

World Clock for MediaPortal

Version 1.9.1

Copyright © 2010-2016 Alexander Gola (aka Micropolis)

Portions of Analog Clock API Copyright © Obaid-ur-Rehman

Portions of Digital Clock API Copyright © Sriram Chitturi

Formulas of Astronomy API Copyright © Peter Duffett-Smith

Icon Artwork Copyright © [Everaldo Coelho](#), [Stardock](#), [IconShock](#), [Harwen](#), [Artua Design Studio](#)



1. Summary

WorldClock is a MediaPortal plugin to display time, date, time zone and astronomy information for self-defined locations.

2. Requirements

This plugin requires MediaPortal v1.3.0 or higher (for more information see the homepage <http://www.team-mediaportal.com>).

3. Installation

To install the WorldClock plugin, please run the installer "WorldClock.mpe1" or, if you want to manually install the plugin, follow the described steps:

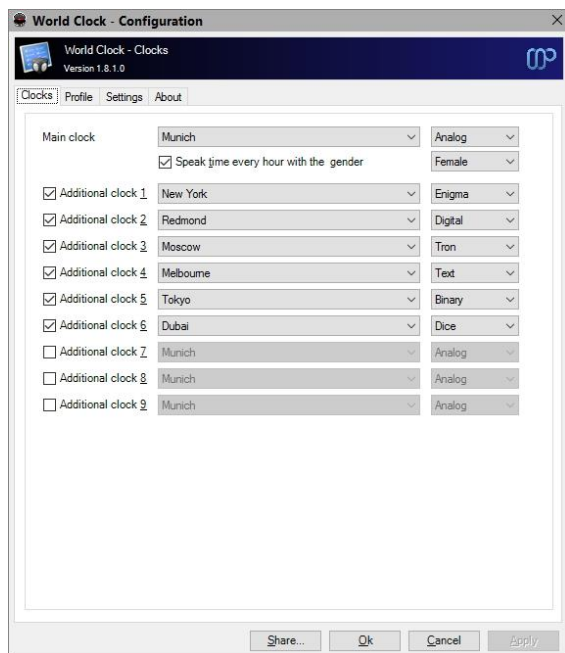
- Step 1: unzip the file "WorldClock.zip" to a temporary directory and open this directory
- Step 2: navigate to folder "*WorldClock\Release\Plugins\Windows*"
- Step 3: copy all files to the MediaPortal plugin directory, e.g. "*c:\program files\team mediaportal\plugins\windows*"
- Step 4: navigate to folder "*WorldClock\Release\Skin\Default\Media*"
- Step 5: copy all files and directories to your MediaPortal skin folder, e.g. "*c:\programdata\team mediaportal\mediaportal\skin\default\media*"
- Step 6: navigate to folder "*WorldClock\Release\Language\WorldClock*"
- Step 7: copy all files to your MediaPortal language folder, e.g. "*c:\programdata\team mediaportal\mediaportal\language\WorldClock*"
- Step 8: navigate to folder "*WorldClock\Release\Skin\Default\Media*"
- Step 9: copy all files to your MediaPortal skin folder, e.g. "*c:\programdata\team mediaportal\mediaportal\skin\default*"

4. Configuration

If you have installed the plugin, please open your MediaPortal Configuration Utility, go to “Plugins”, select “World Clock” in the list of plugins and press button “In Home” or “In Plugins” for your desired location.

4.1. Settings

WorldClock has specific configuration options and a clock profile editor.



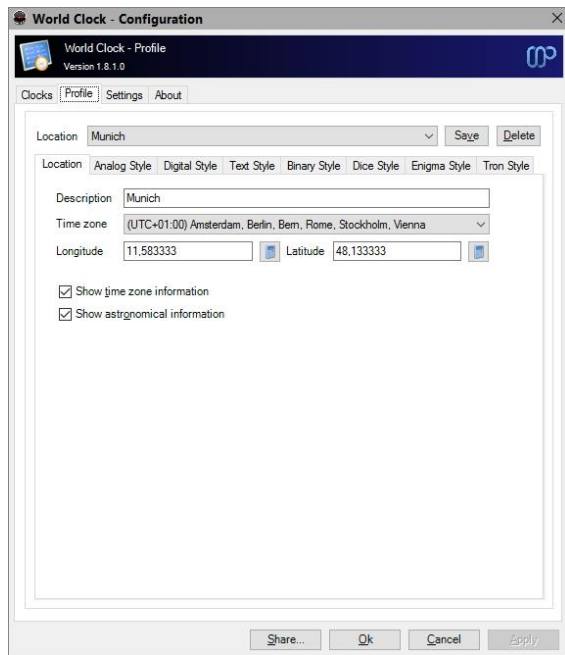
Main Clock: Sets the profile and type for the main clock.

