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:

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

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

```json
{
  "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
`Classes\TimeZoneProperties.cs`	A class that represent one time zone
`Classes\TimeZones.cs`	A wrapper class that only contains a list with time zones (see 1)
`Classes\TimeZoneSettings.cs`	A class that contains all settings for the Time Zone plugin
`Extensions\StringBuilderExtension.cs`	Extension methods for `StringBuilder` Objects
`Helper\ContextMenuHelper.cs`	All functions to build the context menu (for each result entry)
`Helper\JsonHelper.cs`	All functions to load the time zones from a JSON file
`Helper\ResultHelper.cs`	All functions to convert internal results into WOX results
`Helper\TranslationHelper.cs`	All functions to translate the result in the surface language
`Images\timeZone.dark.png`	Symbol for the results for the dark theme
`Images\timeZone.light.png`	Symbol for the results for the light theme
`Properties\Resources.Designer.cs`	File that contain all translatable keys
`Properties\Resources.resx`	File that contain all translatable strings in the neutral language
`GlobalSuppressions.cs`	Code suppressions (no real file, linked via *.csproj)
`Main.cs`	Main class, the only place that implement the WOX interfaces
`plugin.json`	All meta-data for this plugin
`StyleCop.json`	Code style (no real file, linked via *.csproj)
`timezones.json`	File that contains all time zone information
`timeZones.schema.json`	JSON schema for `timezones.json`
`StyleCop.json`	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	`net6.0-windows`

Name	Value
Platforms	`x64`
Output	`..\..\..\..\..\x64\Debug\modules\launcher\Plugins\TimeZone\`
RootNamespace	`Microsoft.PowerToys.Run.Plugin.TimeZone`
AssemblyName	`Microsoft.PowerToys.Run.Plugin.TimeZone`

Project dependencies

Packages

Package	Version
`StyleCop.Analyzers`	1.1.118

Projects

- `Wox.Infrastructure`
- `Wox.Plugin`