

SECTION 7 Understand the Startup Mechanism

In this section of the workbook, you learn how to do the following:

- “Manage Runlevels with YaST” on 7-1
- “Create a Startup Script for icmpinfo” on 7-2

Exercise 7-1 Manage Runlevels with YaST

To manage runlevels with YaST, complete the following:

1. Ensure that you are logged in to your server’s GUI as **geeko** with a password of **N0v3ll**.
2. Launch YaST from the main menu by selecting **System > Configuration > YaST Control Center**.
3. Enter **novell** as root password in the Authentication window.
4. On the left, select **System**.
5. On the right, select **Runlevel Editor**.
6. On the left, read the short help text.
7. Find the service **xntpd** and select **Enable**.
8. Switch to expert mode by selecting **Expert Mode** on the top.
9. Select **Set/Reset** and toggle between **Enable the Service** and **Disable the Service**.
Notice the changes.
10. To apply your configuration, select **Finish**.

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Exercise 7-1 Manage Runlevels with YaST

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8. Switch to expert mode by selecting **Expert Mode** on the top.
9. Select **Set/Reset** and toggle between **Enable the Service** and **Disable the Service**.
Notice the changes.
10. To apply your configuration, select **Finish**.

11. To exit YaST, select **Close**.

(End of Exercise)

Exercise 7-2 Create a Startup Script for icmpinfo

To create a startup script for icmpinfo, complete the following:

1. Ensure that you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.

3. To get root privileges, enter **sux -** and the password of **novell**.

4. Install the package icmpinfo by entering **yast -i icmpinfo**.

If you have not installed packages with YaST before, just follow the instructions.

5. To change to the directory /etc/init.d/, enter **cd /etc/init.d**.

6. To copy the skeleton file in order to create the script icmpinfo, enter **cp skeleton icmpinfo**.

7. To open the new file, enter **vi icmpinfo**.

The file is structured like most of the scripts in /etc/init.d/. The word FOO is used to mark locations where you need to make changes depending on the purpose of the script.

You might want to check the manual page for any options you need for starting icmpinfo, as an independent daemon.

8. Make the appropriate changes to the file according to the manual page of icmpinfo such as:

- a. Replace **/usr/sbin/FOO** with **/usr/sbin/icmpinfo**.

11. To exit YaST, select **Close**.

(End of Exercise)

Exercise 7-2 Create a Startup Script for icmpinfo

To create a startup script for icmpinfo, complete the following:

1. Ensure that you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.

3. To get root privileges, enter **sux -** and the password of **novell**.
4. Install the package icmpinfo by entering **yast -i icmpinfo**.

If you have not installed packages with YaST before, just follow the instructions.

5. To change to the directory /etc/init.d/, enter **cd /etc/init.d**.
6. To copy the skeleton file in order to create the script icmpinfo, enter **cp skeleton icmpinfo**.
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The file is structured like most of the scripts in /etc/init.d/. The word FOO is used to mark locations where you need to make changes depending on the purpose of the script.

You might want to check the manual page for any options you need for starting icmpinfo, as an independent daemon.

8. Make the appropriate changes to the file according to the manual page of icmpinfo such as:
 - a. Replace **/usr/sbin/FOO** with **/usr/sbin/icmpinfo**.

- b. Replace the variable **FOO_BIN** with **ICMPINFO_BIN**.
 - c. Add comment signs (**#**) in front of the section regarding the configuration file.
 - d. Add appropriate options (**-lvv**, **-k**) in the lines with **startproc** and **killproc**.
9. Test the script by calling it with the parameter start, stop and status:
- a. Enter **/etc/init.d/icmpinfo start**
 - b. Enter **/etc/init.d/icmpinfo stop**
 - c. Enter **/etc/init.d/icmpinfo status**
10. Test the functionality by pinging the machine and watching the syslog output:
- a. Launch another terminal window.
 - b. Get root privileges.
 - c. Enter **ping localhost**.
 - d. Launch another new terminal window.
 - e. Get root privileges.
 - f. Enter **tail -f /var/log/messages**.
11. If Step f shows the script is working as expected, edit the init info part at the top of the script to configure the runlevels icmpinfo should run in.
12. Save the script and exit vi by entering **:wq**.
13. To add the service to the configured runlevels, enter **insserv icmpinfo**

(End of Exercise)

- b. Replace the variable **FOO_BIN** with **ICMPINFO_BIN**.
 - c. Add comment signs (**#**) in front of the section regarding the configuration file.
 - d. Add appropriate options (**-lvv, -k**) in the lines with **startproc** and **killproc**.
9. Test the script by calling it with the parameter start, stop and status:
- a. Enter **/etc/init.d/icmpinfo start**
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