Perforce Automation Tool
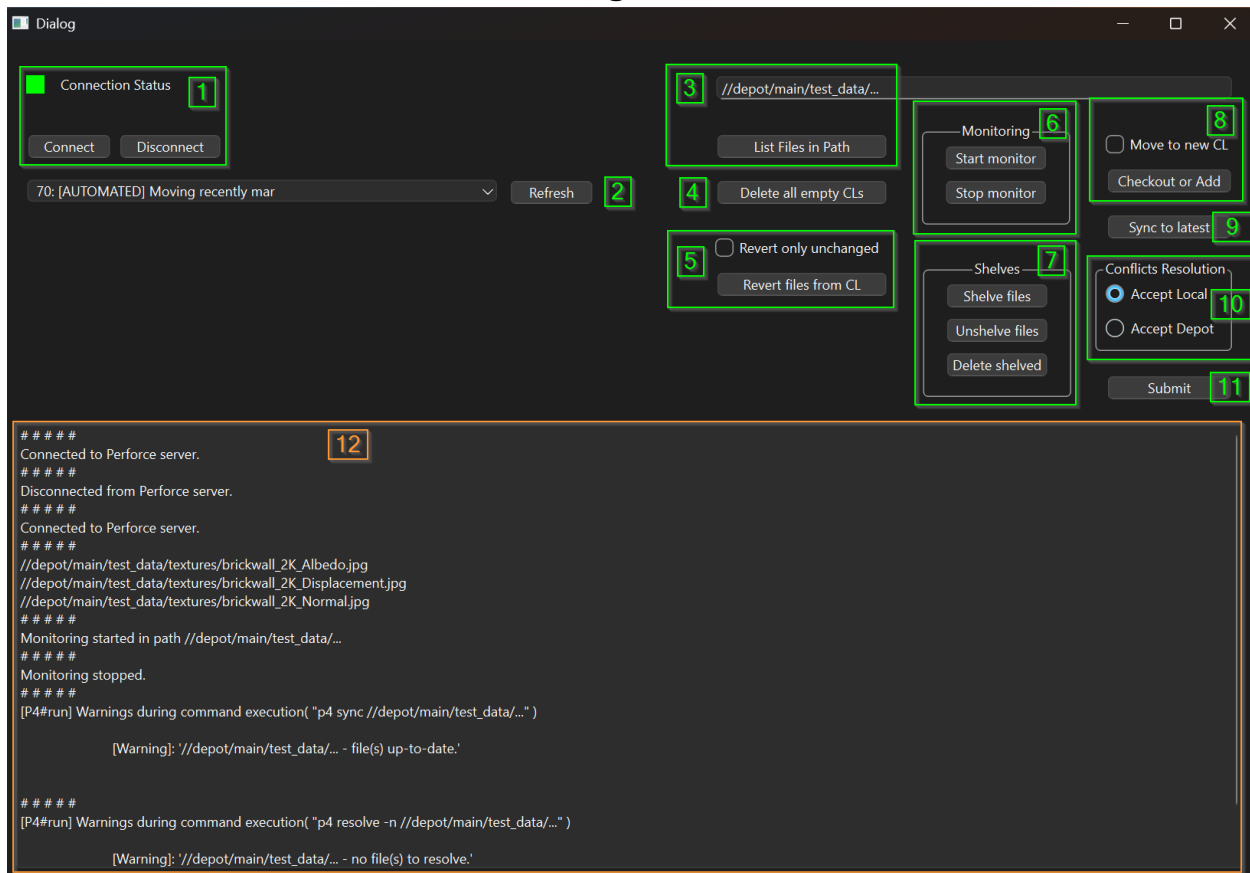
Goal: Automated ways to complete common everyday tasks with the Perforce VCS in P4V

Key Features:
- Connecting and disconnecting from the Perforce server
- Monitoring of important file activity in the Perforce directory
- Automated process of reverting files from a changelist
- Automated submission of changelists
- Automated deletion of empty changelists
- Automated shelving and un-shelving of files
- Conflict resolution through either local or depot accept

UI overview
Tool Widget Window

1. Perforce Server Connection: Buttons to connect and disconnect from the Perforce server. In the top left is also a visual indicator that becomes green when connected and red when disconnected.

2. Pending Changelists Overview: Dropdown list that shows all currently pending changelists in the Perforce directory. On the far right is also a button to refresh the list upon new changes.

3. Path Information: Lists all files in the path that is typed into the text field (top) whenever the button is clicked (bottom). Current syntax only detects files (not folders within folders) and must have the three dots "…" typed at the end of the text field string.

4. Delete All Empty Changelists: Button that deletes all currently empty changelists in the Perforce directory.

5. Reverting Files: Button that reverts all files within the currently selected changelist in the dropdown list [2]. Checking the checkbox (top), before clicking the revert button (bottom) only reverts unchanged files.

6. Monitoring System: Buttons for starting and stopping a monitor event in the Perforce directory. When monitoring is enabled, all detected submissions will output a notification to the logging terminal [12]. The notification includes the name of the user who performed the submission, along with date and time of the submission. A similar notification will also be triggered whenever a user locks a file in the directory and unlocks it again.

7. Shelving System: Buttons for respectively shelving, un-shelving, and deleting shelved files within the currently selected changelist in the dropdown list [2]

8. Checkout Or Add Files: Button that automatically performs a checkout or add operation on all files within the specified path, that's typed into the file path text field [3] to the currently selected changelist in [2]. Checking the checkbox (top) before clicking the checkout or add button (bottom) generates a new changelist instead and then moves the files there.

9. Synchronizing All Files To Latest Version. Synchronizes all files in the Perforce directory to their latest revision.

10. Conflicts Resolution: In case of a merge conflict, this system provides two automatic options. "Accept Local" is enabled by default and overrides user 2's submission with user 1's submission, when clicking the sync button in [9]. "Accept Depot" can also be selected instead, and overrides user 1's submission with user 2's submission, when clicking the sync button in [9].

11. Submit All Changelists: Button that submits the currently selected changelist in [2] when clicked.

12. Logging Terminal. Logs all actions made in the Perforce directory and displays it as text information to users of this tool.

Contact point

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