

Master Control Documentation

LICENSE

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Description

Master Control is a program that facilitates sending TCP commands to other devices, the execution of other programs, and the sending of keystrokes to the system. This is presented to the user as a series of button groups for easy execution.

Requirements

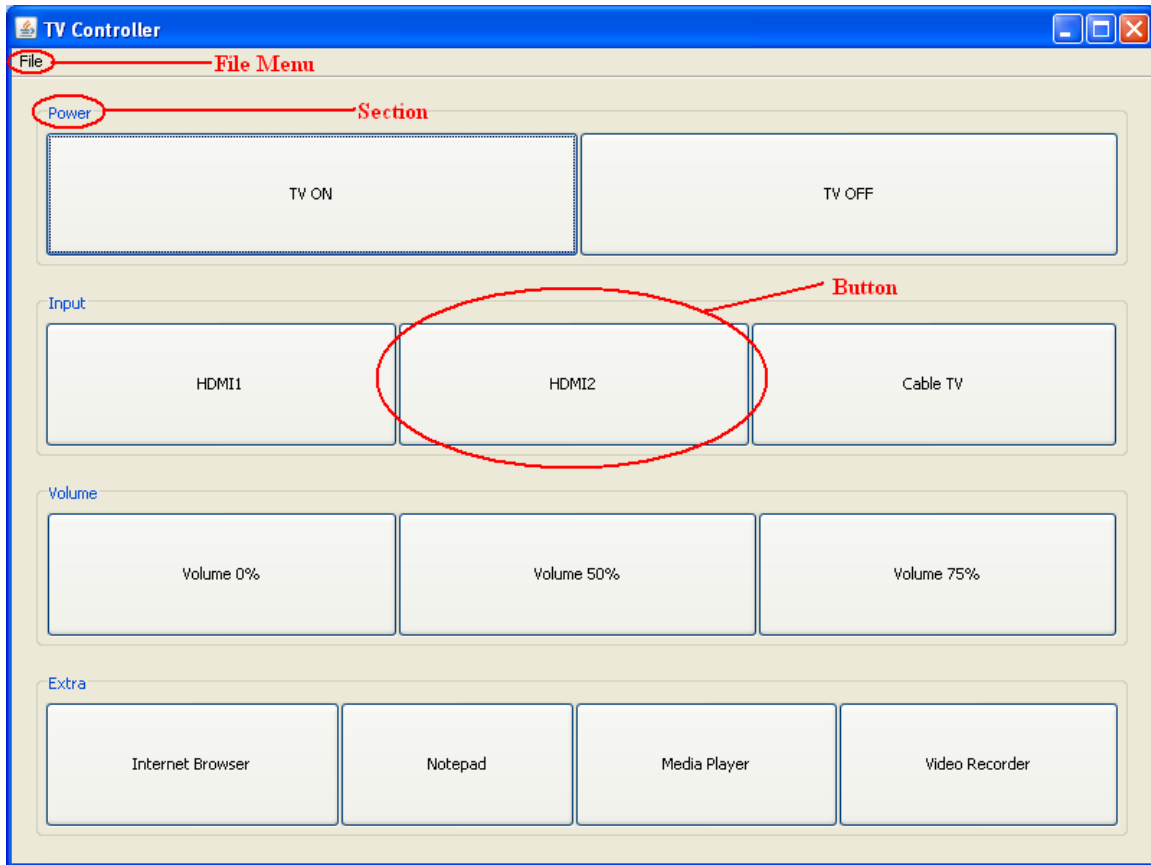
Java Virtual Machine
Jaxen Xpath library for Java

Usage

Use Java to execute the file MasterControl.jar. In some cases, double clicking the file will automatically execute it with Java.

