

Web Service Generator and Deployment Tool Software Design Document		TEM 074
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Revision History

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1 Introduction

The SDD focuses on the software architecture, detailed class descriptions, and all modules' functionality details of Web Service Generator Tool and Deployment Tool.

1.1 Overview of the System

The overview of the project is to develop a tool which will generate source code, compile source code and build the OSGI bundle file for SOAP and Restful web services to deploy in the Jboss Fuse server. The WSGD Tool shall generate Web Service based on predefined Templates. The WSGD Tool shall be a wizard based tool to support Web Services and Multiple Databases. This tool shall have the following features:

- Creating a web service.
- Compiling the source code.
- Creating the war file.
- Downloading the war file.
- Deploying the war file in the configured Jboss fuse server.
- Uploading the template files.
- Adding, editing and deleting the users.
- There shall be a Test Automation framework and UI for testing the Web Service by end-user.
- Code quality analysis report shall be generated for the generated source code using Sonar Cube.
- Generated source code shall be committed to version control SVN.
- For CI+CD, Jenkins shall be used.

1.2 Objective of the System

The main objective of this system is to generate the source code for SOAP and Restful web services based on the user inputs.

1.3 Terms and Acronyms used

Sl No	Acronyms	Definitions
1	OSGI	Open Service Gateway Initiative
2	TestNG	TEST Next Generation
3	WSDL	Web Service Definition Language
4	WADL	Web Application Definition Language
5	REST	Representational State Transfer
6	SOAP	Simple Object Access Protocol
7	SDD	Software Design Document

1.4 Users of this document

This document is used by Censof and Mindteck project team. This document will be used as a basis of implementation (including coding and testing phases)

1.5 Hardware Environment

Operating System: Windows 7 or 10 / Ubuntu 16.04

RAM: Minimum 8GB

Processor: Core i5

Hard Disk: 256 GB or larger

1.6 Software Environment

1. Java Technologies

- Core Java (Version 8)
- Servlet (Version 4.0)
- JSP (Version 2.3)
- Spring-core (Version 4.1.6.RELEASE)
- Spring-MVC (Version 4.1.6.RELEASE)
- Spring-JDBC (Version 4.1.6.RELEASE)
- Spring-ORM (Version 4.0.3.RELEASE)
- Hibernate (Version 4.3.11.Final)
- SOAP web service using Apache - CXF (Version 2.6.0)
- REST web service using Apache - CXF (Version 2.6.0)

2. Front End/UI Technologies

- HTML (Version 5)
- CSS (Version 3)

3. Java Script Frameworks

- Java Script (Version 6)
- JQuery (Version 3.2)
- Ajax (Version 1.1.0)

4. IDE

- Eclipse (Version Juno 4.2)

5. Databases

- MySql (Version 5.7.21)
- Postgres (Version PostgreSQL 10.3)
- Oracle (Version Oracle 12 Release 2: 12.2.0.1)
- MSSql (Version SQL Server 2017 14.0)

6. Code Quality Analysis

- SonarCube (Version LTS 6.7)

7. Build Tool

- Maven (Version 3.3.3)

8. Build and Deployment Automation Server

- Jenkins (Version 2.107.1)

9. Servers

- Tomcat (Version 8)
- Jboss Sever (Red Hat Fuse and Fabric) (Version 6.3.0.redhat-187)

10. Tool Database

- Postgres (Version PostgreSQL 10.3)

11. Testing Tools

- Postman - for testing REST web service (Version 5.5.3)
- SoapUI - for testing SOAP web service (Version 5.3)

2 Functional Modeling Detailed Level

Web Service Generator and Deployment Tool has following modules:

1. Login Module

This module is to login to application, If the user have forgot the password "Forgot Password" option is available.

2. Generate Source Code

This module is to generate source code for REST/ SOAP web service.

3. Properties Module

This module is to provide the property details like the deployment IP and port with WADL/WSDL URL, Server name and version.

4. Compile Generated Source Code

This module is to compile the generate source code for REST/ SOAP web service.

5. Code Quality Analysis

This module is to check the quality of code based upon standard defined.

6. TestNG

This module is to validate/ test the generated source code by providing the parameters.

7. Building OSGI Bundle

This module is to create OSGI bundle for generate source code for REST/ SOAP web service.

8. Deploy Bundle file

This module is to deploy generated bundle file to Jboss Fuse server.

9. User Management

This module is to add, edit and delete the user based on role.

10. Dependency Management

This module is to add, edit, validate and delete the dependency details.

11. Template Management

This module is to upload the template file (XML) and delete the template file.

12. Configuration Management

This module is to configure the paths.

13. Change password

This module is to change the password of logged in user.

14. Mail Server Setting

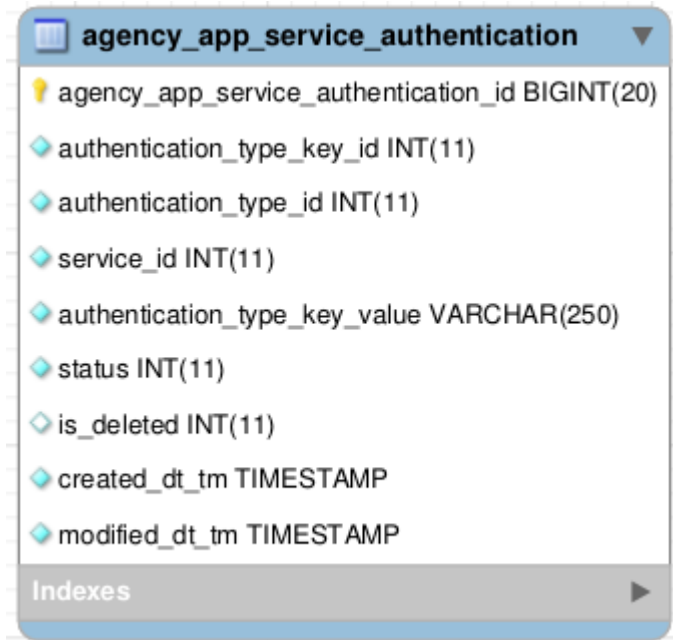
This module is to add, edit and delete the mail sever details.

3 Data Modeling

3.1 Entity-Relationship Diagram

3.1.1 AGENCY_APP_SERVICE_AUTHENTICATION :-

This table provide details of agencies which the web service is generated for.



The screenshot shows a database table definition window for 'agency_app_service_authentication'. The table has the following columns:

Column Name	Data Type
agency_app_service_authentication_id	BIGINT(20)
authentication_type_key_id	INT(11)
authentication_type_id	INT(11)
service_id	INT(11)
authentication_type_key_value	VARCHAR(250)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP

Below the columns, there is a section labeled 'Indexes' with a right-pointing arrow.

Figure 1.1

3.1.2 AGENCY_APPLICATION Table

This table is used to save the agency application data .

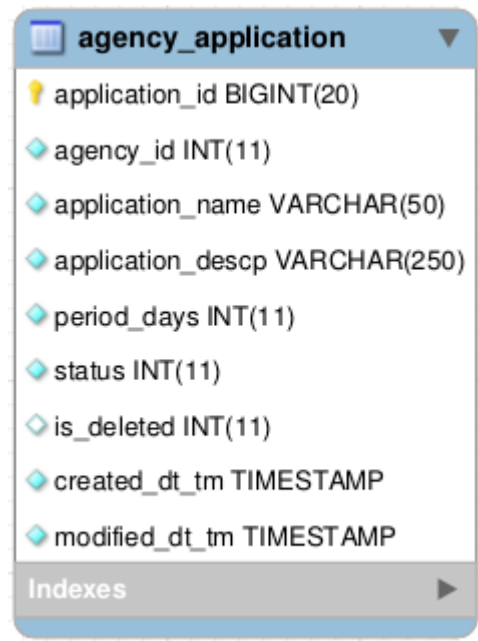


Figure 1.2

3.1.3 AGENCY_INFO Table

This table is used save the agency information.

