

CenTrak Core Connector is an intermediate application between the CenTrak Server and the CenTrak Cloud Connect^{RT} Platform/ backend REST Service (Partner interface). CenTrak Core Connector receives tag data from CenTrak Server, and based on the use cases, the connector sends the Protobuf events to CenTrak Cloud Connect^{RT} Platform, and the relevant JSON messages to the REST Service using the REST API. CenTrak Core Connector supports both Pegasus and Orion Servers. Along with the existing support to stream events to multiple REST Endpoints (max 3), this enhanced version will be capable to stream events to multiple REST Endpoints (max 5) and multiple MQTT Brokers (max 2). One MQTT broker can be dedicated to the CenTrak Cloud and the second MQTT broker can be dedicated to the partner. A partner's MQTT Broker can either be On-Premises or on their cloud.

Prerequisites

Orion Server	5.15SP8 GA or higher
Pegasus Server	5.14SP23 GA Patch 1 or higher
Microsoft .NET Runtime	8.0.0
Microsoft .NET Framework	4.7.2 and higher
TLS Requirements	TLS 1.2 or later should be enabled to support Core-Connector to communicate Connect ^{RT}
For REST Endpoint Integration	REST Endpoint URL and REST API Name
For Connect ^{RT} MQTT Integration	Connect ^{RT} Activation
For Partner MQTT Integration	MQTT Endpoint with Certificates/Credentials and channels for Location/Button events

Supported Use Cases

- Asset Tracking
- Patient Tracking
- Nurse Call and Staff Duress
- Environmental Monitoring Temperature Tracking*
- Safety Solution Alerts*
- Hand Hygiene
- Send and Receive ADT events (Inbound and Outbound)*
- Wi-Fi Client tracking
- Asset, Patient and Staff Battery LBI Change event

Notes:

- By default, the preceding use cases are enabled. The connector UI will accordingly have different sections based on enabled use cases.
- Use cases marked with an asterisk are supported only on REST protocol and not MQTT protocol which is required by Connect^{RT} Cloud application.
- While the Core Connector may support these use cases, the receiving application (Connect^{RT} or partner applications) must also be updated / enhanced to support the use case.

Endpoint and Port

For Connect^{RT} integration, the following Endpoint and port need to be opened in Firewall / Network Settings.

Specifications

Endpoint	a1ahabxervrb1k-ats.iot.us-east-1.amazonaws.com
TCP Port	8883

AWS IoT Core Certificate

Specifications

For Windows 2019 Server and later	AES-256 algorithm-based AWS IoT Core Certificate should be placed as \cert\certificate.pfx.
For Windows 2016 Server and lower	TripleDES algorithm-based AWS IoT Core Certificate should be placed as \cert\certificate.pfx.

Note: During installation, the AES-256 algorithm-based AWS IoT Core Certificate will be placed by default.

Endpoint Supported Events

Rest Endpoint Supported Events

Note: Rest Endpoint supports both existing (Legacy) and new (MQTT) JSON format

Existing/Legacy Format:	<ul style="list-style-type: none"> • Location change • Key press • Hand Hygiene • Temperature data • Safety Solution alerts • ADT – [Admit Discharge Transfer]
New Format (MQTT-JSON)	<ul style="list-style-type: none"> • Location Tracking • Button Press • Battery
Format of Data	JSON

MQTT Endpoint Supported Events

Note: MQTT Endpoint only supports the new MQTT Proto format.

New Format (MQTT-Proto format)	<ul style="list-style-type: none"> • Location Tracking • Button Press • Battery
Format of Data	Protobuf

