

PUTTY DRIVER

INTRODUCTION

[PuttyDriver](#) adds automation and robotics functionality to the popular open source [PuTTY SSH and Telnet client](#) developed by Simon Tatham and others.

Scripts can be recorded, edited and replayed to assist with Systems Administration and integration of Legacy Applications with modern systems. PuTTY screens and commands processed are captured automatically to log files.

PuttyDriver includes interactive record and replay functionality and can communicate interactively with one or more PuTTY sessions using the [Microsoft Windows Message Queue](#). Alternatively, scripts can be run via the [PuTTY command line](#) for batch processing.

Testing has successfully been undertaken with servers running a variety of Unix/Linux platforms. A sample script for a standard Raspberry Pi OS installation is included and is referenced in this document.

PuttyDriver currently consists of two application files - **PuttyDriver.xlsb** (Excel 32 bit) and **putty.exe**, together with a [SQLite](#) database. [ODBC driver for SQLite](#) must be installed and can be downloaded from [here](#).

putty.exe is a slightly modified 0.81 version of PuTTY with a small amount of additional C code, to provide the scripting and message queue interface. Project files with source code can be found at <https://github.com/christyler80/PuttyDriver>.

See the '[Getting Started](#)' section of this document for details of how to run PuttyDriver. There is also a brief mp4 video that shows PuttyDriver being used.

Please also see [DB Data Manager](#) for additional database interface documentation.

Planned future versions of PuttyDriver include VB.NET and C# applications to assist with PuttyDriver script and session management for integration of Legacy Applications with modern systems.

At this time:

- PuttyDriver requires 32-bit versions of Microsoft Excel 2016 or later.
- Microsoft Excel 64-bit versions are not currently supported.
- 32-bit or 64-bit versions of Microsoft Windows 10 operating system or later are supported.
- Other operating systems (e.g., Apple, Linux) are not supported.

Chris Tyler, January 2025

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LICENSE

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GETTING STARTED

1. Download the Zip file from [GitHub](#) and extract into a folder.
2. Run putty.exe and connect to a server using SSH (or Telnet), using its IP address or Server Name.
3. Check that login and password are both OK and close putty.exe.
4. Open the PuttyDriver.xlsb workbook and using the 'Example Template' worksheet, type the **IP address** or **Server Network Name** into cell E1. Leave the **Script Name** in cell B2 blank.

Autosave OFF

PuttyDriver.xlts - Saved to this PC

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Session ID: Script Run On

New Session

Run On

Putty Driver Template

Raspberry Pi OS 3.12

14/05/2024 09:44

Server: Connection

raspberrypi.local (192.168.1.80)

Port: 22

Screen Capture - blank for Yes, or No

Expected Input Command Prompt - row, col

Expected Input Position - row, col

Expected Input Prompt - row, col

Input Command

Input Hidden?

Input Submit Key

Pause Before Input (secs)

DB Script Command ID

Screen Identifier Position

Screen Input Prompt Position

Screen Input Cursor Position

Expected Command Prompt OK?

Terminal Input Processed

Terminal Input Subst Key

Terminal Current Cursor Position

Terminal Screen

Screen Input Cursor Position

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5. Press the 'Record New Script' button. PuTTY (**putty.exe**) should open.
6. Login into PuTTY as usual, i.e., using a valid user ID and password.
7. These commands and the PuTTY screen should be captured automatically, in rows 6 and 7 of the spreadsheet.
8. Type 2 or 3 additional commands Into PuTTY - e.g., 'pwd' or 'ls'. These should also be captured in the spreadsheet.
9. When finished, close PuTTY as normal.
10. Passwords are usually often 'hidden'. If so, type 'Yes' Into the 'Input Hidden?' column 'G' on row 7 if not already present.
11. To replay these commands, press the 'Clear Results' button, followed by the 'Test This Script' button.
12. As before, PuTTY (putty.exe) should open but this time, PuttyDriver should log in automatically using the credentials used in step 6 and automatically run the commands typed in step 8.
13. The PuTTY screen(s) should be captured automatically, both in Excel and as text files, in a new 'Capture' folder.
14. Script execution can be controlled using the 'Expected Screen ID', 'Expected Screen ID Position', 'Expected Input Command Prompt', 'Expected Cursor Position' and 'Expected Cursor Position' columns.
15. See the 'Raspberry PI OS' worksheet for examples of how the 'Expected' fields can be set and use of '*' wildcard for Cursor position where X or Y are known, but not both (e.g., after running list files command).
16. After recording a new script, Use the 'Save Script Commands' function to save the script commands for future use.
17. Use the 'Session Controller' to manage servers and to access/re-run existing scripts.
18. Scripts can be also modified and changes saved using these worksheets (e.g., add screen identification text/numbers).