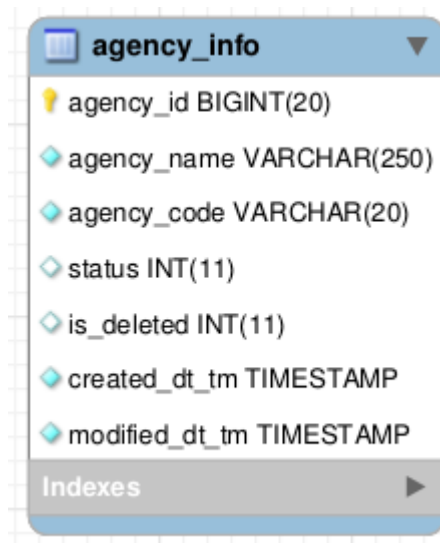
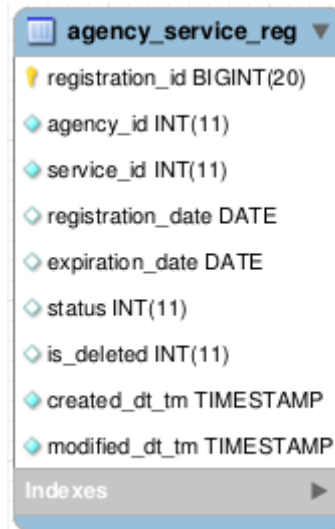


Figure 1.3

3.1.4 AGENCY_SERVICE_REG Table

This table is used to save agency service details.

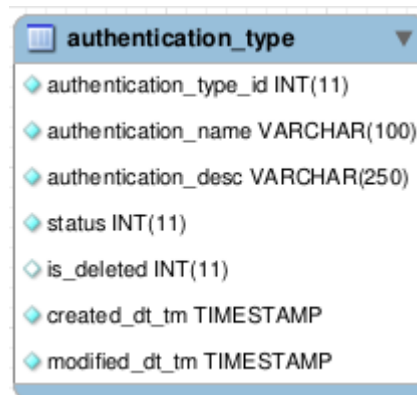


agency_service_reg	
registration_id	BIGINT(20)
agency_id	INT(11)
service_id	INT(11)
registration_date	DATE
expiration_date	DATE
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP
Indexes	

Figure 1.4

3.1.5 AUTHENTICATION_TYPE Table

This table is used save the authentication types.

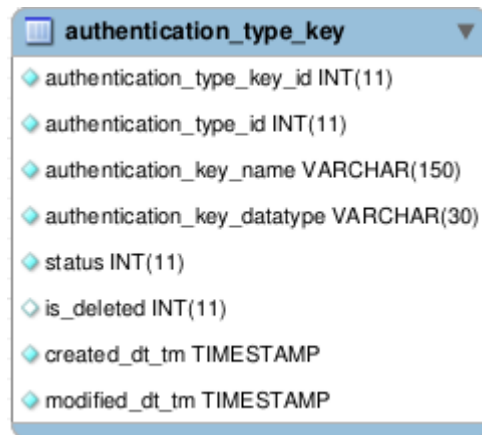


authentication_type	
authentication_type_id	INT(11)
authentication_name	VARCHAR(100)
authentication_desc	VARCHAR(250)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP

Figure 1.5

3.1.6 AUTHENTICATION_TYPE_KEY Table

This table is used save the authentication types key.

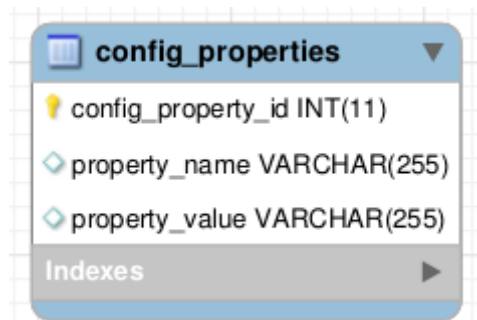


authentication_type_key
authentication_type_key_id INT(11)
authentication_type_id INT(11)
authentication_key_name VARCHAR(150)
authentication_key_datatype VARCHAR(30)
status INT(11)
is_deleted INT(11)
created_dt_tm TIMESTAMP
modified_dt_tm TIMESTAMP

Figure 1.6

3.1.7 CONFIG_PROPERTIES Table

This table is used save the config properties.

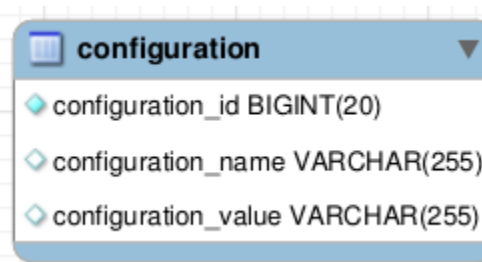


config_properties
config_property_id INT(11)
property_name VARCHAR(255)
property_value VARCHAR(255)
Indexes

Figure 1.7

3.1.8 CONFIGURATION Table

This table is used save the configuration details.

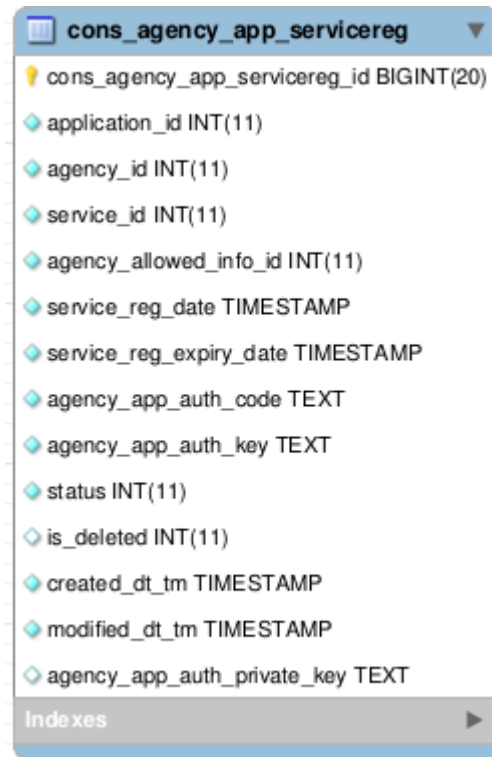


configuration
configuration_id BIGINT(20)
configuration_name VARCHAR(255)
configuration_value VARCHAR(255)

Figure 1.8

3.1.9 CONS_AGENCY_APP_SERVICEREG Table

This table is used save the cons agency app servicereg

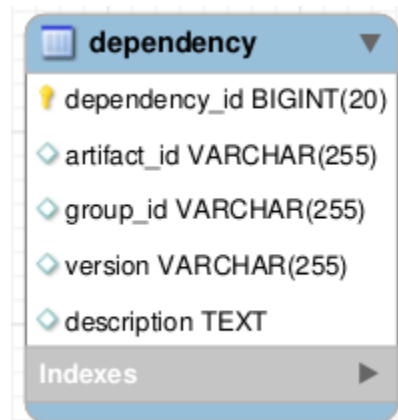


cons_agency_app_servicereg	
cons_agency_app_servicereg_id	BIGINT(20)
application_id	INT(11)
agency_id	INT(11)
service_id	INT(11)
agency_allowed_info_id	INT(11)
service_reg_date	TIMESTAMP
service_reg_expiry_date	TIMESTAMP
agency_app_auth_code	TEXT
agency_app_auth_key	TEXT
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP
agency_app_auth_private_key	TEXT
Indexes	

Figure 1.9

3.1.10 DEPENDENCY Table

This table is used save the dependency.

