

Samples

The SDK samples are located in the following directories:

C++ **C#/.NET4** **C#/Unity** **Java** **Processing**

The samples are prefixed with the following abbreviations to identify the camera model they work with:

- DF Camera neutral samples (Dual Facing.)
- FF Camera model F200 or SR300 samples (Front Facing)
- RF Camera model R200 samples (Rear Facing)

Locate the sample and copy the sample source to [a writable directory](#). Most samples require a writable sample directory for building or execution.

See the following build and execution instructions:

C++ **C#/.NET4** **C#/Unity** **Java** **Processing**

Sample: DF_3DScan (C#)

The `DF_3DScan.cs.exe` sample is a C# application that shows the capabilities of the 3D capturing and scanning.

Launch & Build

You can launch the prebuilt sample directly from the `$(RSSDK_DIR)/bin/$(Platform)` folder of the SDK installation, or compile and execute within Microsoft Visual Studio. The project and source files are located under `$(RSSDK_DIR)/framework/CSharp/DF_3DScan.cs`.

GUI Operations

The sample window is shown in Figure 19. Use the menus to perform the following operations:

- **Device**: Select the camera device.
- **Color**: Select the color stream resolution and frame rate.
- **Depth**: Select the depth stream resolution and frame rate.
- **Mode**: Choose different working modes: live streaming, playback or recording.
- **Help**: Click to view this reference manual.

Select your scanning object in the `Object` list box. The `Object` list box roughly configures the scanning volume size: object (smallest), face, head, body, and full (biggest.) Additionally, you can configure the scanning options such as `Texture` and `Solid (no holes)` from the right panel.

Click the `Start Camera` button to preview camera images for locating the scanning object.

