

Some issues could originate from a problem with file watching. Let me explain how file watching works in VSCode first and then provide some details how to get more logging data from how file watching behaves in your case.

Synopsis VSCode has different strategies for file watching depending on your workspace and setup:

- no folder opened: files in opened editors are watched via node.js `fs.watch`
- folder opened: folder is watched recursively for all changes via [parcel](#), opened editors with files not within the folder are watched via node.js `fs.watch`

If you are connected to a remote (SSH, WSL, Docker), the file watcher will run within the target file system. As such, even though you maybe on Windows where VSCode runs, if the remote is Linux, the file watcher will run in the Linux environment.

Platforms Depending on the platform you are on, file watching is differently implemented:

- macOS: using `fsevents` services
- Windows: using `ReadDirectoryChangesW` method
- Linux: using `inotify`

Specifically on Linux, watching a large folder recursively can result in VSCode consuming too many file handles. If that is the case, you will see a warning notification with instructions how to solve that.

Limitations File watching comes with a set of limitations:

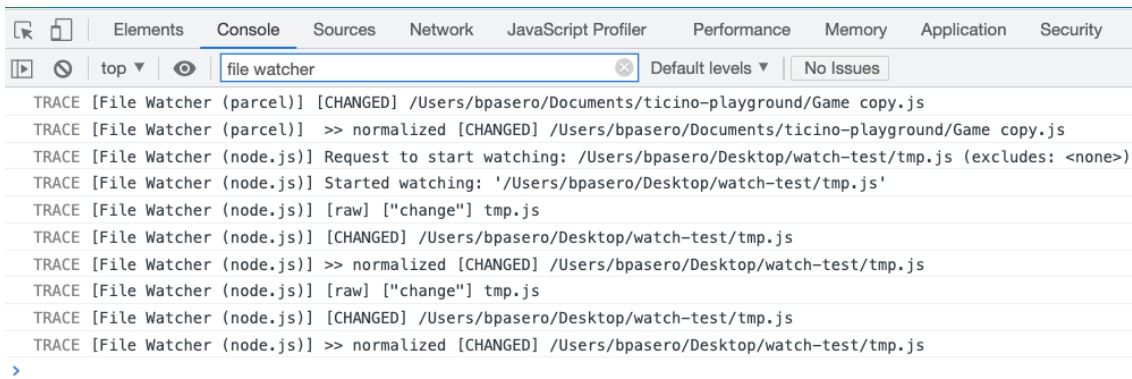
- symbolic links are not followed automatically but you can explicitly add symbolic links to be watched via the `files.watcherInclude` setting
- mapped network drives or third party file system drivers are not guaranteed to produce file events
- in general, the operating system may decide to drop file events at any time, there is no 100% guarantee

Settings Please review your settings to see if maybe a folder is excluded by accident. Specifically, the `files.watcherExclude` setting is relevant.

Logging (local)

!!! This is ONLY when you open a local workspace, for remote see below !!! We provide logging for file events when you enable verbose logging. Steps are:

- open VSCode on the local workspace that shows the issue
- select `View | Command Palette...`
- select `Developer - Set Log Level...`
- pick `Trace`
- select `Help | Toggle Developer Tools`
- select `Console`
- filter the output by typing `File Watcher` into the filter box
- attach the output when doing the operation that exhibits the issue