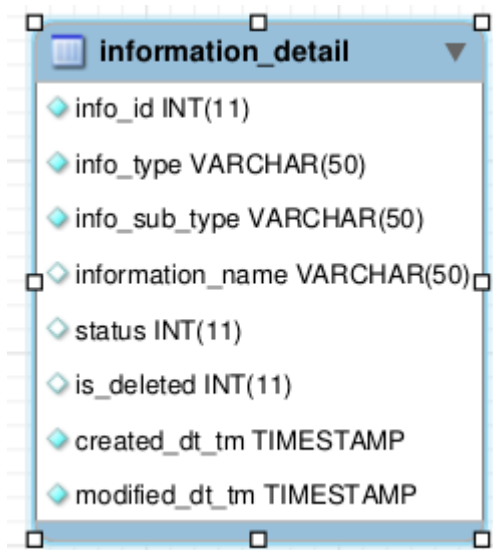


dependency	
dependency_id	BIGINT(20)
artifact_id	VARCHAR(255)
group_id	VARCHAR(255)
version	VARCHAR(255)
description	TEXT
Indexes	

Figure 1.10

3.1.11 INFORMATION_DETAIL Table

This table is used save the web service information details.

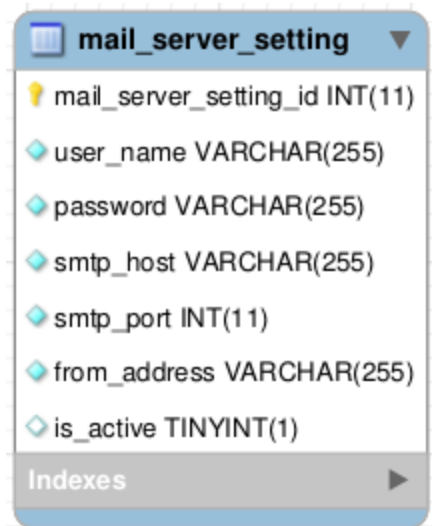


information_detail	
info_id	INT(11)
info_type	VARCHAR(50)
info_sub_type	VARCHAR(50)
information_name	VARCHAR(50)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP

Figure 1.11

3.1.12 MAIL_SERVER_SETTING Table

This table is used save the mail server setting.



mail_server_setting	
mail_server_setting_id	INT(11)
user_name	VARCHAR(255)
password	VARCHAR(255)
smtp_host	VARCHAR(255)
smtp_port	INT(11)
from_address	VARCHAR(255)
is_active	TINYINT(1)
Indexes	

Figure 1.12

3.1.13 METHOD_DATATYPE Table

This table is used access the method data type.

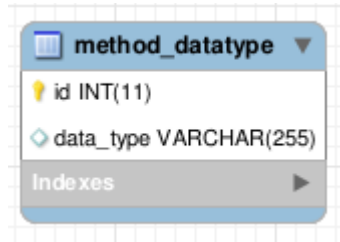


Figure 1.13

3.1.14 METHOD_VALIDATION_RULE Table

This table is used save the method validation rules.

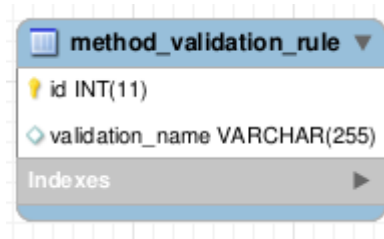


Figure 1.14

3.1.15 PROJECT_DETAILS Table

This table is used save the project details.

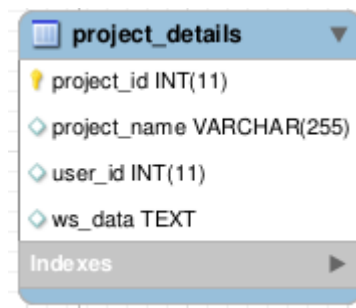
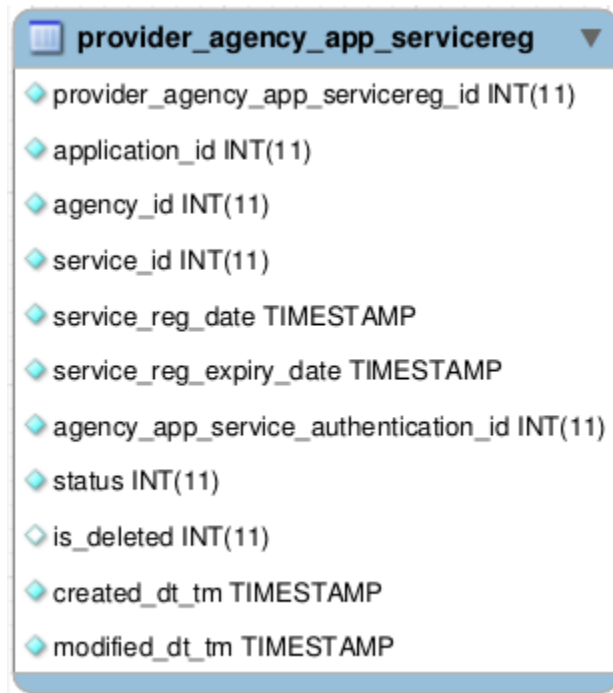


Figure 1.15

3.1.16 PROVIDER_AGENCY_APP_SERVICEREG Table

This table is used save the provider agency app servicereg.

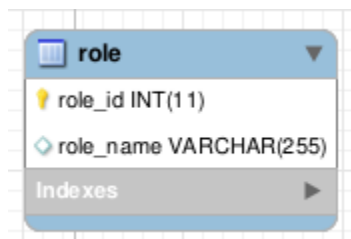


provider_agency_app_servicereg	
provider_agency_app_servicereg_id	INT(11)
application_id	INT(11)
agency_id	INT(11)
service_id	INT(11)
service_reg_date	TIMESTAMP
service_reg_expiry_date	TIMESTAMP
agency_app_service_authentication_id	INT(11)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP

Figure 1.16

3.1.17 ROLE Table

This table is used save the role.

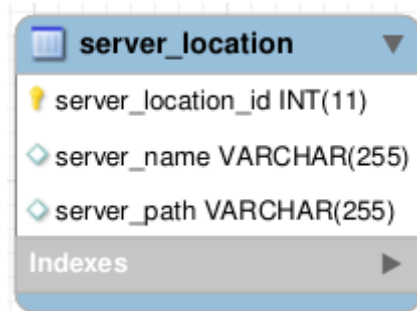


role	
role_id	INT(11)
role_name	VARCHAR(255)
Indexes	

Figure 1.17

3.1.18 SERVER_LOCATION Table

This table is used save the server location.



