Monotype AR/VR Text Plugin for Unity

Version 2.0 – Frequently Asked Questions (FAQ)

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About This Document

Monotype AR/VR Text Plugin for Unity
Frequently Asked Questions
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Monotype Text Plugin Introduction

The Monotype AR/VR Text Plugin is designed for Unity environments that:

- Renders text that is high quality, legible, and aesthetic;
- Uses adaptive distance fields to render high quality text during run time;
- Has native support for global languages - The shaping of complex languages (ex. Indic, Thai), large character sets, and any language layout requirements (ex. Arabic);
- Enables dynamic tuning, and customization of text;
- Is resource (footprint, memory, battery consumption) optimized

This document covers some of the frequently asked questions related to the benefits, features of the plugin, and its usage.

This is beautiful!
这很漂亮！

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Frequently Asked Questions

Benefits	
How is Monotype Text better than the default Text?	Monotype Text is better than the default text in several different ways: • Uses distance fields for the text resulting in crisp glyphs that offer much better legibility, readability without any additional effort from the developer • Generates distance fields using a proprietary runtime distance field technology (called adaptive distance fields) that simplifies the workflow, and the app by removing the need to create, and package the distance fields • Use Adaptive Distance Fields to enable changing fonts, sharpness, thickness of the fonts during runtime without having to package multiple fonts, weights etc. • Includes native support for global languages – handles all the nuances of handling complex languages (complex shapes, number of glyphs, shaping, layout etc.) • Resource optimized in terms of footprint (size of the app), runtime performance
Does the Monotype Text Plugin support languages other than English?	Yes, Monotype AR/VR Text Plugin has support for most global languages. Monotype AR/VR Text Plugin handles all the complexity, and nuances of handling global languages such as: • Large number of glyphs seen with some of the Asian languages (ex. Chinese, Korean, Japanese). Monotype has compression technologies that can significantly reduce the size of a font • Complex characters, and shaping requirements (ex. Indic, Thai) • Layout requirements such as right to left, or bi-directional text (ex. Arabic)
Features	
What is the impact on performance when I switch to Monotype AR/VR Text Plugin?	There is no impact on performance! Monotype AR/VR Text Plugin performs the same if not better than the default text in most cases. For

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	instance, the performance is better in cases where multiple properties of text change per frame.
Is the Text Atlas dynamic or fixed size?	As iOS does not support textures greater than 2048 * 2048, the Text Atlas currently support up to 2048 * 2048 for cross platform compatibility.
Does the Monotype Text Plugin have Rich Text support?	Yes
Does the Monotype Text Plugin support other effects such as glow, drop shadow, engrave, emboss?	Not at this time
Using the Plugin	
Will I get an "Atlas Full" message?	No! Version 1.0, and higher of the Monotype Text Plugin include support for Smart Atlas management, which means you will never run out of buffer space You might receive this with other text controls when the Text Atlas of a font becomes full. It may be due to a large number of glyphs rendered from one font or a large 'Render Size'. This may lead to missing glyphs across multiple labels using that font.
What do I need to do to enable Smart Atlas management?	Nothing! The Monotype Text Plugin takes care of all the atlas management behind the scenes, so you don't need to anything!
How can I control/improve the quality of text?	First adjust *Font Size* to get the desired display size. Then increase the *Render Size* to get the desired text quality (Note – Larger *Render Size* causes the Text Atlas to fill faster). If you still require slight change in quality, carefully adjust the *Adjustment* control to get desired output.
What is the difference between font size and render size?	Font size scales the text (changes the visible text size) without affecting the quality. Render size impacts the text quality without affecting the display size.
Why does outline get distorted when I change 'Render Size' or 'Adjustment' setting?	Larger *Render Size* leads to thinner outline. To get desired outline thickness, first set the required *Render Size*, then adjust *Outline Width* and *Adjustment* setting.
What is 'Default' horizontal alignment?	Text is left aligned in case of LTR languages such as Latin and Chinese and right aligned for RTL languages such as Arabic.
Can I add Monotype UI text to Buttons, Dropdown, Input Fields etc.?	Yes, except Input Field. For Button and Dropdown, simply replace the Unity text label with Monotype UI Text object.

