Classic Logon Shell 2

Built on .NET Technology

Documentation for version

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Part 0: Index of Contents and Warnings

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PART I: Definition of variable types

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WARNING: Certain Windows security policies in combination with password-less accounts and/or multiple accounts may not work properly. See [12.1] for more information.

Part I: Definition of variable types

NAME	DESCRIPTION
Integer	A whole number
Boolean	Can only be 'True' or 'False'
File path	The path to a file, can be relative to the installation path Ex. theme\locale.ini Or absolute Ex. C:\Program Files\ClassicLogonShell\LogonShell.exe
Color	Hex color code, Ex. '#ffffff'
Any of the above + (S)	This variable can accept both the values specified in its main type and a key specific to that variable
String	This type indicates that it accepts values that are specific to each setting of this type, usually specified between quotes ''

NOTE 1: The variables marked with * are the ones that can't be modified by themes.

NOTE 2: All .ini files should be encoded in **UTF-16 LE**, failing this may cause special characters (outside the normal ASCII range) to not be read properly. Most text editors (including Notepad) support this encoding and shouldn't cause problems.

WARNING: Inside both LogonShell.ini and locale.ini there is a section called [Program], the keys in this section are important for the correct operation of the program. Modifying these is not recommended and may cause unwanted behavior.

Part II: Setting contained in LogonShell.ini

5.1 [Main] Section

NAME	VARIABLE TYPE	BEHAVIOR
ResetSettings*	Boolean	When set to 'true' this will replace all settings in LogonShell.ini to their default values
ResetLocale*	Boolean	When set to 'true' this will replace all localisation in Locale.ini to the default English localisation
Banner	File path	The path of the main banner, see part IV for format details
Localisation*	File path	The path of the Localisation file, see part III for available text
Mode*	String	Mode of operation, deprecated
FgColor	Color (S)	Color of the text shown in the program, can be set to 'Default'
BgColor	Color (S)	Color of the window background shown, can be set to 'Default'
Theme	String	'Classic': default, this will render the login in a classic themed window 'Modern': This will render the login with the default theme of Windows version installed.
ShowOptions	Boolean	Whether to show the 'Options' button ('True') or the 'Shutdown' button ('False').
BannerRescale	Boolean	When set to true the banner will be resized to fit the rest of the interface, otherwise it will just be centered
CloseOnUpdate	Boolean	Whether CLS should run when Windows is updating, when set to true upon a shutdown with update it will just close, otherwise it will show the text displayed on the update screen.

Note: See part VI, section 2 for details on how the LogonUI interaction is handled.

5.2 [Background] Section

NAME	VARIABLE TYPE	BEHAVIOR
Type	String	'Single': Only shows the background on the main monitor 'Multi': Shows the background on all monitors
Color	Color	Hex color code for the background
Image	File path (S)	The path of the background image, if set to 'None' is disabled.
ShowOnMulti	Boolean	When set to true this will display the background image on all screens, else it will be displayed only on the main screen.
X	Integer (S)	Horizontal position of the image from the top-left corner, if set to 'Auto' it will center the image horizontally.
Y	Integer (S)	Vertical position of the image from the top-left corner, if set to 'Auto' it will center the image vertically.
Width	Integer (S)	Width of the image, if set to 'Auto' it will take the width from the file itself automatically

ScaleFactor	Integer	Scale of the image in relation with screen size, values range from 0 which will disable scaling to 100 which is 100% of the screen size
ScaleType	String	'X' only scales the image by width 'Y' only scales the image by height 'XY' scales both dimensions

Note: The behavior of the width and scale values and their interaction is explained in [14.1]

6.1 [KeySequence] Section

NAME	VARIABLE TYPE	BEHAVIOR
UseKeySequence*	String	Determines whether the 'Press xxx to start' screen is enabled and which key combination to use, Can be set to: 'False': Disabled, shows the login screen immediately 'Win': Press the Windows key 'CtrlAltWin': Press Ctrl + Alt + Win 'CtrlAltEsc': Press Ctrl + Alt + Esc
Icon	File path	The path to the keyboard icon
HelpText	Boolean	If true the help caption in the key sequence panel is shown, otherwise it is not

Note: Unfortunately, due to how windows works, Ctrl+Alt+Del can't be hooked onto by applications and that's why it's not included in the list of supported combinations.

