2025/12/01 05:36 1/3 Standard Streams

# **Standard Streams**

Standard streams are preconnected input and output communication channels between a computer program and its environment when it begins execution.

The three input/output connections are called stdin (standard input), stdout (standard output) and stderr (standard error).

When a command is executed via an interactive shell, the streams are typically connected to the text terminal on which the shell is running, but can be changed with redirection or a pipeline.

#### Stdin

Standard input is a stream from which a program reads its input data. The program requests data transfers by use of the read operation.

Unless redirected, standard input is inherited from the parent process. In the case of an interactive shell, that is usually associated with the keyboard.

For processes that use a file as input, that file data may be passed (or piped) in through the stdin channel.

### Input via Stdin

Piping an input file myVolumes.csv via stdin to TMSS10Sync.

TMSS10Sync -S user:-password@serveraddress < myVolumes.csv

### **Stdout**

Standard output is a stream to which a program writes its output data.

Unless redirected, standard output is inherited from the parent process.

### **Output Via Stdout**

Redirecting stdout from TMSS10Sync to file sync\_stdout.txt. If the file sync\_stdout.txt already exists, it will be overwritten.

TMSS10Sync -S user:-password@serveraddress < myVolumes.csv > sync\_stdout.txt

Redirecting stdout from TMSS10Sync to file sync\_stdout.txt. Using the double » symbol instead of a single >, the file sync stdout.txt will be appended to rather than overwritten.

```
TMSS10Sync -S user:-password@serveraddress < myVolumes.csv >>
sync_stdout.txt
```

### **Stderr**

Standard error is another output stream typically used by programs to output error messages or diagnostics. It is a stream independent of standard output and can be redirected separately.

### **Output Via Stderr**

Redirecting stderr from TMSS10Sync to file sync\_stderr.txt. If the file sync\_stderr.txt already exists, it will be overwritten.

```
TMSS10Sync -S user:-password@serveraddress < myVolumes.csv > sync_stdout.txt
2> sync_stderr.txt
```

Redirecting stdout from TMSS10Sync to file sync\_stderr.txt. Using the double » symbol instead of a single >, the file sync stderr.txt will be appended to rather than overwritten.

```
TMSS10Sync -S user:-password@serveraddress < myVolumes.csv >>
sync_stdout.txt 2>> sync_stderr.txt
```

## **Concatenating Stdout and Stderr**

Depending on the purpose of the output from stdout and stderr it is possible to combine both streams to the one output file.

```
TMSS10Sync -S user:-password@serveraddress < myVolumes.csv > 2>&1
sync_stdout_stderr.txt
```

https://rtfm.tapetrack.com/ Printed on 2025/12/01 05:36

From:

https://rtfm.tapetrack.com/ - TapeTrack Documentation

Permanent link:

https://rtfm.tapetrack.com/technote/std?rev=1585528095

Last update: 2025/01/21 22:07

