

Changing Date & Time via SNMP

Customer Tip

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This document applies to the Xerox products listed on Page 6. Minimum Software Version may be required.

Purpose

This document contains the procedure to update the time on Xerox devices via an SNMP command.

Background

There are three ways to update the time on devices, which are at the device itself (locally), through an SNMP (Simple Network Management Protocol) command, or via Xerox CentreWare Web. This document will discuss updating the time locally and via SNMP.

To configure devices using Xerox CentreWare Web, see the Customer Tips entitled “Xerox CentreWare Web – Updating Device Time” located at http://www.office.xerox.com/support/dctips/dc_admin.html.

Assumptions

The product is at the required software version; refer to the table on page 6.

During this procedure we will be using NET-SNMP, which is a free SNMP tool available at <http://www.net-snmp.org/>. The syntax used in this procedure was tested with this tool and has been successful. Any other SNMP tools used may require variations of the syntax used.

Configuring Device Time Locally or Via the Web User Interface

Please refer to your device’s User’s Guide for the steps needed to change the time at the device or via the internal web user interface (for those devices that have a web page to set the time).

Create a Configuration Set



Information Checklist

- Ensure that the workstation has an SNMP tool installed
- Take note of the target machine’s IP address. You will be able to do this by printing a configuration sheet. Please see User’s guide on how to print a configuration sheet for your device.
- Take note of the TCP/IP Settings on the configuration report as the IP Address will be needed in subsequent steps.
- Ensure that the SNMP protocol on the device has been enabled and the devices ‘SNMP Get’ and ‘SNMP Set’ community names are known.

Verify SNMP and Community Names

1. Insert the device's IP address within your browser's address line, press the [Enter] button.
2. Select [Properties] → [Connectivity] → [Protocols] → [SNMP]
3. Click on the [Enable] box, if it is not checked.
4. Click [Edit] and make note of the community names.
5. Exit out of the window.

(There may be some variances on where to locate the SNMP information depending on the model type.)



Date/Time Set Procedure

(For WorkCentre 56xx Series products with version 21.113.02.001 or lower proceed to Appendix A)

1. From your operating system open a DOS Window.
2. Within the DOS window verify that the device you are targeting is connected to the network. Type **ping <device IP number>**. You should receive a response similar to this:

```
C:\>ping 12.345.6.789
Pinging 12.345.6.789 with 32 bytes of data:
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Ping statistics for 12.345.6.789:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3. Startup the SNMP tool of your choice and verify that you are able to connect to the device using SNMP. This will be done by obtaining the device's current date and time.

To obtain the device's date and time type the following command, using the appropriate substitutions for your environment:

Note: *hrSystemDate.0 is the location where the date/time resides on the device.*

Command:

snmpget -c public -v 2c 12.345.6.789 hrSystemDate.0

Substituting the following:

public = the 'Get Community Name' obtained earlier in this process

12.345.6.789 = the target device's IP address

4. If successful, you will receive a response such as this from the target device:

HOST-RESOURCES-MIB::hrSystemDate.0 = STRING: 2009-11-1,13:15:55.0,+0:0

Where:

2009-11-1 = YYYY-MM-DD

13:15:55.0 = HH:MM:SS.TT <24 Hour Clock>

+0:0 = The 'Time Offset' configured on the device.

5. ***For WorkCentre 2424 and Phaser Products, please proceed to step 5b, for all others continue to step 5a.***
- 5a. Use the following SNMP command to set the date/time on the device, using the appropriate substitutions for your environment:

snmpset -c private -v 2c 12.345.6.789 hrSystemDate.0 x "07 DC 0B 04 02 1E 00 00 2D 05 00"


The above example uses the following substitutions:

private = the 'Set Community Name' obtained earlier

12.345.6.789 = the target device's IP address

07 D9 0B 18 0F 1E 00 00 2D 05 00 = The hexadecimal converted date/time

- **07 DC** = Year (2012)
- **0B** = Month (November)
- **04** = Day (4)
- **0F** = Hour (02)
- **1E** = Minute (30)
- **00** = Seconds (00)
- **00** = Tenths (00)
- **2D** = 2D ('-') means West of UTC, 2B ('+') means East of UTC"
- **05** = Hours East or West of UTC (range 00 to 0B) (optional)
- **00** = Minutes East or West of UTC (range 00 to 3B) (optional)

 ***To convert date and time to hexadecimal, use the conversion charts at the end of this document.***

- Once successful you should see the following confirmation message which echoes the devices new Date and Time.

HOST-RESOURCES-MIB::hrSystemDate.0 = STRING: 2012-11-4,02:30:0.0,+5:0

- Proceed to Step 6.


- 5b. Use the following SNMP command to set the date/time on the device, using the appropriate substitutions for your environment:

```
snmpset -c private -v 2c 12.345.6.789 hrSystemDate.0 x "07 DC 0B 04 02 1E 00 00 00 01 1E"
```

Substituting the following:

private = the 'Set Community Name' obtained earlier
12.345.6.789 = the target device's IP address
07 D9 0B 01 0F 1E 00 00 = The hexadecimal converted date/time

- **07 DC** = Year (2012)
- **0B** = Month (November)
- **04** = Day (4)
- **0F** = Hour (02)
- **1E** = Minute (30)
- **00** = Seconds (00)
- **00** = Tenths (00)**00** = Hundredths (00)
- **01** = GMT Offset Hour (01)
- **1E** = GMT Offset Minutes (30)

 **To convert date and time to hexadecimal, use the conversion charts at the end of this document.**

- Once successful you should see the following confirmation message which echoes the devices new Date and Time.

