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MilaX - OpenSolaris small LiveCD distro

Alexander R. Eremin
MilaX Developer

opensolaris
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Can Solaris become as small as DSL?

DSS 0.1 Feb 2008 CDDL v.1

MilaX 0.1, 0.1.1 Feb 2008

MilaX 0.2 Mar 2008

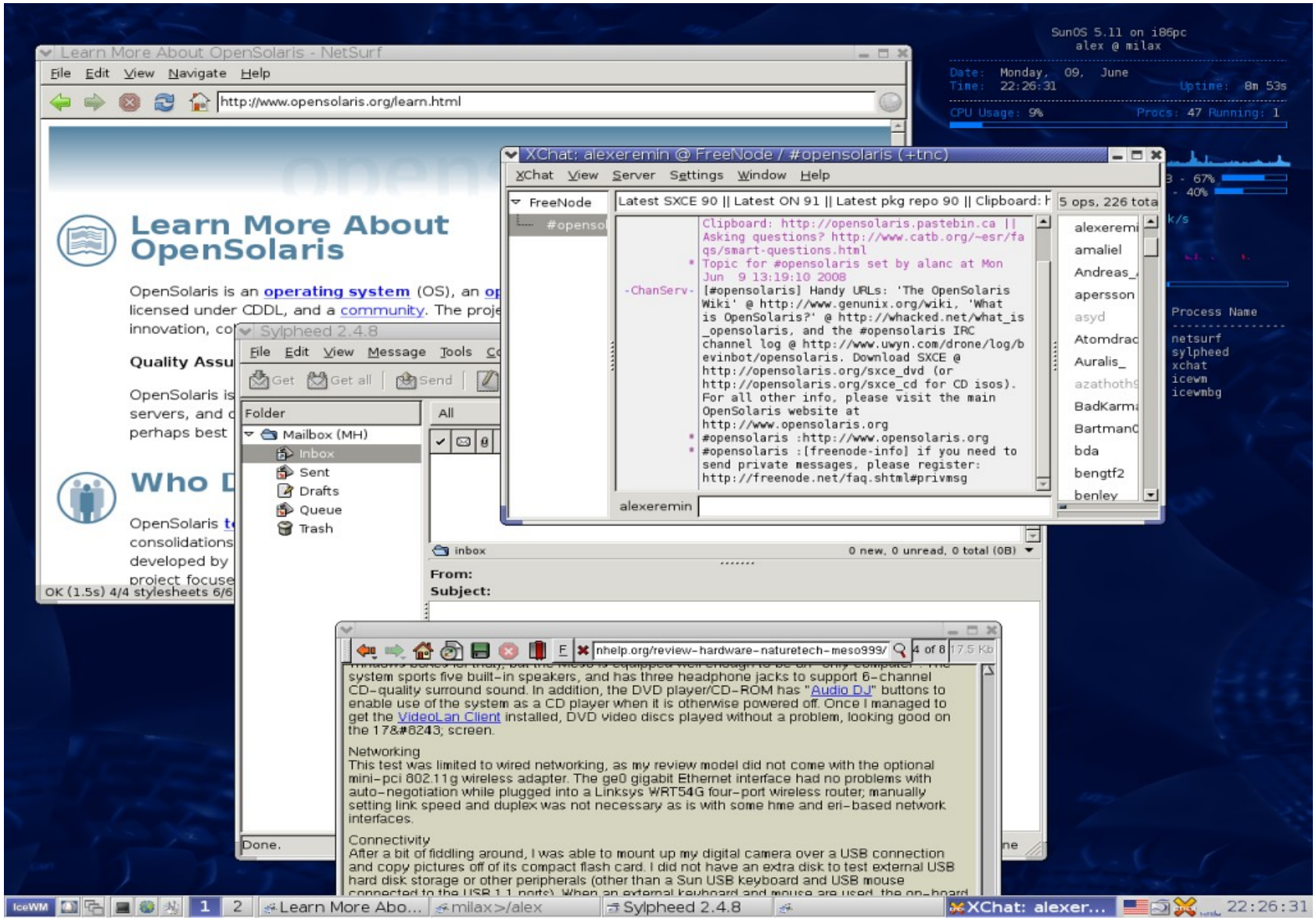
Milax 0.3 May 2008

June 2008

MilaX 0.3.1

MilaX 0.3.1 server

Last version released June 10 2008



