



vuforia™ studio

Getting Started
Install and Configuration
Version 8.3.0

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Welcome to Vuforia Studio

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This guide provides the information needed to install and deploy the following components:

- Vuforia Studio
- Vuforia View

Core Components and Concepts

Experiences

Use Vuforia Studio to create and dynamically deliver an “Experience” – not just another app. Experiences can contain 2D and 3D elements, along with live data and information from ThingWorx.

Once created and published in Vuforia Studio, Experiences can be viewed by scanning a ThingMark with any supported device, using Vuforia View.

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. The following is an example of a ThingMark:



Vuforia Studio

Vuforia Studio is a web-native, easy-to-use tool for authoring domain and task-specific Experiences that provide an integrated view of digital and physical product data, dashboards, and alerts with 2D, 3D, and augmented reality.

Experience Service

The Experience Service for Vuforia Studio is an enterprise-class, secure and scalable server used by both Vuforia Studio and Vuforia View.

For more information on the Experience Service , see [Architecture Overview on page 7](#).

 **Note**

The Experience Service is a fully standalone node application and does not have any dependencies on ThingWorx.

Global Experience Index (GXI)

GXI eliminates the need for you to manually configure Vuforia View to point to your Experience Service and processes queries for any ThingMark.

When the GXI receives a ThingMark query, it identifies the Experience Service that hosts Experiences for that ThingMark and redirects the query to that specific Experience Service.

By default, Vuforia View uses the GXI but can also be manually configured to use a different Experience Service.

Vuforia View

Vuforia View delivers Experiences rich with 2D and 3D graphics, augmented reality, and real-time product data. Vuforia View uses specialized markers called ThingMarks, that once scanned, immediately deliver relevant 2D, 3D, and AR Experiences. Experiences augment the view of your immediate surroundings with context-sensitive information and graphics, enabling you to interact directly with the things around you.

ThingWorx (Optional)

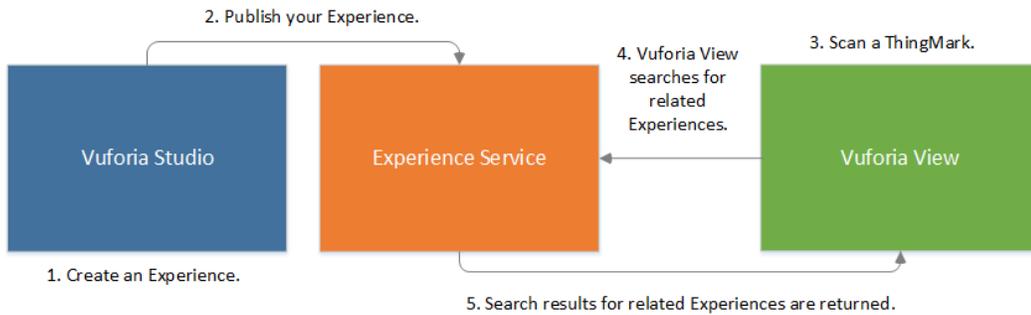
ThingWorx is a rapid, model-based application development platform. By employing modeling instead of coding, the content developer is able to focus on agility and application composition rather than debugging, maintaining, and updating code. The model artifacts become a set of reusable building blocks to assemble new applications.

Access to ThingWorx is included with the Vuforia Studio trial.

For more information, see the [ThingWorx Help Center](#).

How it All Works

Once you've installed Vuforia Studio, and downloaded Vuforia View on your supported device, you'll be creating AR Experiences in no time!



Alternatively, you can access your Experiences from the Library in Vuforia View by entering your Experience Service in the Vuforia View settings.

Request Additional ThingMarks

To request additional ThingMarks, open a new case with [PTC Technical Support](#). Be sure to include your Experience Service URL and ThingMark values in the ticket.

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Supported Devices, Operating Systems, and Browsers

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Vuforia Studio

Vuforia Studio Supported Operating Systems and Browsers

Operating System	Supported Versions	Supported Browsers
Mac	El Capitan	Chrome
Windows	7, 10 (64-bit only)	Chrome

 **Note**

The screen resolution minimum is 1280.

