

Astra Linux Special Edition 1.6:

- mkiosk
 - otrace
 - fly-admin-kiosk
 - Fly

i

- Astra Linux Special Edition .10015-01 (1.6) 5.15 parsec-kiosk2

```
umask , umask ,  
/etc/parsc/kiosk_mask 0000( ).  
• 0003( ), , , ;  
• 0000,  
, /parsecfs/mode_mask.  
. , ..  
. , ..  
parsec-cups( ).
```

mkiosk

```
mkiosk          .          ACL      parsec,      .          ACL      .
. , , /etc/hosts :
```

 /etc/hosts r--

(r), (w) (x) /usr/bin/example.sh :

 /usr/bin/example.sh rwx

bash: ls .. /etc/parsec/kiosk-profiles: mkiosk: default: mkiosk: ..

otrace.

PAM- mkiosk :

-h, --help	
-u , --user=	

-w, --without-profile	.
-e, --mask	. . . /parsecfs/mode_mask

: /etc/parsec/kiosk/<_>

```
sudo mkiosk -u <_>
```

/etc/passwd , .., 0003,, :

```
mkiosk -u <_> --mask=3 --without-profile "/etc/passwd r--"
```

otrace

otrace open() execve().
otrace:

 otrace [-h, --help] [-s, --silent] [-o, --output=] [-k, --kiosk-dir=] [-p, --pid=] [-u, --user=] [-t, --trace] [-a, --audit-trace] [-m, --merge] [-f, --trace-failed] [-e, --mask=] [command]

otrace .
() , , , . , , . ACL - parsec. . . ACL - .
, . /etc/parsec/kiosk-profiles`.
, ls:

/bin/ls r-x
/etc/group r--
/etc/ld.so.cache r--
/etc/ld.so.preload r--
/etc/localtime r--
/etc/nsswitch.conf r--
/etc/passwd r--
/etc/selinux/config r--
/lib/libacl.so.1 r--
/lib/libattr.so.1 r--
/lib/libc.so.6 r--
/lib/libdl.so.2 r--
/lib/libnsl.so.1 r--
/lib/libnss_compat.so.2 r--
/lib/libnss_files.so.2 r--
/lib/libnss_nis.so.2 r--
/lib/libpthread.so.0 r--
/lib/librt.so.1 r--
/lib/libselinux.so.1 r--
/proc/mounts r--
/usr/lib/gconv/gconv-modules.cache r--
/usr/lib/gconv/KOI8-R.so r--
/usr/lib/locale/locale-archive r--
/usr/share/locale/locale.alias r--
/usr/share/locale/ru/LC_MESSAGES/coreutils.mo r--
/usr/share/locale/ru/LC_TIME/coreutils.mo r--
/usr/share/locale/ru_RU/LC_MESSAGES/coreutils.mo r--
/usr/share/locale/ru_RU/LC_TIME/coreutils.mo r--
/usr/share/locale/ru_RU.UTF-8/LC_MESSAGES/coreutils.mo r--
/usr/share/locale/ru_RU.UTF-8/LC_TIME/coreutils.mo r--
/usr/share/locale/ru.UTF-8/LC_MESSAGES/coreutils.mo r--
/usr/share/locale/ru.UTF-8/LC_MESSAGES/coreutils.mo r--
/usr/share/locale/ru.UTF-8/LC_TIME/coreutils.mo r--
/usr/share/locale/ru.UTF-8/LC_TIME/coreutils.mo r--

```

mkiosk.

, , , . , , otrace. , , /etc/parsec/kiosk-profiles/default .

,
,
,
'',
otrace ( . --merge).

, , /etc/parsec/kiosk , .
PAM- mkiosk.

otrace

--- strace ( --trace).
--- PARSEC ( --audit-trace). strace , , SUID-.

--trace      otrace ( ), PID ( --pid).

--audit-trace , --trace. , --- --user.

,
,
,
--audit-trace, , , .

otrace`     (open(), execve()), . --trace-failed, . , .

:

```

-h, --help	
-s, --silent	
-o , --output=	. --- stdout
-k , --kiosk-dir=	. --trace. --- /etc/parsec/kiosk-profiles
-p , --pid=	,
-u , --user=	. --audit-trace --merge
-t, --trace	strace. --audit-trace
-a, --audit-trace	PARSEC. --trace
-m, --merge	, - . . , , , (/etc/parsec/kiosk-profiles/default)
-f, --trace-failed	open() execve(). ,
-e , --mask=	. , . 7

```
:  
ls strace. /tmp/ls_trace
```

```
otrace --trace -o /tmp/ls_trace ls /
```

```
PARSEC.      . stdout
```

```
otrace --audit-trace -u <_> -f
```

```
t, ls /etc/parsec/kiosk-profiles      /usr/bin/example.  
, 3 , ,
```

```
otrace --merge --mask=3 -u <_> ls "/usr/bin/example r-x"
```

fly-admin-kiosk

, fly-admin-kiosk, :



- , /etc/parsec/kiosk-profiles;
- fly-dm /etc/parsec/kiosk.

