Blueprint 7.0 Architectural Changes

In an effort to better accommodate our growing user base we have made the following architectural changes to Blueprint that will aid us in improving performance, scalability and security particularly with large-scale deployments.

# .NET Framework 4.5.2

Blueprint Server now requires the .NET 4.5.2 Framework. Microsoft announced on December 9, 2015 that starting January 12, 2016 Microsoft will no longer provide security updates, technical support or hotfixes for .NET 4, 4.5, and 4.5.1 frameworks. All other framework versions, including 3.5, 4.5.2, 4.6 and 4.6.1, will be supported for the duration of their established lifecycle. The decision to end support for these versions will allow us to invest more resources towards improvements of the .NET Framework. <https://blogs.msdn.microsoft.com/dotnet/2015/12/09/support-ending-for-the-net-framework-4-4-5-and-4-5-1/>

# Blueprint Website

Blueprint is moving to a Service-Oriented Architecture (SOA). Primary web services are located under the SVC folder in the Blueprint Website. A description of each service is described below.

## Blueprint Primary Web Services

Blueprint Primary Web Services execute under a separate IIS Application Pool to provide better isolation and configuration of the services. The Blueprint Server User is used for the identity of the AppPool. Please refer to User Requirements in the [Blueprint 7.0.1 Installation Guide](https://documentation.blueprintcloud.com/Blueprint7.0/pdf/Blueprint_7.0.1_Installation_Guide.pdf) for details.

### AdminStore Web Service

AdminStore web service facilitates application and project administration, setup and user credential management. Data is stored in the AdminStorage database.

### FileStore Web Service

FileStore web service facilitates file upload, storage, download and removal. Files are stored as binary sequences in the FileStorage database.

# Blueprint Auxiliary Website

The Blueprint Auxiliary Website is not secured and services located here are meant to live behind the firewall and not be publically available. The Blueprint Server User is used for the identity of the AppPool. Please refer to User Requirements in the [Blueprint 7.0.1 Installation Guide](https://documentation.blueprintcloud.com/Blueprint7.0/pdf/Blueprint_7.0.1_Installation_Guide.pdf) for details.

## Blueprint Auxiliary Web Services

Blueprint Auxiliary Web Services execute under a separate IIS Application Pool to provide better isolation and configuration of the services.

### AccessControl Web Service

AccessControl web service performs session token validation, authorization and license management for other services. Data is stored in the AdminStorage database.

### ConfigControl Web Service

ConfigControl web service performs configuration management and centralized logging to the database. Data is stored in the AdminStorage database.

# Databases

To address scalability in large scale deployments the Blueprint database has been spit up into three databases. This allows the deployment of each database to be deployed on separate SQL Server instances. The Blueprint Server User for all databases. Please refer to User Requirements in the [Blueprint 7.0.1 Installation Guide](https://documentation.blueprintcloud.com/Blueprint7.0/pdf/Blueprint_7.0.1_Installation_Guide.pdf).

## AdminStorage Database

This database contains all administration details, such as application settings, access control lists and license information.

## FileStorage Database

This database contains uploaded files and basic metadata. Storage is non-relational in nature.

## Blueprint Database

This database contains the rest of the Blueprint data.



