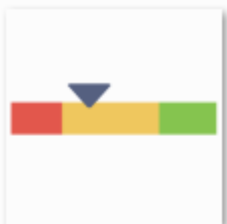


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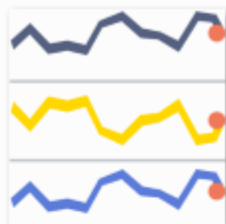
Visual Representations

04

Visual Intelligence: visual programming for visual intelligence tools, Business intelligence, CSBL services, etc.



Slider with multiple steps for KPI



sparklines



kpi



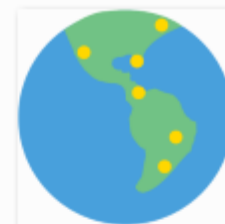
histogram



heatmap



flow-maps



geo-maps



donut-chart



Data-grid



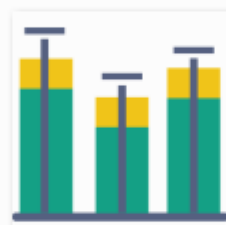
chord



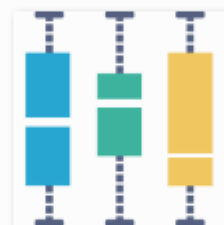
Cone



Bubble-matrix-chart



Bullet



Box-plot



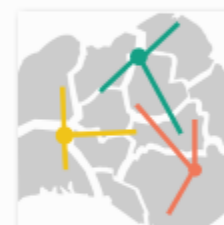
stacked-area



Stacked-line-chart



Stacked-combination-Chart



spider-maps



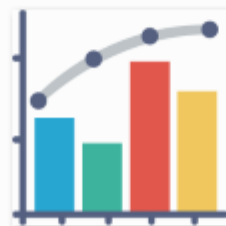
Sequence-Sunburst



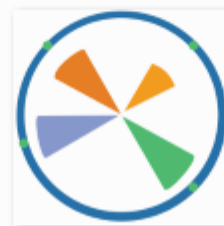
Pivot



pie-chart-1



Pareto-chart



radar



Bubble-maps



waterfall



Sunburst



Sankey

New Data Inspector/Wizard

Wizard

Data Inspector BETA OS

Map Controls:

FilterMap GPSUser GPSOrg

Now displaying in Standard Mode

Switch to the Synoptic Mode to select MyKPIs and sensors that you need for your synoptics.

Switch now to the Synoptic Mode

Data sources

Level	Type	Nature	Subnature	Device	Model	Broker	Value Name	Value Type	Data Type	Value Unit	Last Date	Last Value	Healthiness	Last Check	Ownership
DT	EM Devi...	Environment	Weather	DIDA1		Santa Verdiana ...	Mio sensore		webpage		2021-11-23 13:44...			2023-07-18 16:0...	public
DT	EM Devi...	TransferService...	SensorSite	METRO11		Altair-soda	Altair Valve State		webpage		2021-06-05 00:00...			2024-01-10 01:3...	public
DT	EM Devi...	IndustryAndMa...	Computer	AltairStatoPom...		Altair-soda	Altair Pump St...		webpage		2021-05-20 13:51...			2024-01-10 01:3...	public
DT	EM Devi...	Environment	Air	IBIMET_SMART...		Altair-soda	Altair Pump 43...		webpage		2021-06-07 17:3...			2024-01-10 01:3...	public
DT	EM Devi...	Environment	Air	ARPAT_QA_FI...		Altair-soda	Altair valve 541		webpage		2021-06-07 17:3...			2024-01-10 01:3...	public
DT	EM Devi...	TransferService...	SensorSite	METRO514		Altair-soda	Altair Pump 4321		webpage		2021-06-07 00:00...			2024-01-10 01:3...	public
DT	EM Devi...	TransferService...	SensorSite	SI052032FS990...		Altair-soda	Altair Stock sta...		webpage		2021-06-07 00:00...			2024-01-10 01:3...	public
DT	EM Devi...	TransferService...	SensorSite	METRO831		Altair-soda	Altair Pump 92		webpage		2021-06-07 00:00...			2024-01-10 01:3...	public

Search... Search... Search... Search... Search... Search... Search... Search... Search... Search... Search... Search... Search... Search...

