LF EDGE
BUILDING AN OPEN-SOURCE FRAMEWORK FOR THE EDGE

AnyLog
IBM

Transforming the Edge into a Virtual Data Lake Supporting Real-Time Interactive Queries

OPEN HORIZON

Deploy and Manage Software at the Distributed Edge

EDGELAKE

Manage Edge Data at the distributed Edge without centralizing the data

Make Edge Data Available Anywhere, Anytime, Without a Single Line of Code

Deploy Software & Manage Data at the Distributed Edge

Summary: With the adoption of AI and the proliferation of IoT devices, the edge is rapidly emerging as the next frontier of computing, as organizations seek to extend the benefits of cloud-native deployments closer to where data is generated. However, the edge presents significant challenges. Installing and managing software across distributed edge environments is complex, and handling the vast amounts of data generated by IoT devices and sensors at the Edge requires proprietary solutions. Due to the absence of data services at the Edge, companies are left with little choice but to transfer the core of their edge data to the cloud for processing and management.

Open Horizon is an open-source platform designed to automate the deployment and orchestration of software at the edge. It simplifies the management of edge nodes by allowing organizations to deploy containerized workloads across distributed environments, ensuring that edge devices receive software updates and policies efficiently.

EdgeLake is an open-source decentralized data management platform that enables organizations to collect, store, query, and process data at the edge, eliminating the need to rely on central cloud infrastructures.
The key advantage of EdgeLake lies in its ability to create a virtual data lake across distributed edge environments, unifying data without centralizing it.

What Open-Horizon & EdgeLake Deliver:

Deploy EdgeLake nodes at the distributed edge, creating a peer-to-peer (P2P) network that processes IoT data as a unified system, automating IoT management with the following value proposition:

Value Proposition

- Manage Software, Data and Hardware at the distributed edge from a single point
- Cost Efficiency - Reduce cloud dependency and eliminate proprietary edge projects
- Gain insight to your data, enable real-time decisioning
- Plug & Play
- Horizontal Scaling
- Keeping data locally and ensuring compliance with data sovereignty requirements
- Optimize resource use by managing data closer to its origin, reducing the burden on centralized systems.

Transforming the Edge into a Virtual Data Lake Supporting Real-Time SQL Queries without Centralizing the Data
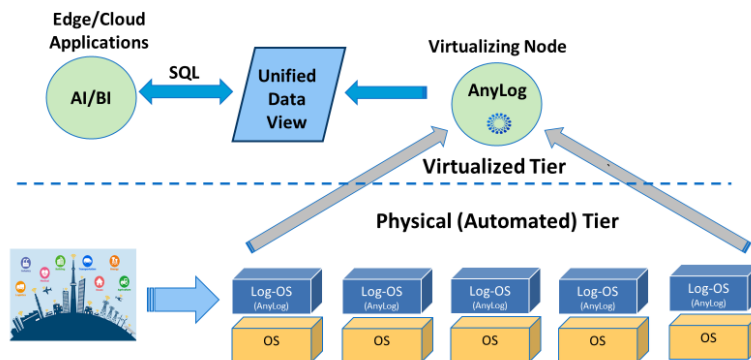
Transforming the Edge to a Unified Data Lake

With EdgeLake, data remains in place – at the edge of the network, near the devices that generate the data – so it can be used locally and, when needed, and shared securely with applications at the edge or cloud.

This approach eliminates incompatible silos. Using virtualization, it allows to query the data as if all the data is serviced from a single and unified collection. It lowers the dependency on the cloud and data is managed and serviced with 100% automation.

Transforming the Edge to a Virtual Data Lake Servicing: Industrial, Smart Cities, Smart Grids, Automotive, Robotics, Oil & Gas, Utilities and more

AnyLog   Open Horizon   EDGELAKE   EdgeLake