ConnectingYourThings

A Platform Based on Function not Technology

ConnectingYourThings, a UPnP certified IoT connectivity platform, was born out of the need for IoT to be based on function not technology. The IoT is not a technology, it is bridging the device, process and human worlds by allowing awareness and collaboration between all. Its function allows for, device integration with business process management (BPM), system control and humans allowing a deeper understanding of device state meant to increase efficiencies, lower device failure rate and total cost of ownership.

Creating a Fabric for Events

Moving messages (events) from one place to another is the focus of IoT today. This misses the basic need which is to take action upon events in real time to avoid cataclysmic failure or death.

In an event driven fabric, there are no static predetermined routes. All interaction is dynamic based on event and expertise of application or human it will be sent to as well as the current presence (availability). Sending an event to an endpoint that has other process already in queue means delay of action, what CYT does is to continually monitor all instance of relevant endpoints and sends message to one that is currently available.

Silos- the Death of IoT

Interoperability is a main necessity of IoT. Creating a product that only works with one application or one application that works with only one product will be the death of the IoT. Device owners are not adopting IoT because the current industry focus is to protect archaic technologies as evidenced in the numerous alliances formed and each taking its own approach to the market, the one that sells their products and locks you into their systems.

To solve the siloing of the IoT, CYT has chosen to work with and adopt the UPnP Forum framework which now enables the 2 Billion currently deployed devices to be interoperable as well as all new devices configured and certified using UPnP tools including the soon to be released online live object model tool.

Security- The fear of IoT, the solution of the US Department of Defense

Security looms large in the market, with horror stories from hacks of refrigerators to cars to industrial systems. The need to create secure channels based on trusted relationships and knowledge that the data will not be compromised during lower level hacks and attacks is the first thought at CYT.

Moving control and forward of data to layer 7 and disconnecting network dependent applications from the NetOS allows your data to stay in secure private channels and free from man in middle and other attempts to acquire your data.

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We have created a platform that addresses each of the functional needs of messaging of the IoT. Creating dynamic relationships between devices and endpoints that have need for data being published for service, control, warranty or any other processes the publisher (owner of device) chooses/requires that would better facilitate the function, health and longevity of the devices or things that sensors are monitoring.

The combination of the UPnP framework and CYT platform eliminates the disastrous siloing that is currently the norm for the market and the IoT can now reach the goal of ubiquity between device and system. "Starting with UPnP's object data model format all the way through to CYT's fabric capabilities, an end to end solution is now a reality giving any device the ability to allow access to data from any system regardless of underlying technology." – Michael Holdmann CEO, ConnectingYourThings

UPnP Framework Includes

- Bridging & Sensor Management – Low power bridging of IP & non-IP technologies
- Cloud & Anywhere Access – UPnP+ uses well-recognized XMPP framework for cloud connectivity
- Established Data Model Scalable at Speed of Internet – UPnP+ enables defining new IoT devices in minutes (online tool coming soon) while using certifiable ISO
- Robust Security Required For Certification – UPnP+ certification requires implementation of role- based security service
- Allows different local communication and protocol networks to interact as one, even if they do not use IP-based networking
- Includes seamless bridging to existing device network protocols such as Bluetooth, Z-Wave, or ZigBee
- Provides a development platform for "home automation hub" manufacturers to integrate with the billions of UPnP devices already in the home
- Aggregates the control point and management interfaces to include disparate technologies and connectivity implementations

CYT IoT platform includes:

- Security- built on DoD mandated technology for security/interoperability of real-time communications
- Privacy- device administration has full rights to subscriber authorization and data event level access
- Event driven fabric- allows devices, applications and humans to come in and out of relationships dynamically as profiles match events that need attention, as the event is satisfied the relationship is then dissolved until necessary again
- Translation- XMPP common data format to/from data format the designated system/device demands for seamless communication throughout the entire event cycle
- Warehouse/analytics- 1-24 hr. historical device data warehoused for transmission to manufacturer/services company based on event message/device state. Real-time event stream also started on event trigger for tracking recovery/change control success