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Less Known Solaris features: Jumpstart Enterprise Toolkit - Part 3: Files controlling the installation

I will not describe the exact process of native Jumpstart in it´s multitude of configuration files you have to modify, as the Jumpstart Enterprise Toolkit will do this job for us, but it´s important to know some of the important internals of Jumpstart. I will describe the most important files. There are varius others like /etc/ethers or the dhcp server configuration, but as you don´t touch them manually even with the native configuration of Jumpstart i won´t describe them here.

The rules fileThe first important file for the automatic installation is the rules file. This files associates system with a installation profile. This enables you to define rules that for a certain class of machines a certain installation profile should be used, e.g. a profile for small, medium and large machines.

```
# rule keywords and rule values       begin script       profile       finish script
# -----------------------------       ------------       --------      -------------
hostname aramaki setup webserver  completion
any   -                          -                genericprofile  -
```

The first rule can be divided in it´s part like this: When the hostname of the new server is aramaki, start the script begin on the client before starting the installation. For the installation use the profile file webserver. After the installation execute the script completion.

The second line is a catch-all condition. The file is used top down and the process of matching a system to a profile stops at the first match. Thus an installation for aramaki would reach the second line. This line can be traslated like this. For any other host, use the profile genericprofile. There is no begin or finish script.

You can´t use the the rules file directly. The Jumpstart server provides a script to do an syntax check on te \verb=rules=. When the file is correct, the script adds it get´s renamed to rules.ok. You don´t have to check this file manually, JET will to this job for you.

The profile fileThe profile file controls what we install on the system and how we partition the disks for the installation.

```
# profile keywords        profile values
# -----------------       -----------------
  install_type           initial_install
  system_type            standalone
  partitioning           default
  filesys                any 512 swap
  cluster                SUNWCprog
  package                SUNWman delete
  cluster                SUNWCacc
```

You can have a multitude of profiles in your system. A profile for system with large disks, a profile for system with small disks, a profile with a selection of packages customized for a webserver, a profile customized for a developer workstation. The jumpstart framework will choose the correct one on the basis of the rules.ok

The profile is capable to control almost any important parameter for the installation on the disk. You can define packages for installation or the configuration of your partitions.

The sysidcfg fileInstalling the packages on the system isn´t enough to get the operating system up an running. You have to give the system a unique identity. Parameters for this identity are:

configuration of network interfaces
locales
initial root password
time zone
etc.

You can type in such information manually, but that wouldn´t be a hands-off installation. The installation process of solaris has a solution for this problem. You can set all the parameters in a file called \verb=sysidcfg=. The solaris installer will use this file to configure the system accordingly.

```
keyboard=US-English
timezone=US/Central
timeserver=timehost1
```

```
terminal=ibm-pc
service_profile=limited_net

name_service=NIS {domain_name=marquee.central.example.com
                name_server=nmsvr2(172.25.112.3)}
nfs4_domain=example.com
```

root_password=URFUni9But: Whenever some essential information is missing, the installer will go interactive and ask for the missing information. This obviously is against our objective of an automated installation.

`Posted by Joerg Moellenkamp in English, Solaris at 16:32`