
NI Compare Source Control Providers

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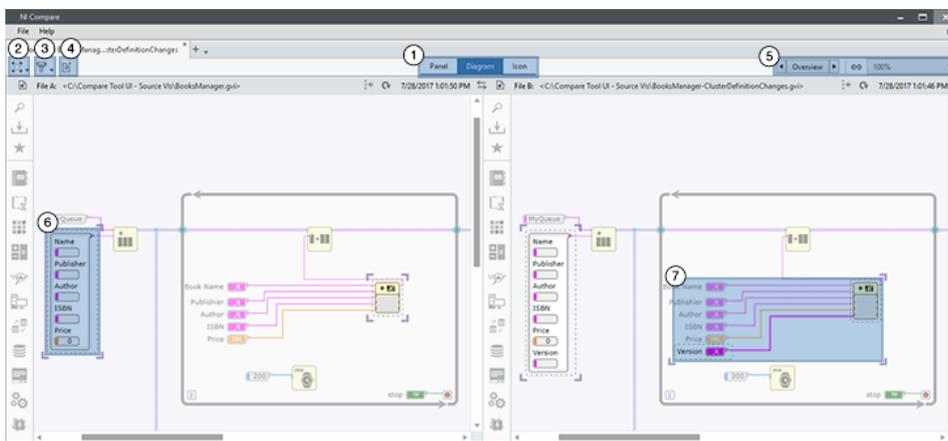
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Workspace

Compare two files with NI Compare to quickly locate modified content and make edits selectively.

The following image highlights the parts in the NI Compare workspace you use to configure the tool and view differences.



①	Aspect switcher—Displays the comparison results in different parts of the files. The panel shows changed inputs and outputs, the diagram shows modified code, and the icon shows changes in the node icon and connector pane.
②	Change display mode button—Specifies whether to show or hide the differences, and whether to display object differences or group differences. You can hide the differences if you want to see the original file without the markers the tool added.
③	Filter differences button—Configures the types of differences to display. For example, you can configure the tool to display only functional differences, which affect the execution of the files.
④	Export report button—Generates a comparison report that summarizes the differences between the files you compare. The comparison report is an HTML file.
⑤	Navigation options—Navigates the differences, selects the difference to view, configures the scroll bars in two files to scroll simultaneously or independently, and zooms in or out.

⑥	Object difference—Displays details of the changes made to the object within the dashed line.
⑦	Group difference—Displays details of the changes made to the group within the square frame. A group includes modified objects that are wired together. If a modified object is not wired with any other modified objects, the object is in its own group.

Related tasks:

- [Comparing Files](#)
- [Using NI Compare with Source Control Providers](#)

Comparing Files

Use NI Compare to locate different content between two files.

Complete the following steps to select two files to compare with NI Compare:

1. Ensure you have a project open and locate two files you want to compare on the Project Files tab. You can compare files with the `.gvi` or `.gcdl` extension.



Note The two files you compare must be of the same extension type.

2. Hold down the <Ctrl> key to select two files on the Project Files tab.
3. Right-click the two files and select **Compare selected**.

Related concepts:

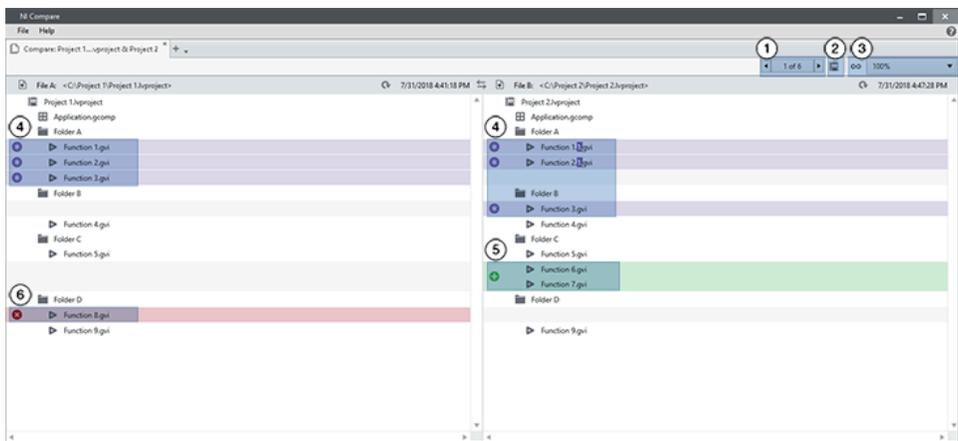
- [Workspace](#)