Additional Clock 1 – 9: Turn a clock on/off and defines the profile and type for additional clocks.

Speak time every hour: Switch this option on, if you would hear the time of main clock every hour. Additionally you can select the gender style.

Hint: You can select a profile within the World Clock window directly, if your favourite skin supports this functionality.

4.2. Profile



Name: Select here the clock profile name, which you want define or change.

Save: Saves the actual clock profile.

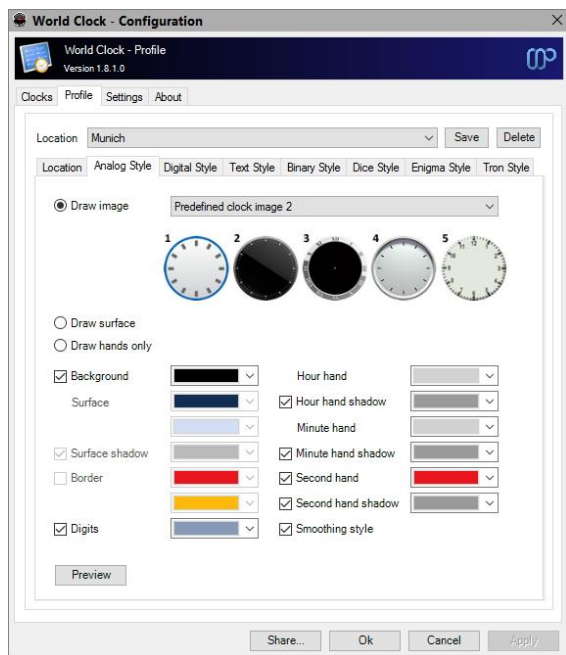
Delete: Deletes the actual clock profile.

Description: Defines the location name.

Time zone: Time zone inclusive longitude/latitude values of this location. Please use the decimal system to enter the values, valid separators are “.” and “,”. For a global directory see [here](#).

Show time zone information: If this option is switched on, time zone relevant information will be available.

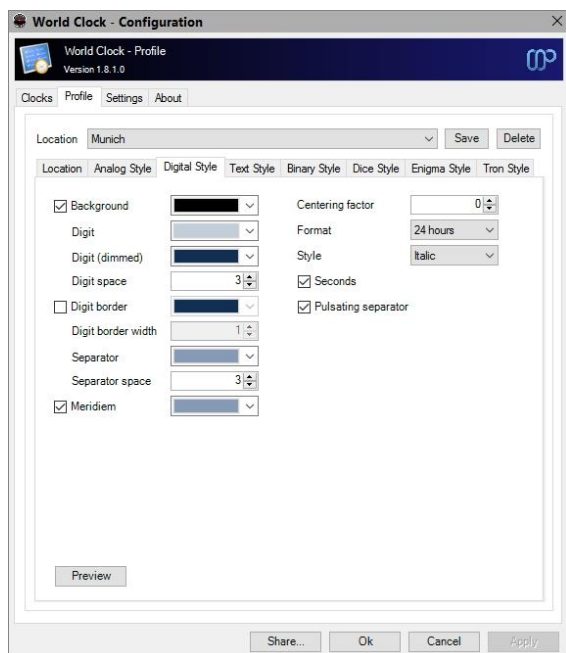
Show astronomical information: If this option is switched on, astronomical information will be available.



Allows you to select colors and style of the analog clock. Additionally you can select, if you would use a predefined or self-defined clock image as background or if you want to draw the clock surface based on your color selection.

