PERFORCE

P4Merge User Guide

2017.2

June 2017

P4Merge User Guide
2017.2

June 2017

Copyright © 1999-2017 Perforce Software.

All rights reserved.

Perforce software and documentation is available from `http://www.perforce.com/`. You can download and use Perforce programs, but you can not sell or redistribute them. You can download, print, copy, edit, and redistribute the documentation, but you can not sell it, or sell any documentation derived from it. You can not modify or attempt to reverse engineer the programs.

This product is subject to U.S. export control laws and regulations including, but not limited to, the U.S. Export Administration Regulations, the International Traffic in Arms Regulation requirements, and all applicable end-use, end-user and destination restrictions. Licensee shall not permit, directly or indirectly, use of any Perforce technology in or by any U.S. embargoed country or otherwise in violation of any U.S. export control laws and regulations.

Perforce programs and documents are available from our Web site as is. No warranty or support is provided. Warranties and support, along with higher capacity servers, are sold by Perforce Software.

Perforce Software assumes no responsibility or liability for any errors or inaccuracies that might appear in this book. By downloading and using our programs and documents you agree to these terms.

Perforce and Inter-File Branching are trademarks of Perforce Software.

All other brands or product names are trademarks or registered trademarks of their respective companies or organizations.

Any additional software included within Perforce software is listed in License Statements on page 7.

Table of Contents

About This Manual v

Helix documentation v
Syntax conventions vi
Please give us feedback vi

Chapter 1 Diffing and Merging Files with P4Merge 1

Diffing Text Files 1
Navigate Diffs 1
Set Preferences 1
Diffing Images 2
Diffing Microsoft Word Files 2
Merging Files 3
Navigate Diffs 3
Merge Text 3
Choose Text Chunks 3
Edit Text 5
Set Preferences 5

License Statements 7

About This Manual

This guide tells you how to use P4Merge, the Perforce visual diff tool. It is intended for anyone using P4Merge to view the differences between files across time and across codelines. P4Merge, as its name implies, also enables you to merge differing files into one.

Helix documentation

The following table lists and describes key documents for Helix end users, developers, and administrators. For complete information see the following:

http://www.perforce.com/documentation

For specific information about…	See this documentation…
Overview of Helix version control concepts and workflows; Helix architecture, and related products.	*Helix Versioning: An Overview*
Administering the Helix Versioning Engine to support Git repos and LFS files.	*Helix4Git*
Using the command-line interface to perform software version management and codeline management; working with Helix streams; jobs, reporting, scripting, and more.	*Helix Versioning Engine User Guide*
Basic workflows using P4V, the cross-platform Helix desktop client.	*P4V User Guide*
Working with personal and shared servers and understanding the distributed versioning features of the Helix Versioning engine.	*Using Helix for Distributed Versioning*
`p4` command line (reference).	*P4 Command Reference*, **`p4 help`**
Installing and administering the Helix Versioning Engine, including user management, security settings.	*Helix Versioning Engine Administrator Guide: Fundamentals*
Installing and configuring Helix servers (proxies, replicas, and edge servers) in a distributed environment.	*Helix Versioning Engine Administrator Guide: Multi-site Deployment*
Helix plug-ins and integrations.	IDEs: *Using IDE Plug-ins* Defect trackers: *Defect Tracking Gateway Guide* Others: online help from the Helix menu or web site

For specific information about…	See this documentation…
Developing custom Helix applications using the Helix C/C++ API.	*C/C++ API User Guide*
Working with Helix in Ruby, Perl, Python, and PHP.	*APIs for Scripting*

Syntax conventions

Helix documentation uses the following syntax conventions to describe command line syntax.

Notation	Meaning
`literal`	Monospace font indicates a word or other notation that must be used in the command exactly as shown.
italics	Italics indicate a parameter for which you must supply specific information. For example, for a *serverid* parameter, you must supply the id of the server.
`[-f]`	Square brackets indicate that the enclosed elements are optional. Omit the brackets when you compose the command. Elements that are not bracketed are required.
…	Ellipses (…) indicate that the preceding element can be repeated as often as needed.
element1 | *element2*	A vertical bar (|) indicates that either *element1* or *element2* is required.