6.2 [Login] Section

NAME	VARIABLE TYPE	BEHAVIOR
Type*	String	The type of username box presented, can be set to: 'Simple': just a simple username textbox without any additional functionality 'Last': Remembers the last username that logged in 'List': The username field is a combobox with a list of all the enabled user accounts 'ListLast': Remembers the last user that logged in and gives a list of enabled user accounts.
IsCancelEnabled*	Boolean	When set to 'true' the Cancel button will be enabled and when clicked will exit the application, else it will be greyed out and inactive
ButtonX*	String	Whether to show the button to close the window on the top-right corner of the titlebar, can be set to: 'None': Don't show the button 'Disabled': Shows the button but disabled and greyed out 'Enabled': Button is shown and enabled

Hint*	String	When to show the password hint, can be set to: 'Never': Never show the password hint 'Always': Always show the password hint 'TryFirst': Default, only show the hint after the first login attempt fails
NetLogon	String	Whether to show network login options, can be set to: 'Disabled': nothing extra is shown in the login dialog. 'DialUp': Shows the dial-up checkbox 'Domain': Shows the domain combobox 'DomainDialUp': Shows both
NetLogonOptions	Boolean	When true it shows the Network login options only when 'Options' is clicked, otherwise they're always shown

7.1 [Loading] Section

NAME	VARIABLE TYPE	BEHAVIOR
Image	File path	The path to the loading animation
FPS	Integer (S)	The speed at which the GIF animation, in frames per second, can also be set to 'Auto'
Height	Integer (S)	The height of the loading bar, in pixels, can also be set to 'Auto'
Banner	File path	The path of the banner shown when logging in

7.2 [Shutdown] Section

NAME	VARIABLE TYPE	BEHAVIOR
ShutdownIcon	File path	The path to the icon shown in the shutdown dialog when the selected action is shutdown
RestartIcon	File path	The path to the icon shown in the shutdown dialog when the selected action is restart
SleepIcon	File path	The path to the icon shown in the shutdown dialog when the selected action is stand-by
Banner	File path	The path of the banner shown in the shutdown dialog
BannerOnShutdown	File path	The path of the banner shown when shutting down

7.3 [MessageBox] Section

NAME	VARIABLE TYPE	BEHAVIOR
Error	File path	The path to the icon shown in an error message
Warning	File path	The path to the icon shown in a warning message (This is the one shown in the 'wrong username/password' message)

Part III: Setting contained in locale.ini

8.1 [Main] Section

NAME	DESCRIPTION
buttonOK	Text for the ok button
buttonCancel	Text for the cancel button
ErrorTitle	The title shown in generic error messages
buttonHelp	Text for the help button and label

8.2 [KeySequence] Section

NAME	DESCRIPTION
Title	Title of the key sequence panel
Text	Text that indicates which keys to press to reveal the login
Help	Text for the help in the key sequence panel