Vuforia View

The following table lists supported devices and versions for Vuforia View.

Operating System	Supported Devices and Versions
iOS  Note iOS 9 is no longer supported.	iOS 10.0 or later: <ul style="list-style-type: none">• iPhone—5s, 6, 6 Plus, 6s, 6s Plus, SE• iPad—Air, Air 2, Mini 4, Pro, Pro 9.7
Android	Vuforia View is supported on devices with an Android operating system with version 5.0 and later.
Windows	<ul style="list-style-type: none">• Surface Pro 4• Surface Book• Microsoft HoloLens

The following table lists supported tracking methods for different operating systems when using Vuforia View:

Operating System	ThingMark	Spatial Tracking	Model Tracking
iOS	X	X	X
Android	X	X	X
Windows	X		X
HoloLens	X	X	

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Install Vuforia Studio

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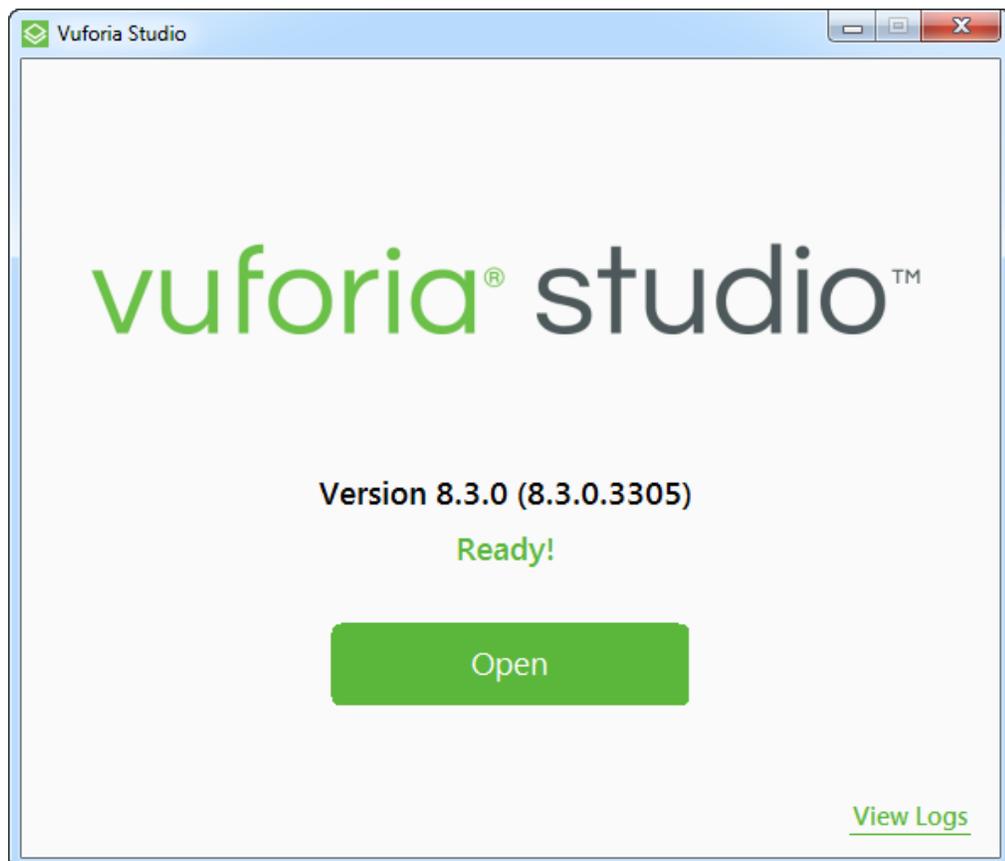
Download Vuforia Studio from the [Vuforia Studio eSupport](#) page.

