Synchronize a Windows 2008 Server with an External Time Source

June 13, 2011

Synchronizing Time

Servers and computers need to synchronize their time with an outside source to maintain the correct time. In this lesson, we will converge our Windows 2008 Server with the US Navy's NTP Server.

We have the opportunity to navigate through the System Registry and safely make changes. The skills we will learn here will help us troubleshoot the Server errors on later dates when the Microsoft Workaround procedures prompt us to check or change a registry setting.

Run Registry Edit (Regedit)

At the Start menu, we select Run and we should type "regedit" in the textbox and press the OK command button.
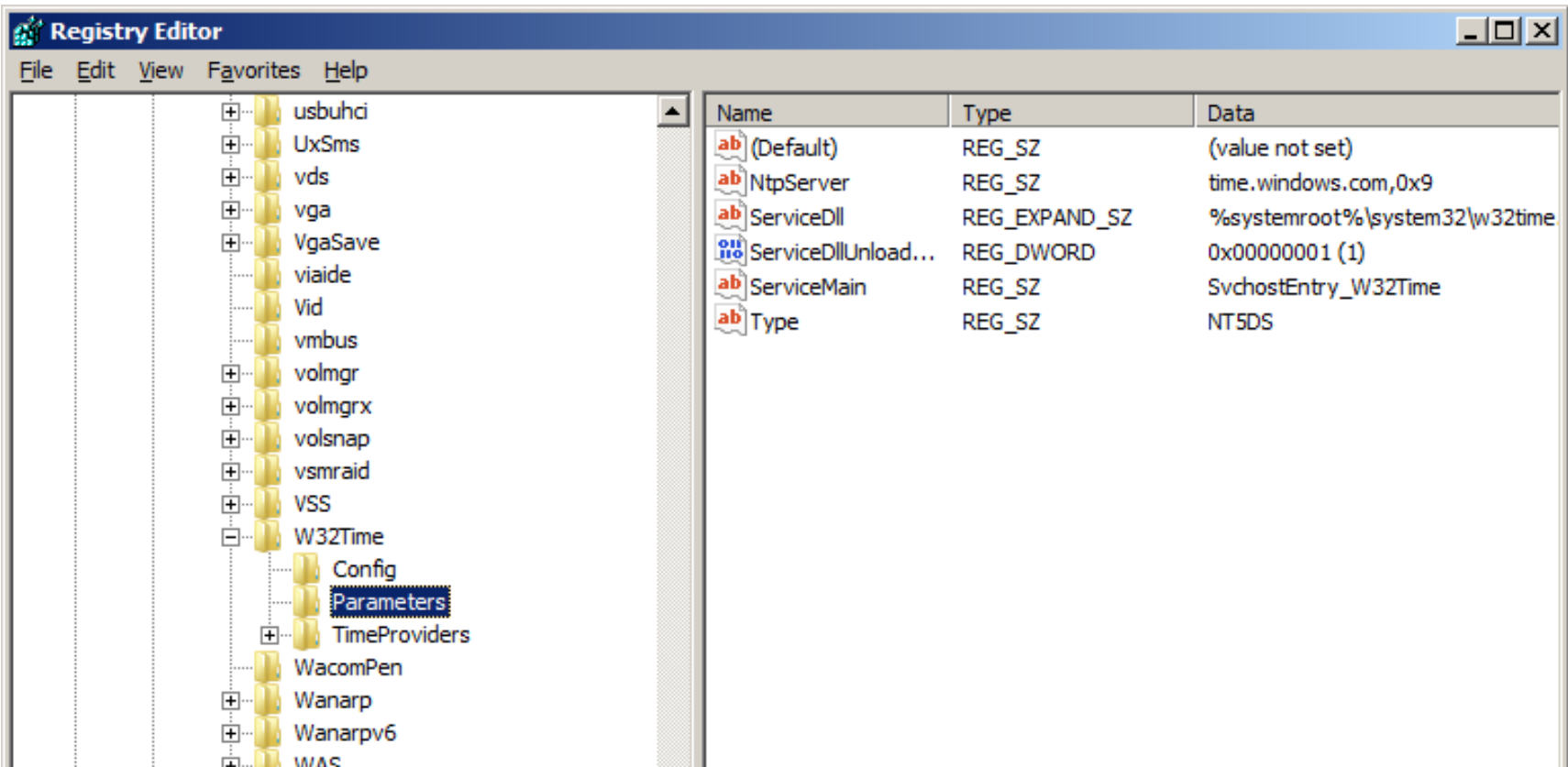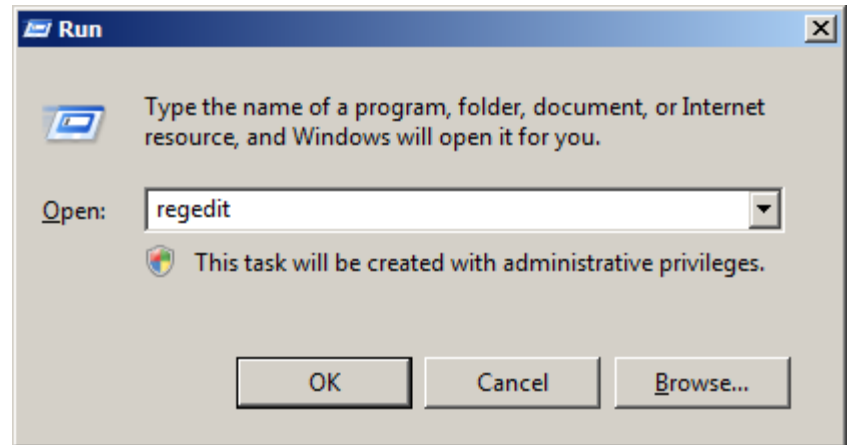
How to Navigate the Registry Editor

