

Time Zone Plugin

The Time Zone plugin allows users to search a time zone.

Special functions (differ from the regular functions)

- Search for a country, like Kamchatka, Prince Edward Island, France
- Search for a shortcuts, like WEST, UTC, PST
- Search for a offset, like -12:00, -7, 5, 9:30
- Search for a military time zone name (must activate in plugin settings)

How to add a new time zone or change one

All time zones are located in `TimeZone.json` in root folder of the project. The `TimeZone.json` use a JSON schema file that make it easier to edit it.

Key	Optional	Value type
Offset	No	String
Name	Yes	String
MilitaryName	Yes	String
Shortcut	Yes	String
TimeNamesStandard	Yes	List with strings
TimeNamesDaylight	Yes	List with strings
ShortcutsStandard	Yes	List with strings
ShortcutsDaylight	Yes	List with strings
CountriesStandard	Yes	List with strings
CountriesDaylight	Yes	List with strings

A minimum entry for the `TimeZone.json` looks like:

```
{
  "Offset": "11:55",
  "Name": "My crazy time zone",
}
```

A full entry for the `TimeZone.json` looks like:

```
{
  "Offset": "11:55",
  "Name": "My crazy time zone",
  "Shortcut" : "MYTZ",
  "MilitaryName" : "Order Time Zone",
  "TimeNamesStandard": [
```

```

        "My crazy standard time"
    ],
    "ShortcutsStandard": [
        "MCST"
    ],
    "TimeNamesDaylight": [
        "My crazy daylight time"
    ],
    "ShortcutsDaylight": [
        "MCDT"
    ],
    "CountriesStandard": [
        "Crazy Land East"
    ],
    "CountriesDaylight": [
        "Crazy Land West"
    ]
}

```

Remarks

- At minimum one of the optional value should be filled.

Scores

- Scores are not used

Important for developers

General

- The assembly name is cached into `_assemblyName` (to avoid to many calls of `Assembly.GetExecutingAssembly()`)

Microsoft.PowerToys.Run.Plugin.TimeZone project

Important plugin values (meta-data)

Name	Value
ActionKeyword	&
ExecuteFileName	Microsoft.PowerToys.Run.Plugin.TimeZone.dll
ID	BADD1B06EF0A4B61AD95395F24241D69

Interfaces used by this plugin

The plugin use only these interfaces (all inside the `Main.cs`):

- `Wox.Plugin.IPlugin`
- `Wox.Plugin.IContextMenu`
- `Wox.Plugin.IPluginI18n`
- `Wox.Plugin.ISettingProvider`

- `IDisposable`

Program files

File	Content
<code>Classes\TimeZoneProperties.cs</code>	A class that represent one time zone
<code>Classes\TimeZones.cs</code>	A wrapper class that only contains a list with time zones (see 1)
<code>Classes\TimeZoneSettings.cs</code>	A class that contains all settings for the Time Zone plugin
<code>Extensions\StringBuilderExtension.cs</code>	Extension methods for <code>StringBuilder</code> Objects
<code>Helper\ContextMenuHelper.cs</code>	All functions to build the context menu (for each result entry)
<code>Helper\JsonHelper.cs</code>	All functions to load the time zones from a JSON file
<code>Helper\ResultHelper.cs</code>	All functions to convert internal results into WOX results
<code>Helper\TranslationHelper.cs</code>	All functions to translate the result in the surface language
<code>Images\timeZone.dark.png</code>	Symbol for the results for the dark theme
<code>Images\timeZone.light.png</code>	Symbol for the results for the light theme
<code>Properties\Resources.Designer.resx</code>	File that contain all translatable keys
<code>Properties\Resources.resx</code>	File that contain all translatable strings in the neutral language
<code>GlobalSuppressions.cs</code>	Code suppressions (no real file, linked via *.csproj)
<code>Main.cs</code>	Main class, the only place that implement the WOX interfaces
<code>plugin.json</code>	All meta-data for this plugin
<code>StyleCop.json</code>	Code style (no real file, linked via *.csproj)
<code>timezones.json</code>	File that contains all time zone information
<code>timeZones.schema.json</code>	JSON schema for <code>timezones.json</code>
<code>StyleCop.json</code>	Code style (no real file, linked via *.csproj)

1. We need this extra wrapper class to make it possible that the JSON file can have and use a JSON schema file. Because the JSON file must have a object as root type, instead of a array.

Important project values (*.csproj)

Name	Value
TargetFramework	<code>net6.0-windows</code>
Platforms	<code>x64</code>
Output	<code>..\..\..\..\x64\Debug\modules\launcher\Plugins\TimeZone\</code>
RootNamespace	<code>Microsoft.PowerToys.Run.Plugin.TimeZone</code>
AssemblyName	<code>Microsoft.PowerToys.Run.Plugin.TimeZone</code>

Project dependencies

Packages

Package	Version
StyleCop.Analyzers	1.1.118

Projects

- Wox.Infrastructure
- Wox.Plugin