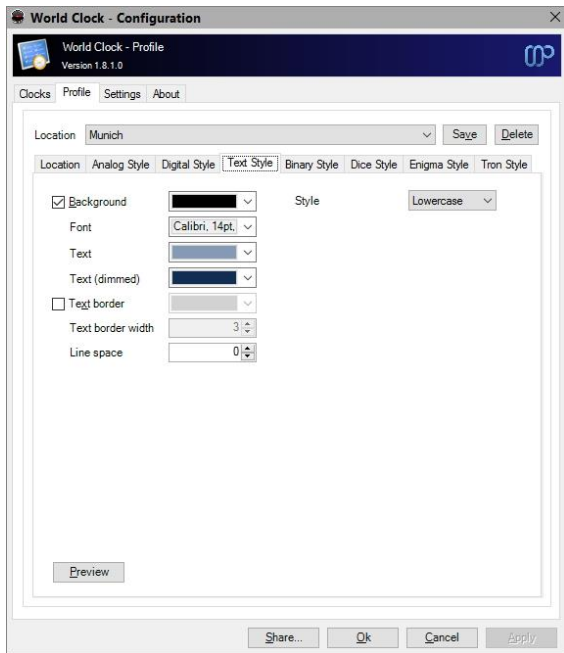
By using the “Preview” button you can generate a preview of the clock style.

Important: If the “Smoothing style” option is turned on, a high resolution timer is required. In case you identify performance problems, please disable this option.



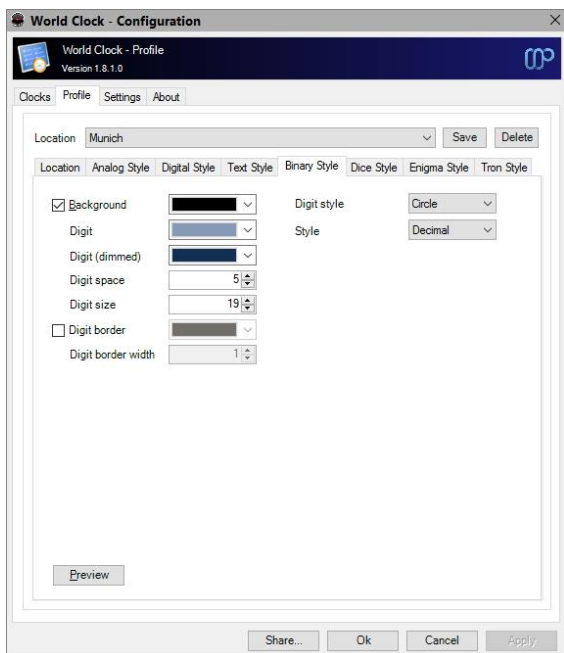
Allows you to select colors and style of the digital clock.

By using the “Preview” button you can generate a preview of the clock style.



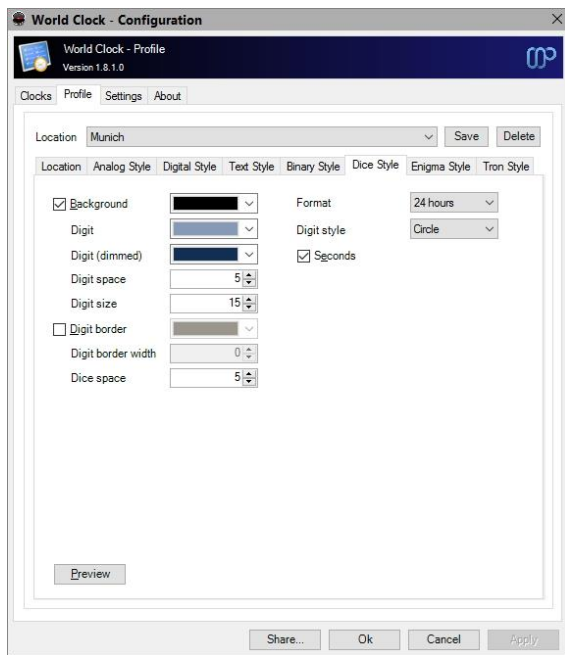
Allows you to select colors and style of the text clock.

By using the “Preview” button you can generate a preview of the clock style.



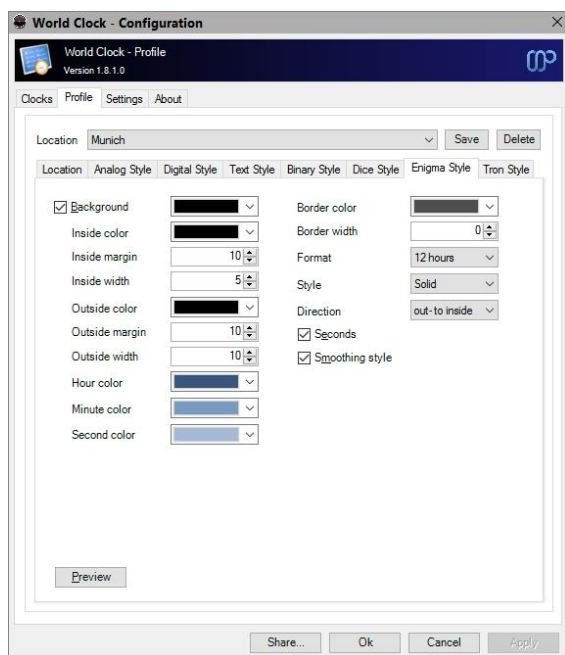
Allows you to select colors and style of the binary clock.