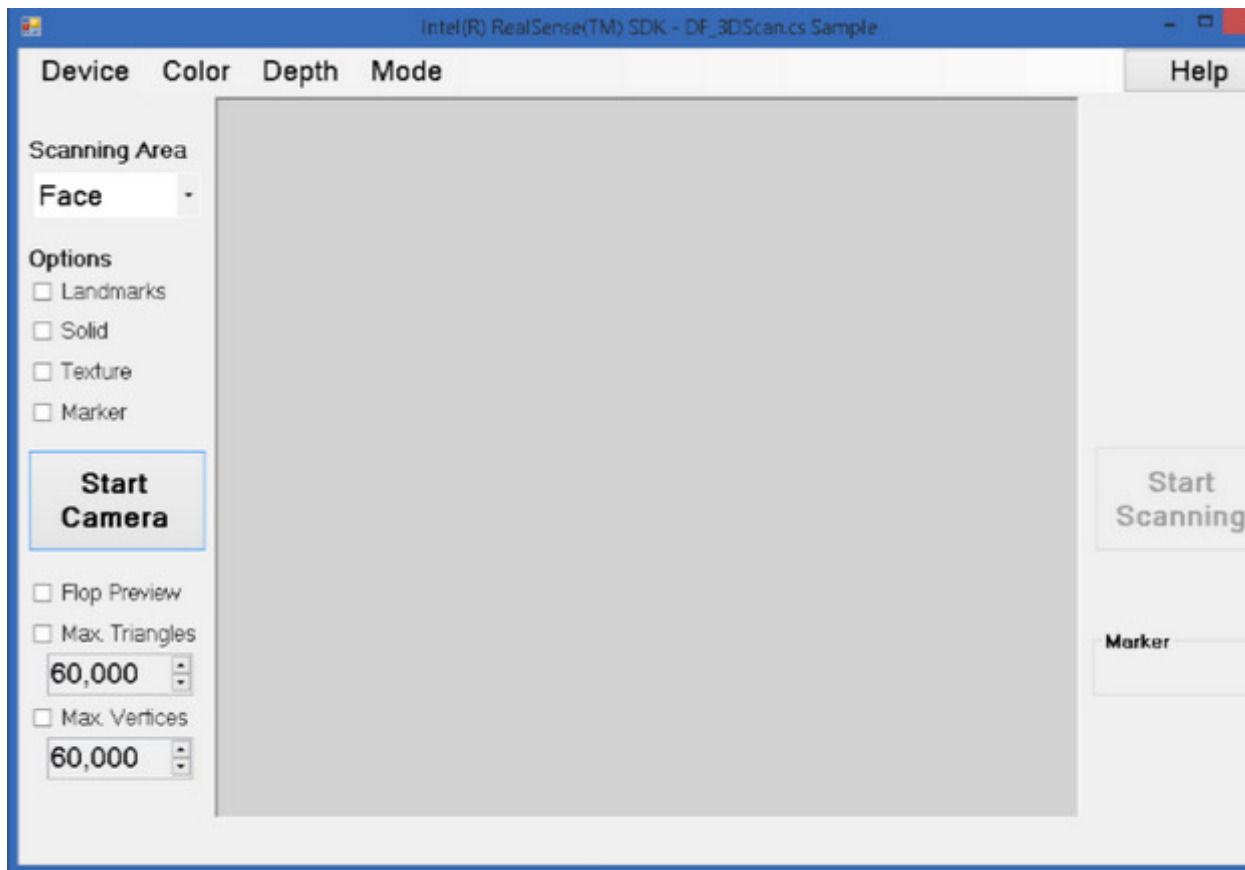


Figure 19: 3DScan Sample Window

Follow the sample prompt (at the bottom of the sample window) to center and locate the scanning object, as illustrated in Figure 20. The object is masked removing all background pixels. Once there is a good shoot of the scanning object, click the Start Scanning button to start the scanning process. You can click the Cancel button to return to the configuration window (Figure 19.)