The Registry Edit window will come into view on our desktop and we need to come across HKEY_LOCAL_MACHINE under My Computer. We can press the plus symbol on the left and the folder tree will expand. We can inflate the System folder, and the Current Control Set folder. When we are in the System Registry, we need to be careful to be in the correct location when making changes.
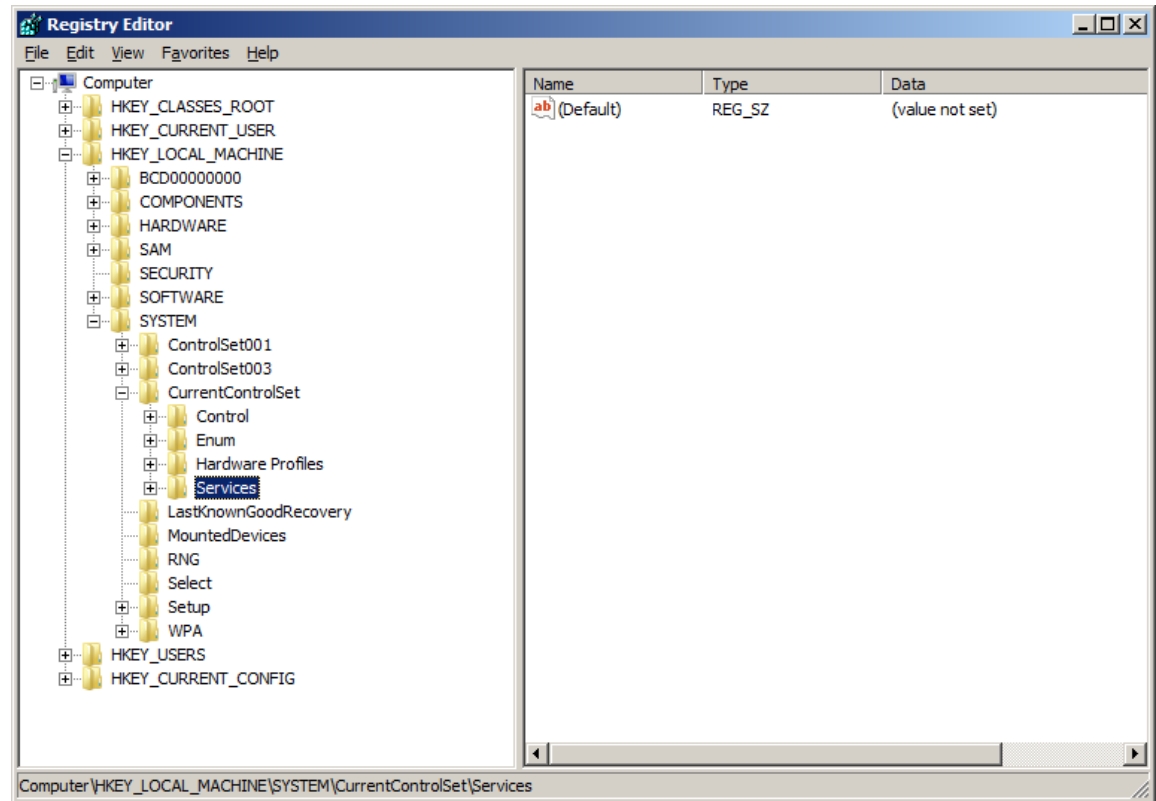
Many time network administrators and technicians will see the registry path written is this format to save space: HKLM\SYSTEM\CCS\Services\W32Time\Parameters