By using the “Preview” button you can generate a preview of the clock style.



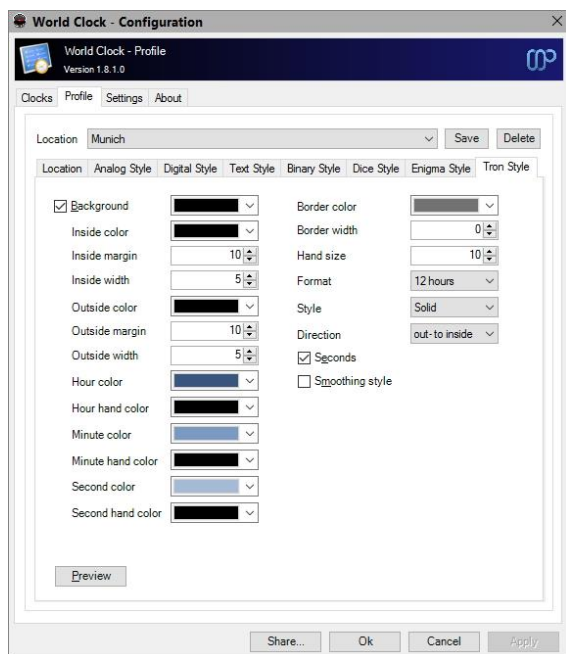
Allows you to select colors and style of the dice clock.

By using the “Preview” button you can generate a preview of the clock style.



Allows you to select colors and style of the enigma clock.

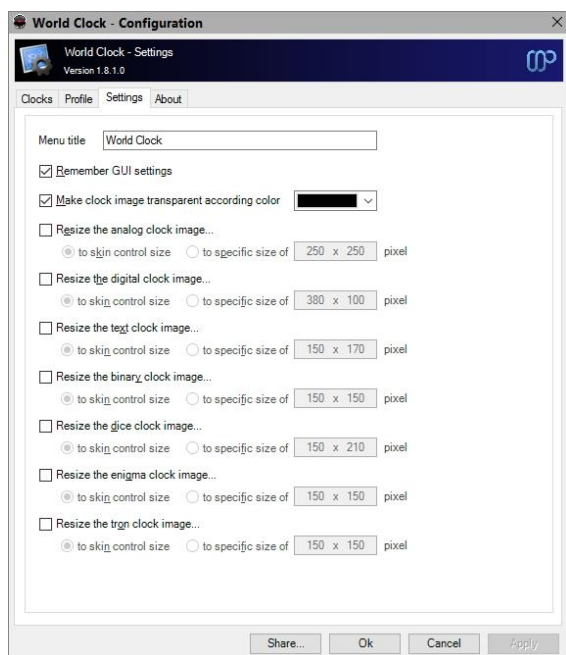
By using the “Preview” button you can generate a preview of the clock style.



Allows you to select colors and style of the tron clock.

By using the “Preview” button you can generate a preview of the clock style.

4.3. Settings



Menu Title: Enter the menu title here.

Remember GUI settings: Saves the GUI settings (e.g. selected clock profiles or styles) before closing MediaPortal.

5. Settings and Profile Sharing

By default, all plugin related settings will be saved locally inside the pre-configured client data directory of MediaPortal. In addition to that, WorldClock allows sharing settings and profile information among clients. This way you have to define your various plugin settings, credentials, etc. only once and accordingly every client can access this data. Before starting with settings and profiles sharing, please observe the following hints and requirements.

- In principle all local and network storages or cloud services (e.g. OneDrive, Dropbox, SugarSync) can be used for sharing. Before using this feature, possible device or service specific configurations should be checked to prevent access or synchronization problems later.
- The current implementation does not support concurrent read or write operations. Also, the synchronization or latency behavior of a device or service cannot be influenced.
- When using a shared network folder, the device must be available and the operating system must know the credentials to access the device.
- When using an OneDrive folder, an internet connection must be established and the synchronization tool must be installed and running across all devices. Additionally the selected OneDrive folder must be available offline (Windows 8 and below only) or enabled as a sync folder.
- When using a Dropbox folder, an internet connection must be established and the synchronization tool must be installed and running across all devices. Additionally the selected Dropbox folder must be enabled as a selective sync folder.
- To share passwords or keys correctly, all synchronized devices must be in the same network domain or workgroup.

