Name:	Lee Evans
Affiliation:	LTS Computing LLC
Email:	levans@ltscomputingllc.com
Presentation type (s):	**Software Demo**

LTS Broadsea API – OHDSI methods as a service

Lee D. Evans
[1]LTS Computing LL, West Chester, PA

Abstract

The LTS Broadsea API provides access to OHDSI methods as a service in the cloud. For example, run Achilles on any OMOP CDM dataset in any OHDSI supported database within Amazon AWS and Google Cloud by making a simple secure web service call referencing the database connection details. The Broadsea API is currently under development.

Introduction

Many organizations are taking advantage of managed database services like AWS RDS, Redshift, Google BigQuery and Hadoop to host their observational databases and convert them into the OMOP Common Data Model.

However, running the OHDSI methods on that data is not so simple. It requires additional skilled resources to deploy, administer and upgrade the required web servers, R servers, Proxy servers and middleware (tomcat, rstudio, docker, etc).

The aim of the Broadsea API is to provide simple, immediate access to the OHDSI methods as a cloud service via a simple REST API service that can be called from any web application/service.

Approach

The services behind the Broadsea API are run in Docker containers on AWS Elastic Container Service and Google Container Engine. They scale on-demand. The containers can be deployed in the same region/zone as the CDM database for best performance in the cloud. They are actively managed and upgraded when new versions of the OHDSI methods are released.

Conclusion

The Broadsea API is currently under development – interested OHDSI Symposium participants can sign up for beta testing. Azure will also be a supported cloud platform in the future. A simple example web application calling the Achilles Broadsea API service in the AWS cloud will be demonstrated.