Select the appropriate install option according to your OS:

- [Install on Windows on page 11](#)
- [Install on Mac on page 13](#)

Install on Windows

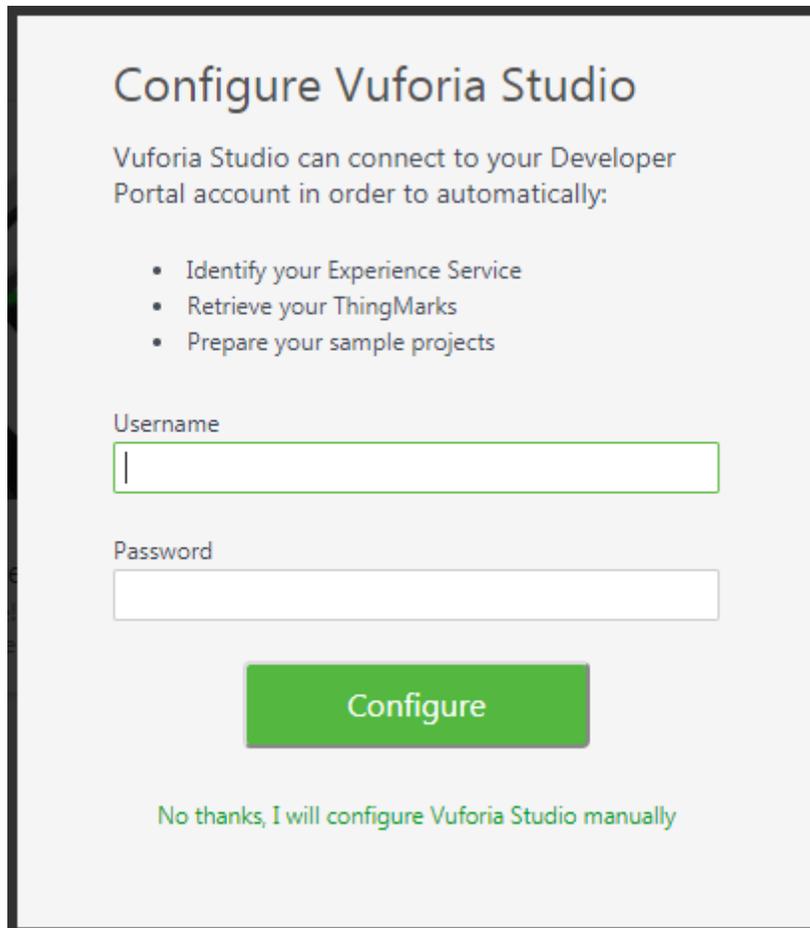
1. Go to the [Vuforia Studio eSupport](#) page.
2. In the **Software Downloads** section, click **PTC Software Downloads**.
3. Click **Order or Download Software Updates**. Enter your **Customer Name** and **Customer Number** and click **Next**.
4. Under **Step 1: Select the Product Family**, click **Vuforia Studio**.
5. Under **Step 2: Choose Release & Download**, select **<Release> ▶ ThingWorx Studio ▶ Most Recent Datecode**.
6. Click **HTTPS** or **Download Manager** next to the .zip file.
7. Once the .zip is finished downloading, open the file and double-click the setup.exe file.
8. Click **Run** when asked if you want to run the file.
9. On the **Application Install - Security Warning** window, click **Install**.
10. Once the install has completed, the **Vuforia Studio** window appears. Click **Open**.



11. A Windows Security Alert appears. Click **Allow Access**.

 **Note**

Upon opening Vuforia Studio for the first time after installation, the **Configure Vuforia Studio** window appears. Click **No thanks, I will configure Vuforia Studio manually**, as auto-configuration is only available for free trial participants.



Configure Vuforia Studio

Vuforia Studio can connect to your Developer Portal account in order to automatically:

- Identify your Experience Service
- Retrieve your ThingMarks
- Prepare your sample projects

