

SLAC 2024

byobu

der bessere screen



Packaging Solutions

KTP Kunststoff Palettentechnik GmbH

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```
root@playground02: /srv/docker/blackhole — Home
GNU nano 6.2                                open docker logs.sh
#!/bin/bash
#
# SLAC 2024
#
SESSION_NAME=$(basename "`pwd`")
WINDOWS_FILE="$HOME/.byobu/windows.$SESSION_NAME"
FOUND_SESSIONS=$(screen -list | grep "$SESSION_NAME" | wc -l)

if [ "$FOUND_SESSIONS" -gt 1 ]; then
    echo -e "\nERROR: MULTIPLE SESSIONS for: \"$SESSION_NAME\"
    echo -e "Call byobu manually and choose session via screen -ls
    exit 1
fi

[ Read 37 lines ]
^G Help          ^O Write Out    ^W Where Is     ^K Cut          ^T
^X Exit          ^R Read File    ^\ Replace      ^U Paste        ^_
...2$ kibana    3@$ logstash   4@$ ubuntu     5*$ NANO        root
u  Ubuntu 22.04 118!! 2## 104d3h 0.10 8x2.6GHz 23.50
```

Inhaltsverzeichnis

Byobu

Überblick

Konfiguration

Backend Auswahl

zombie kr

Windows Preset Dateien

Tastatenbelegung

F7 - Scrollback Mode

Shell Skripte

install-byobu.sh

open-docker-logs.sh

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Byobu

Überblick

- ▶ Namensherkunft: japanische Faltschirm - byōbu
- ▶ mehrere Terminals in einer Session
- ▶ mehrere User gleichzeitig



japanischer Byobu



Frontend



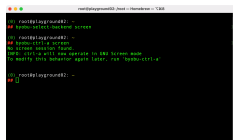
Frontend

Konfiguration

Backend Auswahl

```
1 | byobu-select-backend screen  
2 | byobu-ctrl-a screen
```

- ▶ mögliche Backends: screen, tmux
- ▶ Konfiguration liegt in: `~/ .byobu/`



```
root@byobu001: ~# byobu-select-backend screen  
root@byobu001: ~# byobu-ctrl-a screen  
byobu: ctrl-a action  
byobu: screen session found  
byobu: ctrl-a action now update to use screen backend  
byobu: ctrl-a action update later. run "byobu-ctrl-a"  
root@byobu001: ~#
```

Shell Beispiel

Windows Preset Dateien

```
1 | cat > /root/.byobu/windows.perf << EOF
2 | zombie kr
3 | verbose on
4 | screen -t "htop" htop
5 | screen -t "iotop" iotop -a
6 | screen -t "iftop" bash -c "TERM=screen-256color-bce LANG=C iftop"
7 | screen -t "bash" bash
8 | EOF
```

- ▶ Session wird gestartet mit:

```
env BYOBU_WINDOWS=perf byobu -S "Monitor"
```

- ▶ zombie kr kann auch optional in eine Windows Preset Datei
- ▶ Default Setting ist ohne postfix: ~/.byobu/windows

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Tastatenbelegung

- ▶ F3 → nächstes Window
- ▶ F4 → vorheriges Window
- ▶ F6 → Trennen
- ▶ F8 → Umbenennen
- ▶ CTRL-a \ → alle Sessions terminieren

F7 - Scrollback Mode

- ▶ F7 → Scrollback Mode / Copy Mode
 - ▶ Cursor-Tasten → Navigation
 - ▶ Space → Markieren
 - ▶ / → Vorwärtssuche
 - ▶ ? → Rückwärtssuche
 - ▶ ESC → Modus verlassen

install-byobu.sh

