Application of Microservice Architecture on B2B Processes

(IBM Watson Customer Engagement)

by

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(11th July 2018 – 26th July 2018)

Introduction

The International Business Machines Corporation (IBM) is an American multinational technology company headquartered in Armonk, New York, United States, with operations in over 170 countries. IBM manufactures and markets computer hardware, middleware and software, and provides hosting and consulting services in areas ranging from mainframe computers to nanotechnology.

IBM aims to bring Businesses closer and smarter than ever with the help of their state of the art enterprise software product called B2B Sterling Integrator. IBM B2B Integrator helps companies integrate complex B2B (Business to Business) / EDI (Electronic Data Exchange) processes with their partner communities. IBM aims to transform the B2B Sterling product into Microservice architecture.

Brief Overview

After deploying the sample war file, I have to deploy the B2BiAPIs war file on the Sterling Integrator. So, to deploy it I have created B2BiAPIs Uri in Http Server Adapter and provided the path of it. Then I run few commands to install it and run it on the sterling integrator.

Introduced in B2Bi 526

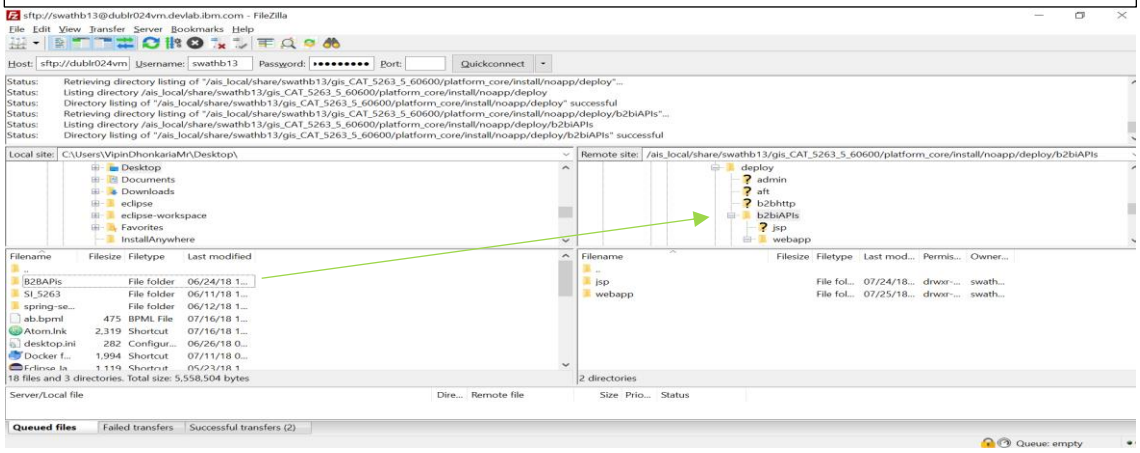
- Allow user to programmatically Create, Read, Update and Delete resources in B2Bi.
- JSON and XML supported as input and output formats.
- Provide support for Partner Engagement Manager PEM.
- More efficient mechanism for on boarding trading partners compared to Xapi.

Report on the Present Investigation

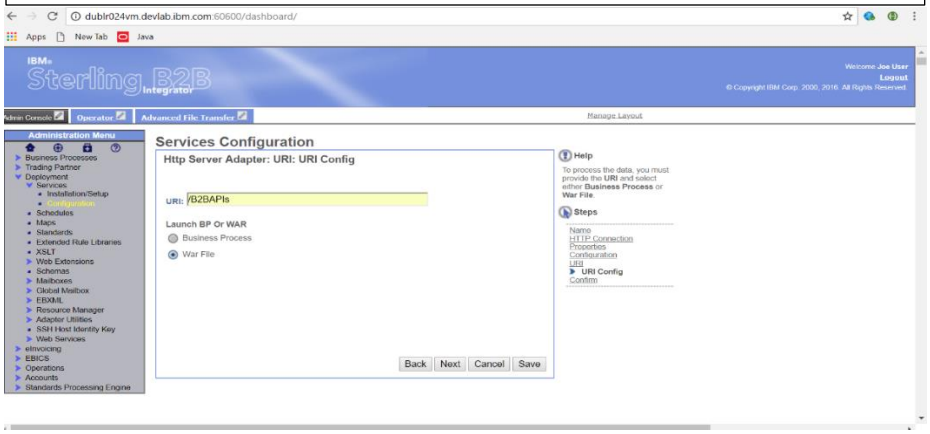
(Progress during this 15-days period)

B2B Sterling Integrator works based on the Business processes. These business processes are used to automate the operation of the services in the business environment. There is a basic set of base services which form the core of the SI product. These services are written in Java and are prepackaged altogether in a WAR archive format. To execute and test these services, the B2Bi war file is to be deployed on the SI server. So to deploy the B2BiAPIs, following steps are taken.

