

# Comparing Deployed Files and Folders with Their Local Versions

Correspondence between files and folders under the *project root* and their copies on a server is set through [server access configuration mappings](#). Please note, that for the sake of simplicity any file or folder under the *project root* is referred to as *local* and any file or folder on the server is referred to as *remote*, even if the server is installed on your machine. For details, see [Working with Web Servers: Copying Files](#). For details, see [Configuring Synchronization with a Web Server](#).

It is clear, that a local file or folder can be mapped to an unlimited number of remote counterparts, while each remote file or folder is mapped to one and only one file or folder respectively.

Consequently, for each remote file or folder, IntelliJ IDEA unambiguously detects its local version to compare with, so you can have remote items compared with their local counterparts at any time. On the contrary, remote versions of local files or folders cannot be identified uniquely, therefore IntelliJ IDEA can compare local items only with their remote versions mapped through the [default server access configuration](#).

IntelliJ IDEA provides a dedicated [Differences Viewer for Folders](#) for comparing files in remote folders and their local versions against the file size, content, or timestamp. The **Differences Viewer** shows the contents of the local and remote directories in the **Item List**, in the left and right panes respectively. The contents of the selected file are shown in the lower pane, with the differences being color-highlighted.

The remote files in the **Difference Viewer** have the status `read-only`. This means that you cannot update them directly in the **Difference Viewer**. Make all the necessary changes to the local version of the file in question and upload the updated file to the server.

Besides exploring differences, the tool also provides interface for synchronizing the contents of folders.

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## Opening the Remote Host tool window

Do one of the following:

- On the main menu, choose **Tools | Deployment | Browse Remote Host**.
- On the main menu, choose **View | Tool Windows | Remote Host**. Note that the tool window can be accessed this way after you have opened it using the **Tools | Deployment | Browse Remote Host**.

## Comparing a remote folder with its local version

1. Open the [Remote Host tool window](#).
2. Select the folder in question. Then choose **Tools | Deployment | Sync with Local** on the main menu or **Sync with local** on the context menu of the selection.
3. In the [Differences Viewer for Folders](#) that opens, [explore the differences](#) and [synchronize the files](#), where applicable.

## Comparing a remote file with its local version

1. Open the [Remote Host tool window](#).
2. Select the file in question, and then choose **Compare with local version** on the context menu of the selection.
3. In the [Differences Viewer for Files](#) dialog box, that opens, explore the differences and apply them, if necessary, using the **»** and **«** buttons. For details, see [Viewing Differences Between Files](#).

## Comparing a local folder with its remote version

This action is available only if you have a default server access configuration appointed.

1. Select the folder in question in the [Project](#) tool window, and then choose **Tools | Deployment | Sync with Deployed to <default server access configuration>** on the main menu.
2. In the [Differences Viewer for Folders](#) that opens, [explore the differences](#) and [synchronize the files](#), where applicable.

## Comparing a local file with its version on a server

This action is available only if you have a default server access configuration appointed.

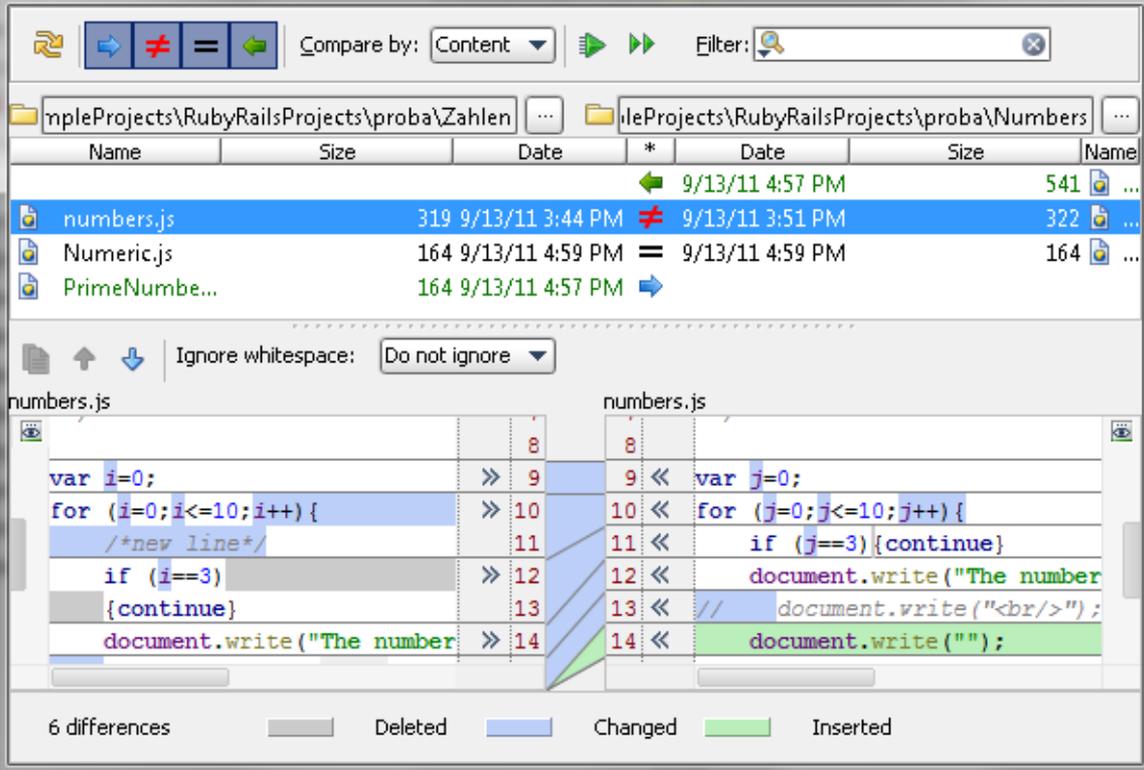
1. Select the file in question in the [Project](#) tool window, and then choose **Tools | Deployment | Compare with Deployed Version on <default server access configuration>** on the main menu.

