Amazon’s Alexa: Key Analytics Applications That Deliver Voice-activated Reporting
4:45-5:45pm

By Stephen Lippens
Agenda

- Interacting with the MicroStrategy reusable object layer (Web API)
- Extracting data from MicroStrategy (REST API)
- How to enrich Alexa’s capabilities – Simple commands, complex processes
- How to make Alexa ‘Smart’ – Integrating NLP/ML/AI
- Demo - Pushing the envelope with Alexa Control
Alexa, Ask MicroStrategy how many documents were created since December 10th 2017

3 documents were created since 2017-12-10
Alexa, Ask MicroStrategy how many reports were created today

X reports were created today
SearchFunction: how many \{obj\} were created \{date\}
Alexa, Ask MicroStrategy what reports were created today

The reports created today are…
Alexa, ask MicroStrategy to send me Simple Report

You were successfully subscribed to the report ... and should receive an email shortly.
Alexa

Voice to text

Server-side

Text to voice

Map text to command

Dynamic variables

Invoke function

Parse data and form speech string

Call MSTR API

Response

Multiple web API functions in sequence

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Alexa, Ask MicroStrategy how many web sessions are active

xxx users are currently online.
Alexa, ask MicroStrategy to revoke access to user **Steve**

Access for user Steve has been revoked
Alexa, Ask MicroStrategy to grant access to user **Steve**

Access for user Steve has been granted
Alexa

API Layer

System Information (Metadata)
System Actions (Metadata)
Insights (Data)
Alexa, ask MicroStrategy what is my revenue for the category books?

Revenue for category books is: $2,640,094
Alexa, ask MicroStrategy what is my cost for the region central?

Cost for the region central is: $4,265,043
**REPRESENTATIONAL STATE TRANSFER**

- **Login params**
  - POST /auth/login
  - **Auth Token**

- **Auth Token**
  - GET /cubes/{cubeID}
  - **Cube Definition**

  - Parse Cube Definition to obtain GUID for attribute and metric with given display name

- **Cube Data**
  - POST /cubes/{cubeID}
  - **Cube Data**

  - Form Request definition using GUIDs to return desired data

  - Iterate Cube data and form speech test for Alexa
Increased Utility - Summaries

Alexa, ask MicroStrategy for my summary

Your regions pipeline for this quarter is $4.3 million and are on track to hit your quota. Year over year revenue is up 12.3%. You have 1 unsubmitted expense report, and 5 salesforce action items.
Alexa, ask MicroStrategy for my smart summary

"After analyzing your 5 KPIs, 1 is outside operating limits. RevForecast is currently at 13, 62.5% off target. You should probably do your job and fix that."
Nothing to report!  

After analyzing your X KPIs, X is outside operating limits.

For Each:

{Provide context}
Alexa Control
Questions?

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