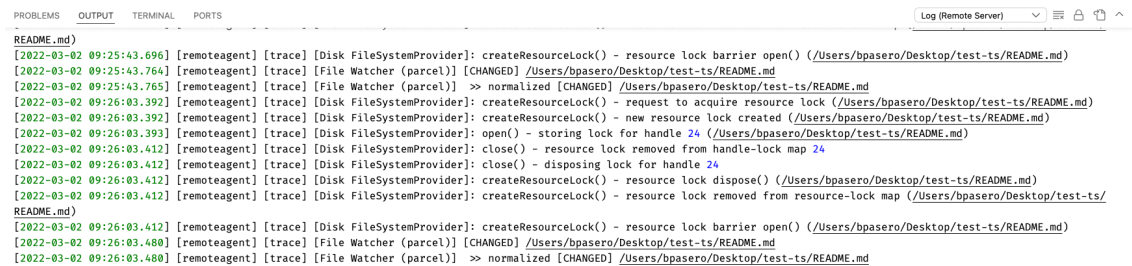
The screenshot shows the VS Code interface with the 'Console' tab selected. The search bar contains 'file watcher'. The log output shows a series of trace messages from the File Watcher (node.js) and File Watcher (parcel) modules. The messages indicate that a file named 'tmp.js' was changed, and the watcher was started and normalized. The logs are as follows:

```
TRACE [File Watcher (parcel)] [CHANGED] /Users/bpasero/Documents/ticino-playground/Game copy.js
TRACE [File Watcher (parcel)] >> normalized [CHANGED] /Users/bpasero/Documents/ticino-playground/Game copy.js
TRACE [File Watcher (node.js)] Request to start watching: /Users/bpasero/Desktop/watch-test/tmp.js (excludes: <none>)
TRACE [File Watcher (node.js)] Started watching: '/Users/bpasero/Desktop/watch-test/tmp.js'
TRACE [File Watcher (node.js)] [raw] ["change"] tmp.js
TRACE [File Watcher (node.js)] [CHANGED] /Users/bpasero/Desktop/watch-test/tmp.js
TRACE [File Watcher (node.js)] >> normalized [CHANGED] /Users/bpasero/Desktop/watch-test/tmp.js
TRACE [File Watcher (node.js)] [raw] ["change"] tmp.js
TRACE [File Watcher (node.js)] [CHANGED] /Users/bpasero/Desktop/watch-test/tmp.js
TRACE [File Watcher (node.js)] >> normalized [CHANGED] /Users/bpasero/Desktop/watch-test/tmp.js
```

Logging (remote)

!!! This is ONLY when you open a remote workspace (WSL, Docker, SSH), for local see above !!! We provide logging for file events when you enable verbose logging. Steps are:

- open VSCode on the remote workspace that shows the issue
- select View | Command Palette...
- select Developer - Set Log Level...
- pick Trace
- select View | Output
- select Log (Remote Server) from the dropdown
- attach the output when doing the operation that exhibits the issue



The screenshot shows the VS Code interface with the 'Output' tab selected. The dropdown menu shows 'Log (Remote Server)'. The log output shows a series of trace messages from the Disk FileSystemProvider and File Watcher (parcel) modules. The messages indicate that a file named 'README.md' was changed, and the watcher was started and normalized. The logs are as follows:

```
2022-03-02 09:25:43.696 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - resource lock barrier open() (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:25:43.764 [remoteagent] [trace] [File Watcher (parcel)] [CHANGED] /Users/bpasero/Desktop/test-ts/README.md
2022-03-02 09:25:43.765 [remoteagent] [trace] [File Watcher (parcel)] >> normalized [CHANGED] /Users/bpasero/Desktop/test-ts/README.md
2022-03-02 09:26:03.392 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - request to acquire resource lock (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.392 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - new resource lock created (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.393 [remoteagent] [trace] [Disk FileSystemProvider]: open() - storing lock for handle 24 (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.412 [remoteagent] [trace] [Disk FileSystemProvider]: close() - resource lock removed from handle-lock map 24
2022-03-02 09:26:03.412 [remoteagent] [trace] [Disk FileSystemProvider]: close() - disposing lock for handle 24
2022-03-02 09:26:03.412 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - resource lock dispose() (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.412 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - resource lock removed from resource-lock map (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.412 [remoteagent] [trace] [Disk FileSystemProvider]: createResourceLock() - resource lock barrier open() (/Users/bpasero/Desktop/test-ts/README.md)
2022-03-02 09:26:03.480 [remoteagent] [trace] [File Watcher (parcel)] [CHANGED] /Users/bpasero/Desktop/test-ts/README.md
2022-03-02 09:26:03.480 [remoteagent] [trace] [File Watcher (parcel)] >> normalized [CHANGED] /Users/bpasero/Desktop/test-ts/README.md
```