8.3 [Login] Section

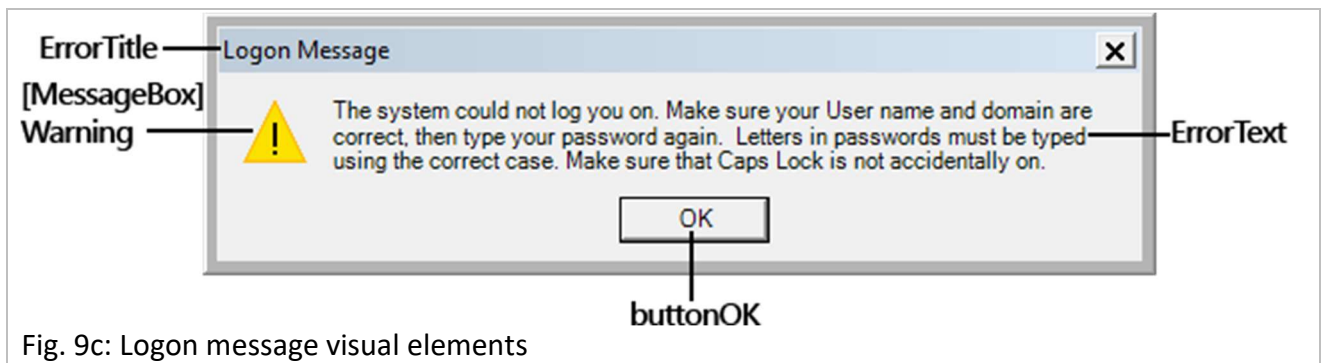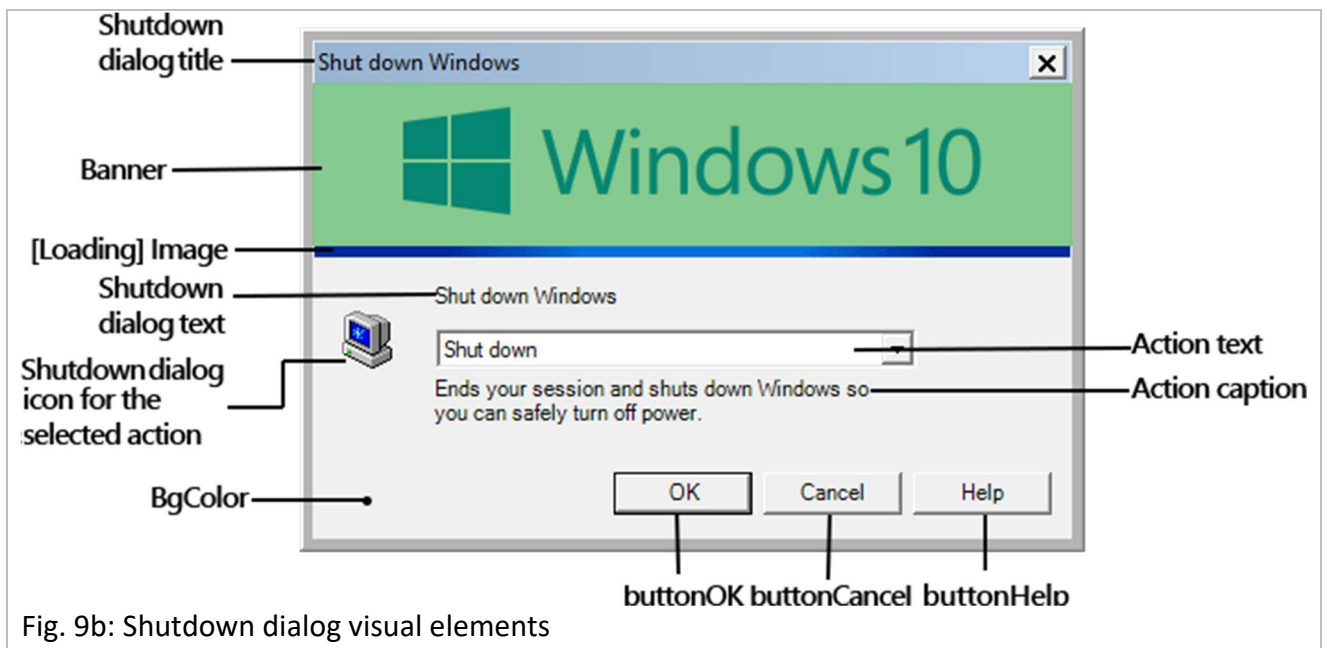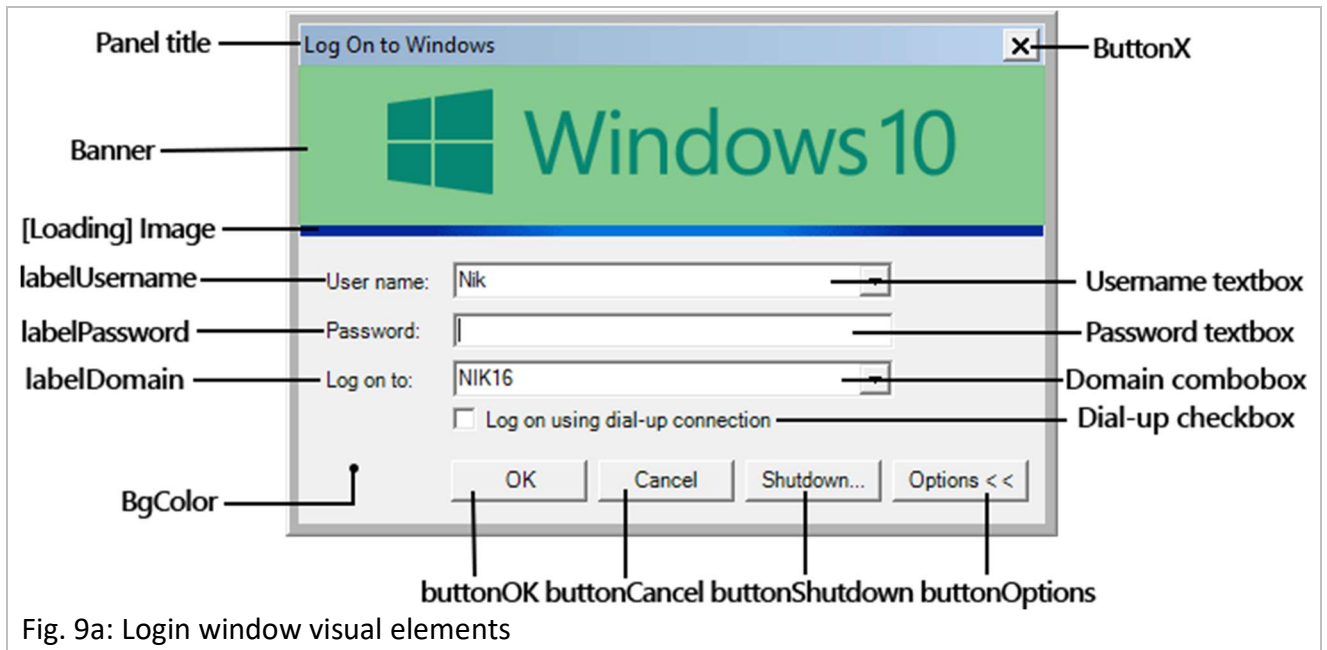| NAME	DESCRIPTION
Title	Title of the login panel
labelPassword	Text for the password textbox
labelUsername	Text for the username textbox
buttonOptions	Text for the options button
buttonShutdown	Text for the button that opens the shutdown dialog
ErrorTitle	Title of the wrong username/password message
ErrorText	Text of the wrong username/password message
labelDomain	Text for the domain textbox
checkboxDialUp	Text for the dial up checkbox
capsLockNotice	Text for the 'Caps Lock on' warning message