Selected rows: 0 Previous 1 2 3 4 5 ... 45711 Next

163

04

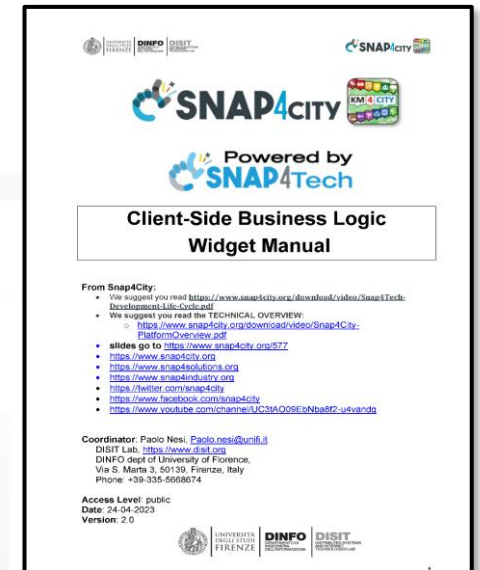
Visual Intelligence: visual programming for visual intelligence tools, Business intelligence, CSBL services, etc.

- Filtering/Searching for individual fields (even for some fields not displayed as geographic coordinates)
- Geographic Filtering
- Text Search on all fields
- Menu for choosing the fields to display in the table
- View on Map(via PREVIEW)
- Data and Trend visualization
- Opening Digital Twin
- Pass to Synoptic mode
- Select the graph representation

Smart Applications, CSBL: Client Side Business Logic

Visual Intelligence
among widgets

<https://www.snap4city.org/download/video/ClientSideBusinessLogic-WidgetManual.pdf>



04

Visual Intelligence: visual programming for visual intelligence tools, Business intelligence, CSBL services, etc.

Available AI Solutions on Snap4City

<https://www.snap4city.org/997>

More than 80 Available Solutions & 300 AI applic.

- Mobility and Transport
- Waste Collection Optimisation
- Tourism Management
- City Users Behaviour
- Security and Safety
- Energy and Control
- Environment, Weather, Water
- High Level Decision Support Solutions
 - Asset management
 - Resilience and Risks Analysis

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SnapAdvisor Copilot for developers, MLOps supp.

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<https://www.snap4city.org/download/video/course/p4/>

AI/ML developers, MLOps

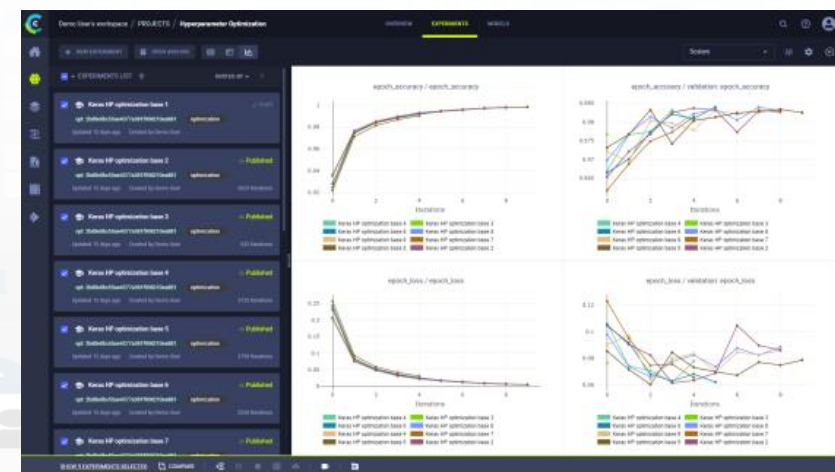
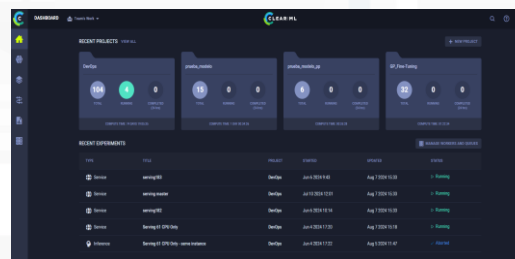
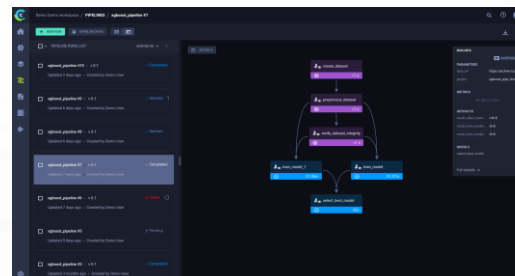
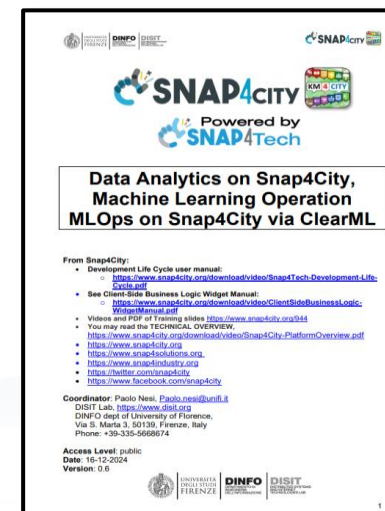
MLOps: AI, ML development
Automating training, hyperparam, optimisation
Any library and AI model, API, Agentic AI, MCP
Exploiting CPU/GPU clusters

