



A Unity Asset by DTT  
Version 1.0.1 – 08-03-18

# **DYNAMIC TEXT LOCALISATION**



## Change log

Version	Date	Notes	
1.0.0	14-02-2018	<i>Added</i>	Initial release
		<i>Changed</i>	-
		<i>Deprecated</i>	-
		<i>Removed</i>	-
		<i>Fixed</i>	-
1.0.1	08-03-2018	<i>Added</i>	-
		<i>Changed</i>	-
		<i>Deprecated</i>	-
		<i>Removed</i>	-
		<i>Fixed</i>	Minor bugs pertaining to building on Android

## Summary

The *Dynamic Text Localisation* Asset by DTT allows text in your game to be localised from a provided CSV file, simplifying the implementation of multiple languages. After adding a **LanguageManager** component anywhere in your scene, you can specify the CSV file that contains the translations (hereafter referred to as the *LanguageMap*). The *LanguageMap* can either be locally stored, or remotely accessed by specifying a URL. With this initial set-up, you can add a **TranslatedText** component to any UI-Text object, and specify the key for the value you wish to display.

**LanguageManager** will set the value for all **TranslatedText** components based on the current language. The **TranslatedText** component can be set to override the current language, allowing you to display multiple languages at once.

**LanguageManager** has highly verbose logging, allowing you to see what went wrong if anything fails to load properly.

For more advanced uses, turn off auto-loading in the editor, and set up your **LanguageManager** through its static methods. Custom variables can be provided for the NewLine-separator and Delimiter.

## Contents

Change log .....	2
Summary .....	3
LanguageMap example .....	5
Editor Properties.....	6
<b>LanguageManager</b> component .....	6
<b>TranslatedText</b> Component.....	8
Scripting Reference .....	9
<b>LanguageManager</b> .....	9
<b>TranslatedText</b> .....	12
FAQ.....	14
Contact.....	14

## LanguageMap example




The *LanguageMap* is a CSV file which contains the language data for every language which is to be displayed in your Unity game. The *LanguageMap* has to adhere to the following format:

	English	Dutch	Spanish
str_Code	en	nl	es
Key_example_0	Example	Voorbeeld	Ejemplar
Key_Example_1	Hello	Hallo	Hola

1. The first row contains the names of the languages; these names are not displayed or otherwise used by the asset;
2. The second row contains the [language codes](#);
3. The leftmost column contains the keys for the translations;
4. Every row past the second holds the key as its first value, followed by the translations associated with this key for every corresponding language.

## Editor Properties

LanguageManager component


**Language Manager (Script)**



**Auto-Loading**

1

Load On Awake

☒

**Preferred Language**

2

☒ Use a preferred Language

3

Language:

Unknown

⌵

4

Set as Current

**Translation-File (CSV)**

▼ CSV Settings

5

NewLine

EnvironMent\_NewLine

⌵

6

Delimiter

;

⌵

7

☒ Use a remote Language-File

URL for Language-File:

8

9

Custom Username:


10

Download on WIFI only

☐

11

FirstBoot-File:


LanguageMap-Demo

⊙

**Language**

12

Current Language:

Dutch

13

Fallback Language:

English

⌵

▼ Debug

14

Log Methods

☒

15

Logging-Level:

Warning

⌵

16

User-Saved Language:

