Data Integration Control Center

Name: Tanmay Kulkarni

Project Giude: Kalpana Dhende

Class: MCA-III

Div: A

ACKNOWLEDGEMENT

I take this opportunity to express my deep sense of gratitude towards my project guide **Kalpana Dhende** for her encouragement, guidance and supervision of my project work during the year. I was fortunate to have used the computers in the college lab.

I am very much obliged of Dr. Manasi Bhate, for her kind help, throughout the project.

I take this opportunity to thank Director Dr. Vikas H. Inamdar for permitting me to use the facilities available in the institution for my project work. I would also like to thank Head, Department of Computer Science, Dr. Santosh Deshpande.

Tanmay Kulkarni

Index

Chapter 1

INTRODUCTION

1.1 Company Profile

Name: Kanaka Software Consulting Private Ltd.

Location: #302 Indira Icon, Right Bhusari Colony, Paud Road, Pune– 411038 INDIA.

Project Guide Name: Aniket Kulkarni.

Description:

The Organization Kanaka Software Consulting is an independent company that prides itself on building delightful Software Development, mobile application development, website development and corporate training. It possesses not only the latest technology gadgets but also the most knowledgeable and experience hands to offer most user friendly customized solutions.

We are headquartered in Pune, India. The world we live in is changing constantly at a rapid speed. And this change, in turn, is creating a huge demand for better technology solutions. We focus on

creating software for environmental data evaluation, including custom solutions for specific needs. We believe in the power of creativity. We take a creative approach to address the needs of a better tomorrow. Our philosophy is to power creative solutions.

Kanaka services enabled a leading Business Process Management (BPM) consultancy in the US, with leading global brands in Pharmaceuticals, Energy and Consumer Products sector in their portfolio, to continue focus on their core competency which is consultancy, while Kanaka brought in the expertise to engineer, develop and manage their product.

Area of Expertise:

The visualization concepts can be considered domain independent. However, we have built knowledge bases in following domains

- Website Hosting Services
- Professional Website Designing
- Mobile Application Development

Technologies Stack:

- Open Source Technologies
- Microsoft Technologies
- Business Productivity Solutions
- Cloud
- Test Automation Tools
- Mobile App Development

1.2 Existing System and Need for System

There is no Existing System of **Data Integration Control Center.**

Need of **Data Integration Control Center** is when a client comes with the raw data(files) , unsorted data(files) , then **Data Integration Control Center** Extracts, Validates, Transforms and Loads the raw data into SQL database.

1.3 Scope of Work

The proposed project "Data Integration Control Center" is web application. This application is an interface to connect generic integration framework. The application can be used for ETL (Extraction, Transformation and Load). This Application can be used to integrate two different Application with different data storing format (e. g one Application may use NoSQL Databse and another could be RDBMS), so "Data Integration Control Center" Responsible for following things:

1) Providing Environment for execution of integration process
2) Real-time monitoring of Integration Process and execution history.
3) Scheduled and On-Demand execution of Integration process
4) It facilitate execution of PDI (Pentaho Data Integration) Transformation and Jobs.

We are Integrating two application using this project that is Kvisulize (Visualization tool) with Torqus SCM (supply chain management) for achieving this integration we need to follow following steps:

1) Data analysis of this two systems

2) Identifying different activities in the process

3) Creating Transformation/jobs

4) Setting up Integration process with "Data Integration Control Center"

The application allows User to schedule an Integration process with cron expression, or a User can execute a Integration process on a demand.

1.4 Operating Environment – Hardware and Software

Hardware:

Computer: To handle Administrative Work Admin will require Desktop version of an Application.

Mobile: User and supervisor will use Mobile version of an application to perform their task.

Software:

Webstorm:

It is an open-source software rapid development web framework, for use in building dynamic web sites. Webstorm is loosely based on the popular model–view–controller (MVC) development pattern.

WebStorm helps you write code better thanks to the smart code completion, on-the-fly error detection, powerful navigation and refactoring!

The IDE provides first-class support for JavaScript, Node.js, HTML and CSS, as well as their modern successors. Supported frameworks include AngularJS, React, Meteor and more.

Source Tree:

SourceTree is a powerful Git and Mercurial desktop client for developers on Mac or Windows. Fully-Powered DVCS SourceTree simplifies how you interact with Git and Hg repositories so you can focus on coding. Manage all your repositories, hosted or local, through SourceTree's simple interface. Perfect for Newcomers Simplify DVCS for your team. SourceTree can bring everyone up to speed with Git and Mercurial.

Commit, push, pull and merge changes easily with a click of a button Organize your repos with the intuitive bookmarks window

Visualize how your work changes over time with SourceTree's log view Powerful Enough for Experts Make advanced Git and

Mercurial developers even more productive. Review your outgoing and incoming changesets, cherry-pick between branches, patch handling, rebase, stash, shelve, and much more.

Eclipse:

Eclipse is an Integrated Development Environment (IDE) used in computer programming, and is the most widely used Java IDE.

It contains a base work space and an extensible plug-in system for customizing the environment. Eclipse is written mostly in Java and its primary use is for developing Java applications, but it may also be used to develop applications in other programming languages via plug-ins,
including: C, C++,COBOL, JavaScript, Perl, PHP, Python.

1.5 Detail Description of Technology Used

AngularJS: AngularJS (commonly referred to as "Angular.js" or "AngularJS 1.X") is a JavaScript-based open source front-end web Application Framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing Single Page Application. The JavaScript components complement Apache Cordova, the framework used for developing cross-platform mobile apps. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model–view–controller (MVC) and model–view–viewmodel (MVVM) architectures, along with components commonly used in rich Internet applications. In 2014, the original AngularJS team began working on Angular (Application Platform).

The AngularJS framework works by first reading the HTML page, which has embedded into it additional custom tag attributes. Angular interprets those attributes as directives to bind input or output parts of the page to a model that is represented by standard JavaScript

variables. The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic JSON resources.

Bootstrap: (Front-End Framework) It is a free collection of tools for creating a websites and web applications. It contains HTML and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

HTML5: It is a markup language used for structuring and presenting content on the World Wide Web. It is the fifth and current version of the HTML standard.

CSS: Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup

language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML.

SQL: Structured Query Language is used to communicate with a database. SQL statements are used to perform tasks such as update data on a database, or retrieve data from a database. Some common relational database management systems that use SQL are: PostgreSQL, Server Oracle, Sybase, Microsoft SQL Server , Access, etc.

Chapter 2

PROPOSED SYSTEM

2.1 Proposed System

The Data Integration Control System is an automated system. Through our software a client can provide a raw data I. e a .kjb (Kettle Extraction Transformation Transport Load Environment) files which contains raw data. The client can set the raw data I.e. .kjb files for the validations. The system creates a Run time execution environment for the integration process to execute. The Integration process has activities which depend on the client requirement, through which a system executes a process step by step. The system transforms the .kjb file into .ktr file (KTR files are 3D Image Files primarily associated with KeyTruss (Keymark Enterprises, LLC) PENTAHO) and then it stores the data into the postgresql. The system also provides the scheduler for automate the execution of the integration process.

The system has following advantages:-

1) User friendly Interface.
2) Validations for the files.
3) Fast access to the database.

4) Less Error.

5) Fast execution of the system.

6) Automate the integration system through the scheduler.

7) Transformation the data through the steps.

2.2 Objectives of System

1) The System to be menu-driven and must have the user friendly graphical user interface.

2) When a Client needs to transform and validates the Raw data, that raw data should be stored in a kjb files.

3) The system should fetch the data and validate it properly according to the requirements.

4) The system should returns the validated data.

5) The system provides a mechanism for storing a request for validations for a file, i. e the when one request comes asynchronously and at that time the system is validating another file, then the system storing a request in one table and creates a thread dynamically hitting it all the time for accepting a request for validations.

6) The user can set the schedule for execution of the process. i. e the user can set the execution on every day or every week or every month. Or he can do execution of process whenever he wants i.e manually.

7) The system should provide the notification for the execution of the process.

8) The system executes the integration process after fetching, validating and scheduling a raw data.

2.3 User Requirements

1) Basic requirement is to transform the raw data files into sql Database.

2) Provide an interface to prepare a Runtime Execution Environment for Job Scheduling.

3) The user should have a authority to setup an activity.

4) Activity must run by itself.

5) Each activity must have a mechanism that activates/executes the next activity.

6) Files can be loaded by 3rd Party by their place.

7) Loading the execution files.

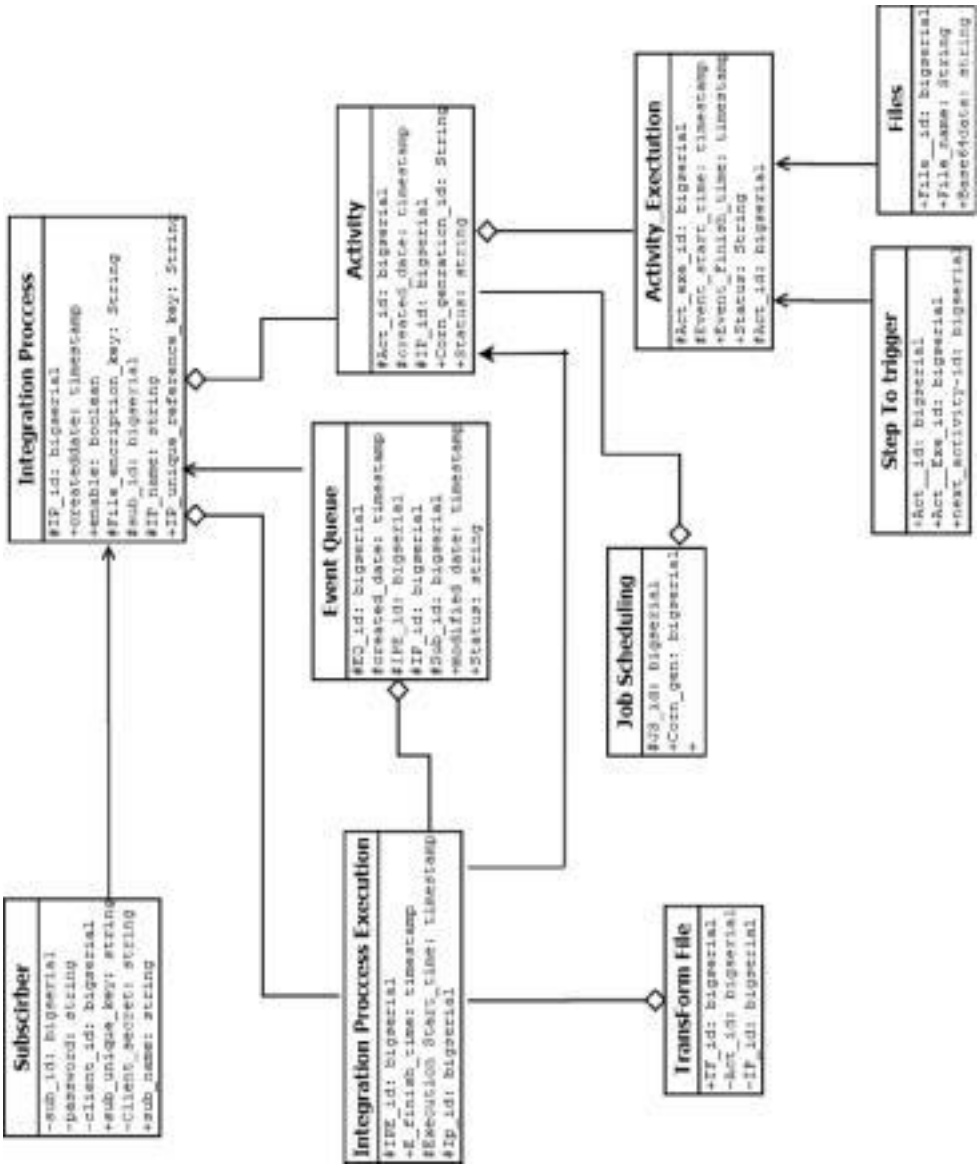
8) The file must be validate.

9) Transforming the files one into another to use.

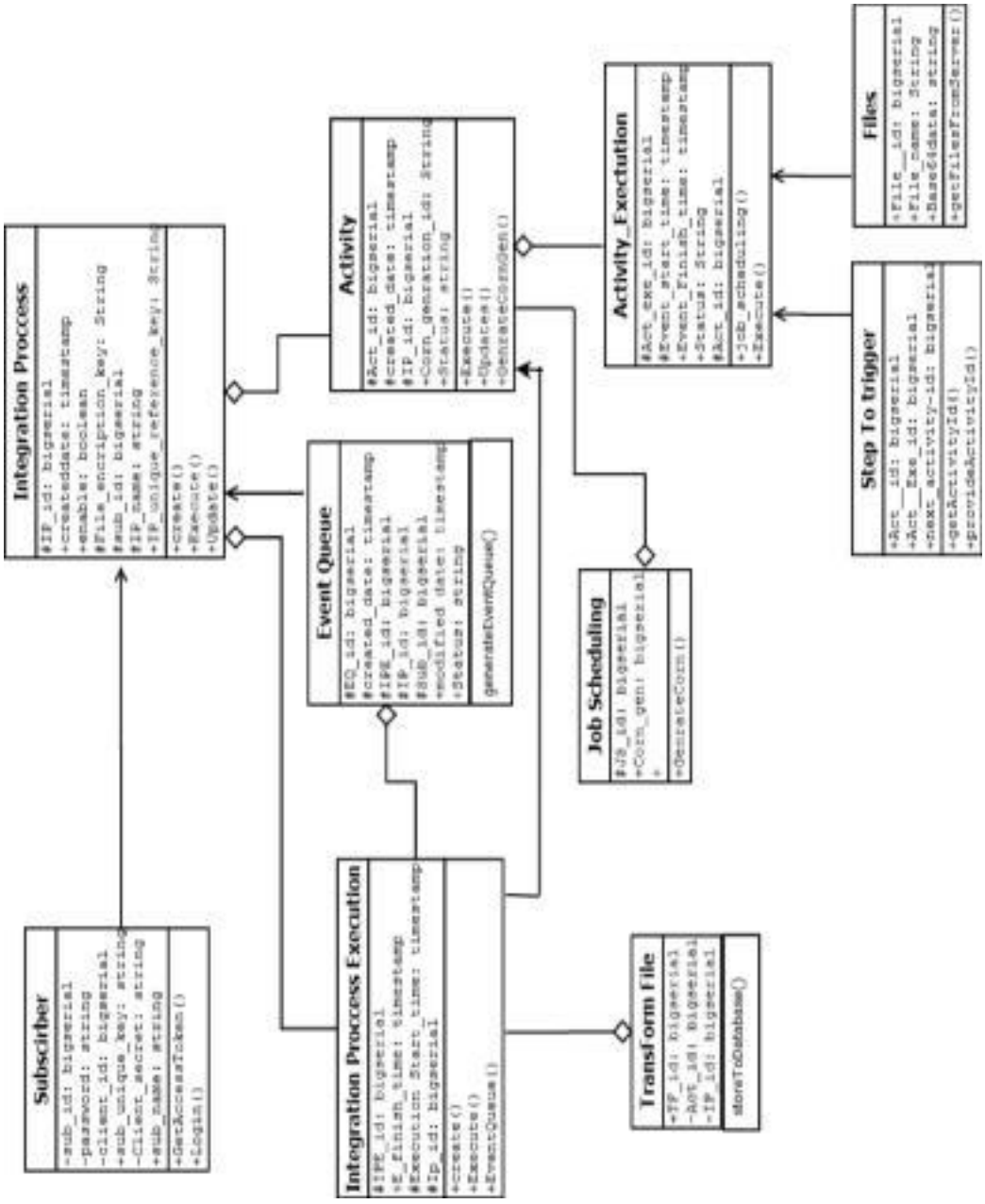
Chapter 3

ANALYSIS & DESIGN

3.1 Object Diagram

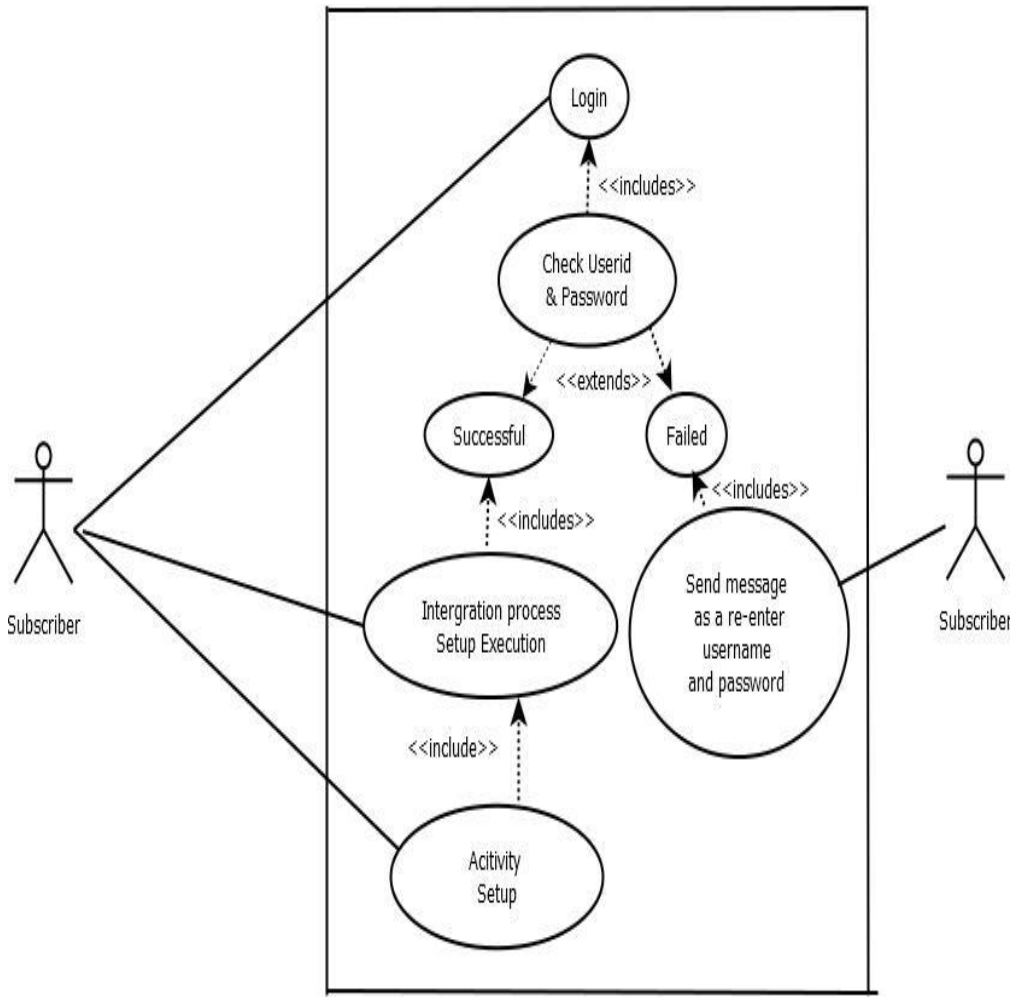


3.2 Class Diagram

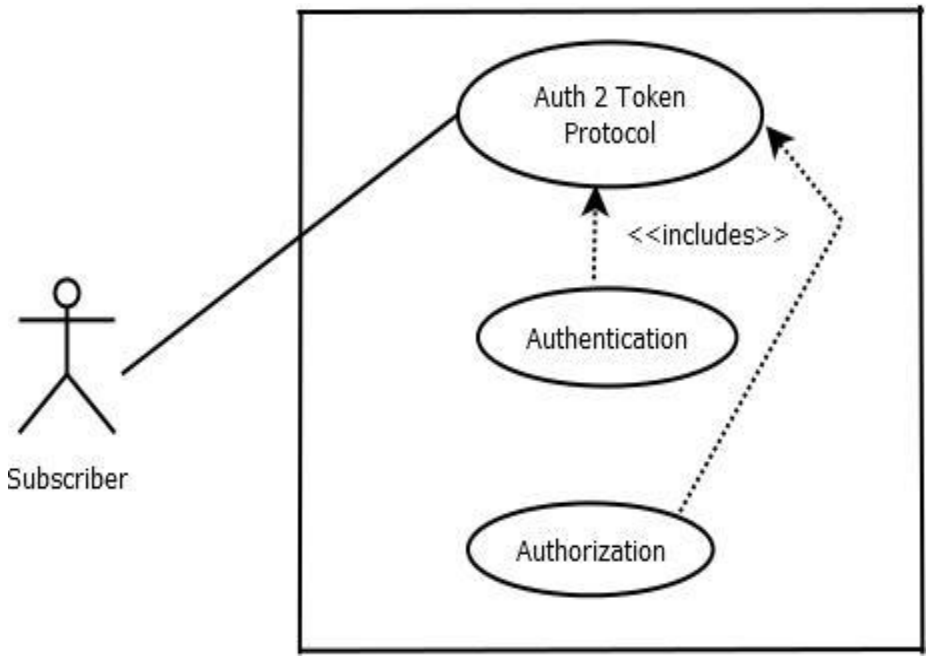


3.3 Use Case Diagrams

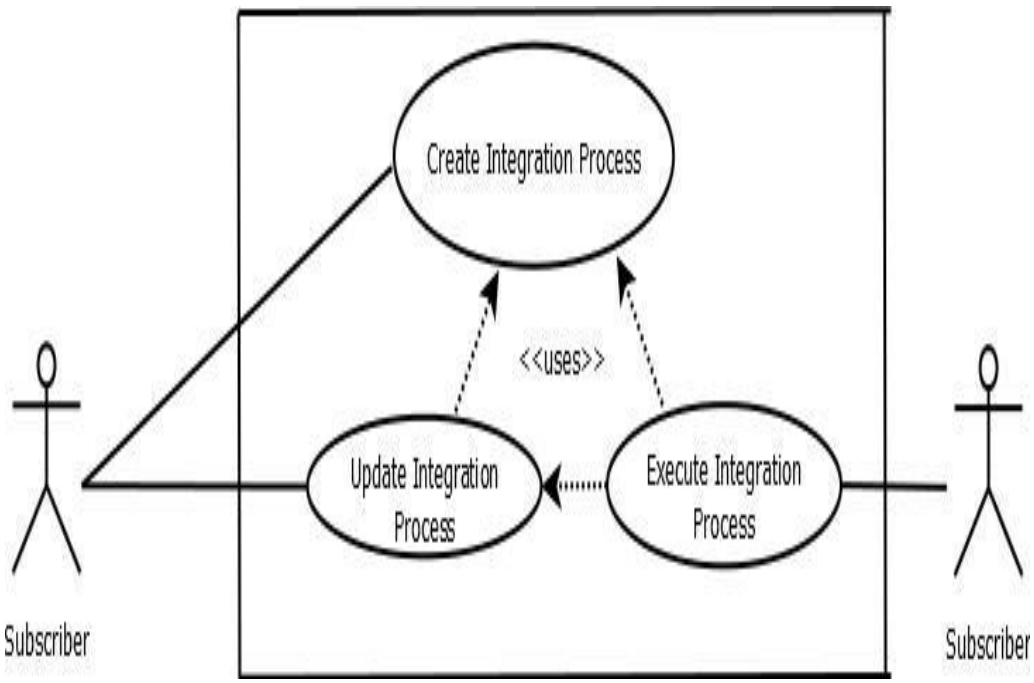
3.3.1 System use case



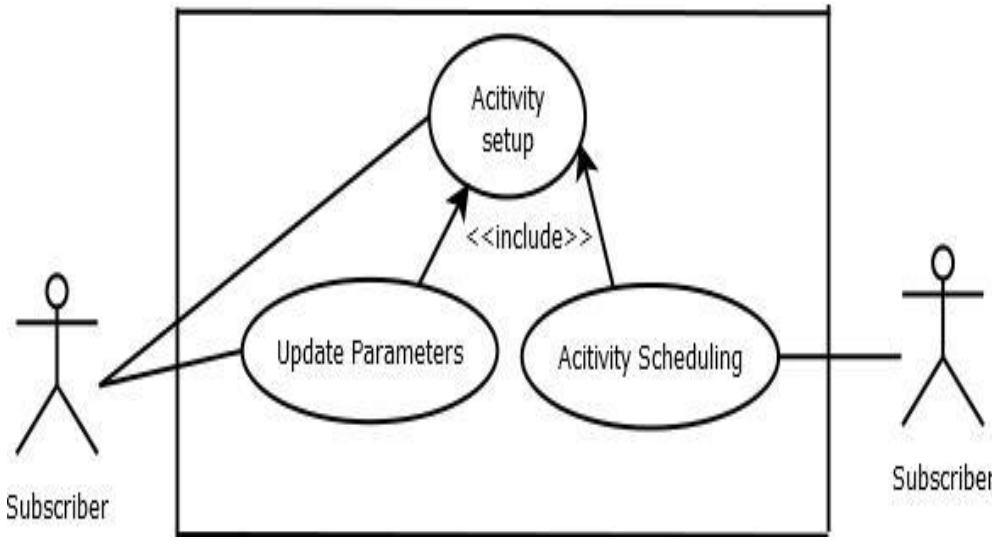
3.3.2 Auth2Token use case



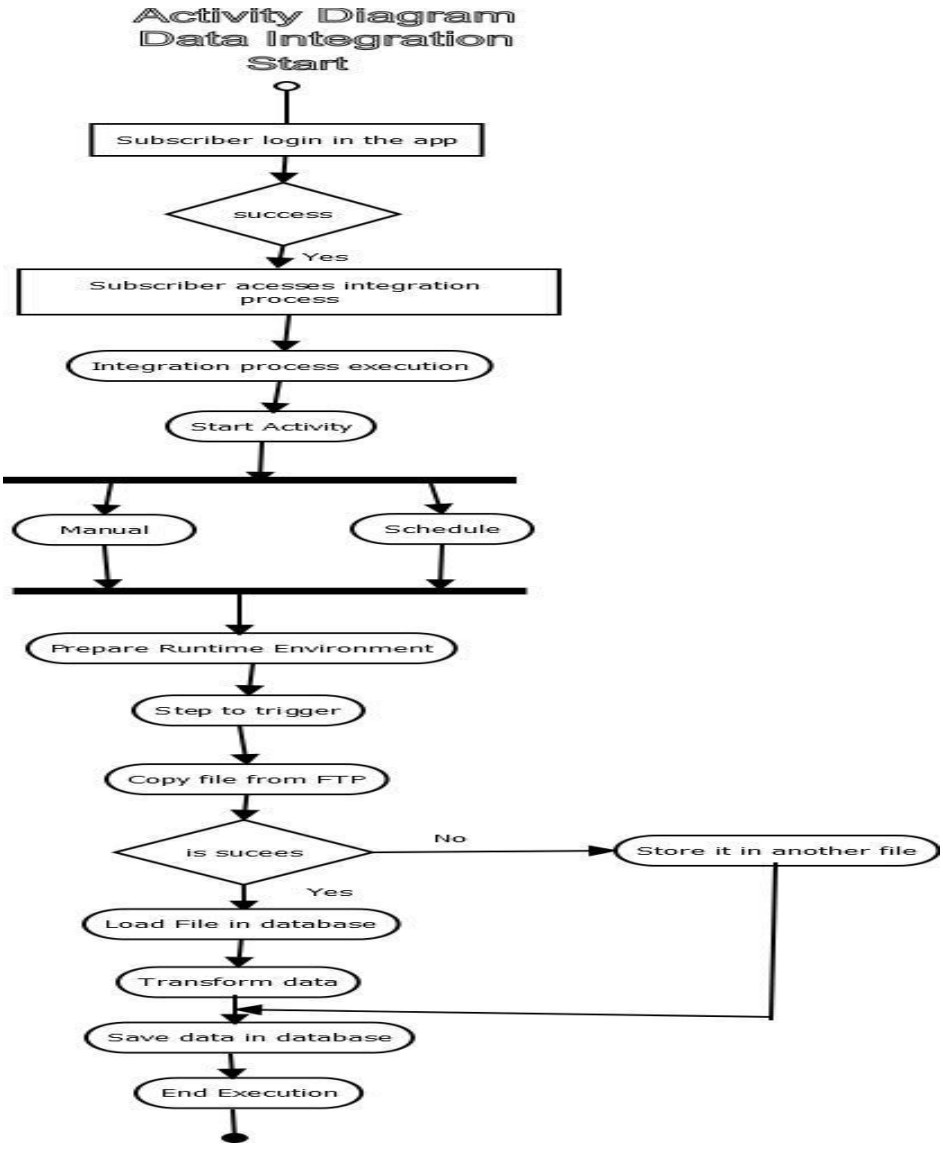
3.3.3 Integration Process use case

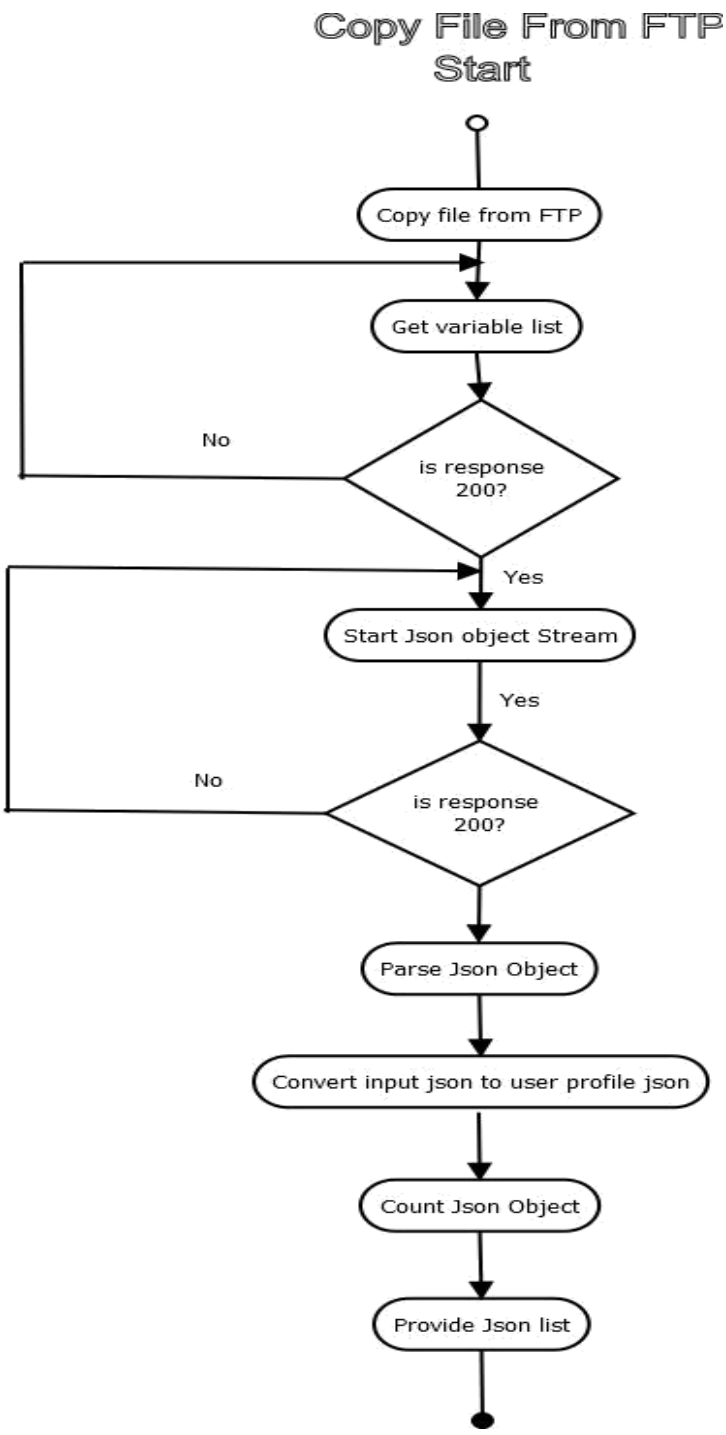


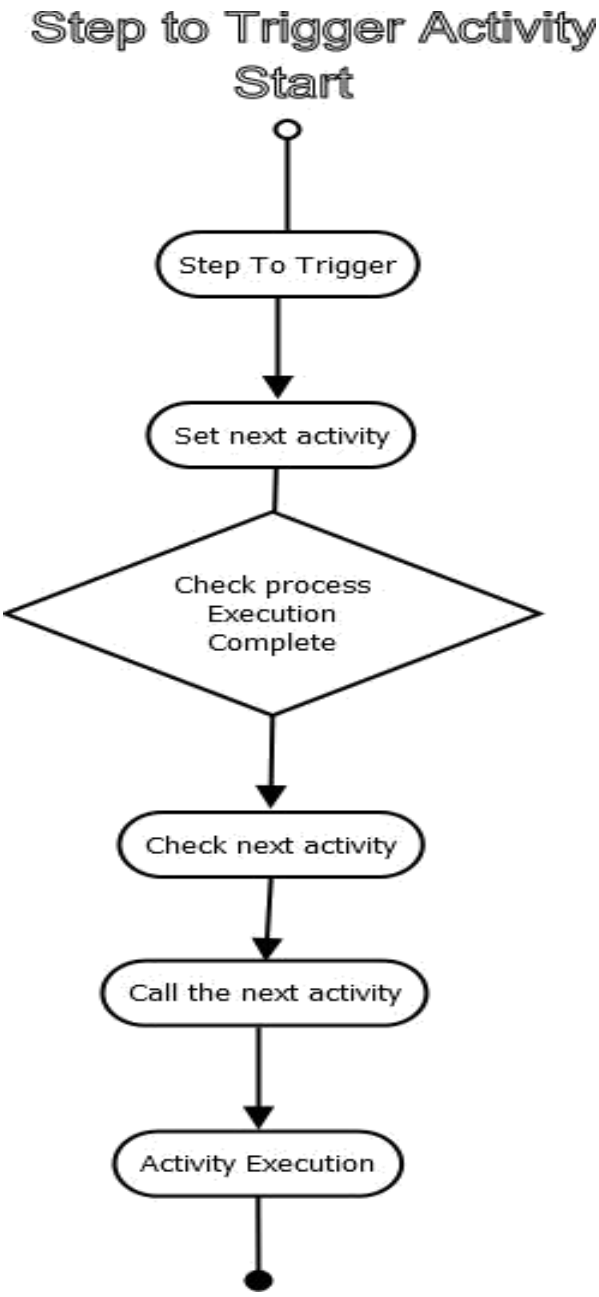
3.3.4 Activity Execution use case

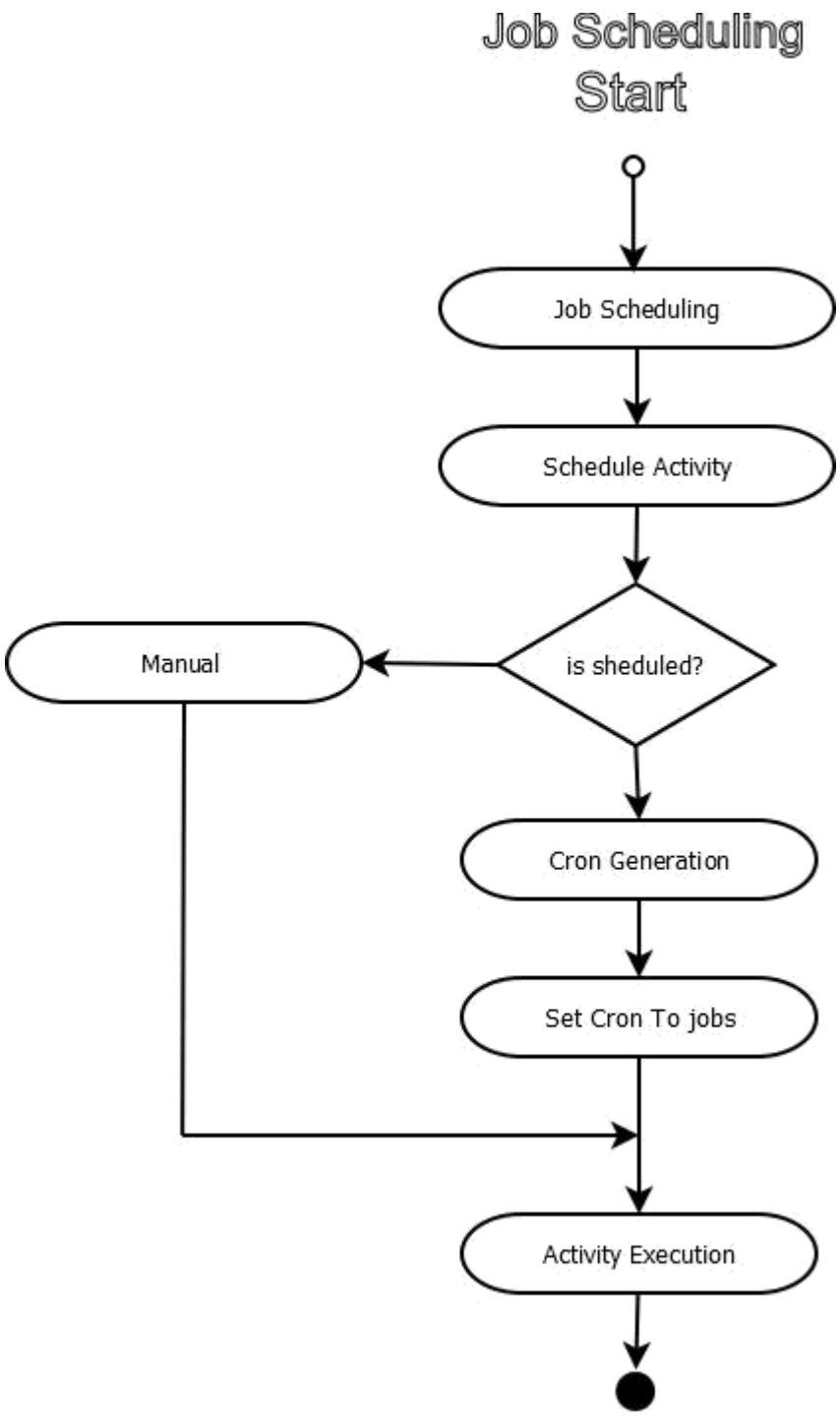


3.4 Activity Diagram



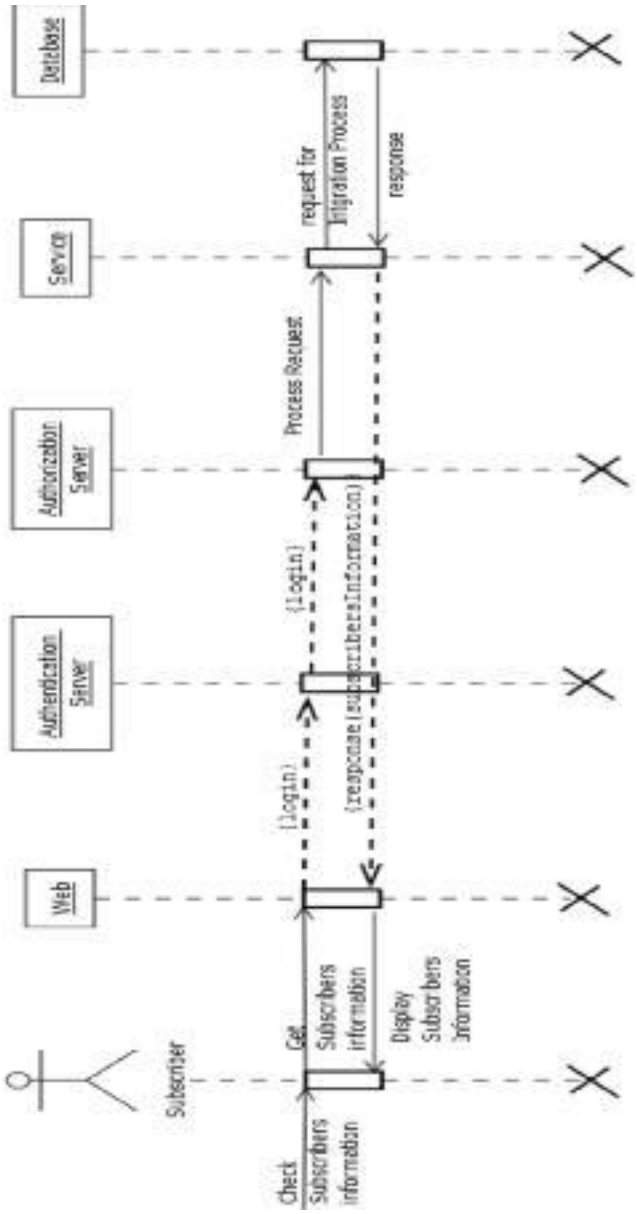

Copy File From FTP
Start
Copy file from FTP
Get variable list
No
is response 200?
Yes
Start Json object Stream
Yes
No
is response 200?
Parse Json Object
Convert input json to user profile json
Count Json Object
Provide Json list


