



Preparing to transition name services

ONTAP 7-Mode Transition

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Preparing to transition name services

Name service configurations that include DNS, LDAP, NIS, hosts, name services switch, UNIX users and groups, and netgroups configurations are transitioned by the 7-Mode Transition Tool. You must be aware of some considerations before transitioning name services configurations.

Name services transition: supported and unsupported configurations, and required manual steps

You must be aware of the name services configurations that are transitioned by the 7-Mode Transition Tool. Some name services configurations are not transitioned to ONTAP because either these are not supported in ONTAP or these must be manually transitioned.

You should verify all the precheck error and warning messages to evaluate the impact of such configurations on transition.

Configurations that are transitioned

At a high level, the following name services configurations are transitioned by the 7-Mode Transition Tool:

- DNS configuration (`/etc/resolv.conf`)
- LDAP configuration
- NIS configuration
- Name service switch configuration (`/etc/nsswitch.conf` and `/etc/resolv.conf`)
- Hosts configuration (`/etc/hosts`)
- UNIX users and groups (`/etc/passwd` and `/etc/group`)
- Netgroups configuration (`/etc/netgroup`)

See the precheck results for details about these name services configurations.

Unsupported configurations in ONTAP

- NIS slave
- NIS broadcast
- NIS groups caching
- Dynamic DNS
- DNS cache
- Shadow database
- Host database sources other than file or DNS

ONTAP supports only file and DNS for host lookup; other database sources are not supported. Host lookup order in the `/etc/nsswitch.conf` is ignored during transition.

Configurations that must be manually configured

You must manually configure the following LDAP options on the SVMs:

- `ldap.usermap.attribute.unixaccount`
- `ldap.password`
- `ldap.usermap.base`
- `ldap.ssl.enable`

Related information

[Customizing the transition of 7-Mode configurations](#)

[NFS management](#)

[Network and LIF management](#)

Considerations for transitioning DNS, NIS, and LDAP configurations

You should be aware of how the DNS, NIS, and LDAP configurations in Data ONTAP operating in 7-Mode are transitioned and applied in ONTAP.

Considerations for DNS transition

For DNS configurations, a maximum of six domain names and three name servers per SVM are supported in ONTAP. If the unique number of domain names or name servers across 7-Mode systems and the target SVM exceed the supported limit, the 7-Mode Transition Tool reports a blocking error. To continue with the transition, you should ignore the transition of the DNS configuration from the tool.



If you ignore the transition of the DNS configuration, you must manually configure DNS on the target SVM.

Considerations for NIS transition

- The length of the NIS domain name on the 7-Mode system must not exceed 64 characters.
- For transitioning to target cluster versions running ONTAP 9.1 or earlier, the `nis.servers` option on the 7-Mode system must be configured only with IP addresses, and not a fully qualified domain name (FQDN).

You must configure the `nis.servers` option on the 7-Mode system with IP addresses before transition if you are transitioning to a cluster running ONTAP 9.1 or earlier. Transition is supported if you have the `nis.servers` option on the 7-Mode system configured with an FQDN and you are transitioning to a cluster running any version of ONTAP between 9.2 and 9.5.

Considerations for LDAP transition

- If separate base values and scope values are specified for user mapping (`ldap.usermap.base`) and user password (`ldap.base.passwd`) lookups in the 7-Mode system, the base values and scope values for only the user password are transitioned.

The base values and scope values are used for user mapping and user password lookups in ONTAP, which can cause security issues. You must manually add the base values and scope values for user mapping to the user distinguished name (DN) option in ONTAP after transition, if required.

Considerations for transitioning netgroups and UNIX users and groups

Netgroup configuration is transitioned only if the 7-Mode `/etc/netgroup` file is less than 5 MB in size. UNIX users and groups are transitioned only if the total number of UNIX users and groups on the SVM do not exceed the limits for users and groups in ONTAP.

Considerations for netgroups

If the `/etc/netgroup` file on 7-Mode is greater than 5 MB, the netgroup configuration is not transitioned. You must perform one of the following actions to continue with the transition:

- Exclude the transition of netgroups.

[Customizing the transition of 7-Mode configurations](#)

- Move the netgroup configuration to NIS or LDAP servers before transition.

Considerations for UNIX users and groups

If the total number of transitioning UNIX users and groups exceed the limit of UNIX users and groups in ONTAP, the 7-Mode Transition Tool blocks the transition. You must perform one of the following actions to continue with the transition:

- Exclude the transition of UNIX users and groups.

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- Move the UNIX users and groups to NIS or LDAP servers before transition.

Related information

[NFS management](#)

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