Please give us feedback

We are interested in receiving opinions on this manual from our users. In particular, we'd like to hear from users who have never used Perforce before. Does this guide teach the topic well? Please let us know what you think; we can be reached at manual@perforce.com.

If you need assistance, or wish to provide feedback about any of our products, contact support@perforce.com.

Chapter 1

Diffing and Merging Files with P4Merge

P4Merge is a visual diff tool that displays the differences between file versions and helps you to resolve conflicts and merge competing versions into one.

This chapter includes the following topics:

- "Diffing Text Files" on page 1
- "Diffing Images" on page 2
- "Diffing Microsoft Word Files" on page 2
- "Merging Files" on page 3

Diffing Text Files

In its diff mode, P4Merge enables you to compare two text files to locate differences. (P4Merge can also diff image files and, if your Perforce administrator has enabled it, Microsoft Word .docx files.)

The purple icon ( ) is associated with the first file you selected, and purple bands highlight text that is in the first file but not the second file. The green icon ( ) is associated with the second file you selected, and green bands highlight text that is in the second file but not the first file.

To display diffs in a single pane, go to **View > Single Pane Diff Layout**. In single-pane mode, deleted text is shown using strikethrough text. By default, P4Merge displays diffs in a side-by-side layout.

To toggle the display of line numbers, click .

Navigate Diffs

To move forward and back through individual differences, or to locate specific text or lines, click the toolbar buttons listed below.

Go to next/previous diff	
Find text	
Go to line number	

Set Preferences

To configure P4Merge settings to display or suppress differences in white space and line endings, click or choose **File > Comparison Method**. To configure other settings, go to **Edit > Preferences** (Windows) or **P4Merge > Preferences** (Mac).

Note	If you are comparing Unicode files, selection of the correct character set is essential. If you select the wrong character set, P4Merge cannot correctly diff files.

Diffing Images

To diff two different image files: context-click an image file, choose **Diff Against…** and specify the other image, or (in the Depot, Workspace, or Files pane,) drop one image file's icon on another.

To diff two revisions of the same image file: context-click the image file and choose **File History**. In the File History pane, drop one of the desired revisions on the other revision.

P4V launches P4Merge, displaying the differences between the specified images. You can display image diffs side by side or overlaid.

To enlarge or reduce the displayed images, use the zoom sliders or choose the desired display option from the **View** menu.

To highlight differences, check **Highlight Differences** and use the adjacent slider to increase or decrease sensitivity. P4Merge highlights identical areas in gray and differences in yellow.

To blend or separate overlaid images, use the vertical slider: to blend the images equally, center the slider. **To increase the amount of an image used in the composite**, move the slider toward that image.

You can also view image revisions sequentially in Time-lapse View. For more information, see Viewing Image File History with Time-lapse View in the *P4V User's Guide*.

You can diff the following image file types:

- BMP
- GIF
- JPG, JPEG
- PNG
- PBM
- PGM
- PPM
- TIFF
- XBM
- XPM

Diffing Microsoft Word Files

If your Perforce administrator has enabled it, you can diff Microsoft Word `.docx` files in a P4Merge window using a rich comparison tool that shows differences in text, images, formats, styles, tables, headers, footers, and many other objects.

There are two `.docx` compare modes, **Parent-Child** and **Sibling**:

- **Parent-Child** mode is used to show how a file has changed from one version to another; this mode is set when you select **Diff Against Have Revision** in P4V.
- **Sibling** mode is used when there is no direct relationship between the files being compared; it is set, for example, when you drag and drop `.docx` files.

For more information about how to select files in P4V for diffing, see Diffing Files and Folders in the *P4V User's Guide*.

Merging Files

If you and another user have edited the same file, Perforce requires you to resolve those changes. One way of resolving is by merging your changes with the other changes using P4Merge. P4Merge enables you to compare two text files with a common base file to locate differences and to select the text that you want in the merged result file. The purple icon ( ) is associated with the file that another user edited (*[italic] their* file), and purple bands highlight text that unique to that file. The green icon ( ) is associated with file that you edited (*[italic] your* file), and green bands highlight text that is in the second file but not the first file. The *[italic] base* file is indicated by the yellow icon ( ) and yellow highlighting indicates text that is in the base file but not in the other files.