03

Artificial Intelligence: ML, AI, DL, Fed.AI, LLM,
DRL, Agentic AI, MCP tools, generative AI, ...
SnapAdvisor Copilot for developers, MLOps supp.



<https://www.snap4city.org/download/video/Snap4City-MLOps-Manual.pdf>



SnapAdvisor & Copilot

Your AI-powered assistant for the Snap4City Digital Twin

Understand your objectives | Plan and use Snap4City services | Analyse data | Deliver actionable answers

Turn your questions into smarter, data-driven decisions for a smarter city.

 CLEANER CITIES

 MORE EFFICIENT OPERATIONS

 BETTER DECISIONS

Ask in natural language



What is happening in this area?



Find the sensors along this route.



Which route is better considering current conditions?



What can be done to reduce the CO₂ emissions in Mercy road at 9:00?



Why are there no free parking slots in the Guizzer area?



Find an API to get data of traffic flow in Bologna?

I understand your objective. I'll create a plan, use the right Snap4City services, analyse the data and give you an actionable answer.

1

Understand & Plan

Interpret your request and create a multi-step plan

2

Select & Execute

Choose and invoke the right Snap4City services and APIs

3

Analyse & Verify

Analyse results, recover from issues eventually replan

4

Deliver Answer

Provide clear, explainable results in natural language with visuals

Snap4City Services & APIs



Access data (live & historical)



Discover IoT devices



GIS and geospatial tools



Analytics and AI models



Optimisation & what-if analysis



Open to any data model and format

Actionable results



Here is the analysis of the area. I used traffic, air quality and parking data. You can see the results on the map, the trends over time and a summary of insights.



Key insights

- ✓ Congestion level reached 90% in Via Sparta due to an event.
- ✓ CO₂ emissions are higher at 9:00 in Mercy road.
- ✓ Alternative routes can reduce travel time by 18%.
- ✓ See the full report for details and the data sources used.



 Download PDF Report



Rich knowledge foundation

Snap4City, mobility, energy, tourism, assets, transportation, GIS and more.



RAG with private collections

Use your PDFs, documents, presentations, images, code and web pages. Domain-customisable, multilingual.



Agentic capabilities

Multi-step planning, specialist agents, execution, verification and replanning.



Exploit more resources

Integrate web search and external resources. Generate decision graphs and reuse them.



Explainable AI

See the plan, tools used, data sources and reasoning behind the answer.

For multiple domains



Smart Cities



Mobility



Energy



Tourism



Assets



Transportation



GIS



Retail



Legal



Training



Help Desk

...

... and more

For everyone



Decision Makers



City Operators



Developers



Organisations & Teams

SnapAdvisor & Copilot

Technical architecture for the Snap4City Digital Twin conversational decision support system



From natural-language objective to orchestrated analysis, simulation, and explainable decision support.