Dutch

17

Clear Saved Language

**TranslatedTexts**

18

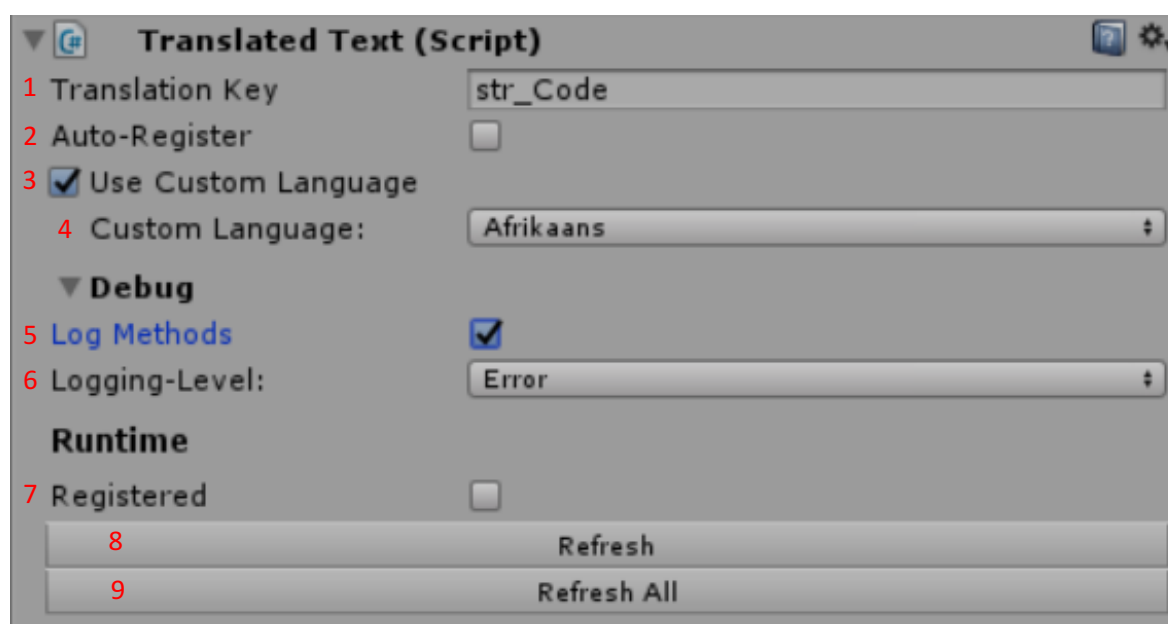
Update Registered TranslatedTexts

19

Update All TranslatedTexts

<b>LanguageManager</b>		
<i>Auto-Loading</i>		
1	Load On Awake	Set <i>true</i> to load <i>LanguageMap</i> when <b>LanguageManager</b> is created (on <i>Awake</i> )
<i>Preferred Language</i>		
2	Use a preferred Language	Set <i>true</i> to load <b>LanguageManager</b> using a preferred Language. This will override any saved Language.
3	Language	Preferred Language to use.
4	Set as Current	Overrides Current Language with Preferred Language
<i>Translation-File (CSV)</i>		
5	NewLine	String used as NewLine-Separator
6	Delimiter	Character used as Column-Separator
7	Use a remote Language-File	Set <i>true</i> to download a remote Language-File for translations
8	URL for Language-File	URL for downloading a remote Language-File
9	Custom Username	Username to use for Downloading (User Credentials)
	Custom Password	Password to use for Downloading (User Credentials)
	Custom Domain	Domain-name to use or Downloading (User Credentials)
10	Download on WIFI only	Set <i>true</i> to download new remote Language-File on WIFI only
11	FirstBoot-File	<i>LanguageMap</i> to use when remote Language-File is not used, or cannot be downloaded/retrieved from cache.
<i>Language</i>		
12	Current Language	The currently selected (default) Language
13	Fallback Language	The Language used if a Translation cannot be found for a specific Language
<i>Debug</i>		
14	Log Methods	Set true to log methods in the <b>LanguageManager</b>
15	Logging-Level	Logging-Level to use when logging methods
16	User-Saved Language	The currently set User-Saved Language (uses <i>PlayerPrefs</i> )
17	Clear Saved Language	Clears the currently saved User-Language
<i>TranslatedText</i>		
18	Update Registered <b>TranslatedText</b>	Updates all <b>TranslatedText</b> components currently registered to the <b>LanguageManager</b>
19	Update All <b>TranslatedText</b>	Updates all existing <b>TranslatedText</b> components, regardless of registration

