

Introduction to Oracle® Solaris 11.3 Network Services



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Using This Documentation

- **Overview** – Provides an overview of the network services supported by the Oracle Solaris operating system.
- **Audience** – System administrators.
- **Required knowledge** – Basic and some advanced network administration skills.

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Introduction to Network Services

This chapter provides the list of key tasks used to manage the network services in Oracle Solaris 11.3.

Network Services in Oracle Solaris 11.3

Select one of the following network services to see the list of key tasks:

- **LDAP** – The Lightweight Directory Access Protocol (LDAP) service enables you to access directory servers for distributed naming service.
- **DNS and NIS** – The Domain Name System (DNS) service enables the system to look up IP addresses for host names and host names for IP addresses. The Network Information System (NIS) service enables you to manage network information such as machine names and addresses, users, and network services.
- **DHCP and IPQoS** – The Dynamic Host Configuration Protocol (DHCP) service enables systems to automatically configure the network. The IP Quality of Service (IPQoS) service enables you to prioritize, control, and gather network accounting statistics.
- **NFS** – The network file system (NFS) service enables you to access file systems over a network.
- **SMB** – The Server Message Block (SMB) service enables you to share files between an Oracle Solaris system and a Windows system.
- **NTP and PTP** – The Network Time Protocol (NTP) and Precision Time Protocol (PTP) services enable you to synchronize system clocks within a network.
- **sendmail** – The sendmail service enables you to set up and maintain an email service.
- **FTP** – The File Transfer Protocol (FTP) service enables you to transfer file between two systems over a network.
- **UUCP and PPP** – The Point-to-Point Protocol (PPP) service enables two systems in different physical locations to communicate with each other. The UNIX-to-UNIX CoPy (UUCP) service enables two systems in different physical locations to transfer files and exchange mail with each other.
- **SLP** – The Service Location Protocol (SLP) provides you with a framework to discover and provision network services in a network.

Key Tasks for Managing LDAP services

You can use the following tasks to manage LDAP service:

- Configure Oracle directory server enterprise edition for the LDAP naming service. For more information, see [“How to Configure Oracle Directory Server Enterprise Edition for the LDAP Naming Service” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
- Populate the LDAP server with data. For more information, see [“Populating the LDAP Server With Data” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
- Populate the directory server with additional profiles. For more information, see [“How to Populate the Directory Server With Additional Profiles” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
- You can use the following tasks to administer the LDAP client:
 - Initialize an LDAP client. For more information, see [“Initializing an LDAP Client” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
 - Modify an LDAP client configuration. For more information, see [“Modifying an LDAP Client Configuration” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
 - Uninitialize an LDAP client. For more information, see [“Uninitializing an LDAP Client” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
- You can use the following tasks to monitor LDAP client status:
 - Verify that the `ldap_cachemgr` daemon is running. For more information, see [“Verifying the ldap_cachemgr Daemon Status” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
 - Check the current profile information. For more information, see [“Checking the Client Profile Information” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
 - Verify basic client-server communication. For more information, see [“Verifying Basic Client-Server Communication” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
 - Check LDAP server data from a non-client machine. For more information, see [“Checking LDAP Server Data From a Non-Client Machine” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).
- Transition from NIS to LDAP. For more information, see [“Transitioning From NIS to LDAP Task Map” in *Working With Oracle Solaris 11.3 Directory and Naming Services: LDAP*](#).

Key Tasks for Managing DNS and NIS services

You can use the following tasks to manage DNS and NIS services:

- You can use the following tasks to configure name service switch:
 - Change the source for a database. For more information, see [“How to Change the Source for a Database” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Configure a search criterion for a database. For more information, see [“How to Configure a Search Criterion for a Database” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Change the source for all naming databases. For more information, see [“How to Change the Source for All Naming Databases” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Use a legacy `nsswitch.conf` file. For more information, see [“How to Use a Legacy `nsswitch.conf` File” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
- You can use the following tasks to administer DNS server and client services:
 - Install a DNS package. For more information, see [“How to Install the DNS Package” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Configure a DNS server. For more information, see [“How to Configure a DNS Server” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Create configuration file for remote control access of DNS server daemon. For more information, see [“How to Create an `rndc.conf` File” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Run the DNS service as an alternative user. For more information, see [“How to Run the DNS Service as an Alternative User” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Enable a DNS client. For more information, see [“How to Enable a DNS Client” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Verify DNS configuration. For more information, see [“How to Verify DNS Configuration Changes” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Enable Multicast DNS and DNS service discovery. For more information, see [“How to Enable mDNS and DNS Service Discovery” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
 - Configure the `nss_ad` module to set up Oracle Solaris active directory clients. For more information, see [“How to Configure the `nss_ad` Module” in Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS](#).
- You can use the following tasks to set up and configure NIS service:

- Prepare the master server. For more information, see [“Preparing the Master Server \(Task Map\)”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
- Start and stop NIS services on an NIS server. For more information, see [“Starting and Stopping NIS Services on an NIS Server \(Task Map\)”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
- Set up NIS slave servers. For more information, see [“Setting Up NIS Slave Servers \(Task Map\)”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
- Administer NIS clients. For more information, see [“Administering NIS Clients \(Task Map\)”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
- You can use the following tasks to administer NIS service:
 - Add a new NIS user to an NIS domain. For more information, see [“How to Add a New NIS User to an NIS Domain”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Change a NIS map's master server. For more information, see [“How to Change a Map's Master Server”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Modify configuration file to update the security and supported map information. For more information, see [“How to Modify Configuration Files”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Modify Makefile entries. For more information, see [“How to Modify /var/yp/Makefile to Use Specific Databases”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Update and modify existing maps. For more information, see [“How to Update Maps Supplied With the Default Set”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Work with the NIS server to modify the NIS configuration. For more information, see [“How to Configure Machine Host Name and Address Lookup Through NIS and DNS”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
- You can use the following information to troubleshoot NIS:
 - Problems affecting one NIS client. For more information, see [“Problems Affecting Single NIS Client”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.
 - Problems affecting NIS clients. For more information, see [“Problems Affecting NIS Clients”](#) in *Working With Oracle Solaris 11.3 Directory and Naming Services: DNS and NIS*.

Key Tasks for Managing DHCP and IPQoS services

- You can use the following tasks to manage DHCP service:
 - Grant user access to DHCP commands. For more information, see [“How to Grant User Access to DHCP Commands” in *Working With DHCP in Oracle Solaris 11.3*](#).
 - Configure an ISC DHCP Server. For more information, see [“How to Configure an ISC DHCP Server” in *Working With DHCP in Oracle Solaris 11.3*](#).
 - Modify the Configuration of the DHCP Service. For more information, see [“How to Modify the Configuration of the DHCP Service” in *Working With DHCP in Oracle Solaris 11.3*](#).
 - Enable a DHCP Client. For more information, see [“How to Enable a DHCP Client” in *Working With DHCP in Oracle Solaris 11.3*](#).
 - Disable a DHCP Client. For more information, see [“How to Disable a DHCP Client” in *Working With DHCP in Oracle Solaris 11.3*](#).
 - Enable a DHCPv4 Client to Request a Specific Host Name. For more information, see [“How to Enable a DHCPv4 Client to Request a Specific Host Name” in *Working With DHCP in Oracle Solaris 11.3*](#).
- You can use the following tasks to manage the IPQoS service:
 - Plan the QoS policy. For more information, see [“QoS Policy Planning Task Map” in *Managing IP Quality of Service in Oracle Solaris 11.3*](#).
 - Define a QoS policy in the IPQoS configuration file. For more information, see [“Defining a QoS Policy Task Map” in *Managing IP Quality of Service in Oracle Solaris 11.3*](#).
 - Administer IPQoS. For more information, see [“Administering IPQoS” in *Managing IP Quality of Service in Oracle Solaris 11.3*](#).
 - Set up flow accounting. For more information, see [“How to Create a File for Flow-Accounting Data” in *Managing IP Quality of Service in Oracle Solaris 11.3*](#).

Key Tasks for Managing NFS Service

You can use the following tasks to manage network file systems:

- Set up the NFS service. For more information, see [“Setting Up the NFS Service” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- Mount NFS file system. For more information, see [“Mounting File Systems Task Map” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- You can use the following tasks to manage automatic file system sharing:
 - Set up automatic file system sharing. For more information, see [“How to Set Up Automatic File System Sharing” in *Managing Network File Systems in Oracle Solaris 11.3*](#).