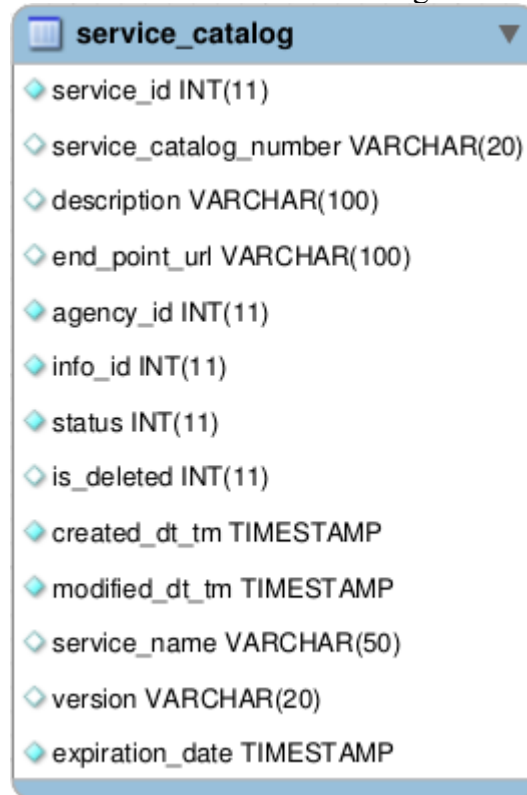
The screenshot shows a database tool window for the 'server_location' table. It lists three columns: 'server_location_id' as an INT(11) with a primary key icon (yellow key), 'server_name' as a VARCHAR(255) with a foreign key icon (blue diamond), and 'server_path' as a VARCHAR(255) with a foreign key icon (blue diamond). Below the columns is an 'Indexes' section with a right-pointing arrow.

Column Name	Data Type	Constraints
server_location_id	INT(11)	Primary Key
server_name	VARCHAR(255)	Foreign Key
server_path	VARCHAR(255)	Foreign Key

Figure 1.18

3.1.19 SERVICE_CATALOG Table

This table is used save the service catalog.



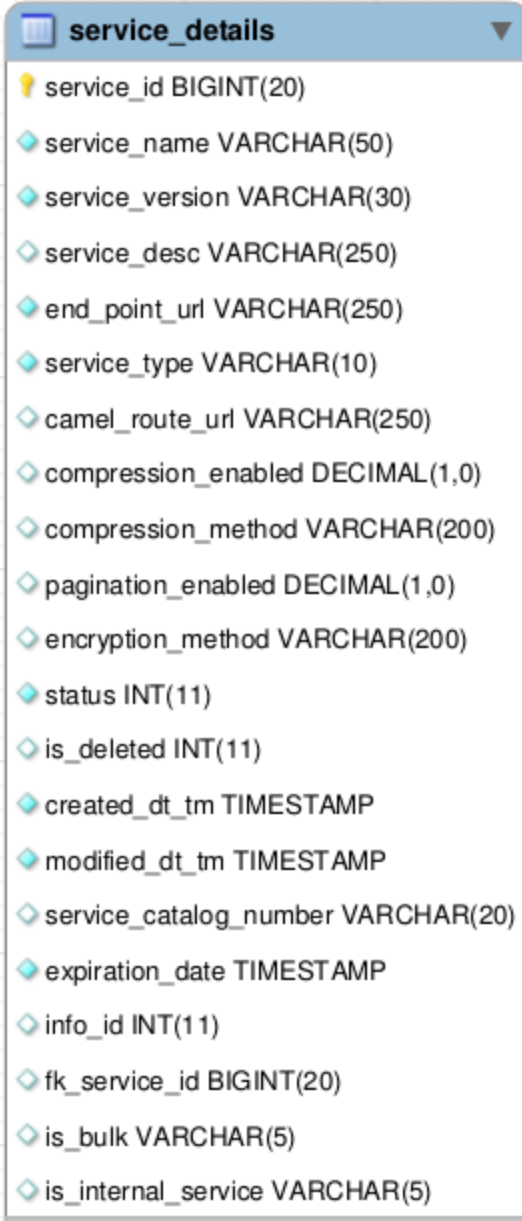
The screenshot shows a database tool window for the 'service_catalog' table. It lists thirteen columns, all with foreign key icons (blue diamonds): 'service_id' (INT(11)), 'service_catalog_number' (VARCHAR(20)), 'description' (VARCHAR(100)), 'end_point_url' (VARCHAR(100)), 'agency_id' (INT(11)), 'info_id' (INT(11)), 'status' (INT(11)), 'is_deleted' (INT(11)), 'created_dt_tm' (TIMESTAMP), 'modified_dt_tm' (TIMESTAMP), 'service_name' (VARCHAR(50)), 'version' (VARCHAR(20)), and 'expiration_date' (TIMESTAMP).

Column Name	Data Type
service_id	INT(11)
service_catalog_number	VARCHAR(20)
description	VARCHAR(100)
end_point_url	VARCHAR(100)
agency_id	INT(11)
info_id	INT(11)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP
service_name	VARCHAR(50)
version	VARCHAR(20)
expiration_date	TIMESTAMP

Figure 1.19

3.1.20 SERVICE_DETAILS Table

This table is used save the service details.



The screenshot shows a database tool window titled 'service_details'. It lists the following columns and their data types:

Column Name	Data Type
service_id	BIGINT(20)
service_name	VARCHAR(50)
service_version	VARCHAR(30)
service_desc	VARCHAR(250)
end_point_url	VARCHAR(250)
service_type	VARCHAR(10)
camel_route_url	VARCHAR(250)
compression_enabled	DECIMAL(1,0)
compression_method	VARCHAR(200)
pagination_enabled	DECIMAL(1,0)
encryption_method	VARCHAR(200)
status	INT(11)
is_deleted	INT(11)
created_dt_tm	TIMESTAMP
modified_dt_tm	TIMESTAMP
service_catalog_number	VARCHAR(20)
expiration_date	TIMESTAMP
info_id	INT(11)
fk_service_id	BIGINT(20)
is_bulk	VARCHAR(5)
is_internal_service	VARCHAR(5)

Figure 1.20

3.1.21 WS_USER Table

This table is used save the user types



Figure 1.21

3.2 Data Dictionary

Table No		1	Table Name		WS_USER	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	USER_ID	Integer		No	User Id
2		FIRST_NAME	VARCHAR2	255	Yes	First Name
3		LAST_NAME	VARCHAR2	255	Yes	Last Name
4		PASSWORD	VARCHAR2	255	No	Password
5		USER_NAME	VARCHAR2	255	Yes	User Name
6		IS_ACTIVE	TINYINT1		Yes	Is Active
7		SVN_URL	VARCHAR2		Yes	Svn Url
8		ROLE_ID	Integer		Yes	Role Id
9		EMAIL	VARCHAR2	255	Yes	Email
		Purpose: This table is used to save the user details.				

Table No		2	Table Name		DEPENDENCY	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	DEPENDENCY_ID	Integer		No	Dependency Id
2		ARTIFACT_ID	VARCHAR2	255	No	Artifact Id
3		GROUP_ID	VARCHAR2	255	Yes	Group Id
4		VERSION	VARCHAR2	255	Yes	Version number
5		DESCRIPTION	VARCHAR2	1000	Yes	Description
		Purpose: This table is used to save the maven dependencies.				