## TranslatedText Component



Translated Text		
1	Translation Key	The key from the <i>LanguageMap</i> of which the value which corresponds to the current language will be displayed
2	Auto-Register	Set <i>true</i> to automatically register the text at run time
3	Use Custom Language	Set <i>true</i> to use a Custom Language for this specific <b>TranslatedText</b>
4	Custom Language	Custom Language to use when Use Custom Language is <i>true</i>
<i>Debug</i>		
5	Log Methods	Set <i>true</i> to log methods for this <b>TranslatedText</b>
6	Logging-Level	Logging-Level to use when logging methods
<i>Runtime</i>		
7	Registered	Displays whether this specific <b>TranslatedText</b> is currently registered to the <b>LanguageManager</b> . Can be changed in the editor to (un)register an object at any time.
8	Refresh	Instantly Refreshes this specific <b>TranslatedText</b>
9	Refresh All	Instantly Refreshes ALL existing <b>TranslatedText</b> components



# Scripting Reference

## LanguageManager

Properties	
<i>static</i>	
Name	<i>CurrentLanguage</i>
Type	Language
Summary	Returns the currently selected Language
Methods	
<i>Unity-Methods</i>	
Name	<i>Awake()</i>
Type	Void
Summary	Used to Initialize the LanguageManager. Also loads the <i>LanguageMap</i> if LoadOnAwake is set to <i>true</i> in the editor.
<i>Static</i>	
<i>Get</i>	
Name	<i>IsLoaded()</i>
Type	Boolean
Summary	Returns true if the <b>LanguageManager</b> (and the <i>LanguageMap</i> ) is(/are) loaded
Name	<i>GetUsePreferredLanguage()</i>
Type	Boolean
Summary	Returns <i>true</i> if UsePreferredLanguage has been set to true (in the editor)
Name	<i>GetPreferredLanguage()</i>
Type	Language
Summary	Returns the currently set Fallback Language. This language is used when a translation for a specific language cannot be loaded
Name	<i>GetFallbackLanguage()</i>
Type	Language
Summary	Returns the currently set Fallback Language. This language is used when a translation for a specific language cannot be loaded
Name	<i>GetUseRemoteLanguageMapFile()</i>
Type	Boolean
Summary	Returns <i>true</i> if a remote (downloaded) <i>LanguageMap</i> is used
Name	<i>GetUseWIFIDownloadOnly()</i>
Type	Boolean
Summary	Returns <i>true</i> if downloading is only allowed when on WIFI
Name	<i>GetLanguageMapURL()</i>
Type	String
Summary	Returns the String currently used as NewLine-Separator
Name	<i>GetNewLineString()</i>
Type	String
Summary	Returns the String currently used as NewLine-Separator
Name	<i>GetDelimiter()</i>
Type	Char
Summary	Returns the Character currently used as Delimiter (Column-Separator)
Name	<i>GetLanguageMap()</i>
Type	Dictionary<string, Dictionary<Language, string>>
Summary	Returns a COPY of the currently loaded <i>LanguageMap</i> (key, {Language, Value})
<i>Set</i>	
Name	<i>SetPreferredLanguage(Language preferred)</i>