When no default server access configuration is appointed, this menu item is disabled and its name is changed to **Compare Local File with Deployed Version**.

2. In the [Differences Viewer for Files](#) dialog box, that opens, explore the differences and apply them, if necessary, using the **»** and **«** buttons. For details, see [Viewing Differences Between Files](#).

## Comparing two folders in the Difference Viewer

- Configure the layout of the **Items List**. Use the **toolbar buttons** to narrow down or widen the set of items to show. For example, show or hide files that are present only locally or remotely, equal files, different files, files **excluded from synchronization**, etc.
- Specify the parameter for comparison. In the **Compare by** drop-down list, select one of the possible options (contents, size, or time stamp).
- Filter the folders' contents. To do that, type filtering string in the **Filter** text field, and press Enter to apply it. Using the asterisk \* wildcard to represent any number of characters is welcome.
- To switch to another pair of folders to compare, update the fully qualified paths to them. Click the **Browse** button  next to the **Paths** read-only fields and choose the required folders in the **dialog that opens**.
- Explore the detected differences between files in the **Differences Pane**.



The screenshot displays a file comparison tool interface. At the top, there is a toolbar with icons for navigation and comparison, and a "Compare by:" dropdown menu set to "Content". A "Filter:" field is also present. Below the toolbar, two file paths are shown: "mpleProjects\RubyRailsProjects\proba\Zahlen" and "leProjects\RubyRailsProjects\proba\Numbers". A table lists files with columns for Name, Size, Date, and comparison status. The "numbers.js" file is highlighted in blue, indicating a difference. Below the table, a detailed comparison of the "numbers.js" file is shown, with line numbers and color-coded differences: Deleted (grey), Changed (blue), and Inserted (green). A legend at the bottom indicates "6 differences" and defines the colors: Deleted (grey), Changed (blue), and Inserted (green).

Name	Size	Date	*	Date	Size	Name
			←	9/13/11 4:57 PM	541	...
numbers.js	319	9/13/11 3:44 PM	≠	9/13/11 3:51 PM	322	...
Numeric.js	164	9/13/11 4:59 PM	=	9/13/11 4:59 PM	164	...
PrimeNumbe...	164	9/13/11 4:57 PM	→			

```
numbers.js | 8 | 9 | 10 | 11 | 12 | 13 | 14
var i=0; | >> | 9 | 9 << | var j=0;
for (i=0;i<=10;i++){ | >> | 10 | 10 << | for (j=0;j<=10;j++){
/*new line*/ | 11 | 11 << | if (j==3){continue}
if (i==3) | >> | 12 | 12 << | document.write("The number
{continue} | 13 | 13 << | // document.write("<br/>");
document.write("The number | >> | 14 | 14 << | document.write("");
```

6 differences   Deleted   Changed   Inserted

## Synchronizing contents of folders

The contents of the remote folder are always shown in the right-hand pane of the **Items List**, the contents of its local version are always shown in the left-hand pane.

1. For each pair of items, in the \* field specifies the action to apply. Click the icon in the field until the required action is set.

-  the file will be uploaded, possibly overwriting the remote version.
-  the file will be downloaded, possibly overwriting the local version.
-  the files are treated identical with regard to the selected criterion of comparison. No action will be performed by default.
-  the files differ with regard to the selected criterion of comparison. No action will be performed by default. Explore the differences in the **Differences Pane** of the **Difference Viewer** and change the intended action by clicking the icon.

The remote files in the **Difference Viewer** have the status `read-only`. This means that you cannot update them directly in the **Difference Viewer**. Make all the necessary changes to the local version of the file in question and upload the updated file to the server.

-  the file is present only locally or remotely and will be removed.

2. Do one of the following:

- To synchronize the currently selected item, click the **Synchronize Selected** button  on the toolbar.
- To synchronize all the items, click the **Synchronize All** button  on the toolbar.

## See Also

Procedures:

- [Working with Web Servers: Copying Files](#)
- [Comparing Folders](#)
- [Comparing Files](#)

Reference:

- [Differences Viewer](#)
- [Differences Viewer for Folders and DB Objects](#)
- [Remote Host Tool Window](#)

Web Resources:

- [Developer Community](#) 