Analytics Dashboard  
Technical Design document

version 1.0

Last updated: April 14, 2020

# Document Purpose

This document is a technical design document for ABC Analytics Dashboard. It provides an overview of the report and the insights it provides to its end-users. The document will specify the various aspects of reports and will detail the design and implementation; focusing specifically on:

* System Purpose and Scope
* Components of System
* High-level Architecture
* User Interface and Functionality

# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version#** | **Revision Date** | **Reason For Revision** | **Author/Owner** |
| 1.0 | April 14, 2020 | New Document | ABC |

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1. **Overview**

The reporting system will consist of two major components:

* Tableau data extracts loaded directly from **ABC** schema.
* Tableau workbook with all the necessary reports and filters published to tableau server

Users will be provided access to tableau server where the reports will be published.

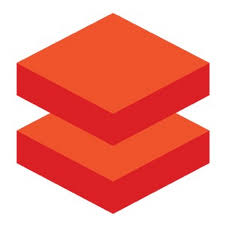
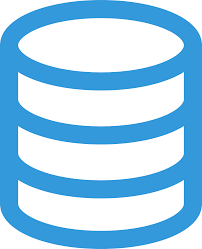
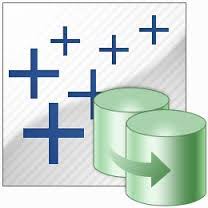
1. **High-Level Architecture**

The diagram below illustrates the high–level architecture of ABC Analytics Dashboard. The data flow steps are described as under:

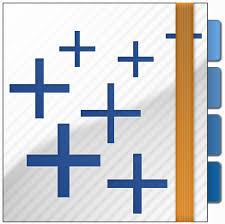
* Data is extracted from **ABC** schema which is located at the **server “abc.com”**.
* Data is then extracted and stored as a Tableau data extract.
* Tableau data extract serves as a data source for ABC Analytics Dashboard.

**Tableau Data Extract**

**Data Sources**

**ABC Schema**



**Tableau Report**

1. **Design**
   1. **Components**

The system consists of two major components:

* Tableau Data Extract
* Tableau Workbook
  + 1. **Tableau Data Extract**

Tableau data extract to be used as source for reports is created by extracting data from ABC. No filters are applied while loading data into the Tableau extract and thus a full load is carried out to create the extract.

**Data Source Information as follows:**

Server Name: abc.com

Port: abc

|  |  |
| --- | --- |
| **SCHEMA** | **TABLE** |
|  |  |
|  |  |
|  |  |
|  |  |

* + 1. **Tableau Workbook**

Tableau workbook for **ABC Analytics Dashboard** has two design components detailed below:

* Visual Components
* Filter Components

The workbook **ABC Analytics Dashboard** contains 9 dashboards:

1. **TAB 1** - In this graph, each metric has been normalized against itself; that is, all metrics will peak at their relative highest volume (1.0). This generally happens around a trailer or first-content release.

**Visual Component:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COMPONENT** | **FORMAT** | **DESCRIPTION** | **FIELDS** | **EXPRESSION** |
| Trend | Line Graph | The line will represent multiple measures like YouTube, Facebook views etc. for a selected movie title for all time data. | |  | | --- | | ment | | Views | | ews | | ws | | s | | Edi | | |  | | --- | | SUex]) | | SUM( | | SUM([T | | PTAT]) | | SUM([norm | | SUM([ | | S | | SUM([normalized\_twittervideo\_views]) | |

**Filter Component:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Filter** | **Filter Type** | **Selection** | **Default Value** | **Description** |
| Select | Quick | Single-Select Drop Down | S | M names |
| Select Measure Names | Quick | Multiple Values Drop Down | All | Measure Names |
| Select Range of Dates (Post Date) | Quick | Range of dates | 5/1/2019 – Present | Range of Dates (Date) |

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* 1. **Security**

Report Security is implemented at two levels:

* **Server Level Security:** Server level security is enabled using HUBID. The table below maps the current roles to user groups:

|  |  |  |
| --- | --- | --- |
| **Role Group** | **Role Group Description** | **Users / User Group Identification** |
| Interactor | User can only view the Tableau Reports on Tableau server |  |
| Publisher | User can view and publish the Tableau reports on server |  |

* **Folder Level Security:** ABC dashboards and data sources are published to specific folder named as ‘ABC' on the tableau server. Project folder help to keep the content together and also allow site administrator to grant different permissions to different groups for the same project.
  1. **Target Details**

Tableau Workbook for ABC Analytics Dashboard will use the following environments as QA and production:

* **QA Environment**

The details of QA environment are given in the table below:

Table: QA Environment

|  |  |  |  |
| --- | --- | --- | --- |
| Tableau Server | Site | Folder | Workbook |
| https://qa.com | Default | ABC | ABC Analytics Dashboard |

* **PROD Environment**

The details of Production environment are given in the table below:

Table: Prod Environment

|  |  |  |  |
| --- | --- | --- | --- |
| Tableau Server | Site | Folder | Workbook |
| https://prod | Default | ABC | ABC Analytics Dashboard |

* 1. **Refresh Schedule**

Tableau Report for **ABC** will be refreshed on a daily basis **4:00 AM EST** as the data refreshes in the downstream.