MilaX

LiveCD, LiveUSB

Virtualizing MilaX

LiveCD,LiveUSB

Qemu

VirtualBox

VMware

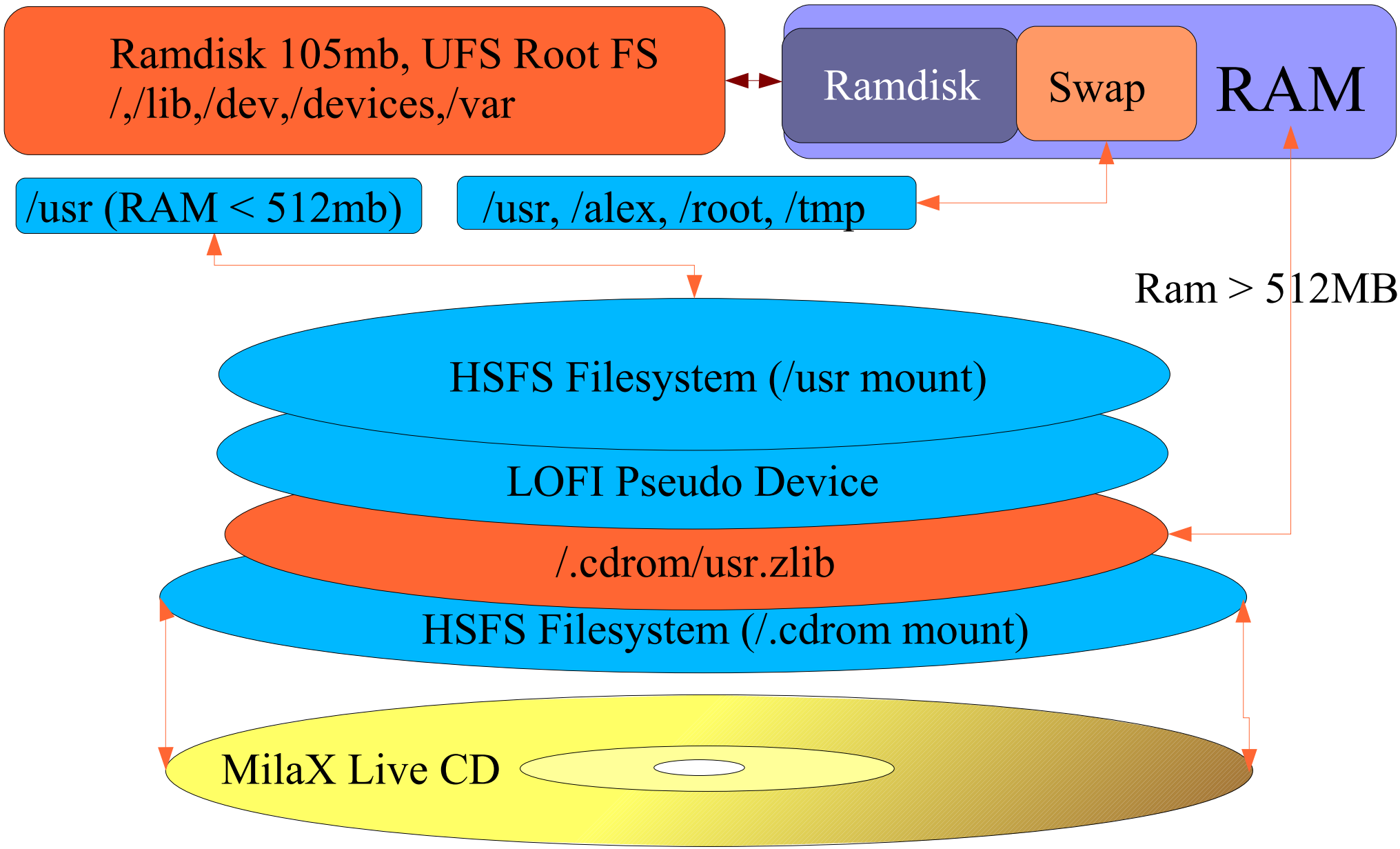
MilaX advantages

- Small size
- Fast boot
- Loading live image from RAM
- Booting from various storage devices
- People can try small Solaris without installing on the harddisk.
- All Solaris features: dtrace,zfs, zones,e.t.c
- Latest drivers and bugfixes
- Two versions: desktop and server

When MilaX is the best choice?

