

RiOT Engine and SkyView Security



IoT INTL



Overview

- **Role-based Security** - Access Control Based on the User Role
- **OAuth Framework** - Token Based Security to Control Users' Access
- **TLS - Transport Layer Security** to Protect Data in Travel and Maintain Data Integrity



Software Services

The real-time IoT suite (RiOT) has three main components:

- **Edge component or RiOT Engine:** RiOT Engine is the actual integrated real-time communication module that is running on the edge. The Engine can run on both Windows and Linux platforms and is hardware agnostic.
- **Time series:** is set up to receive, collect, save and serve time series data generated in the field. Time series can be an IoT platform such as Amazon, Azure, AT&T, IBM or just a SQL based database.
- **SkyView:** The presentation and configuration layer to configure devices, design and render HMI pictures, configure and render displays and charts, develop and publish interval reports, sequence of events, geo-intelligence, alarms and notifications.

Edge Security: implemented where data is collected in the field.

Some data communication protocols are more security maturity compared to other ones. RiOT Engine implements the security measures built into the protocol.

In addition to the local data communication protocols, the RiOT Engine has the following built-in features:

- Local data saved in the Engine is seeded and hashed to ensure privacy and integration
- Local or remote configuration, debug and troubleshoot messages between the user computer and the Engine is implemented via a secure channel

Data from the Edge to the Timeseries platform is secured by Transport Layer Security (TLS) protocol. Using TLS technology, the two sides negotiate a stateful connection by using a handshaking procedure. They establish a shared key which is used to encrypt the data in transport. During this handshake, the two sides agree on various security parameters.

Contact Us



A: 70 Inwood Rd
Rocky Hill, CT 06067

P: 860.760.4902

W: www.ctasg.com