```
~]$ su -
Password:
```

2.2.1. Date and Time Setup

The **date** command allows the superuser to set the system date and time manually:

1. *Change the current date.* Type the command in the following form at a shell prompt, replacing the *YYYY* with a four-digit year, *MM* with a two-digit month, and *DD* with a two-digit day of the month:

   ```
   ~]# date +%D -s YYYY-MM-DD
   ```

   For example, to set the date to 2 June 2010, type:

   ```
   ~]# date +%D -s 2010-06-02
   ```

2. *Change the current time.* Use the following command, where *HH* stands for an hour, *MM* is a minute, and *SS* is a second, all typed in a two-digit form:

   ```
   ~]# date +%T -s HH:MM:SS
   ```

   If your system clock is set to use UTC (Coordinated Universal Time), add the following option:

   ```
   ~]# date +%T -s HH:MM:SS -u
   ```

   For instance, to set the system clock to 11:26 PM using the UTC, type:

   ```
   ~]# date +%T -s 23:26:00 -u
   ```

You can check your current settings by typing **date** without any additional argument:

Example 2.1. Displaying the current date and time

```
~]$ date
Wed Jun  2 11:58:48 CEST 2010
```

2.2.2. Network Time Protocol Setup

As opposed to the manual setup described above, you can also synchronize the system clock with a remote server over the Network Time Protocol (NTP). For the one-time synchronization only, use the **ntpdate** command:

1. Firstly, check whether the selected NTP server is accessible:

   ```
   ~]# ntpdate -q server_address
   ```

   For example:

   ```
   ~]# ntpdate -q 0.rhel.pool.ntp.org
   ```

2. When you find a satisfactory server, run the **ntpdate** command followed by one or more server addresses:

```
~]# ntpdate server_address...
```

For instance:

```
~]# ntpdate 0.rhel.pool.ntp.org 1.rhel.pool.ntp.org
```

Unless an error message is displayed, the system time should now be set. You can check the current by setting typing **date** without any additional arguments as shown in Section 2.2.1, “Date and Time Setup”.

3. In most cases, these steps are sufficient. Only if you really need one or more system services to always use the correct time, enable running the **ntpdate** at boot time:

```
~]# chkconfig ntpdate on
```

For more information about system services and their setup, see Chapter 12, *Services and Daemons*.

NOTE

If the synchronization with the time server at boot time keeps failing, i.e., you find a relevant error message in the **/var/log/boot.log** system log, try to add the following line to **/etc/sysconfig/network**:

```
NETWORKWAIT=1
```

However, the more convenient way is to set the **ntpd** daemon to synchronize the time at boot time automatically:

1. Open the NTP configuration file **/etc/ntp.conf** in a text editor such as **vi** or **nano**, or create a new one if it does not already exist:

```
~]# nano /etc/ntp.conf
```

2. Now add or edit the list of public NTP servers. If you are using Red Hat Enterprise Linux 6, the file should already contain the following lines, but feel free to change or expand these according to your needs:

```
server 0.rhel.pool.ntp.org iburst
server 1.rhel.pool.ntp.org iburst
server 2.rhel.pool.ntp.org iburst
server 3.rhel.pool.ntp.org iburst
```

The **iburst** directive at the end of each line is to speed up the initial synchronization. As of Red Hat Enterprise Linux 6.5 it is added by default. If upgrading from a previous minor release, and your **/etc/ntp.conf** file has been modified, then the upgrade to Red Hat Enterprise Linux 6.5 will create a new file **/etc/ntp.conf.rpmnew** and will not alter the existing **/etc/ntp.conf** file.

3. Once you have the list of servers complete, in the same file, set the proper permissions, giving the unrestricted access to localhost only:

```
restrict default kod nomodify notrap nopeer noquery
restrict -6 default kod nomodify notrap nopeer noquery
restrict 127.0.0.1
restrict -6 ::1
```

4. Save all changes, exit the editor, and restart the NTP daemon:

```
~]# service ntpd restart
```

5. Make sure that **ntpd** is started at boot time:

```
~]# chkconfig ntpd on
```