Step to Trigger Activity
Start
Step To Trigger
Set next activity
Check process
Execution
Complete
Check next activity
Call the next activity
Activity Execution

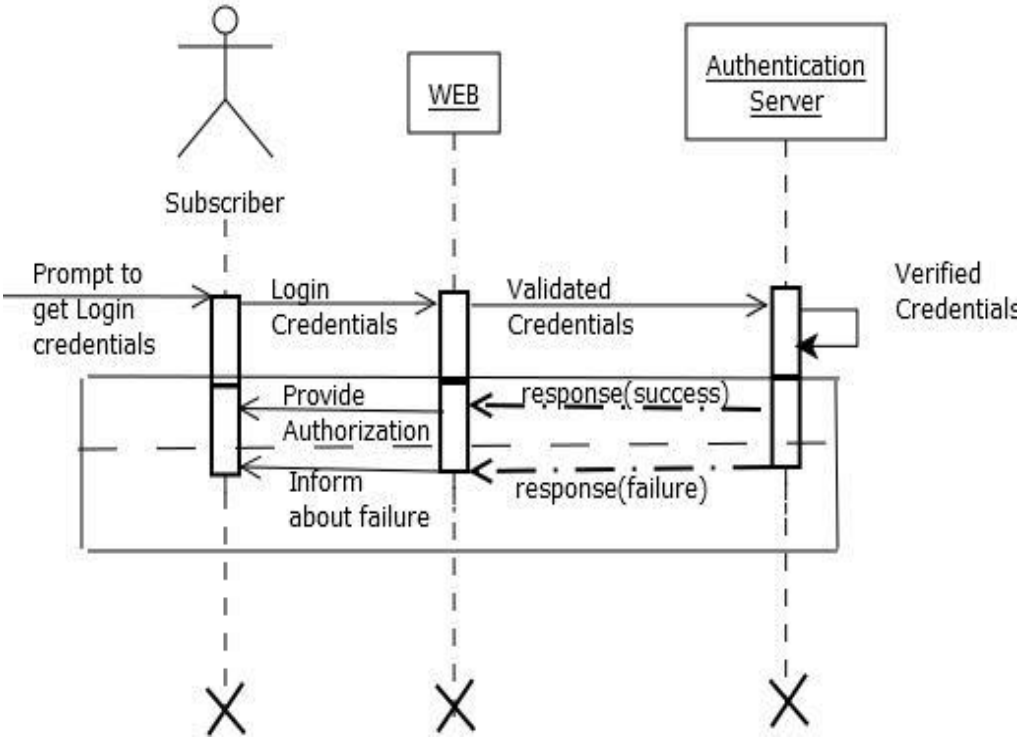

Job Scheduling
Start
Job Scheduling
Schedule Activity
is sheduled?
Manual
Cron Generation
Set Cron To jobs
Activity Execution

3.5 Sequence Diagram

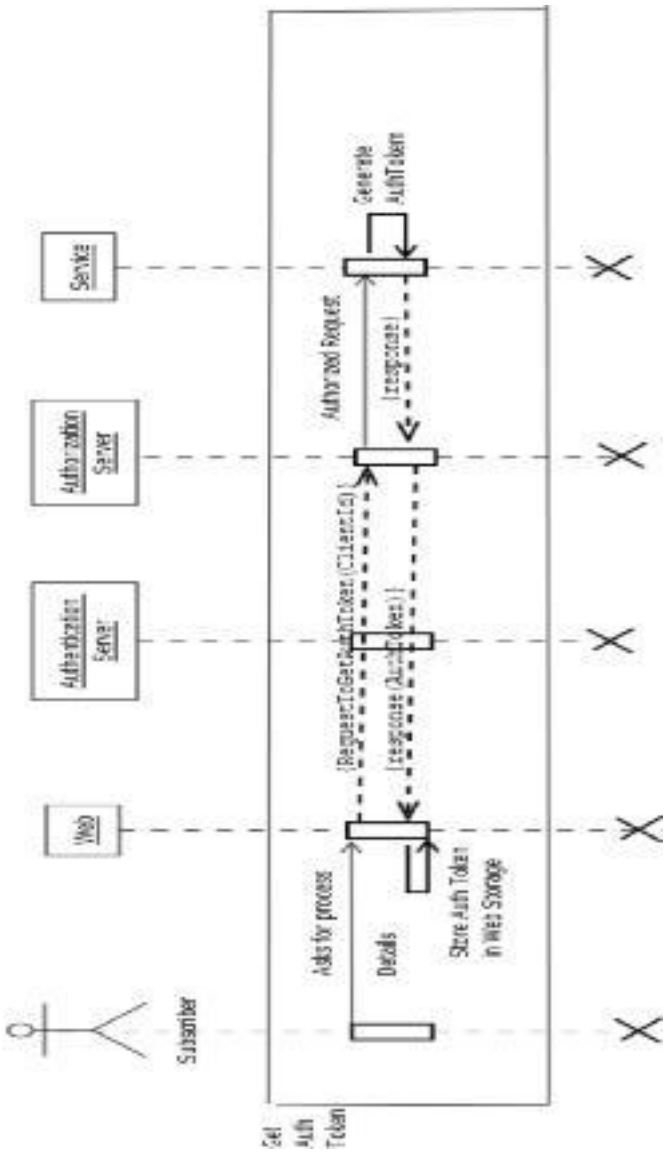
3.5.1 System's Sequence Diagram



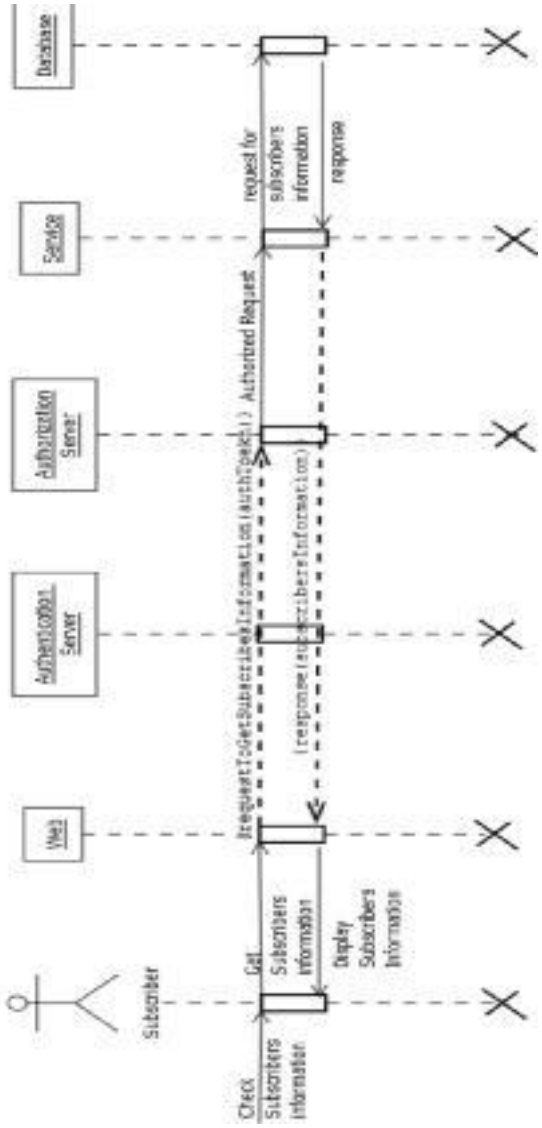
3.5.2 Login Sequence Diagram



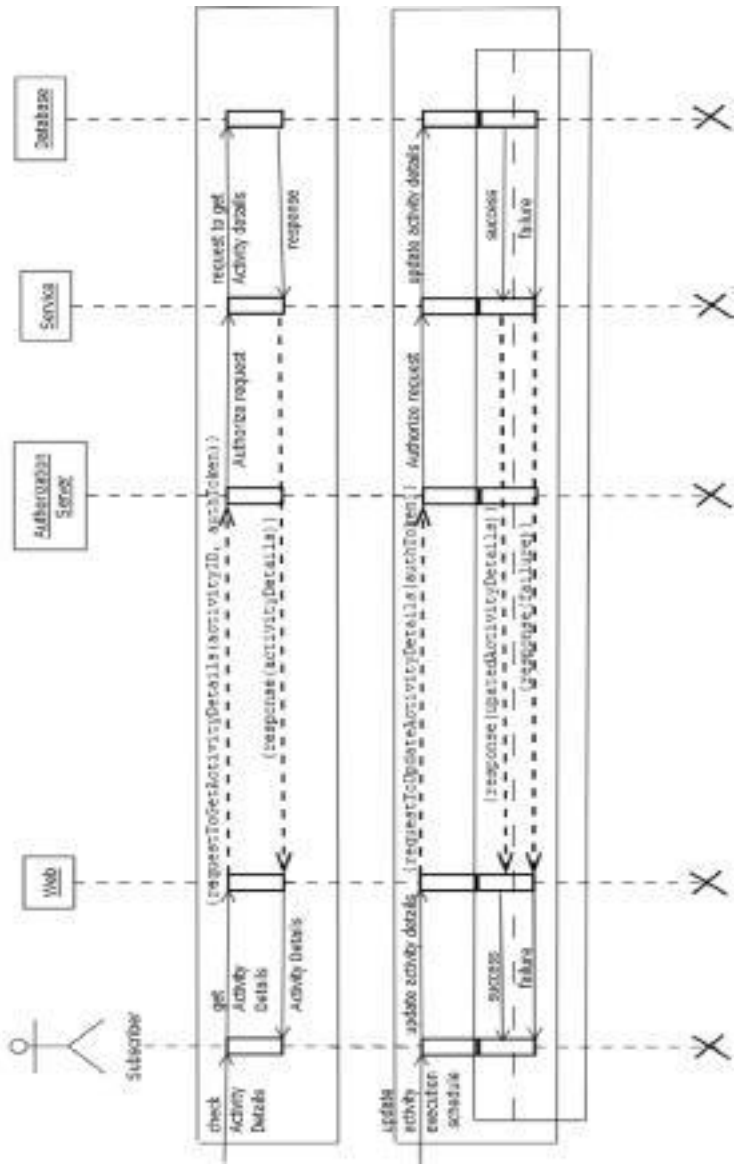
3.5.3 Get Auth Token Sequence Diagram



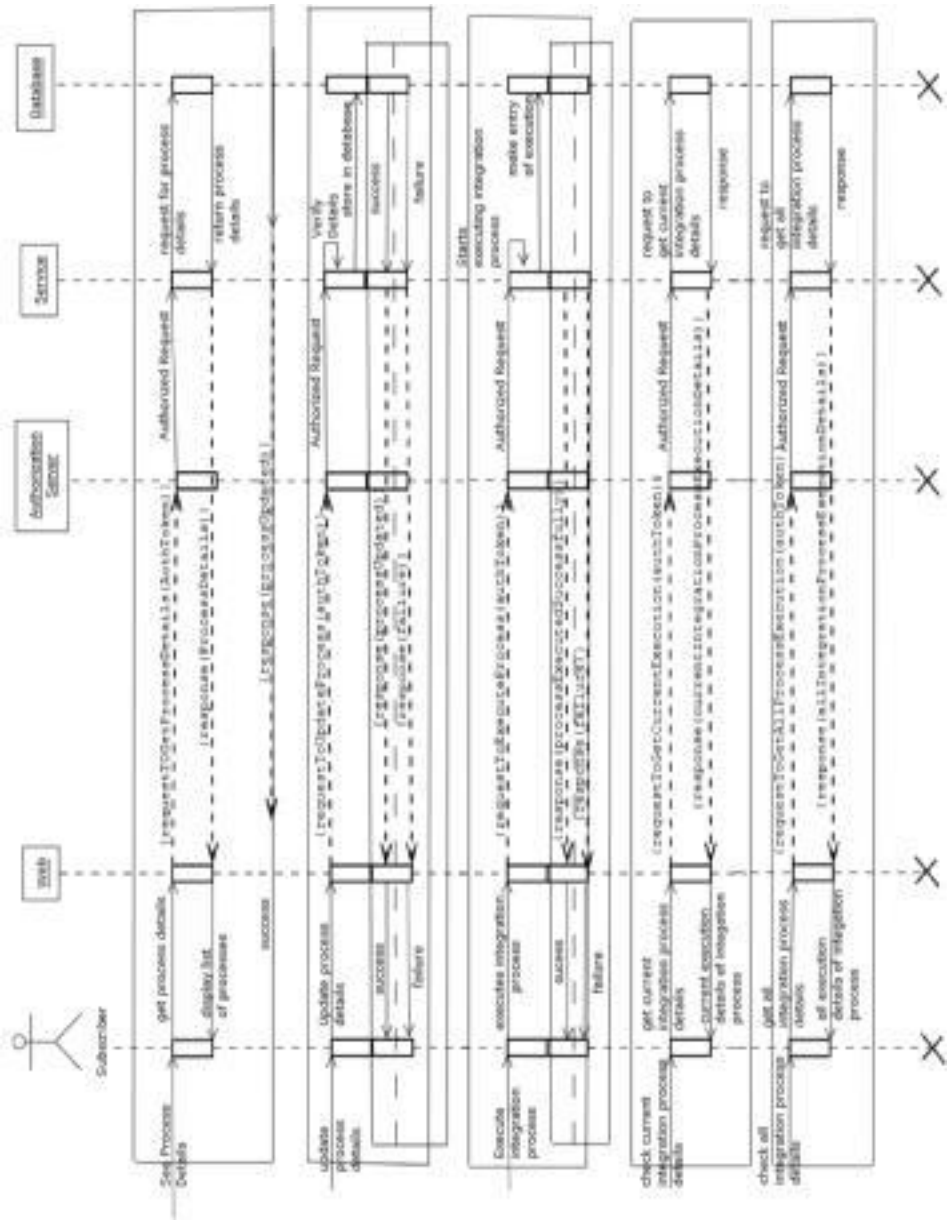
3.5.4 Get Subscriber Sequence Diagram



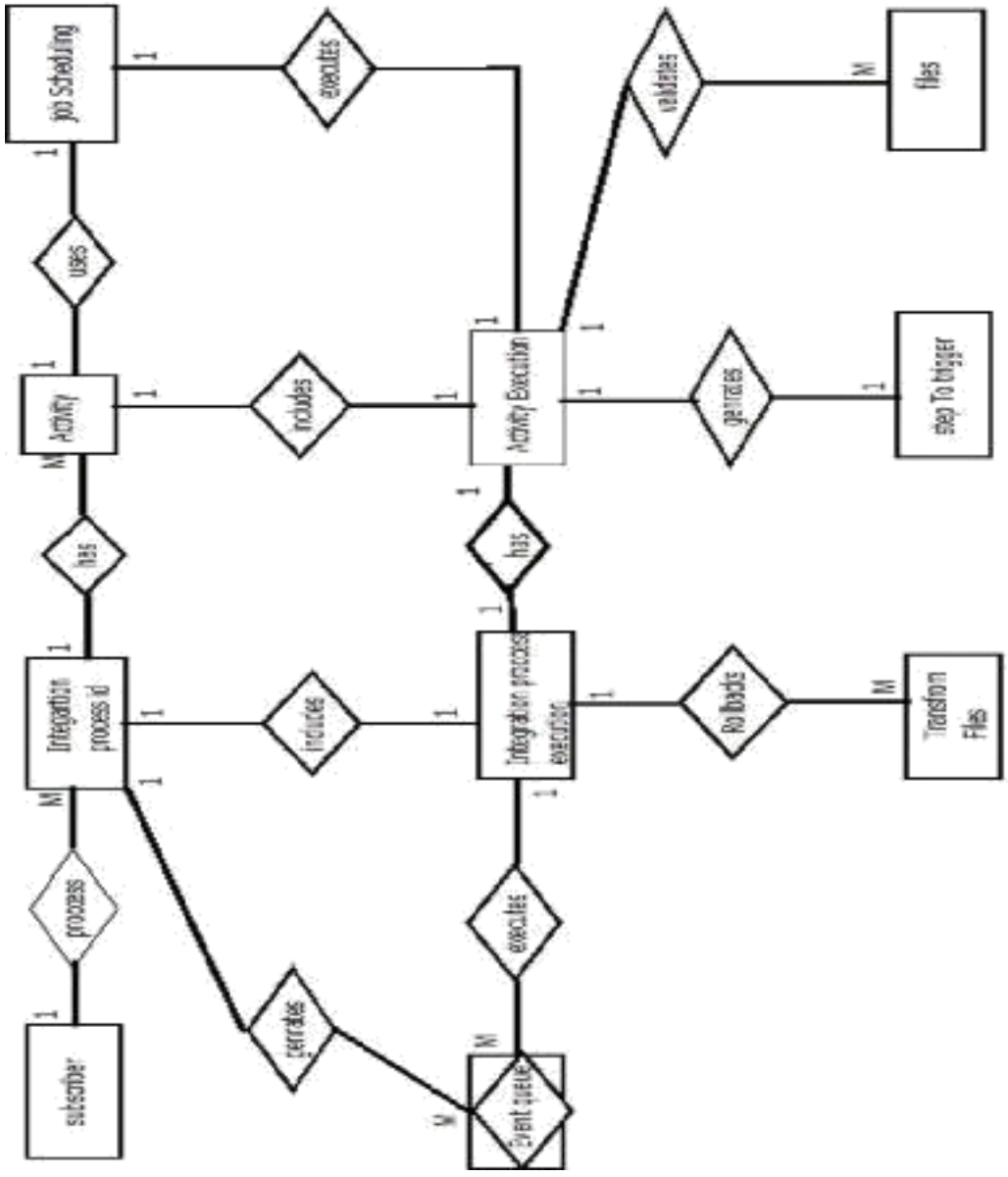
3.5.5 Activity Sequence Diagram



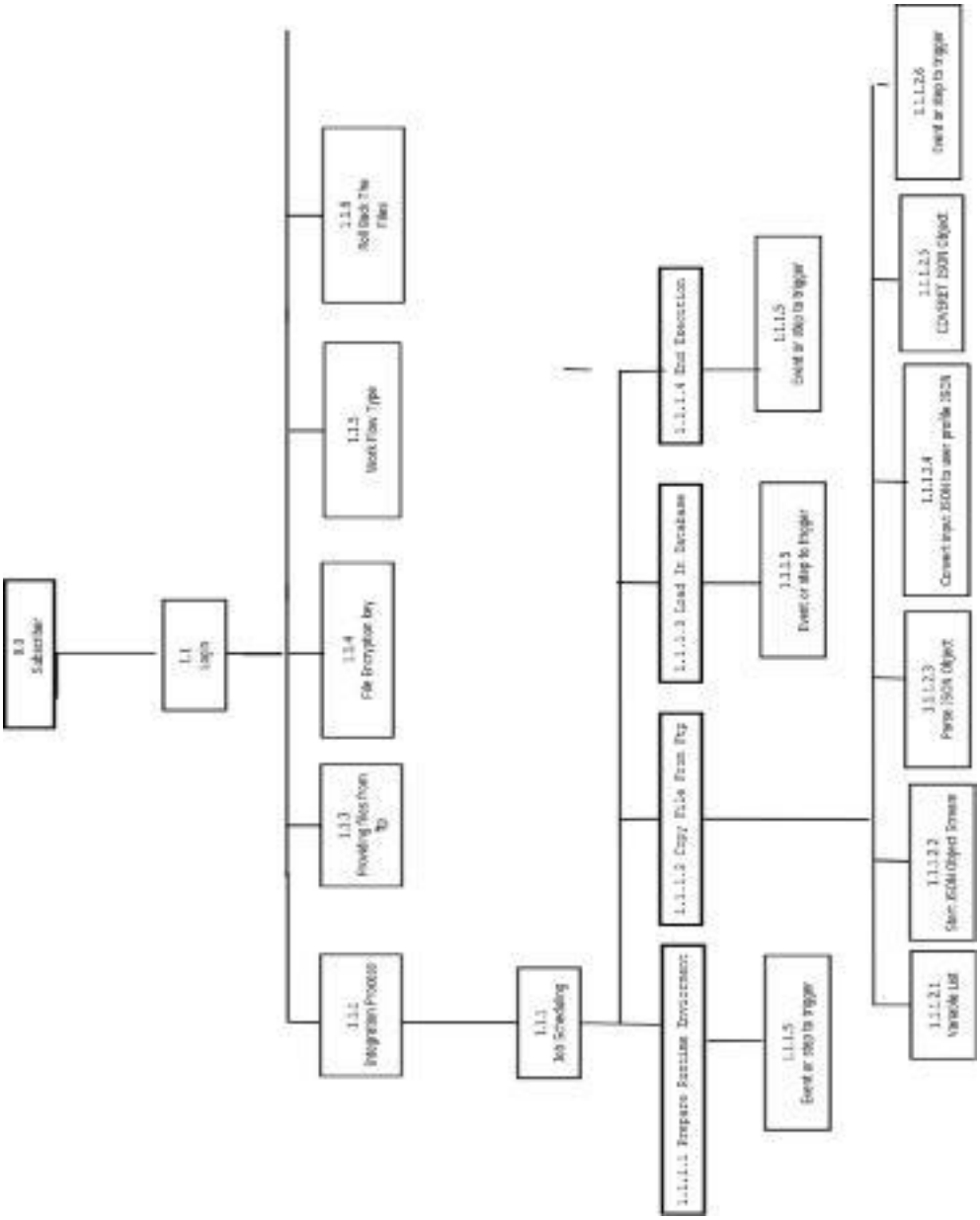
3.5.6 Integration Process Sequence Diagram



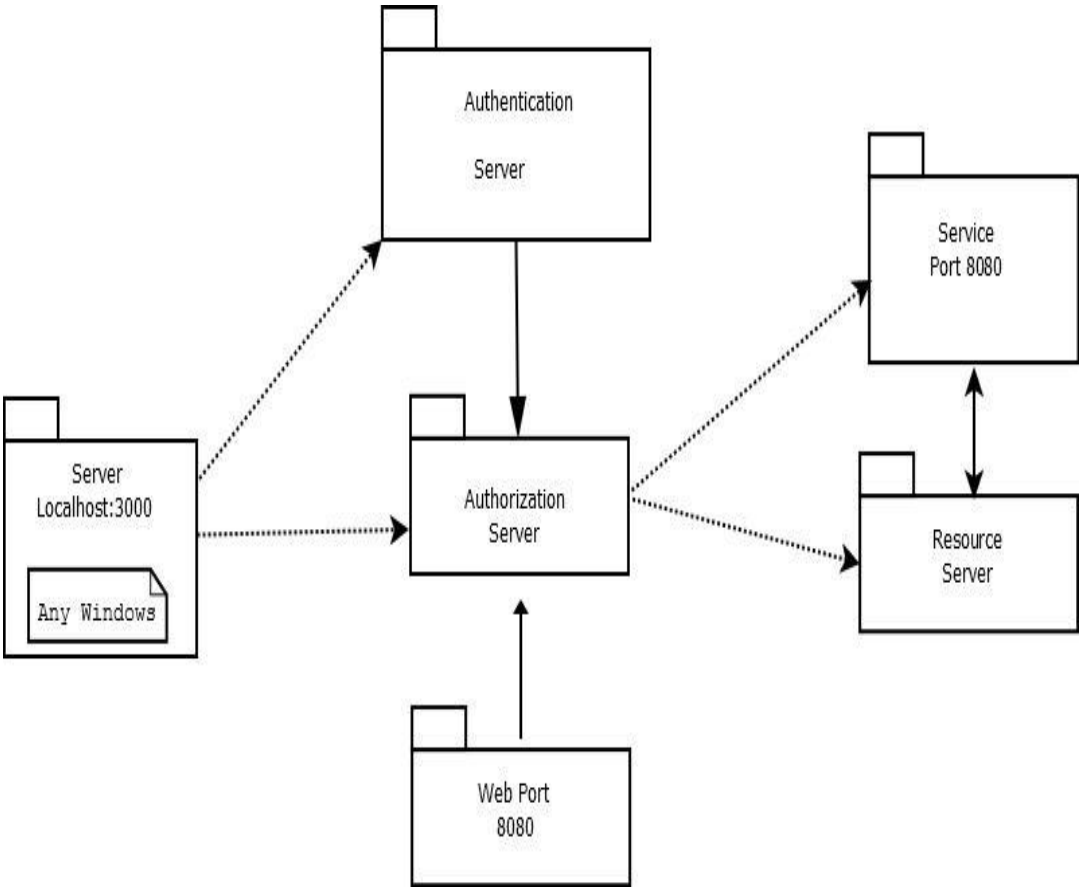
3.6 Entity Relationship Diagram



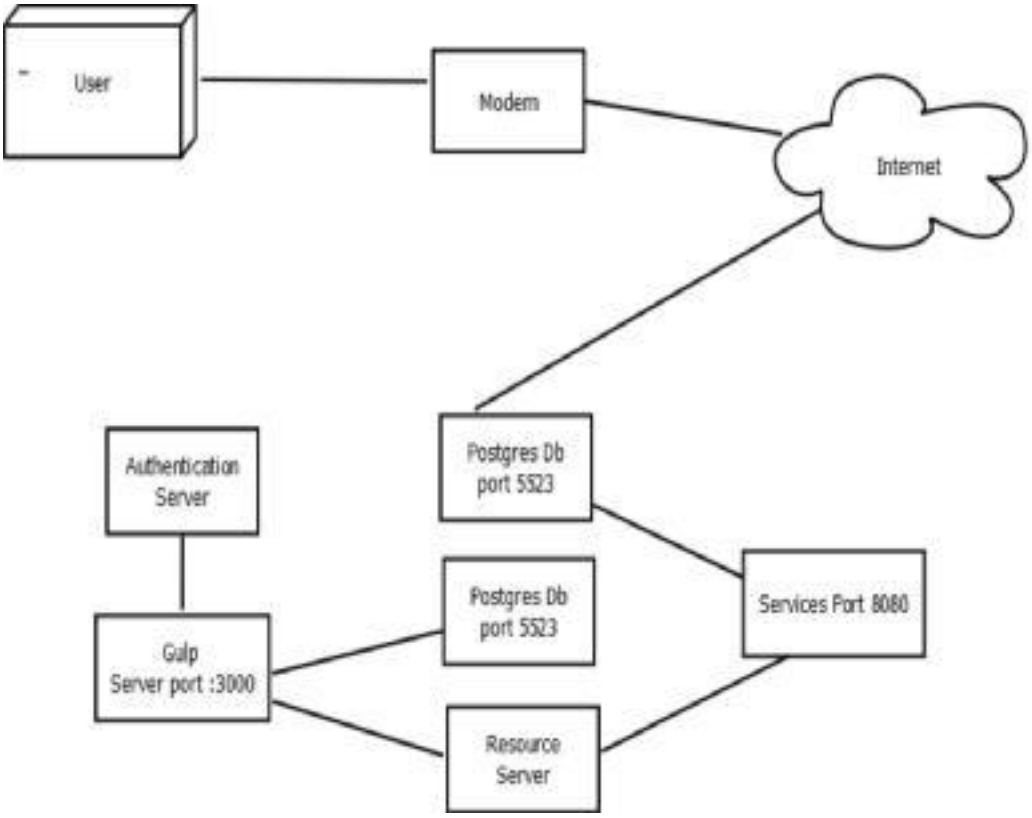
3.7 Module Hierarchy Diagram



3.8 Component Diagram



3.9 Deployment Diagram



3.10 Module Specification

User's Login Page:-

User enters the credential in the login page, the login page verifies the credetials, if the credetials are authorized the the login page generates the auth2token and gives the acces to the system , otherwise it will allow the User to enters the credetials again.

Home Page/Integration Process :-

There can be a one or more integration processes. When a user clicks on the Integration Process, it will allow the user to either executes/updates the process or go to the activities related to the Integration Process.

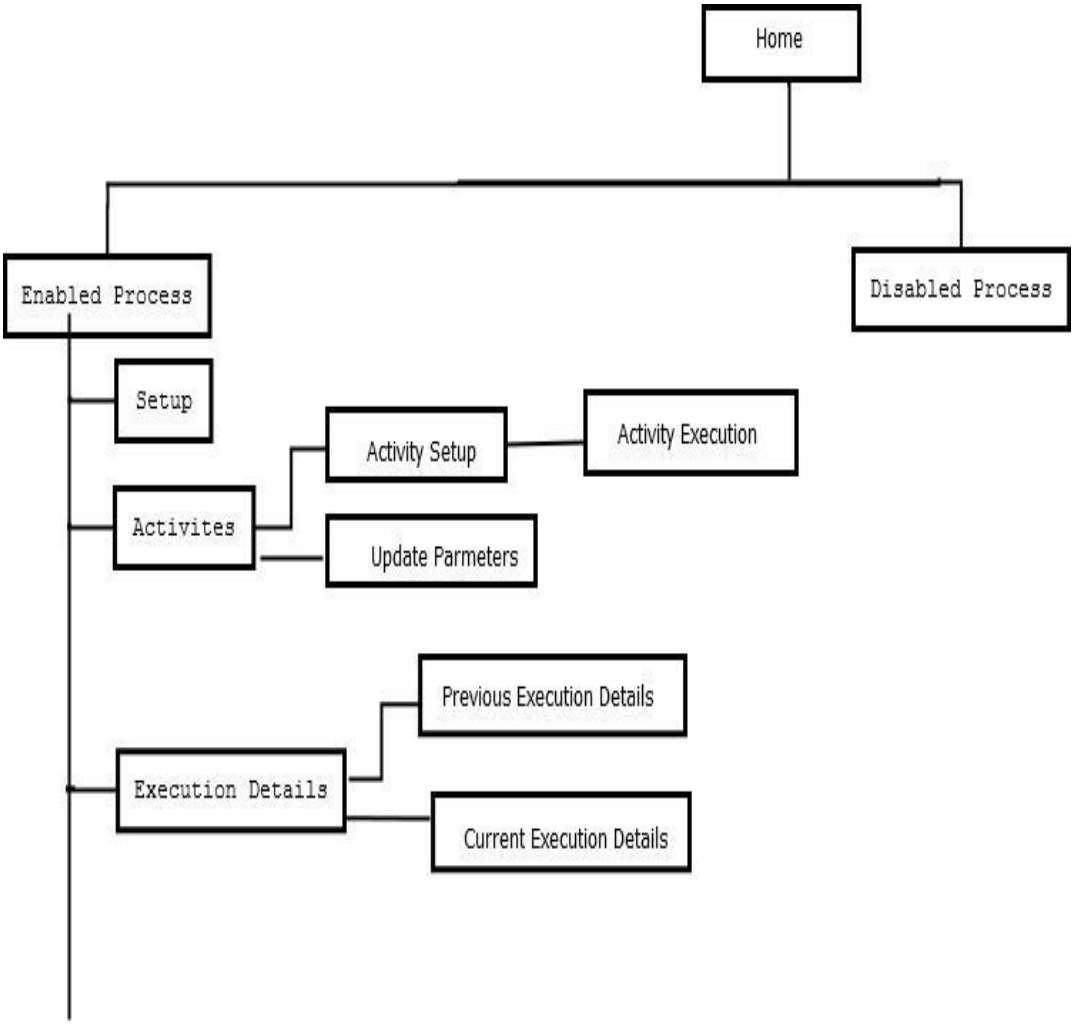
Activity Execution:-

There can be a one or more Activities. When a user clicks on one of the activies then there is a Step to trigger field,by default it has next activity's number but the ser can enter the number the he/she wants to execute an next activity , it will allow the user to execute or update an Activity.