Type	Void
Summary	Sets a new Preferred Language
Name	<i>SetFallbackLanguage(Language fallback)</i>
Type	Void
Summary	Sets a new Fallback Language. This language is used when a translation for a specific language cannot be loaded
Name	<i>SetUsePreferred(bool preferred)</i>
Type	Void
Summary	Sets whether to use the Preferred Language
Name	<i>SetUseRemote(bool useRemote)</i>
Type	Void
Summary	Sets whether to download a remote file
Name	<i>SetWIFIDownloadOnly(bool wifiOnly)</i>
Type	Void
Summary	Sets whether to only download remote file on WIFI
Name	<i>SetURL(string URL)</i>
Type	Void
Summary	Sets URL to use when downloading remote file
Name	<i>SetNewLineString(string newLine)</i>
Type	Void
Summary	Sets NewLine-Separator to use when parsing <i>LanguageMap</i>
Name	<i>SetDelimiter(char delim)</i>
Type	Void
Summary	Sets Delimiter (Column-Separator) to use when parsing <i>LanguageMap</i>
Name	<i>SetCredentials(string username, string password, string domain = null)</i>
Type	Void
Summary	Sets Credentials used for downloading file
Name	<i>SetLanguage(Language language)</i>
Type	Void
Summary	Sets Current Language. Also refreshes all registered <b>TranslatedText</b> components
Name	<i>SetLanguage(ISOCode639 ISO_Code)</i>
Type	Void
Summary	Sets Current Language. Also refreshes all registered <b>TranslatedText</b> components
Name	<i>SetLanguage(SystemLanguage deviceLanguage)</i>
Type	Void
Summary	Sets Current Language. Also refreshes all registered <b>TranslatedText</b> components
<b>TranslatedTexts</b>	
Name	<i>RegisterTranslatedText(TranslatedText text)</i>
Type	Void
Summary	Registers a <b>TranslatedText</b> based on its Key
Name	<i>RegisterTranslatedTexts(List&lt;TranslatedText&gt; texts)</i>
Type	Void
Summary	Registers a List of <b>TranslatedText</b> components based on their respective Keys
Name	<i>UnregisterTranslatedText(TranslatedText text)</i>
Type	Boolean
Summary	Removes a <b>TranslatedText</b> -Object from registration
Name	<i>UnregisterTranslatedTexts(List&lt;TranslatedText&gt; texts)</i>
Type	Void
Summary	Removes a List of <b>TranslatedText</b> components from registration

Name	<i>RefreshTranslatedText(TranslatedText text)</i>
Type	Void
Summary	Updates value for <b>TranslatedText</b> -Object. This is the same as calling Refresh() on the Object itself
Name	<i>RefreshRegisteredTranslatedTexts()</i>
Type	Boolean
Summary	Updates values for all registered <b>TranslatedText</b> -Objects
Name	<i>RefreshALLTranslatedTexts()</i>
Type	Boolean
Summary	Updates values for ALL <b>TranslatedText</b> -objects, including non-registered ones. This is the same as calling TranslatedText.RefreshAll()
Name	<i>SetTextValue(TranslatedText text)</i>
Type	Void
Summary	Sets value for a <b>TranslatedText</b> . Uses CustomLanguage from <b>TranslatedText</b> if set, CurrentLanguage otherwise
Name	<i>SetTextValue(List&lt;TranslatedText&gt; texts)</i>
Type	Void
Summary	Sets values for a List of <b>TranslatedText</b> component. See SetTextValue(TranslatedText text) for more info
Name	<i>SetTextValue(TranslatedText text, Language language)</i>
Type	Void
Summary	Sets value for <b>TranslatedText</b> -Object using specific Language
Name	<i>SetTextValue(List&lt;TranslatedText&gt; texts, Language language)</i>
Type	Void
Summary	Sets values for List of <b>TranslatedText</b> -Objects using specific Language
Translations	
Name	<i>GetTranslation(string key)</i>
Type	String
Summary	Returns a translation for a specific key for CurrentLanguage. See GetTranslation(string key, Language language) for more info
Name	<i>GetTranslation(string key, Language language)</i>
Type	String
Summary	Returns a translation for a specific key and a specific Language. If the translation cannot be retrieved, the Fallback-Language will be attempted instead
<b>Non-Static</b>	
<b>Loading</b>	
Name	<i>LoadTranslations()</i>
Type	Void
Summary	Loads Translations using currently set Value for UseRemote. See LoadTranslations(bool loadRemote, bool loadCacheFile) for more info
Name	<i>LoadTranslations(bool loadRemote, bool loadCacheFile = false)</i>
Type	Void
Summary	Loads Translations. loadRemote shows whether to try downloading a remote <i>languemap</i> . loadCacheFile (only checked if loadRemote = true) shows whether to load the last downloaded (and cached) file instead.
Name	<i>ClearAllCache()</i>
Type	Void
Summary	Clears all current Cache-Files
<b>Logging</b>	
Name	<i>GetLoggingLevel()</i>