User Interface

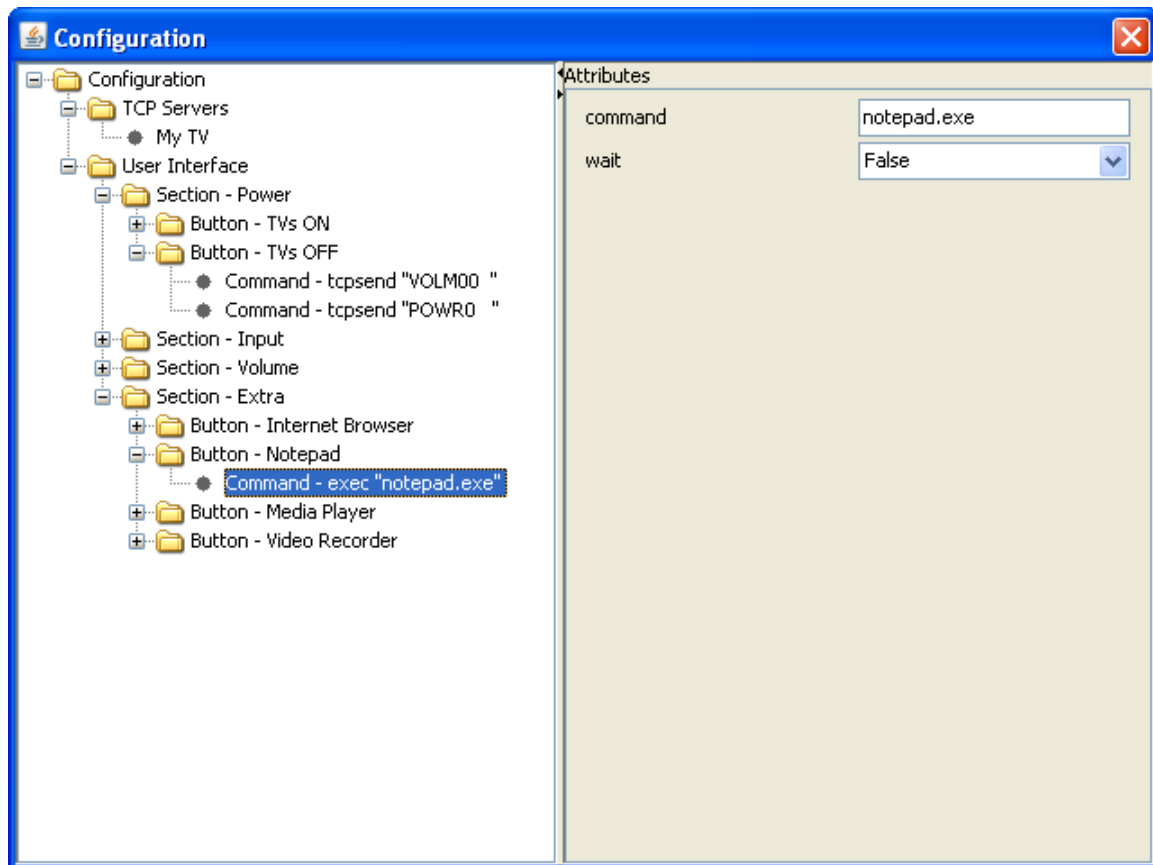
Below is a screen capture that details the primary portion of the user interface:



The sections and the buttons within them can be customized from “File->Modify Configuration” menu.

Configuration

Choosing the “File->Modify Configuration” menu item displays a screen that can be used to configure the appearance of the primary portion of the user interface. Below is the configuration screen for the example in the previous screen capture:



Configuration Nodes

The configuration is displayed in a tree fashion in the left pane of the window (called the “Configuration pane”) comprised of items called nodes. Each node may or may not have child nodes. For example, the root node, labeled “Configuration”, has two child nodes labeled “TCP Clients” and “User Interface”. On the other hand, the selected node, labeled “Command – exec ‘notepad.exe’” has no child nodes. The configuration structure can be altered by adding, reordering, and removing nodes. Right clicking on a node causes a context menu to popup, having these three options:

- Add Child – Adds a child node to the selected node. The new child will be the last node of all selected node’s children. For example, if the node “Button – Notepad” was currently selected, the new child would appear after the node, “Command – exec ‘notepad.exe’”.
- Add Sibling – Adds a child node to the parent node of the selected node. The new child will appear after the selected node. For example, if the node “Button – Notepad” was currently selected, a new node would

appear before the node “Button – Media Player” as a child of the node “Section – Extra”.

