Quick Note 30

Reboot a TransPort at a Certain Time of Day

Digi Technical Support

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Contents

1 Introduction ........................................................................................................................................... 3
  1.1 Corrections ........................................................................................................................................ 3
  1.2 Version ............................................................................................................................................. 3

2 Configuration ......................................................................................................................................... 4
  2.1 Place the Script Basic File on the TransPort File System ................................................................. 4
  2.2 Ensure Time is Correct ...................................................................................................................... 4
  2.3 Configure the TransPort to Run the Script ....................................................................................... 8

4 Configuration VIA Command Line ........................................................................................................ 9

5 Testing ................................................................................................................................................... 10

6 Source Code for the .sb File ............................................................................................................... 11
1 INTRODUCTION

This Quick Note (QN) will demonstrate how to configure a TransPort to reboot at a set time every 24 hours. A “Script Basic” program is used for this and needs to be manually uploaded to the router.

Router Model: The router used in this quick note is the TransPort WR41.

Other Compatible Models: Digi TransPort VC7400 VPN Concentrator, WR, SR or DR.

Firmware versions: 5.077 and later.

Configuration: This QN assumes the devices are set to their factory default configurations. Most configuration commands are only shown if they differ from the factory default.

1.1 Corrections

Requests for corrections or amendments to this application note are welcome and should be addressed to: tech.support@digi.com

Requests for new QN’s can be sent to the same address.

1.2 Version

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Published</td>
</tr>
<tr>
<td>2.0</td>
<td>Updated and rebranded</td>
</tr>
<tr>
<td>2.0a</td>
<td>Change to HyperLink</td>
</tr>
<tr>
<td>2.1</td>
<td>Updated screenshots and instructions for new web interface, rebranding (Apr 2016)</td>
</tr>
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</table>
2 CONFIGURATION

2.1 Place the Script Basic File on the TransPort File System

Download the following zip file then extract the “rebootat.sb” Script Basic file:

http://ftp1.digi.com/support/firmware/transport/utils/rebootat.zip

Using FileZilla or a similar FTP client, upload the “rebootat.sb” file to the default main folder on the
TransPort, and then reboot the TransPort.

**NOTE:** Ensure the “FTP Server” Network Service is enabled, in **Configuration - Network > Network Services**.

2.2 Ensure Time is Correct

Navigate to **Configuration - System > Date and Time**

You can either enter the time manually or configure the TransPort for SNTP or NTP.
Manual configuration:

### Configuration - System > Date and Time

#### Device Identity

#### Date and Time

Current system time: 1 Jan 1970 01:09:24

Manually set the time

- Hours: **15**
- Minutes: **47**
- Seconds: **24**
- Month: **April**
- Day: **21**
- Year: **2016**

Set

Timezone: (GMT -6:00) Central Time (US & Canada), Mexico City

- Update for Daylight Saving Time

### Autoset Date and Time

- Do not auto-set the system time
- Use SNTP to auto-set the system time
- Use NTP to auto-set the system time

Apply
SNTP (Simple Network Timer Protocol) configuration:

**Configuration - System > Date and Time**

- **Device Identity**
- **Date and Time**

  Current system time: 1 Jan 1970 01:20:45

  Manually set the time

  Hours: 1
  Minutes: 20
  Seconds: 45
  Month: January
  Day: 1
  Year: 2010

  Set

  Timezone: GMT Western Europe Time, London, Lisbon, Casablanca, Greenwich

  Update for Daylight Saving Time

  **Autoset Date and Time**

  Do not auto-set the system time

  Use SNTP to auto-set the system time

  SNTP Server: time.devicecloud.com

  Authorisation key #: 0

  Authorisation key:

  Check on Power-Up

  Update:

  every 24 hours

  randomly between 0 and 0 seconds

  Disable SNTP when interface: None

  0 is out of service

  Use NTP to auto-set the system time

**NOTE**: SNTP is the default time configuration setting. NTP may be alternatively be used.
Both hostnames and IP addresses are supported in the SNTP Server field.

A list of public SNTP Servers can be found here:
http://support.ntp.org/bin/view/Servers/NTPPoolServers

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>SNTP Server</td>
<td>time.devicecloud.com</td>
<td>Enter the desired SNTP server address</td>
</tr>
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</table>
2.3 Configure the TransPort to Run the Script

Navigate to Configuration - System > General

Enter the command:
bas rebootat.sb hh:mm

Where hh:mm is the time of the reboot using the 24 hour clock format.

hh = Hours
mm = Minutes

For example, to schedule a reboot at 6:30 PM, the command would be:
bas rebootat.sb 18:30

Click Apply then Save the configuration.