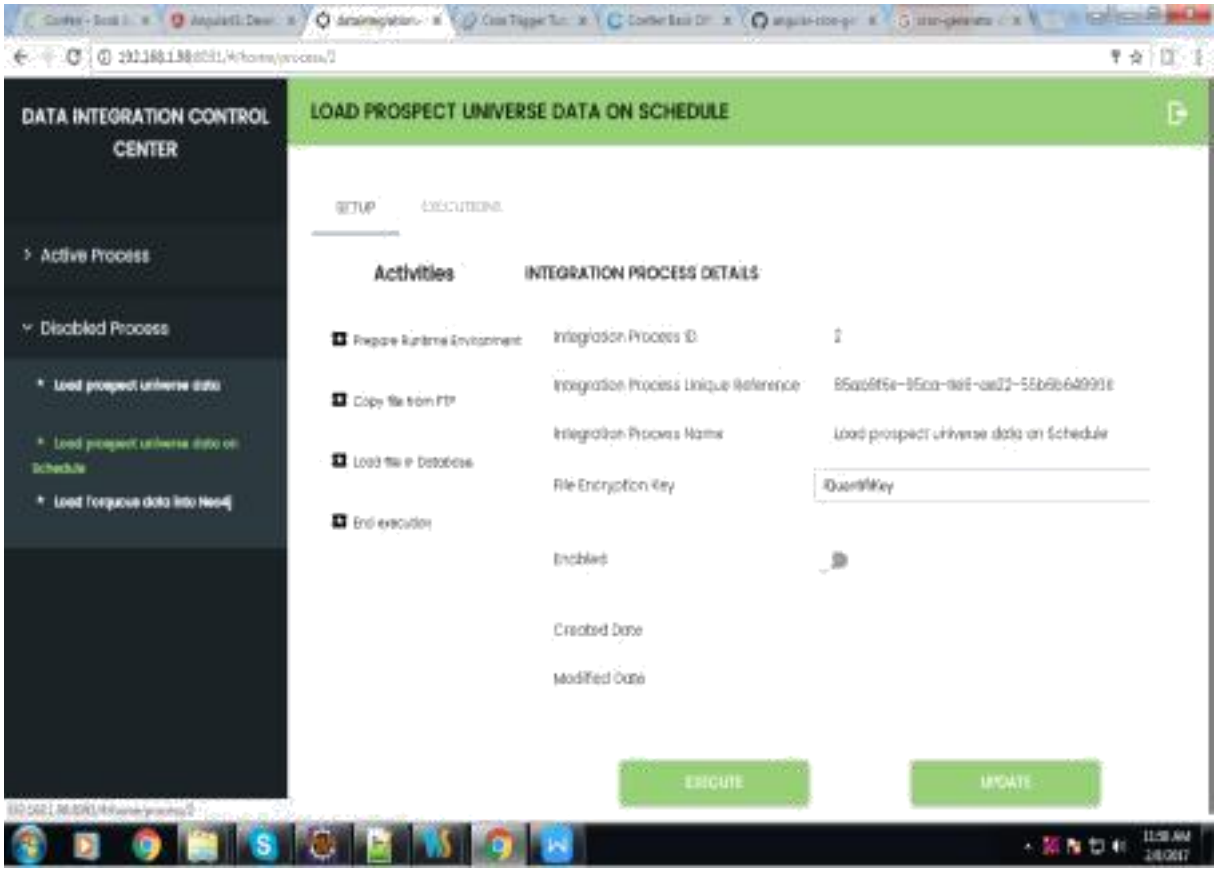
Previous Execution And Current Execution Tab :-

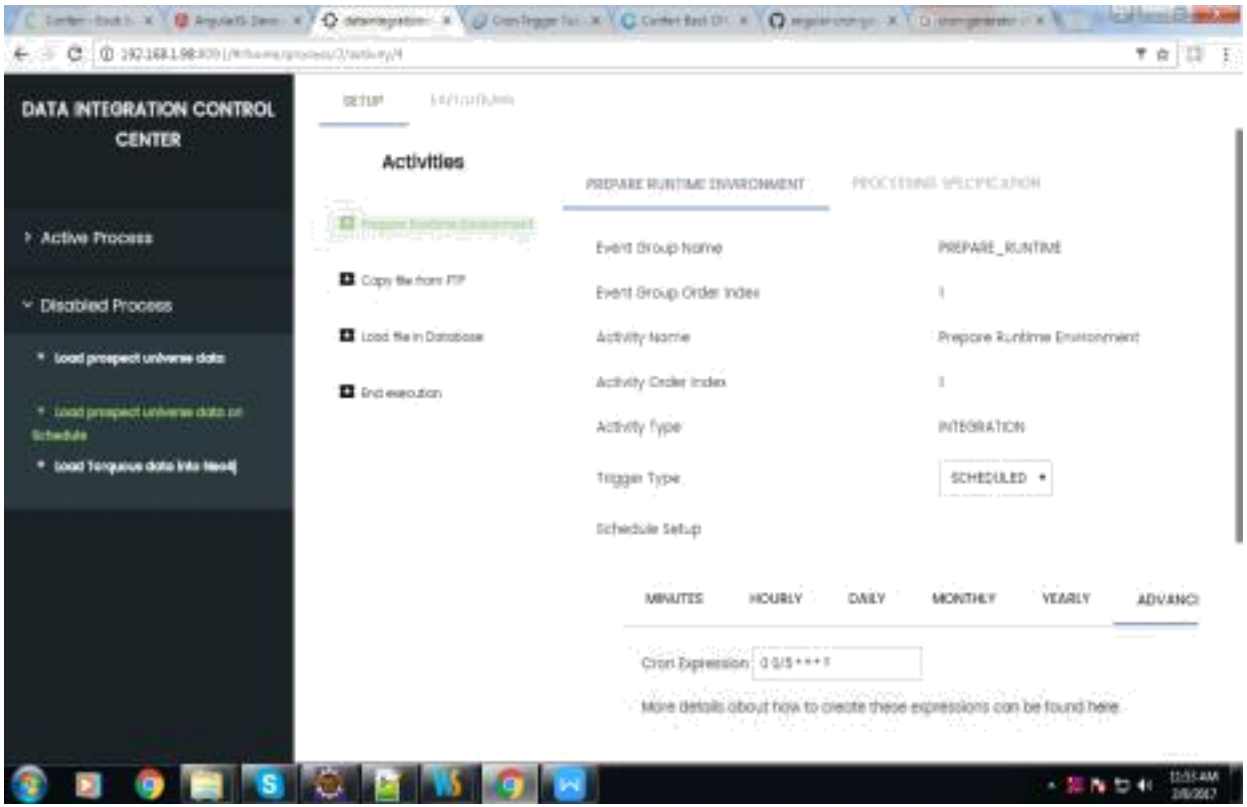
Current Execution Tab will allow the user to see , which activity of which Integration Process is executing currently and details of that activity and Previous Execution Tab will allow the User to see the previous executions and details of those activites.

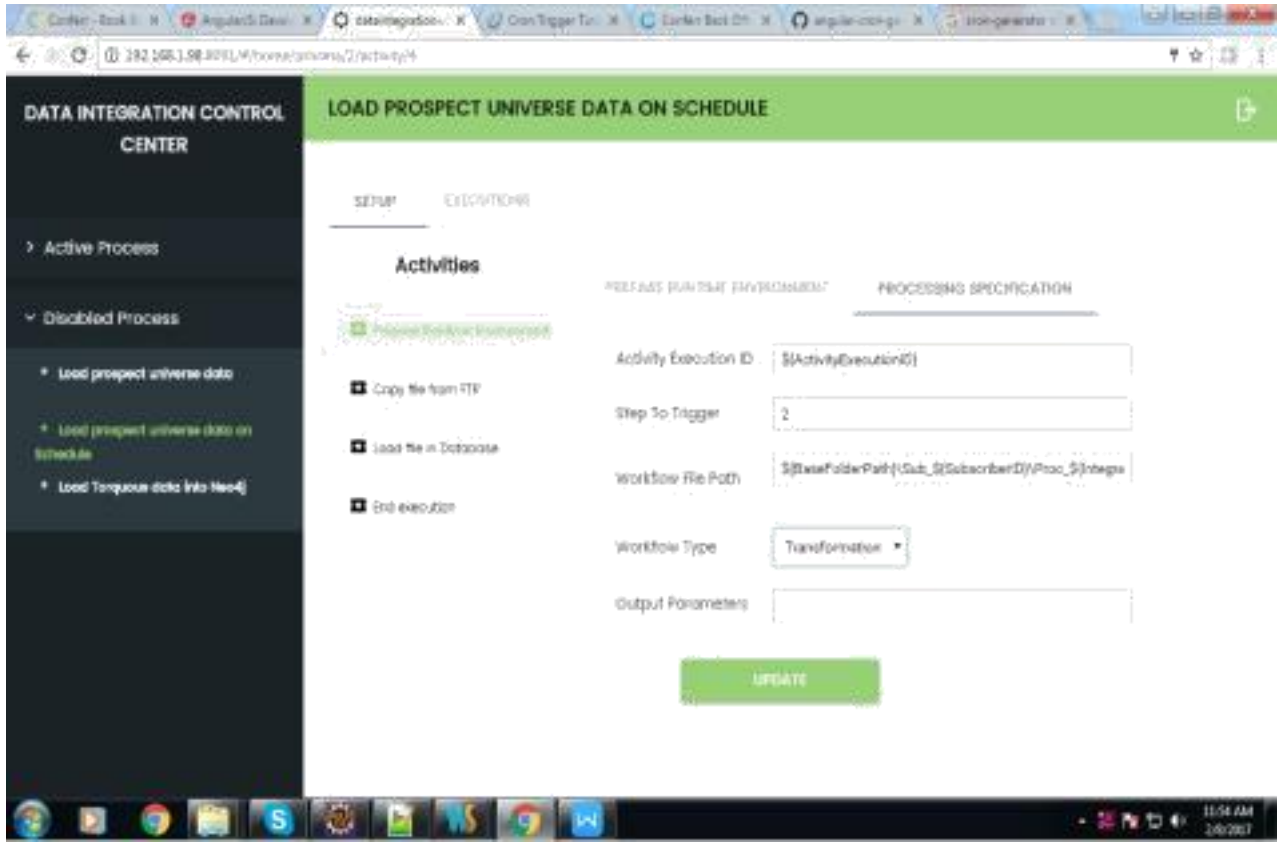
3.11 Web Site Map Diagram

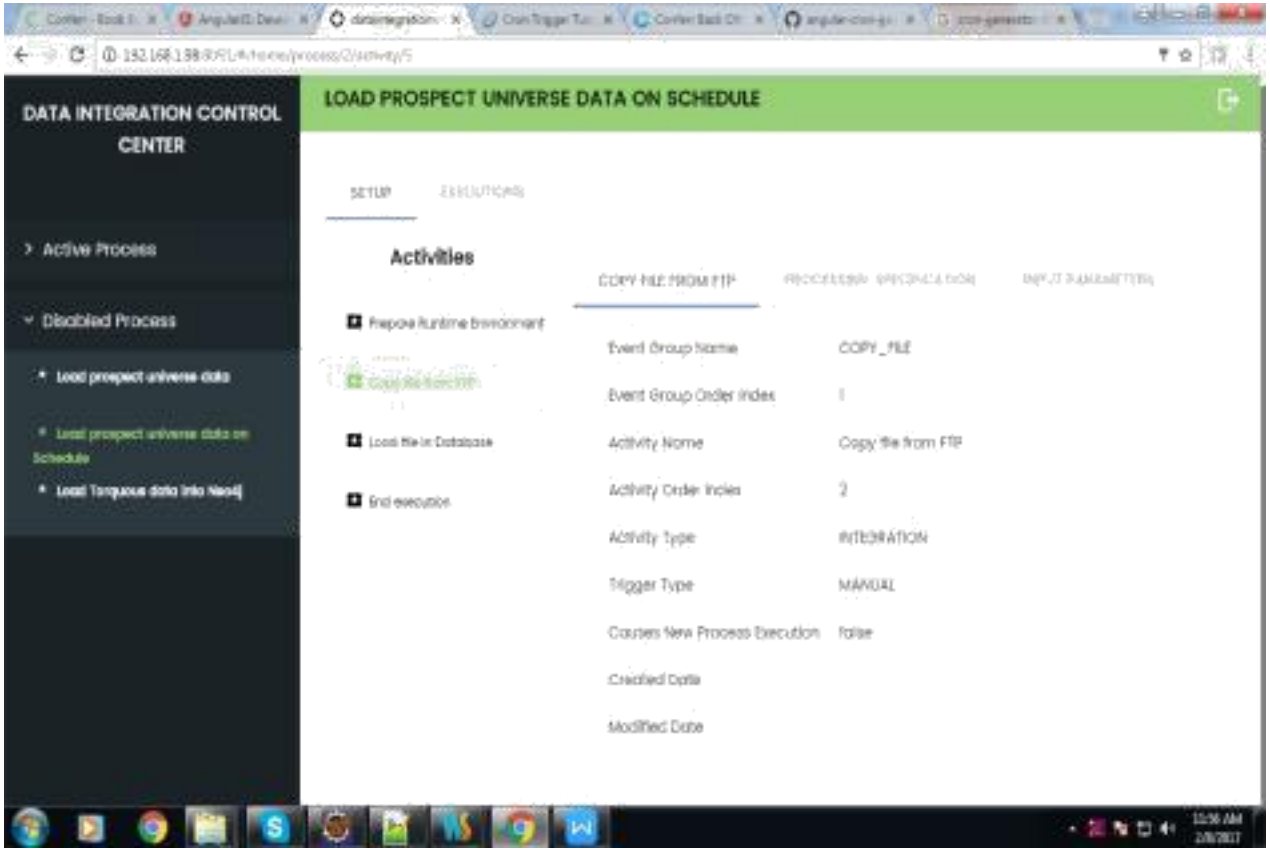


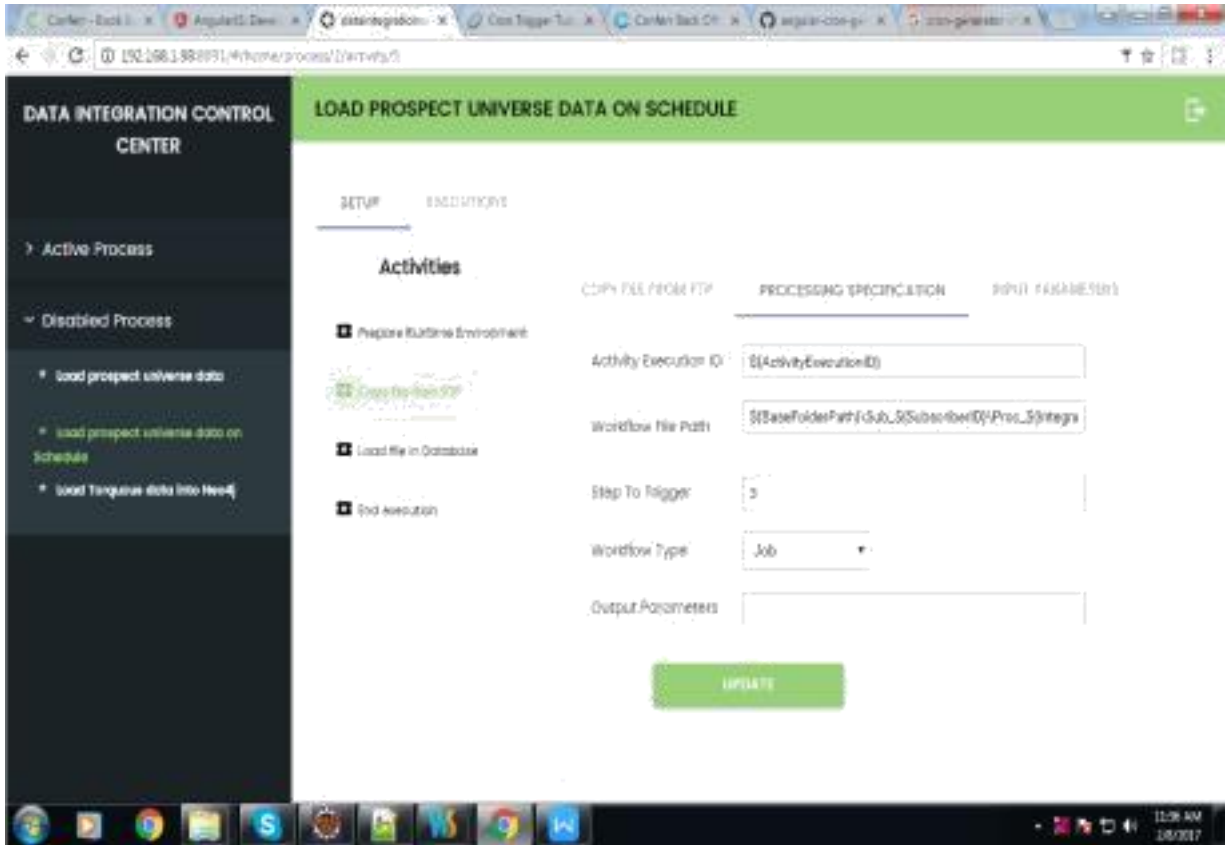
3.12 User Interface Design

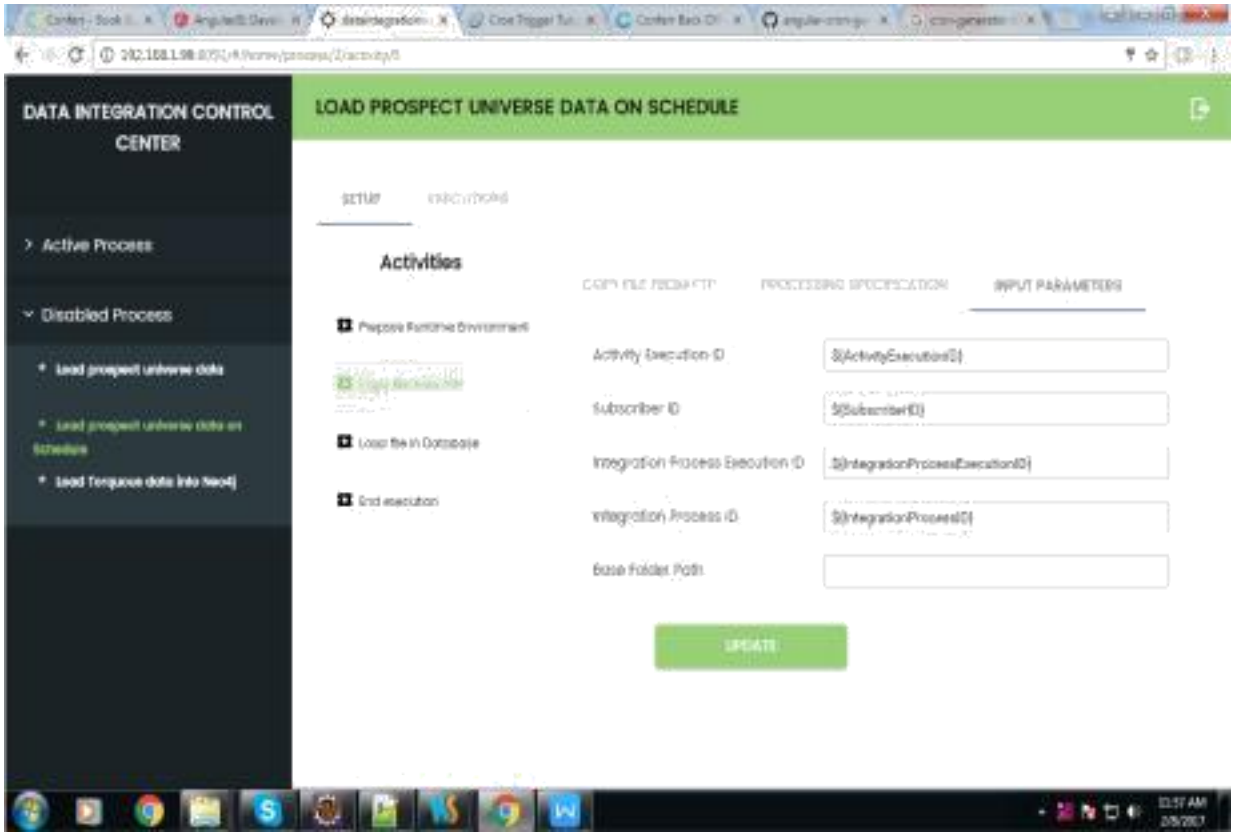

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
SETUP
Activities
INTEGRATION PROCESS DETAILS
Prepare Runtime Environment
Copy file from FTP
Load file in Database
End execution
Integration Process ID
Integration Process Unique Reference
Integration Process Name
Load prospect universe data on Schedule
File Encryption Key
Enabled
Created Date
Modified Date
EXECUTE
UPDATE

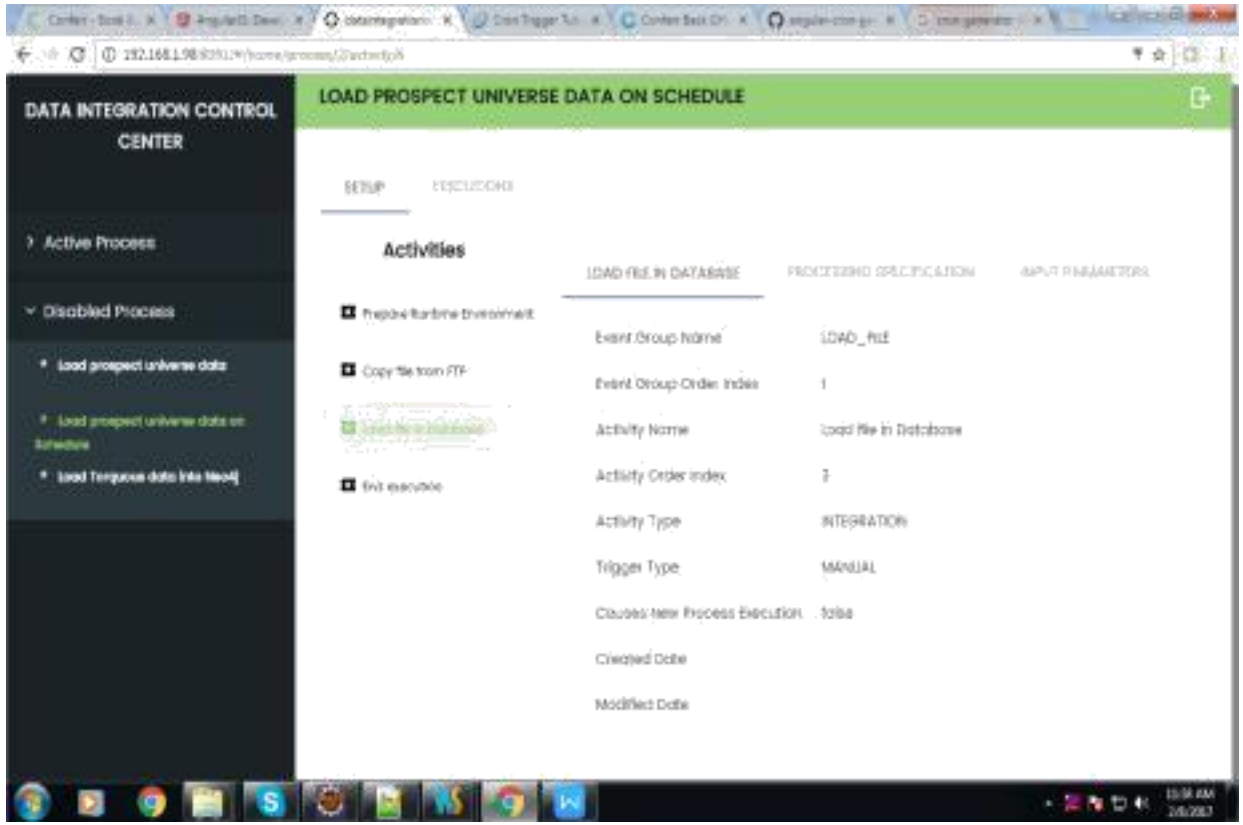

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Activities
Copy file from FTP
Load file in Database
End execution
PREPARE RUNTIME ENVIRONMENT
Event Group Name
PREPARE_RUNTIME
Event Group Order Index
Activity Name
Prepare Runtime Environment
Activity Order Index
Activity Type
INTEGRATION
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY
Cron Expression
More details about how to create these expressions can be found here

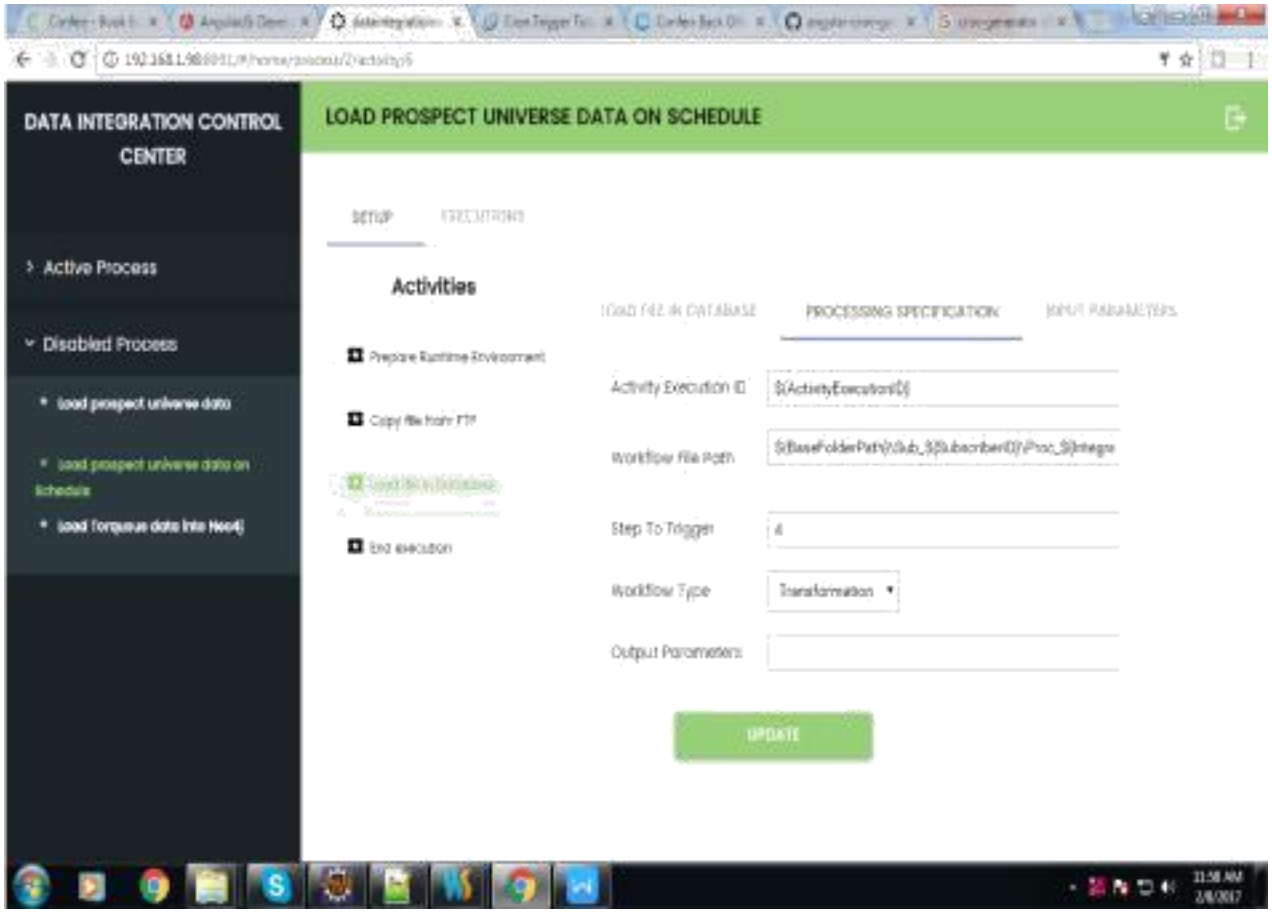

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on schedule
Load Torquoise data into Neo4j
SETUP
Activities
Copy file from FTP
Load file in Database
End execution
PROCESSING SPECIFICATION
Activity Execution ID
${ActivityExecutionID}
Step To Trigger
2
Workflow File Path
Workflow Type
Transformation
Output Parameters
UPDATE

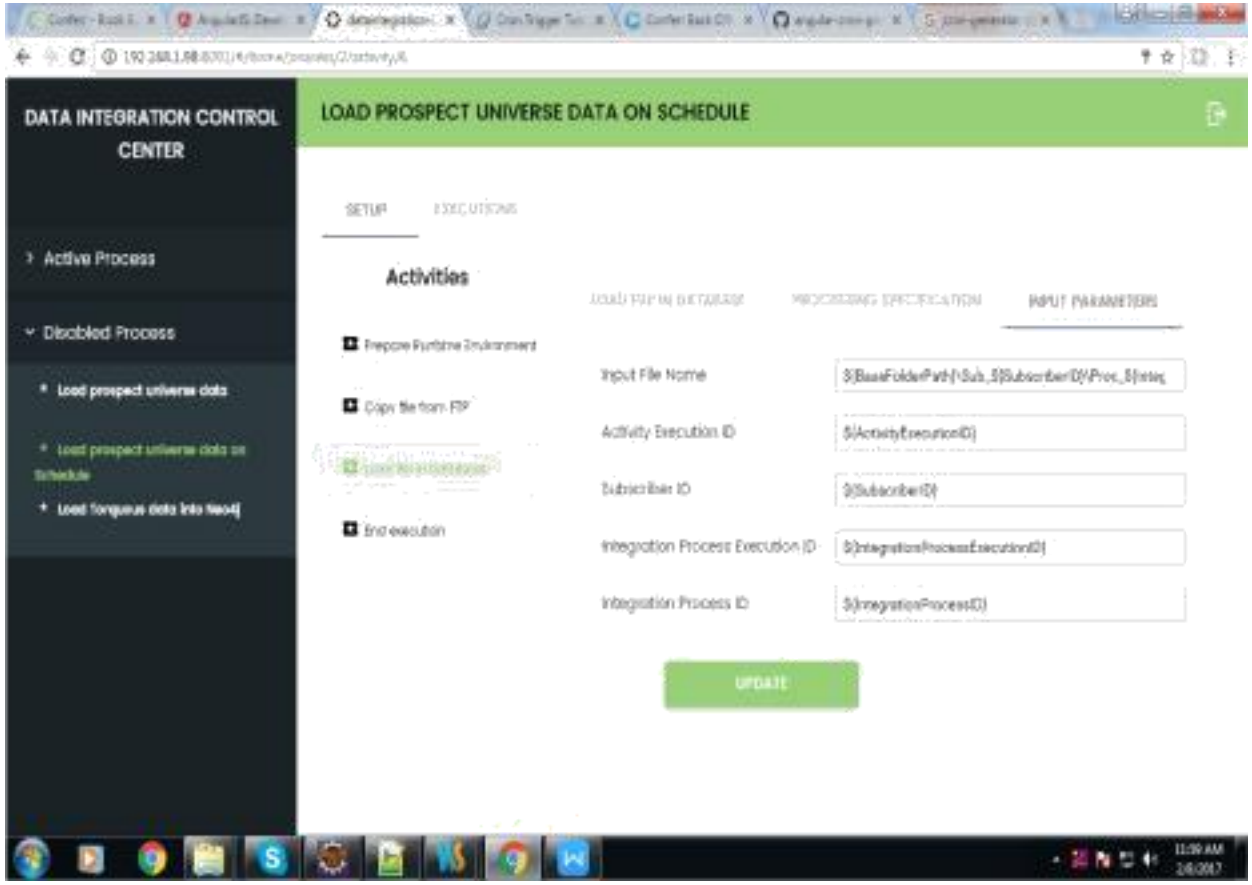

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Activities
Prepare Runtime Environment
Load file in Database
End execution
COPY FILE FROM FTP
Event Group Name
COPY_FILE
Event Group Order Index
Activity Name
Copy file from FTP
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Causes New Process Execution
false
Created Date
Modified Date

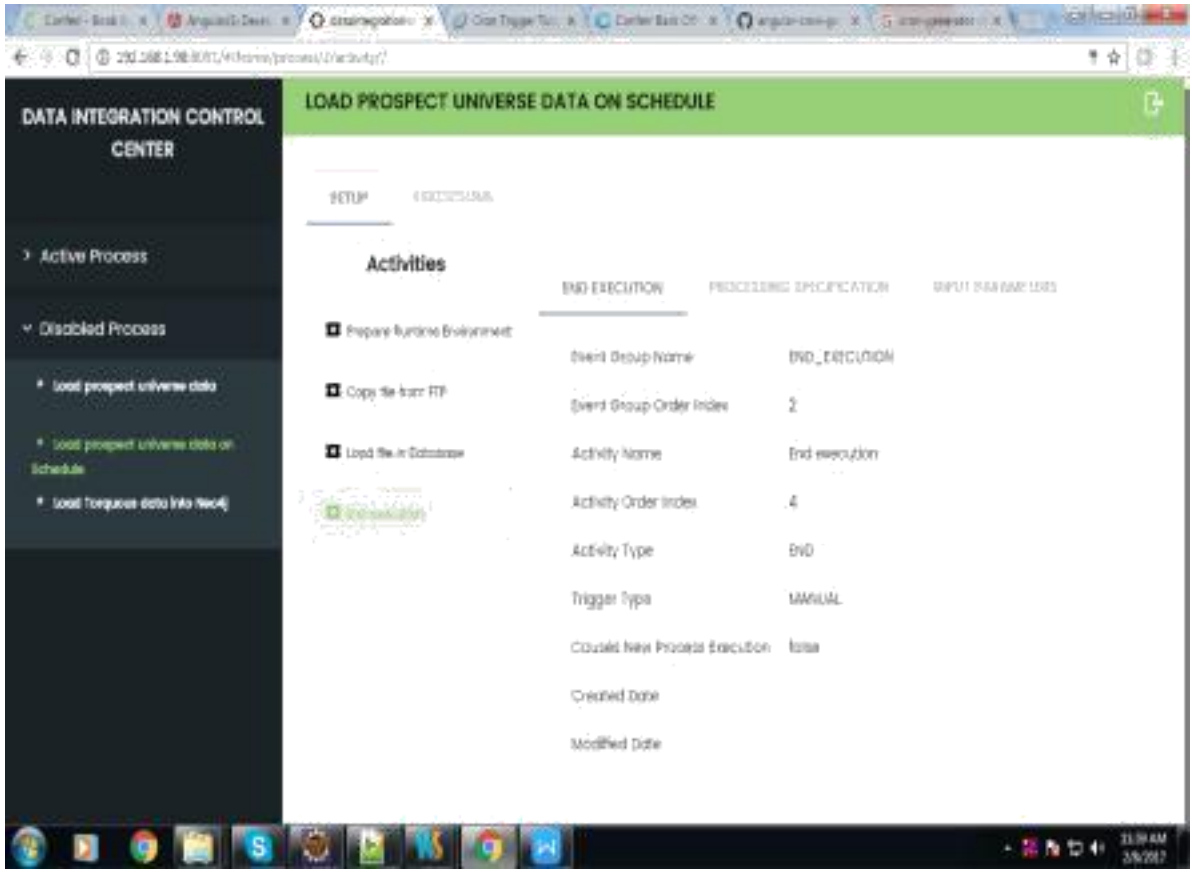

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
SETUP
Activities
PROCESSING SPECIFICATION
Activity Execution ID
Workflow File Path
Step To Trigger
Workflow Type
Job
Output Parameters
UPDATE

