# Rsyncd setup on a windows computer for use with Affa backup

## **From SME Server**

# Contents

- 1 Purpose
- 2 Installation
- 3 Configuration
  - 3.1 Configuring the sshd Service
    - 3.1.1 On Windows Vista
    - 3.1.2 On Windows XP, Windows 2000 Workstation and Windows 2000 Server
    - 3.1.3 On Windows Server 2003
  - 3.2 Configuring the rsyncd Service
- 4 Security
- 5 Uninstall
- 6 References

## Purpose

Using Cygwin rsync on a Windows computer to backup it remotely over ssh does not work as the Cygwin rsync process hangs. This problem has been reported frequently but was not solved yet. The only known workaround is running the rsync daemon.

This document describes the installation and configuration of the rsync daemon in the cygwin environment on a Windows XP computer for the purpose to backup data using the Affa backup software.

Affa versions 0.9.0 or higher support the rsyncd protocol.

**Note:** Cygwin requires a Windows OS with NTFS file system. Does not work on FAT32 file system

## Installation

Login with the **local** Administrator account and create a folder C:\cygwin. Save http://cygwin.com/setup.exe to this folder and run it:

🗲 Cygwin Setup		
	Cygwin Net Release Setup Program	
	This setup program is used for the initial installation of the Cygwin environment as well as all subsequent updates. Make sure to remember where you saved it.	
	The pages that follow will guide you through the installation. Please note that Cygwin consists of a large number of packages spanning a wide variety of purposes. We only install a base set of packages by default. You can always run this program at any time in the future to add, remove, or upgrade packages as necessary.	
	E	
	Setup.exe version 2.573.2.2	
	Copyright 2000-2007	
	http://www.cygwin.com/	
	< ⊒urück Weiter > Abbrechen	

🗳 Cygwin Setup - Choose Installation Type	
<b>Choose A Download Source</b> Choose whether to install or download from the internet, or install from files in a local directory.	E
<ul> <li>Install from Internet downloaded files will be kept for future re-use</li> <li>Download Without Installing</li> </ul>	
◯ Install from <u>L</u> ocal Directory	
< <u>Zurück</u> <u>W</u> eiter >	Abbrechen

🖻 Cygwin Setup - Choose Installation Directory				
Select Root Install Directory Select the directory where you want to install Cygwin. Also choose a few installation parameters.				
CRoot Directory				
C:\cygwin	Browse			
Install For	Default Text File Type			
Cygwin will be available to all users of the system. NOTE: This is required if you wish to run services like sshd, etc.	No line translation done; all files opened in binary mode. Files on disk will have LF line endings.			
◯ Just <u>M</u> e	OD <u>0</u> S / text			
Cygwin will only be available to the current user. Only select this if you lack Admin, privileges or you have specific	Line endings will be translated from unix (LF) to DOS (CR-LF) on write and vice versa on read.			
needs.	Read more about file modes			
	< <u>Z</u> urück <u>W</u> eiter > Abbrechen			
🔄 Cygwin Setup - Select Local Package	Directory			
Select Local Package Directory Select a directory where you want Setup to store the installation files it downloads. The directory will be created if it does not already exist.				
Local Package Directory				
Local Package Directory C:\cygwin	Browse			
	B <u>r</u> owse			
	Browse			

< <u>Z</u>urück

 $\underline{W}$ eiter >

Abbrechen

Cygwin Setup - Select Connection Type	
Select Your Internet Connection Setup needs to know how you want it to connect to the internet. Choose the appropriate settings below.	E
<ul> <li>Direct Connection</li> <li>Use <u>IE5 Settings</u></li> </ul>	
O Use HTTP/FTP <u>P</u> roxy: Proxy <u>H</u> ost	
Port 80	
< <u>Z</u> urück <u>W</u> eiter >	Abbrechen

## Select a nearby mirror

🗳 Cygwin Setup	- Choose Download Site(s)	
Choose A Dow Choose a site	nload Site from this list, or add your own sites to the list	E
	Available Download Sites:	
	ftp://mirror.switch.ch ftp://sunsite.ms.mff.cuni.cz ftp://ftp.fit.vutbr.cz http://cygwin.basemirror.de ftp://ftp-stud.fht-esslingen.de http://ftp.gwdg.de http://ftp.gwdg.de http://ftp.inf.tu-dresden.de http://ftp.inf.tu-dresden.de http://ftp.uni-kl.de http://ftp.uni-kl.de	
User URL:		Add
	< <u>Zurück</u>	Weiter > Abbrechen

Select the packages to install (in additon to the already selected defaults):

- from category Net: openssh, rsync
  from category Editor: vim (or any other editor of your choice)
  from category Utils: diffutils

Select p	backages to ins	tall			E	
		<u>О К</u> е	еер <u>О</u>	Prev 💽	<u>Curr</u> ○ E <u>x</u> p <u>V</u> iew Category	
Category	New	Bin?	P Src?	Size	Package	
	4.7p1-2	$\boxtimes$			openssh: The OpenSSH server and	
	🚯 0.9.8g-1	$\times$		983k	openssl: The OpenSSL runtime envir	
	🚯 Skip	n/a	n/a	554k	openssl097: The OpenSSL 0.9.7 rur	
	🚯 Skip	ηία	nja	9k	P	
	🚯 Skip	nja	n/a	34k	pr3287: 3287 Printer Emulator	
	🚯 Skip	n/a	n/a	519k	proftpd: A flexible, stable and highly-	
	2.6.9-2	$\times$			rsync: Fast remote file transfer progra	
- 16	🚯 Skip	nja	n/a	114k	s3270: 3270 Emulator (Scripted)	
				J	>	