Table No		3	Table Name		METHOD_DATATYPE	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	METHOD_DATATYPE_ID	Integer		No	Method id
2		DATA_TYPE	VARCHAR2	255	No	Data_Type
		Purpose: This table is used to save request parameters data type for the methods				

Table No		4	Table Name		CONFIG_PROPERTIES	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	CONFIG_PROPERTY_ID	Integer		No	Configuration Property Id
2		PROPERTY_NAME	VARCHAR2	255	No	Property Name
3		PROPERTY_VALUE	VARCHAR2	255	No	Property Value
		Purpose: This table is used to save the property details.				

Table No		5	Table Name		SERVICE_DETAILS	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	SERVICE_ID	Integer		No	Service id
2		SERVICE_NAME	VARCHAR2	255	No	Service name
3		SERVICE_VERSION	VARCHAR2	255	No	Service version
4		SERVICE_DESC	VARCHAR2	255	Yes	Service Description
5		END_POINT_URL	VARCHAR2	255	No	End point url
6		SERVICE_TYPE	VARCHAR2	255	No	Service Type
7		CAMEL_ROUTE_URL	VARCHAR2	255	Yes	Camel route URL
8		COMPRESSION_ENABLED	NUMBER		Yes	Compression enabled or not
9		COMPRESSION_METHOD	VARCHAR2	255	Yes	Compression Method
10		PAGINATION_ENABLED	NUMERIC		No	Pagination nabled
11		ENCRYPTION_METHOD	VARCHAR2		Yes	Encryption method
12		STATUS	NUMBER		No	Status
13		IS_DELETED	NUMBER		No	Is deleted or not
14		CREATED_DT_TM	TIMESTAMP		No	Created date
15		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified date
16		SERVICE_CATALOG_NUMBER	VARCHAR2		Yes	Service catalog number
17		EXPIRATION_DATE	TIMESTAMP		Yes	Expiration date
18		INFO_ID	INTEGER		Yes	Info Id

19		FK_SERVICE_ID	BIGINT		No	Fk service id
20		IS_BULK	VARCHAR2		Yes	Is bulk
21		IS_INTERNAL_SERVICE	VARCHAR2		Yes	Is internal service
		Purpose: This table is used to save all the configuration related names and values,				

Table No		6	Table Name		AGENCY_INFO	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	AGENCY_ID	Integer		No	Agency id
2		AGENCY_NAME	VARCHAR2	255	No	Agency Name
3		AGENCY_CODE	VARCHAR2	255	No	Agency code
4		STATUS	NUMBER		Yes	Agency status
5		IS_DELETED	NUMBER		Yes	Is agency deleted or not
6		CREATED_DT_TM	TIMESTAMP		Yes	Created dt tm
7		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified dt tm
		Purpose: This table is used to save request parameters data type for the methods				

Table No		7	Table Name		AGENCY_APP_SERVICE_AUTHENTICATION	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	AGENCY_APP_SERVICE_AUTHENTICATION_ID	Integer		No	Agency_app_service_authentication_id
2		AUTHENTICATION_TYPE_KEY	Integer		No	Authentication_type_key_i

		ID				d
3		AUTHENTICATI ON_TYPE_ID	Integer		No	Authenticatio n_type_id
4		SERVICE_ID	Integer		No	Service id
5		AUTHENTICATI ON_TYPE_KEY_ VALUE	VARCHA R2	255	Yes	Authenticatio n type key value
6		STATUS	NUMBER		Yes	Agency status
7		IS_DELETED	NUMBER		Yes	Is agency deleted or not
8		CREATED_DT_T M	TIMESTA MP		Yes	Created dt tm
9		MODIFIED_DT_ TM	TIMESTA MP		Yes	Modified dt tm
		Purpose: This table is used to provide agency app service authentication				

Table No		8	Table Name		AGENCY_APPLICATION	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		APPLICATION_I D	Integer		No	application_i d
2		AGENCY_ID	Integer		No	agency_id
3		APPLICATION_ NAME	VARCHA R2	255	Yes	application_n ame
4		APPLICATION_ DESCP	VARCHA R2	255	Yes	application_d escp
5		PERIOD_DAYS	Integer		Yes	Period days
6		STATUS	Integer		Yes	Agency status
7		IS_DELETED	Integer		Yes	Is agency deleted or not
8		CREATED_DT_T M	TIMESTA MP		Yes	Created dt tm

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9		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified dt tm
		Purpose: This table is used to provide agency application.				

Table No	9	Table Name	AGENCY_SERVICE_REG			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		REGISTRATION_ID	BigInt		No	Registration id
2		AGENCY_ID	Integer		No	Agency id
3		SERVICE_ID	Integer		No	Service id
4		REGISTRATION_DATE	Date		Yes	Registration date
5		EXPIRATION_DATE	Date		Yes	Expiration date
6		STATUS	NUMBER		Yes	Agency status
7		IS_DELETED	NUMBER		Yes	Is agency deleted or not
8		CREATED_DT_TM	TIMESTAMP		Yes	Created dt tm
9		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified dt tm
		Purpose: This table is used to provide agency service registration.				

Table No	10	Table Name	AUTHENTICATION_TYPE			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		AUTHENTICATION_TYPE_ID	Integer		No	Authentication type id
2		AUTHENTICATION_NAME	VARCHAR2	255	No	Authentication name
3		AUTHENTICATION_DESC	VARCHAR2	255	No	Authentication desc

4		STATUS	NUMBER		Yes	Agency status
5		IS_DELETED	NUMBER		Yes	Is agency deleted or not
6		CREATED_DT_TM	TIMESTAMP		Yes	Created dt tm
7		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified dt tm
		Purpose: This table is used to provide authentication type.				

Table No		11	Table Name		AUTHENTICATION_TYPE_KEY	
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		AUTHENTICATION_TYPE_KEY_ID	Integer		No	Authentication type key id
2		AUTHENTICATION_TYPE_ID	Integer		No	Authentication type id
3		AUTHENTICATION_KEY_NAME	VARCHAR2	255	Yes	Authentication key name
4		AUTHENTICATION_KEY_DATA_TYPE	VARCHAR2	255	Yes	Authentication key datatype
5		STATUS	NUMBER		Yes	Agency status
6		IS_DELETED	NUMBER		Yes	Is agency deleted or not
7		CREATED_DT_TM	TIMESTAMP		Yes	Created dt tm
8		MODIFIED_DT_TM	TIMESTAMP		Yes	Modified dt tm
		Purpose: This table is used to provide authentication type key.				

Table No		12	Table Name		INFORMATION_DETAIL		
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description	
1	Primary Key	INFO_ID	INTEGER		No	Information id	
2		INFO_TYPE	VARCHAR 2	50	No	Information type	
3		INFO_SUB_TYPE	VARCHAR 2	50	No	Information sub type	
4		INFORMATION_NAME	VARCHAR 2	50	Yes	Information name	
5		STATUS	INTEGER		Yes	Status	
6		IS_DELETED	INTEGER		Yes	Is deleted	
7		CREATED_DT_TM	TIMESTAMP		Yes	Createddate & time	
8		MODIFIED_DT_TM	TIMESTAMP		Yes	Modifieddate & time	
		Purpose: This table is used to provide information details.					

Table No		13	Table Name		MAIL_SERVER_SETTING		
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description	
1	Primary Key	MAIL_SERVER_SETTING_ID	INTEGER		No	Mail server setting id	
2		USER_NAME	VARCHAR 2	255	No	User name	
3		PASSWORD	VARCHAR 2	255	No	Password	
5		SMTP_HOST	VARCHAR 2	255	No	Smtp host	
6		SMTP_PORT	INTEGER		No	Smtp port	
7		FROM_ADDRESS	VARCHAR 2	255	No	From address	
8		IS_ACTIVE	BOOLEAN		Yes	Is active	
		Purpose: This table is used for mail server setting which is required to send mail from the application.					