Parameter | Setting | Description
---|---|---
Command | bas rebootat.sb hh:mm | Enter the desired reboot time in hours and minutes
4  CONFIGURATION VIA COMMAND LINE

It is also possible to configure the same function via the CLI:

```
cmd 0 autocmd "bas rebootat.sb hh:mm"
config 0 save
```
5 TESTING

In this example, the time is almost 11 AM. The command configured in step 2.2 was:

```
bas rebootat.sb 11:00
```

The TransPort configuration was saved and manually rebooted.

When the TransPort has rebooted, the Event Log should be checked. There should be a 'User event' which is the event referring to the scripted reboot timer.

User event: REBOOTAT: Delay before reboot=2 mins

After the scripted reboot, another event will be written to the Event Log showing the TransPort will reboot in 1440 minutes (24 hours).

```
type eventlog.txt

11:00:21, 08 Nov 2010, User event: REBOOTAT: Delay before reboot=1440 mins
11:00:21, 08 Nov 2010, ETH 2 up
11:00:21, 08 Nov 2010, ETH 1 up
11:00:21, 08 Nov 2010, ETH 0 up
11:00:19, 08 Nov 2010, USB-3 device 1 connected: EHCI root hub
11:00:19, 08 Nov 2010, USB-2 device 1 connected: EHCI root hub
11:00:19, 08 Nov 2010, USB-1 device 1 connected: EHCI root hub
11:00:19, 08 Nov 2010, Power control profile 0 activated
11:00:19, 08 Nov 2010, Power-up [], Reboot command

10:58:03, 08 Nov 2010, User event: REBOOTAT: Delay before reboot=2 mins
10:58:03, 08 Nov 2010, ETH 2 up
10:58:03, 08 Nov 2010, ETH 1 up
10:58:03, 08 Nov 2010, ETH 0 up
10:58:01, 08 Nov 2010, USB-3 device 1 connected: EHCI root hub
10:58:01, 08 Nov 2010, USB-2 device 1 connected: EHCI root hub
10:58:01, 08 Nov 2010, USB-1 device 1 connected: EHCI root hub
10:58:01, 08 Nov 2010, Power control profile 0 activated
10:58:01, 08 Nov 2010, Power-up [], Reboot command
10:58:01, 08 Nov 2010, GPRS using SIM 1 (not present)
10:58:01, 08 Nov 2010, Eventlog Counters Reset
10:57:53, 08 Nov 2010, Reboot
10:57:53, 08 Nov 2010, PPP 1 down, LL disconnect
10:57:43, 08 Nov 2010, PPP 1 down, LL disconnect
10:57:41, 08 Nov 2010, DTR Up ASY 0
10:57:33, 08 Nov 2010, PPP 1 down, LL disconnect
10:57:23, 08 Nov 2010, PPP 1 down, LL disconnect
10:57:19, 08 Nov 2010, Par change by username, cmd 0 autocmd to bas rebootat.sb 11:00
```
' rebootat.sb: causes the Sarian to reboot at a specified time.
' Usage: bas rebootat.sb hh:mm
' To run at startup: cmd 0 autocmd "bas rebootat.sb hh:mm"
' This works by calculating the necessary delay (in minutes), and
' then running the "reboot n" command
'
const nl = "\r\n"
'
function MsgNonFatal(msg)
    local junk
    junk = system("setevent \"" & msg & "\" & " 0")
    print msg, nl
end function

initial_time = command()
'
' initialise the initial on/off time
if initial_time <> ""
    split initial_time by ":" to daily_hour, daily_min
    if val(daily_hour) < 0 OR val(daily_hour) > 23 OR val(daily_min) < 0 OR val(daily_min) > 59 then
        MsgNonFatal("REBOOTAT: invalid time (" & initial_time & ")",
            ignored")
        initial_time = ""
        stop
    else
        print "REBOOTAT: Time set to ", daily_hour, ":", daily_min,
            "\r\n"
        MsgNonFatal("REBOOTAT: Time=" & initial_time)
    endif
else
    MsgNonFatal("REBOOTAT: reboot time not set")
    stop
endif

tnow = GmTime()
'
MsgNonFatal("Time now is: " & FormatDate("YEAR-0M-0D 0H:0m:0s", tnow))
treboot = timevalue(year(tnow), month(tnow), day(tnow), val(daily_hour), 
val(daily_min), 0)
if treboot < tnow then
   treboot = treboot + 86400
endif
'
calculate how many minutes before reboot'
',
mins_delay = (treboot-tnow)\60 + 1
'
MsgNonFatal("REBOOTAT: Delay before reboot=" & treboot-tnow & 
" secs")
MsgNonFatal("REBOOTAT: Delay before reboot=" & mins_delay & 
" mins")
junk = system("reboot " & mins_delay)
stop