System Manual for HAPI FHIR & SQL Database

FHIR Server Setup

Hosting Web service on azure:
Go to https://github.com/hansenms/fhir-azure/tree/master/hapi-fhir-sql and follow the instructions provided on the page. This provides a template that deploys the infrastructure for running the HAPI FHIR example server as a Azure Web App with an Azure SQL Database backend. The Web App will be configured with all necessary connection strings, java versions, etc. Click the 'Deploy to Azure' button at the bottom of the page.

A .war file will need to be generated for deployment. To do this follow the instructions on https://github.com/hansenms/fhir-azure/tree/master/hapi-fhir-sql. Then copy the hapi-fhir-jpaserver-example.war (from the target folder) file to the D:\home\site\wwwroot\webapps folder of the Azure Web App (using the Kudu console).

After deployment visit the web app (e.g. https://WEBSITENAME.azurewebsites.net/hapi-fhir-jpaserver-example/) with a browser to make sure it is up and running.

Uploading mock data
The next step is to generate sample data on the FHIR server hosted on Azure. To do this follow the instructions from https://github.com/smart-on-fhir/sample-patients-stu3. You will need to run a command like this using python 2:

> python2 generate.py --write-fhir ../out --id-prefix "nhs"

This adds a nhs prefix before ids.

Then you can upload this generated data on the azure hosted fhir server by following the instructions given in https://github.com/smart-on-fhir/tag-uploader. Do npm install after cloning the repository.

From the previous step, we have the sample data loaded in the out folder. This can be moved to the directory under tag-uploader. We can rename the javascript file index.js to tag-uploader.js. Then run the following statements. Replace "nhs" with any tag. In the second command replace the url given with the fhir server url (baseDstu3)

- node tag-uploader -d out -t "nhs" -w
- node tag-uploader -d out -t "nhs" -S
  http://smarthospitalhapifhir.azurewebsites.net/hapi-fhir-jpaserver-example/baseDstu3

Setting up SQL Database

An sql db copy of the UCL Smart Hospital project database is provided in the azure-sql-db-copy. It contains all working tables and data up to 18-03-2019.

The .bacpac file must be updated to Azure Storage as blob data. Then an Azure Data Storage service must be created to later on import a database from the .bacpac file stored in Azure Storage.

Fur further details on setting up please follow the steps in the following guide:
https://github.com/Huachao/azure-content/blob/master/articles/sql-database/sql-database-import.md