Conversational / RAG

Agentic orchestration

Multi-domain

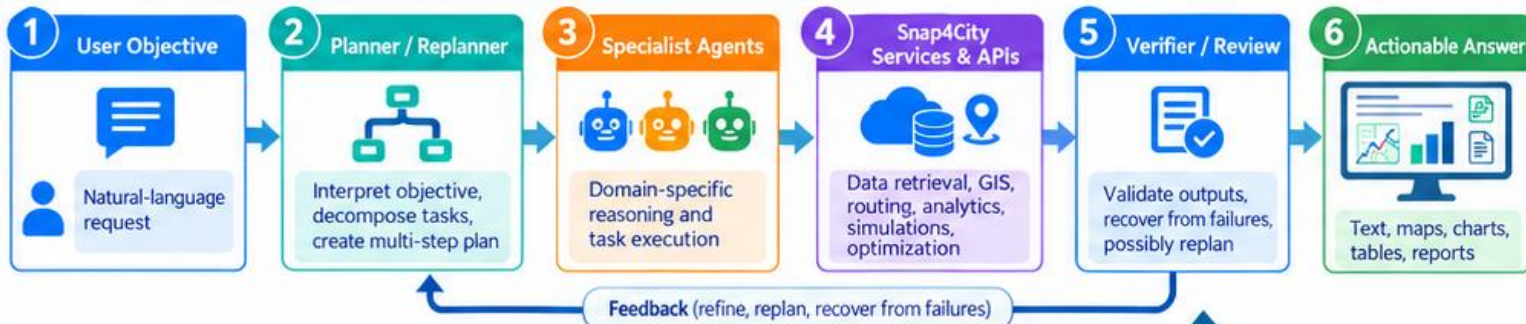
Explainable AI

Report generation

Example Requests

- "What is happening in this area?"
- "Find sensors and POIs along this route."
- "Which route is better considering current conditions?"
- "Why are there no free parking slots in this area?"
- "What can be done to reduce CO2 emissions at 9:00?"
- "Find an API to get traffic flow in Bologna."

System Architecture & Workflow



Extend capabilities with internal skills

Turn private knowledge and web resources into reusable domain expertise



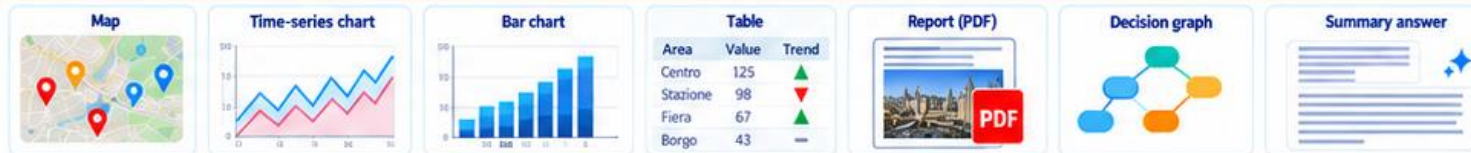
Extend to new domains and workflows as your knowledge grows.

Tool Families

- Data Management**
 - Metadata
 - Live/historical observations
 - Entities
 - IoT devices
- Geospatial Analysis**
 - Geocoding
 - Spatial search
 - Polygons, POIs
 - Location-aware analysis
- Mobility & Transport**
 - Routing
 - Traffic flow
 - Public transport
 - Simulation, KPI computation
 - Optimization
- ML / AI Analytics**
 - Prediction
 - Statistics, correlation
 - Regression, PCA
 - Time-series analysis
- Media Processing**
 - Image interpretation
 - Image generation
 - Image modification
- Reporting & Rendering**
 - Web pages
 - PDF reports
 - Maps, charts, tables
 - Dashboards
- High-Level Reasoning**
 - Decision graphs
 - Strategy generation
 - What-if analysis

Outputs

Explainable results with evidence, data sources, and visual analytics.



Who it supports

- Decision Makers**
Strategic planning and policy making
- Developers**
Build solutions and integrate APIs
- City Operators**
Monitor, manage and respond
- Organisations / Teams**
Collaborate across domains



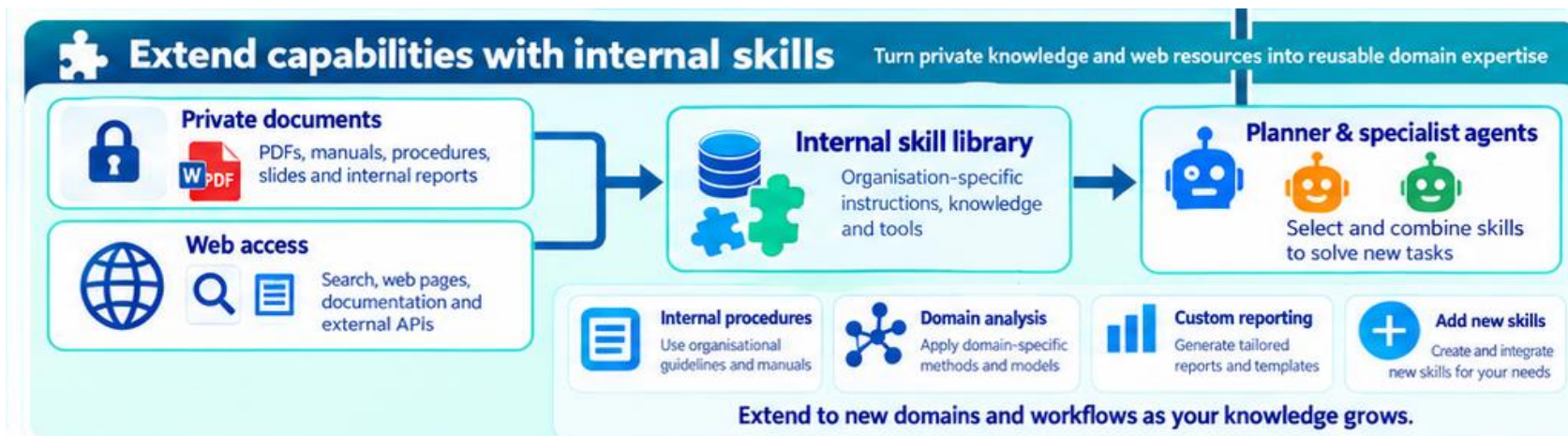
Private knowledge
Use your documents and web resources