- Old PC's
- Not enough RAM
- Not enough free disk space
- Fast and small server (0.3.1 server)
- Fast developing (0.3.1 server)
- Virtual testing

MilaX Filesystem



Milax 0.3.1 Apps

Desktop version

- Gtk-Terminal, Beaver, Netsurf, Sylpheed, Midnight Commander, emelFM, XMMS, Xpdf, VNC viewer, Rdesktop, Nmap, gFTP, gPicview, Conky, XChat, Xpad.

Server version

- Apache, PHP, Samba and NFS servers, GCC, GMake, Midnight Commander, Pine, Mutt, Elinks, Lynx.

MilaX first boot

- Login to system as alex with pass: alex
- Access for root - through su with pass: root
- To manually start the X-Windows system use startx command.
- Switching X Keyboard Layout in runtime: Alt-Shift or click on a fbxkb icon on the bottom right of IceWM panel.

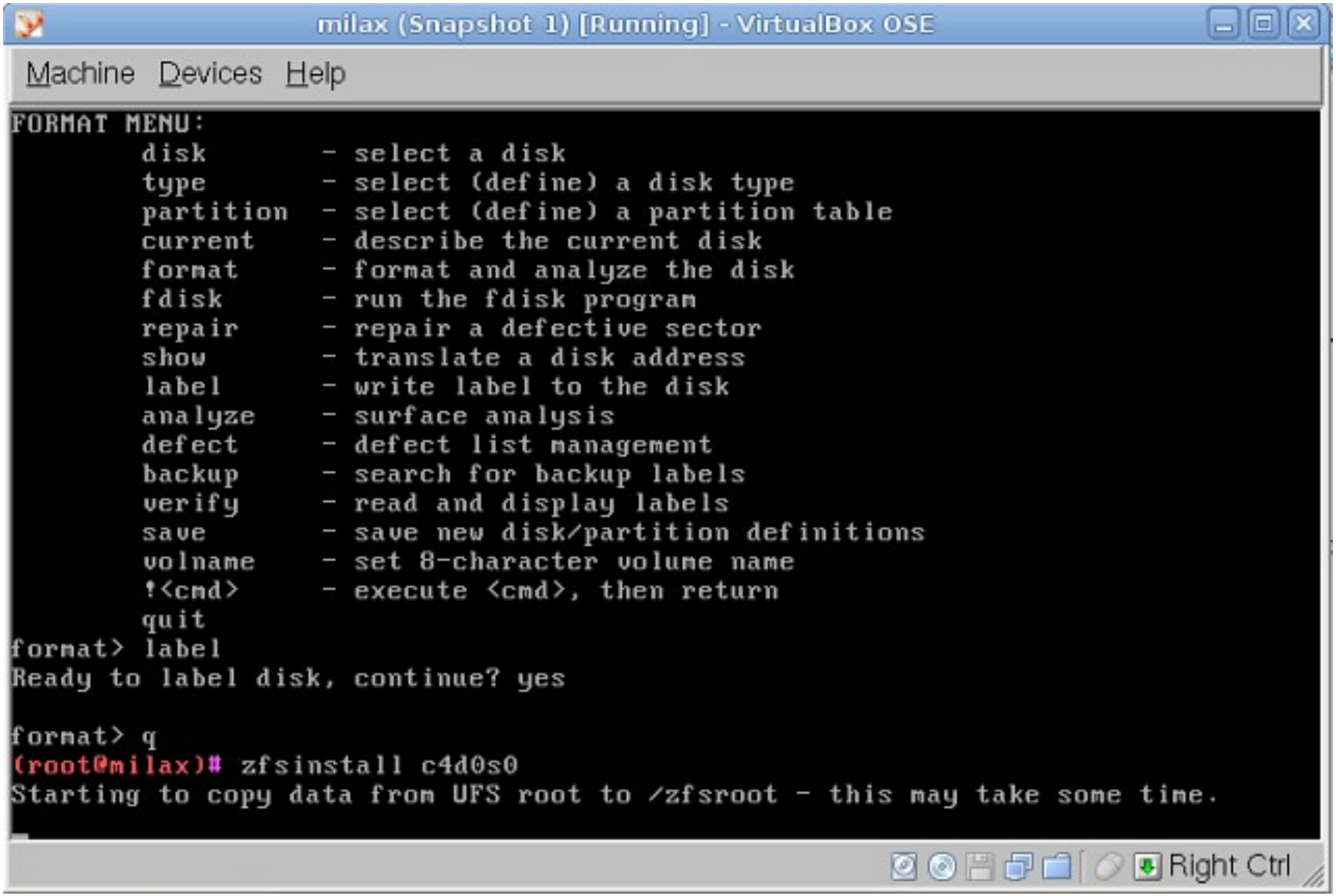
Creating a Solaris partition

```
(alex@milax)# fdisk /dev/rdsk/c3d0p0
No fdisk table exists. The default partition for the disk is:
  a 100% "SOLARIS System" partition

Type "y" to accept the default partition,  otherwise type
    "n" to edit the
 partition table.
y
```

