



BIG DATA  
DEVELOPMENT

## Project 1.2

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**ACADGILD**

## Project 2.1- State-Wise Development Analysis In India

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## **1. Executive Summary**

### **1.1 Project Overview**

To develop the System to analyze the log data (In XML format) of government progress of various development activities.

### **1.2 Purpose and Scope of this Specification**

The purpose of this project is to capture the data for analyzing the progress of various activities.

#### **In scope**

The following requirement will be addressed in phase 1 of Project:

- Developing system to handle the incoming log feed and store the information in Hadoop Cluster (Flume)
- Analyze the data and understand the progress
- Store the results in Hbase/RDBMS

#### **Out of scope**

We can use this data and visualization and get more insights

## **2. Product/Service Description**

### **2.1 Assumptions**

Log will be generated in XML format and stored in a server

### **2.2 Constraints**

Describe any item that will constrain the design options, including

- This system may not be used for searching for now. But it will be used for analysis and saving the relevant information as of now
- System will be using Hbase as a database

### 3. Requirements

- The FLUME job which will format the data and place the data to HDFS
- Pig/MapReduce job for parsing the XML data.
- Create Pig scripts/MapReduce jobs to analyze the data
- Create the Sqoop job to store the data in database

#### Priority Definitions

The following definitions are intended as a guideline to prioritize requirements.

- Priority 1 – Create FLUME job for fetching log files from spool directory the data
- Priority 2 – MapReduce/pig job to preprocess

### Download the dataset using the below link:

#### Link:

<https://drive.google.com/file/d/0Bxr27gVaXO5sUjd2RWFQS3hQQUE/view?usp=sharing>

**Refer the below steps to understand the actual steps to create the above project.**

#### Step 1:

Copy dataset from local file system to HDFS using flume.

Note: use the conf file by downloading from below link.

[Click here](#) to download

#### Command:

```
flume-agent agent -n agent1 -c conf -f <path to filecopy.conf>
```

## **Step 2:**

Input file is in the XML format use Map reduce or pig to parse the data and get the results for the below problem statements.

### **4. Problem statement**

1. Find out the districts who achieved 100 percent objective in BPL cards

Export the results to mysql using sqoop

2. Write a Pig UDF to filter the districts which have reached 80% of objectives of BPL cards.

Export the results to MySQL using Sqoop.