Multi-user / multi-organisation
Secure isolation and flexible deployment

Traceable answers with sources
Explainable outputs with data sources and justifications



Skill Packages



- Multiple and pluggable Skills, for different users and teams
- Full Custom Skills
- Integrate internal skills with web access, when needed

snap4city4dummies

ID: 280

This collection documents the Snap4City platform, its principal development and management tools, and a...

Open

TourismExpert

ID: 281

This collection include document and skill regarding about: how to solve problem in...

Open

ParkingExpert

ID: 286

The collection covers parking policy and supply requirements; demand-responsive...

Open

CityLightExpert

ID: 287

A curated collection of 30 publicly accessible PDFs supporting expert questions abo...

Open

WasteExpert

ID: 289

This collection contains 24 authoritative PDFs supporting retrieval-augmented answers...

Open

snap4citybarc2026

ID: 293

this collection contains promotional material distributed at Smart City world expo...

Open

CivilProtectionITExp ert

ID: 294

No description provided for this collection

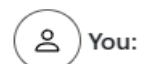
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SnapAdvisor

Current chat: solution1

Agentic AI



You:

which are the possible to solutions to reduce the lenght of queue at red lights



SnapAdvisor: Tokens details: tokens in prompt: 56759; tokens in answer: 653

Possible Solutions to Reduce the Length of Queue at Red Lights

Based on the provided context passages, here are some possible solutions to reduce the length of queue at red lights:

Traffic Management and Road Safety Measures

- 1. Optimizing Traffic Light Timing:** Adjusting the timing of traffic lights to optimize traffic flow and reduce congestion.
- 2. Implementing Intelligent Transportation Systems (ITS):** Using ITS to dynamically adjust traffic light timing in real-time to respond to changing traffic conditions.



Run agentic mode 

Write a message...