Creating a slice for the root fs

```
partition> p
Current partition table (unnamed):
Total disk cylinders available: 1302 + 2 (reserved cylinders)

Part      Tag    Flag     Cylinders       Size            Blocks
  0 unassigned    wm       3 -  264       2.01GB    (262/0/0)   4209030
  1       swap    wm     265 -  395       1.00GB    (131/0/0)   2104515
  2     backup    wu       0 - 1301       9.97GB    (1302/0/0) 20916630
  3 unassigned    wm       0              0         (0/0/0)           0
  4 unassigned    wm       0              0         (0/0/0)           0
  5 unassigned    wm       0              0         (0/0/0)           0
  6 unassigned    wm       0              0         (0/0/0)           0
  7 unassigned    wm       0              0         (0/0/0)           0
  8       boot    wu       0 -    0       7.84MB    (1/0/0)       16065
  9 alternates    wm       1 -    2       15.69MB   (2/0/0)       32130
partition> label
```

ZFS-boot installation on HD



USB stick installation

```
(alex@milax)$ pfexec usbcopy milax03.usb
Found the following USB devices:
0: /dev/rdsk/c4t0d0p0 953.5 MB Kingston DataTraveler 2.0 1.00
Enter the number of your choice: 0
WARNING: All data on your USB storage will be lost.
Are you sure you want to install to
Kingston DataTraveler 2.0 1.00, 953 MB at /dev/rdsk/c4t0d0p0 ?(y/n) y
umount: warning: /dev/dsk/c4t0d0s0 not in mnttab
umount: /dev/dsk/c4t0d0s0 not mounted
Copying image to USB device
7744+0 records in
7744+0 records out
126877696 bytes (127 MB) copied, 57.9422 s, 2.2 MB/s
real 0m57.950s
user 0m0.011s
sys 0m0.304s
Installing grub to USB device /dev/rdsk/c4t0d0s0
Completed copy to USB
```

Apache2+PHP5 on MilaX server

Get HTTP Server in two minutes!

Boot 0.3.1 server Live CD or Live-USB.

Enable apache 2.2:

```
(alex@milax)$ pfexec /etc/init.d/apache stop
(alex@milax)$ pfexec svcadm enable http
```

Enable ftp if needed:

```
(alex@milax)$ pfexec svcadm enable ftp
```

Next steps

- Sparc version
- Transition on IPS and creation of MilaX own pkg repository
- Live image size and booting speed reduction
- User interface improvements

Resources

- http://www.milax.org
- http://www.genunix.org/distributions/dss/
- http://www.opensolaris.org/os/project/milax/
- http://www.opensolaris.org/jive/forum.jspa?forumID=210
- http://wiki.sun.com/display/BigAdmin/

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Thank you!

Alexander R. Eremin
MilaX Developer
St.Petersburg, Russia
eremin at milax dot org

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