

Existing Project Taxonomy

The below is a snapshot of where the existing projects under LF Edge currently sit. Updates to the taxonomies should be requested through the Project's TAC representative. The Glossary Project will further define the terminology as outlined below.

Last Updated:

- Akraino (May 16, 2019)
- Baetyl (OpenEdge) (July 22, 2019)
- EdgeX (June 3, 2019)
- Fledge (FogLAMP) (June 27, 2019)
- Home Edge (August 19, 2019)
- Project EVE (June 3, 2019)

Existing Projects by Function (Provide, Consume, Facilitate, or N/A; Add context as needed)

Functions	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
APIs	Provide	Provide	Provide	Provide, Consume, Facilitate - Microcontroller Example - South Microservice (esp8266)	Provide	Provide
Cloud Connectivity	Provide	Provide, not only Baidu Cloud	Provide	Provide, Consume and Facilitate - North repos , GCP , OSI-OMF	In Future	Provide
Container Runtime & Orchestration	Provide	Consume	Consume	Consume - (debian , rpm , docker , Project Eve)	Consume - (Docker)	Provide for Edge Container
Data Governance	NA	Provide		Provide and Facilitate - Auditing logs and asset tracking.	In Future	
Data Models	Provide	N/A		Provide, Consume and Facilitate	In Future	Provide for Edge Container (not app data)
Device Connectivity	Provide	Provide, MQTT protocol	Provide	Provide, Consume and Facilitate	Provide	Provide (incl LTE, WiFi, serial)
Filters/Pre-processing	Provide	Provide	Provide	Provide and Facilitate	In Future	
Logging	Provide	Provide	Provide	Consume	In Future	Provide for its own runtime
Management UI	Provide	Provide, not determined yet	Facilitate	Provide, Consume and Facilitate	In Future	Provide for its own runtime
Messaging & Events	Provide	Provide	Provide	Provide, Consume and Facilitate	In Future	
Notifications & Alerts	Provide	Provide, under developing	Provide	Provide, Consume and Facilitate	In Future	
Security	Provide	Provide	Provide	Provide, Consume and Facilitate	In Future	Provide
Storage	Provide	Provide	Provide	Provide, Consume and Facilitate - Buffering	Provide	Provide (local virtual disks)

Existing Projects by Deployment & Industry Verticals (Support, Possible, N/A; Add context as needed)

Deployment Type	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
Customer Devices (Edge Nodes)	Support	Support	Support	Support	Support	Support
Customer Premises (DC and Edge Gateways)	Support	Support	Support	Support	Support	Support
Telco Network Edge (MEC and Far-MEC)	Support	Support	Possible	Possible	NA	Possible
Telco CO & Regional	Support	Support		Possible	NA	
Cloud Edge & CDNs	Support	Support	Possible	Possible	Possible	
Public Cloud	Support	Support	Possible	N/A	Possible	

Private Cloud	Support	Support	Possible	N/A	Possible	
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Existing Projects by Deployment & Industry Verticals (or X; Add context as needed)

Directly applicable Industry/Verticals use cases	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
Automotive / Connected Car				X		
Chemicals		X				
Facilities / Building automation						
Consumer		X		X		
Manufacturing				- Production deployments		
Metal & Mining				- PoCs		
Oil & Gas				- PoCs		
Pharma		X		- PoCs		
Health Care		X		X		
Power & Utilities				- Production deployments		
Pulp & Paper		X				
Telco Operators				X		
Telco/Communications Service Provider (Network Equipment Provider)				X		
Transportation (asset tracking)				X		
Supply Chain				X		
Preventative Maintenance				- Production deployments (Not a vertical)		
Water Utilities		X		- PoCs		
Security / Surveillance				X		
Retail / Commerce (physical point of sale with customers)		X		X		
Other - Please add if not listed above (please notify TAC-subgroup@lists.lfedge.org when you add one)						

Deployments (static v dynamic, connectivity, physical placement) - (or X; Add context as needed)

Use Cases	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
Gateways (to Cloud, to other placements)						
NFV Infrastructure		X		X		
Stationary during their entire usable life / Fixed placement edge constellations / Assume you always have connectivity and you don't need to store & forward.				X		
Stationary during active periods, but nomadic between activations (e.g., fixed access) / Not always assumed to have connectivity. Don't expect to store & forward.				X		
Mobile within a constrained and well-defined space (e.g., in a factory) / Expect to have intermittent connectivity and store & forward.						
Fully mobile (To include: Wearables and Connected Vehicles) / Bursts of connectivity and always store & forward.		X				

Compute Stack Layers (architecture classification) - (Provide, Require, or N/A; Add context as needed)

Compute Stack Layers	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
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APIs	Provide	Provide	Provide	Provide	Provide	Provide
Applications	Deployed	Provide	Provide	Provide		
Firmware	Update and Configure	Provide, OS as a Firmware		Require		
Hardware	Provision and Configure	Require	Require	Require	Require	Require
Orchestration	Require	Require		N/A	Provide	Provide
OS	Require	Provide	Require	Require	Require	Provide
VM/Containers	Require	Require, vm is optional	Provide	Require	Require	Provide

Cloud Stack Layers (architecture classification) - (Provide, Require, or N/A; Add context as needed)

Cloud Stack Layers	Akraino	Baetyl	EdgeX	Fledge	Home Edge	Project EVE
Applications		Yes	Provide (services can live in cloud layer)	N/A		
Configuration (drive)		Yes		N/A		
Content (management system)		Yes		N/A		
IaaS		No		N/A	Provide (at Edge but not cloud)	Provide (at Edge but not cloud)
PaaS		Yes		N/A		
Physical Infrastructure		No		N/A		
SaaS		No		N/A		