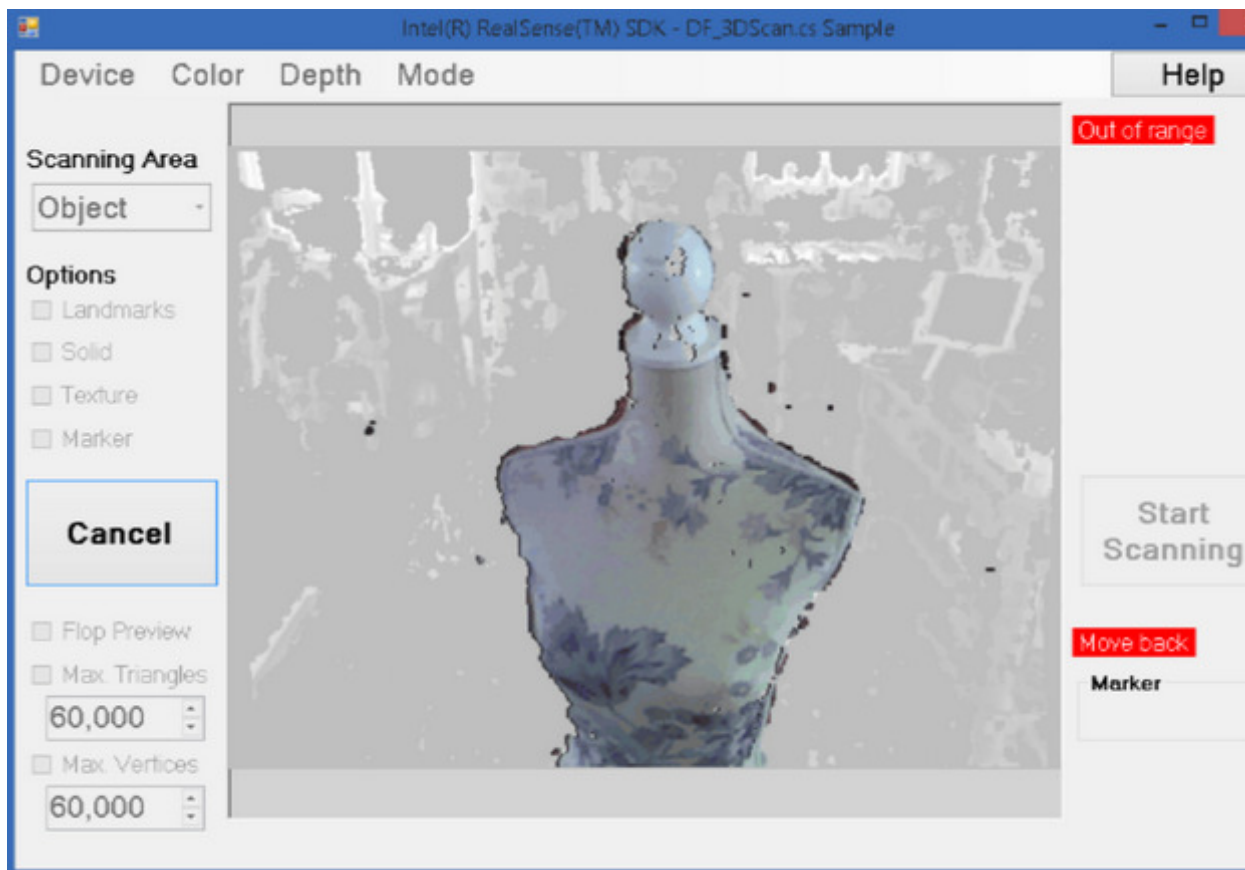


Figure 20: Follow the Prompts to Locate the Scanning Object in the Camera View.

During scanning, you need to either turning the object in front of the camera, or moving your camera around the object so that the algorithm gets to scan the object from all angles. The sample prompts you when the object is too far/close related to the camera. See Figure 21.