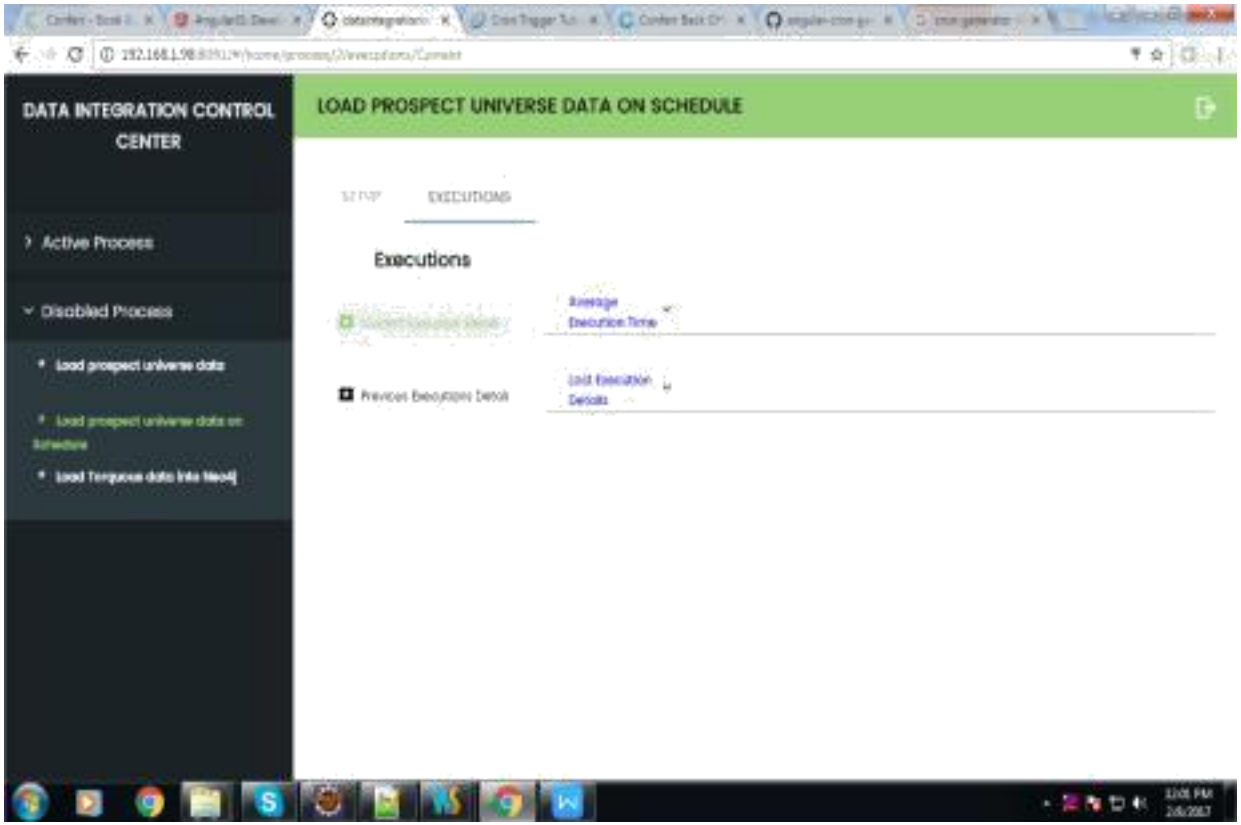

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
Active Process
Disabled Process
Activities
INPUT PARAMETERS
Activity Execution ID
Subscriber ID
Integration Process Execution ID
Integration Process ID
Base Folder Path
UPDATE

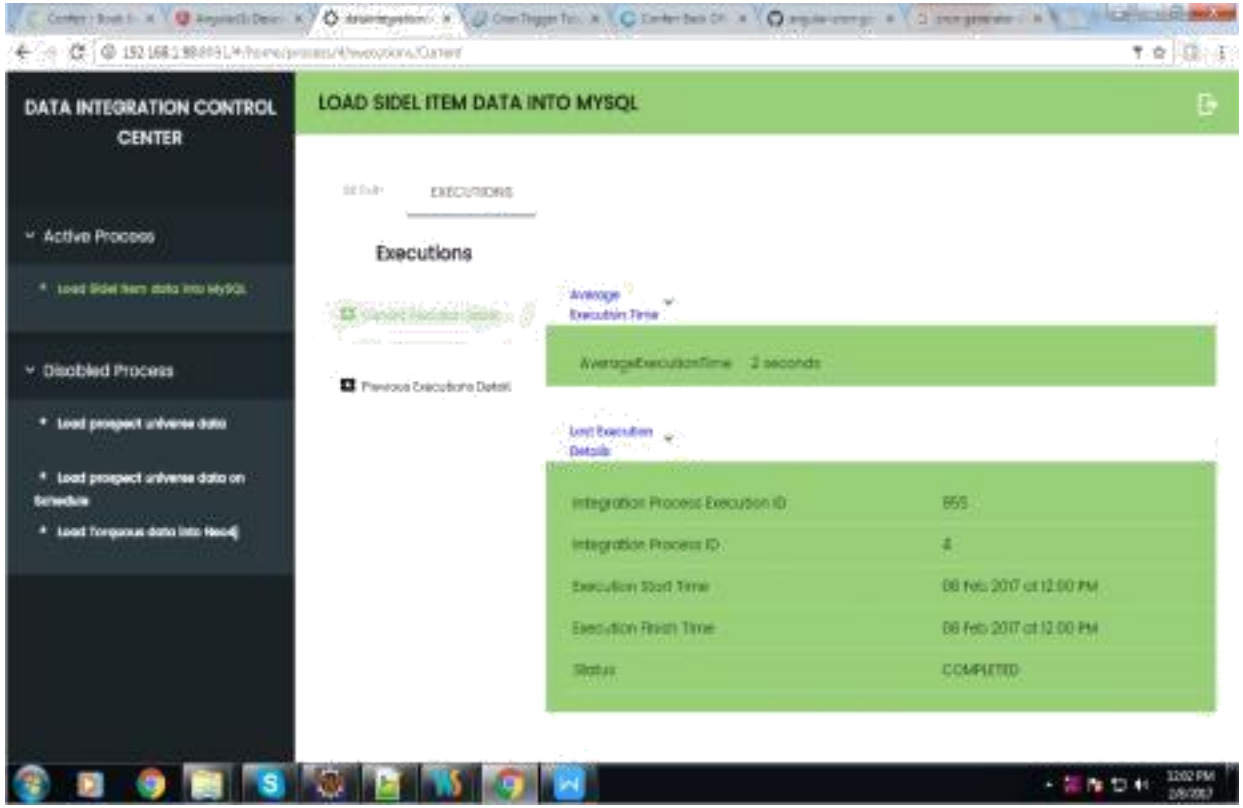

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
Activities
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Tenpuse data into Neo4j
Prepare Runtime Environment
Copy file from FTP
Load file in Database
End executio
LOAD FILE IN DATABASE
Event Group Name
LOAD_FILE
Event Group Order Index
1
Activity Name
Load file in Database
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Causes new Process Execution
false
Created Date
Modified Date

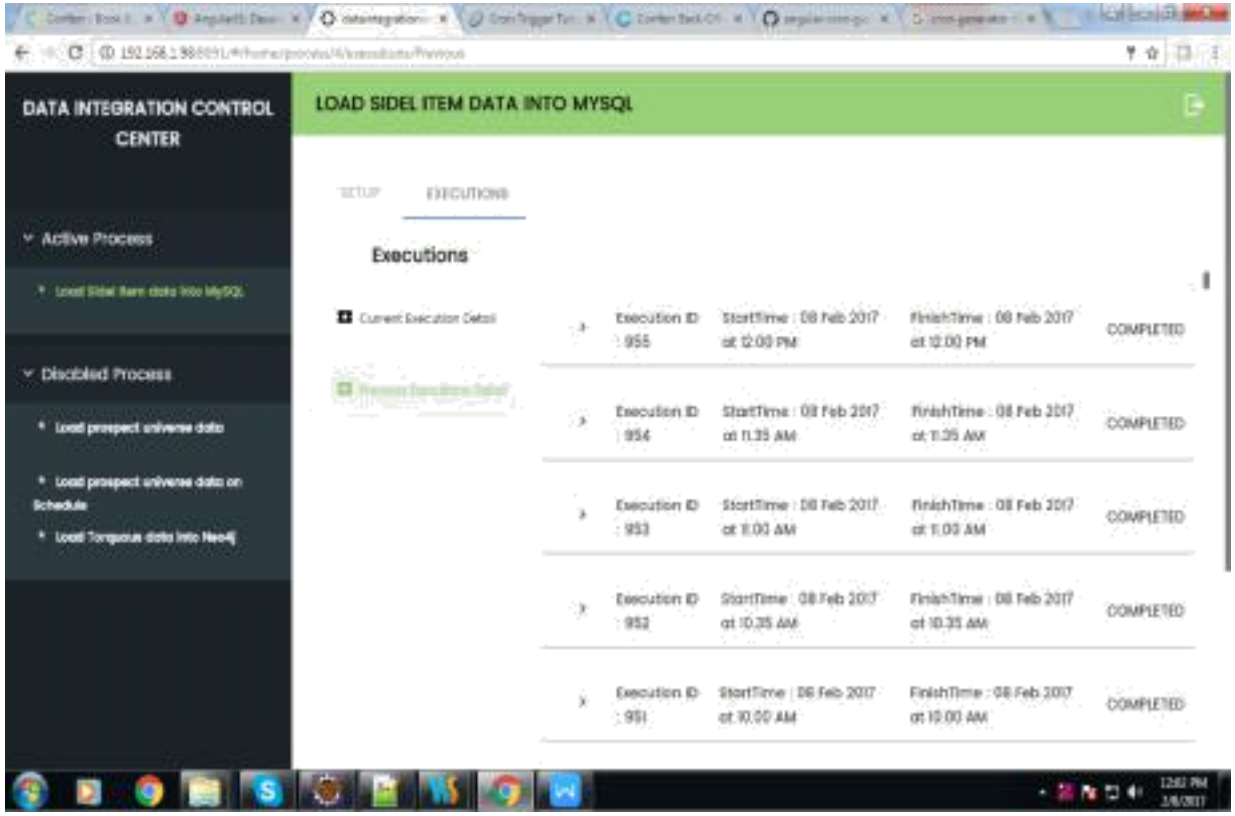

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
load prospect universe data
load prospect universe data on schedule
load forqueue data into Hive4j
SETUP
Activities
Prepare Runtime Environment
Copy file from FTP
End execution
PROCESSING SPECIFICATION
Activity Execution ID
Workflow File Path
Step To Trigger
Workflow Type
Transformation
Output Parameters
UPDATE

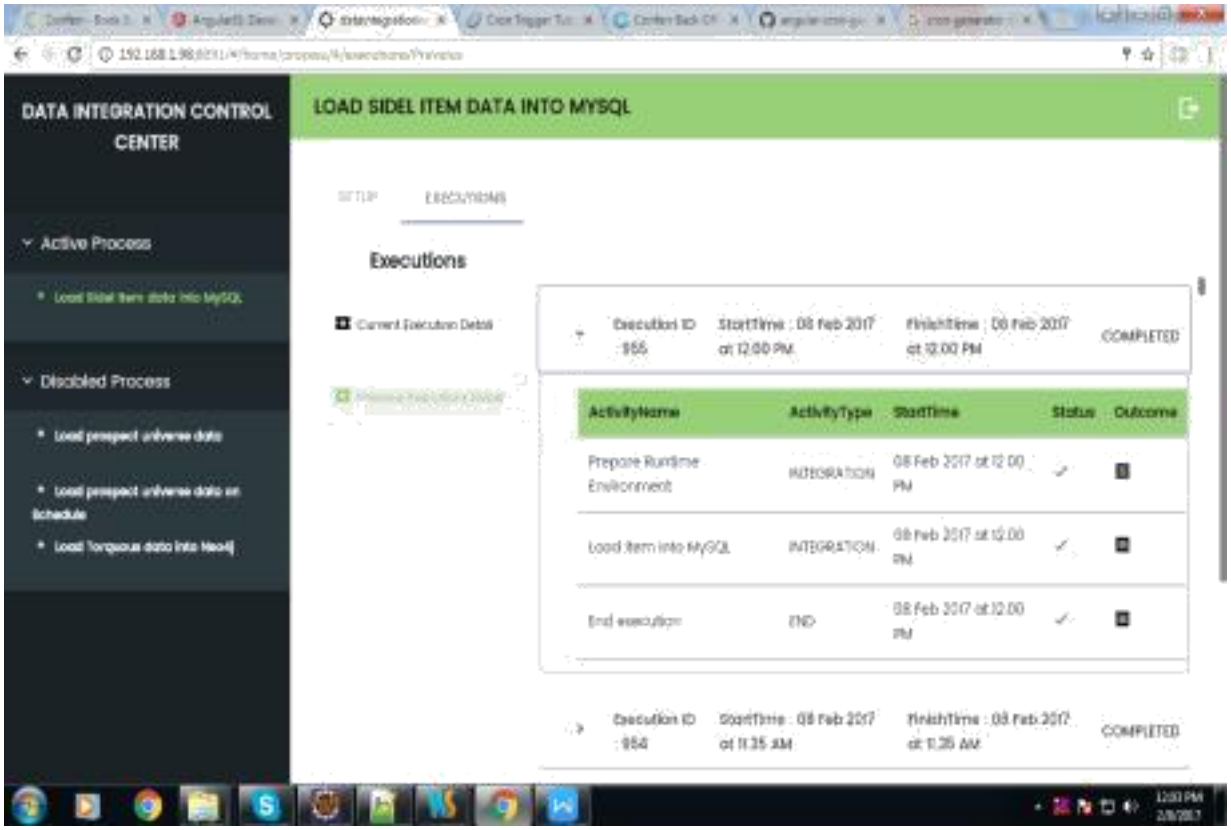

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torqueus data into Neo4j
SETUP
Activities
Prepare Runtime Environment
Copy file from FTP
End execution
INPUT PARAMETERS
Input File Name
Activity Execution ID
Subscriber ID
Integration Process Execution ID
Integration Process ID
UPDATE

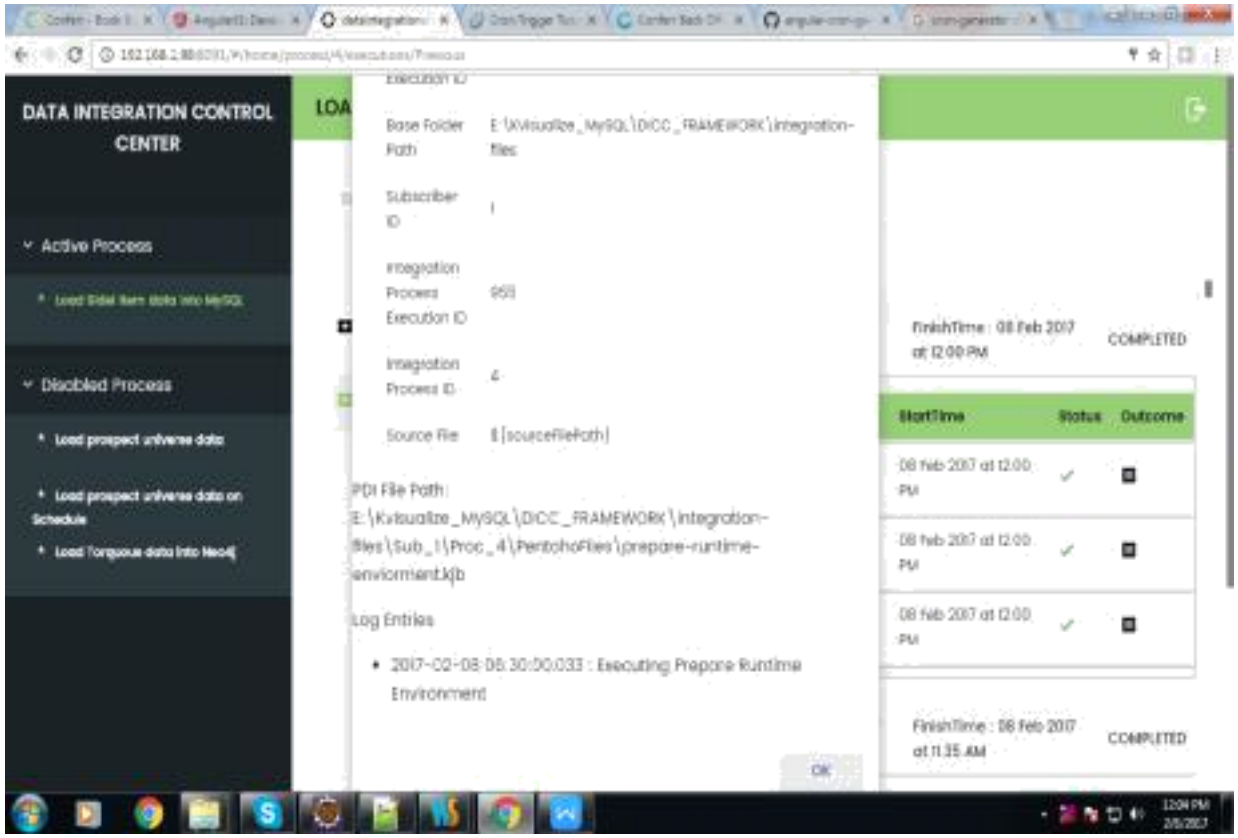

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Activities
END EXECUTION
Event Group Name
END_EXECUTION
Event Group Order Index
2
Activity Name
Activity Order Index
4
Activity Type
END
Trigger Type
MANUAL
Created Date
Modified Date

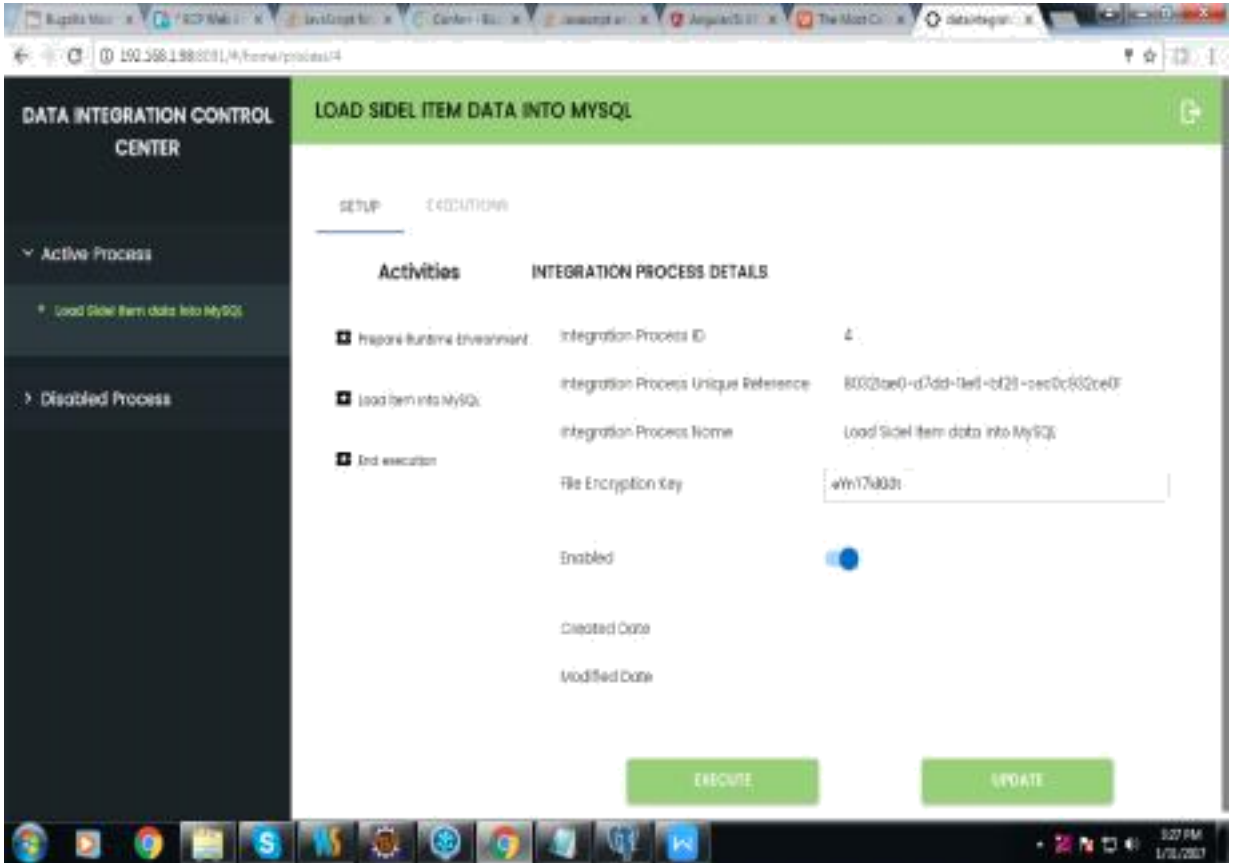

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Tenpuse data into Neo4j
EXECUTIONS
Executions
Average Execution Time
Previous Executions Details
Last Execution Details

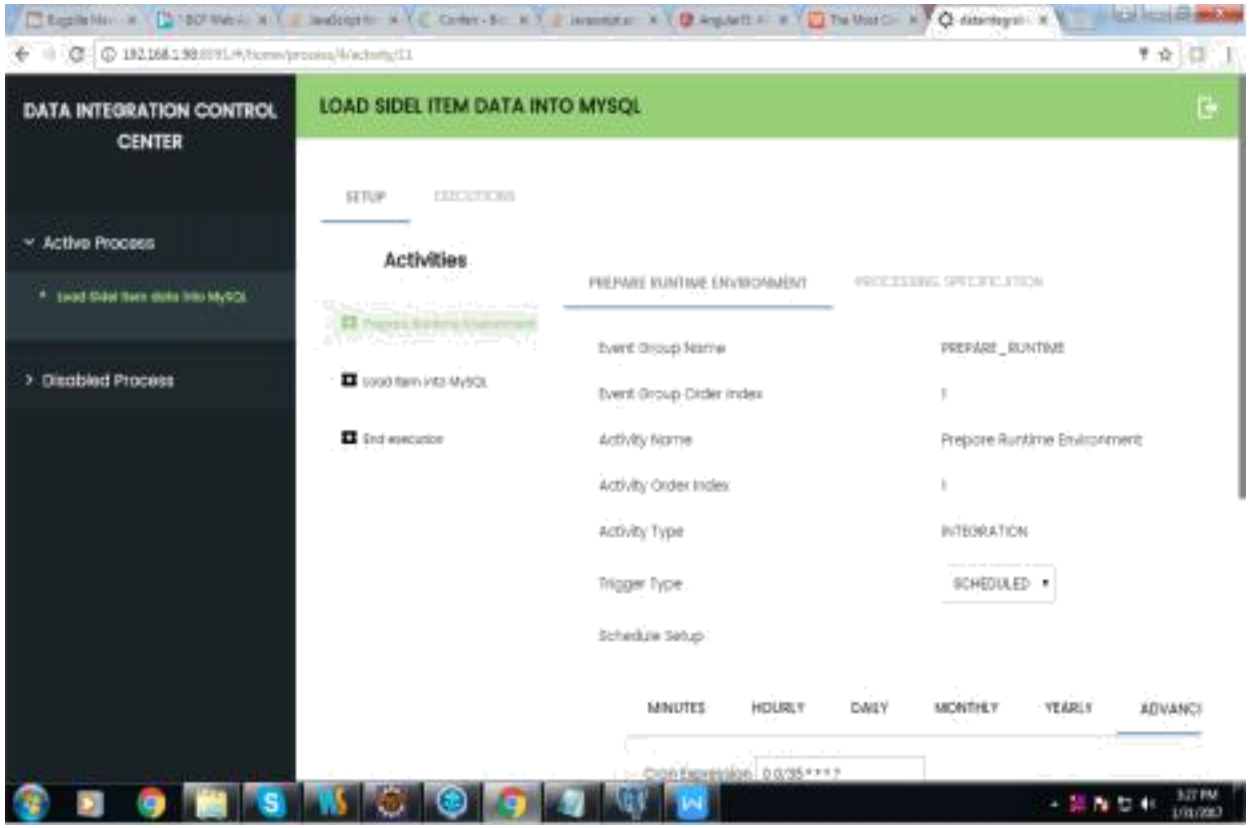

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
EXECUTIONS
Executions
Active Process
Disabled Process
Average Execution Time
AverageExecutionTime 2 seconds
Previous Executions Details
Integration Process Execution ID 855
Integration Process ID 4
Execution Start Time 08 Feb 2017 at 12:00 PM
Execution Finish Time 08 Feb 2017 at 12:00 PM
Status COMPLETED

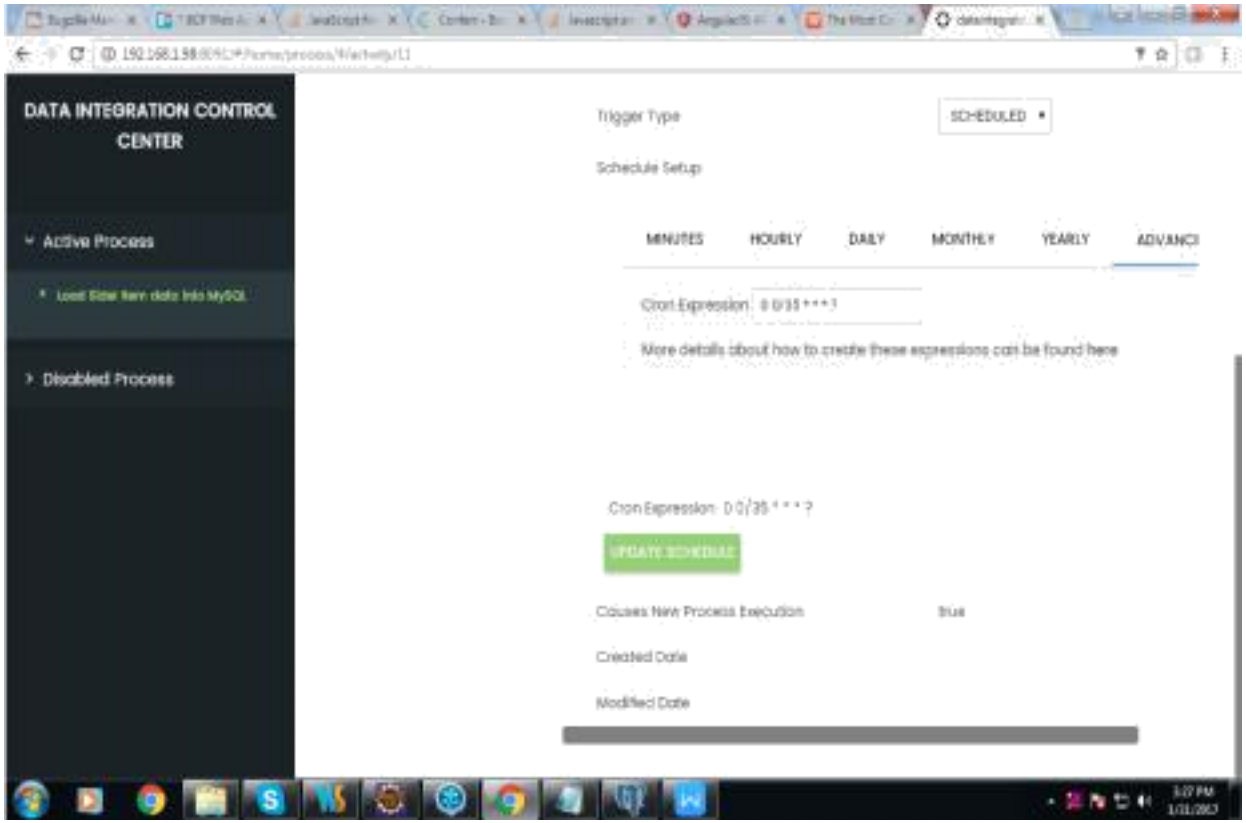

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Executions
Current Execution Detail
Execution ID : 955
StartTime : 08 Feb 2017 at 12:00 PM
FinishTime : 08 Feb 2017 at 12:00 PM
COMPLETED
Execution ID : 954
StartTime : 08 Feb 2017 at 11:35 AM
FinishTime : 08 Feb 2017 at 11:35 AM
COMPLETED
Execution ID : 953
StartTime : 08 Feb 2017 at 11:00 AM
FinishTime : 08 Feb 2017 at 11:00 AM
COMPLETED
Execution ID : 952
StartTime : 08 Feb 2017 at 10:35 AM
FinishTime : 08 Feb 2017 at 10:35 AM
COMPLETED
Execution ID : 951
StartTime : 08 Feb 2017 at 10:00 AM
FinishTime : 08 Feb 2017 at 10:00 AM
COMPLETED

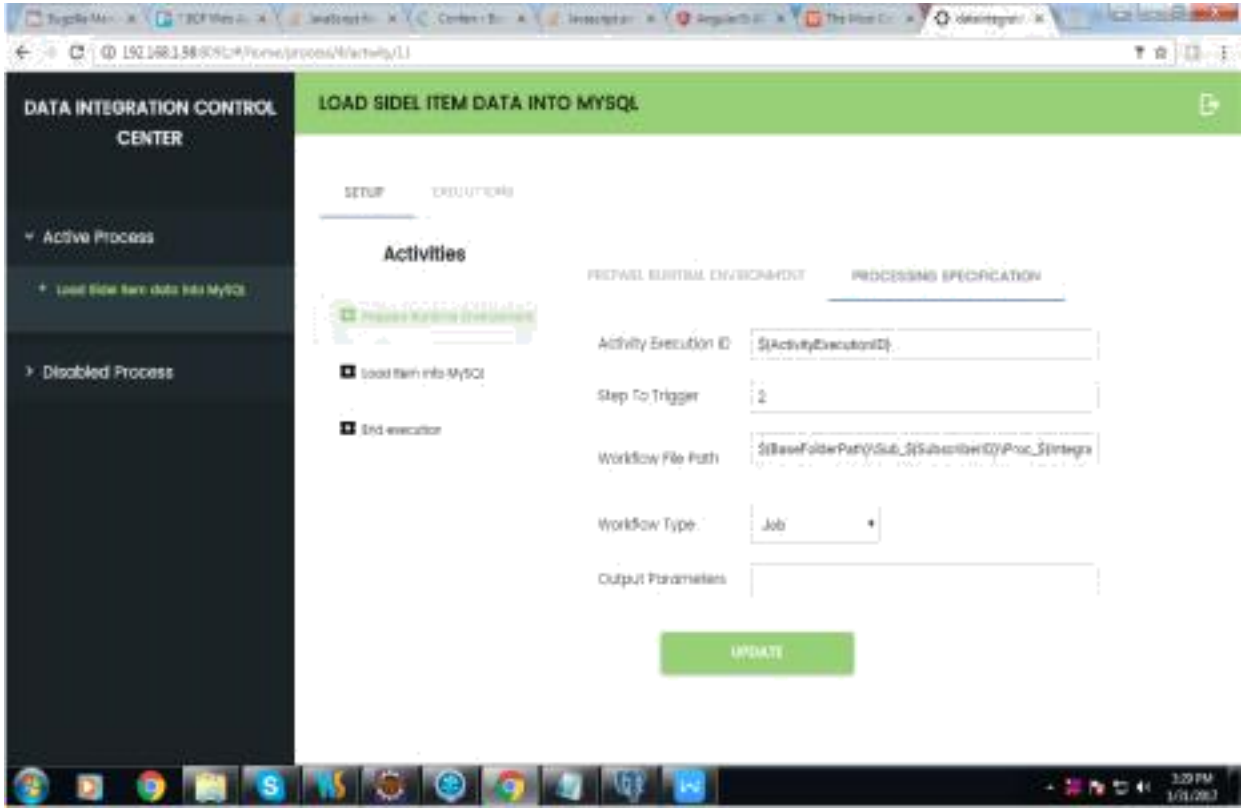

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Executions
Active Process
Load Sidel Item data into MySQL
Disabled Process
Load prospect universe data
Load prospect universe data on schedule
Load Torqeous data into Neo4j
Current Execution Detail
Execution ID : 955
StartTime : 08 Feb 2017 at 12:00 PM
FinishTime : 08 Feb 2017 at 12:00 PM
COMPLETED
ActivityName
ActivityType
StartTime
Status
Outcome
Prepare Runtime Environment
INTEGRATION
08 Feb 2017 at 12:00 PM
Load item into MySQL
INTEGRATION
08 Feb 2017 at 12:00 PM
End execution
END
08 Feb 2017 at 12:00 PM
Execution ID : 954
StartTime : 08 Feb 2017 at 11:35 AM
FinishTime : 08 Feb 2017 at 11:35 AM
COMPLETED