System Settings on a Folder

We follow the path to HKLM\SYSTEM\CCS\Services\W32Time\Parameters and we find that there are five system settings inside the Parameters folder.
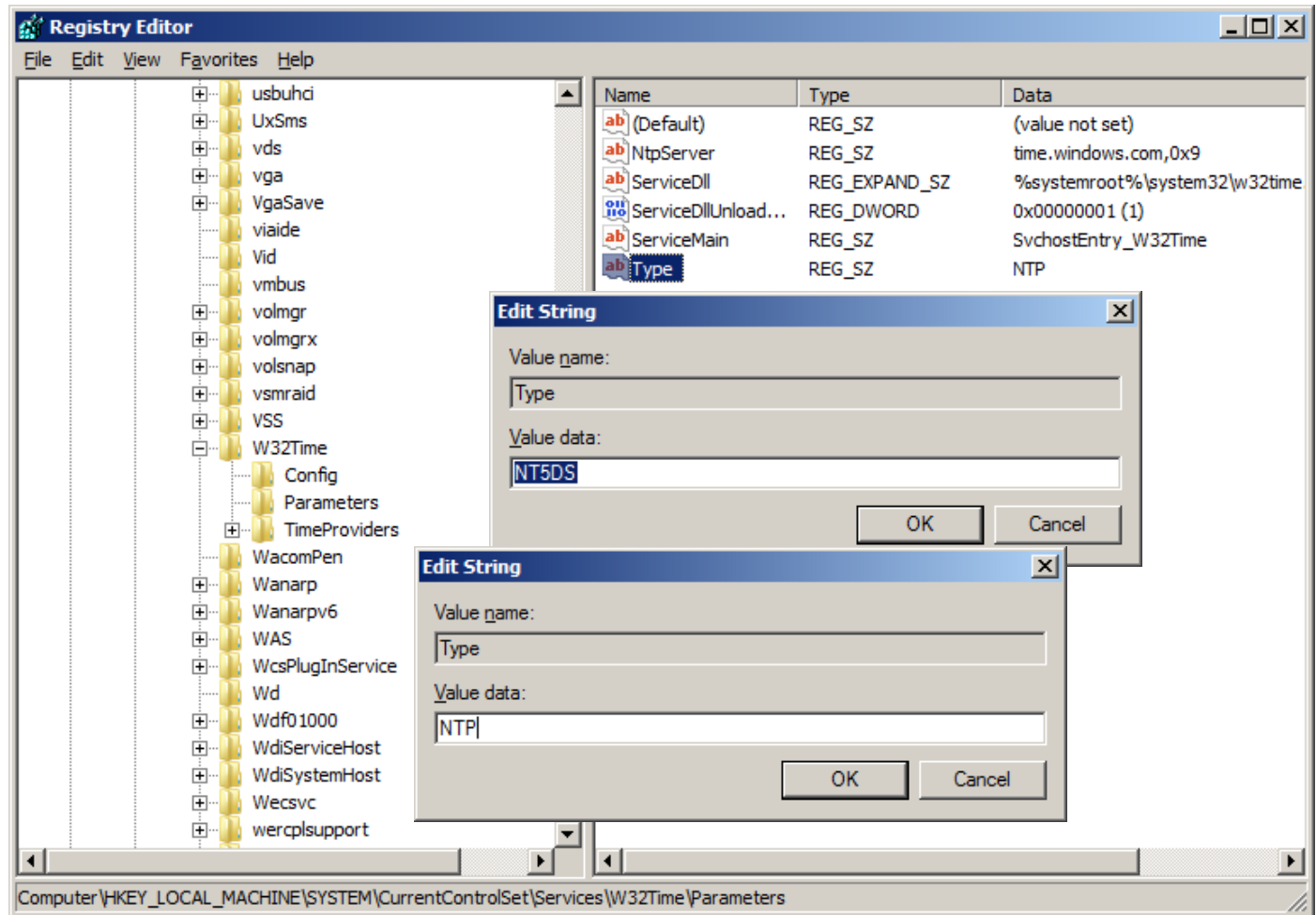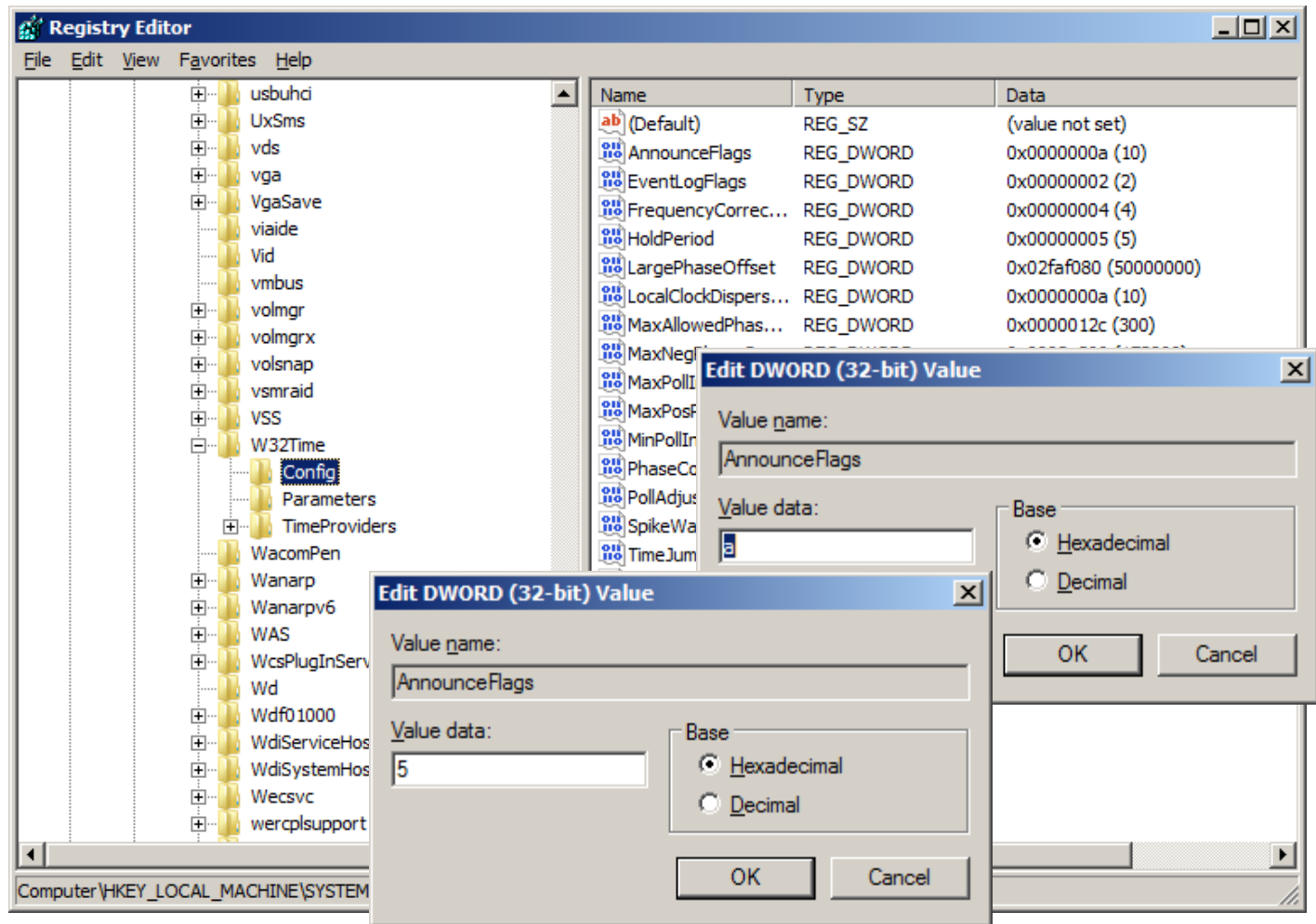
Changing the Type Setting

