

Leap Indicator: 0(no warning)
Stratum: 2
Source: Local CMOS Clock

Stratum: 0 DC

2?? ?? DC ???????

```
w32tm /query /configuration
```

DC

Type: NTP
NtpServer: time.windows.com,0x8
AnnounceFlags: 5

DC

? ????? DC ??????PDC ???????

```
“ S-DNS1 PDC nctest Flags PDC
```

1?? ?????????????????????????????

```
w32tm /config /manualpeerlist:"time.windows.com,0x8" /syncfromflags:manual /reliable:yes /update
```

2?? ?????????

```
net stop w32time  
net start w32time
```

3?? ?????????

```
w32tm /resync /force
```

4?? ??????

```
w32tm /query /status
```

□□□□

```
Source: time.windows.com,0x8  
Stratum: 2
```

? ????????????

□□□□□□

7000 □□□□□□

```
net stop w32time  
net start w32time  
w32tm /config /syncfromflags:domhier /update  
w32tm /resync /force
```

□□□□

```
w32tm /query /source
```

□ □□□□

```
S-DNS1.shuncom.local
```

? ????????

□□□□□

```
w32tm /stripchart /computer:S-DNS1.shuncom.local /dataonly /samples:5
```

□□□□□□□□□□

NTP □□□□□□


```
w32tm /config /manualpeerlist:"time.windows.com,0x8 cn.pool.ntp.org,0x8" /syncfromflags:manual /reliable:yes /update
```

□□□□□□

- manualpeerlist: □□□□□□ NTP □□
- syncfromflags:manual: □□□□□□□□□□
- reliable:yes: □□□□□□ "□□□□□□" "□ PDC □□□□□□

?? 2????????????????? Hyper-V ? VMware ??

“□□□□□□□□□□” “□□ ” w32time□

VMware ?????

□ VMware vSphere □□□□□□□□□□□□

“Synchronize guest time with host”

□□□□□□□□

```
vmware-toolbox-cmd timesync disable
```

Hyper-V ?????

□□□□□□□ “Time synchronization” □□□

?? 3?????????????????

```
net stop w32time
net start w32time
w32tm /resync /force
```

□□□□

```
w32tm /query /status
```

□□□□

Leap □□□: 0(no warning)

□□: 2

□: time.windows.com,0x8

?? 4???????"7000"?????

```
net stop w32time
net start w32time
w32tm /config /syncfromflags:domhier /update
w32tm /resync /force
```

□□□

```
w32tm /query /source
```

□□□□

```
S-DNS1.shuncom.local
```

? ?????

□□□□□□

```
w32tm /stripchart /computer:S-DNS1.shuncom.local /dataonly /samples:5
```

□□□□□□□□

```
12:34:56, +00.0012345s
12:34:57, +00.0009876s
...
```

□□□□□□□□□□

□□□□□□□□□□

□□□□□□□□□□

VMware □□ Hyper-V □□□□

"□□□□□□□□"

"□□□□□□"

□□□□□

□□□□□□

S-DNS1□□□□□□□□

□□□□□□□□

□□□□□□□□□□□□

? ? ? ? ? ? ? ?

```

Leap □□□: 0(□□□)      → □□□□□□□
□□: 3 (□□□ - □(S)NTP □□) → □□□□ NTP □□□□
□: cn.pool.ntp.org,0x8      → □□□□□□□□□□ NTP □

```

□□□

- DC □□□□ “VM IC Time Synchronization Provider”□
- □□□□□□□□□□□□□□
- □□□□□ □□□□□ **reliable time source**□ □□□□□□□□□□

? ? ? ? ? ? ? ? ? ? ? ? ? ?

□□□□□□

7000 □□□□□□□□□□

```

net stop w32time
net start w32time
w32tm /config /syncfromflags:domhier /update
w32tm /resync /force

```

□□□□□□

```

w32tm /query /source
w32tm /query /status

```

□□□□□□□□□□□□

```

Source: S-DNS1.shuncom.local
Leap □□□: 0(□□□)
□□: 4 (□□□ - □□□□□□□□)

```

□□□□□□□□□□□□


```
w32tm /config /syncfromflags:domhier /update
w32tm /resync /force
```

□□□□

```
w32tm /query /source
```

? ??????????