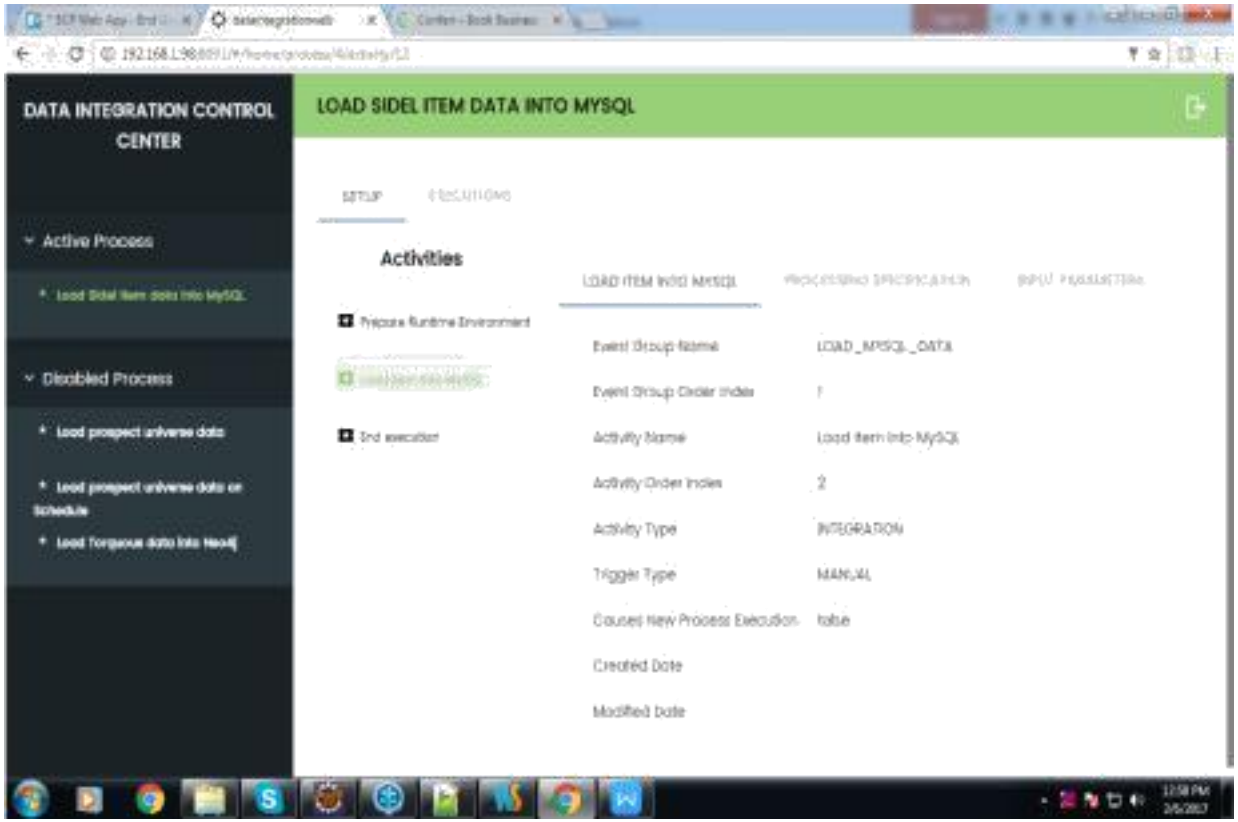

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Base Folder Path
E:\kVisualize_MySQL\DICC_FRAMEWORK\integration-files
Subscriber ID
1
Integration Process Execution ID
953
Integration Process ID
4
Source File
${sourceFilePath}
PDI File Path
E:\kVisualize_MySQL\DICC_FRAMEWORK\integration-files\Sub_1\Proc_4\PentohoFiles\prepare-runtime-enviorment.kjb
Log Entries
2017-02-08 06:30:00.033 : Executing Prepare Runtime Environment
OK
FinishTime : 08 Feb 2017 at 12:00 PM
COMPLETED
StartTime
Status
Outcome
08 Feb 2017 at 12:00 PM
08 Feb 2017 at 12:00 PM
08 Feb 2017 at 12:00 PM
FinishTime : 08 Feb 2017 at 11:35 AM
COMPLETED

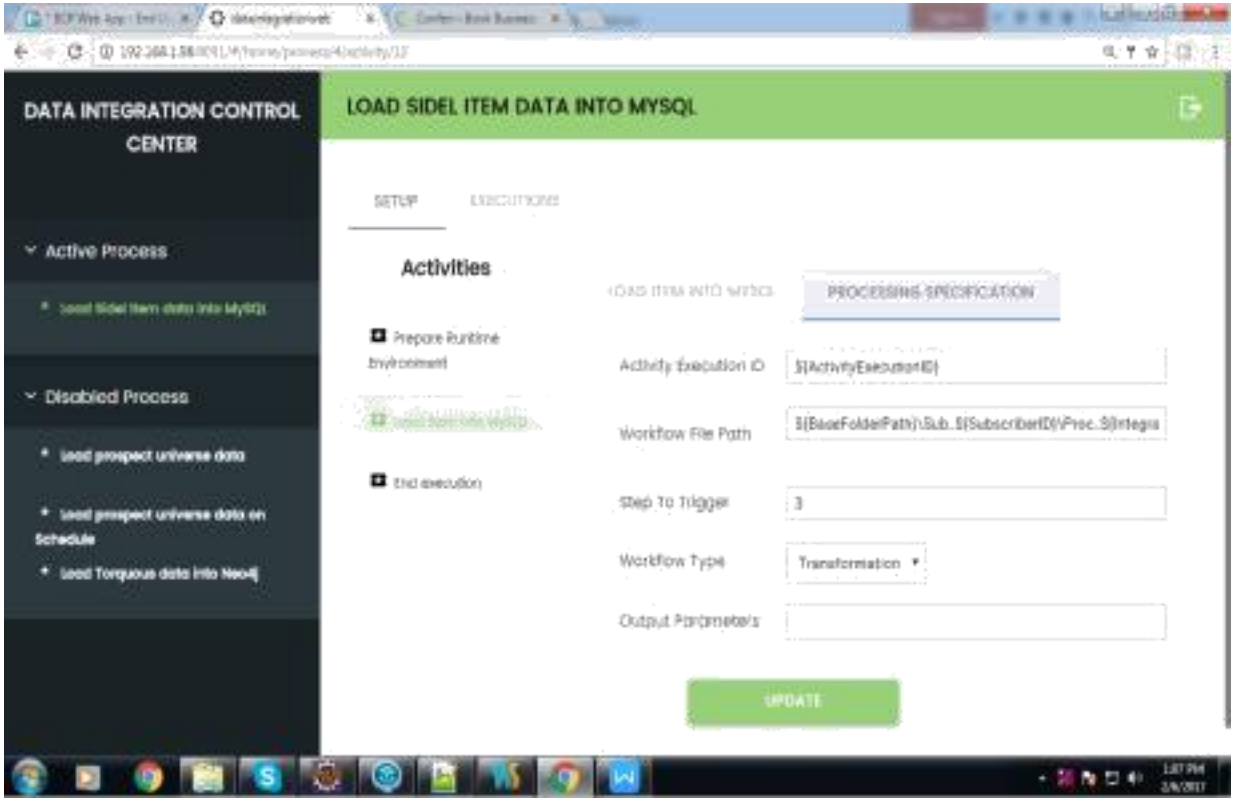

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Active Process
Load Sidel Item data into MySQL
Disabled Process
Activities
INTEGRATION PROCESS DETAILS
Prepare Runtime Environment
Load Item into MySQL
End execution
Integration Process ID
4
Integration Process Unique Reference
Integration Process Name
Load Sidel Item data into MySQL
File Encryption Key
Enabled
Created Date
Modified Date
EXECUTE
UPDATE

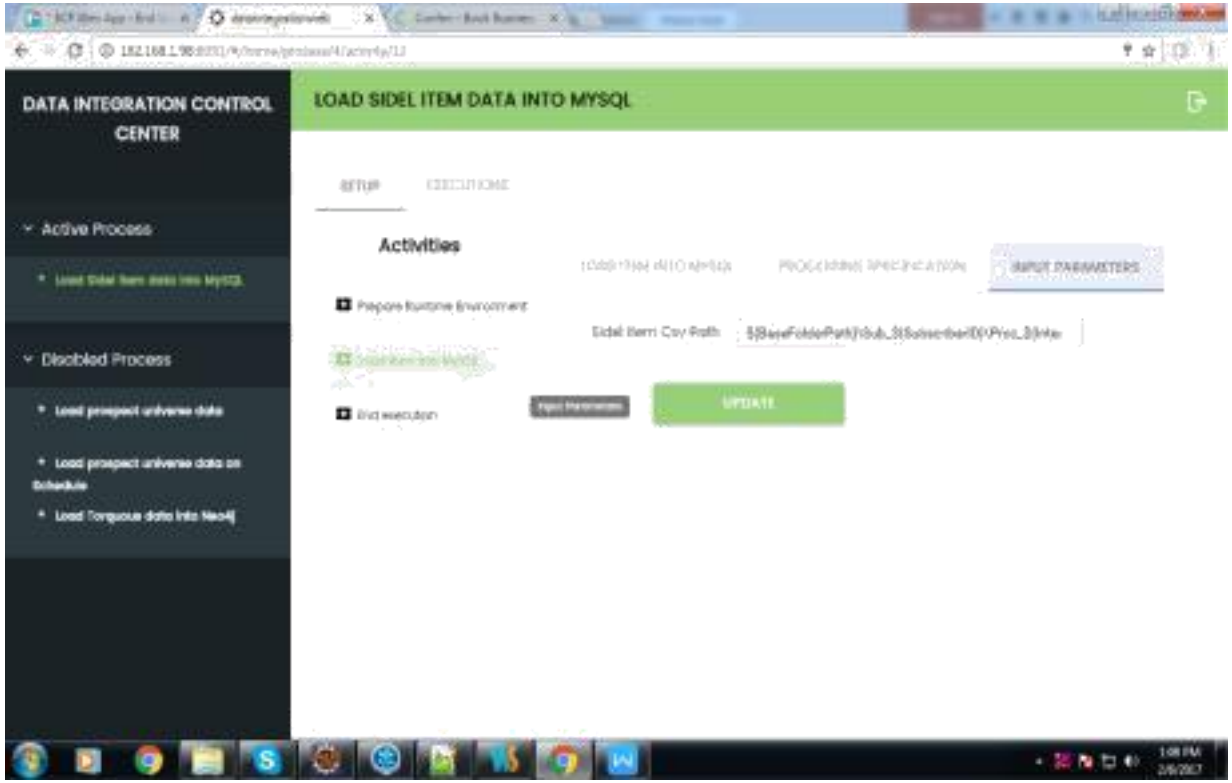

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
Active Process
Disabled Process
Activities
PREPARE RUNTIME ENVIRONMENT
Event Group Name
PREPARE_RUNTIME
Event Group Order Index
Activity Name
Prepare Runtime Environment
Activity Order Index
Activity Type
INTEGRATION
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY

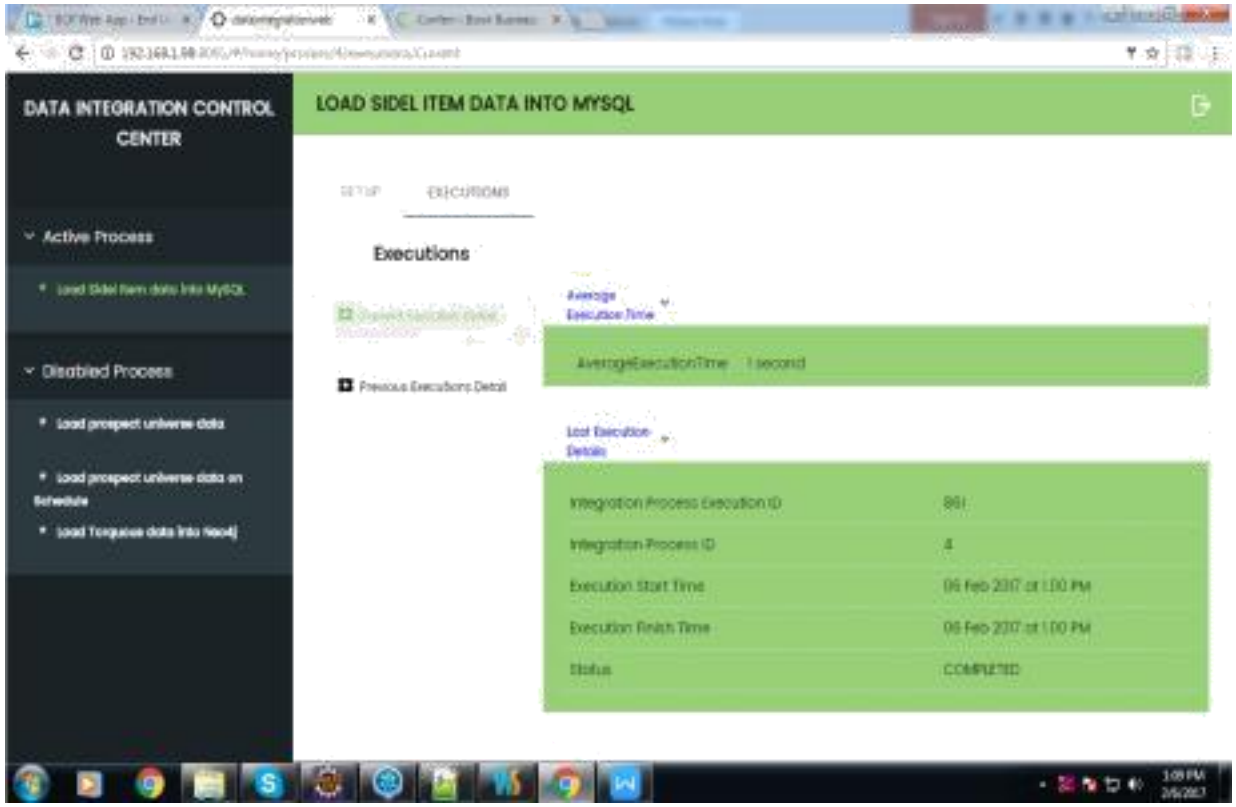

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY
ADVANCE
Cron Expression
More details about how to create these expressions can be found here
Cron Expression: 0 0/35 * * * ?
UPDATE SCHEDULE
Causes New Process Execution
true
Created Date
Modified Date

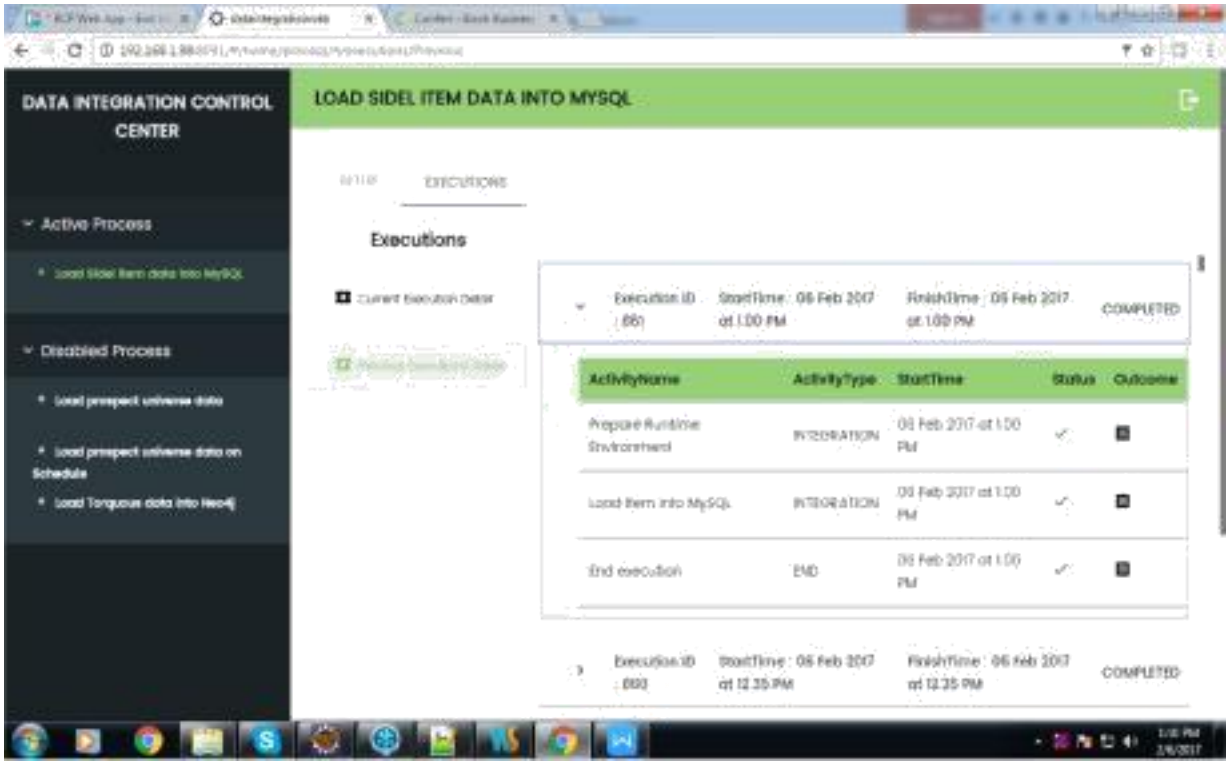

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
Active Process
Disabled Process
Activities
Load Item info MySQl
End execution
PROCESSING SPECIFICATION
Activity Execution ID
Step To Trigger
Workflow File Path
Workflow Type
Job
Output Parameters
UPDATE

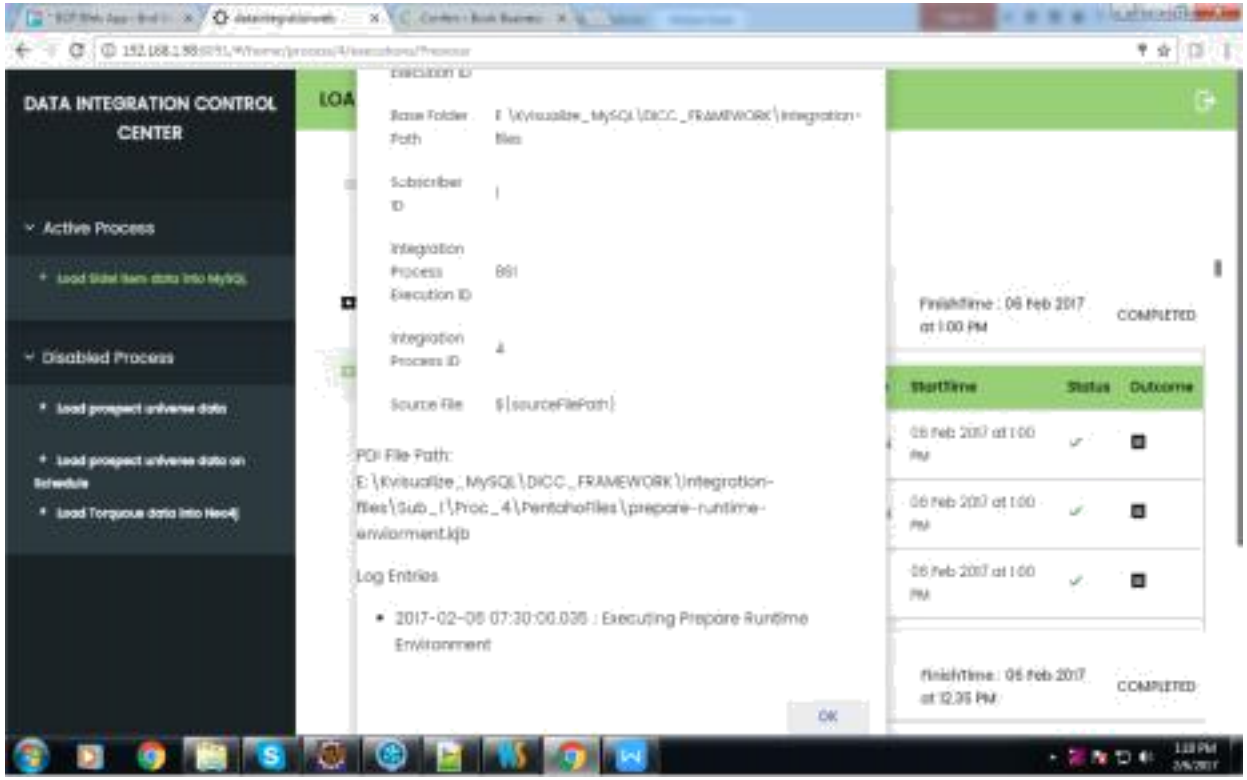

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Activities
Prepare Runtime Environment
End execution
Event Group Name
LOAD_MYSQL_DATA
Event Group Order Index
1
Activity Name
Load Item Into MySQL
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Causes New Process Execution
false
Created Date
Modified Date


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Active Process
Disabled Process
Activities
Prepare Runtime Environment
End execution
PROCESSING SPECIFICATION
Activity Execution ID
Workflow File Path
Step To Trigger
Workflow Type
Transformation
Output Parameters
UPDATE


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
Activities
INPUT PARAMETERS
Prepare Runtime Environment
Sidel Item Csv Path
UPDATE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torgueux data into Neo4j


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Executions
Average Execution Time
Last Execution Details
Integration Process Execution ID
Integration Process ID
Execution Start Time
Execution Finish Time
Status
COMPLETED


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Tongxue data into Neo4j
EXECUTIONS
Executions
Execution ID : 66 StartTime : 06 Feb 2017 at 1.00 PM FinishTime : 06 Feb 2017 at 1.00 PM COMPLETED
ActivityName ActivityType StartTime Status Outcome
Prepare Runtime Environment INTEGRATION 06 Feb 2017 at 1.00 PM
Load Item into MySQL INTEGRATION 06 Feb 2017 at 1.00 PM
End execution END 06 Feb 2017 at 1.00 PM
Execution ID : 893 StartTime : 06 Feb 2017 at 12.35 PM FinishTime : 06 Feb 2017 at 12.35 PM COMPLETED


DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torquoe data into Neo4j
Base Folder Path
Subscriber ID
Integration Process Execution ID
Integration Process ID
Source File
${sourceFilePath}
PDI File Path:
E:\Kvisualize_MySQL\DICC_FRAMEWORK\integration-files\Sub_1\Proc_4\PentahoFiles\prepare-runtime-enviorment.kjb
Log Entries
2017-02-06 07:30:00.035 : Executing Prepare Runtime Environment
OK
FinishTime : 06 Feb 2017 at 1:00 PM
COMPLETED
StartTime
Status
Outcome
06 Feb 2017 at 1:00 PM
06 Feb 2017 at 1:00 PM
06 Feb 2017 at 1:00 PM
finishTime : 06 Feb 2017 at 12:35 PM
COMPLETED

3.13 Data Dictionary

Field Name	**Data Type**	**Size**	**Description**
Activity_id	Bigserial	32	It is used for Activity_Id
Activity_exe_id	bigserial	32	Activity execution id
Activity_name	String	max	Name of the activity
Base64Data	String	max	
Corn_gen_id	bigserial	32	Corn generation id
Created_date	timestamp		Process Created date
Enable	boolean	1	Flag
EQ_id	bigserial	32	Event Queue id
Event_finish_time	bigserial	32	Event finish time
Event_start_time	bigserial	32	Event start time
File_encryption_key	bigserial	32	File encryption key
File_name	String	max	
File-id	bigserial	32	Primary Key
IP_id	bigserial	32	Integration process id
Ip_name	String	max	Integration process name
Ip_unique_referencing	String	max	Referencing key
IPE_end_time	timestamp		Integration process End time

IPE_id	bigserial	32	Integration process execution id
IPE_start_time	timestamp		Integration process Start time
Js_id	bigserial	32	Job scheduling id
Modified_date	timestamp		Modified date
next_Act_id	Bigserial	32	
Status	String	max	Status
Sub_id	Bigserial	32	Subscriber_id
Tf_id	Bigserial	32	Transform id

3.14 Table specifications

Subscriber:

Field Name	**Data Type**	**Size**	**Constraints**
Sub_id	bigserial	32	Primary Key
Password	String	50	
Client_id	bigserial	32	
Sub_unique_key	String	100	
Client_ secret	String	100	
Sub_name	String	100	

Integration Process:

Field Name	**Data Type**	**Size**	**Constraints**
IP_id	Bigserial	32	Primary Key
Created_date	Timestamp		
Enable	Boolean	1	
File_encryption_key	Bigserial	32	
Ip_name	String	32	
Ip_unique_referencing	String	32	
Sub_id	Bigserial	32	Foriegn Key

Integration Process Execution:

Field Name	**Data Type**	**Size**	**Constraints**
IPE_id	Bigserial	32	Primary Key
IPE_end_time	Timestamp		
IPE_start_time	Timestamp		
IP_id	Bigserial	32	Foriegn Key

Event Queue:

Field Name	**Data Type**	**Size**	**Constraints**
EQ_id	bigserial	32	Primary Key
Created_date	timestamp		
IPE_id	bigserial	32	Foriegn Key
IP_id	bigserial	32	Foriegn Key
Sub_id	bigserial	32	Foriegn Key
Modified_date	timestamp		
Status	String	Max	

Activity:

Field Name	**Data Type**	**Size**	**Constraints**
Activity_id	bigserial	32	Primary Key
Created_date	timestamp		
Ip_id	bigserial	32	Foriegn Key
Status	string	Max	

Activity Execution:

Field Name	**Data Type**	**Size**	**Constraints**
Activity_exe_id	bigserial	32	Primary Key
Event_finish_time	bigserial	32	
Event_start_time	bigserial	32	
Status	string	Max	
Activity_id	bigserial	32	Foriegn Key

Job Scheduling

Field Name	**Data Type**	**Size**	**Constraints**
Js_id	bigserial	32	Primary Key
Corn_gen_id	bigserial	32	
IP-Id	bigserial	32	Foriegn Key

Files:

Field Name	**Data Type**	**Size**	**Constraints**
File-id	bigserial	32	Primary Key
File_name	string	Max	
Base64Data	string	Max	

Step to trigger:

Field Name	**Data Type**	**Size**	**Constraints**
Activity_id	Bigserial	32	Foriegn Key
next_Act_id	Bigserial	32	

Transform File:

Field Name	**Data Type**	**Size**	**Constraints**
Tf_id	bigserial	32	Primary Key
Activity_id	bigserial	32	Foriegn Key
IPE_id	bigserial	32	Foriegn Key

3.15 Test Procedures and Implementation

Test plan

Introduction:

Test plan has following objectivies:

Define the activities required for different testing.

Define the test tool and environment needed for the system test

Scope:

This test plan covers a full system test for monitoring system which include all data entry screens.

Test strategy

Test strategy consist of different tests that will fully exercise the system.

The primary purpose of the test is to uncover system limitations and measures its full capacities.

a) Unit testing

Unit testing focuses on testing smallest unit of software design.

b) Performance testing

Performance test will be conducted to ensure that the system response time meets the user expectation and do not exceed the specified performance criteria.

c) system testing:

This testing focus on the behavior of the system. Overall it includes testing the integrated system and verify that it meets the requirement specified during design phase.

d) Environment requirement:

- windows operating system
- database PostgreSQL server
- internet explorer/Google chrome

e) Risk:

1) **Schedule**: the schedule for each and every phase is very aggressive and could affect testing.

2**) Technical:** This is a new system, in event of failure maintenance is required.

3) **Management:** management support is required so the project falls behind, the test schedule does not get squeezed to make for delay.

Implementation:

1. Eventually multiple users will be using application simultaneously; therefore concurrent connection will be issue for implementation.
2. We will be looking for the entry and exit condition of data will make sure all the function work without any troubles.
3. We will use table to log the entire test describe them and to record of the tests. Below are the tables :

TEST CASES

Test item - Login

Cardinality: negative

Test case name	Test case description	Input	Expected Output	Actual output	Status	Priority
Validate login	User name or password Fields are blank	Username = Password=	Focus on Username and password field and Give message Field should not be empty	Please enter user name	pass	High

Validate Login	Password Entered is wrong	Username = iquantify Password= 12345	Display message Incorrect password	Incorrect User-name or pass-word	pass	High

Cardinality: positive

Test case name	Test case description	Input	Expected Output	Actual output	Status	Priority
Validate login	Enter correct user name And	Username = iquantify Password= Iquantify1	Successfully login and redirect To home	Redirct to Home page Of Appropria	pass	High

	password	23	page	te user		

Test item - Auth 2 Token

Cardinality: positive

Test case name	Test case description	Input	Expected Output	Actual output	Status	Priority
Check Auth 2 Token is granted.	Enter correct user name And password	Username = iquantify Password= Iquantify123	Successfully login and redirect To home page And will get Auth 2 Token	Redirct to Home page Of Appropriate user And will get Auth 2 Token	pass	High

Test item: Cron Expression Generation

Cardinality: negative

Test case name	Test case description	Input	Expected Output	Actual output	Status	Priority
Validate Cron Expression Generation	Select Invalid cron expression	Cron Exp = 12 13 1 13 *	Message will be display Invalid Cron Expression	Invalid Cron Expression	pass	High
Validate Cron Expression Generatio	Filed kept Blank	Cron Exp =	Message will be Display Cron Exp Required	Message will be Display Cron Exp Required	pass	High

n						

Cardinality: positive

Validate Cron Expression Generation	Enter Field correctly	Cron Exp= 12 9 1 12 *	Successfully Saved	Successfully Saved And stored in databse	pass	High

Test item: Step to Trigger

Cardinality: negative

Test case name	Test case description	Input	Expected Output	Actu-al output	Status	Priority
Validate Entered Activity Id	Enter blank Activity Id	Step to Trigger =	Message Will be Display that Please Enter Activity Id.	Message Will be Display that Please Enter Activity Id.	pass	High

Cardinality: positive

Test case name	Test case description	Input	Expected output	Actu-al output	Status	Priority
Validate Entered Activity Id	Enter blank Activity Id	Step to Trigger = 2	Message Won't Display.	Message Won't Display.	pass	High

Test item: Activity Execution

Cardinality: positive

Test case name	Test case description	Input	Expected Output	Actu-al output	Status	Priority
Activity	Click On	null	Stored in	Stored	pass	High

Exexcution	Execute		Database Message will be Success	in Database Message will be Success		

Test item: Integration Process Execution

Cardinality: positive

Test case name	Test case description	Input	Expected Output	Actu-al output	Status	Priority
Integration Exexcution	Click On Execute	null	Stored in Database Message will be Success	Stored in Database Message will be Success	pass	High

Chapter 4

USER MANUAL

4.1 User manual

The user manual is meant to be used by all users using the system, with prior training session from the Development unit, plus he/she has to be skilful enough in operating the intended system. This manual is used for benefit of intended user to make it more clearly along with functioning of system, the processes and precautions that must be followed during working with the system. It also tells the user how to use various functionality of the site being provide according to the type of user, whenever user logs in to the system.

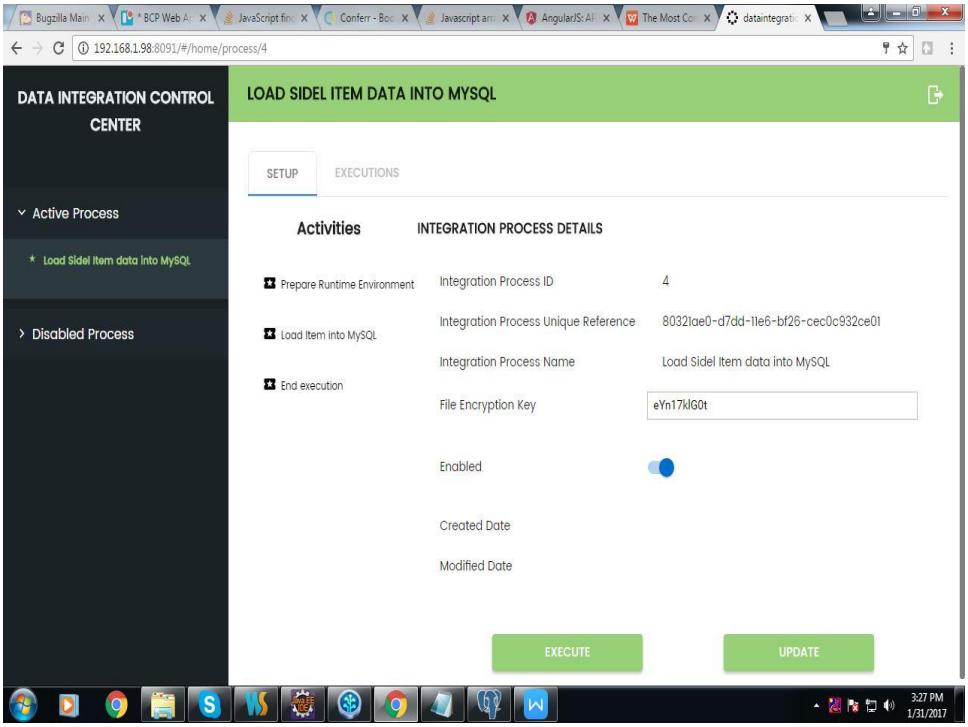
How to use this system:-

1)The User needs to login to the System.

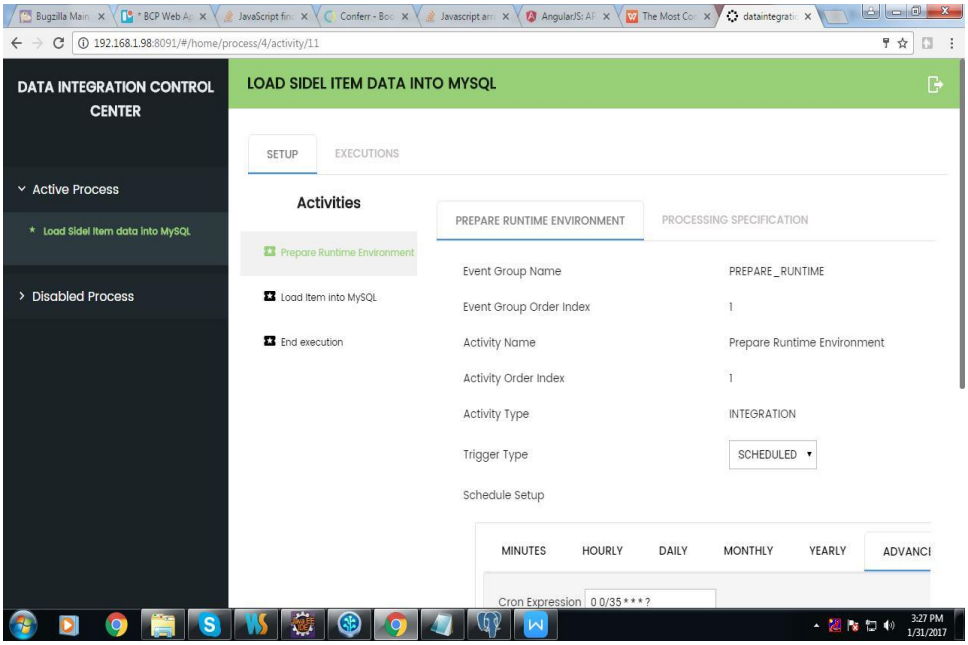
2)Then there are 2 Categories.

3)One is Enabled Process and other One is disabled process.

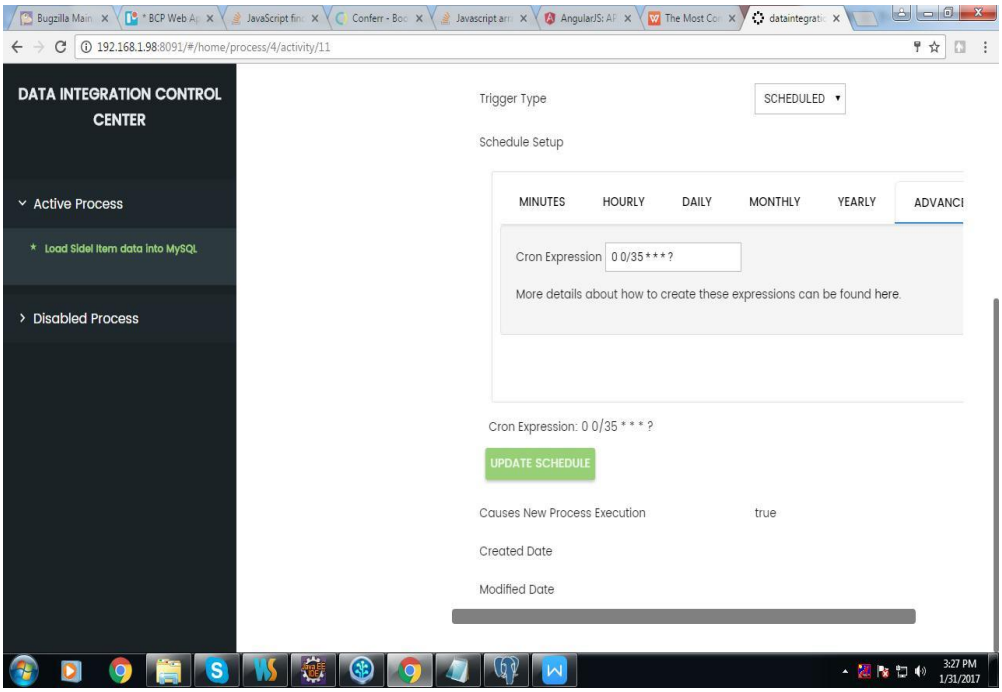
4)User needs to select that he wants to do the operations on.