Table No	14	Table Name	configuration			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	CONFIGURATION_ID	INTEGER		No	Configuration id
2		CONFIGURATION_NAME	VARCHAR2	255	Yes	Configuration name
3		CONFIGURATION_VALUE	VARCHAR2			Configuration value
		Purpose: This table is used for configurations.				

Table No	15	Table Name	METHOD_VALIDATION_RULE			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	ID	INTEGER		No	Id
2		VALIDATION_NAME	VARCHAR2	255	Yes	Validation name
		Purpose: This table is used to validate method				

Table No	16	Table Name	PROJECT_DETAILS			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	PROJECT_ID	INTEGER		No	Project id
2		PROJECT_NAME	VARCHAR2	255	Yes	Project name
3		USER_ID	INTEGER		Yes	User id
4		WS_DATA	VARCHAR2	10000	Yes	Ws data
		Purpose: This table is used to give the list of projects and its user.				

Table No		17	Table Name		PROVIDER AGENCY APP SERVICEREG		
Sr. No	Constraint s	Attribute Name	Data Type	Size	Nullable	Description	
1		PROVIDER_AGENCY_APP_SERVICEREG_ID	INTEGER		No	Provider agency app servicereg id	
2		APPLICATION_ID	INTEGER		No	Application id	
3		AGENCY_ID	INTEGER		No	Agency id	
4		SERVICE_ID	INTEGER		No	Service id	
5		SERVICE_REG_DATE	TIMESTAMP WITHOUT TIME ZONE		No	Service reg date	
6		SERVICE_REG_EXPIRY_DATE	TIMESTAMP WITHOUT TIME ZONE		Yes	service reg expiry date	
7		AGENCY_APP_SERVICE_AUTHENTICATION_ID	INTEGER		No	Agency app service authentication id	
8		STATUS	INTEGER		No	status	
9		IS_DELETED	INTEGER		Yes	Is provider agency deleted or not	
10		CREATED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		No	Created dt tm	
12		MODIFIED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		Yes	Modified dt tm	
		Purpose: This table is used to provide provider agency app servicereg.					

Table No	18	Table Name	ROLE			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1	Primary Key	ROLE_ID	INTEGER		No	Role id
2		ROLE_NAME	VARCHAR2	255	Yes	Role name
		Purpose: This table is used to determine the role of the users.				

Table No	19	Table Name	SERVER_LOCATION			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		SERVER_LOCATION_ID	INTEGER		No	Server Location id
2		SERVER_LOCATION_ID	VARCHAR2	255	Yes	Server Location Id
3		SERVER_PATH	VARCHAR2	255	Yes	Server Path
		Purpose: This table is used to provide server location				

Table No	20	Table Name	SERVICE_CATALOG			
Sr. No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		SERVICE_ID	INTEGER		No	Service id
2		SERVICE_CATALOG_NUMBER	VARCHAR2	255	Yes	Agency Name
3		DESCRIPTION	VARCHAR2	255	Yes	Agency code
4		END_POINT_URL	VARCHAR2		Yes	Agency status
5		AGENCY_ID	INTEGER		No	Is agency deleted or not

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6		INFO_ID	INTEGER		No	Created dt tm
7		STATUS	INTEGER		No	Modified dt tm
8		IS_DELETED	INTEGER		Yes	IsDeleted
9		CREATED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		Yes	Created Dt Tm
10		MODIFIED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		Yes	Modified Dt Tm
12		SERVICE_NAME	VARCHAR2	255	Yes	Service Nam
13		VERSION	VARCHAR2	255	Yes	Version
14		EXPIRATION_DATE	TIMESTAMP WITHOUT TIME ZONE		Yes	Expiration Date
		Purpose: This table is used to provide catalog for service.				

Table No	21	Table Name	cons_agency_app_servicereg			
Sr No	Constraints	Attribute Name	Data Type	Size	Nullable	Description
1		CONS_AGENCY_APP_SERVICE_REG_ID	INTEGER		No	cons_agency_app_servicereg_id
2		APPLICATION_ID	INTEGER		No	Application id
3		AGENCY_ID	INTEGER		No	Agency id
4		SERVICE_ID	INTEGER		No	Service id
5		AGENCY_ALLOWED_INFO_ID	TIMESTAMP		No	agency_allowed_info_id

			WITHOUT TIME ZONE			
6		SERVICE_REG_DATE			yes	service_reg_date
7		SERVICE_REG_EXPIRY_DATE	TIMESTAMP WITHOUT TIME ZONE		Yes	service reg expiry date
8		AGENCY_APP_AUTH_CODE	TEXT		yes	agency_app_auth_code
9		AGENCY_APP_AUTH_KEY	TEXT		yes	agency_app_auth_key
10		STATUS	INTEGER		No	status
11		IS_DELETED	INTEGER		Yes	Is provider agency deleted or not
12		CREATED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		No	Created dt tm
13		MODIFIED_DT_TM	TIMESTAMP WITHOUT TIME ZONE		Yes	Modified dt tm
14		AGENCY_APP_AUTH_PRIVATE_KEY	TEXT		yes	agency_app_auth_private_key
		Purpose: This table is used to provide cons agency app servicereg				

3.3 Diagrams

3.3.1 Class Diagram

3.3.1.1 Base Controller Class Diagram

The Base controller class has multiple functionality which is used to support tool to perform operation.

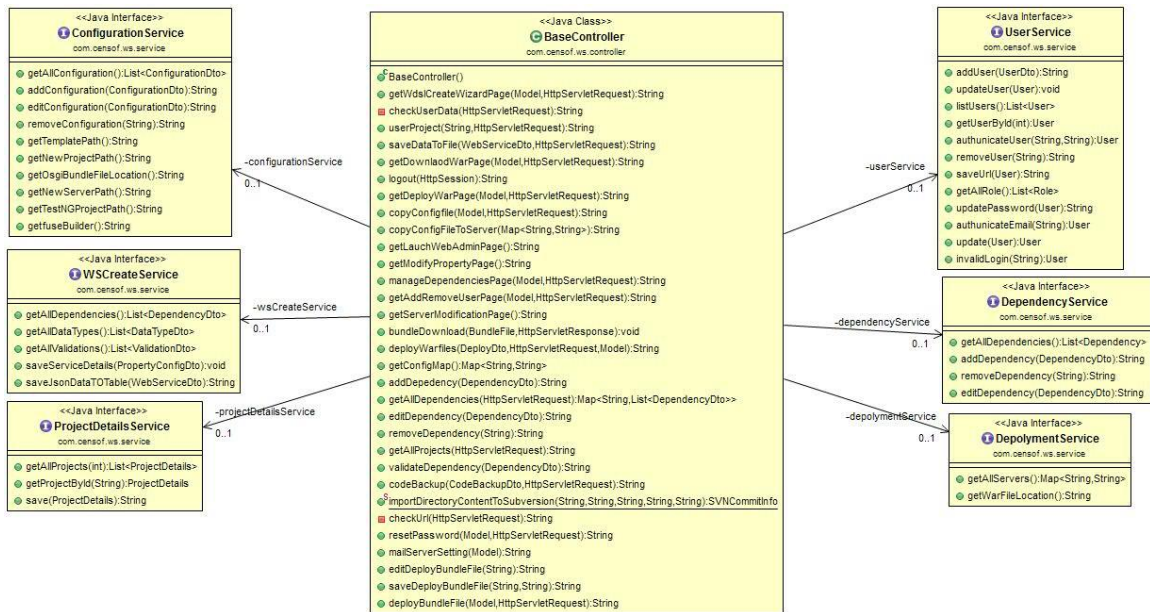


Diagram 1

3.3.1.2 Configuration Mange Controller Class Diagram

The configuration mange controller class has functionality to configure the path.