- Administer automatic file system sharing. For more information, see [“Autofs Administration” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- Administer the secure NFS system. For more information, see [“How to Set Up a Secure NFS Environment With DH Authentication” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- You can use the following tasks to administer NFS referrals:
 - Create and access an NFS referral to connect to multiple NFS Version 4 server. For more information, see [“How to Create and Access an NFS Referral” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Remove an NFS referral. For more information, see [“How to Remove an NFS Referral” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- You can use the following tasks to administer Federated file system (FedFS):
 - Create a namespace database (NSDB). For more information, see [“How to Create a Namespace Database” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Use a secured connection to the NSDB. For more information, see [“How to Use a Secured Connection to the NSDB” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Create a FedFS referral. For more information, see [“How to Create a FedFS Referral” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
- You can use the following information to troubleshoot NFS and autofs:
 - Check connectivity issues on an NFS client. For more information, see [“How to Check Connectivity on an NFS Client” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Check the NFS server remotely. For more information, see [“How to Check the NFS Server Remotely” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Verify the NFS service on the server. For more information, see [“How to Verify the NFS Service on the Server” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Verify options used with the mount command. For more information, see [“How to Verify Options Used With the mount Command” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - NFS error message description and solution. For more information, see [“NFS Error Messages” in *Managing Network File Systems in Oracle Solaris 11.3*](#).
 - Autofs error message description and solution. For more information, see [“Troubleshooting Autofs” in *Managing Network File Systems in Oracle Solaris 11.3*](#).

Key Tasks for Managing SMB and Windows Interoperability

You can use the following tasks to manage SMB service:

- You can use the following tasks to create identity mapping strategy:

- Manage directory-based name mapping for users and groups. For more information, see [“Managing Directory-Based Name Mapping for Users and Groups” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Manage directory-based identity mapping by using identity management for UNIX. For more information, see [“Managing Directory-Based Identity Mapping by Using Identity Management for UNIX” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Managing rule-based identity mapping for users and groups. For more information, see [“Managing Rule-Based Identity Mapping for Users and Groups” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Disable the samba service. For more information, see [“How to Disable the Samba Service” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Configure the SMB server operation mode. For more information, see [“Configuring the SMB Server Operation Mode” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Manage SMB shares. For more information, see [“Managing SMB Shares \(Task Map\)” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Manage SMB groups. For more information, see [“Managing SMB Groups” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Configure the WINS service. For more information, see [“How to Configure WINS” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- Configure the SMB print service. For more information, see [“How to Enable the SMB Print Service” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
- You can use the following tasks to manage SMB mounts:
 - Manage SMB mounts in your local environment. For more information, see [“Managing SMB Mounts in Your Local Environment” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).
 - Manage SMB mounts in the global environment. For more information, see [“Managing SMB Mounts in the Global Environment” in *Managing SMB File Sharing and Windows Interoperability in Oracle Solaris 11.3*](#).

Key Tasks for Managing Network Caching and Time-Related Services

You can use the following tasks for managing network caching and time-related services:

- You can use the following tasks to administer network caching:
 - Enable caching of web pages. For more information, see [“How to Enable Caching of Web Pages” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).

- Disable caching of web pages. For more information, see [“How to Disable Caching of Web Pages” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
- Enable or disable Network Cache Accelerator (NCA) logging. For more information, see [“How to Enable or Disable NCA Logging” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
- Load the socket utility library for NCA. For more information, see [“Loading the Socket Utility Library for NCA” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
- Add a new port to the NCA service. For more information, see [“How to Add a New Port to the NCA Service” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
- You can use the following tasks to manage NTP:
 - Set up NTP on an Oracle Solaris system. For more information, see [“How to Set Up NTP on a Oracle Solaris System” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
 - Enable NTP logging. For more information, see [“How to Enable NTP Logging” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
 - Display the SMF properties associated with the NTP service. For more information, see [“How to Display the SMF Properties Associated With the NTP Service” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
- You can use the following tasks to manage PTP:
 - Set up an interface as a PTP master. For more information, see [“How to Set Up an Interface as a PTP Master” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
 - Set up an interface as a PTP slave. For more information, see [“How to Set Up an Interface as a PTP Slave” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
 - Enable the PTP service to use the PTP hardware in the NIC. For more information, see [“How to Enable the PTP Service to Use the PTP Hardware in a NIC” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).
 - Enable PTP logging. For more information, see [“How to Enable PTP Logging” in *Enhancing System Performance Using Clock Synchronization and Web Caching in Oracle Solaris 11.3*](#).

Key Tasks for Managing sendmail Services

You can use the following tasks to manage sendmail service:

- Set up the mail services. For more information, see [“Setting Up Mail Services” in *Managing sendmail Services in Oracle Solaris 11.3*](#).
- Change the `sendmail` configuration. For more information, see [“Task Map for Changing the sendmail Configuration” in *Managing sendmail Services in Oracle Solaris 11.3*](#).
- Administer mail alias files. For more information, see [“Task Map for Administering Mail Alias Files” in *Managing sendmail Services in Oracle Solaris 11.3*](#).
- Administer the queue directories. For more information, see [“Task Map for Administering the Queue Directories” in *Managing sendmail Services in Oracle Solaris 11.3*](#).
- Administer `.forward` files. For more information, see [“Task Map for Administering .forward Files” in *Managing sendmail Services in Oracle Solaris 11.3*](#).
- Troubleshoot mail services. For more information, see [“Task Map for Troubleshooting Procedures and Tips for Mail Services” in *Managing sendmail Services in Oracle Solaris 11.3*](#).

