

Vuforia™ Studio Enterprise

SIMPLIFYING AR DEVELOPMENT FOR THE ENTERPRISE

Vuforia Studio Enterprise, along with Vuforia Experience Service and Vuforia View, delivers a graphically rich user experience where information is superimposed over a physical product through one, universal browser application.

Through the use of these AR development and delivery tools, what was once a world of simple applications shifts towards full product experiences that enable end users in any industry, to better create, service, and operate their products.

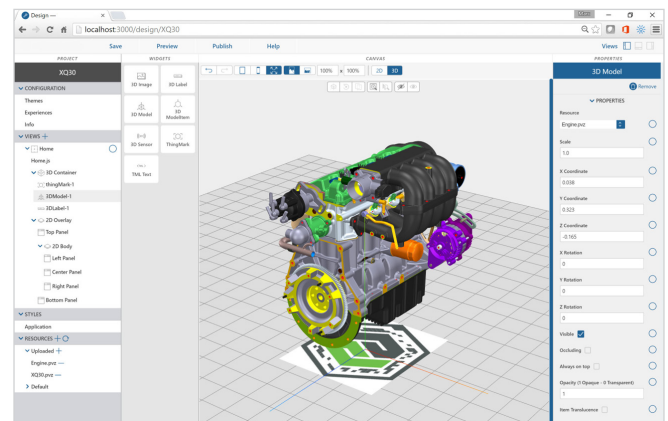
Why Vuforia Studio Enterprise?

Simple, Powerful and Scalable – AR for Everyone

- Rapid 'codeless' authoring of AR experiences.
- Global service, managing access to all enterprise AR experiences.
- Vuforia View displays 2D, 3D AR and specific device-level information for all "things" through one universal application.
- ThingMarks uniquely identify each individual discoverable object with Vuforia View.

Connecting AR with the Enterprise

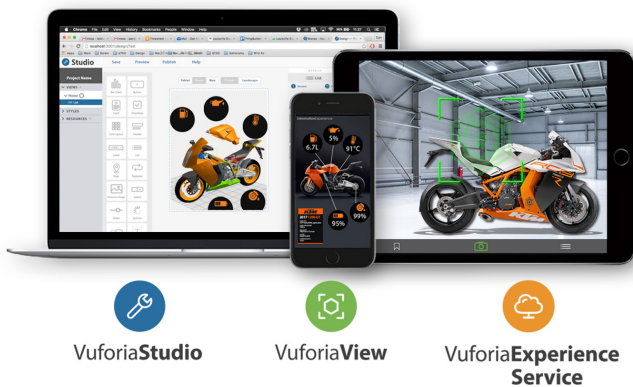
- Leverage engineering data from tools like Creo or other 3rd party 3D CAD tools inside your AR experience.
- Add additional animations and sequences created in Creo Illustrate.



Screenshot of the Vuforia Studio dashboard.

Open Platform for Democratized AR Development

- Broad support for devices, platforms, and 3D geometry.
- Extensive enterprise system integrations such as ERP, SCM and CRM systems.
- Quickly connect to IoT objects within ThingWorx or 3rd party device clouds.



Vuforia Studio Enterprise Components

Vuforia Studio Enterprise

Vuforia Studio Enterprise democratizes the creation of AR experiences for specific objects. It is a highly efficient and easy-to-use authoring tool for creating use-case specific experiences, which are delivered through Vuforia View. Experiences built in Vuforia Studio Enterprise enable a composite view of digital and physical product data, dashboards, and alerts presented in 2D, 3D and AR - without the need to write code.

Vuforia Experience Service

Vuforia Experience Service is at the heart of providing contextualized information within AR experiences in the enterprise. It manages the experiences and delivers relevant, contextualized information and analysis for each uniquely identifiable object in the enterprise. Vuforia Experience Service includes an instance of ThingWorx, making connecting your IoT solutions to AR experiences seamless.

Vuforia View

Vuforia View solves the challenge of knowing which application goes with what object. It is a new way for users to experience their smart, connected world. Vuforia View is a single application that universally recognizes objects through uniquely identifiable ThingMarks, and produces rich mobile user experiences of seamlessly connected real-time product data. This information is delivered via use-case specific experiences enhanced by 3D product navigation and AR interaction. Vuforia View is the web browser for recognizable objects in the enterprise.

Augmented Reality and the Enterprise:

Augmented reality presents both interesting opportunities and challenges for developers trying to deploy applications with AR at scale. Creating AR apps at scale has been historically difficult, limiting the reach of how much and what can be developed. Typically, the development of AR applications supported sales and marketing efforts to help companies sell more products or differentiate themselves in the minds of consumers. However, there are new possibilities for AR in the enterprise to improve service, operation and engineering/manufacturing of products.