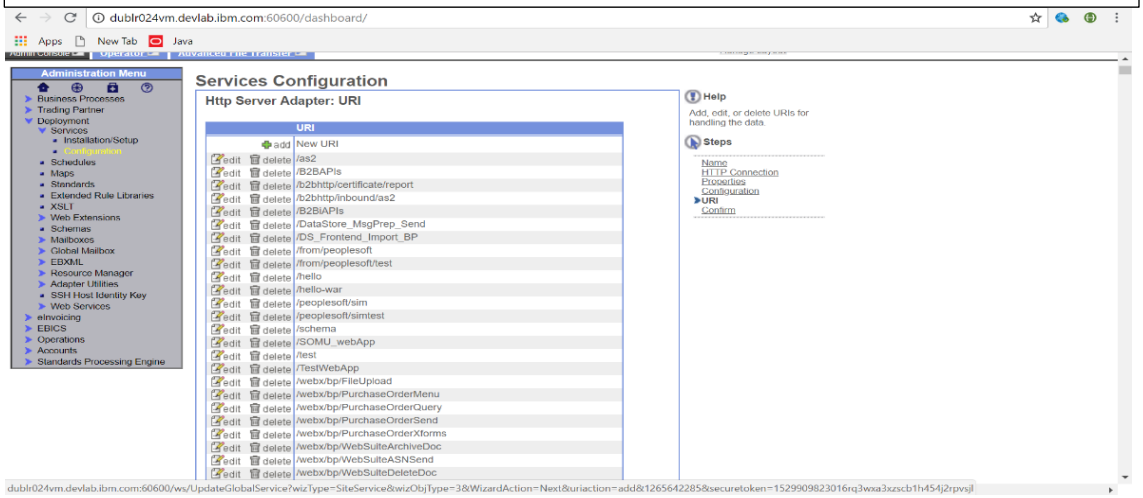
Step 1: Connect to the B2Bi-SI server using filezilla and copy the WAR package.



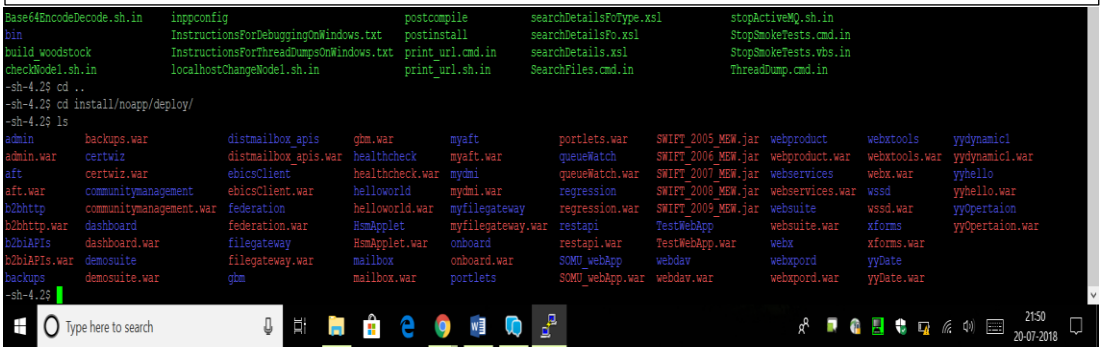
Step 2: Launch B2BAPIs war File in Sterling Integrator



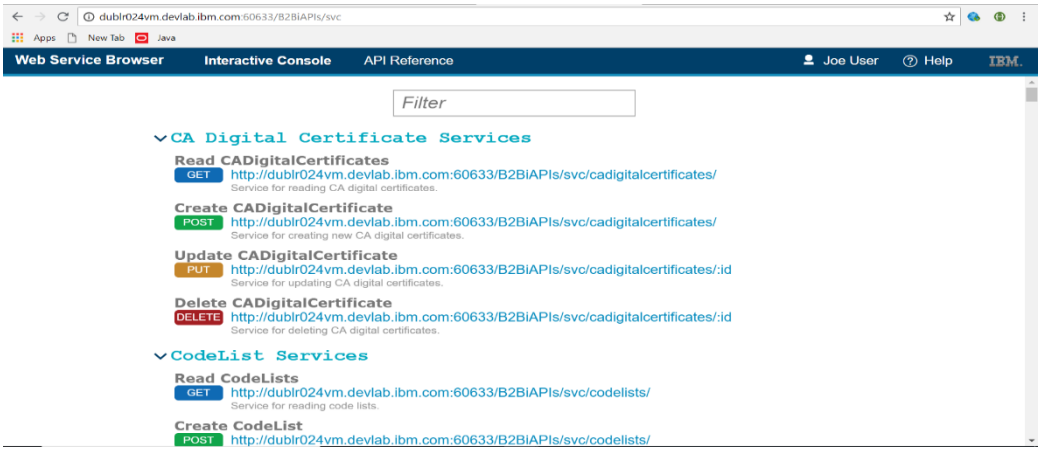
B2BiAPI URI is created in Http Server Adapter