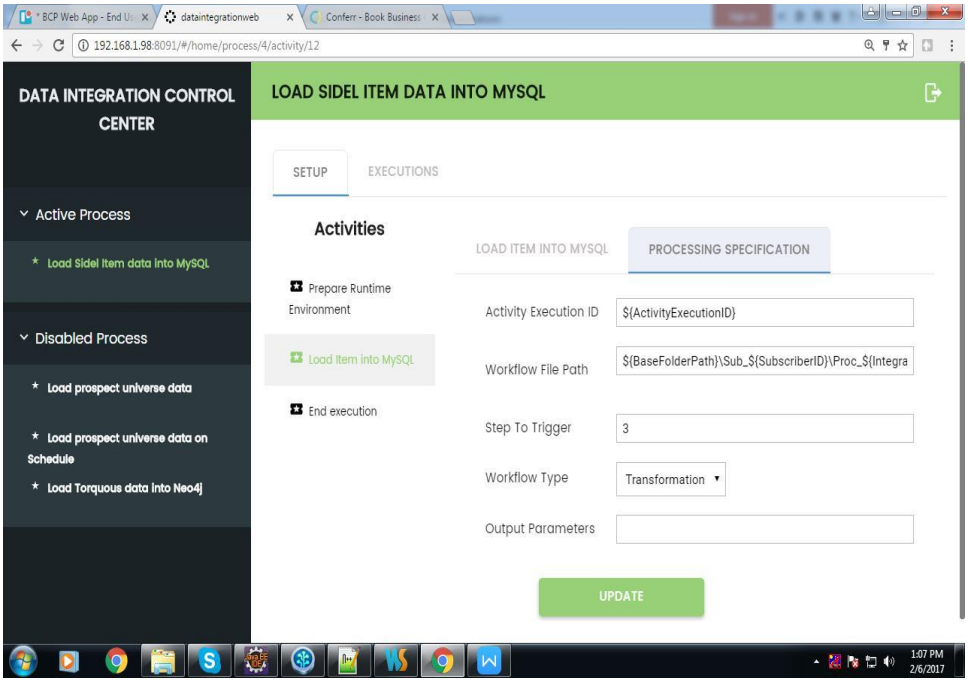
5)When User selects one of the process then the user will get the activities of that Integration process.



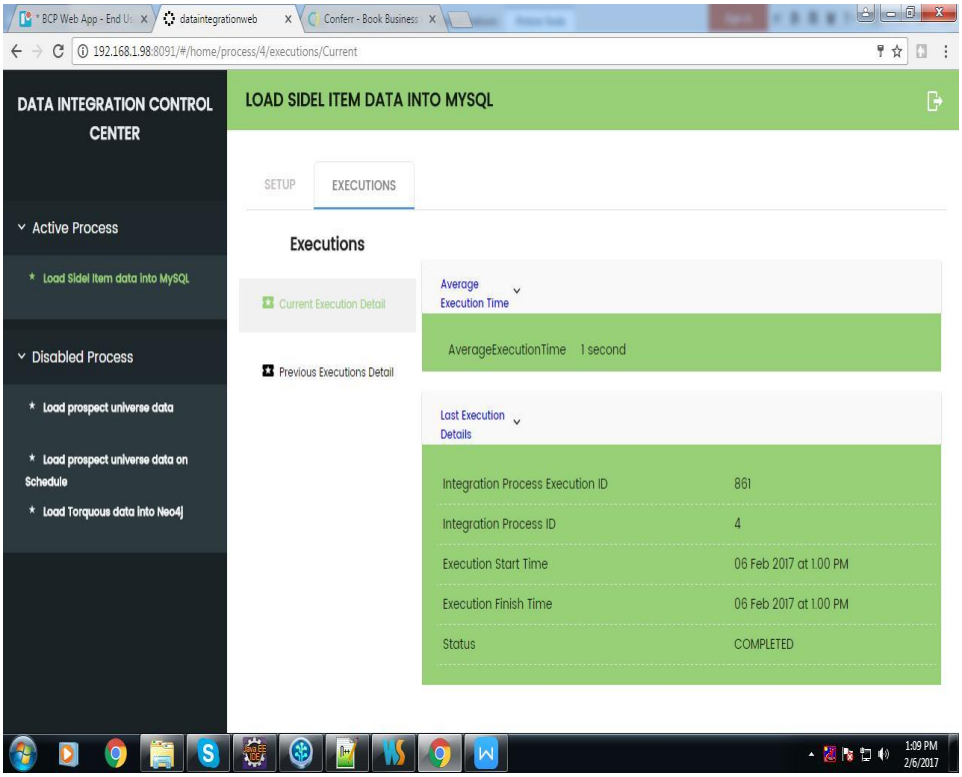
6)Then User needs to set the Cron Expression.



7)When User moves further to next activity then he has to give some inputs to the activity and needs to set the next activity and click on the Execute button or Update button.



8)The user can see the current execution and previous execution by clicking the Execution tab.



4.2 Operations Manual / Menu Explanation

User's Login Page:-

User enters the credential in the login page, the login page verifies the credetials, if the credetials are authorized the the login page generates the auth2token and gives the acces to the system , otherwise it will allow the User to enters the credetials again.

Home Page/Integration Process :-

There can be a one or more integration processes. When a user clicks on the Integration Process, it will allow the user to either executes/updates the process or go to the activities related to the Integration Process.

Activity Execution:-

There can be a one or more Activities. When a user clicks on one of the activies then there is a Step to trigger field,by default it has next activity's number but the ser can enter the number the he/she wants

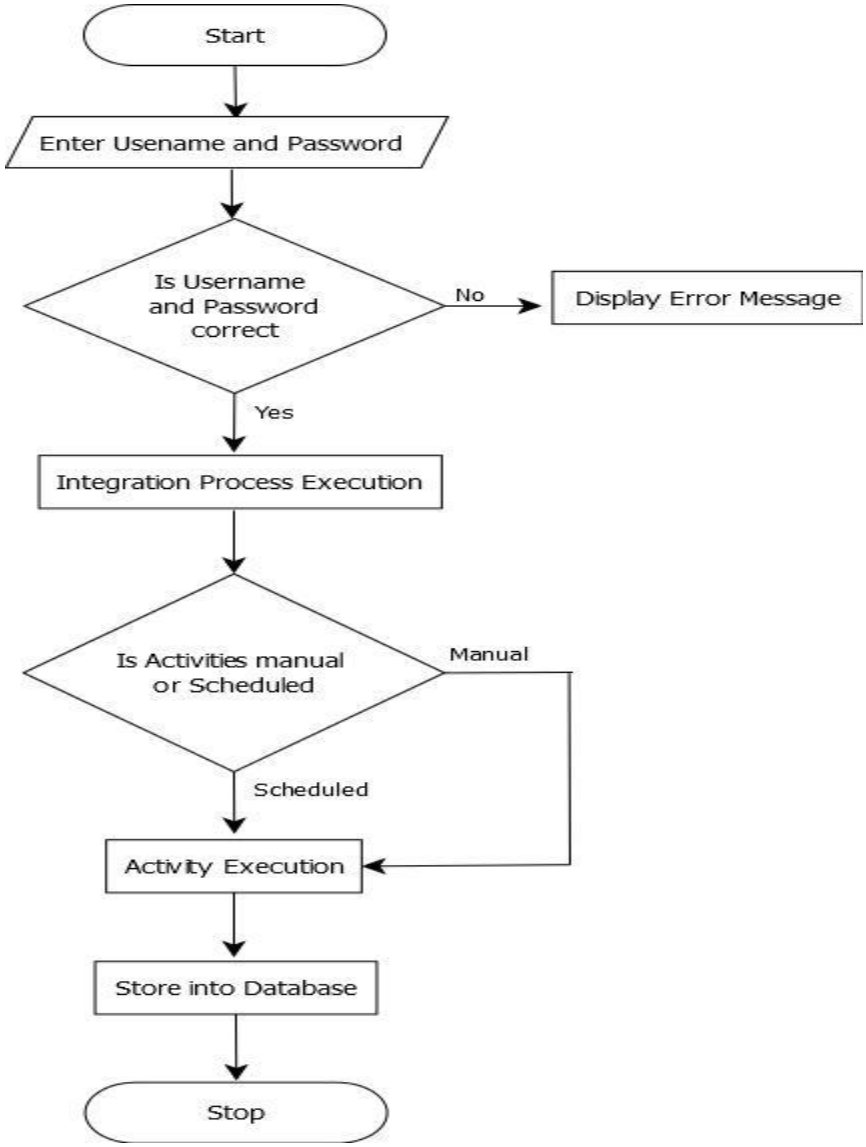
to execute an next activity , it will allow the user to execute or update an Activity.

Previous Execution And Current Execution Tab :-

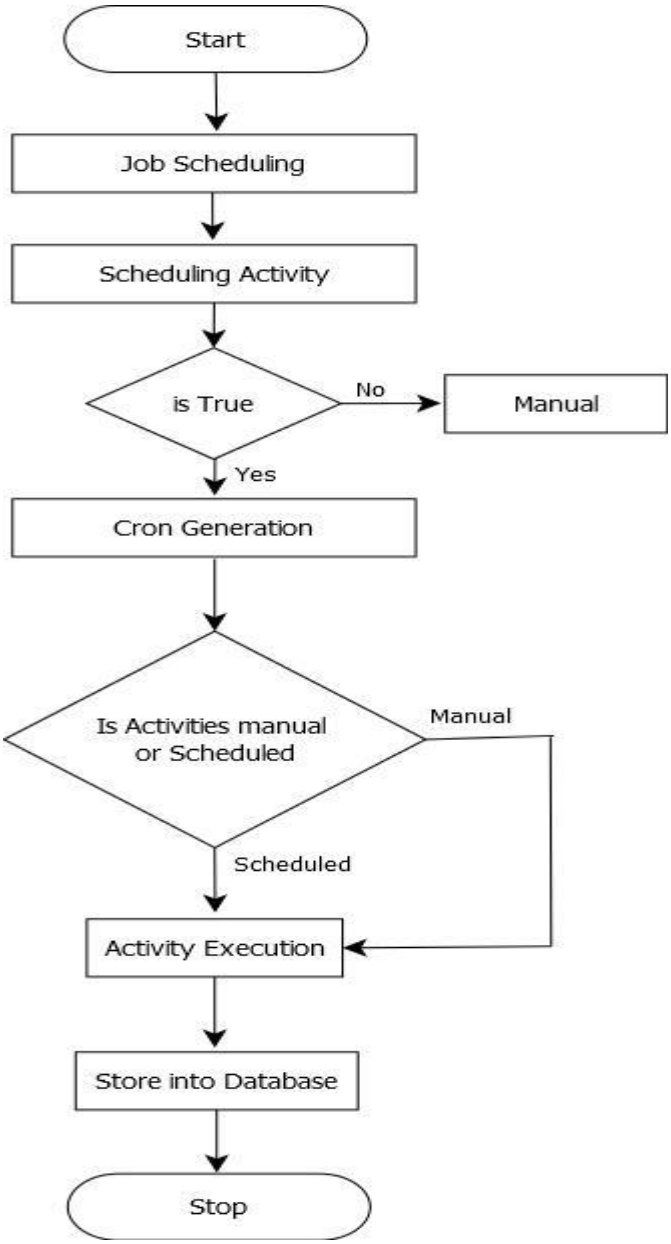
Current Execution Tab will allow the user to see , which activity of which Integration Process is executing currently and details of that activity and Previous Execution Tab will allow the User to see the previous executions and details of those activites.

4.3 Program Specification / Flow Charts

4.3.1 System's Flowchart



4.3.2 Cron-Expression Generation Flowchart



Proposed Enhancements :-

Delete function:

An Integration Process created by user should be deleted when it is no longer needed by the users or too old.

Conclusions:

The “Data Integration Control Center” is developed for the converting the raw data into information. This project is developed in AnglarJS and Spring Boot. It is very user friendly.

I have got an opportunity to learn AnglarJS with SpringBoot techniques and how to use the PostgreSQL-Server as backend and experience of project implementation in those particular technologies.

“Data Integration Control Center” is implemented successfully on client machine so it’s our pleasure to see that our code is going to work and reap result as expected.

The application has been tested with live data and has provided successful result.

Hence the software has proved to work efficiently.

Bibliography:-

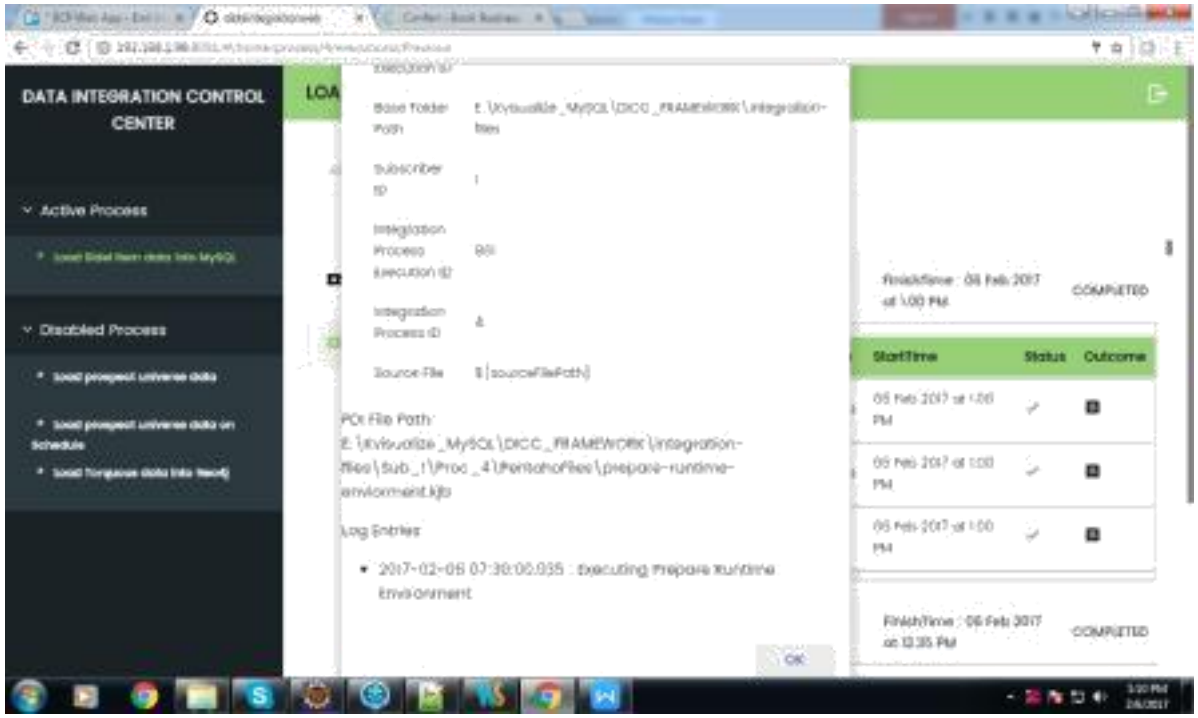
WEBSITES

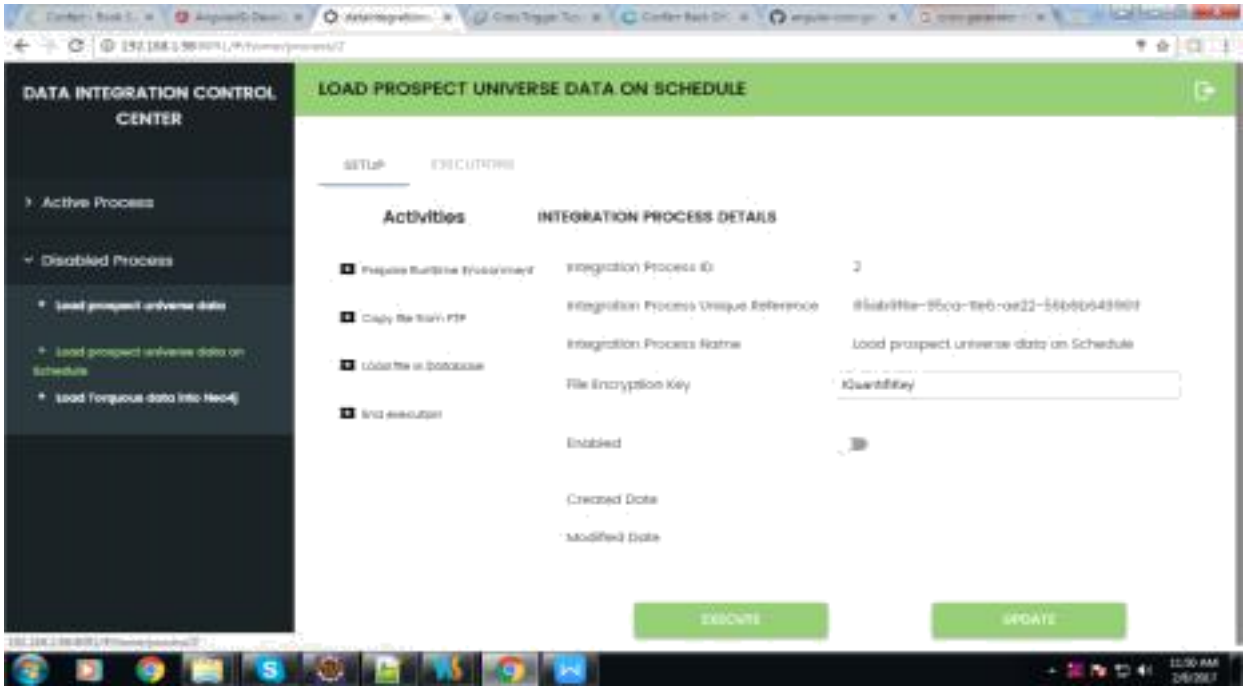
- www.Angular.org
- www.StackOverFlow.com

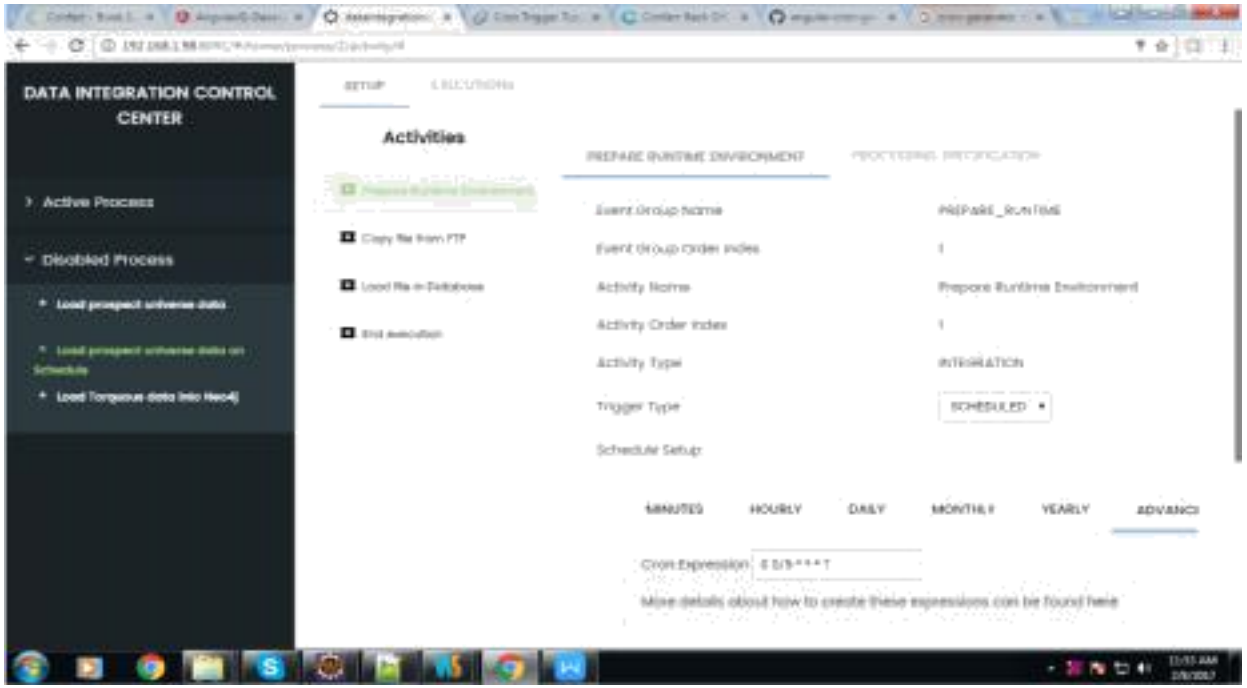
BOOKS

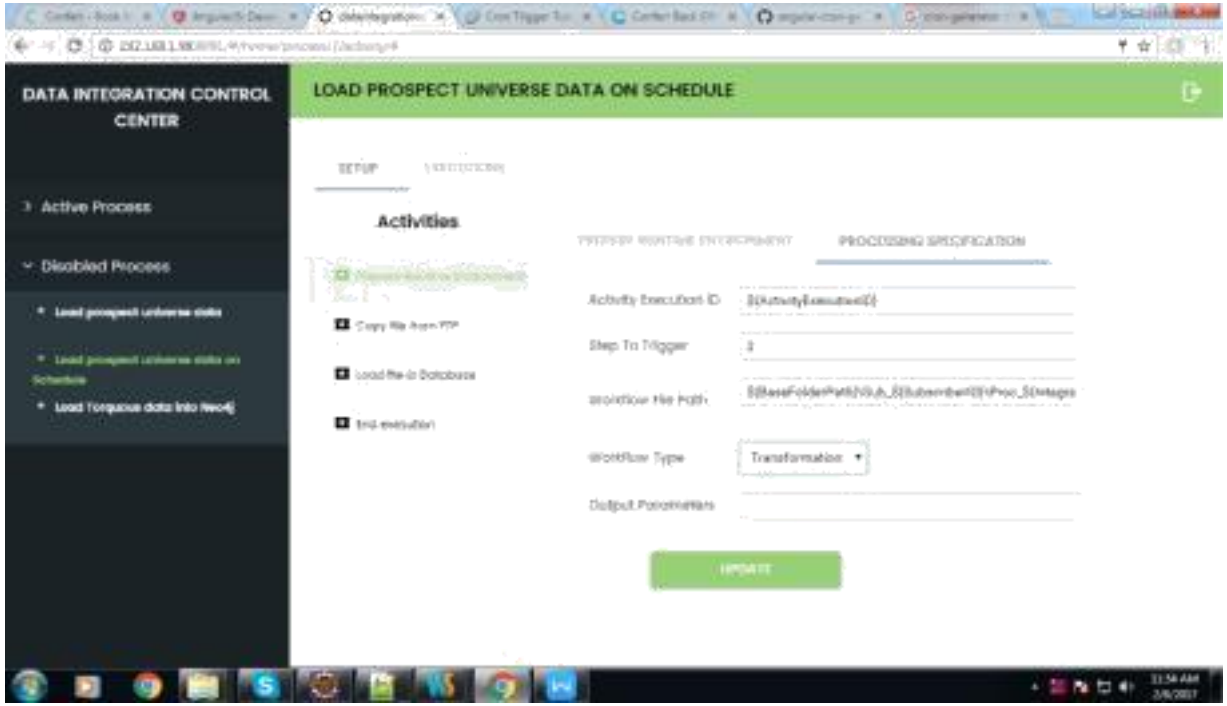
- AngularJS, the complete Reference By Robert standefer .
- Programming PostgreSql Server 2005 By Andrew J.Brust.

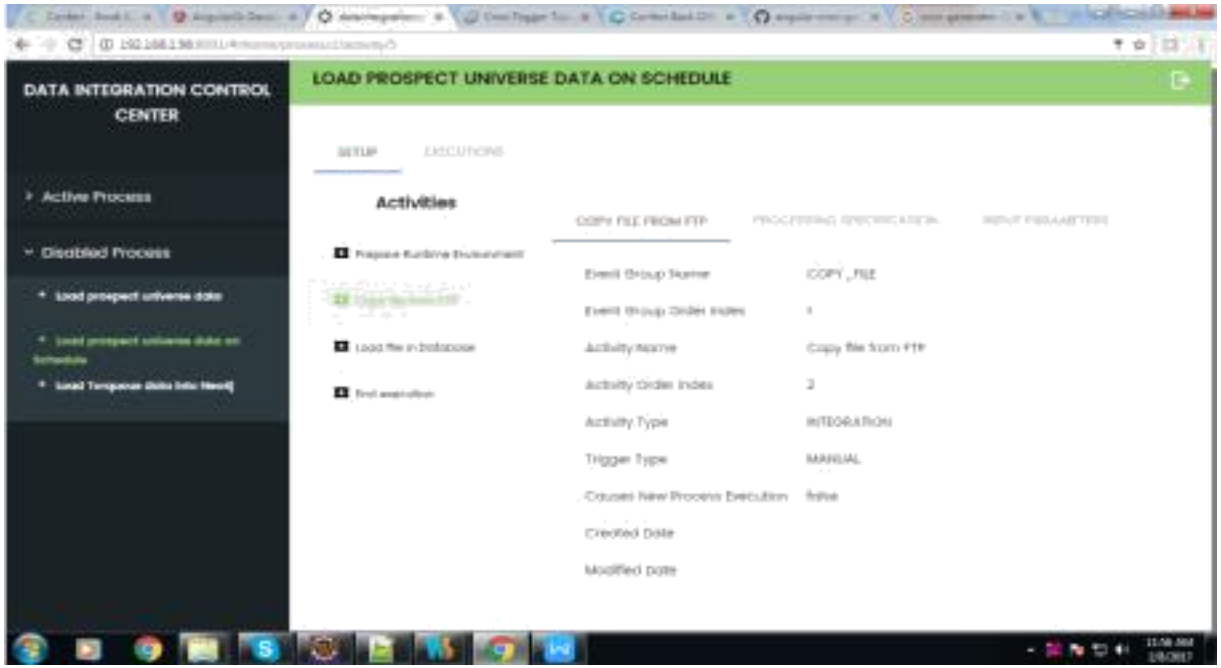
ANNEXURE 1

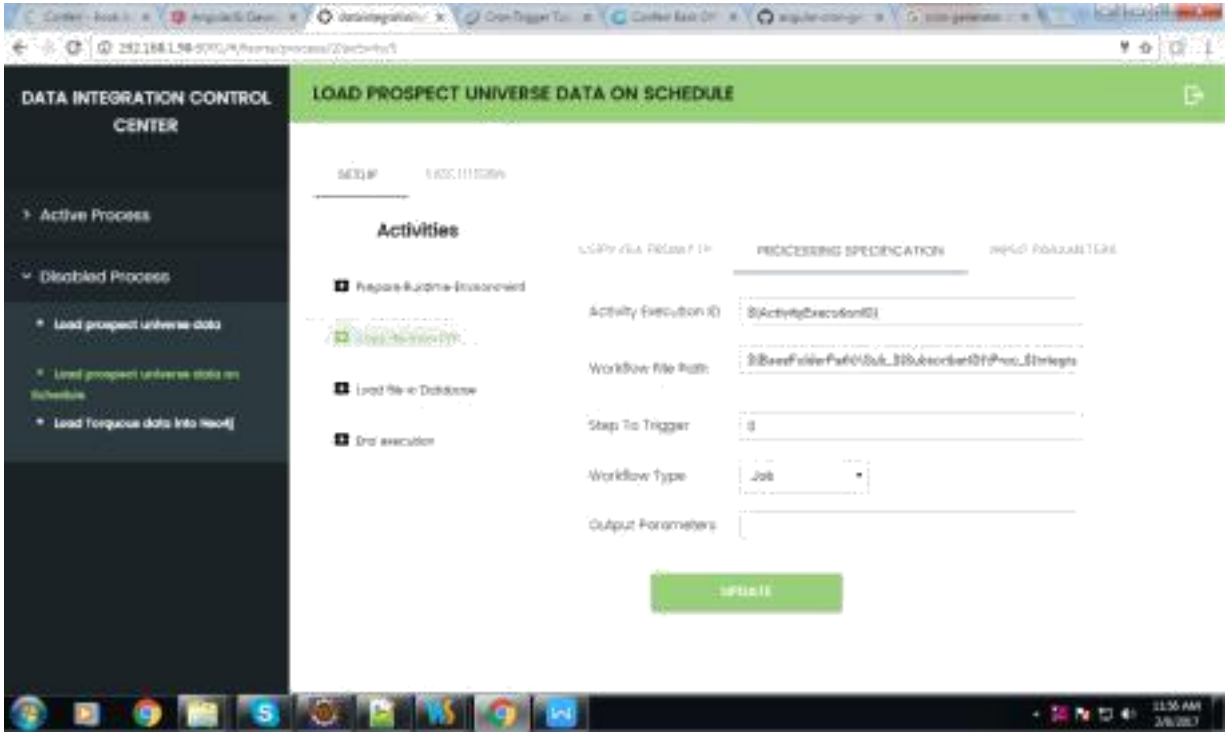

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Base Folder Path
Subscriber ID
Integration Process Execution ID
Integration Process ID
Source File
${sourceFilePath}
PDI File Path:
Log Entries
2017-02-06 07:30:00.035 : Executing Prepare Runtime Environment
OK
StartTime
Status
Outcome
COMPLETED
COMPLETED

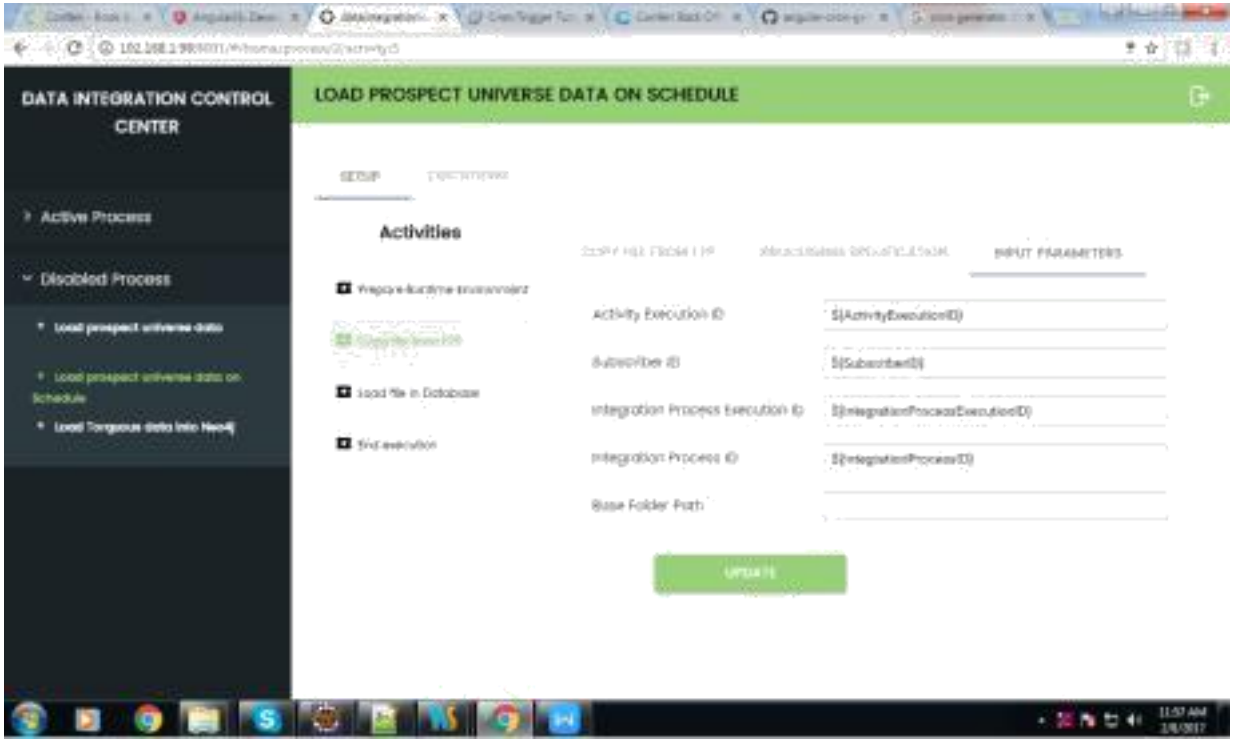

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torquous data into Neo4j
SETUP
Activities
INTEGRATION PROCESS DETAILS
Integration Process ID
2
Integration Process Unique Reference
Integration Process Name
Load prospect universe data on Schedule
File Encryption Key
IQuantifiKey
Enabled
Created Date
Modified Date
EXECUTE
UPDATE

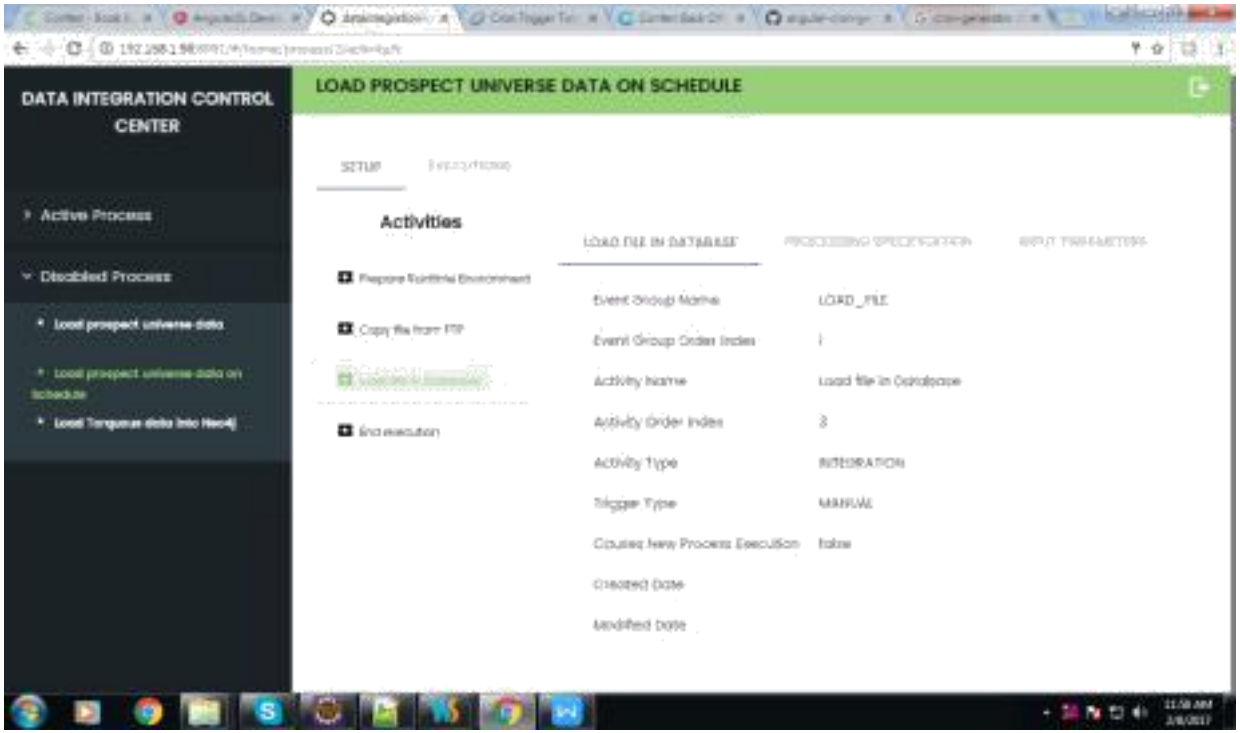

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Activities
Copy file from FTP
Load file in Database
End execution
PREPARE RUNTIME ENVIRONMENT
Event Group Name
PREPARE_RUNTIME
Event Group Order Index
1
Activity Name
Prepare Runtime Environment
Activity Order Index
1
Activity Type
INTEGRATION
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY
ADVANCED
Cron Expression
More details about how to create these expressions can be found here