Project Comparison Workspace

When you collaborate with others on a project, you might want to visualize changes to the project file structure. Compare two project files with NI Compare to quickly locate modifications to the file structure of the project.

The following image highlights the types of differences NI Compare displays for projects.

 **Note** NI Compare does not display files contained within applications or libraries.



①	Difference selector button—Navigates the differences, and selects the difference to view.
②	Properties button—Displays differences between values in the Document tab of the projects.
③	Viewing options—Configures the scroll bars in two project files to scroll independently or simultaneously, and zooms in or out.
④	*—Identifies a renamed or moved item in the project. Hover over the item to view additional

	details.
⑤	 —Identifies a new item in the project.
⑥	 —Identifies a removed item in the project.

Related tasks:

- [Comparing Projects](#)
- [Using NI Compare with Source Control Providers](#)

Comparing Projects

Visualize differences between two projects using NI Compare.

Compare two projects to see if a collaborator has modified, added, or removed a file.



Note If you store your projects in a source code control repository, you can configure the source control provider to launch NI Compare for files with a `.lvproject` file extension.

Complete the following steps to compare two project files using NI Compare:

1. Open a project.
2. On the Navigation pane, right-click the project and select **Open in NI Compare**.
3. On the right side of the NI Compare window, click **Browse** to select the project file you want to compare.

Related concepts:

- [Project Comparison Workspace](#)

Using NI Compare with Source Control Providers

A source control provider is a piece of third-party software that enables you to share files among multiple users, improve security and quality, and track changes to shared projects. You can use NI Compare to display the differences between the local copy of a selected file and the version in source control.

Before beginning this task, make sure the computer on which you are running NI Compare includes a source control provider.

Complete the following steps to configure a source control provider to use NI Compare as the default application to compare two versions of a file:

1. Direct the source control provider to `nicompare.exe`. By default, `nicompare.exe` is installed in `C:\Program Files\National Instruments\[Product]`.
2. Enter arguments in the source control provider to configure `nicompare.exe` to perform different operations. The following table lists available arguments.

Argument	Description
<code>-alias1</code>	Changes the display name of the first file. You may consider changing the display name of the file if the filename is randomly generated. Specifying a meaningful display name helps you to keep track of the version of the file.
<code>-alias2</code>	Changes the display name of the second file. You may consider changing the display name of the file if the filename is randomly generated. Specifying a meaningful display name helps you to keep track of the version of the file.
<code>-exclude</code>	Specifies the type of difference to ignore. Use commas to separate multiple types of differences.
<code>-report</code>	Generates a comparison report in HTML

Argument	Description
<p>-usePreferences</p>	<p>format that summarizes the differences.</p> <p>Specifies whether to use the default settings in NI Compare.</p> <p>The value for this argument can be only TRUE or FALSE. Specify a value of TRUE if you want to use user-defined settings. You can specify user-defined settings by selecting File » Preferences in NI Compare. Specify a value of FALSE if you want to use the default settings.</p> <div data-bbox="850 705 1468 873" style="border: 1px solid #ccc; padding: 5px; background-color: #f9f9f9;">  <p>Note NI Compare does not have user-defined settings for project comparison.</p> </div> <p>If you do not use this argument, NI Compare uses the default settings.</p>

For example, you can use the following command to configure the source control provider to use NI Compare.

```
"C:\Program Files\National Instruments\LabVIEW NXG\nicompare.exe" $1 $2 -alias1
TestFile -usePreferences true -exclude Diagram.Comments,Diagram.Visual.Position
-report "C:\Users\lvadmin\Desktop\compare report.html"
```

where

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- \$1 and \$2 are variables the source control provider defines for the paths to the files you want to compare.
- -alias1 TestFile changes the display name of the first file to TestFile.
- -usePreferences true uses user-defined settings in NI Compare.
- -exclude Diagram.Comments,Diagram.Visual.Position configures NI Compare to not detect or display differences of comments on the diagram and node positions on the diagram.