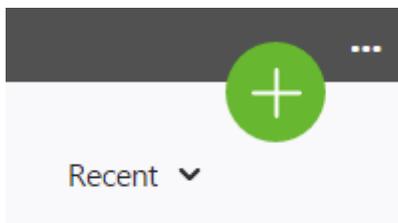
Username

Password

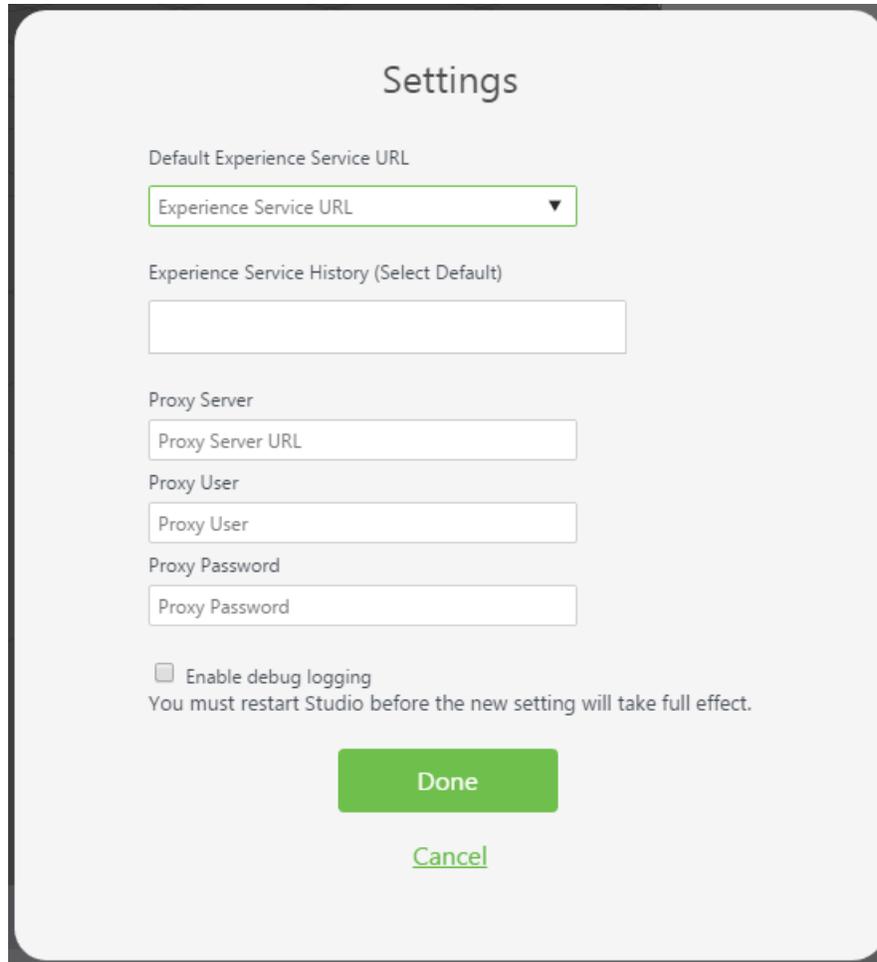
Configure

[No thanks, I will configure Vuforia Studio manually](#)

12. The home screen appears. Click  and select **Settings**.



13. Enter your Experience Service URL. This will configure Vuforia Studio to use your Experience Service.



The screenshot shows a 'Settings' dialog box with the following fields and options:

- Default Experience Service URL:** A dropdown menu with 'Experience Service URL' selected.
- Experience Service History (Select Default):** An empty text input field.
- Proxy Server:** A text input field with 'Proxy Server URL' as the placeholder.
- Proxy User:** A text input field with 'Proxy User' as the placeholder.
- Proxy Password:** A text input field with 'Proxy Password' as the placeholder.
- Enable debug logging:** An unchecked checkbox.

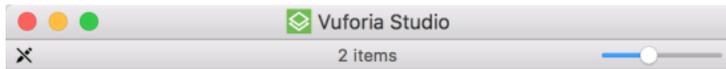
Below the fields, there is a note: "You must restart Studio before the new setting will take full effect." At the bottom of the dialog are two buttons: a green 'Done' button and a 'Cancel' link.

14. Now that you've successfully installed Vuforia Studio, start building AR Experiences! Walk through sample projects on the Home page of Vuforia Studio, and check out a few of the [tutorials](#) in the Vuforia Studio Help Center.

Install on Mac

1. Go to the [Vuforia Studio eSupport](#) page.
2. In the **Software Downloads** section, click **PTC Software Downloads**.
3. Click **Order or Download Software Updates**. Enter your **Customer Name** and **Customer Number** and click **Next**.
4. Under **Step 1: Select the Product Family**, click **Vuforia Studio**.
5. Under **Step 2: Choose Release & Download**, select **<Release> ► ThingWorx Studio ► Most Recent Datecode**.

