# IoT Platform	
# Cloud	
Application software management (SaaS)	Activity
Device management	Devices as things
Semantic web format for things	Things and Observations semantic
Data aggregation, integration, transformation, storage and management	Realtime view (Things instances)
Event processing: rule engine/orchestration/BPM	Reasoners, topics, observations, actions (kafka, storm)
Sensor network	Sensor network
-Real time data streaming	
-Security at observation level	
-Semantic web format for observation and topic	
-Observation's enrichment	
-topic's enrichment	
-asynchronous sub (web-socket)	
-synchronous pub/sub (restful)	
Real time Intelligence	Observer
Programmability	DAP, Reasoner, Observers
-Domain specific language	DAP, Reasoner, Observers
-Extensible	Semantic, RDF, linked data
-REST - Semantic Web Standards	RDF
Point and Click Configuration	Platform, DAP
M2M communications	Action command
Analysis and visualization	Tree editor, time, map
Multiprotocol communications extensions	Observation and thing type
Endpoint and IT application adapters	Observation type, sensor network end points
Location aware services	Location aware
-geolocation	

-proximity	
Self-service user interface	Platform
Configurable security from/to the edge to/from the cloud	(Access control)
SaaS marketplace	Follower experience
Push notification	Action notification
Multi Tenancy	Tenant's/Guest tenants
-PaaS	
-SaaS app marketplace	
Things urn (unique ids)	Things urn
Simulation	Sensor network and reasoner
Edge/near to device	M2M Bridge
BPM	Edge reasoners
-Rule engine	
-Actions	
-Point and Click Configuration	
-Programm	
Dedicated gateway	Raspberry PI configuration
OTA autometed over the air updates	
-I2C interfaces support	
Protocols abstraction extensions	DAP Thing and Observations, plugin SDK
Multiprotocol support	M2M Bridge Stack and plugins
Industrial protocols	M2M Bridge Stack and plugins

BLE GATT BLE GAP LLRP OPC UA OBD SNMP Modbus TCP GPS Eddystone IBeacon OTHER PROPRIETARY PROTOCOLS	Extensible by implementing new plugins
Connection protocols	M2M Bridge Stack and plugins
Digi Mesh Bluethoot Low Energy Wifi RJ45 Ethernet	
Automatic deployment	M2M Bridge plugins deployment and configuration
Autoconfiguration	Cloning, bridge configuration
M2M communications	Actions command at cloud and edge
-Intelligence	Smoothing, encoding, aggregation, changed analysis
M2M-Bridges mesh nework	M2M Bridge network
IoT mesh network Range is extended by allowing data to hop node to node and reliability is increased by “self healing,” the ability to create alternate paths when one node fails or a connection is lost Digi Mesh PTMP 9 miles Digi Mesh PTMP 25 miles PTMP repeater 100 miles	AMTech Mesh network
-Aggregation/Correlation	M2M Bridge network