

STEP BY STEP MANUAL

HOW TO BUILD AN IRIX 6.5.X INSTALL SERVER

1. Create a new user account:

Login: **instsrv**

Password: *********

2. Create a new directory **irix** in the home directory of the user "instsrv" and copy all ten IRIX CDs into it.
Make sure to copy all 4 Overlay CDs into the directory **~/irix/overlay** and both Foundation CDs into **~/irix/foundation**.

It should look like this:

```
INDY 2% cd irix
INDY 4% ls -l
total 16
drwxr-xr-x  5 instsrv user      122 Oct 25 18:12 applications
drwxr-xr-x  6 instsrv user      156 Oct 25 18:56 development_foundation
drwxr-xr-x  6 instsrv user      137 Oct 25 18:31 development_libraries
drwxr-xr-x  3 instsrv user       96 Oct 25 17:55 foundation
-rw-r--r--  1 instsrv user      380 Oct 26 06:00 init.sh
drwxr-xr-x  6 instsrv user      123 Oct 25 18:59 nfs
drwxr-xr-x  7 instsrv user     4096 Oct 25 17:27 overlay
```

3. After this step you've to edit three System Files. You've to put in there IPs, MAC Addresses like also Hostnames and correct Sash for each System in your LAN.

Note that the *INDY* was my Install Server and the Systems like *O2*, *OCTANE2* and *ONYX2* were only Clients in my LAN for installing IRIX onto them.

You have to do changes within these files only with Root privileges. The following listings are showing the configuration of my LAN.

/etc/ethers :

```
#
# /etc/ethers maps Ethernet addresses to hostnames
#
# The library routine ether_line() uses this file.
#
# The format of a line is:
#
# x:x:x:x:x:x      hostname
#
# where the first field is the 48-bit Ethernet address
# expressed as 6 hexadecimal bytes.
#
08:00:69:85:f7:d6      O2
08:00:69:0a:fd:b8     OCTANE2
08:00:69:05:78:67     ONYX2
```

/etc/bootptab :

```
...
...
#
# The remainder of this file contains one line per client interface
# with the information shown by the table headings below.
# The 'host' name is also tried as a suffix for the 'bootfile'
# when searching the home directory. (e.g., bootfile.host)
#
# host      htype haddr      iaddr      bootfile
#
# IRIS      1 01:02:03:8a:8b:8c 192.0.2.1   unix
O2          1 08:00:69:85:f7:d6 192.168.6.2 /usr/people/instrsr/irix/overlay/stand/sashARCS
OCTANE2    1 08:00:69:0a:fd:b8 192.168.6.3 /usr/people/instrsr/irix/overlay/stand/sash.64
ONYX2      1 08:00:69:05:78:67 192.168.6.5 /usr/people/instrsr/irix/overlay/stand/sash.64
```

/etc/inetd.conf :

```
...
...
bootp      dgram udp   wait  root  /usr/etc/bootp  bootp
tftp       dgram udp   wait  guest /usr/etc/tftpd  tftpd -s /usr/people/instrsr/irix
...
...
```

4. To enable all new settings without to reboot the Machine, type following command with Root privileges into a Terminal:

```
/etc/killall -HUP inetd
```

5. Now you have to create a File [init.sh](#) with Nedit, which you'll put later on into the Directory where all Packages are residing. Former known as [~/irix](#).

Note that the maybe unknown IP 192.168.6.4 shows my Install Server, the INDY, or in your case your Install Server where you'll put it's IP in!

This little file is very helpful in this case cause it automates the complete Package reading process in inst when you'll install IRIX.

It's the overall eye catching item in this whole work, and that's what we need – "Automatism" – don't we? 😊

The interior of this File contains:

```
open 192.168.6.4:/usr/people/instrsr/irix/overlay/dist
open 192.168.6.4:/usr/people/instrsr/irix/foundation/dist
open 192.168.6.4:/usr/people/instrsr/irix/applications/dist
open 192.168.6.4:/usr/people/instrsr/irix/development_foundation/dist/dist6.5
open 192.168.6.4:/usr/people/instrsr/irix/development_libraries/dist
open 192.168.6.4:/usr/people/instrsr/irix/nfs/dist/dist6.5
```

6. The Install Server should now be powered on if you desire to install IRIX on a Client across your LAN.

You have to boot your Client into Maintenance. If you think you've to reorganize the partitions on your HDD, you need to change into the Command Monitor. For Example on an Octane2 you've to type the following command into the Command Line:

```
boot -f bootp()192.168.6.4:/usr/people/instsrv/irix/overlay/stand/fx.64
```

This will boot fx from the Install Server across the LAN. You're now able to reorganize the Partitions on Octane2.