6. Click **HTTPS** or **Download Manager** next to the .dmg file.
7. Once the .dmg is finished downloading, double-click the file. Once the Vuforia Studio window appears, drag-and-drop the Vuforia Studio application onto the **Applications** folder.

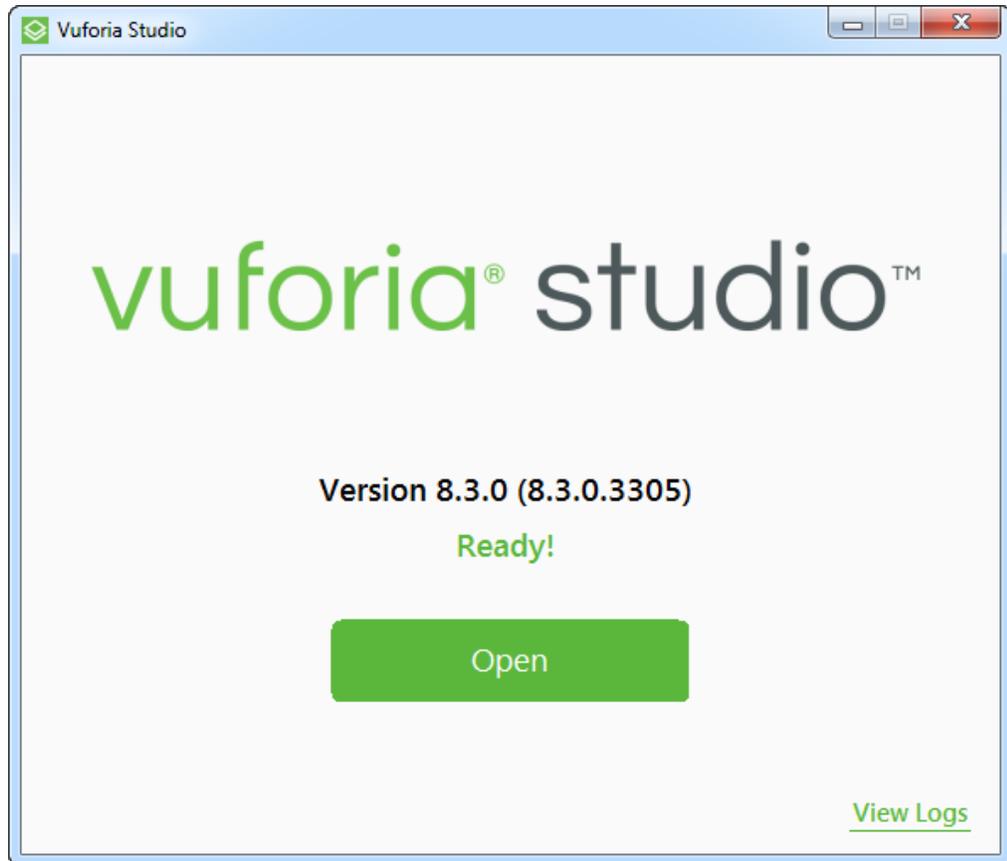


vuforia® studio™



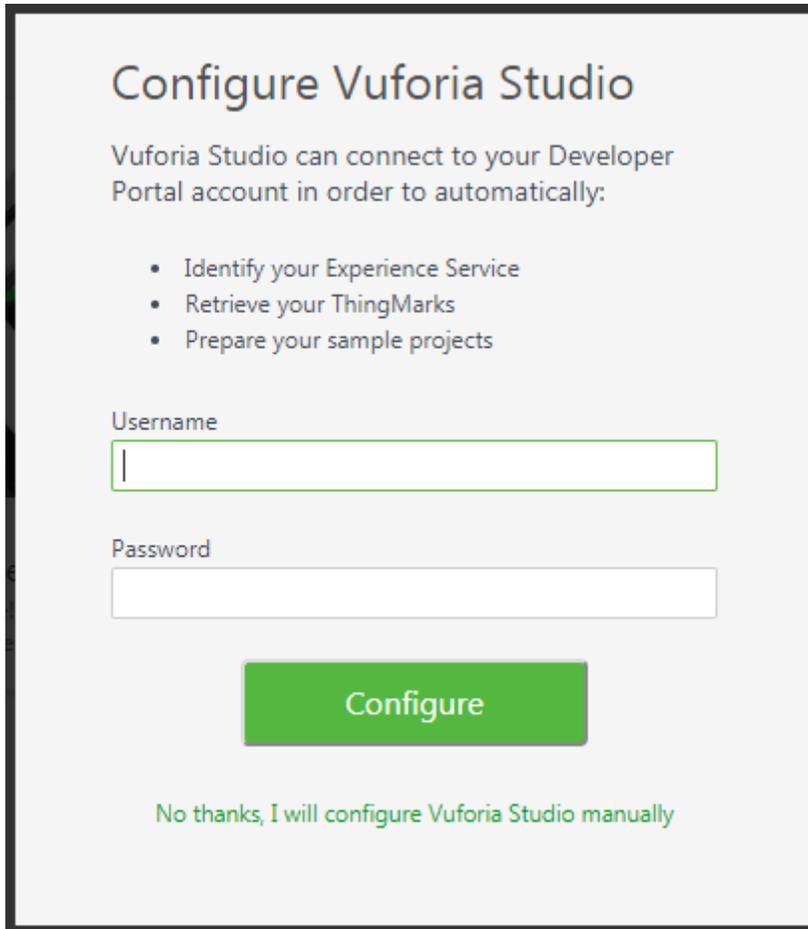
8. In the **Applications** folder, click the Vuforia Studio application.

