Secure IoT Challenge Webinar

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Event Distribution in the Internet of Things

- Seamless data flow across devices and applications
- End-to-end addressability enables ingestion and command & control
- Protocol support and transformation
- Massive scale with built-in filtering and burst handling
The Intelligent, Hybrid IoT Event Mesh

Enables seamless, secure messaging between connected devices and on-premise or cloud hosted services and applications

PubSub+ Cloud (AWS, Azure, GCP) and PubSub+ Standard Edition provide participants the capability to create event mesh topologies as required for their use case.
Cloud manage your Solace estate through one console:

- Lifecycle management
- Provisioning
- Monitor
- Upgrades
- Governance

Deploy anywhere, manage in the cloud anywhere
Solace Interoperability

- 100% Interoperability
- Best of breed approach to APIs and protocols
- Eliminate platform and protocol lock-in
- No more bridging single-purpose systems

**Programming Languages and Tools**

- Objective C
- JavaScript
- HTML5
- .NET Core 2.0
- HTTP API

**Other**

- Objective C
- iOS
- JavaScript
- HTML5
- .NET
- Boot
- Cloud Connector
- Cloud Stream
- Data Flow

**Frameworks and Libraries**

- Node.js
- Python
- Ruby
- C#
- Java
- C++
- Perl
- JMS/JCA
- REST
- MQTT
- AMQP
- Other

**Protocols and Implementations**

- JMS (1.1, 2.0)
- SwiftMQ
- amqpnetlite
- Java
- SwiftMQ
- Node.js
- Qpid

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Solace Security

1. Authentication
   (based on username & credentials)
   - Basic: Choose Internal, LDAP or RADIUS
   - TLS client certificate (x509 certs)
   - Kerberos

2. Client Authorization
   (based on authenticated username)
   - Authorization group determines:
     - Attributes of the client’s connection (client profile)
     - Topics client can publish & subscribe to (ACL profile)
   - Managed internally or in external LDAP Server

3. Real-time policing of pub/sub topics
   - Connect ACL: Control where client can connect from
   - Publish ACL: Control which topics client can publish to
   - Subscribe ACL: Control which topics client can subscribe to
Secure IoT Accelerator - Scenario & Topology

• **Bidirectional interaction with Solace Cloud**
  – Tutorial using aws-iot MQTT client (paho, mbedTLS)
  – Deployable on Telus DevKit connecting securely to Solace Cloud

• **Solace Cloud Account**
  – Sign up at solace cloud
  – Launch a free developer service