# **Application Instance**



The LabVIEW Task Manager (LVTM) detects all open LabVIEW application instances, but discovers and displays VIs for only the selected instance. Select an application instance from the App Instance dropdown in the toolbar to discover and display VIs in the application instance you care about.

## Menu

The menu provides access to various functions and settings of the LVTM.

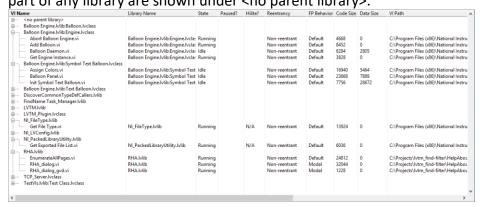
#### View

The View menu provides options to set an update speed for refreshing the view and a few view options.



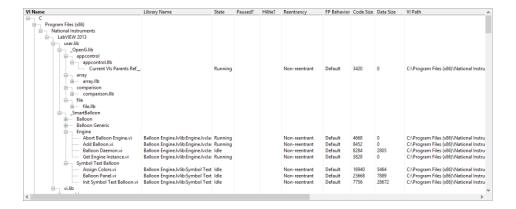
#### View>>Group by Library

When selected, the Group By Library setting displays all VIs in the selected application instance grouped by the library they belong to. All VIs that are not part of any library are shown under <no parent library>.



### View>>Group by Folder

When selected, the Group By Folder setting displays all VIs in the selected application instance with their folder hierarchy on disk. Like the Files view in the LabVIEW Project, this view makes it easy to see where all the project dependencies live on disk.



#### View>>Flat List

When selected, the Flat List setting displays all VIs in the selected application instance as a list. This view can help sorting the view by different properties of the VIs, by clicking on the column headers.

'I Name	Library Name	State	Paused?	Hilite?	Reentrancy	FP Behavior		Data Size	VI Path
<ul> <li>Delete Elements from 2D Array (Variant)_ogtk.vi</li> </ul>	NAME OF THE OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER	Running			Preallocated clone	Default	11084	0	C:\Program Files (x86)\National Instru
Delete Tree Item If No Longer Needed.vi	LVTM.lvlib	Running			Non-reentrant	Default	10340	0	C:\Projects\lvtm_find-filter\VIs_LVTM
Details Display Dialog.vi		Running			Non-reentrant	Modal	48380	0	C:\Program Files (x86)\National Instru
Directory of Top Level VI.vi		Idle			Non-reentrant	Default	10196	2172	C:\Program Files (x86)\National Instru
Discover ALL VIs in Memory.vi	LVTM.Ivlib	Running			Non-reentrant	Default	22804	0	C:\Projects\lvtm_find-filter\VIs_LVTN
DiscoverCommonTypeDefCallers.vi	DiscoverCommonTypeDefCaller:	Bad			Non-reentrant	Default	16604	41796	C:\Projects\lvtm_find-filter\Utils_LVT
- DiscoverTypeDefs.vi	DiscoverCommonTypeDefCaller:	Idle			Non-reentrant	Default	15140	3424	C:\Projects\lvtm_find-filter\Utils_LVT
Dispatch_FindOrFilterOnName.vi	FindName Task_Manager.lvlib	Idle.			Non-reentrant	Default	10036	2981	C:\Projects\lvtm_find-filter\VIs_LVTN
Draw Flattened Pixmap.vi		Idle			Non-reentrant	Default	31804	5140	C:\Program Files (x86)\National Instru
EnumerateAllPages.vi	RHA.Ivlib	Running			Non-reentrant	Default	24812	0	C:\Projects\lvtm_find-filter\HelpAbo
Error Cluster From Error Code.vi		Running			Shared clone	Default	5620	0	C:\Program Files (x86)\National Instr
Error Cluster From Error Code.vi		Running			Shared clone	Default	5620	0	C:\Program Files (x86)\National Instr
Error Cluster From Error Code.vi:5160001		Running			Shared clone	Default	5620	0	C:\Program Files (x86)\National Instr
- Error Cluster From Error Code.vi:5160002		Running			Shared clone	Default	5620	0	C:\Program Files (x86)\National Instr
Error Code Database.vi		Running		N/A	Non-reentrant	Default	3292	0	C:\Program Files (x86)\National Instr
Error_ClearError.vi		Running			Non-reentrant	Default	1836	0	C:\Program Files (x86)\National Instr
Error_FilterMulti.vi		Running			Non-reentrant	Default	2756	0	C:\Program Files (x86)\National Instr
Error_FilterSingle.vi		Running			Non-reentrant	Default	2324	0	C:\Program Files (x86)\National Instr
Escape String.vi	NI_LVConfig.lvlib	Running			Non-reentrant	Default	7060	0	C:\Program Files (x86)\National Instr
EXT Changed_ogtk.vi		Running			Preallocated clone	Default	1844	0	C:\Program Files (x86)\National Instr
EXT Changed_ogtk.vi		Running			Preallocated clone	Default	1844	0	C:\Program Files (x86)\National Instr
Fade InPlace.vi	Balloon Engine.lvlib:Balloon.lvcla	Idle			Non-reentrant	Default	5252	2224	C:\Program Files (x86)\National Instr
Fade.vi	Balloon Engine.lvlib:Text Balloon	Idle			Non-reentrant	Default	11692	3828	C:\Program Files (x86)\National Instr
FileVersionInfo.vi		Running			Non-reentrant	Default	11220	0	C:\Program Files (x86)\National Instr
Filter & Build DependentTypeDefs&Parents.vi	DiscoverCommonTypeDefCaller:	Idle			Non-reentrant	Default	8780	2188	C:\Projects\Ivtm_find-filter\Utils_LV
Filter 1D Array (Boolean)_ogtk.vi		Running			Preallocated clone	Default	5076	0	C:\Program Files (x86)\National Instr
Filter 1D Array (Boolean)_ogtk.vi		Running			Preallocated clone	Default	5076	0	C:\Program Files (x86)\National Instr
Filter 1D Array (CDB)_ogtk.vi		Running			Preallocated clone	Default	5076	0	C:\Program Files (x86)\National Instr
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## **Filters**