8.4 [Loading] Section

NAME	DESCRIPTION
Title	Title of the key sequence panel
Text	Text shown when loading
ShutdownText	Text shown when shutting down

8.5 [Shutdown] Section

NAME	DESCRIPTION
Title	Title of the shutdown dialog
Text	Text shown in the shutdown dialog
Name1	Text for the shutdown action
Name2	Text for the restart action
Name3	Text for the stand-by action
Desc1	Caption for the shutdown action
Desc2	Caption for the restart action
Desc3	Caption for the stand-by action

Part IV: Graphical elements

9 Elements referred to in part II and III

Fig. 9a: Login window visual elements

Fig. 9b: Shutdown dialog visual elements

Fig. 9c: Logon message visual elements

Fig. 10: Key sequence panel visual elements

10.1 Format guidelines for images

NAME	FORMAT	DIMENSIONS (WIDTHxHEIGHT)
Banner	PNG, JPG, BMP, STATIC GIF	409x93
Loading Image	ANIMATED GIF	409x6
Shutdown dialog icon	PNG, JPG, BMP, STATIC GIF	32x32
Key sequence icon	PNG, JPG, BMP, STATIC GIF	48x32
Error icon	PNG, JPG, BMP, STATIC GIF	32x32

Note 1: the recommended format for static images is PNG.