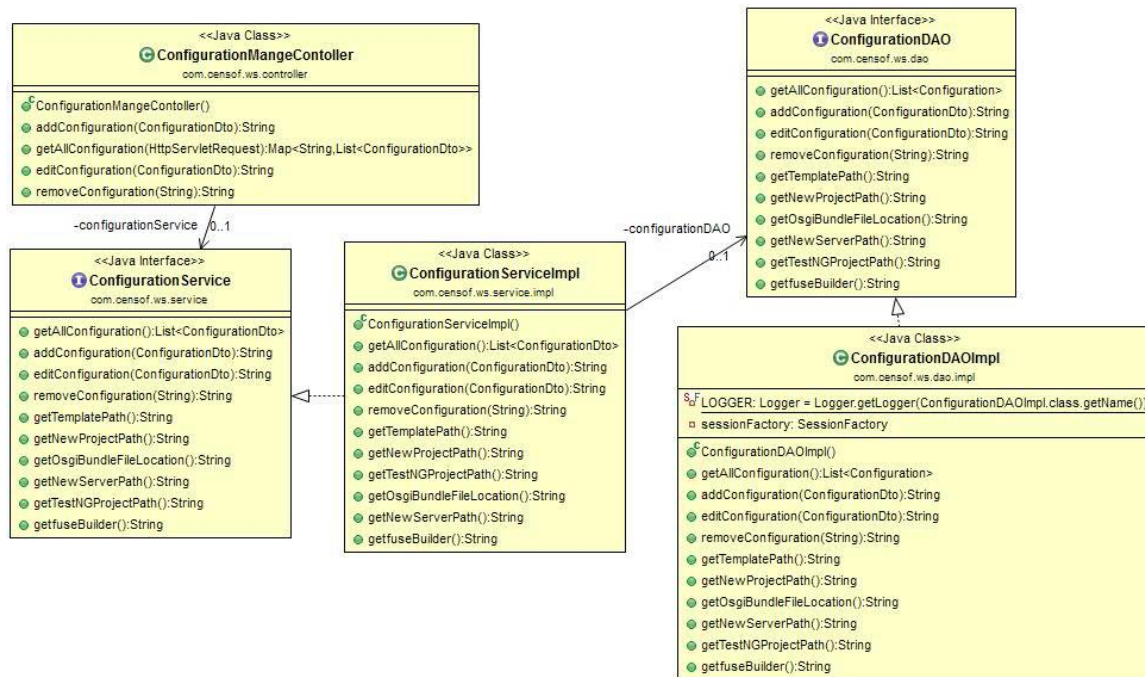


Diagram 2

3.3.1.3 Mail Server Setting Controller Class Diagram

The Mail server setting controller class is used to add and edit mail sever operation.

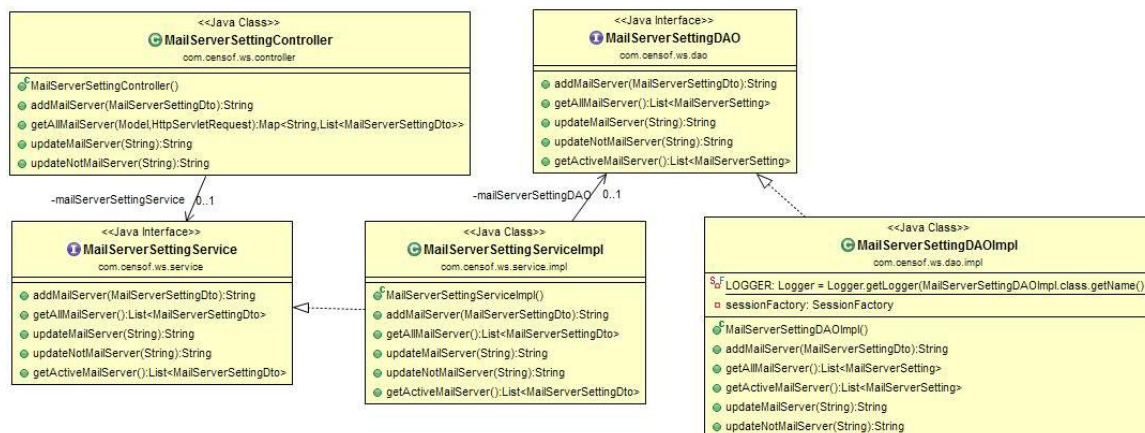


Diagram 3

3.3.1.4 Upload Controller Class Diagram

The upload controller class is used to upload and delete the template file.

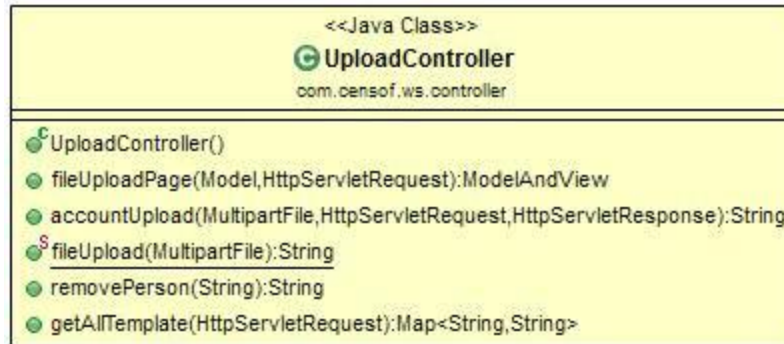


Diagram 4

3.3.1.5 User Controller Class Diagram

The User controller class is used to add, edit and delete the users based on role.



Diagram 5

3.3.1.6 WS Create Controller Class Diagram

The WS controller class is used to generate source code for REST and SOAP web service.

