Blueprint Architecture – Phase 1

# Applications

## Blueprint Web Application

Blueprint is Requirement Management web application. Contains functional modules, dialogs and other user interactions. Technology: HTML5/Angular/TypeScript.

### Application Administration Views

Application Administration module contains views where application administrator can setup and manage application instance. All application settings are managed from the views and dialogs of Application Administration module.

### Project Administration Views

Project Administration module contains views where project administrator can setup and manage project. All project settings are managed from the views and dialogs of Project Administration module.

### Artifact Management Views

Artifact Management module contains views where users can create, update, manipulate and delete artifacts, its properties and alike. All textual and graphical representations and editors of the artifacts are implemented in Artifact Management module.

### Activity Simulation Views

Activity Simulation module contains views where user runs screen mockup and use case simulations.

### Baseline Review Views

Baseline Review module contains views where user can define baseline and create review of artifacts as of baseline date.

### Rapid Review Views

Rapid Review module contains views where user can review collection of artifacts.

### Impact Analysis Views

Impact Analysis module contains views where user can trace and explore artifact dependencies.

## Bluedocs Application

Bluedocs Application allows users to convert MS Word files into Blueprint projects, extracting use cases and screen mockups. Application has self-learning capabilities to recognize patterns. Technology: C#/Silverlight Desktop.

## Migration Application

Migration Utility facilitates migration of data from legacy RC projects to Blueprint Software. Technology: Java/Swing.

# Services

## Artifact Store Web Service

Artifact Store web service facilitates creation, persistence, modification and manipulation of artifacts. Technology: ASP.NET Web API/C#.

## Admin Store Web Service

Admin Store web service facilitates application and project administration, setup and user credential management. Technology: ASP.NET Web API/C#.

## File Store Web Service

Document / Content Service implements document upload / download / content streaming functionality. C#/WCF REST. Contained in BluePrintSys.RC.Service.Ria.BPDDomainServices and BluePrintSys.RC.Service.Business projects.

## Data Analytics Service

Data Analytics Service implements functionality to view data analytics. It exposes OData interface. Module operates in Data Analytics database, but also has access to Main database for authentication. Data Analytics database is updated from main database via ETL process. ETL process is scheduled nightly using MS SQL Server scheduling. C#/WCF. Contained in DataAnalytics solution.

## Rapid Review Service

Rapid Review Service to facilitate Rapid Review SPA. C#/Web API. Contained in BluePrintSys.RC.Business.Internal and BluePrintSys.RC.Web.Web projects.

## Open API Service

Open API Service exposes Blueprint Software functionality via REST endpoint. It is designed for various external system integration scenarios, such as integration with TASKTOP and OpsHub. C#/Web API. Contained in BluePrintSys.RC.Api.Business and BluePrintSys.RC.Api.Web projects.

## Job Executor Windows Service

Job Executor Windows service performs long running user initiated operations. Long running user initiated operations saved in operations table in Main DB. Job Executor periodically checks the operations table for new records. If found, long running operation is performed and record is updated. C#. Contained in BluePrintSys.RC.JobExecutor project.

## QC Lite Connector Service

QC Lite Connector Service allows for communication to HP ALM / QC via COM API. It isolates Blueprint Software from QC Client COM API. C#/Web API. Contained in QCLiteConnector.Web project.

## Excel Template Service

Excel Template Service allows users to import updated artifacts into Blueprint. C#/Web API. Contained in BluePrintSys.RC.Business.Internal and BluePrintSys.RC.Web.Web projects.

## ALM Connector Library

ALM Connector Library allows to synchronize Blueprint data with external ALM systems such as MS TFS and HP ALM / QC. In case of communication with QC COM API QC Lite Connector is used as mediator. C#. Contained in BluePrintSys.RC.AlmConnectors project.

## Phone Home Library

Phone Home Library collects and forwards the Blueprint Software usage information and forensics to centralized usage data service (Phone Home Windows Service). C#. Contained in BluePrintSys.RC.Data.PhoneHome project.

## Phone Home Windows Service

Phone Home Windows Service receives usage and forensics data from Blueprint Software installation instances and stores it for further analysis. C#.

# Databases

## Artifact Store Database

Main Experience Service implements functionality to facilitate requirements management and persistence. C#/WCF RIA. Contained in BluePrintSys.RC.Service.Ria.BPDDomainServices and BluePrintSys.RC.Service.Business projects.

## Admin Store Database

Main Experience Service implements functionality to facilitate requirements management and persistence. C#/WCF RIA. Contained in BluePrintSys.RC.Service.Ria.BPDDomainServices and BluePrintSys.RC.Service.Business projects.

## File Store Database

Main Experience Service implements functionality to facilitate requirements management and persistence. C#/WCF RIA. Contained in BluePrintSys.RC.Service.Ria.BPDDomainServices and BluePrintSys.RC.Service.Business projects.

## Data Analytics Database

Main Experience Service implements functionality to facilitate requirements management and persistence. C#/WCF RIA. Contained in BluePrintSys.RC.Service.Ria.BPDDomainServices and BluePrintSys.RC.Service.Business projects.

## Phone Home Database

Phone Home database contains opted in customers’ usage and forensic data received from cloud and on-premise installations of Blueprint. Technology: SQL Server 2012.