, , parsec-kiosk.

fly-dm /etc/parsec/kiosk /etc/parsec/kiosk-profiles, :

```
sudo mv /etc/parsec/kiosk/fly-dm /etc/parsec/kiosk-profiles/fly-dm
```

fly-dm /etc/parsec/kiosk, :

```
echo fly-dm | sudo tee /etc/parsec/kiosk/fly-dm
```

/etc/parsec/kiosk-profiles, :

(i) "/lib64/ld-linux-x86-64.so.2" r-x
"/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2" r-x

fly-admin-kiosk.

<_> /etc/parsec/kiosk <_> , , :

- default
- bash

:

```
echo -e "default\nbash" | sudo tee /etc/parsec/kiosk/<_>
```

:

- (, tty1);
- (, tty2) , :

```
sudo otrace -a -o /etc/parsec/kiosk-profiles/<_> -f --mask=3 -u <_>
```

- parlogd;
- , ;
- ;
- root , <Enter>;
- , :

```
echo __ | sudo tee -a /etc/parsec/kiosk/<_>
```

- , :

```
echo 0003 | sudo tee /etc/parssec/kiosk_mask  
sudo reboot
```

:

- fly-dm /etc/parssec/kiosk/fly-dm;
- fly __, root :

```
echo fly | sudo tee -a /etc/parssec/kiosk/_
```

fly :

1. ;
2. fly-dm|, :

```
sudo systemctl stop fly-dm
```

3. /usr/bin/x-session-manager, :

```
ls -l /usr/bin/x-session-manager
```

4. .orig, :

```
sudo rm /usr/bin/x-session-manager  
sudo ln -s /etc/alternatives/x-session-manager /usr/bin/x-session-  
manager.orig
```

5. /usr/bin/x-session-manager :

```
(i) #!/bin/bash  
/usr/sbin/otrace -t -f -o /test/fly --mask=3 /usr/bin/x-session-manager.orig $@ &  
sleep 20  
/usr/bin/fly-wmfunc FLYWM_EXIT
```

6. , :

```
sudo chmod 777 /usr/bin/x-session-manager
```

7. strace, :

```
sudo apt install startrace
```

8. /test 777, :

```
mkdir -m 777 /test
```

9. fly-dm, :

```
sudo systemctl start fly-dm
```

10. 20 (- Fly, fly-term);
11. root fly /test, :

```
ls -l /test/fly
```

12. /usr/bin/x-session-manager, :

```
sudo rm /usr/bin/x-session-manager
```

13. /usr/bin/x-session-manager, :

```
sudo ln -s /etc/alternatives/x-session-manager /usr/bin/x-session-manager
```

14. /test/fly , ... resumed ..., /proc , , "./";

15. , :

```
sudo cp /test/fly /etc(parsec/kiosk-profiles/fly
```

16. fly , :

```
echo fly | sudo tee -a /etc/parsec/kiosk/<_>
```

17. , :

```
echo 0003 | sudo tee /etc/parsec/kiosk_mask  
sudo reboot
```

18. ;

19. , :

- a. ;
- b. /home/<_>/xsession-errors, , fly, .
/home/_/xsession-errors:



/etc/X11/fly-dm/Xsession : line 55 /bin/df: /

fly:

```
echo ''/bin/df" r-x' | sudo tee -a /etc/parsec/kiosk-profiles/fly
```

20. , :

```
sudo mkiosk -u <_>
```

21. /home/<_>/xsession-errors| , "unable to create error file":

- a. fly:

i. :

- 1. chmod;
- 2. rm
- 3. cp

ii. :

- 1. XErrorDB;
- 2. /usr/lib/parsec/bin/x-session-manager

, , .

(, firefox) :

1. , :

```
echo 0000 | sudo tee /etc/parssec/kiosk_mask  
sudo reboot
```

```
2.      ;  
3.      ;  
4. P , :  
  
      sudo otrace -a -o /etc/parssec/kiosk-profile/firefox -f --mask=3 -u <_>  
  
5. parlogd;  
6. / firefox;  
7. ;  
8. , <Enter>;  
9. firefox , :  
  
      echo firefox | sudo tee -a /etc/parssec/kiosk/_  
  
10. , :  
  
      echo 0003 | sudo tee /etc/parssec/kiosk_mask  
sudo reboot
```

Fly

```
fly-admin-smc.      fly-admin-smc << Fly>> << Fly>>. . . , . . , . . , .. .  
fly-admin-smc , .
```