The button “Share” inside the dialog allows the definition of the central configuration storage path. Enter this path information in every client’s setup to ensure, that each clients will use the same settings.

Depending on the selection, the button “Ok” will use the central file storage as defined (when sharing is enabled) or the pre-configured client data directory (when sharing is disabled). The button “Apply” acts in the same way without closing the configuration dialog itself.

6. Properties

This plugin offers some properties, which can be used in your skin files. See the following table for more information.

Property Name	Return value
#WorldClock.MainClockDate	Date of main clock
#WorldClock.MainClockLocation	Location of main clock
#WorldClock.MainClockTimezoneDescription	Time zone description of main clock
#WorldClock.MainClockCoordinates	Longitude/Latitude coordinates of main clock
#WorldClock.MainClockCoordinatesDegree	Longitude/Latitude degrees of main clock
#WorldClock.MainClockDaylightStartTime	Daylight start time of main clock
#WorldClock.MainClockDaylightEndTime	Daylight end time of main clock
#WorldClock.MainClockWeekNumber	Week number of main clock
#WorldClock.MainClockSunriseTime	Sunrise time of main clock
#WorldClock.MainClockSunsetTime	Sunset time of main clock
#WorldClock.MainClockSunCulminationTime	Sun culmination time of main clock
#WorldClock.MainClockMoonPhase	Moon phase of main clock
#WorldClock.MainClockMoonriseTime	Moonrise time of main clock
#WorldClock.MainClockMoonsetTime	Moonset time of main clock
#WorldClock.MainClockMoonCulminationTime	Moon culmination time of main clock
#WorldClock.AdditionalClock<digit> ¹ Enabled	State of additional clock
#WorldClock.AdditionalClock<digit> ¹ Date	Date of additional clock
#WorldClock.AdditionalClock<digit> ¹ Location	Location of additional clock
#WorldClock.AdditionalClock<digit> ¹ TimezoneDescription	Time zone description of additional clock
#WorldClock.AdditionalClock<digit> ¹ Coordinates	Longitude/Latitude coordinates of additional clock
#WorldClock.AdditionalClock<digit> ¹ CoordinatesDegree	Longitude/Latitude degrees of additional clock
#WorldClock.AdditionalClock<digit> ¹ DaylightStartTime	Daylight start time of additional clock

#WorldClock.AdditionalClock<digit> ¹ DaylightEndTime	Daylight end time of additional clock
#WorldClock.AdditionalClock<digit> ¹ WeekNumber	Week number of additional clock
#WorldClock.AdditionalClock<digit> ¹ SunriseTime	Sunrise time of additional clock
#WorldClock.AdditionalClock<digit> ¹ SunsetTime	Sunset time of additional clock
#WorldClock.AdditionalClock<digit> ¹ SunCulminationTime	Sun culmination time of additional clock
#WorldClock.AdditionalClock<digit> ¹ MoonPhase	Moon phase of additional clock
#WorldClock.AdditionalClock<digit> ¹ MoonriseTime	Moonrise time of additional clock
#WorldClock.AdditionalClock<digit> ¹ MoonsetTime	Moonset time of additional clock
#WorldClock.AdditionalClock<digit> ¹ MoonCulminationTime	Moon culmination time of additional clock

¹: <digit> is a number between 1 and 9

7. Translation Properties

Property Name	Return value
#WorldClock.TranslationWeek #WorldClock.TranslationSunrise #WorldClock.TranslationSunset #WorldClock.TranslationSunCulmination #WorldClock.TranslationMoonPhase #WorldClock.TranslationMoonrise #WorldClock.TranslationMoonset #WorldClock.TranslationMoonCulmination	Appropriate translations