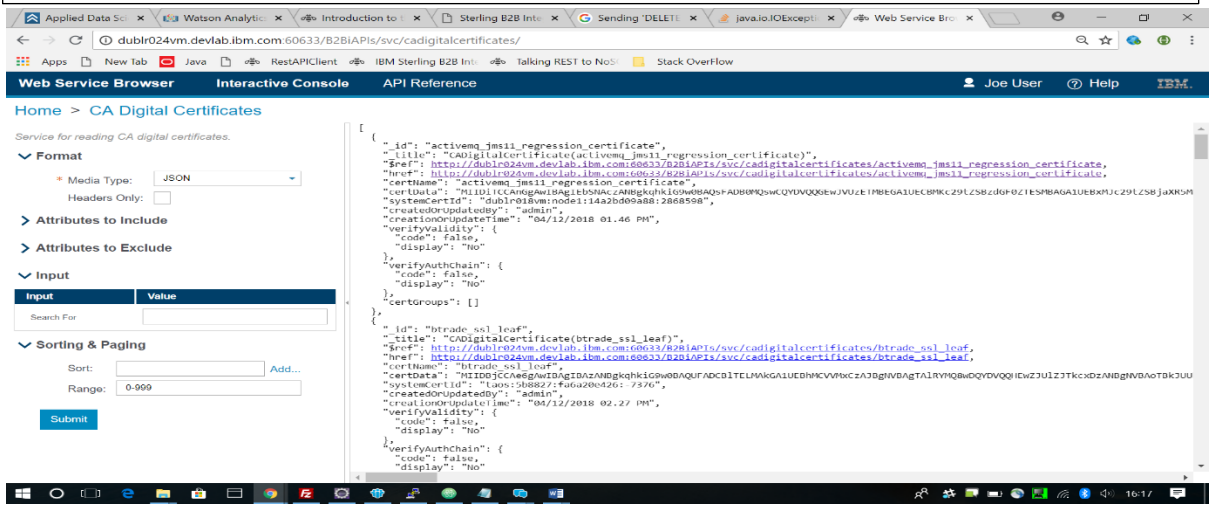
Unpackaged B2BiAPIs WAR directory is created.



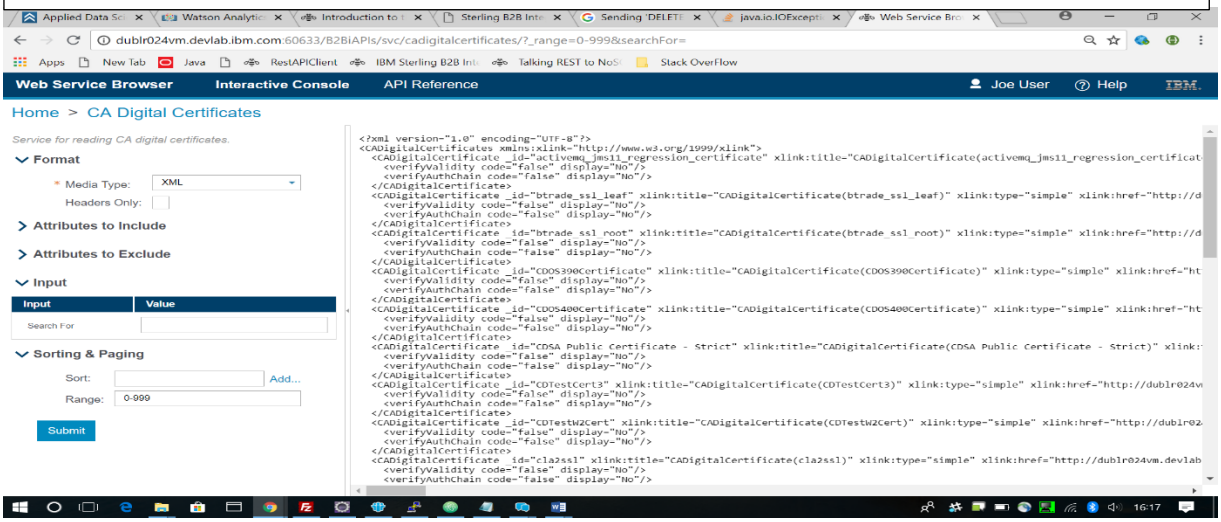
Deployed B2BiAPIs on Sterling Integrator.



Read CADigitalCertificates API in json.



Read CADigitalCertificates API in XML.



We can perform CRUD operations on deployed B2BiAPIs and retrieve the response in json or XML whichever format we want. We can include or exclude the parameters pass in the GET request to APIs. We can set the range on response such as set the page size or number of instances of particular API we want to retrieve.

Results and Discussions

On single URI, we can have all the B2BiAPIs deployed and we can perform all the CRUD operations on these APIs. Allow clients to programmatically Create, Read, Update and Delete resources in B2Bi, and retrieve the response in either json or XML format. All the operations are defined already and a user interface is provided to include or exclude some of parameters, set range on the page to display the response.

Conclusions

After deploying the B2BiAPIs WAR file, it makes easy to the clirnts to have an access of all the APIs on the same URI. B2BiAPIs are developed for the clients to perform the rest operations on it and set the response accordingly.

Next Target

My target for the next 15 days is develop a Rest Client to perform the CRUD operations on the deployed APIs. My primary aim is to understand how to create a service and deploy it on SI. I have to understand how to create a business process and call the services and adapters from BP.