7. When now desire to continue installing IRIX onto a Client, you need to boot across the LAN of your IRIX Install Server into inst. Firstly you've to boot into the Maintenance. In the Maintenance Menu you've to follow this path in its GUI:

[Install System Software](#) ⇒ [Remote Directory](#)

There you should enter the IP address of the Server, in our case:

```
192.168.6.4
```

Last but not least, you also have to enter in the next mask the path of the Remote Directory with its Install Tools:

```
/usr/people/instsrv/irix/overlay/dist
```

After this steps, your Client boots across the LAN into inst from the Install Server.

8. In some situations inst may ask you about the Clients Network Settings like IP, Subnet mask. Just enter the IP of you current Client you wish IRIX to install onto it.

That doesn't happen on every SGI, for example it will be asked on my Onyx2 Deskside, but it won't on my Octane2. I don't really know where the hell this stupid bug is, but it doesn't have to bother us either!

Note that only Clients could be installed like configured before on the Install Server in [/etc/ethers](#) and [/etc/bootptab](#)!

9. After all you should see inst full initialized with its ready prompt. If you've reorganized your Partitions on your HDD could it be that inst lets you choose between two Block sizes.

I recommend choosing 4096 Blocks with every HDD over 4GB. With all smaller Candidates beneath 4GB you should better choose 512 Blocks.

It should be clear that if you've reorganized your HDD that you've to do an mkfs on it.

You could do that slightly in the advanced Menu within inst.

10. Inst will now read all Packages automatically out of the previous made File *init.sh* on the Server by typing this command:

```
admin source 192.168.6.4:/usr/people/instsrv/irix/init.sh
```

11. After that your Client should connect to the Server and start to read all Overlays. When all Overlay Packages went though, inst should stop to give us the chance to enter Paths for other Packages. But we don't need that cause we have the "Automatism" – so we'll choose the Option "done" .

In this way inst reads all left Packages, one after the other automatically. This will be:

- Foundation 1
- Foundation 2
- Development Foundation
- Development Libraries
- NFS

That's the hint why you don't need to play in the traditional way Disc jockey with ten CDs and weird paths cause you want to install via Remote on your LAN – so it's a very unique and comfortable thing.

- 12 . 'Cause inst don't asks us which stream we want to install, we've to set it ourselves.

You could do that easily in inst by typing one of following commands:

```
install maint      (for the Maintenance Release)
```

```
install feature    (for the Feature Release)
```

12. The last you could check now are the possible conflicts. But there should be none by using this default way of automatic Package reading.

Then you're ready to start the installation with *go*.

All other could be handled as usual.

Have fun! ☺

CORRECT SASH/FX VERSIONS FOR DIFFERENT SGI SYSTEMS

SYSTEM	SASH- / FX-VERSION	IRIX VERSION
PERSONAL IRIS 4D/2X	SASH.IP6 FX.IP6	4.0.1 OR 5.3
PERSONAL IRIS 4D/3X	SASH.IP12 FX.IP12	4.0.1 OR 5.3
PROFESSIONAL IRIS 4D/120	SASH.IP5 FX.IP5	
PROFESSIONAL IRIS 4D/210	SASH.IP9 FX.IP9	
PROFESSIONAL IRIS 4D/2X0 PROFESSIONAL IRIS 4D/3X0 PROFESSIONAL IRIS 4D/4X0	SASH.IP7 FX.IP7	
CRIMSON	SASH.IP17 FX.IP17	
INDIGO R3000	SASH.IP12 FX.IP12	
ONYX / CHALLENGE R4000 INDIGO R4000 INDIGO2 R4400 INDY	SASH.ARCS FX.ARCS	5.3 OR 6.5
O2	SASH.ARCS FX.ARCS	6.3 OR 6.5
ONYX / CHALLENGE R8000 ONYX / CHALLENGE R10000 INDIGO2 R8000 INDIGO2 R10000 ONYX2 ORIGIN OCTANE FUEL	SASH.64 FX.64	6.5