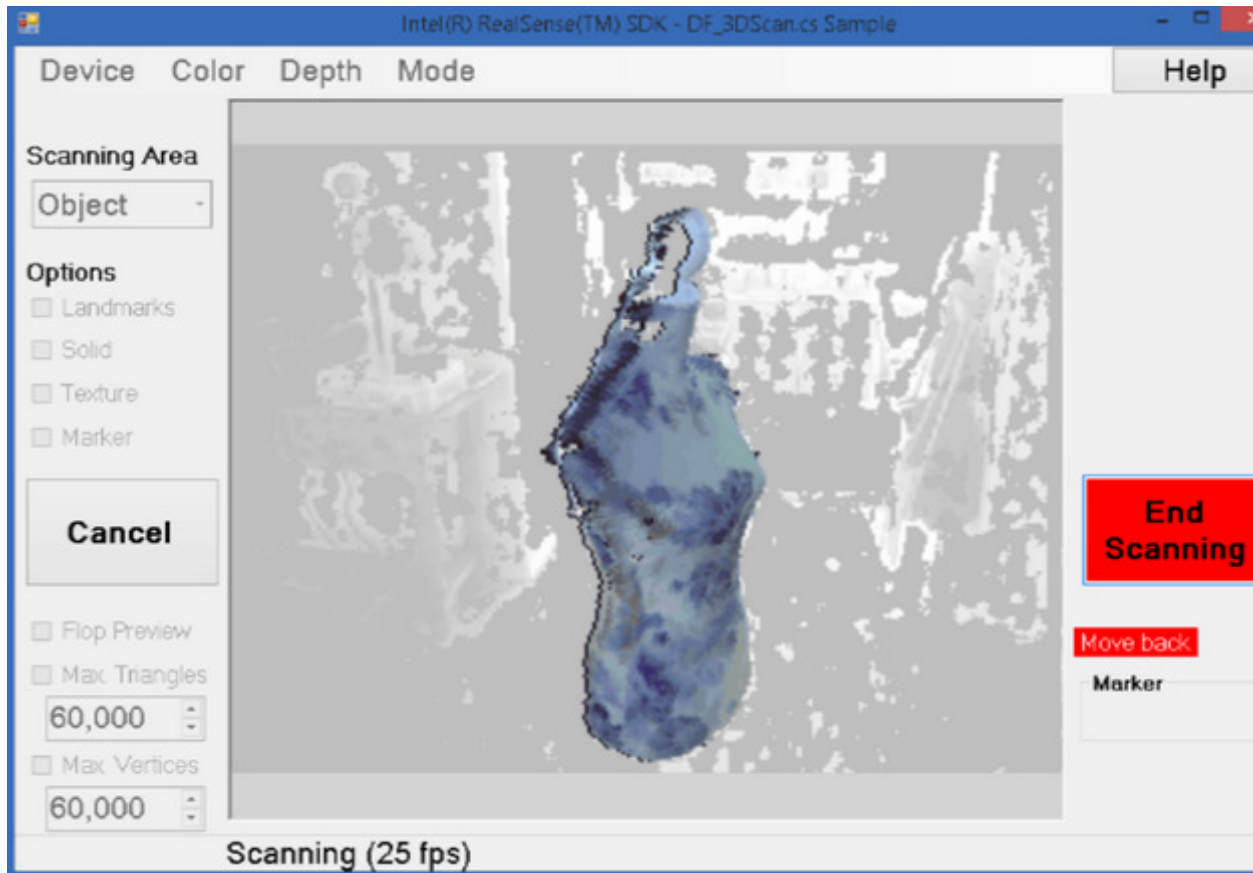


Figure 21: Turn the Object or Move Around the Object During Scanning

After scanning is completed, click the End Scanning button to save the object file to the disk. See Figure 22.

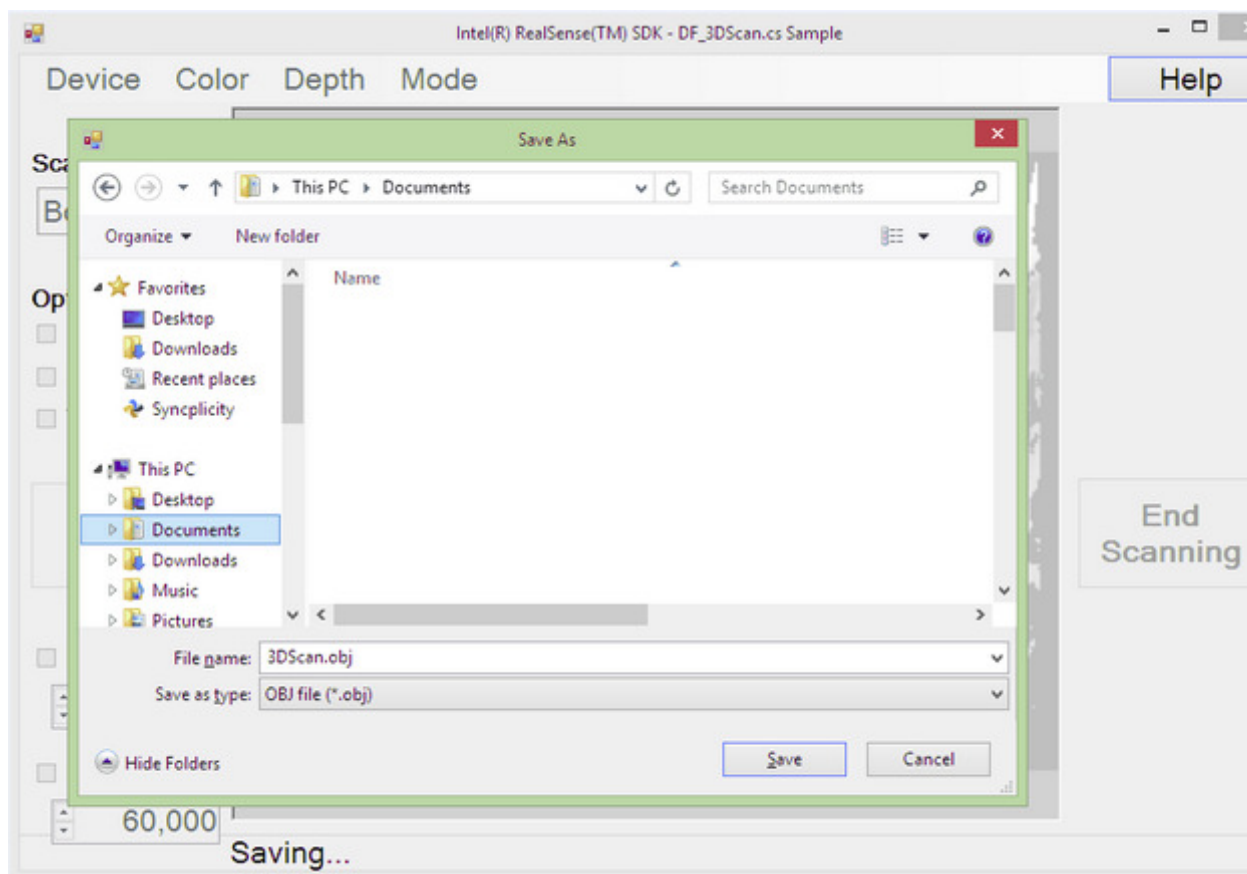


Figure 22: Save the Object File After Scanning

You can view the saved object file in your favorite browser. See 23.