- Remove Item – Removes the current node from the tree. Some nodes cannot be removed.

Nodes can be rearranged, as long as they will still have the same parent. To move a node, left click on the node and drag it to its new position. When the mouse button is released, the node will be moved.

Node Attributes

Each node may or may not have attributes. When a node is selected, its attributes are displayed in the right pane of the window (called the “Attributes pane”). They can be altered by typing in or selecting a new value. The changes will be saved and reflected once the Configuration screen has been closed. Attributes cannot be added or removed.

Configuration Format

Page 5 of this document defines the possible child node types of each node, and their attributes.

Configuration Management

To create a new configuration, select “New Configuration” from the File menu. Configurations can be loaded and saved using the “Load Configuration” and “Save Configuration As...” File menu items respectively.

The configuration file used by Master Control when it first starts can be specified on the command line using the following format:

```
java -jar MasterControl.jar YourConfigFileHere.dat
```

where “YourConfigFileHere.dat” is the name of the configuration file you wish to use. If a configuration file is not specified, the default configuration file “settings.dat” is used.

MasterControl was written by Andrew Phillip.

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The source code for MasterControl is included in the “src” directory of MasterControl.jar.

Configuration - The root configuration node			Attribute	Description		
			password	The password used to restrict access to the configuration settings. If it is not blank, the user will be prompted to enter this value when File->Configuration is clicked in the menu.		
TCP Server -	List of tcp servers.					
	Server - A tcp server accepting connections to process commands.		ip	The IP address of the server.		
			maximummessagesize	The maximumsize of the message to be sent.		
			messageterminator	The series of characters that indicate to the server that the message is complete. The following special character sequences will be replaced in the message: 0x0 is replaced with null or zero. 0x0A is replaced with new line character. 0x0D is replaced with carriage return character.		
			minimummessagesize	The minimumsize of the message to be sent.		
			name	A name for the server.		
			port	The network port to send the information to.		
			responsesize	The size of the response in bytes.		
			timeout	The length of time to wait before giving up on establishing a connection.		
		User Interface - User interface definition			fullscreen	Whether the application will occupy the entire screen or not. Possible value of true or false. If true, the height and width attributes of the user interface settings will be ignored.
			height	The height of the Master Control window.		
			title	The title of the Master Control window.		
			width	The width of the Master Control window.		
Section - A section on the User Interface	Button - A button in a section		name	The name of the section.		
			label	The text to display on the button.		
			tooltip	The tooltip to display when the mouse hovers over the button for a short time.		
	exec - A button command that executes a program on the system.		command	The command/executable to be executed.		
			wait	Whether or not Master Control should wait for the command to end before processing any further instructions. Possible value of true or false.		
	sendkeys - A button command that sends a combination of key presses to the system. This can be used to trigger Hot Key events.		keylist	A + separated list of keys to press and release (Eg. ctrl+alt+c). The keys will be pressed and released in the order they appear in the list. Only the main character of a key can be used. For example, using ! Will not yeild any actions. To send an ! character, shift+1 can be used. Functions keys are referred to as F1, F2, etc. The following is a list of non character keys that may be sent: ctrl, alt, shift, enter, caps, esc, tab, backspace, delete, home, end, pageup, pagedown, up, down, left, right, insert, numlock.		
			presstime	The amount of time in milliseconds to wait before the keys are released. Minimum value is 200. Master Control will not process any commands until the presstime has elapsed.		
	tcpsend - A button command to send a value to a TCP Server.		readresponse	Whether or not Master Control should read a response from the target(s).		
			target	The server to send the TCP command to. This list is generated from the TCP Server node settings.		
			value	The value to send to the TCP server.		
	wait - A button command that halts program executes for a specified amount of time.		time	The amount of time to wait.		
	At Exit - A set of commands to be executed when the program is exited. The available child nodes of this node are the same as the child nodes for the button node.				enabled	Whether or not this feature is enabled. Possible value of True or False. When True, the commands specified will be executed.