□□□□□□□□□□

```
w32tm /query /source
S-DNS1.shuncom.local
```

```
w32tm /query /status
Leap □□□: 0(□□□)
□□: 4 (□□□)
□□□□□□□□: <□□□□>
```

□□□□□□□□□□

```
nltest /sc_query:shuncom.local
```

□□□□□□□□□□ □□□□□ □□□□□ “□□□□□□□□” DNS □□ ”□□□□□□□□

□□□□□□□□□□□□□□ □□□□□□□□□□
□□ Win11 □□□ □□□□□□□□ **S-DNS1.shuncom.local** □□□□□ □□□□□□□□□□
□□□ **75** □□□ □□□□□□□□□□□□□□ □□□□□□□□ □

? ??????????

□□□□□□□□

```
w32tm /query /status
□□: 4 (□□□□ - □(S)NTP □□□)
□□□□□□□□□□: 2025-10-16 12:14:04
□: S-DNS1.shuncom.local
```

□□□

- □□□□□□□□ **UDP 123** □□ □
- □ /stripchart □□□

+81s → +75s

□□□□□□□□ □ **75~80** □ □□□□□□□ → □□□□ □□□□□□□□

?? ????????

Windows □□□□□□□□□□

- □□□ < **128** □ → □□ “□□□□ slew□” □□□□□□□□
- □□□ > **128** □ → □□□□□□□□ step□□

□□□□□□□□ 75 □□□□□□□□ 128 □□□□□□□□ “□□” □□□□□□□□

1. □□□ **Windows Time** □□□□□□□□□□ □
2. □□□□□□□□ □□□□ CMOS□□□□□□□□□□
3. □□□□□□□□□□ □
4. **NTP** □□□□□□□□ □□□□□□□□□□ 145s □□□□□□□□

? ????????????

? 1. ????????????

□ **S-DNS1** □□□□□□

```
w32tm /query /source
w32tm /query /status
```

□□□

- □□□□□□□□ NTP□□ cn.pool.ntp.org □ time.windows.com □
- □□□□□□ (□□: 3 □□□ □)

□□□□□□□□□□□□□□

```
w32tm /config /manualpeerlist:"time.windows.com,0x8 cn.pool.ntp.org,0x8" /syncfromflags:manual
/reliable:yes /update
```

```
net stop w32time && net start w32time
w32tm /resync /force
```

? 2. ?????Win11???????????

■■■■■■■■■■■■■■■■■■■■

```
net stop w32time
w32tm /unregister
w32tm /register
net start w32time

w32tm /config /manualpeerlist:"S-DNS1.shuncom.local,0x8" /syncfromflags:manual /update
w32tm /resync /nowait
```

■■■■ 75s ■■■■■■ step ■■■

```
w32tm /resync /rediscover /force
```

■■■

```
w32tm /config /update
net stop w32time && net start w32time
```

? 3. ????????????????????

■■■■■■■■■■■■■■■■■■■■

step■■

```
reg add HKLM\SYSTEM\CurrentControlSet\Services\W32Time\Config /v MaxPosPhaseCorrection /t
REG_DWORD /d 3600 /f
reg add HKLM\SYSTEM\CurrentControlSet\Services\W32Time\Config /v MaxNegPhaseCorrection /t
REG_DWORD /d 3600 /f
net stop w32time && net start w32time
w32tm /resync /force
```

■■■■■■■■ ±3600 ■■■■■■■■

? 4. ?????

■■■■■■■■

```
w32tm /query /status
```

```
w32tm /stripchart /computer:S-DNS1.shuncom.local /dataonly /samples:5
```

```
|||||
```

```
+0.05s ~ +0.10s
```

```
|||||||
```

```
? ??????????
```

- ||||| PDC Emulator ||||||| NTP|
- ||||||||||||||| NT5DS || domhier||||
- ||||||| UDP 123|
- ||||||| ||||||| |||||||

```
||||||||| || +||| NTP ||||| PowerShell || |
```

```
|||||||||||||||||
```

Revision #4
Created 16 October 2025 04:17:33 by Admin
Updated 16 October 2025 04:24:26 by Admin