With the Parameters folder highlighted, we double click on Type and the Edit String window will appear. Change NT5DS to NTP. We should press the OK button to save the change.

Changing the AnnounceFlags Setting

Next, with the Config folder highlighted, we double click on AnnounceFlags and the Edit DWORD Value window will appear. Change "a" to "5". We should press the OK button to save the change.
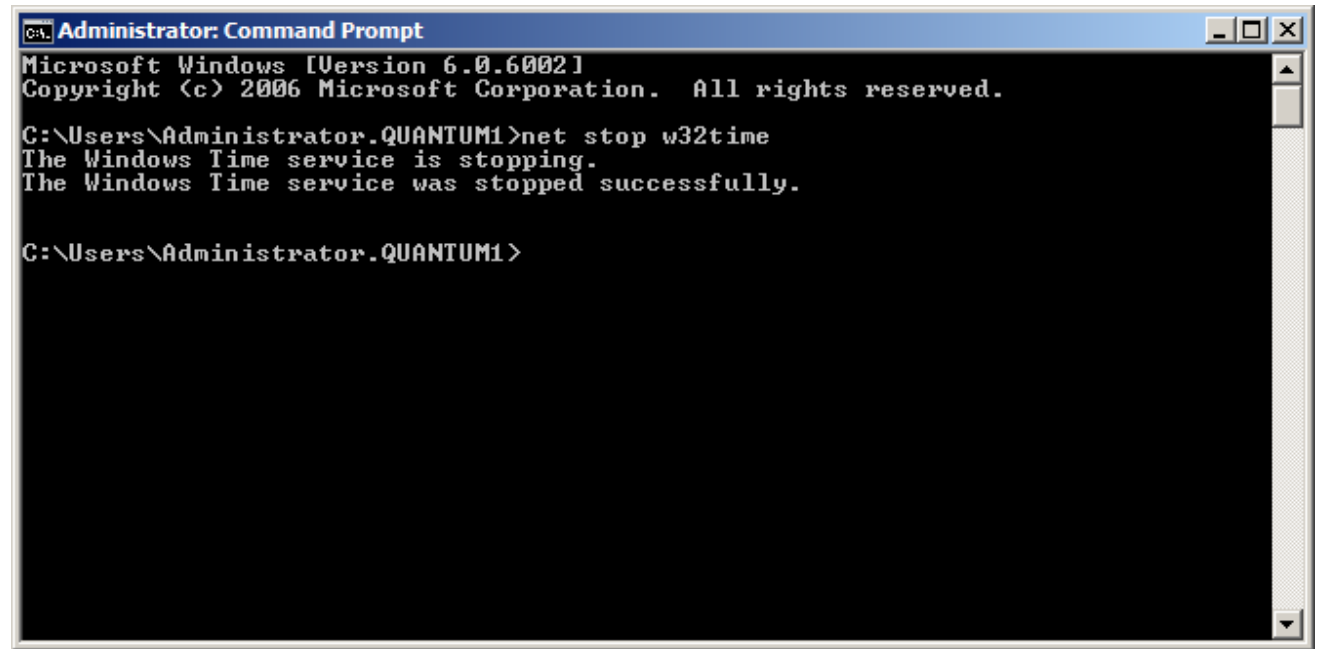
Changing the NtpServer Setting

