TRADECRAFT TECHNOLOGIES, INC

AMPS API Documentation/Reference

Introduction

The AMPS API is used primarily has a gateway between the front end React.js code and the database. The architecture of the AMPS API is built using REST principals and could be consumed by other clients in the future based on need.

Architecture

The AMPS API is built using REST principals and its internal design is largely divided into two major categories of endpoints: collection management (personnel, platforms, etc.) and business logic/actions (intel request / mission management workflows).

Authentication

The AMPS API utilizes OAuth2 authentication. Using a user ID and password provided by the end user, the API will generate a time bound token that will then allow access to the API functions for a set amount of time (the default is 30 minutes). Each user has one or more role assigned to them which allow access not only to specific areas in the AMPS system but also limits which API endpoints can be utilized by the user. There is a Super Admin user role that allows access to everything in the system.

Supported Protocols

The API supports being invoked from any source that can submit a HTTP request. Each endpoint has its own data parameter requirements. HTTP responses are currently defaulted to JSON, however, the API can also support XML responses if there were a business need.

Database

The underlying database is Microsoft SQL Server and the design paradigm used for structuring the tables is Third Normal Form (3NF). There are stored procedures that are coded within the database as well to provide optimization for some larger queries as well as to provide a queueing service for routine updates (i.e. status checks on intel requests & missions).

Further Documentation / Real-Time Interaction

Swagger UI is currently being utilized as the real time documentation, interaction, and unit testing mechanism for the API. Below is a link to this documentation:

http://ec2-18-220-128-32.us-east-2.compute.amazonaws.com:8081