Type	LogLevel
Summary	Returns the currently selected Logging Level

## TranslatedText

Properties	
<i>static</i>	
Name	<i>TextObject</i>
Type	Text
Summary	Text-Object (from Unity UI) used by this <b>TranslatedText</b>
Name	<i>FieldName</i>
Type	String
Summary	Key used for identifying this text (Key-String in LanguageMap). Can be set in the Editor
Name	<i>IsRegistered</i>
Type	Boolean
Summary	Whether this <b>TranslatedText</b> is currently registered to the <b>LanguageManager</b> . Can be set in the Editor
Name	<i>UseCustomLanguage</i>
Type	Boolean
Summary	Whether this <b>TranslatedText</b> should use a Custom Language for its translations
Name	<i>CustomLanguage</i>
Type	Language
Summary	CustomLanguage used by this <b>TranslatedText</b> if UseCustomLanguage is True
Name	<i>AutoRegister</i>
Type	Boolean
Summary	Whether this RegisterText should automatically self-register to the <b>LanguageManager</b> (on Awake)
Methods	
<i>Unity-Methods</i>	
Name	<i>Awake()</i>
Type	Void
Summary	Used for Initialization (i.e. Loading the Text-Object) & Self-Registration (if Auto-Register is On)
Name	<i>OnDestroy()</i>
Type	Void
Summary	Used for removing the object from static list of all <b>TranslatedText</b> -Objects (used for RefreshAll())
<i>Static</i>	
<i>Refresh</i>	
Name	<i>RefreshAll()</i>
Type	Void
Summary	Refreshes all Text objects that are in the Scene(s)
<i>Non-Static</i>	
<i>Set</i>	
Name	<i>SetCustomLanguage(Language? customLanguage = null)</i>
Type	Void
Summary	Sets a Custom Language for a <b>TranslatedText</b> . Set to null to use default Language (no Custom Language)
Name	<i>SwapTranslationKeyWith(string newKey)</i>

Type	Void
Summary	Sets a new Key for a <b>TranslatedText</b> & Refreshes the object. See Refresh(string newkey) for more info
Name	<i>ClearTranslationKey()</i>
Type	Void
Summary	Clears Key for a <b>TranslatedText</b> & Unregisters the object
<b>Register &amp; Refresh</b>	
Name	<i>Refresh(string newkey = "")</i>
Type	Void
Summary	Refreshes text for this <b>TranslatedText</b> . Set newkey to anything other than "" (string.Empty) to swap out the Key as well
Name	<i>Register()</i>
Type	Void
Summary	Registers a <b>TranslatedText</b> to the <b>LanguageManager</b> . Needs a set and valid (non-null) Key
Name	<i>Unregister()</i>
Type	Void
Summary	Unregisters a <b>TranslatedText</b> from the <b>LanguageManager</b> . Returns <i>true</i> if successful

## FAQ

**Q: Can I use a Google Docs spreadsheet as the *LanguageMap*?**

**A:** Yes. However; in order for the CSV to be downloaded properly, you need to ensure that the URL follows the following specification:

<https://docs.google.com/spreadsheets/d/KEY/export?format=csv&id=KEY&gid=0>

---

We will continually update the FAQ with future releases.

## Contact

Have a question, issue, or suggestion? Please let us know! You can contact us at [unity@d-tt.nl](mailto:unity@d-tt.nl). Please include “**Dynamic Text Localisation**” in your email subject. Our response time will typically fall within one work day; emails received during the weekend are processed on Monday.