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## **Configuring a DNS client and /etc/nsswitch.conf in Solaris 11.**

If the `svc:/network/dns/client:default` service has never been configured on the system you can copy a existing `/etc/resolv.conf` file and run the following command:

```
root@solaris:~# nscfg import dns/client
```

to add the `/etc/resolv.conf` settings to the `svc:/network/dns/client:default` service, then refresh and restart the service, or reboot.

```
root@solaris:~# svcadm refresh dns/client
root@solaris:~# svcadm restart dns/client
```

To configure the `svc:/system/name-service/switch:default` copy a existing `/etc/nsswitch.conf` file and run the following command:

```
root@solaris:~# nscfg import name-service/switch
```

Then refresh and restart the service, or reboot.

To modify the `resolv.conf` file or the `nsswitch.conf` file on a system that the services are currently configured, modify the files and use the `-f` option to the `nscfg` command:

```
root@solaris:~# nscfg import -f dns/client
```

## **Configuring a DNS client and /etc/nsswitch.conf manually in Solaris 11.**

In Solaris 11 the `/etc/resolv.conf` is automatically populated by the `svc:/network/dns/client` service and manual edits will be lost when the `svc:/network/dns/client` service is started or restarted.

To set values for the `/etc/resolv.conf` administrators must set properties in the `svc:/network/dns/client` service.

A listing of the default `/etc/resolv.conf` for my Solaris 11 instance:

```
tim@solaris:~$ cat /etc/resolv.conf
#
# Copyright (c) 2011, Oracle and/or its affiliates. All rights reserved.
#
#
# _AUTOGENERATED_FROM_SMF_V1_
#
# WARNING: THIS FILE GENERATED FROM SMF DATA.
# DO NOT EDIT THIS FILE. EDITS WILL BE LOST.
# See resolv.conf(4) for details.

nameserver 10.0.0.1
```

Now use the `svccfg` to modify the `svc:/network/dns/client` service:

```
tim@solaris:~$ svccfg -s dns/client
svc:/network/dns/client> listprop config
config application
config/value_authorization astring solaris.smf.value.name-service.dns.client
config/nameserver net_address 10.0.0.1
```

Modify the `config/nameserver` property and list the results:

```
svc:/network/dns/client> setprop config/nameserver = (192.168.1.1 4.2.2.2 8.8.8.8)
svc:/network/dns/client> listprop config
config application
config/value_authorization astring solaris.smf.value.name-service.dns.client
config/nameserver net_address 192.168.1.1 4.2.2.2 8.8.8.8
```

Add the `config/search` and `config/domain` properties and list the results:

```
svc:/network/dns/client> setprop config/search = timwort.org
svc:/network/dns/client> setprop config/domain = timwort.org
svc:/network/dns/client> listprop config
config application
config/value_authorization astring solaris.smf.value.name-service.dns.client
config/nameserver net_address 192.168.1.1 4.2.2.2 8.8.8.8
config/search astring timwort.org
config/domain astring timwort.org
svc:/network/dns/client> exit
```

Finally refresh and restart the `dns/client` service:

```
tim@solaris:~$ svcadm refresh dns/client
tim@solaris:~$ svcadm restart dns/client
```

Now verify it all worked:

```
tim@solaris:~$ cat /etc/resolv.conf
#
# Copyright (c) 2011, Oracle and/or its affiliates. All rights reserved.
#
#
# _AUTOGENERATED_FROM_SMF_V1_
#
# WARNING: THIS FILE GENERATED FROM SMF DATA.
# DO NOT EDIT THIS FILE. EDITS WILL BE LOST.
# See resolv.conf(4) for details.
domain timwort.org
search timwort.org
nameserver 192.168.1.1
Nameserver 4.2.2.2
nameserver 8.8.8.8
```

The next step is to configure the `svc:/system/name-service/switch` service.

Similarly the `/etc/nsswitch.conf` file has been deprecated and the configuration of the name service switch is preformed by setting service properties in the `svc:/system/nameservice/switch` service.

For backward compatibility the `/etc/nsswitch.conf` file is regenerated when the `svc:/system/name-service/switch` service is started or restarted.

In the following the `svccfg` command is used to configured the defaults for all databases in the name service switch service, then individual databases (`hosts` and `ipnodes`) are reset to add a `dns` search:

```
tim@solaris:~$ svccfg -s name-service/switch
svc:/system/name-service/switch> setprop config/default = files
svc:/system/name-service/switch> setprop config/host = "files dns"
svc:/system/name-service/switch> setprop config/ipnode = astring: "files dns"
svc:/system/name-service/switch> exit
tim@solaris:~$ svcadm refresh name-service/switch
tim@solaris:~$ svcadm restart name-service/switch
```

Now examine the `/etc/nsswitch.conf` to confirm it worked:

```
tim@solaris:~$ more /etc/nsswitch.conf
#
# Copyright (c) 1991, 2011, Oracle and/or its affiliates. All rights reserved.
#
#
# _AUTOGENERATED_FROM_SMF_V1_
#
# WARNING: THIS FILE GENERATED FROM SMF DATA.
# DO NOT EDIT THIS FILE. EDITS WILL BE LOST.
# See nsswitch.conf(4) for details.
passwd: files
group: files
hosts: files dns
ipnodes: files dns
networks: files
protocols: files
rpc: files
ethers: files
netmasks: files
bootparams: files
--More-- (69%) ^C
```

**Note:** See the `resolv.conf(4)` and `nsswitch.conf(4)` man pages for other properties that can be configured for each service.