The challenges executing against these new opportunities include: how do you create AR experiences at scale, connect those experiences with real-time contextualized information and deliver it in a way that is both immersive, easy to understand and ultimately actionable for a user?

Application vs. Experience

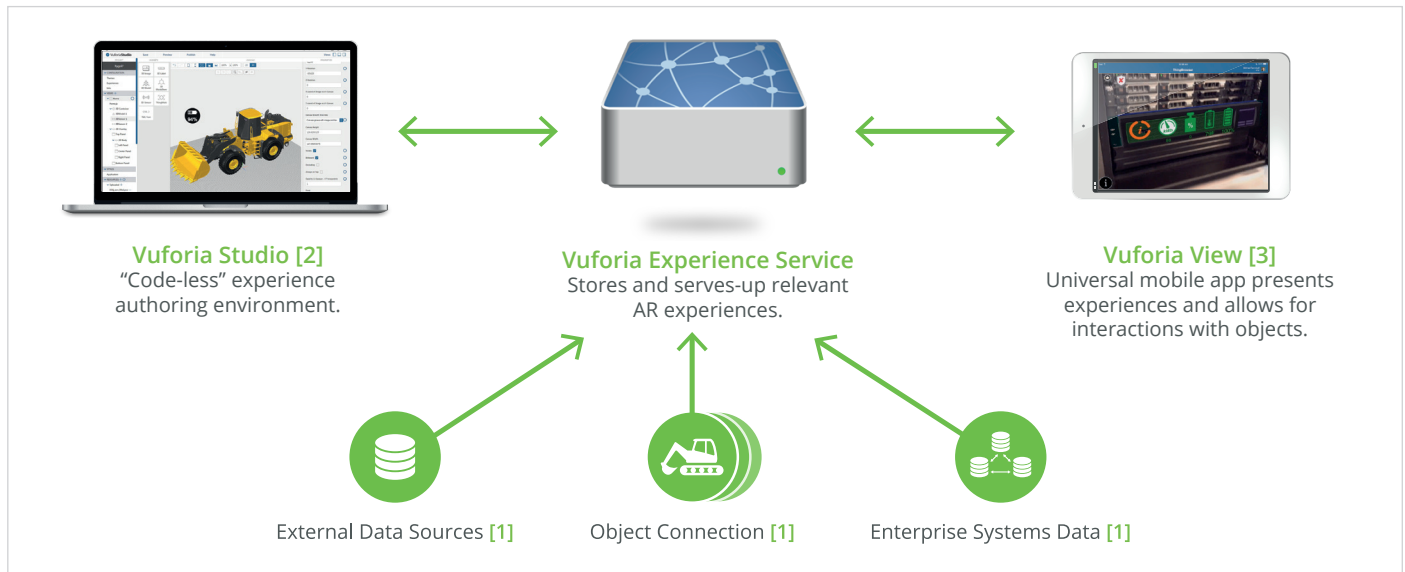
Rather than creating many standalone, platform-specific app with Vuforia Studio Enterprise, solution builders can use the authoring tool along with Vuforia View to create and dynamically deliver an "experience" – not just another app. This solves the problem of creating an app for every object. Instead of potentially creating millions of apps, you can have one app that can recognize an object and serve up immersive experiences to a user whenever and wherever it is needed.

ThingMarks

ThingMarks are uniquely identifiable marks on a specific object that are universally recognizable by Vuforia View. ThingMarks need to be recognizable to Vuforia View in order for the appropriate experiences and corresponding data to be delivered for the specific thing and use case. If a user sees a ThingMark on an object they should know that it is discoverable by Vuforia View.

How does it Work?

1. Objects are connected with enterprise system data and external data sources inside of Vuforia Experience Service.
2. AR experiences are then created using Vuforia Studio Enterprise.
3. The experiences are then stored inside of Vuforia Enterprise Service and recalled and populated with the correct, contextualized information for each object through visual recognition of the ThingMark via Vuforia View.



Key features

- Rapidly create AR experiences without writing code.
- Extend the value of engineering CAD data with use in AR.
- Support for multiple 3D file formats including Creo View, STEP, IGES, STL, OBJ & VRML.
- Automatically optimize and reduce 3D data for high performing AR experiences.
- Intuitive 3D navigation and interaction with objects.
- Create UI layouts for mobile devices with interactive components.
- Add sensor displays, which connect to live IoT data from physical objects.
- Re-use animations sequences for instructional AR experiences.
- Place ThingMarks for unique object recognition and tracking via Vuforia View.
- Connect to Thing Model inside ThingWorx for IoT object definitions and data.
- CSS editing to customize look and feel for experiences.
- Support for hands-on developers via JavaScript extensions.
- Preview experiences prior to publishing to users.
- Seamless integration between Vuforia Studio Enterprise, Vuforia Experience Service and Vuforia View for quick experience publishing and consumption.