The Filters menu items provides several settings for <u>filtering out</u> VIs. Once all VIs in memory, in the selected application instance are displayed in the tree view, certain dynamic properties of all these VIs, like the state, paused status, execution highlight status, data size, etc., are occasionally checked and updated. The more VIs that need to be checked, the more resources are tied up, and the longer each refresh cycle takes.

Filtering out VIs that you don't care about tremendously improves the performance of the LVTM. Select (v) the filter options that you want to apply for filtering VIs out of the view. All VIs that match these filters will be ignored.

#### Filters>>Extensions

Select ( $\forall$ ) the file extensions that you want to filter out of the view. All files with the selected extensions will be ignored.



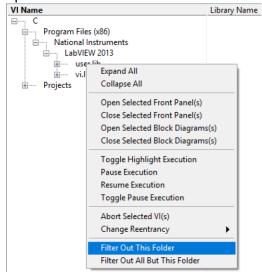
## Filters>>Types

Select (V) the VI types that you want to filter out of the view. All VIs of the selected type will be ignored.



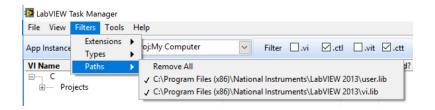
#### Filters>>Paths

When the view is set to Group By Folder, you can right click any folder and select Filter Out This Folder, which adds that folder to the list of folders to be filtered out. Or you can right click a folder and select Filter Out All But This Folder, which will add all folders currently in view, other than the right clicked one, to the list of folders to be filtered out. Any VIs from these filtered out folders will not show up in the tree view.



If one or more paths have been selected to be filtered out, they will show up checked under the Filters>>Paths menu. Clicking any one of these checked folders will remove them from the list of filtered out folders, and will immediately update the view to show any VIs from that folder or any of its subfolders.

Selecting Remove All will remove all filtered out paths, which will essentially disable path based filtering for the VIs.

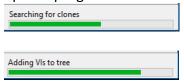


If there are no paths set to be filtered out, the Paths menu item is disabled.



# **Progress Update**

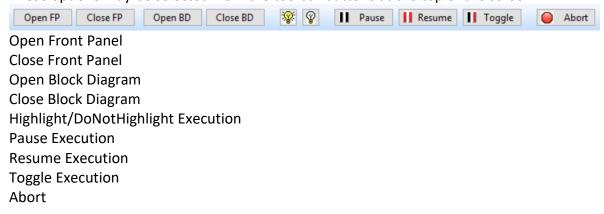
Any time any changes are made to the filters or to the view, the view is refreshed. Discovering all VIs in memory along with their clones, and then updating the tree view can take several seconds, depending on how many VIs are in memory in the selected application instance. A progress bar at the bottom right of the screen, in the status bar, shows the discovery and update progress.



If any settings are changed before the refresh is completed, this progress is interrupted and a new refresh cycle, with the new settings begins.

## Toolbar

LVTM provides several operations to be performed on one or more VIs in the tree view. These options may be selected from the toolbar buttons at the top of the screen.



These options may also be selected from the right click menu.