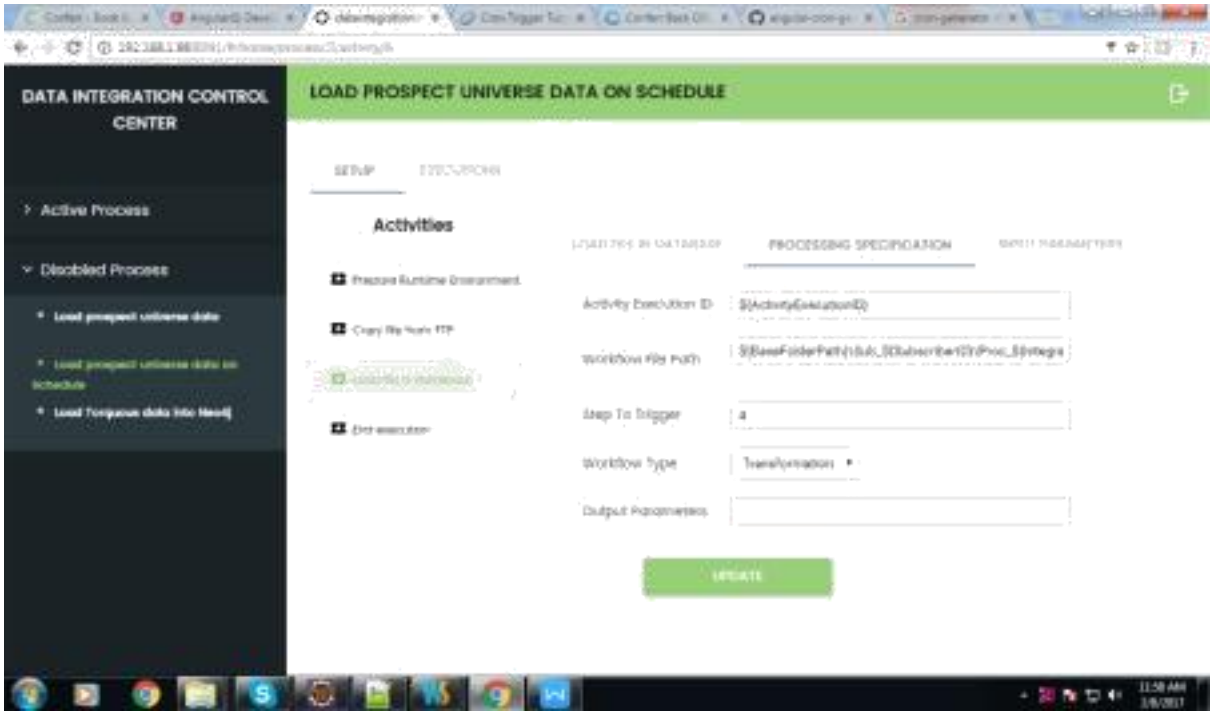

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Activities
PROCESSING SPECIFICATION
Activity Execution ID
Step To Trigger
Workflow File Path
Workflow Type
Transformation
Output Parameters
UPDATE

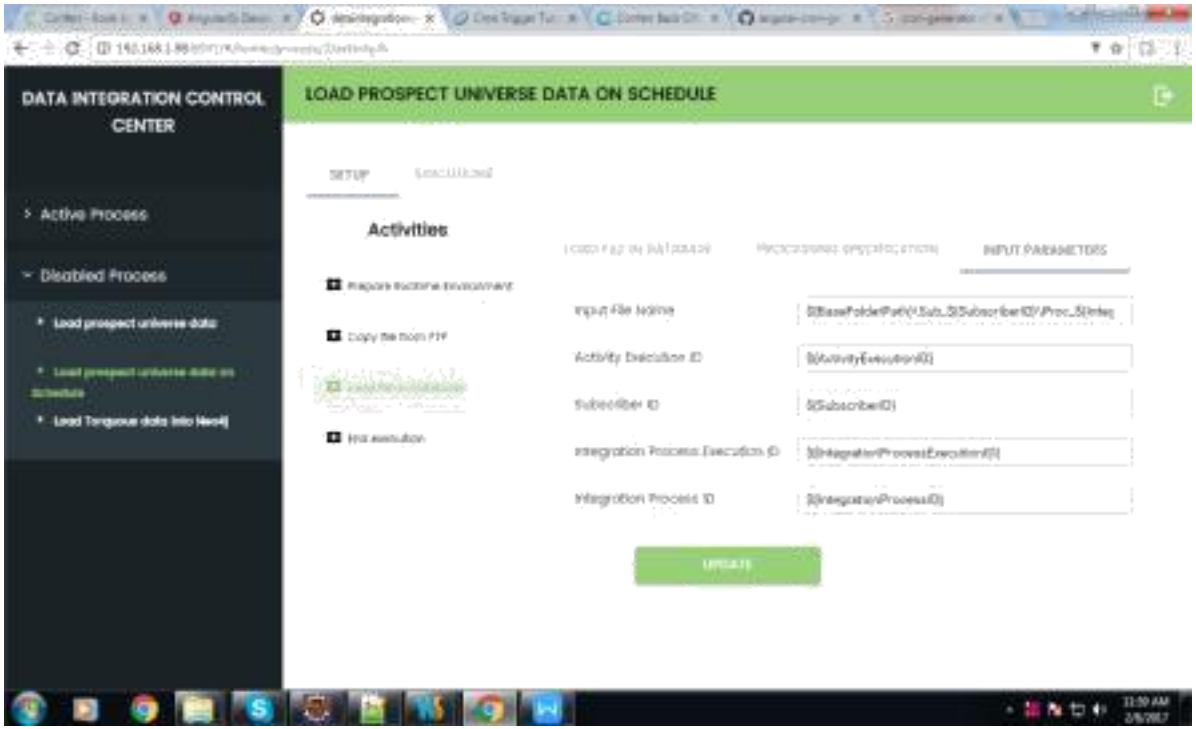

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
EXECUTIONS
Active Process
Disabled Process
Load prospect universe data
Activities
COPY FILE FROM FTP
Event Group Name
COPY _FILE
Event Group Order Index
1
Activity Name
Copy file from FTP
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Creates New Process Execution
false
Created Date
Modified Date

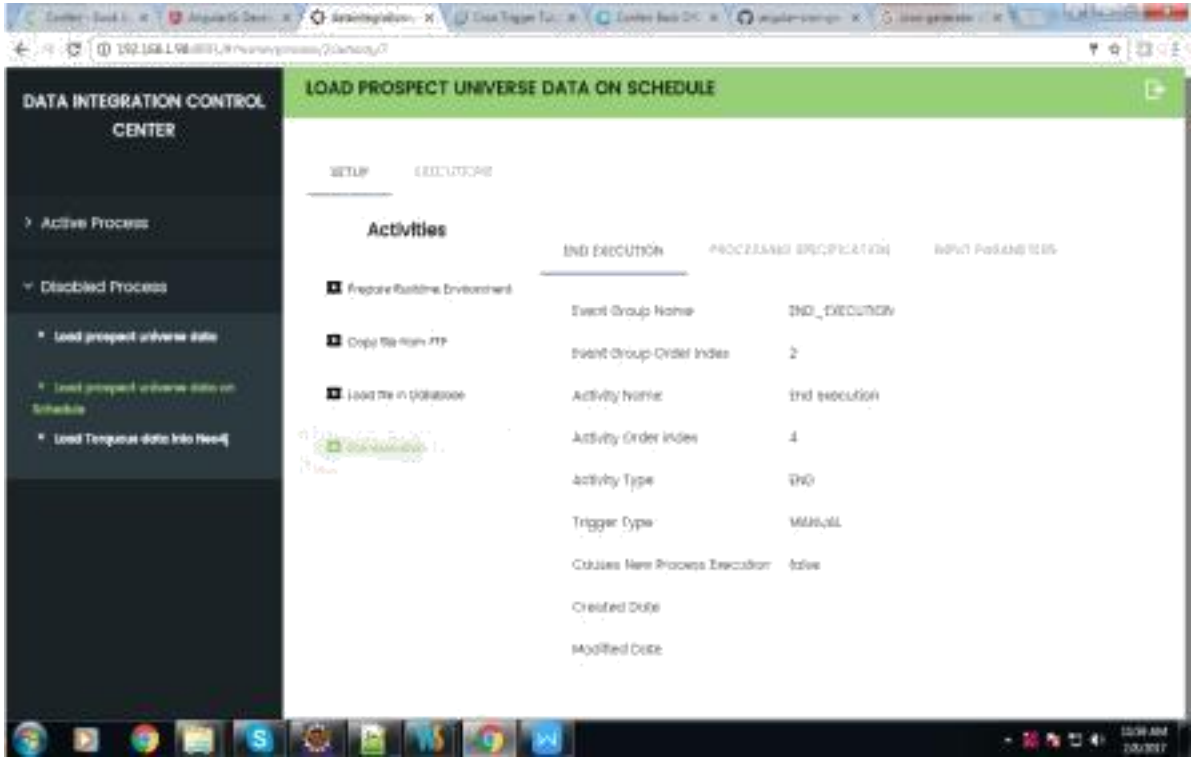

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load Torquoa data into Hexaj
Activities
Load file in Database
Exe execution
PROCESSING SPECIFICATION
Activity Execution ID
Step To Trigger
Workflow Type
Job
Output Parameters

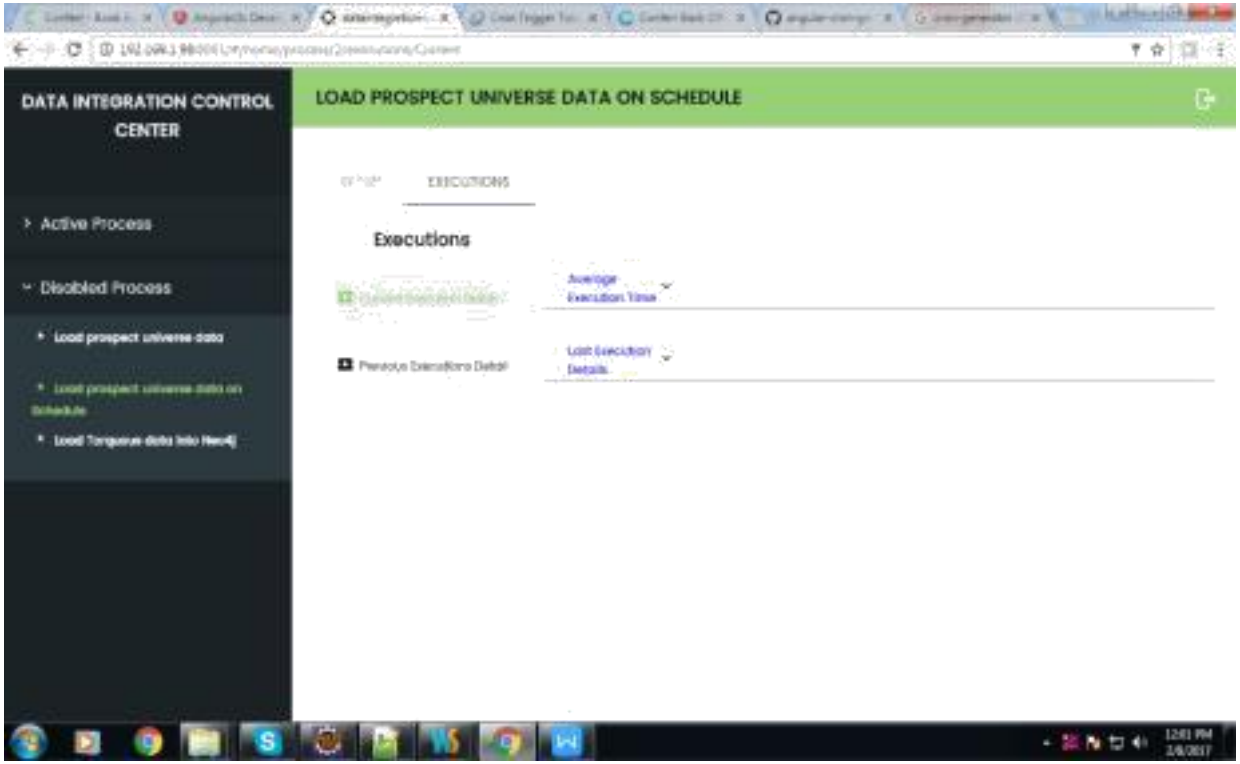

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Activities
INPUT PARAMETERS
Activity Execution ID
Subscriber ID
Integration Process Execution ID
Integration Process ID
Base Folder Path
UPDATE

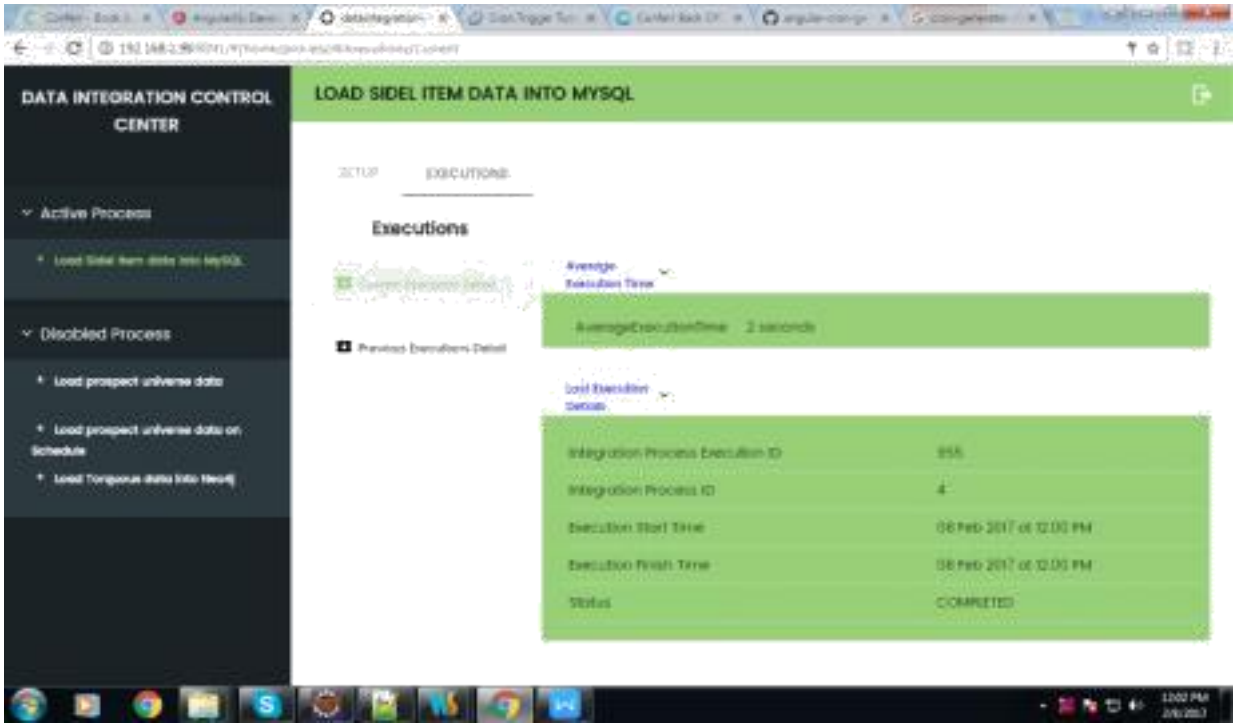

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on
Load Tongueue data into Neo4j
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
Activities
Prepare Runtime Environment
Copy file from FTP
End execution
LOAD FILE IN DATABASE
Event Group Name
LOAD_FILE
Event Group Order Index
1
Activity Name
Load file in Database
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Causes New Process Execution
false
Created Date
Modified Date

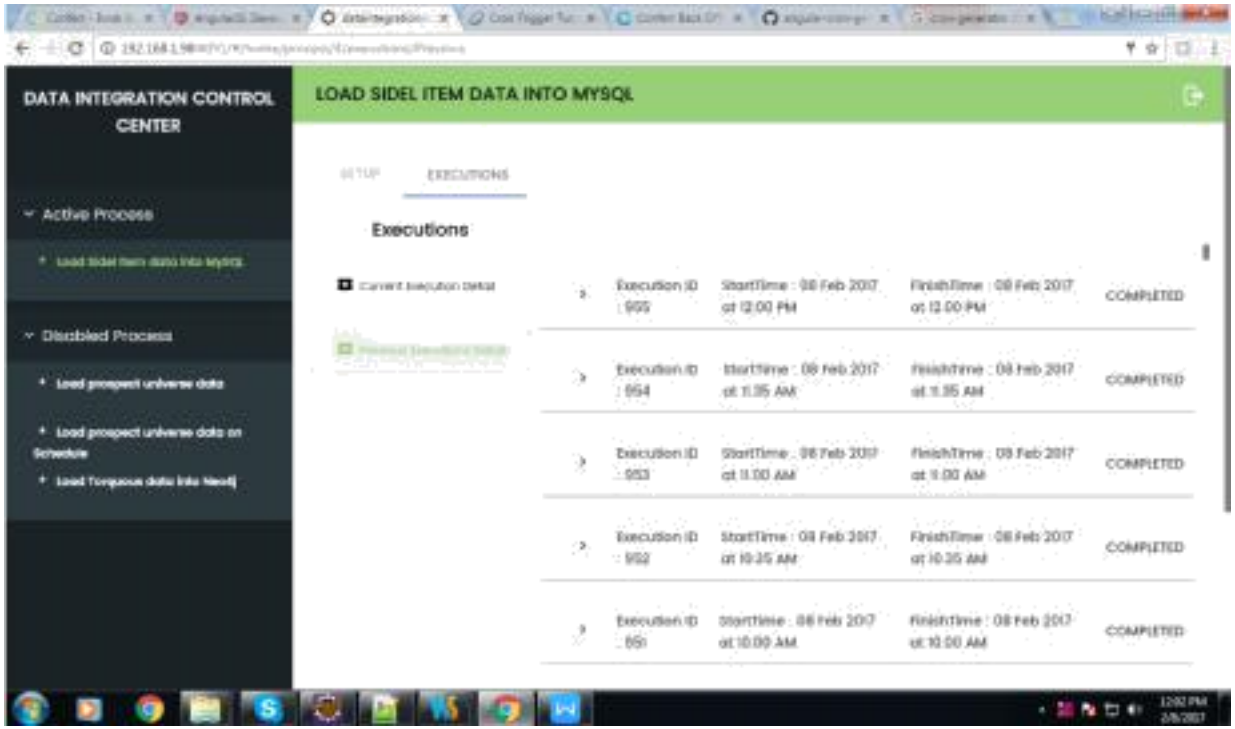

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on schedule
Load Torquoise data into Neo4j
SETUP
Activities
PROCESSING SPECIFICATION
Activity Execution ID
Workflow File Path
Jump To Trigger
Workflow Type
Output Parameters
UPDATE

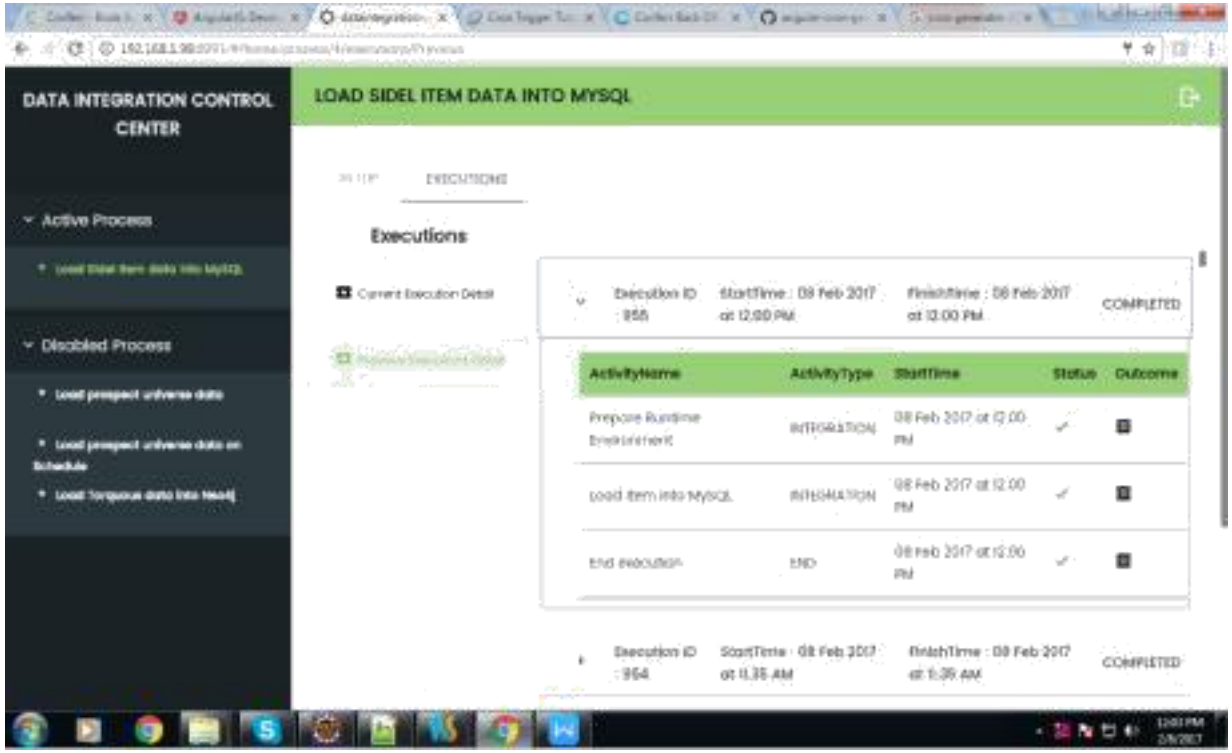

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
SETUP
Activities
Active Process
Disabled Process
Load prospect universe data
Load Torquoe data into Neo4j
INPUT PARAMETERS
Input File Name
Activity Execution ID
Subscriber ID
Integration Process Execution ID
Integration Process ID
UPDATE

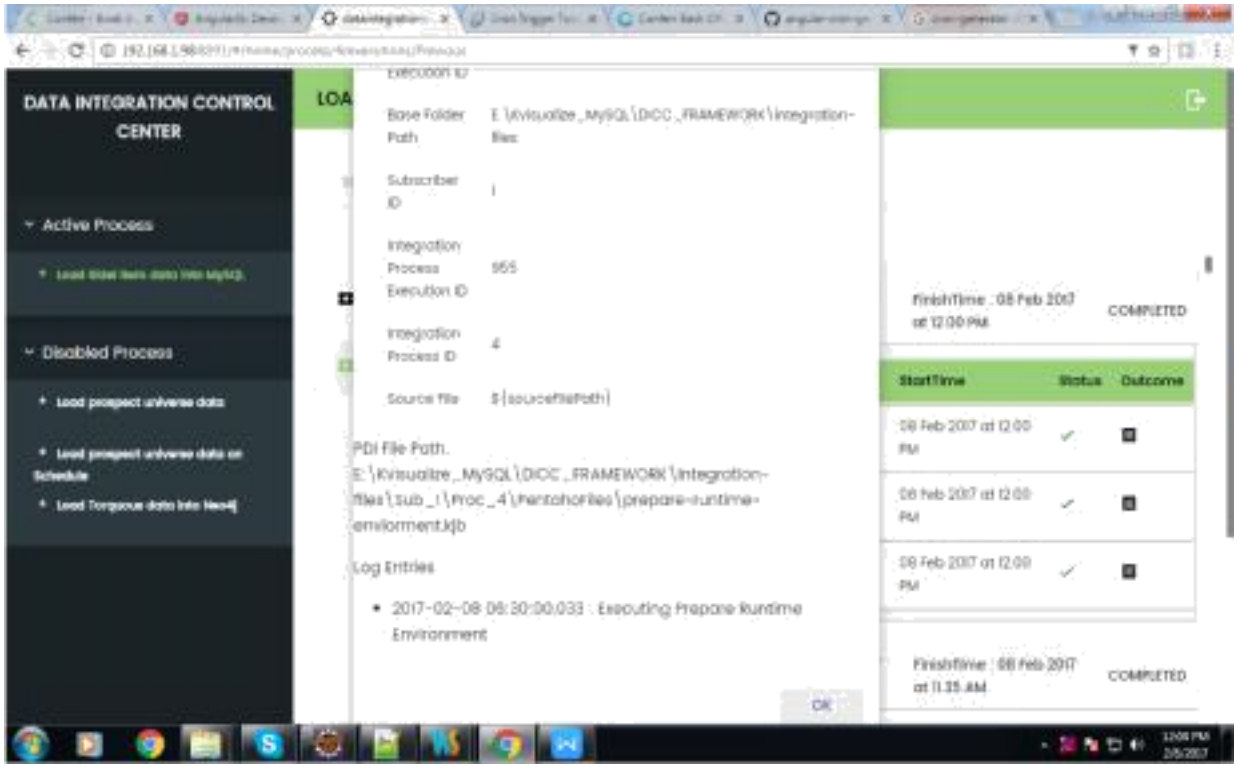

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Activities
Prepare Runtime Environment
Load file in Database
END EXECUTION
Event Group Name
END_EXECUTION
Event Group Order Index
2
Activity Name
End execution
Activity Order Index
4
Activity Type
END
Trigger Type
Manual
Created Date
Modified Date

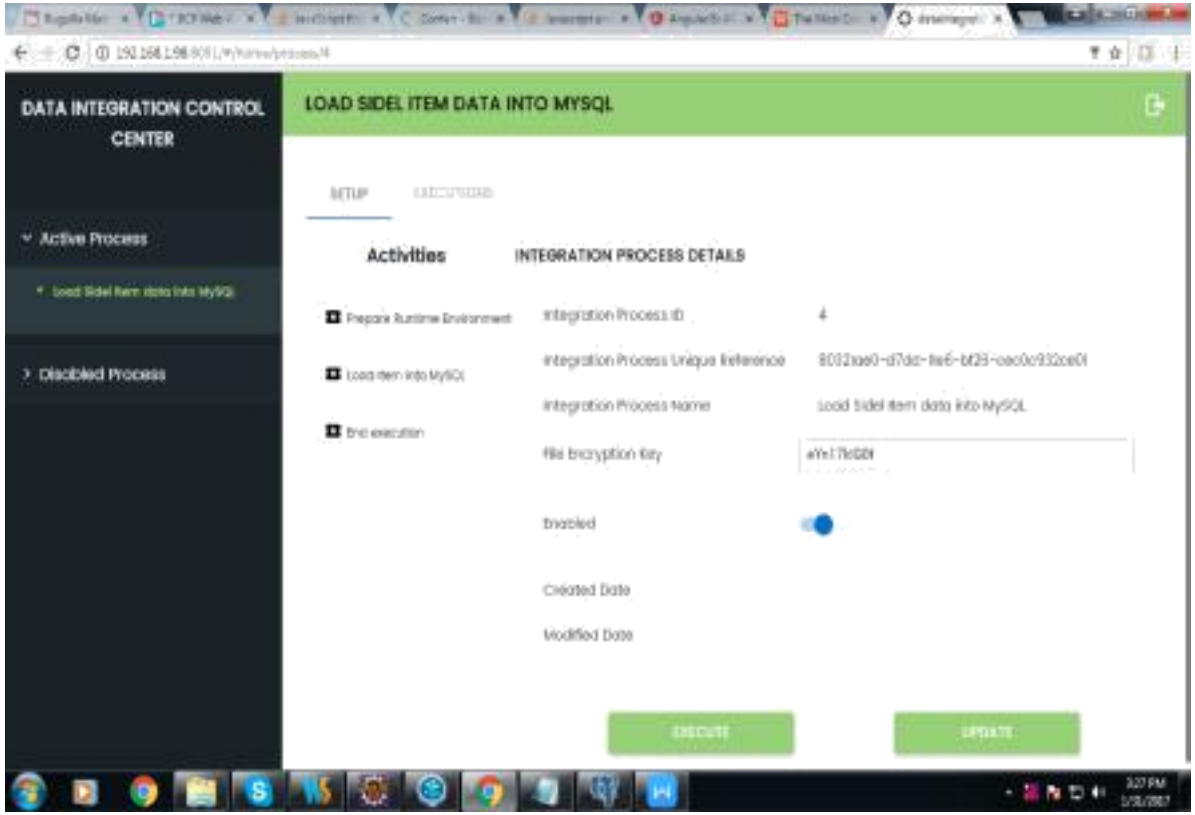

DATA INTEGRATION CONTROL CENTER
LOAD PROSPECT UNIVERSE DATA ON SCHEDULE
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torquoise data into Neo4j
EXECUTIONS
Executions
Average Execution Time
Last Execution Details

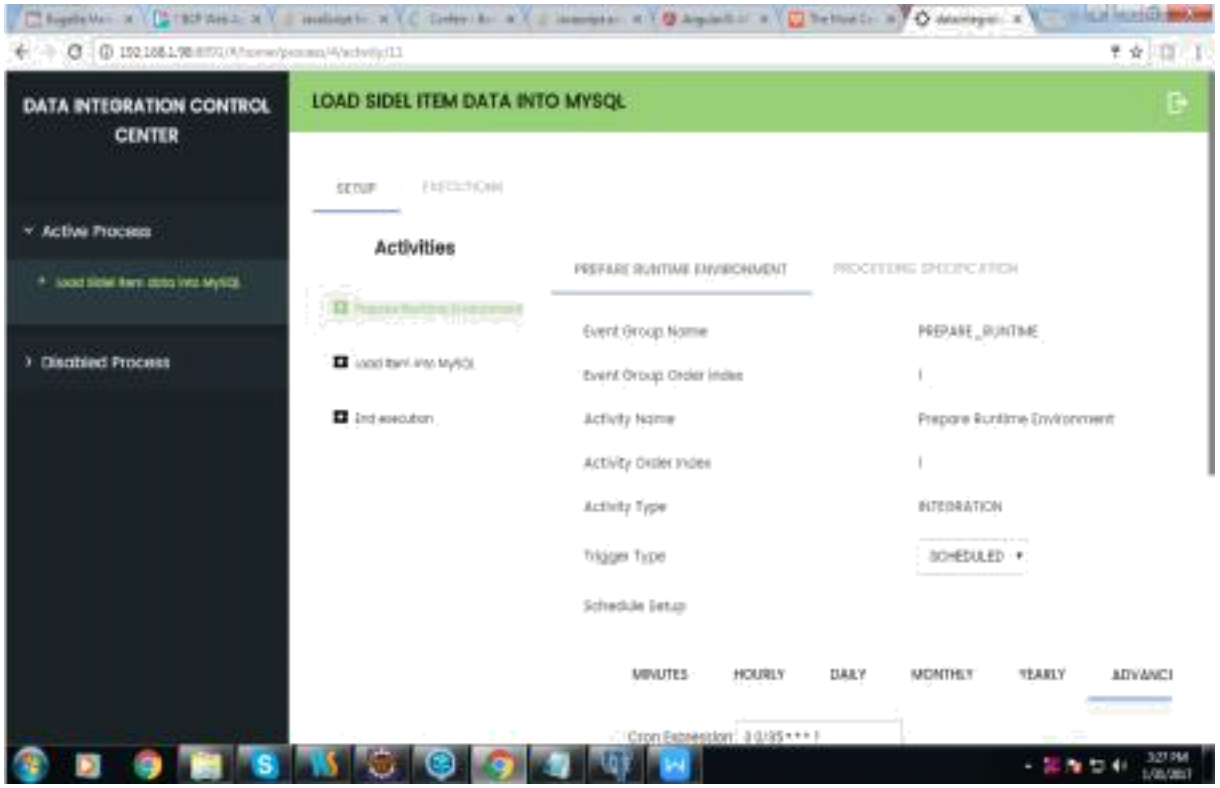

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Executions
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Integration Process Execution ID
Integration Process ID
Execution Start Time
Execution Finish Time
Status
COMPLETED

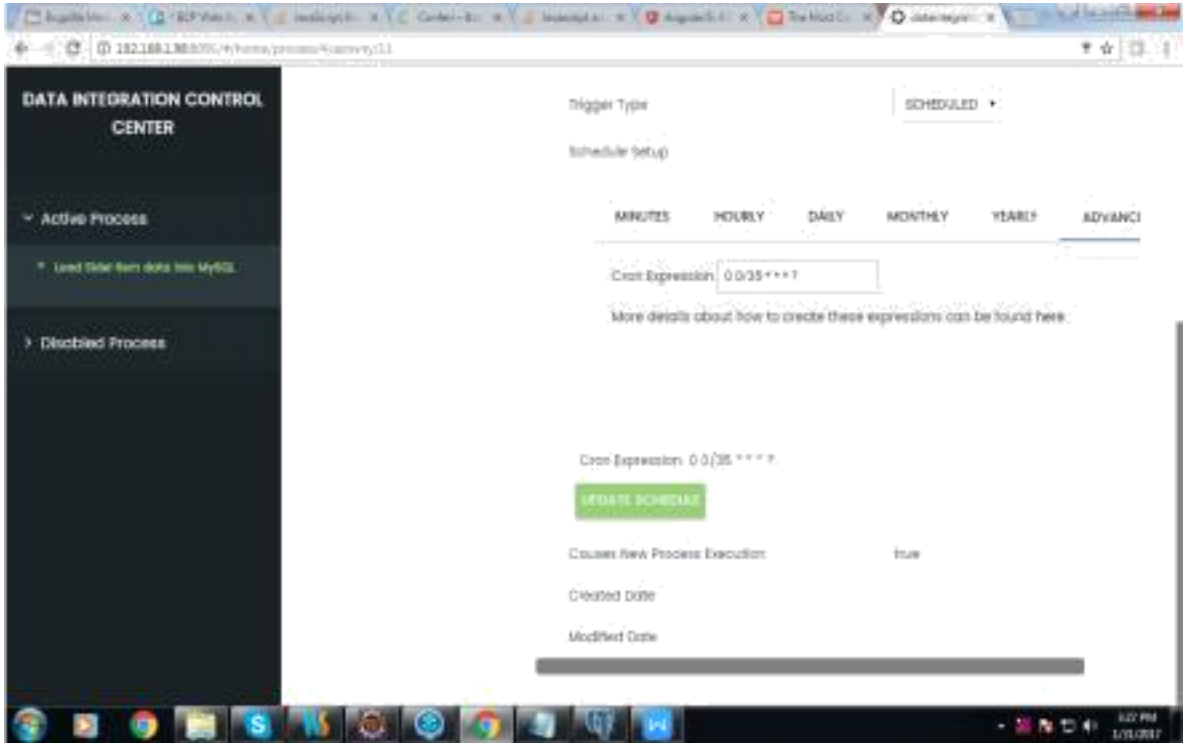

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Executions
Active Process
Load Sidel Item data into MySQL
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Tungsus data into Neo4j
Current Execution Detail
Execution ID : 955
StartTime : 08 Feb 2017 at 12:00 PM
FinishTime : 08 Feb 2017 at 12:00 PM
COMPLETED
Execution ID : 954
StartTime : 08 Feb 2017 at 11:35 AM
FinishTime : 08 Feb 2017 at 11:35 AM
COMPLETED
Execution ID : 953
StartTime : 08 Feb 2017 at 11:00 AM
FinishTime : 08 Feb 2017 at 11:00 AM
COMPLETED
Execution ID : 952
StartTime : 08 Feb 2017 at 10:35 AM
FinishTime : 08 Feb 2017 at 10:35 AM
COMPLETED
Execution ID : 951
StartTime : 08 Feb 2017 at 10:00 AM
FinishTime : 08 Feb 2017 at 10:00 AM
COMPLETED