```
HOST-RESOURCES-MIB::hrSystemDate.0 = STRING: 2012-11-4,15:30:0.0
```

6. You have successfully updated the date and time of the target device.

Appendix A - Date/Time Set Procedure for WorkCentre 56xx Series Products Version 21.113.02.001 or lower.

1. From your operating system open a DOS Window. For Windows click **[Start]** → **[Run]**, type **[cmd]** and hit the **[Enter]** key.
2. Within the DOS window verify that the device you are targeting is connected to the network. Type **ping <device IP number>**. You should receive a response similar to this:

```
C:\>ping 12.345.6.789
Pinging 12.345.6.789 with 32 bytes of data:
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Reply from 12.345.6.789: bytes=32 time<1ms TTL=62
Ping statistics for 12.345.6.789:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3. Startup the SNMP tool of your choice and use the following SNMP command to set the date/time on the device, using the appropriate substitutions for your environment:

snmpset -c private -v 2c 12.345.6.789 hrSystemDate.0 x "07 D9 0B 01 0F 1E 00 00 00 01 1E"

Substituting the following:

private = the 'Set Community Name' obtained earlier

12.345.6.789 = the target device's IP address

07 D9 0B 01 0F 1E 00 00 = The hexadecimal converted date/time

- **07 D9** = Year (2009)
- **0B** = Month (November)
- **01** = Day (1)
- **0F** = Hour (15)
- **1E** = Minute (30)
- **00** = Seconds (00); Tenths (00); Hundredths (00)
- **01** = GMT Offset Hour (01)
- **1E** = GMT Offset Minutes (30)

i *To convert date and time to hexadecimal, use the conversion charts at the end of this document.*

- Once successful you should see the following confirmation message which echoes the devices new Date and Time.

HOST-RESOURCES-MIB::hrSystemDate.0 = STRING: 2009-11-1,15:30:0.0

4. You have successfully updated the date and time of the target device.

Minimum Software Version Needed

Product	Minimum Version	Product	Minimum Version
Color 550/560 (built-in controller)	All Versions	WC 5222/5225/5230	All Versions
ColorQube 9201/9202/9203	All Versions	WC 5325/5330/5335	All Versions
ColorQube 9301/9302/9303	All Versions	WC 5735/5740/5745/5755	All Versions
ColorQube 8570	All Versions	WC 6400	All Versions
ColorQube 8700	All Versions	WC 7120	All Versions
ColorQube 8870	All Versions	WC 7132	1.202.1
ColorQube 8900	All Versions	WC 7228/7235/7245	All Versions
DC 430	3.3.32	WC 7232/7242	All Versions
FaxCentre 2218	All Versions	WC 7328/7335/7345/7346	All Versions
Phaser	All Versions	WC 7425/7428/7435	All Versions
3635MFP 7500		WC 7525/7530/7535/7545/7556	All Versions
4500 7750		WC 7655/7665 (v1)	All Versions
4510 7760		WC 7655/7665/7675 (v2)	All Versions
4600 8400		WC 7755/7765/7775	All Versions
5500 8550		WC M20/M20i	2.5
5550 8560			
6250 8560MFP			
6350 8570			
6360 8860			
6700 8860MFP			
7400 8870			
WC 123/128/133	All Versions	WCP 32/40C	1.02.083
WC 2424	All Versions	WCP 35/45/55	*.97.20.019
WC 3210/3220	All Versions	WCP 65/75/90	1.001.02.082
WC 3315/3325	All Versions	WCP 165/175/190	*.57.32.008
WC 3550	All Versions	WCP 232/238/245/255/265/275	All Versions
WC 4118	1.15	WCP 2128/2636/3545	1.04.501
WC 4150	10.100.06		
WC 4250/4260	All Versions		
WC 5020/DN	All Versions		
WC 5030/5050	All Versions		
WC 5135/5150	All Versions		

Hexadecimal Conversion Tables

Convert Year to Hexadecimal

Year	Hexadecimal Value	Year	Hexadecimal Value
2012	07 DC	2014	07 DE
2013	07 DD	2015	07 DF

Convert Number to Hexadecimal

Number	Hexadecimal	Number	Hexadecimal	Number	Hexadecimal	Number	Hexadecimal
-12	F4	6	06	24	18	42	2A
-11	F5	7	07	25	19	43	2B
-10	F6	8	08	26	1A	44	2C
-9	F7	9	09	27	1B	45	2D
-8	F8	10	0A	28	1C	46	2E
-7	F9	11	0B	29	1D	47	2F
-6	FA	12	0C	30	1E	48	30
-5	FB	13	0D	31	1F	49	31
-4	FC	14	0E	32	20	50	32
-3	FD	15	0F	33	21	51	33
-2	FE	16	10	34	22	52	34
-1	FF	17	11	35	23	53	35
0	00	18	12	36	24	54	36
1	01	19	13	37	25	55	37
2	02	20	14	38	26	56	38
3	03	21	15	39	27	57	39
4	04	22	16	40	28	58	3A
5	05	23	17	41	29	59	3B

Additional Information

You can reach Xerox Customer Support at <http://www.xerox.com> or by contacting Xerox Support in your country.

Xerox Customer Support welcomes feedback on all documentation - send feedback via e-mail to: USA.DSSC.Doc.Feedback@xerox.com.

Other Tips about Xerox multifunction devices are available at the following URL: <http://www.office.xerox.com/support/dctips/dctips.html>.

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