Note 2: All of the above images, except for special cases, if a different size, get rescaled with the highest quality possible; See [15.1] for details.

Part V: How to make your own localization and theme

10.2 Make your own localization

First, make a copy of the active localization file (Refer to [11.1] on where to find it).

Modify that copy however you want, you can refer to Part III and IV to know which keys do what.

Rename the file to the name that you want it to show up as, this is the name that will show up in the customizer.

Add it to the available languages through CLS customizer's 'Add a language' button.

The name of your file will be the one shown in the customizer, select it and click 'Apply' to use it.

Note: If you want make that localization freely available, please upload it to the project's forum thread on winclassic.boards.net, thank you!

10.3 Make your own theme

First of all, make a copy of LogonShell.ini and the theme folder (Refer to [11.1] on where to find it), from here we'll be working with the copied files.

Modify LogonShell.ini however you want (Note that certain variables contained inside aren't modifiable by the themes and you can safely delete these, refer to Part I: Note 1 to know more), you can help yourself by referring to Part II to know which keys do what.

Replace the icons and images inside the theme folder with the ones you want, making sure that these files are named according to the values that you put in the 'File path' type variables inside LogonShell.ini (you must also keep the images that you didn't replace that are still referenced in LogonShell.ini!).

Make a zip file that contains LogonShell.ini and the corresponding theme folder.

Rename that zip file with the theme's name (The name that you want to show up in the customizer).

Add it to the available themes through CLS customizer's 'Add a theme' button.

The name of your file will be the one shown in the customizer, select it and click 'Apply' to use it.
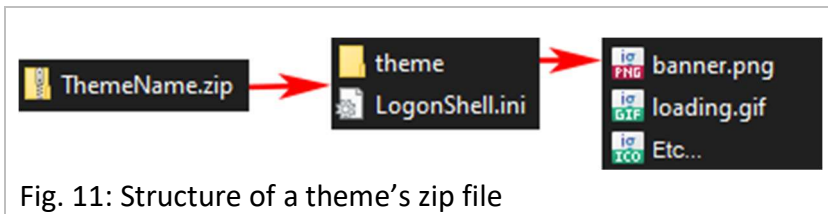

Fig. 11: Structure of a theme's zip file

Part VI: Additional Information

11.1 Location of important folders and files

The default location of the installation is:

C:\Program Files(x86)\ClassicLogonShell\

Inside the install folder are LogonShell.ini, the active localization .ini file and the theme folder.

Inside the theme folder are all the active theme files.

11.2 Operation of the customizer

The customizer works with files inside the 'customizer_files' directory, inside of which are the 'locale' folder containing all localisation ini files and the 'themes' folder which contains all the themes' zip files.

When the user selects a localisation and applies it, the corresponding ini file is copied to the installation folder and the path to the file is inserted inside the 'Localisation' setting in LogonShell.ini.

When the user edits a localisation by clicking 'Modify', the localisation is loaded into memory and then if the user saves it, it is written to an ini file inside the locale folder, if that file already exists it is overwritten, else if the user discards it nothing happens.

When the user modifies the theme's settings thrgough the 'Modify' button, it creates a copy the theme's configuration in a separate folder inside the customizer folder, called 'user_settings', that copy is named with the theme's name, and when the user clicks 'Save' these settings are saved to the file.

When the user selects a theme and applies it, the corresponding zip file is extracted to a temporary folder, the theme folder is deleted and replaced with the one that was extracted, then if the user has saved personalized settings for the applied theme, those are the ones applied, else the theme's default settings (Which are not all of CLS' settings, see Part I, Note 1) are applied to the main LogonShell.ini.

