

## NAME

parset - set shell variables in parallel

## SYNOPSIS

**parset** *variablename* [options for GNU Parallel]

**env\_parset** *variablename* [options for GNU Parallel]

## DESCRIPTION

**parset** is a shell function that puts the output from GNU **parallel** into shell variables.

**env\_parset** is a shell function that puts the output from **env\_parallel** into shell variables.

The **parset** and **env\_parset** functions are defined as part of **env\_parallel**.

If *variablename* is a single variable name, this will be treated as the destination variable. If the variable is defined as an associative array (using **typeset -A myassoc**), this will be used. Otherwise the variable will be made into a normal array.

If *variablename* contains multiple names separated by ',' or space, the names will be the destination variables. The number of names must be at least the number of jobs.

## OPTIONS

Same as GNU **parallel**, but they are put *after* the destination variable.

## SUPPORTED SHELLS

Bash/Zsh/Ksh/Mksh

### Examples

Put output into **myarray**:

```
parset myarray seq 3 ::: 4 5 6
echo "${myarray[1]}"
```

Put output into vars **\$seq**, **\$pwd**, **\$ls**:

```
parset "seq pwd ls" ::: "seq 10" pwd ls
echo "$ls"
```

Put output into vars **\$seq**, **\$pwd**, **\$ls**:

```
into_vars=(seq pwd ls)
parset "${into_vars[*]}" ::: "seq 10" pwd ls
echo "$ls"
```

Put output into associative array **myassoc** (not supported for mksh):

```
typeset -A myassoc
parset myassoc seq ::: 4 5 ::: 6 7
echo "${myassoc[4 7]}"
```

The commands to run can be an array:

```
cmd=("echo first" "echo '<<joe  \"double  space\"  cartoon>>' " "pwd")
parset data ::: "${cmd[@]}"
echo "${data[1]}"
echo "${data[2]}"
```

**parset** can read from stdin (standard input) if it is a file:

```
parset res echo < parallel_input_file
```

but **parset** can *not* be part of a pipe. In particular this means it cannot read from a pipe or write to a pipe:

```
seq 10 | parset res echo Does not work
```

but must instead use a tempfile:

```
seq 10 > parallel_input
parset res echo :::: parallel_input
echo "${res[1]}"
echo "${res[9]}"
```

or a FIFO:

```
mkfifo input_fifo
seq 30 > input_fifo &
parset res echo :::: input_fifo
echo "${res[1]}"
echo "${res[29]}"
```

or Bash/Zsh/Ksh process substitution:

```
parset res echo :::: <(seq 100)
echo "${res[1]}"
echo "${res[99]}"
```

## Installation

Put this in the relevant **\$HOME/.bashrc** or **\$HOME/.zshenv** or **\$HOME/.kshrc**:

```
. `which env_parallel.bash`
. `which env_parallel.zsh`
source `which env_parallel.ksh`
```

E.g. by doing:

```
echo '. `which env_parallel.bash`' >> $HOME/.bashrc
echo '. `which env_parallel.zsh`' >> $HOME/.zshenv
echo 'source `which env_parallel.ksh`' >> $HOME/.kshrc
```

or by doing:

```
env_parallel --install
```

## ash/dash (FreeBSD's /bin/sh)

### Examples

ash does not support arrays.

Put output into vars **\$seq**, **\$pwd**, **\$ls**:

```
parset "seq pwd ls" :::: "seq 10" pwd ls
echo "$ls"
```

**parset** can read from stdin (standard input) if it is a file:

```
parset res1,res2,res3 echo < parallel_input_file
```

but **parset** can not be part of a pipe. In particular this means it cannot read from a pipe or write to a pipe:

```
seq 3 | parset res1,res2,res3 echo Does not work
```

but must instead use a tempfile:

```
seq 3 > parallel_input
parset res1,res2,res3 echo ::: parallel_input
echo "$res1"
echo "$res2"
echo "$res3"
```

or a FIFO:

```
mkfifo input_fifo
seq 3 > input_fifo &
parset res1,res2,res3 echo ::: input_fifo
echo "$res1"
echo "$res2"
echo "$res3"
```

## Installation

Put the relevant one of these into **\$HOME/.profile**:

```
. `which env_parallel.sh`
. `which env_parallel.ash`
. `which env_parallel.dash`
```

E.g. by doing:

```
echo '. `which env_parallel.ash`' >> $HOME/.bashrc
```

or by doing:

```
env_parallel --install
```

## 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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## **DEPENDENCIES**

**parset** uses GNU **parallel**.

## **SEE ALSO**

**parallel**(1), **env\_parallel**(1), **bash**(1).