# **NAME**

env\_parallel - export environment to GNU parallel

# **SYNOPSIS**

env\_parallel [options for GNU Parallel]

#### DESCRIPTION

env parallel is a shell function that exports the current environment to GNU Parallel.

If the shell function is not loaded, a dummy script will be run instead that explains how to install the function.

env\_parallel is alpha quality and not production ready.

# **Environment space**

**env\_parallel** only works if the size of the current environment is smaller than the maximal length of a command and smaller than half of the max if running remotely. E.g. The max size of Bash's command is 128 KB, so **env\_parallel** will fail if **set | wc -c** is bigger than 128 KB. Technically the limit is in execve(1) which IPC::open3 uses.

Bash completion functions are well-known for taking up well over 128 KB of environment space and the primary reason for causing **env\_parallel** to fail.

### **OPTIONS**

Same as GNU parallel.

### SUPPORTED SHELLS

### Bash

Installation

```
Put this in $HOME/.bashrc:
```

```
. `which env parallel.bash`
E.g. by doing:
  echo '. `which env_parallel.bash`' >> $HOME/.bashrc
aliases
             alias myecho=echo
             env_parallel myecho ::: test
              env_parallel -S server myecho ::: test
functions
             myfunc() { echo $*; }
              env_parallel myfunc ::: test
              env_parallel -S server myfunc ::: test
variables
             myvar=test
              env_parallel echo '$myvar' ::: test
              env_parallel -S server echo '$myvar' ::: test
arrays
             myarray=(foo bar baz)
```

```
env_parallel echo '${myarray[{}]}' ::: 0 1 2
env_parallel -S server echo '${myarray[{}]}' ::: 0 1 2
```

#### Zsh

Installation

```
Put this in $HOME/.zshrc:
```

```
. `which env_parallel.zsh`
```

# E.g. by doing:

```
echo '. `which env_parallel.zsh`' >> $HOME/.zshenv
```

aliases

Not supported - Zsh does not support aliases defined in the same parsing as they are used.

functions

```
myfunc() { echo $*; }
env_parallel myfunc ::: test
env_parallel -S server myfunc ::: test
```

variables

```
myvar=test
env_parallel echo '$myvar' ::: test
env_parallel -S server echo '$myvar' ::: test
```

arrays

```
myarray=(foo bar baz)
env_parallel echo '${myarray[{}]}' ::: 1 2 3
env_parallel -S server echo '${myarray[{}]}' ::: 1 2 3
```

### fish

Installation

Put this in \$HOME/.config/fish/config.fish:

```
source (which env_parallel.fish)
```

### E.g. by doing:

```
echo 'source (which env_parallel.fish)' >> $HOME/.config/fish/config.fish
```

aliases

```
alias myecho=echo
env_parallel myecho ::: test
env_parallel -S server myecho ::: test
```

functions

```
function myfunc
  echo $argv
end
env_parallel myfunc ::: test
```

```
env parallel -S server myfunc ::: test
        variables
                      set myvar test
                      env_parallel echo '$myvar' ::: test
                      env_parallel -S server echo '$myvar' ::: test
        arrays
                      set myarray foo bar baz
                      env_parallel echo '$myarray[{}]' ::: 1 2 3
                      env_parallel -S server echo '$myarray[{}]' ::: 1 2 3
ksh
        Installation
        Put this in $HOME/.kshrc:
          source `which env_parallel.ksh`
        E.g. by doing:
          echo 'source `which env_parallel.ksh`' >> $HOME/.kshrc
        aliases
                      alias myecho=echo
                      env_parallel myecho ::: test
                      env_parallel -S server myecho ::: test
        functions
                      myfunc() { echo $*; }
                      env_parallel myfunc ::: test
                      env_parallel -S server myfunc ::: test
        variables
                      myvar=test
                      env_parallel echo '$myvar' ::: test
                      env_parallel -S server echo '$myvar' ::: test
        arrays
                      myarray=(foo bar baz)
                      env_parallel echo '${myarray[{}]}' ::: 0 1 2
                      env_parallel -S server echo '${myarray[{}]}' ::: 0 1 2
pdksh
        Installation
        Put this in $HOME/.profile:
          source `which env_parallel.pdksh`
        E.g. by doing:
          echo 'source `which env_parallel.pdksh`' >> $HOME/.profile
```

```
aliases
              alias myecho=echo
              env_parallel myecho ::: test
              env_parallel -S server myecho ::: test
functions
             myfunc() { echo $*; }
              env_parallel myfunc ::: test
              env_parallel -S server myfunc ::: test
variables
             myvar=test
              env_parallel echo '$myvar' ::: test
              env_parallel -S server echo '$myvar' ::: test
arrays
             myarray=(foo bar baz)
              env_parallel echo '${myarray[{}]}' ::: 0 1 2
              env_parallel -S server echo '${myarray[{}]}' ::: 0 1 2
env_parallel for csh breaks $PARALLEL, so do not use $PARALLEL.
Installation
Put this in $HOME/.cshrc:
  source `which env_parallel.csh`
E.g. by doing:
  echo 'source `which env_parallel.csh`' >> $HOME/.cshrc
aliases
             alias myecho echo
              env parallel myecho ::: test
              env_parallel -S server myecho ::: test
functions
            Not supported by csh.
variables
              set myvar=test
              env_parallel echo "\$myvar" ::: test
              env_parallel -S csh@server echo "\$myvar" ::: test
arrays with no special chars
              set myarray=(foo bar baz)
              env_parallel echo "\{myarray [\{\}]}" ::: 1 2 3
             env_parallel -S csh@server echo "\${myarray\[\{\}\]}" ::: 1 2
            3
```

csh

### tcsh

env\_parallel for tcsh breaks \$PARALLEL, so do not use \$PARALLEL.

```
Installation
```

```
Put this in $HOME/.tcshrc:
```

```
source `which env_parallel.tcsh`
```

### E.g. by doing:

```
echo 'source `which env_parallel.tcsh`' >> $HOME/.tcshrc
```

### aliases

```
alias myecho echo
env_parallel myecho ::: test
env_parallel -S server myecho ::: test
```

functions

Not supported by tcsh.

variables

```
set myvar=test
env_parallel echo "\$myvar" ::: test
env_parallel -S tcsh@server echo "\$myvar" ::: test
```

arrays with no special chars

```
set myarray=(foo bar baz)
env_parallel echo "\${myarray\[\{\}\]}" ::: 1 2 3
env_parallel -S tcsh@server echo "\${myarray\[\{\}\]}" ::: 1 2
```

# **EXIT STATUS**

Same as GNU parallel.

# **AUTHOR**

When using GNU parallel for a publication please cite:

O. Tange (2011): GNU Parallel - The Command-Line Power Tool, ;login: The USENIX Magazine, February 2011:42-47.

This helps funding further development; and it won't cost you a cent. If you pay 10000 EUR you should feel free to use GNU Parallel without citing.

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Parts of the manual concerning **xargs** compatibility is inspired by the manual of **xargs** from GNU findutils 4.4.2.

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# **DEPENDENCIES**

env\_parallel uses GNU parallel.

# **SEE ALSO**

 $\textbf{parallel}(1),\,\textbf{bash}(1),\,\textbf{ksh}(1),\,\textbf{zsh}(1),\,\textbf{ksh}(1),\,\textbf{pdksh}(1)$