When the user clicks 'Open configuration', the program makes a copy of LogonShell.ini inside a temp folder, that way if the user clicks 'Cancel' no changes are made and the copy is deleted, if the user instead applies the changes the copied file replaces LogonShell.ini.

Note 1: 'Cancel' closes the application and removes any changes that weren't applied.

Note 2: 'Uninstall' removes all application files, including additional themes and languages.

12.1 A note on Active Directory domains

While CLS features support for Active Directory domains, it should be noted that if the computer on which it is run is joined to an AD domain, it is impossible for CLS to change from it to the local computer's despite it being an option in the domain combobox.

This is due to certain challenges when interacting with Windows' GUI and will remain the case for the foreseeable future unfortunately.

12.2 Description of operation with LogonUI

The old way that the program logged you in was by creating a remote desktop connection to the computer, this has now been deprecated in favor of interacting directly with LogonUI.

This method has a big challenge: the "Don't show last logged-in user" rule, going forward this rule will be referred to as the LL rule; There is another rule, called "Don't show user name at sign-in", that modifies LogonUI in the same way but only for users that aren't the last logged-in one. CLS does not support multi-user configurations when either of these are active, due to the way that Microsoft handles the login in these cases (see [13.1])

CLS achieves this by using the microsoft-provided UIAutomation library to do from 3 up to 5 specific actions, depending on how the UI is structured:

First, it sends the Backspace key to make sure that the lock screen will not interfere with the ui interaction.

Second, if the user that wants to log in is not the last logged in user and the LL rule is not active, it clicks on the list item with the user's name on the login screen.
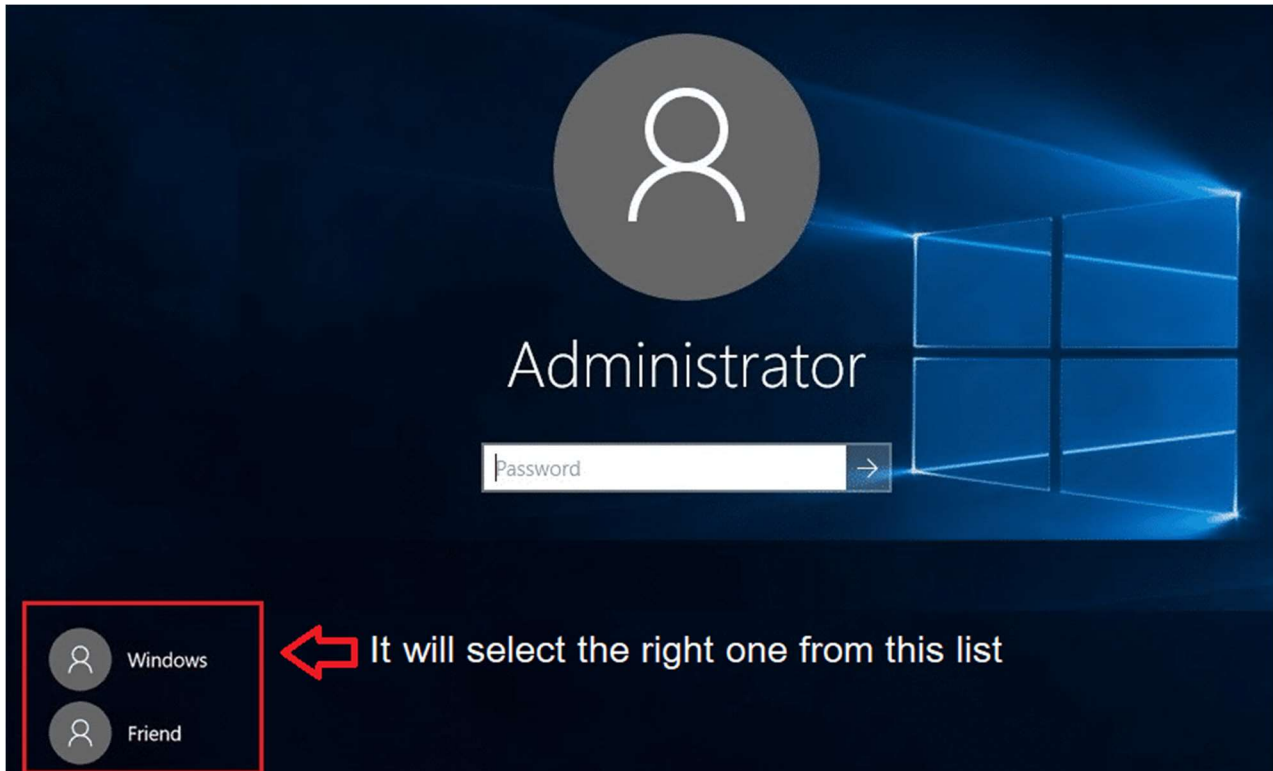
Third, if the LL rule is active, it will type in the username into the UI's user textbox.

