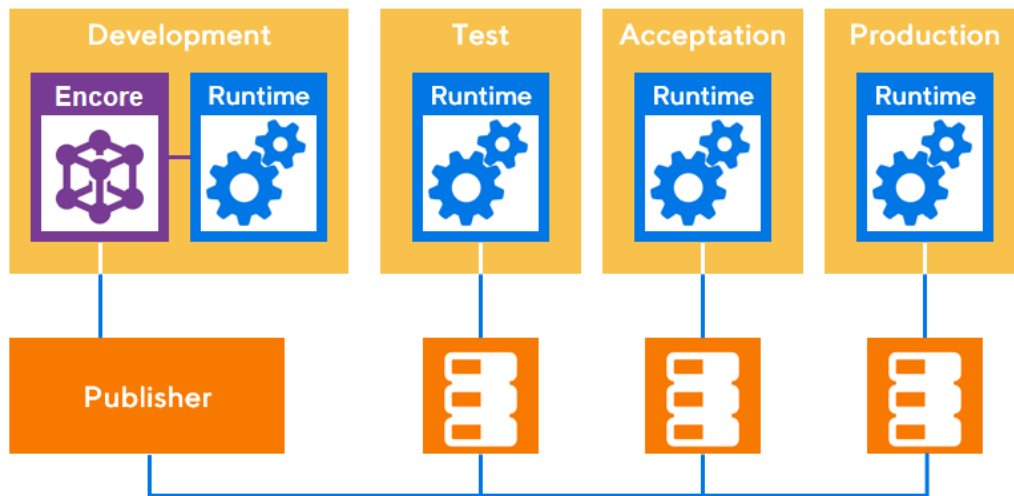# Blueriq Components

Blueriq consists of the following components:

- **Encore**: *create* and *maintain* an application
- **Runtime**: *execute* an application
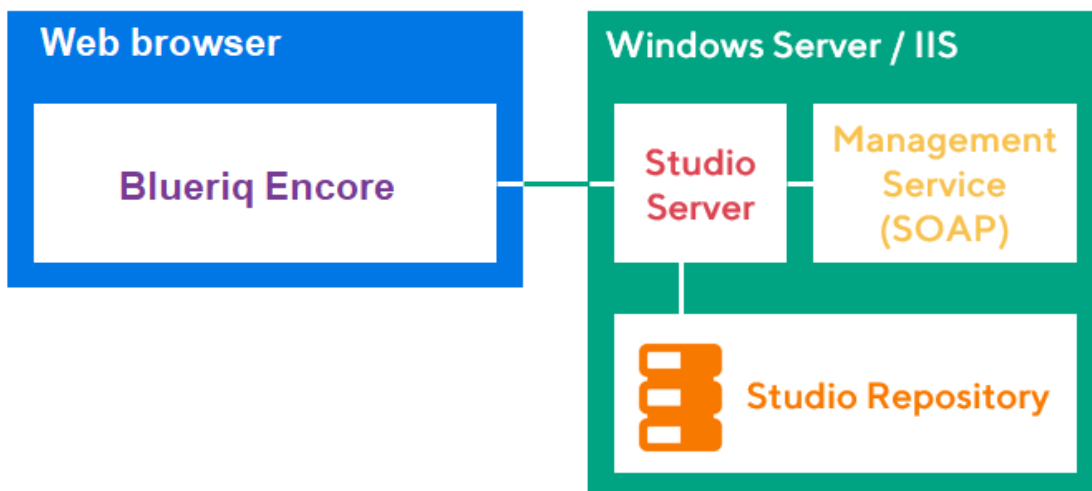- **Publisher**: *publish* an application from one environment to another

Below the preferred deployment of Blueriq is outlined. An application is developed with Encore, which runs on the Development environment. This environment also contains a Runtime which is linked to Encore. With this setup changes in Encore are directly reflected in the Runtime, which enables rapid application development. Once an application is ready for test, the Publisher is used to transfer the application from the Development environment to the Test(/Acceptation/Production) environment. On this environment only the Runtime is deployed to run the application.

Blueriq Encore

A closer look at Encore shows that there are two layers internally:

- **Studio server** providing the core functionality and is responsible for maintaining the repository containing the model. It provides a management service, via SOAP, which handles the connections to the Publisher, Composer and the development plug-in on the Runtime.
- **Encore**, in which the interface elements (the screens) are handled. This frontend requires Chrome, Edge, or Firefox to run.