Return to the Parameters folder and we double click on NtpServer and the Edit String window will appear. Change "time.windows.com,0x1" to "ntp0.usno.navy.mil,0x1". We should press the OK button to save the change. We now can close the Registry Editor.
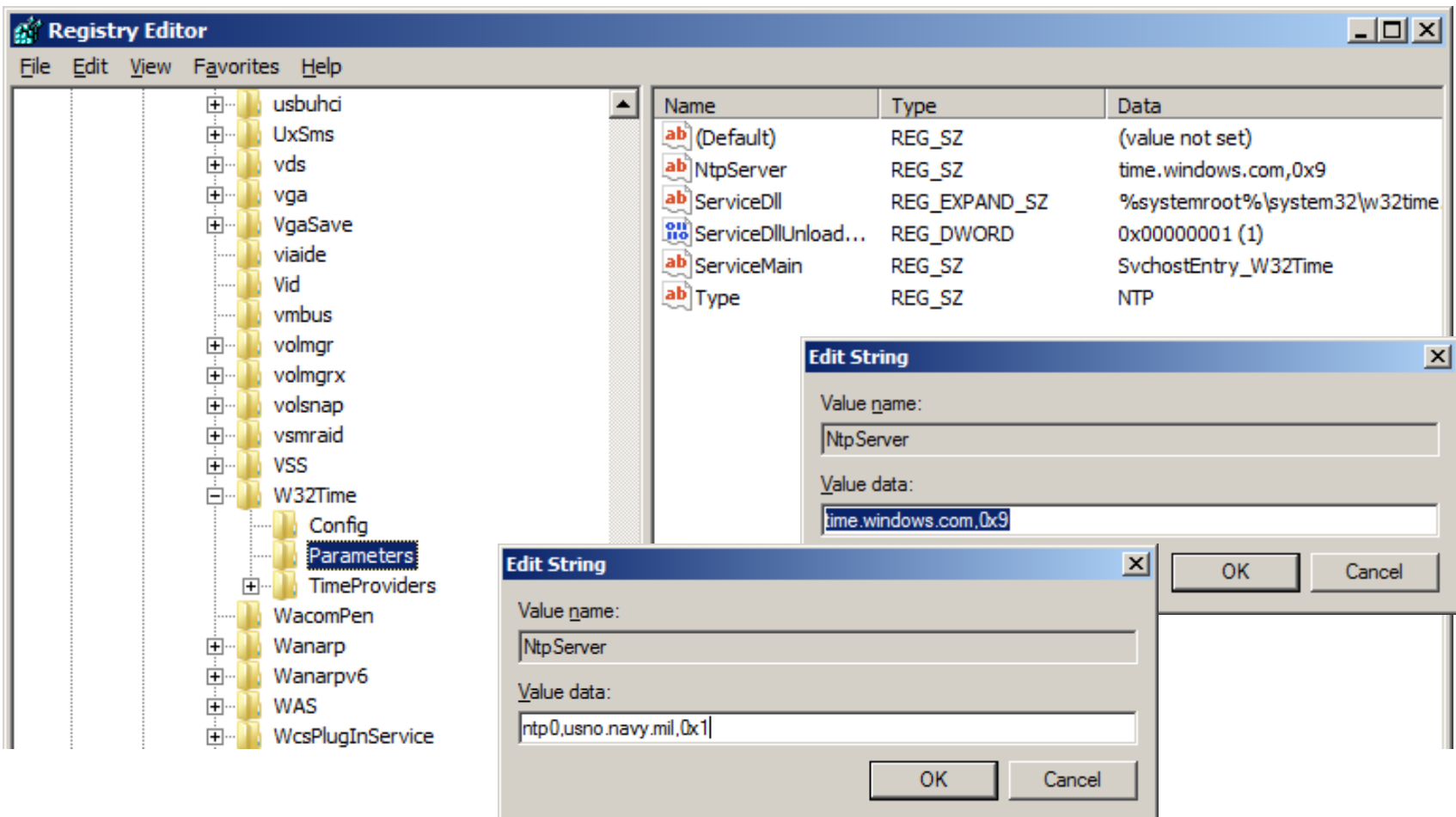
Stop Windows Time Service