9. Once startup has completed, click **Open**.



 **Note**

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Configure Vuforia Studio

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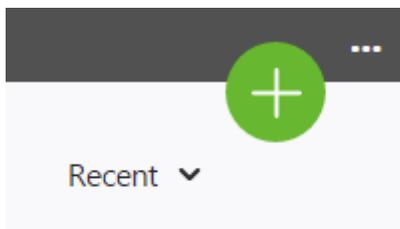
Username

Password

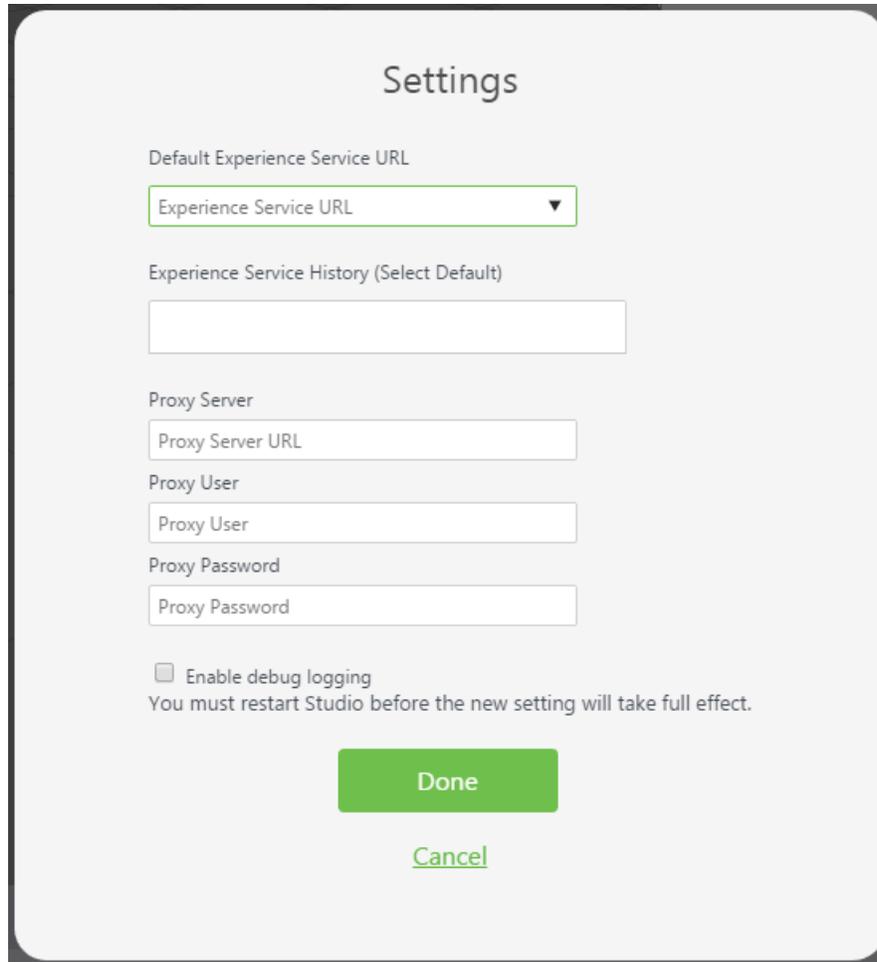
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- Enable debug logging:** An unchecked checkbox.