- `-report "C:\Users\lvadmin\Desktop\compare_report.html"` generates an HTML comparison report and saves the report to `C:\Users\lvadmin\Desktop`.
3. (Optional) Complete any remaining steps to configure the source control provider. For example, some source control providers allow you to specify comparison tools for particular file extensions. You can specify `nicompare.exe` for files with the `.gvi`, `.gcdl`, and `.lvproject` extensions. Consult the documentation for the source control provider for more configuration information.

Related concepts:

- [Workspace](#)
- [Project Comparison Workspace](#)

Related reference:

- [Values of the -exclude Argument](#)

Values of the -exclude Argument

When you configure a source control provider to use NI Compare, you can use the `-exclude` argument to prevent NI Compare from displaying certain types of comparison differences. The following table shows the values of the `-exclude` argument you can use in NI Compare.

Value of the <code>-exclude</code> Argument	Differences NI Compare Ignores
<code>Panel</code>	All the differences on the panel.
<code>Panel.Functional</code>	Added, deleted, and modified objects on the panel.
<code>Panel.Functional.AddedDeleted</code>	Added and deleted objects on the panel.
<code>Panel.Functional.Modified</code>	Modified objects on the panel.

Value of the <code>-exclude</code> Argument	Differences NI Compare Ignores
<code>Panel.Visual</code>	Differences of object properties, positions, and sizes on the panel.
<code>Panel.Visual.Properties</code>	Differences of object properties on the panel.
<code>Panel.Visual.Position</code>	Differences of object positions on the panel.
<code>Panel.Visual.Size</code>	Differences of object sizes on the panel.
<code>Diagram</code>	All the differences on the diagram.
<code>Diagram.Functional</code>	Added, deleted, and modified code on the diagram.
<code>Diagram.Functional.AddedDeleted</code>	Added and deleted code on the diagram.
<code>Diagram.Functional.Modified</code>	Modified code on the diagram.
<code>Diagram.Visual</code>	Differences of node properties, positions, and sizes on the diagram.
<code>Diagram.Visual.Properties</code>	Differences of node properties on the diagram.
<code>Diagram.Visual.Position</code>	Differences of node positions on the diagram.
<code>Diagram.Visual.Size</code>	Differences of node or structure sizes on the diagram.
<code>Diagram.Visual.WireLayout</code>	Differences of wire layout on the diagram.
<code>Diagram.Comments</code>	Differences of comments

Value of the <code>-exclude</code> Argument	Differences NI Compare Ignores
	on the diagram.
<code>IconConnectorPane</code>	All the differences on the icon and connector pane.
<code>IconConnectorPane.Functional</code>	Differences of terminals on the connector pane.
<code>IconConnectorPane.Functional.ConnectedDisconnected</code>	Differences of connected and disconnected terminals on the connector pane.
<code>IconConnectorPane.Functional.Modified</code>	Modified terminals on the connector pane.
<code>IconConnectorPane.Functional.Position</code>	Differences of terminal positions on the connector pane.
<code>IconConnectorPane.Visual</code>	Differences of icon properties, templates, and view modes.
<code>IconConnectorPane.Visual.Properties</code>	Differences of icon properties.
<code>IconConnectorPane.Visual.Template</code>	Differences of icon templates.
<code>IconConnectorPane.Visual.IconVisuals</code>	Differences of icon view modes.

Related tasks:

- [Using NI Compare with Source Control Providers](#)