Fourth, if the user account has a password, it will type in that password (It must correspond to the password that you provided beforehand) into the UI's password textbox.

Lastly, it will send the Enter key to initiate the login process.

13.1 LogonUI modification and multi-user operation

Microsoft has implemented two security policies/registry keys, called "Don't show last logged-in user" and "Don't show user name at sign-in" that alter the LogonUI screen; CLS can deal with these only in a limited way that means that multi-user operation with any one of these rules in place is impossible.

Unfortunately, the way that these rules modify the UI is by replacing the "other users" list panel with a button that must be clicked to sign in with a different user than the last one.

This button though, instead of just modifying the UI, reloads the entire console session, terminating CLS before it's able to log-in, and thus making multi-user operation impossible.

Not only this, but also be warned that using password-less accounts with these rules active may cause unwanted behavior, as sometimes Windows tries to log-in passwordless accounts even when these rules are active, causing an error that CLS can't deal with properly due to the way that the UI is structured.

14.1 Background image width vs. scale

The background image has three main properties: Width, ScaleFactor and ScaleType, and they determine different things.

First is width, this is the width in pixels that your image will be rendered at if ScaleFactor is set to 0. Height is automatically calculated from width, preserving your image's original aspect ratio.

Second is ScaleFactor. By default, this is set to 0, which is disabled. If you set to any other number, then width will be ignored and the image will instead be rendered at the % of the screen resolution that the number indicates, for example if set to 10 the image will take up 10% of the screen width.

Third is ScaleType. By default this is set to X, which means that the ScaleFactor calculation is based on width, as said above. If set to Y, then the ScaleFactor calculation will be applied to the height instead of the width. If instead this is set to XY then both width and height will be calculated from the ScaleFactor and screen dimensions, as a result the image's original aspect ratio will not be preserved and instead it will be adapted to the screen aspect ratio. This setting only applies if ScaleFactor is not 0.

14.2 Optional arguments

LogonShell.exe can accept additional arguments selecting a specific behavior:

ARGUMENTS	BEHAVIOR
/quiet	Forcefully (and silently) refreshes the cache and, if not already present, creates the settings file
/shutdown [n]	Shows the shutdown dialog, [n] is optional and indicates which shutdown options is selected by default, it can be one of three values: Not present or 0 – Shutdown 1 – Restart 2 – Sleep
-tray	Makes the program sit idle inside the current user session, this mode exists due to the mechanisms that are required for proper shutdown detection in Windows
-shutdown	Indicates to the program that it has been called at shutdown, and thus shows just the shutdown screen
-startup	Indicates to the program that it has been called at startup, thus it should enable special behavior in case that the automatic login is present

15.1 Image Rescaling

If any images mentioned in [10.1] are of a different size than specified, they will be rescaled with the highest quality afforded by the .NET Framework Graphics Library, except for two cases:

The Loading gif will never be rescaled.

The banner/s will be rescaled if **BannerRescale** is set to **true**, otherwise it will simply be centered relative to its frame.

Credits

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[WinClassic forum]

ɬəəɼ ftw for the original idea

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You, for downloading my program. Thank you & have a -reasonably buggy- experience!

-Nik