Below the fields, there is a note: "You must restart Studio before the new setting will take full effect." At the bottom of the dialog are two buttons: a green 'Done' button and a 'Cancel' link.

12. Now that you've successfully installed Vuforia Studio, start building AR Experiences! Walk through sample projects on the Home page of Vuforia Studio, and check out a few of the [tutorials](#) in the Vuforia Studio Help Center.

Update Vuforia Studio to the Latest Version

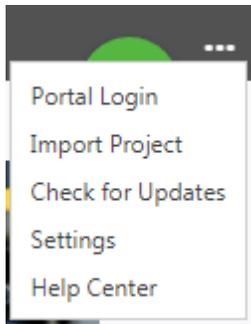
Use the following procedure to update Vuforia Studio.

Windows

Note

Vuforia Studio 8.3.0 requires uninstalling any previous version, and then reinstalling. Your projects and configuration will be preserved when installing Vuforia Studio 8.3.0

1. From the Vuforia Studio toolbar, click the  menu and select **Check for Updates**.



2. If a newer version is available, a pop-up appears. If you're running the latest version, a small notification appears at the bottom of the screen.

Mac

Quit any running instances of Vuforia Studio. Locate the Vuforia Studio file in your **Applications** folder and drag the icon to the **Trash** can in the dock. Install the latest version of Vuforia Studio.

Move Vuforia Studio Projects Manually

Vuforia Studio automatically moves your projects and extensions directories under a new `ThingWorxStudio` directory on startup of Vuforia Studio 1.6. However, if there are a large number of projects to be moved, the process may take a while. Also, if the move fails, Vuforia Studio will not start, and will continue to keep trying to complete the move on subsequent startups until it succeeds. While it is recommended that you let Vuforia Studio move your projects for you, it is possible to manually move them using the following process.

1. Create a `ThingWorxStudio` folder under `<Home Directory>/Documents`.
2. Move the `<Home Directory>/Documents/VuforiaStudioEnterpriseProjects/builder-settings.json` file to `Documents/ThingWorxStudio`.

-
3. Move the contents of `<Home Directory>/Documents/VuforiaStudioEnterpriseProjects/` to `<Home Directory>/Documents/ThingWorxStudio/Projects` and delete the `VuforiaStudioEnterpriseProjects` folder.
 4. Move the contents of `<Home Directory>/Documents/VuforiaStudioEnterpriseExtensions/` to `<Home Directory>/Documents/ThingWorxStudio/Extensions`, and delete the `VuforiaStudioEnterpriseExtensions` folder.

 **Note**

The *Home Directory* that Vuforia Studio uses is controlled by `HOME` environment variable, or if that doesn't exist the `USERPROFILE` environment variable is used. For example, on Windows the home directory could be `D:\Users\jdoe\`, or on macOS, `~/`.

Install Vuforia View

The latest version of Vuforia View is available in the [Apple App Store](#), [Google Play](#), and [Microsoft Store](#) for your supported mobile devices and operating systems. Check your App updates and install the latest version or, if you are installing for the first time, search for Vuforia View.

Install Vuforia View on Microsoft HoloLens

1. Update your HoloLens OS.
2. On your HoloLens, search for Vuforia View in the Microsoft store.
3. Air-tap **Install**.