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DELL'INFORMAZIONE

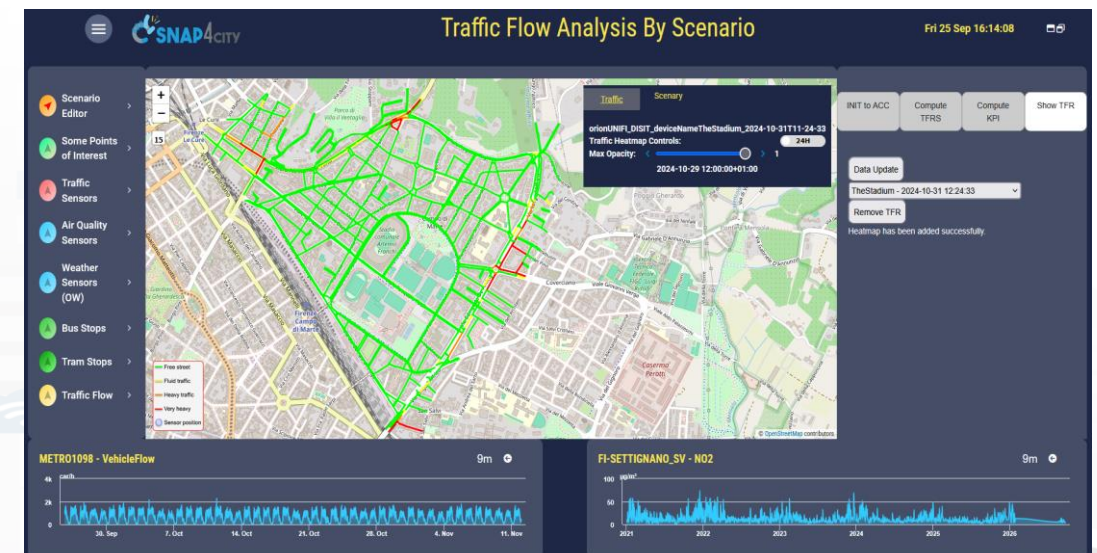
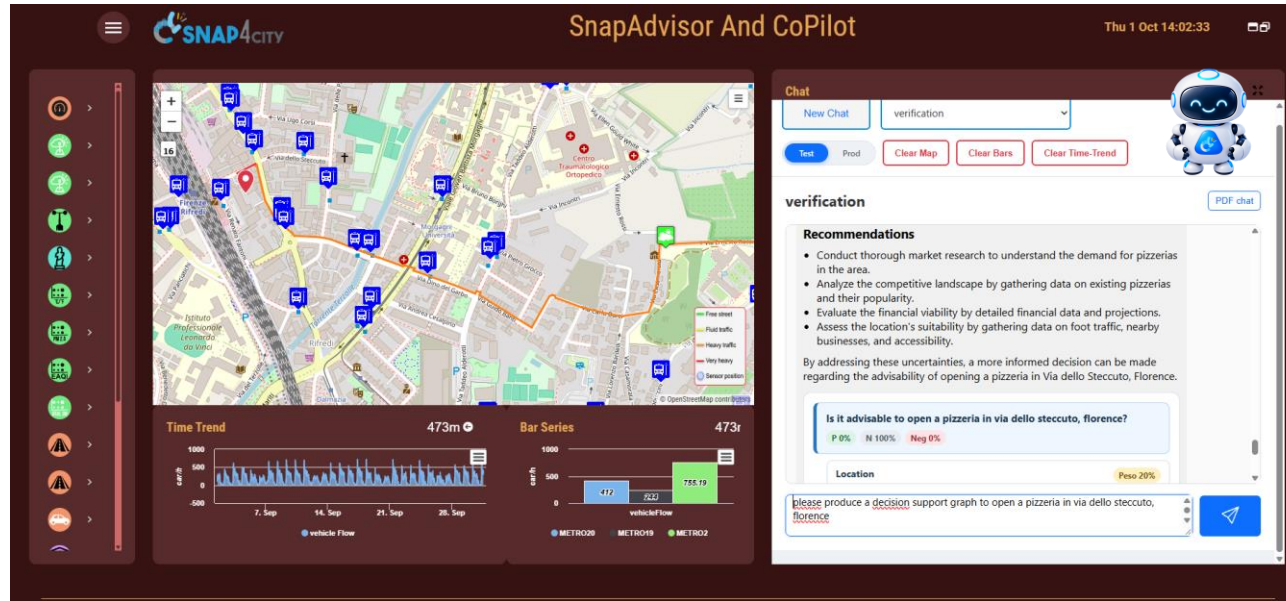
DISIT
DISTRIBUTED SYSTEMS AND
INTERNET TECHNOLOGIES LAB
DISTRIBUTED DATA INTELLIGENCE
AND TECHNOLOGIES LAB



Mobility & Transport

- Routing
- Traffic flow
- Public transport
- Simulation, KPI computation
- Optimization

SNAP4CITY



Flexible deployment and controlled access

Open and interoperable

Build on the Snap4City ecosystem and connect existing data sources.

Deployment choice

Cloud, SaaS or on-premise to suit organisational needs.

Multiple cities and teams

Support multiple tenants and service domains.

Access by responsibility

Role-based access and controlled private knowledge collections.



Value for buyers and delivery partners

City and enterprise teams



Developers



System integrators



A shared operational view

Combine information across departments and connect it to daily decisions.

A reusable application toolbox

Use visual flows and APIs while keeping the flexibility of custom code.

A foundation for differentiated services

Build domain applications and connect customer systems on a common platform.

Sources and further reading

Development framework

Developer guide: snap4city.org/843

Protocols: snap4city.org/65

Training: snap4city.org/944

Installation: snap4city.org/738

Solutions

Main applications: snap4city.org/1180

SnapAdvisor: snap4city.org/1178

Digital Twin: digitaltwin.snap4city.org

Scenariious: snap4city.org/4



SNAP4CITY