Key Tasks for Managing Remote Systems

You can use the following tasks to manage file transfer between two systems:

- Start a FTP Server using SMF. For more information, see [“How to Start an FTP Server Using SMF” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- Stop a FTP server using SMF. For more information, see [“How to Shut Down the FTP Server Using SMF” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- Shut down the FTP connection. For more information, see [“How to Shut Down the FTP Connection” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- Change the FTP service configuration. For more information, see [“How to Change the ProFTPD Configuration” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- Access a remote system by using Secure Shell (ssh). For more information, see [“Accessing a Remote System by Using Secure Shell” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- You can use the following tasks to transfer files between a local system and a remote system by using `sftp`:
 - Open and close an `sftp` connection to a remote system. For more information, see [“How to Open and Close an sftp Connection to a Remote System” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
 - Copy files from a remote system. For more information, see [“How to Copy Files From a Remote System \(sftp\)” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
 - Copy files to a remote system. For more information, see [“How to Copy Files to a Remote System \(sftp\)” in *Managing Remote Systems in Oracle Solaris 11.3*](#).
- Transfer files between remote systems by using the `scp` command. For more information, see [“Remote Copying With the scp Command” in *Managing Remote Systems in Oracle Solaris 11.3*](#).

Key Tasks for Managing Serial Networks Using UUCP and PPP

You can use the following tasks to manage UUCP and PPP services:

- Set up a dial-up PPP link. For more information, see [“Major Tasks for Setting Up the Dial-up PPP Link \(Task Map\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- Set up a leased-line PPP link. For more information, see [“Setting Up a Leased Line \(Task Map\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- Set up PPP authentication. For more information, see [“Configuring PPP Authentication \(Task Map\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- Set up PPP over Ethernet (PPPoE) tunnel. For more information, see [“Major Tasks for Setting Up a PPPoE Tunnel \(Task Maps\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- Troubleshoot PPP-related and PPPoE-related problems. For more information, see [“Solving PPP Problems \(Task Map\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- Administer UUCP. For more information, see [“UUCP Administration \(Task Map\)” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
- You can use the following tasks to troubleshoot UUCP:
 - Check for faulty modems. For more information, see [“How to Check for Faulty Modems or ACUs” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).
 - Debug transmissions. For more information, see [“How to Debug Transmissions” in *Managing Serial Networks Using UUCP and PPP in Oracle Solaris 11.3*](#).

Key Tasks for Managing Service Location Protocol Service

You can use the following tasks to manage SLP service:

- Monitor the SLP message traffic by using the snoop command. For more information, see [“How to Use snoop to Run SLP Traces” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Configure SLP properties to reduce network congestion. For more information, see [“How to Change Your SLP Configuration” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- You can use the following procedures to modify Directory Agent (DA) access and discovery frequency:

- Limit User Agents (UAs) and Service Agents (SAs) to statically configured DAs. For more information, see [“How to Limit UAs and SAs to Statically Configured DAs” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Configure DA discovery for dial-up networks. For more information, see [“How to Configure DA Discovery for Dial-up Networks” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Configure DA heartbeat for frequent partitions. For more information, see [“How to Configure DA Heartbeat for Frequent Partitions” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- You can use the following tasks to accommodate different network media, topologies, or configurations:
 - Reduce SA reregistrations. For more information, see [“How to Reduce SA Reregistrations” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
 - Configure the multicast time-to-live property. For more information, see [“How to Configure the Multicast Time-to-Live Property” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
 - Configure the packet size. For more information, see [“How to Configure the Packet Size” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
 - Configure broadcast-only routing. For more information, see [“How to Configure Broadcast-Only Routing” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- You can use the following tasks to modify timeouts on SLP discovery requests:
 - Change default timeouts. For more information, see [“How to Change Default Timeouts” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
 - Configure the random-wait bound. For more information, see [“How to Configure the Random-Wait Bound” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Deploy scopes to administer access to service advertisements. For more information, see [“How to Configure Scopes” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Deploy DAs to reduce the amount of multicast traffic. For more information, see [“How to Deploy DAs” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).
- Enable SLP proxy registration to advertise legacy services. For more information, see [“How to Enable SLP Proxy Registration” in *Managing Service Location Protocol Services in Oracle Solaris 11.3*](#).

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