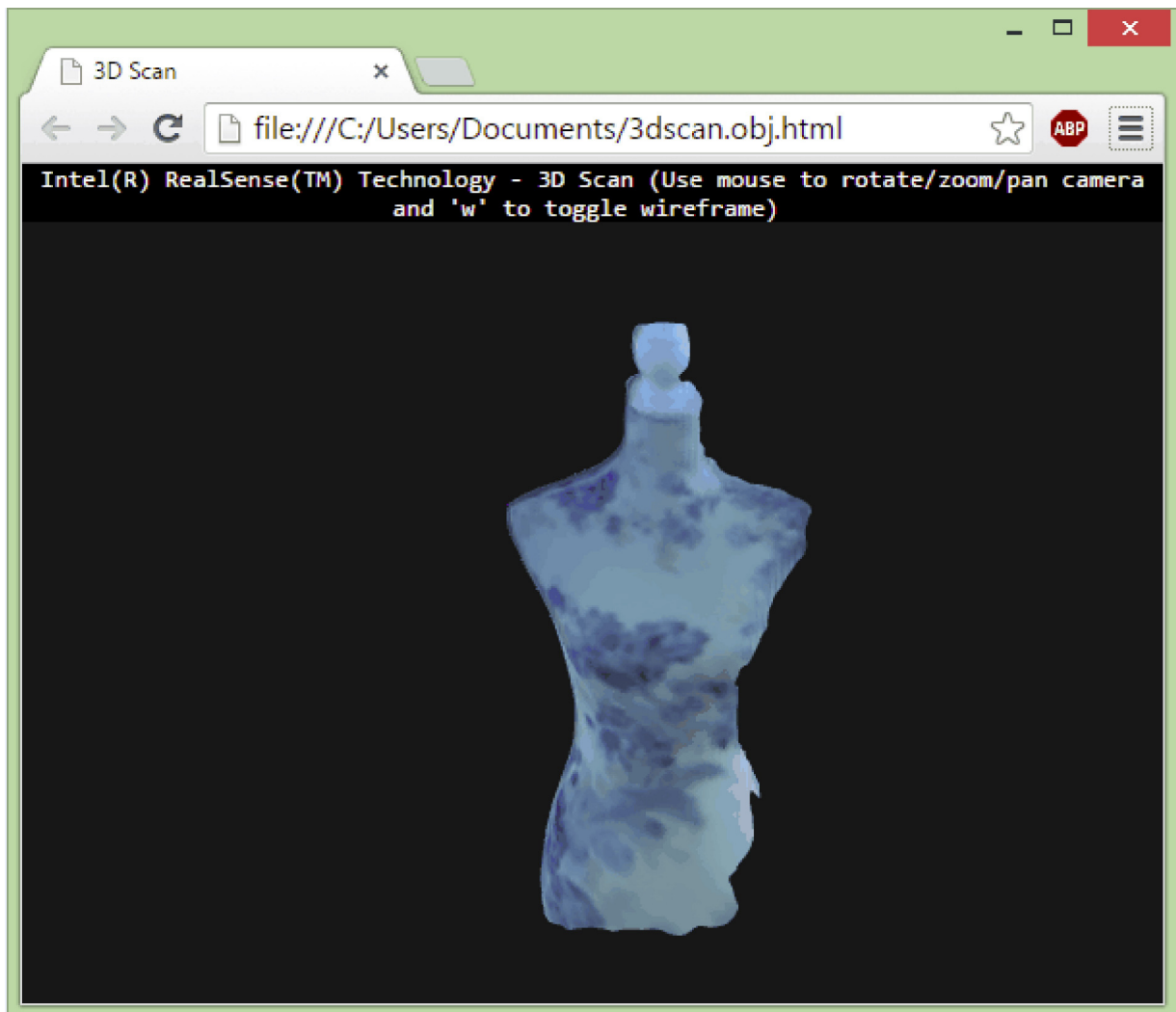


Figure 23: Review the Scanned Object in Your Browser

See Also

[3D Scanning Algorithm](#)