8. Screenshots



WorldClock example

9. Version History

- 0.1.0 – Initial Release
- 0.2.0 – Integration of clock images
- 0.3.0 – First release to community
- 0.3.1 – Enhancements for profile selection dialog
- 0.3.2 – Configuration option for menu title
- 0.3.4 – Code optimization after platform change (Visual Studio/Team Foundation Server 2010)
- 0.3.5 – Bug fix for daylight savings, more clocks added
- 0.3.6 – Bug fix for skin related issues
- 0.3.7 – Improved thread management
- 0.3.8 – Speech functionality added
- 0.4.0 – Astronomy functions and new properties added
- 0.4.2 – new properties added (MainClockWeekNumber), fix for possible daylight saving problems
- 0.5.0 – Version/Subsystem control functionalities added
- 0.5.1 – Bug fix for daylight transition routines
- 0.5.2 – last improvements for MediaPortal v1.2.0
- 1.0.0 – final version
- 1.0.1 – bug fix for incorrect time zone calculation for countries with more than one rule
- 1.0.2 – change compatibility flags to support MediaPortal v1.3.0, changes to configuration window
- 1.0.3 – source maintenance, cumulative updates
- 1.1.0 – rework of configuration dialog and most routines
- 1.1.1 – fix update problem for additional clocks, refactoring of astronomy routines, add properties (MainClockMoonriseTime, MainClockMoonsetTime, MainClockMoonCulminationTime, MainClockSunCulminationTime)
- 1.2.0 – maintenance release
- 1.2.1 – fix for various daylight saving time related astronomy calculation issues
- 1.2.2 – fix for timer specific issues in case threaded plugin loading is enabled, fix for astronomy calculation issues
- 1.2.3 – change compatibility flags to support MediaPortal v1.5.0
- 1.2.4 – refactoring of plugin startup code, code cleanup, internal maintenance/test release
- 1.3.0 – several performance improvements
- 1.3.1 – change compatibility flags to support MediaPortal v1.6.0
- 1.4.0 – rework to support updated plugin framework v1.1.0
- 1.5.0 – change target framework to .NET 4.0, change compatibility flags to support MediaPortal v1.7.0, support for updated plugin framework v1.2.0
- 1.5.1 – change compatibility flags to support MediaPortal v1.8.0
- 1.5.2 – rework update mechanism, changes to support plugin framework 1.3.0
- 1.6.0 – change compatibility flags to support MediaPortal v1.9.0
- 1.6.1 – minor enhancements, change compatibility flags to support MediaPortal v1.10.0
- 1.6.2 – refactoring of plugin architecture, enhancements to existing configuration dialog
- 1.6.3 – enhancements to configuration dialog for digital clock settings, preview functionality added, integration of digital clock routines, plugin code enhancements

- 1.6.4 – code cleanup, improvements, fix transparency issue for digital clock, workaround for centering digital clock, fix event handling for color picker, support for up to 10 clocks, context menu to flip clock styles added, community preview release
- 1.6.5 – architectural enhancements, rework of speech functionality
- 1.7.0 – rework of configuration dialog
- 1.8.0 – cryptographic routines updated, functionality to share settings and profiles added, support for MediaPortal v1.12.0
- 1.8.1 – more clock types (Text, Binary, Dice, Enigma, Tron) added, rework of message management routines, improvements to sharing functionality, maintenance
- 1.9.0 – support for plugin framework v1.4.0, change compatibility flags to support MediaPortal v1.13.0
- 1.9.1 – maintenance release, change compatibility flags to support MediaPortal v1.14.0

10. Skin Changes

- 0.3.6 – IDs 55-58 changed to 60-63, IDs 60-63 changed to 70-73, IDs 65-68 changed to 80-83, IDs 70-73 changed to 90-93, IDs 54-56 added, IDs 64-66 added, IDs 74-76 added, IDs 84-86 added, IDs 94-96 added
- 1.6.4 – IDs 70-76 changed to 80-86, IDs 60-66 changed to 70-76, IDs 60-69, 77-79, 87-89 added, IDs greater than 90 has been removed and can be handled by the visible condition
- 1.8.1 – IDs 70-89 deleted, ID 100-109 for analog clock added, ID 110-119 for digital clock added, ID 120-129 for text clock added, ID 130-139 for binary clock added, ID 140-149 for dice clock added, ID 150-159 for enigma clock added, ID 160-169 for tron clock added

11. Known Limitations

- Display of many clocks can appear in high CPU load. To prevent this, use fewer clocks and switch off functionalities like “Display second hand” and “Smoothing Style”.

12. Copyright Information

This Program is free software; you can redistribute it and/or modify it under the terms of the Microsoft Public License (Ms-PL).

This Program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; the software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

(<http://www.opensource.org/licenses/ms-pl.html>)



Some of the clock images are downloaded from the world wide web. If you suspect a copyright violation, please report this immediately. In this case I want to remove the image as soon as possible.