```
1 byobu-select-backend screen &> /dev/null
2 byobu-ctrl-a screen &> /dev/null
3
4 cat > /root/.screenrc << EOF
5 zombie kr
6 verbose on
7 EOF
8
9 cat > /root/.byobu/keybindings << EOF
10 source \$BYOBU_PREFIX/share/byobu/keybindings/common
11 escape "^Aa"
12 register x "^A"
13 bindkey "^A"
14 EOF
15
16 cat > /root/.byobu/windows << EOF
17 # zombie kr
18 # verbose on
19 # screen -t "ls /"          watch ls /
20 # screen -t "ls via bash"  bash -c "watch ls"
21 # screen -t "bash shell"   bash
22 EOF
```

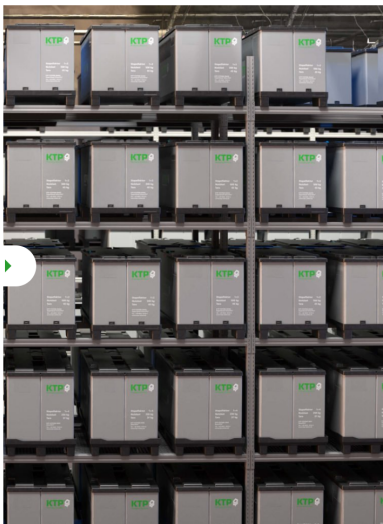
open-docker-logs.sh

```

1 SESSION_NAME=$(basename "`pwd`")
2
3 echo "zombie kr" > "$WINDOWS_FILE"
4 echo "verbose on" >> "$WINDOWS_FILE"
5 echo "screen -t \"docker ps\" watch docker ps -a" \
6     >> "$WINDOWS_FILE"
7
8 for container in $(docker-compose -f docker-compose.yml ps \
9     | tail -n +3 \
10    | cut -d " " -f 1 \
11    | egrep -v '^a'\
12    ); do
13     echo screen -t "$container" \
14         bash -c \"cd /srv/docker \; \
15             docker logs --tail 1000 --follow "$container\" \
16                 >> "$WINDOWS_FILE"
17 done
18
19 env BYOBU_WINDOWS="$SESSION_NAME" byobu -S "$SESSION_NAME"

```

Live Demo







```
(0) root@playground02: ~  
## █
```

OS Updates

Users

Uptime

Current Load

CPU

Memory

Hard Disk

0* & \$ byobu-shell

u Ubuntu 22.04

120!!

2##

108d2h

0.05

root@playground02

8x2.6GHz

23.5GB15%

98GB49%

2024-05-03 12

10.99.10.166

Menu: <F9>

```
(0) root@playground02: ~  
## █
```

screen -t "ls /"
screen -t "ls via bash"
screen -t "bash shell"

watch ls /
bash -c "watch ls"
bash



```
00$ ls / 1-@$ ls via bash 2*$ bash shell root@playground02 10.99.10.166 Me...  
u Ubuntu 22.04 121!!! 177 110u5ll 0.14 8x2.6GHz 23.5GB15% 98GB49% 2024-05-05 16
```

```
(0) root@playground02: ~
```

```
## byobu-select-backend screen
```

```
(0) root@playground02: ~
```

```
## byobu-ctrl-a screen
```

```
No screen session found.
```

```
INFO: ctrl-a will now operate in GNU Screen mode
```

```
To modify this behavior again later, run 'byobu-ctrl-a'
```

```
(0) root@playground02: ~
```

```
## 
```

(0) root@playground02: ~

exit

exit

=== Command terminated normally (Fri May 3 13:41:06 2024) ===

0*Z bash

root@playground02 10.99.10.166 Menu: <F9>

u Ubuntu 22.04 120!! 2## 108d2h 0.04 8x2.6GHz 23.5GB15% 98GB49% 2024-05-03 13

(0) root@playground02: ~

exit

exit

=== Command terminated normally (Fri May 3 13:41:06 2024) ===

0*Z bash

root@playground02 10.99.10.166 Menu: <F9>

u Ubuntu 22.04 120!! 2## 108d2h 0.04 8x2.6GHz 23.5GB15% 98GB49% 2024-05-03 13