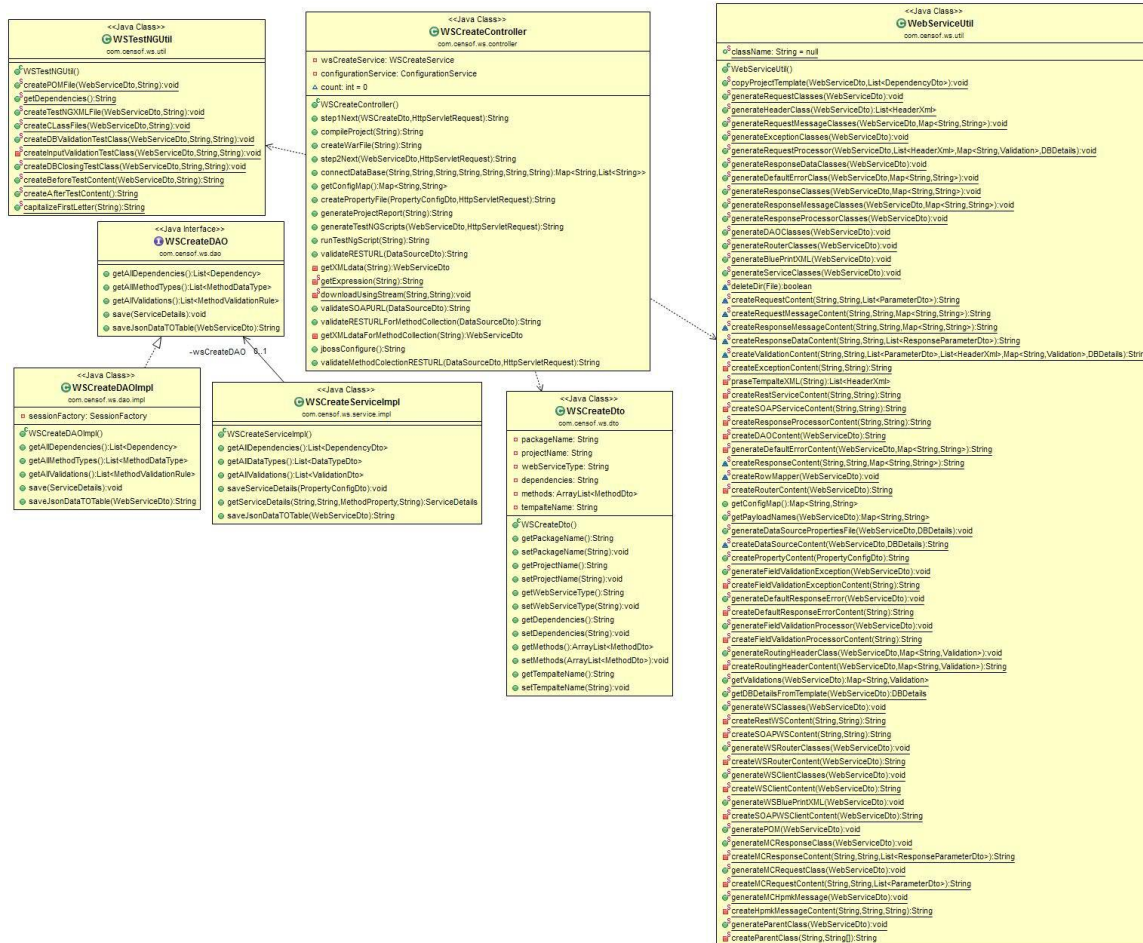


Diagram 6

3.4 Sequence Diagram

Below sequence diagram explains the flow of generating source compiling and creating bundle file

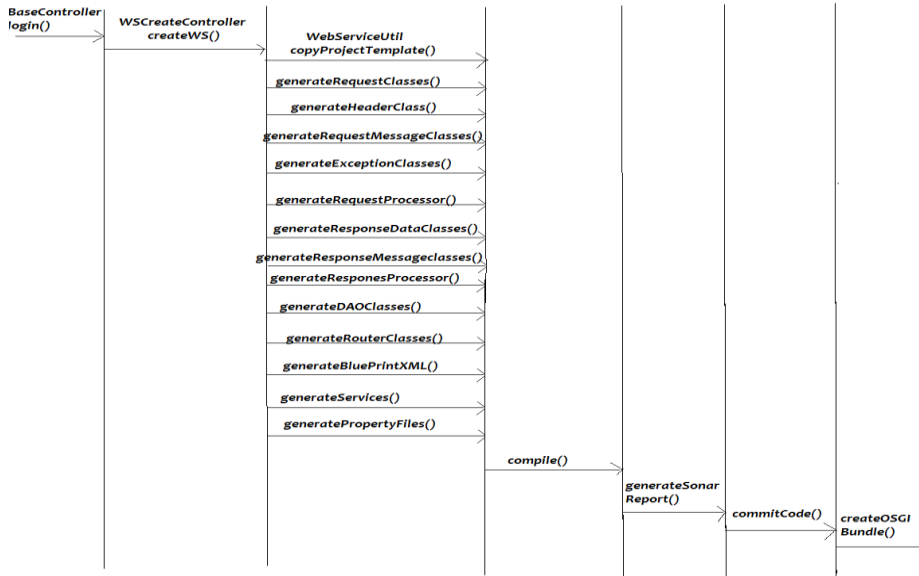


Diagram 5

3.5 Data Flow Diagrams (DFD)

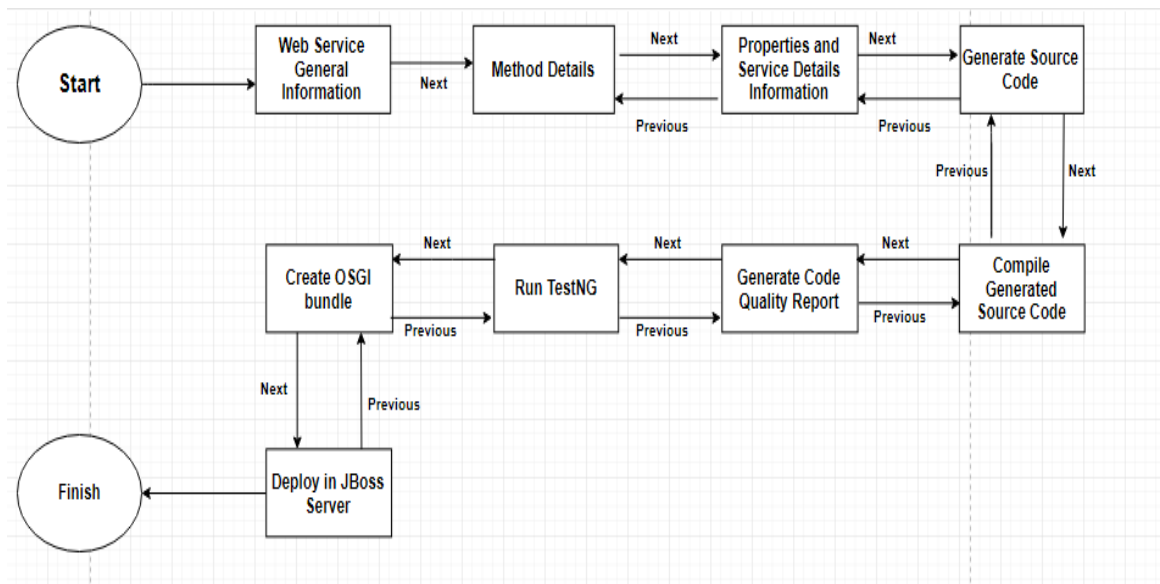


Figure 1.22

4 References

Sl No	Reference Document Name	Description
1	SRS	WebService Generator and Deployment Tool_SRS_V2_20181011.doc

5 Appendix

5.1 Template File

```
<xml>
  <message>
    <header>
      <applicationCode>
        <isMandatory>true</isMandatory>
        <isNumeric>>false</isNumeric>
        <isAlphaNumeric>true</isAlphaNumeric>
      </applicationCode>
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  </message>
</xml>
```



```

        </resMessageID>
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        </transactionChecksum>
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    <errorName>hpmk_error</errorName>

    <requestDataPayloadName>hpmk_message_payload</requestDataPayloadName>
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    <responseDataPayloadName>hpmk_response_data</responseDataPayloadName>

```

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</message>
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  <validation>
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  <validation>
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```

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        <errorDesc>All_Targets_Unavailable</errorDesc>
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    </validation>
    <validation>
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    </validation>
    <validation>
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        <errorCode>27</errorCode>
        <errorDesc>Version or Service is not available</errorDesc>
    </validation>
</validations>
</xml>
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