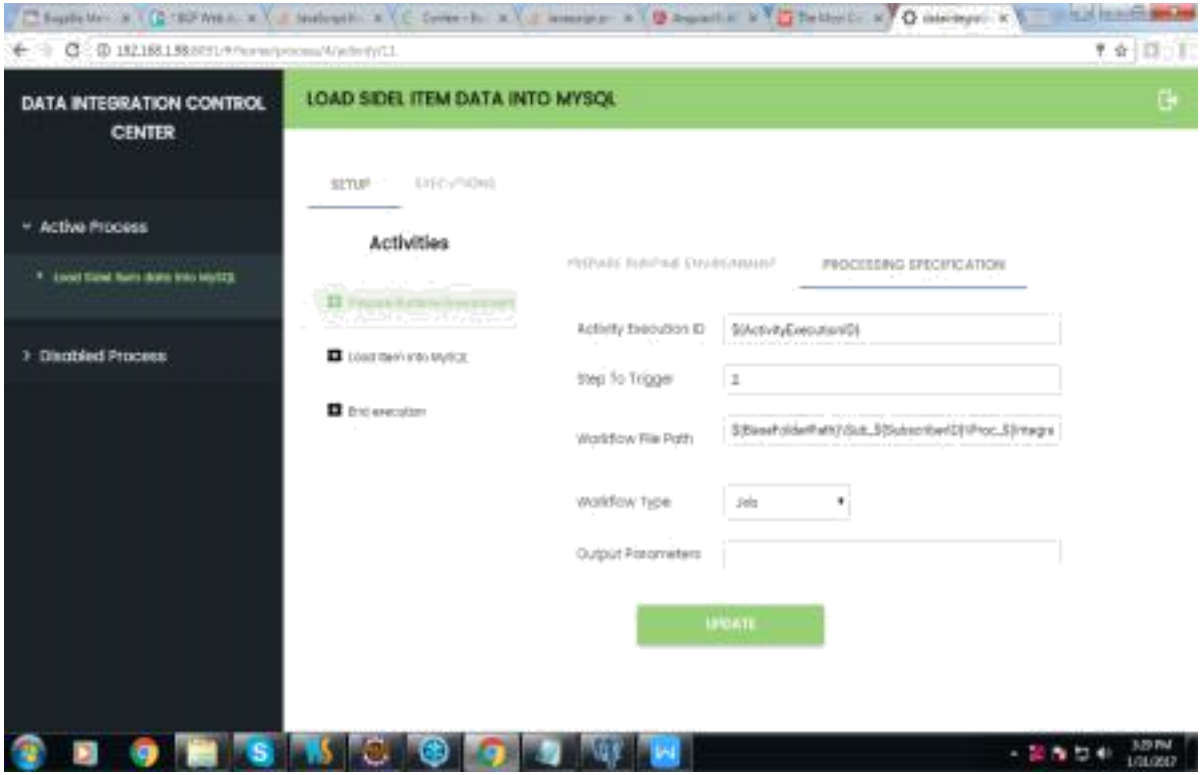

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
EXECUTIONS
Executions
Active Process
Disabled Process
Current Execution Detail
Execution ID : 955
StartTime : 09 Feb 2017 at 12:00 PM
FinishTime : 09 Feb 2017 at 12:00 PM
COMPLETED
ActivityName
ActivityType
StartTime
Status
Outcome
Prepare Runtime Environment
INTEGRATION
09 Feb 2017 at 12:00 PM
Load item into MYSQL
INTEGRATION
09 Feb 2017 at 12:00 PM
End execution
END
09 Feb 2017 at 12:00 PM
Execution ID : 954
StartTime : 08 Feb 2017 at 11:35 AM
FinishTime : 09 Feb 2017 at 1:35 AM
COMPLETED

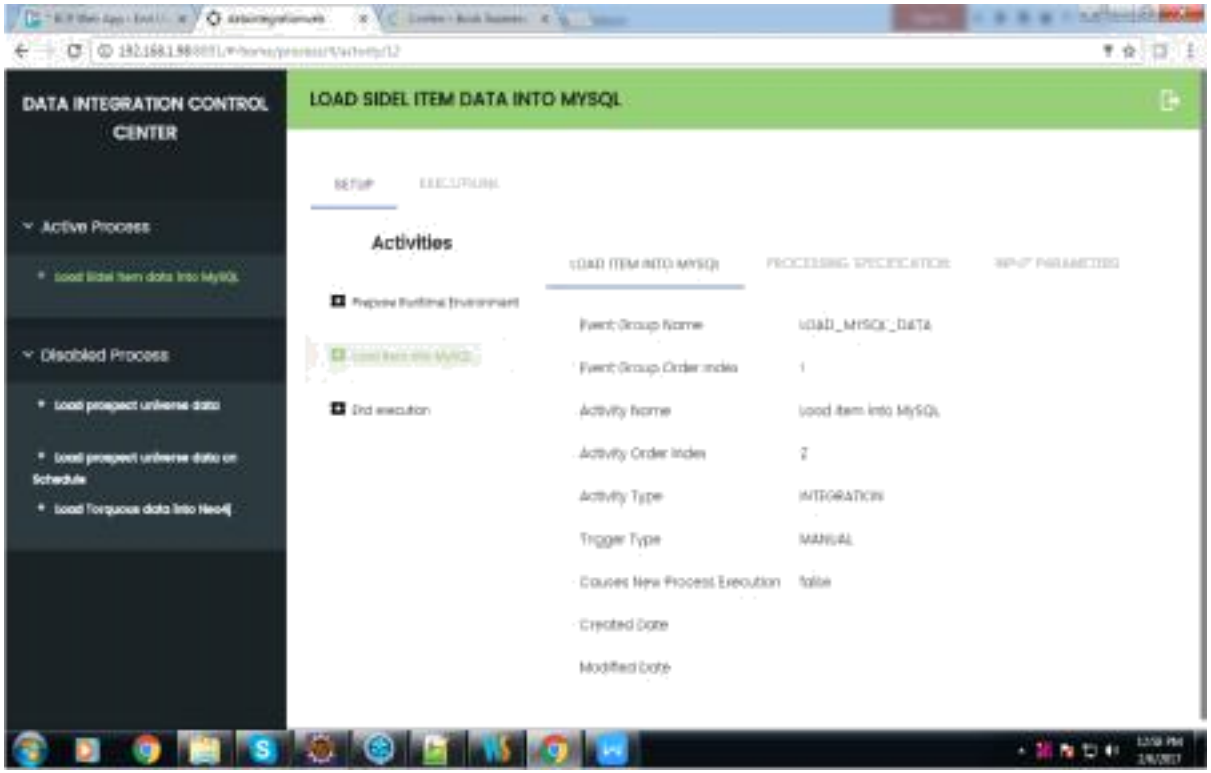

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torgovue data into Neo4j
Execution ID
Base Folder Path
E:\Kvisualize_MySQL\DICC_FRAMEWORK\integration-files
Subscriber ID
1
Integration Process Execution ID
955
Integration Process ID
4
Source file
${sourceFilePath}
PDI File Path.
E:\Kvisualize_MySQL\DICC_FRAMEWORK\integration-files\sub_1\Proc_4\Pentahofiles\prepare-runtime-enviorment.kjb
Log Entries
2017-02-08 06:30:00.033 : Executing Prepare Runtime Environment
OK
FinishTime : 08 Feb 2017 at 12:00 PM
COMPLETED
StartTime
Status
Outcome
08 Feb 2017 at 12:00 PM
08 Feb 2017 at 12:00 PM
08 Feb 2017 at 12:00 PM
FinishTime : 08 Feb 2017 at 11:35 AM
COMPLETED

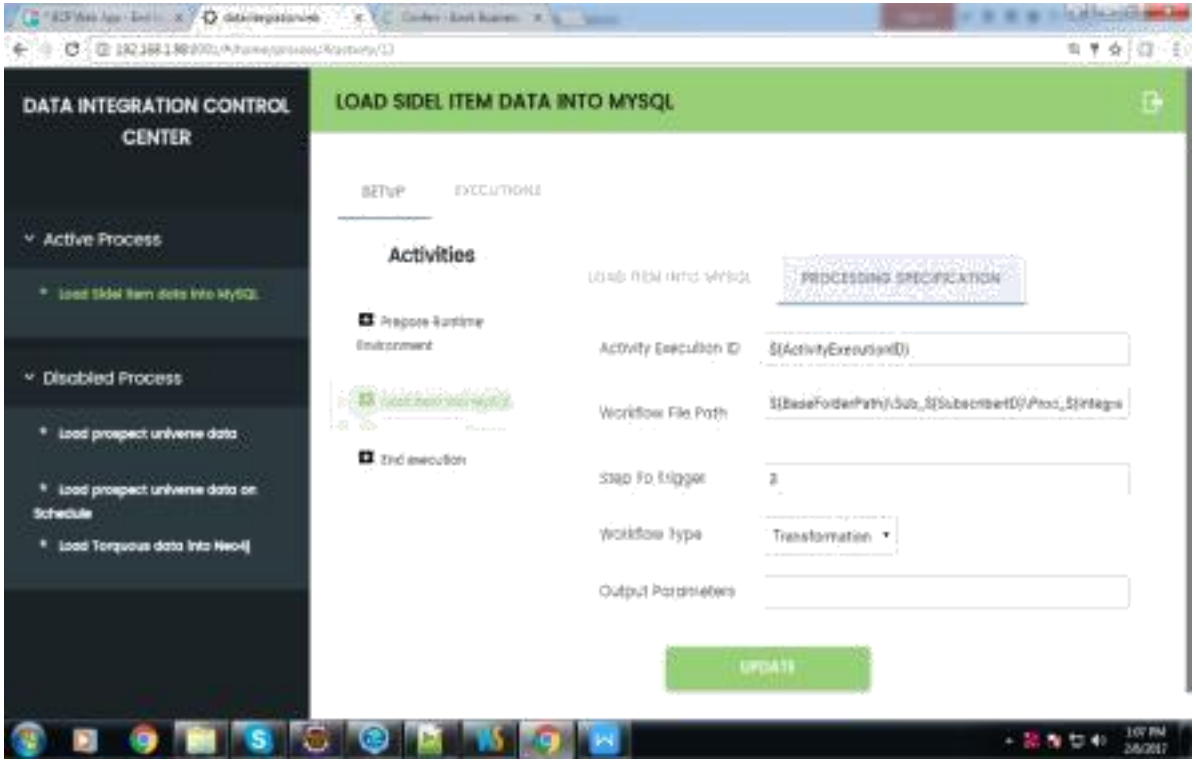

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
Active Process
Disabled Process
Activities
INTEGRATION PROCESS DETAILS
Prepare Runtime Environment
Load item into MySQL
End execution
Integration Process ID
4
Integration Process Unique Reference
Integration Process Name
Load Sidel item data into MySQL
File Encryption Key
Enabled
Created Date
Modified Date
EXECUTE
UPDATE

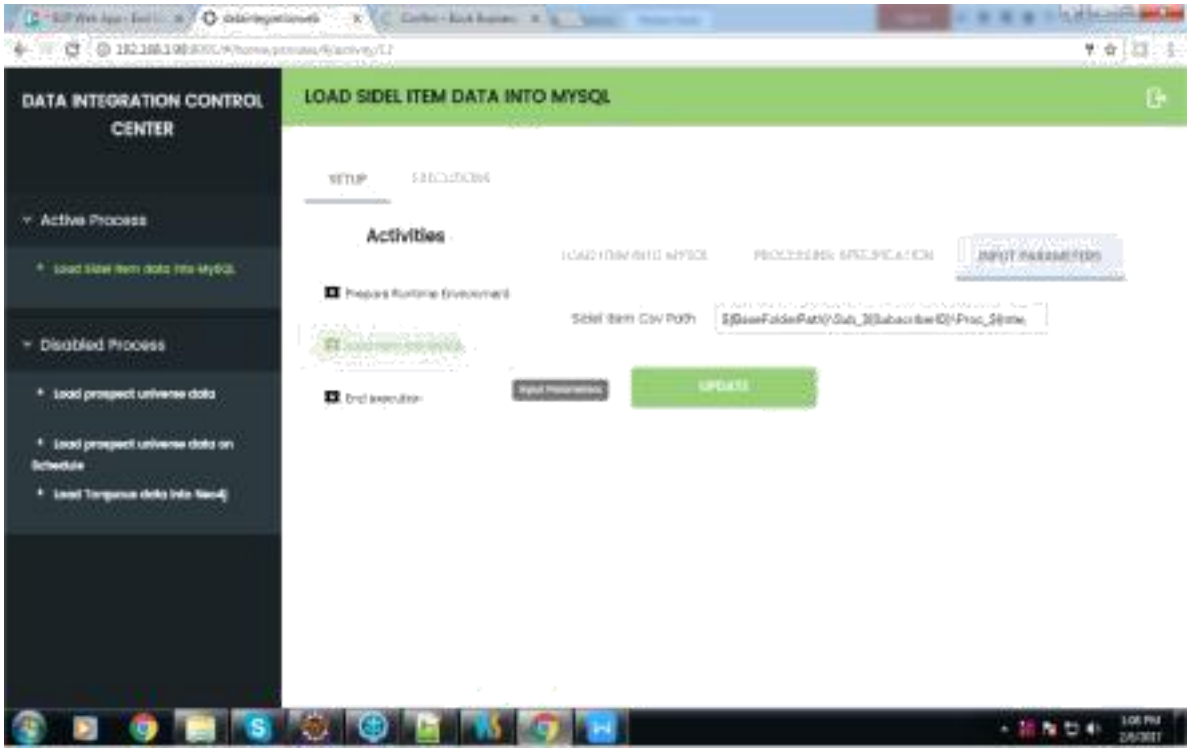

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Activities
PREPARE RUNTIME ENVIRONMENT
Event Group Name
PREPARE_RUNTIME
Event Group Order Index
1
Activity Name
Prepare Runtime Environment
Activity Order Index
1
Activity Type
INTEGRATION
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY

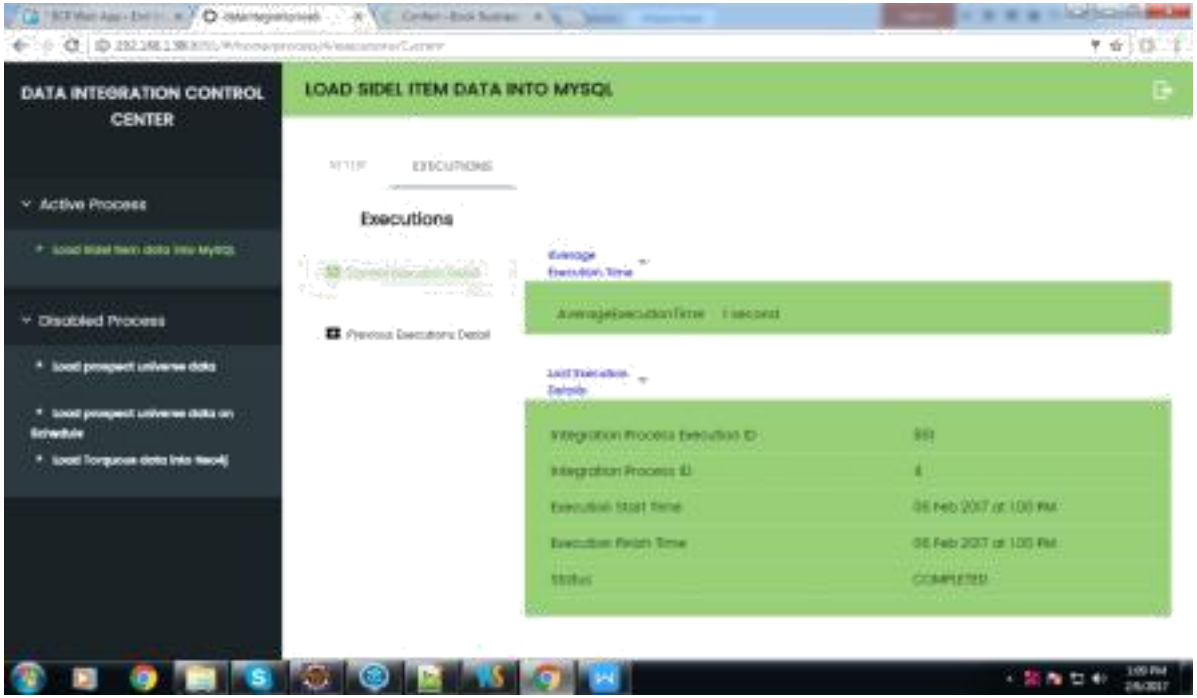

DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Trigger Type
SCHEDULED
Schedule Setup
MINUTES
HOURLY
DAILY
MONTHLY
YEARLY
ADVANCI
Cron Expression: 0 0/35 * * * ?
More details about how to create these expressions can be found here
Cron Expression: 0 0/35 * * * ?
Causes New Process Execution
true
Created Date
Modified Date

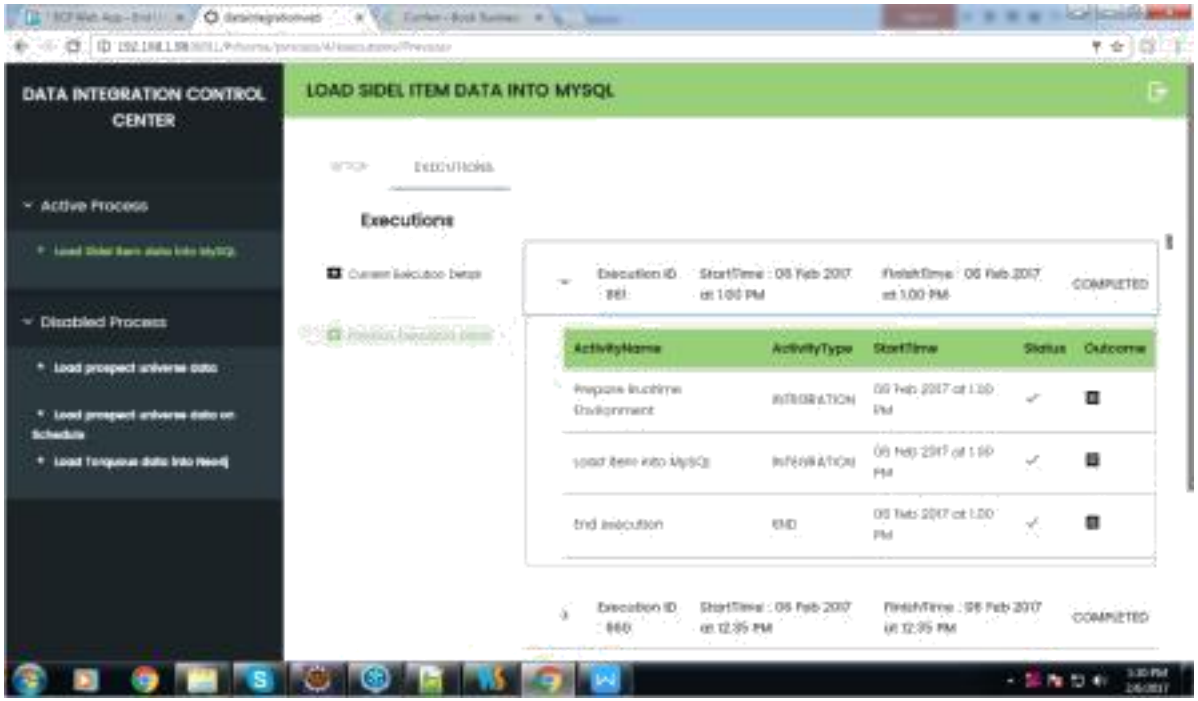

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
Activities
PROCESSING SPECIFICATION
Activity Execution ID
Step To Trigger
Workflow File Path
Workflow Type
Output Parameters
UPDATE

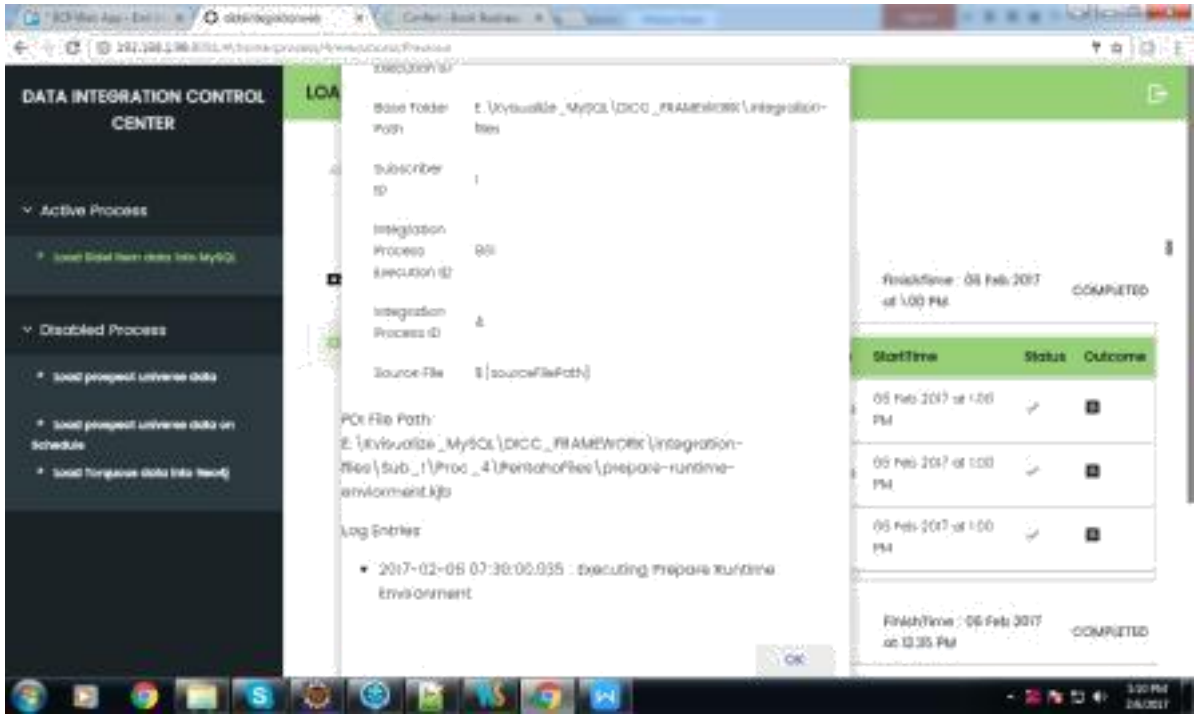

DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torquoise data into Neo4j
Activities
Prepare Runtime Environment
End execution
Parent Group Name
LOAD_MYSQL_DATA
Parent Group Order Index
1
Activity Name
Load item into MySQL
Activity Order Index
2
Activity Type
INTEGRATION
Trigger Type
MANUAL
Causes New Process Execution
false
Created Date
Modified Date


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
SETUP
EXECUTIONS
Active Process
Load Sidel Item data into MySQL
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Torquous data into Neo4j
Activities
Prepare Runtime Environment
End execution
LOAD ITEM INTO MYSQL
PROCESSING SPECIFICATION
Activity Execution ID
${ActivityExecutionID}
Workflow File Path
${BaseFolderPath}\Sub_${SubscriberID}\Proc_${Integra
Step To Trigger
3
Workflow Type
Transformation
Output Parameters
UPDATE


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Activities
Prepare Runtime Environment
Sidel Item Csv Path
End execution
UPDATE


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
EXECUTIONS
Executions
Previous Executions Detail
Integration Process Execution ID
Integration Process ID
Execution Start Time
Execution Finish Time
Status
COMPLETED


DATA INTEGRATION CONTROL CENTER
LOAD SIDEL ITEM DATA INTO MYSQL
Active Process
Disabled Process
Load prospect universe data
Load prospect universe data on Schedule
Load Tenjuice data into Neo4j
EXECUTIONS
Executions
Execution ID : 861
StartTime : 06 Feb 2017 at 1:00 PM
FinishTime : 06 Feb 2017 at 1:00 PM
COMPLETED
ActivityName
ActivityType
StartTime
Status
Outcome
Prepare Runtime Environment
INTEGRATION
06 Feb 2017 at 1:00 PM
load item into MySQL
INTEGRATION
06 Feb 2017 at 1:00 PM
End execution
END
06 Feb 2017 at 1:00 PM
Execution ID : 860
StartTime : 06 Feb 2017 at 12:35 PM
FinishTime : 06 Feb 2017 at 12:35 PM
COMPLETED


DATA INTEGRATION CONTROL CENTER
Active Process
Disabled Process
Base Folder Path
Subscriber ID
Integration Process Execution ID
Integration Process ID
Source File
${sourceFilePath}
KTR File Path
Log Entries
2017-02-06 07:30:00.035 : Executing Prepare Runtime Environment
OK
StartTime
Status
Outcome
FinishTime : 06 Feb 2017 at 1:00 PM
COMPLETED
FinishTime : 06 Feb 2017 at 12:35 PM
COMPLETED

ANNEXURE 2

Subscriber:-

Subscriber_ID	Client_ID	Client_Secret	Created_Date	Login	Modified_Date	Password	SubScriber_Name	Subscriber_Unique_Key
1	1734260-4802	e4keb68-4801	15/11/2016	iquantify		iquantify123	Z Bank	9c7066e4-4cc9
2	2344260-5456	2ekeb78-3402	16/11/2016	brainlogi	02/02/2017	iquantify123	Team Link	4d7066e54c10
3	2344260-4812	2ekeb78-3765	20/12/2016	iquantify	02/02/2017	iquantify123	SBI	4d7066e6-58c1
4	9084260-4654	5eeeb78-3098	25/12/2016	iquantify	02/02/2017	iquantify123	SBI	507065a6-5823
5	236j4260-7895	4qeeb78-5356	20/01/2017	kanaka	02/02/2017	iquantify123	Kanaka	902065a6-5569
6	5487895k-5897	8b434b78-7893	15/03/2017	haga	02/02/2017	iquantify123	Haga	35065a6-5668

Integration Process:-

Integration_Process_ID	Created_Date	Enabled	File_Encryption_Key	IntegrationProcess_Name	Integration Process_UniqueReference	Modified_Date	Subscriber_ID	IntegrationProcess_ExecutionID	Status
1	27/05/2016	true	Load Prospect universe Data	[illegible]	[illegible]	15/03/2017	1	1	Success
2	27/05/2016	true	Load Prospect universe Data on Schedule	[illegible]	[illegible]	15/03/2017	1	2	Success
3	24/01/2017	false	Load Targets universe Data into Hawk	[illegible]	[illegible]	15/03/2017	1	3	Success
4	12/01/2017	true	Load Targets universe Data on schedule	[illegible]	[illegible]	15/03/2017	1	4	Success

Integration Process Execution:-

IntegrationProcess_ExecutionID	Execution_FinishTime	Execution_StartTime	Integration_Process_ID	Status
1	1149333576093	1049333576236	1	Success
2	2549333576879	2549123576879	2	Success
3	1659333576887	1334912376825	3	Success
4	9659333576887	6584912376825	4	Success

Event Queue:-

EventQueue_ID	Created_Date	Event_Specification	IntegrationProcess_ExecutionID	Integration_Process_ID	Modified_Date	Status	Subscriber_ID
1	27/12/2016	on Load Torques universe Data into Neo4j	3	3	15/03/2017	running	1
2	04/01/2017	on Load Torques universe Data	4	4	15/03/2017	running	1
3	12/01/2017	on Load Torques universe Data into Neo4j	3	3	15/03/2017	Executed	1

Activity Execution:-

ActivityExecution_ID	ExecutionFinishTime	ExecutionStartTime	ExecutionStepOutcome	Status	Activity_ID	IntegrationProcess_ExecutionID
1	1349333576684	1349033676568		running	1	1
2	1349333576093	1349033679054		running	2	2
3	1349333576025	1349033676268		running	3	2
4	1349333576093	1349033679054	Success	Done	4	2

Activity:-

Activity_ID	Activity_name	Created_Date	Modified_Date	Step_To_Trigger	Integration_Process_ID	Comments	Status
1	Prepare Runtime Environment	23/12/2015	15/12/2017	2	1	[illegible]	running
2	Copy File From FTP	23/12/2015	15/12/2017	3	1	[illegible]	running
3	Load in Data Base	04/12/2017	15/12/2017	4	1	[illegible]	running
4	End Execution	10/12/2017	15/12/2017		1	[illegible]	Done

Subscriber Monthly Report:-

input:Timestamp:-1510721869000

Subscriber_ID	Client_ID	Client_Secret	Created_Date	Login	Modified_Date	Password	SubScriber_Name	Subscriber_Unique_Key
1	172d4260-4302	e4fee63-4201	16/11/2016	iquantify		iquantify123	Z Bank	9c702e4-4c3
2	234d4260-5455	2afeed73-3402	16/11/2016	training	20/02/2017	iquantify123	Team Linc	4d702e64c10

Integration Process Monthly Report:-

input:Timestamp:1514005408000

Integration_Process_ID	Created_Date	Enabled	File_Encryption_Key	IntegrationProcess_Name	IntegrationProcess_UniqueReference	Modified_Date	Subscriber_ID	IntegrationProcess_ExecutionID	Status
1	20/12/2016	true	Load Prospect Universe Data	[illegible]	[illegible]	[illegible]	1	1	Success
2	20/12/2016	true	Load Prospect Universe Data [illegible] Schedule	[illegible]	[illegible]	[illegible]	1	2	Success

Event Queue Monthly Report:-

input:Timestamp:-1510721869000

Activity Monthly Report:-

Activity_ID	Activity_name	Created_Date	Modified_Date	Step_To_Trigger	Integration_Process_ID	Comment	Status
1	Process Activities Environment	27/2/2017	15/3/2017	2	1	[illegible]	[illegible]
2	Copy Files From FTP	27/2/2017	15/3/2017	3	1	[illegible]	[illegible]

ANNEXURE 3

```
/**
 • @author Akshay Misal
 • @name dataintegrationweb.ActivityController
 •   @description controller for Process details
Activity
 */
(function() {
    'use strict';
    angular
        .module('dataintegrationweb')
        .controller('ActivityController',
['$scope','SubscriberService', '$state', '$http',
'ApplicationStorage', 'ENDPOINTS','UtilService',
ActivityController]);

function ActivityController($scope, SubscriberService,
$state,$http,ApplicationStorage,ENDPOINTS,
UtilService) {
     $scope.causesNewProcessExecutionValue = true;
      $scope.formdata = {};
      $scope.NavigationMenu = {};
      $scope.NavigationMenu =
     ApplicationStorage.getValue("NavigationMenu");
     $scope.activity = {};
     $scope.currentState = $state.current.name;
     $scope.flag3 = false;
     $scope.convertNormalCaseFromCamelCase=
     UtilService.convertNormalCaseFromCamelCase;
     $scope.triggerTypeList = ["MANUAL", "SCHEDULED"];
         $scope.workflowTypeList = ["Transformation",
     "Job"];
         $scope.selectedWorkFlowType = "";
         $scope.selectedTriggerType = "";
         $scope.changeTriggerType = changeTriggerType;
         $scope.changeWorkFlowType =
           changeWorkFlowType;
         $scope.initTriggerType = initTriggerType;
         $scope.initWorkFlowType = initWorkFlowType;
         $scope.getCron = getCron;
         $scope.reschedule = reschedule;
         $scope.iscausesNewProcessExecution=
           iscausesNewProcessExecution;
         $scope.clearFields = clearFields;
```

```
    $scope.getIntialValue = getIntialValue;

    function getIntialValue(value){
       var jsonvalue = JSON.parse(value);
        $scope.formdata.scheduleSetup =
      jsonvalue.cronExpression;
    }

    function iscausesNewProcessExecution(value){

console.log("causesNewProcessExecutionValue :: "
+ value);
       $scope.causesNewProcessExecutionValue
      = value;
    }

    init();

    function clearFields(){
       $scope.formdata.errorMessage = "";
       $scope.formdata.successMessage = "";
    }

    function init() {

       var noOfProcess =
Object.keys($scope.NavigationMenu.integrationProc
esses).length;
for (var j = 0; j < noOfProcess; j++) {
var                    size                    =
Object.keys($scope.NavigationMenu.integrationProc
esses[j].activities).length;

for(var i = 0; i < size; i++) {

var           integrationProcessName           =
$scope.NavigationMenu.integrationProcesses[j].int
egrationProcessName;
var               activityName                 =
$scope.NavigationMenu.integrationProcesses[j].act
ivities[i].activityName;
```

```
$scope.stateName = "homepageState." +
getStateName(integrationProcessName) +"."+
getStateName(activityName)
if ($scope.stateName == $scope.currentState) {
$scope.activity =
$scope.NavigationMenu.integrationProcesses[j].act
ivities[i];
$scope.tabname =
$scope.NavigationMenu.integrationProcesses[j].act
ivities[i].activityName;
var str =
$scope.NavigationMenu.integrationProcesses[j].act
ivities[i].processingSpecification;
$scope.processingspec = angular.fromJson(str)
if($scope.processingspec.hasOwnProperty('Activity
ExecutionID')) {
$scope.flag3 = true
}
$scope.inputparameter=
$scope.processingspec.inputParameters;

$scope.integrationProcess =
$scope.NavigationMenu.integrationProcesses[j]; }

}
}
}

function getCron(value){
if (value == null) return null;
return angular.fromJson(value).cronExpression;
}

function reschedule(activityID){
var bodyJSON = {"cronExpression" :
$scope.formdata.scheduleSetup };
console.log("activityID : " + activityID + ",
scheduleSetup : " + $scope.formdata.scheduleSetup
+ ", bodyJSON : " +bodyJSON);

//Write code To reschdule process
var promise =
SubscriberService.updateActivityByActivityID(ENDP
OINTS, activityID, bodyJSON);
```

```
 promise.then(function (promise) {
 if (promise.status == 200) {
 var responseData = promise.data;
 $scope.formdata.successMessage    =    "Activity
  successfully updated";
 console.log("Activity  successfully  updated  :  "  +
  responseData);

 }
 else if (promise.status == 400) {
 $scope.formdata.errorMessage  =  "Error  :  Enter
  correct expression..";
 console.log(promise.status + " : Bad request");
 }
 else if (promise.status == 401) {
 console.log(promise.status + " : User is
 undefined... Unauthorized access");
 redirectToLogin();
             }
else if (promise.status == 404) {
$scope.formdata.errorMessage= "Error : Activity
  can not updated.";

console.log(promise.status + " : Not found");
}
else if (promise.status == 500) {
$scope.formdata.errorMessage= "Error : Activity
  can not updated.";

console.log(promise.status + " : Internal server
  error");
}
});
}

function getStateName(stateName) {
stateName = stateName.toLowerCase()
.replace(/\b[a-z]/g, function (letter)
{ return letter.toUpperCase(); });
stateName= stateName.charAt(0).toLowerCase() +
  stateName.substr(1);
stateName = stateName.replace(/ /g, "_");
return stateName;
}
```

```
function initTriggerType(value){
$scope.selectedTriggerType = value;
}

function         changeTriggerType(selectedTriggerType)
{
```

```
 $scope.selectedTriggerType =
selectedTriggerType; }
function changeWorkFlowType(selectedWorkFlowType) {
$scope.selectedWorkFlowType = selectedWorkFlowType;
}
function initWorkFlowType(value){
$scope.selectedWorkFlowType = value;
}
}
})();
```