



Try our free dockerized Smart City Enablers

We provide the ideal environment to experiment with IoT in a Smart City context. Use our components when building **YOUR** IoT solution, here at the ALMANAC-Lab.

You can experiment with the **OPEN** data we are publishing, or add your own. If you prefer, download our platform, and get started with things like storage, messaging, security in just a few seconds.

Our components can be used individually, or together as a comprehensive **Reliable Smart Secure Internet of Things for Smart Cities** platform.

All our components are freely available at the Docker Hub.



The ALMANAC IoT platform enables integrated smarter city processes for green, citizen-centric and sustainable urban ecosystems. The platform enables interoperation of different communication networks and heterogeneous IoT technologies. Experimentation of selected Smart City services and applications will be carried out in the city of Turin, Italy. Visit us at almanac-project.eu



Download the free ALMANAC Smart City Enablers at almanac-lab.alexandra.dk



Data Fusion Manager

The Data Fusion Manager is a Smart City agent for Stream Mining. With it, we can discover context in real-time in the city with millions of devices, e.g. waste bins are full, leakages in some areas. Using the learnt models, it can discover or forecast more complex situations.



LinkSmart GlobalConnect

LinkSmart GlobalConnect establishes an overlay network to interconnect local IoT networks and enables the discovery and sharing of IoT services and resources across these local IoT networks.



Resource Catalogue

The Resource Catalogue discovers and keeps track of available sensors and devices in the network. It provides a set of RESTful interfaces to select, actuate on and retrieve data from these IoT resources.



Security and Policy Framework

The Security and Policy Framework allows to secure IoT services. It implements identity management with OpenID Connect 1.0 and allows to define fine-grained access control for IoT services, providing an XACML Policy Decision Point.



Smart City Resource Adaptation Layer (SCRAL)

The Smart City Resource Adaptation Layer (SCRAL) provides a REST-based, uniform and transparent access to physical devices, capillary networks, systems and services for monitoring (and actuation) in a Smart City context.



Storage Manager

The Storage Manager provides flexible integration of multiple storage solutions for IoT time series data and RESTful access using the OGCSensorThings API open standard.



Virtualization Layer

The Virtualization Layer offers a single entry point to application developers, hiding the internal details and decentralized complexity of all other IoT components.