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What is the 'none' option in font list?	In case you don't have any fonts in streaming assets folder or you do not have preference of font for given label and you want to use fonts available in system fallback font list, select 'none' in font list, check the *Font Fallback* checkbox and update the font fallback list for desired platform to render labels from system fonts.
Is there a way to provide different fallback fonts for different versions of android/iOS/Mac/Windows?	To support multiple versions of platforms add the system fonts for all the versions of given platform in its respective font fallback file. For instance, add both Nirmala.ttf and Mangal.ttf to WindowsFontFallback.txt to support Devanagari in both Windows 7 and Windows 10. Note – You may receive a warning on Windows 7 that Nirmala.ttf was not found or similar warning on Windows 10, which can be simply ignored.
Can I use a font in assets folder with monotype text?	No. Monotype Text works only with fonts present in the Assets/StreamingAssets/Monotype/Fonts folder.
Can I use a single font file for both Monotype text and Unity text at the same time?	No. For Unity text, you need a font file in Assets folder while for Monotype text you need to add the font file to streaming assets folder. (Assets/StreamingAssets/Monotype/Fonts)
Rich Text	
What will happen if the tag isn't defined correctly?	If the tag isn't defined correctly, the effect of the tag wouldn't be visible. Let's say you want to apply the Bold tag, the correct usage would be " Bold " which would result in "**Bold**" in the Scene. However, if this was defined as "<b> Bold <b>", the result would be "<b> Bold <b>" i.e. the entire text string without the effects.
What will happen if user provides incorrect tag values?	In the case of nested tag and inner tag value is wrong, the value of outer tag will apply, and otherwise it will apply default settings.
Why does the text quality degrade upon reducing the Size to its minimum?	If the Size tags is used with Rich text the text is rendered using *Render Size* instead of *Font Size*. A simple workaround would be to increase all *Font Sizes* (set in editor and mentioned in size tags) by a factor such that the minimum *Font Size* in the Monotype Text object is 40 and then reduce the transform scale by the same factor.

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Why am I unable to change Render size when applying Size tag in Rich text?	If the Size tag is used with Rich text the text is rendered using *Render Size* instead of *Font Size*. Hence, no change will be visible to user on changing *Render Size*.
Are Rich text tags case sensitive?	No, Rich text tags are not case sensitive. You can use them interchangeably, for instance "\<b> Awesome Text</B>", would result in "**Awesome Text**" However, it is keyword specific, and cases like "\<B>Awesome Text </Bold>" are not supported.
Can we apply any custom Material to Monotype text?	No, not at this point. Materials can be added in the Material list but no effect will be visible on Monotype text. However, these Materials can be used with Rich Text Quad tag.

Monotype-3D Extruded Text

How can I add Monotype-3D Extruded text using Monotype Text Plugin?	You can add Monotype-3D Extruded text using 3D Objects present under GameObject.
What are the features supported with Monotype-3D Extruded Text?	Monotype-3D Extruded Text supports unique features like Smoothness, Bevel Size, Depth, Render Size which allows users to generate smooth legible text in their applications.
Is Rich text supported Monotype-3D Extruded text support?	No, currently Rich Text is not supported with Monotype-3D Extruded text.
Can I add colors to Monotype-3D Extruded text object?	User can apply desired color on Monotype-3D Extruded text by creating own custom Material/Shader.
Can Monotype-3D Extruded text slow down my application as compared to normal Monotype-3D text?	Creation of extruded text and enhancing its appearance using Render Size and Smoothness increases the number of vertices which may cause small degrade in performance.
Which font variants should be used with Extruded text?	Although user is free to use any font for generating 3D Extruded text, but, it is advisable to use Bevel Size and other extruded features effectively as it may display distorted text with thin or light fonts. Eg, applying Bevel Size with any *Thin* or *Light* variant font may produce distorted text.
Should I use Extruded text for reading applications?	Except for some logotype designs and a few other limited applications, extruded text tends to degrade the readability of the text. Even though we are designing experiences for 3D, we use 2D for the type because it is more legible and easier to read.

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Why I am getting errors when using large text in 3D extruded object?	In Unity version prior to 2018.1, maximum vertices supported in a text object is 65535. So you are getting this error. You should reduce the text or use minimum bevel/smoothness values to fix this issue. However, you will not face this issue if your device supports 32 bit index buffer and you are using Unity 2018.1 or higher version.
Misc.	
Can I use any font with the Monotype Text Plugin	While you can use any font with the Monotype Text Plugin, we highly recommend using only fonts optimized for AR/VR. These are fonts designed keeping AR/VR like use cases in mind. These fonts are available at http://catalog.monotype.com/category/product/virtual-reality-vr-augmented-reality-ar
Where can I get help? Be it with questions, or modifications/tuning of Monotype fonts?	Reach out to AR/VR.support@monotype.com

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