Now, we open the command prompt window and to stop the Windows Time Service we type:

Net stop w32time


```
Administrator: Command Prompt

Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation.   All rights reserved.

C:\Users\Administrator.QUANTUM1>net stop w32time
The Windows Time service is stopping.
The Windows Time service was stopped successfully.


C:\Users\Administrator.QUANTUM1>
```
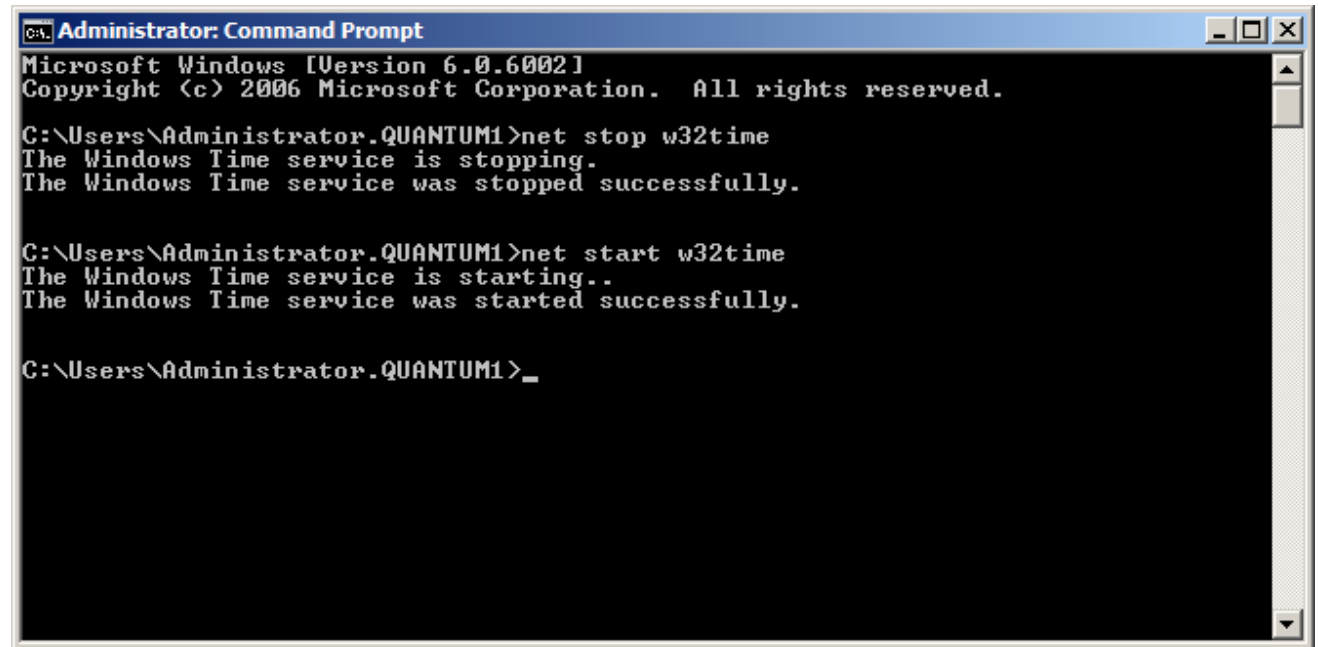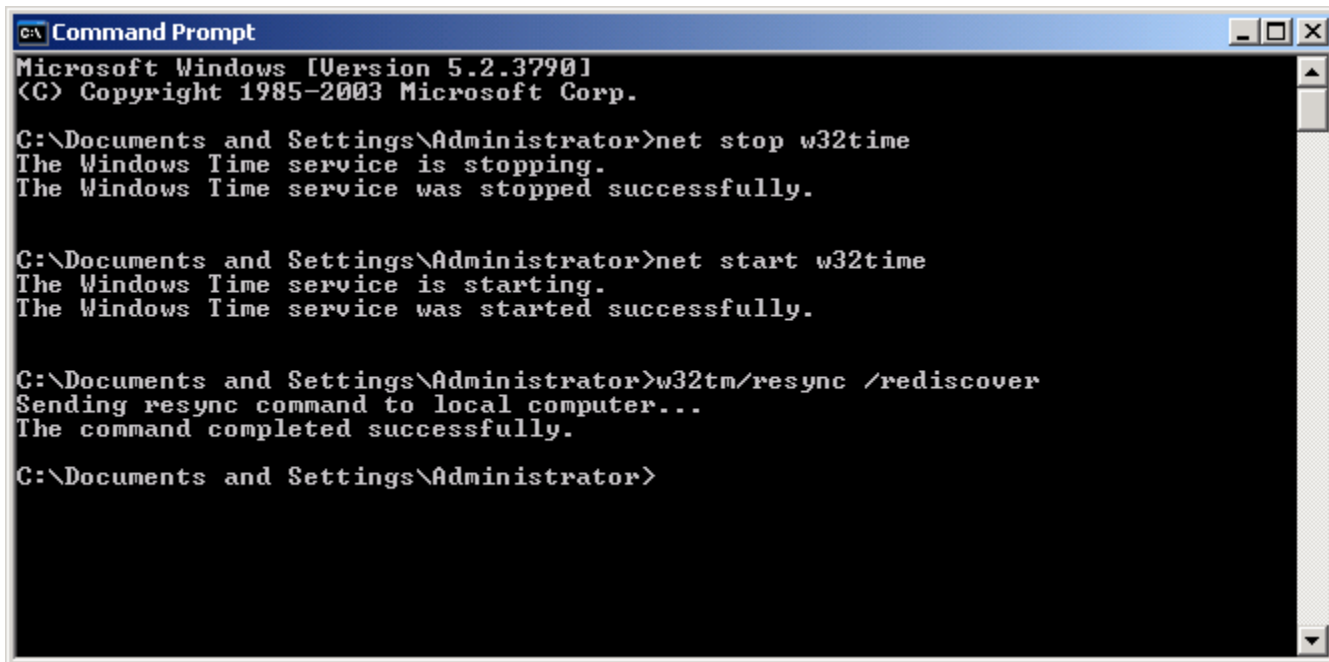
Start Windows Time Service

To start the
Windows Time
Service we type:

Net start w32time

Resynchronize with the Time Source

To Resynchronize with the time source, we type:

W32tm /resync /rediscover

The time will synchronize with the source and the devices on the domain will now harmonize. We have completed the lesson and successfully edited the System Registry.