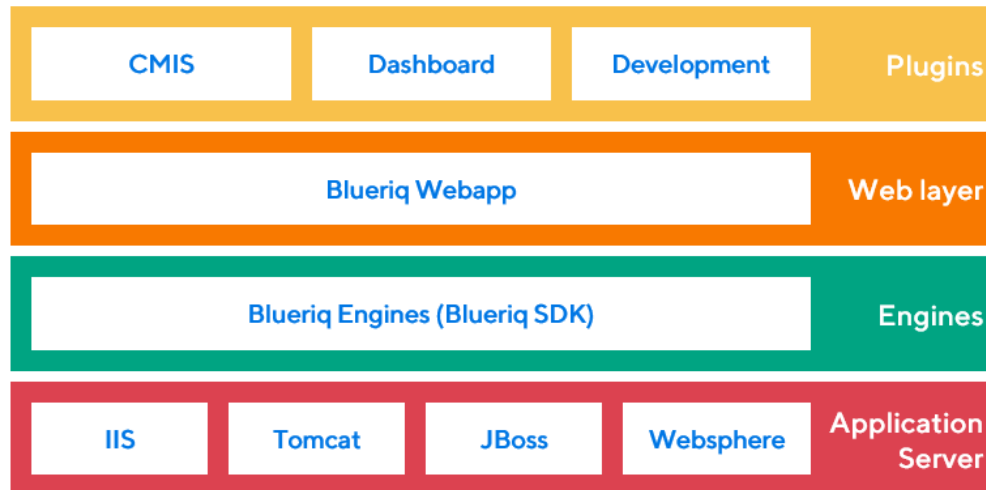Both layers run on top of an IIS application server.

Key features of the development environment:

- Complete revision control
- Work with external and internal libraries
- Multilingual elements
- User and access management
- Working with multiple projects

Blueriq Encore provides a complete guide on Encore.

Blueriq Runtime

The Runtime is the execution platform that executes the application. The Runtime runs on top of an application server, e.g. Tomcat, JBoss, Websphere. On the next layer the Blueriq SDK is available which contains the Blueriq engines. The webapp is located on the next layer, which handles all web interaction. On top of the stack a number of plug-ins are available, e.g. Dashboard, CMIS, which provide specific functionality.

There are several options to load an application from Studio/Encore into the Runtime:

1. Via a direct link between the Studio server and Runtime
2. Via a generated export on the file system (by default in

   ```
   spring.config.additional-location
   /exports)
   ```

3. Via the Publisher

The Runtime runs on Java and works with modern browsers.

Key features of the Runtime:

- Customizable dashboard to run applications
- Variety of plug-ins to extend functionality
- Different APIs to further extend and customize functionality

Blueriq Runtime provides a complete guide on the Runtime.
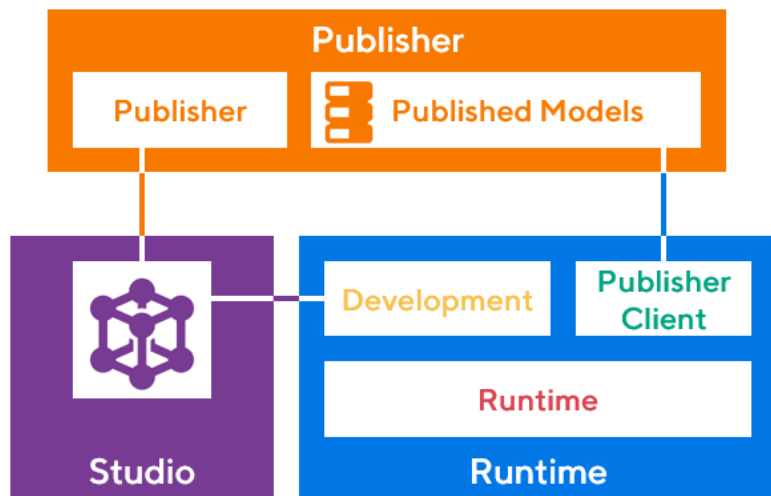
Blueriq Model Analyzer

Blueriq Model Analyzer gives an objective judgment about the quality of Blueriq models and lift these models to a higher level.

More information on the Blueriq Model Analyzer can be found here: Blueriq Model Analyzer .

Blueriq Publisher

The Publisher is a standalone application. It is connected to the Studio server to retrieve applications. An application can be published from the Studio server to the Publisher database. An environment with a Runtime can connect to this database and start a published application through the Publisher Client, which runs on top of Runtime.

Key features of the Publisher:

- Two man rule
- Select a tag/revision to publish
- Administration of published/unpublished applications

More information on the Publisher can be found here: Blueriq Publisher .