In the top half of the window, P4Merge displays the base file surrounded by the two changed versions of the revision being merged. In the bottom half of the window, P4Merge displays the merge results file, where you select or enter the text that you want to check in. Make your changes as described below, and be sure to save them before exiting P4Merge.

Navigate Diffs

To move forward and back through individual differences, or to locate specific text or lines, click the toolbar buttons listed below.

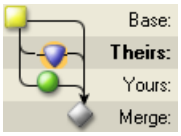
Go to next/previous diff	
Find text	
Go to line number	

Merge Text

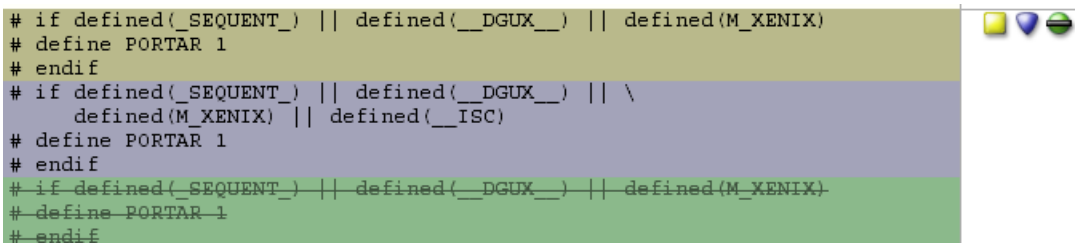
To merge files, you can either choose text from one of the files or enter changes directly into the merge results file.

Choose Text Chunks

To choose the entire contents of a file, click the corresponding icon in the merge diagram, as shown below.



To choose a single chunk of text from a set of diffs, click the corresponding button to the right of the chunk, as shown below.



The buttons indicate the origin of the text and the way it was changed, as follows:

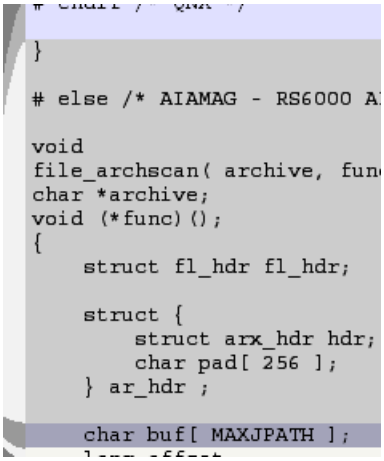
	Base file text
	Same in theirs and base.
	Same in theirs and base.
	Text added to their file. Not in yours or base.
	Text added to your file. Not in theirs or base.
	Text deleted from their file.
	Text deleted from your file.
	Same in yours and theirs, different from base.
	Added to both yours and theirs.
	Deleted from both yours and theirs.

Note that the buttons are toggles: click once to select the corresponding text, click again to deselect it.

If P4Merge encounters too many changes to display all the required buttons, it displays this button: . Click it to view the details.

Edit Text

To edit the text in the merge result file, click on the text in the bottom pane and enter your changes. Manually-edited text is displayed with a gray highlight, like the middle chunk in the following example:



Set Preferences

To configure P4Merge settings to display or suppress differences in white space and line endings, click or choose **File > Comparison Method**. To configure other settings, choose **Edit > Preferences** (Windows) or **P4Merge > Preferences** (Mac).

To toggle the display of line numbers, click .

Note	If you are comparing Unicode files, selection of the correct character set is essential. If you select the wrong character set, P4Merge cannot correctly compare files.

Appendix

License Statements

Perforce software includes software developed by the University of California, Berkeley and its contributors. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).

Perforce software includes software from the Apache ZooKeeper project, developed by the Apache Software Foundation and its contributors. (http://zookeeper.apache.org/)

Perforce software includes software developed by the OpenLDAP Foundation (http://www.openldap.org/).