🔄 71% - Cygwin Setu	p	
<b>Progress</b> This page displays th	ne progress of the download or installation.	E
Installing openssh-4.7j /usr/bin/sftp		
Progress: Total: Disk:		
	<u></u>	
	< <u>Z</u> urück <u>W</u> eiter >	Abbrechen

Cygwin Setup - Installation Status and Create Icons	
<b>Create Icons</b> Tell setup if you want it to create a few icons for convenient access to the Cygwin environment.	E
Create icon on Desktor	
Add icon to <u>Start Menu</u>	
Installation Status Installation Complete	
< <u>Zurück</u> Fertig stellen	Abbrechen

## Configuration

Run the Cygwin Bash Shell from the Start Menu.

### **Configuring the sshd Service**

<b>Note:</b> The sshd service is not needed for the Affa backup but it is quite useful to have a ssh login for configuration or viewing log files. You can skip this step, if you don't need ssh login.	
Run the sshd configuration script.	
ssh-host-config	
You are asked a few questions. Answer them as shown in the script dialog below (in bold text).	
On Windows Vista	

<b>Incomplete:</b> This article or section needs to be expanded. Please help to fill the gaps or discuss the issue on t page	he talk
	······

On Windows XP, Windows 2000 Workstation and Windows 2000 Server

7 Generating /etc/ssh host key Generating /etc/ssh\_host\_rsa\_key Generating /etc/ssh\_host\_dsa\_key Generating /etc/ssh\_config file Privilege separation is set to yes by default since OpenSSH 3.3. However, this requires a non-privileged account called 'sshd'. For more info on privilege separation read /usr/share/doc/openssh/README.privsep. Should privilege separation be used? (yes/no) yes Warning: The following function requires administrator privileges! Should this script create a local user 'sshd' on this machine? (yes/no) yes Generating /etc/sshd config file Added ssh to F:\WINDOWS\system32\drivers\etc\services Warning: The following functions require administrator privileges! Do you want to install sshd as service? (Say "no" if it's already installed as service) (yes/no) yes Which value should the environment variable CYGWIN have when sshd starts? It's recommended to set at least "ntsec" to be able to change user context without password. Default is "ntsec". CYGWIN=ntsec The service has been installed under LocalSystem account. . To start the service, call `net start sshd' or `cygrunsrv -S sshd'. Host configuration finished. Have fun! 1\_\_\_\_\_

#### **On Windows Server 2003**

Choose a random string for the password. You'll never need it again.

Generating /etc/ssh host key Generating /etc/ssh\_host\_rsa\_key Generating /etc/ssh host dsa key Generating /etc/ssh\_config file Privilege separation is set to yes by default since OpenSSH 3.3. However, this requires a non-privileged account called 'sshd'. For more info on privilege separation read /usr/share/doc/openssh/README.privsep. Should privilege separation be used? (yes/no) yes Warning: The following function requires administrator privileges! 'Should this script create a local user 'sshd' on this machine? (yes/no) yes Generating /etc/sshd config file Warning: The following functions require administrator privileges! Do you want to install sshd as service? (Say "no" if it's already installed as service) (yes/no) yes You appear to be running Windows 2003 Server or later. On 2003 and later systems, it's not possible to use the LocalSystem account if sshd should allow passwordless logon (e.g. public key authentication). If you want to enable that functionality, it's required to create a new account 'sshd server' with special privileges, which is then used to run the sshd service under. Should this script create a new local account 'sshd server' which has the required privileges? (yes/no) yes Please enter a password for new user 'sshd server'. Please be sure that this password matches the password rules given on your system. Entering no password will exit the configuration. PASSWORD=Xesp348RfnMes User 'sshd\_server' has been created with password 'Xesp348RfnMes'. If you change the password, please keep in mind to change the password for the sshd service, too. Also keep in mind that the user sshd server needs read permissions on all users' .ssh/authorized\_keys file to allow public key authentication for these users!. (Re-)running ssh-user-config for each user will set the required permissions correctly. Which value should the environment variable CYGWIN have when sshd starts? It's recommended to set at least "ntsec" to be able to change user context without password. 'Default is "ntsec". CYGWIN=ntsec The service has been installed under sshd server account. To start the service, call `net start sshd' or `cygrunsrv -S sshd'. Host configuration finished. Have fun! 1\_\_\_\_\_

\_\_\_\_\_

#### Start the sshd service

	,
	1
net start sshd	
·	

Don't forget to open port 22 for the IP address of the Affa server in the Windows firewall.

#### Testing

	i
ssh Administrator@localhost	
۱	· · · · · · · · · · · · · · · · · · ·

#### **Configuring the rsyncd Service**

Create the /etc/rsyncd.secrets file and add the user affa with password **secretword** separated by a colon. Replace the placeholder **secretword** by a strong password. The user 'affa' does not need to exist on the local system.

-----E. affa:secretword Set secure permissions on /etc/rsyncd.secrets ------chown 18.544 /etc/rsyncd.secrets chmod 660 /etc/rsyncd.secrets ι\_ Create the /etc/rsyncd.conf configuration file. Replace the placeholder AFFA IP by the ip address of your Affa server. ----gid = 544 uid = 18 hosts allow = AFFA IP auth users = affa secrets file = /etc/rsyncd.secrets strict modes = true read only = true

use chroot = no transfer logging = true log format = %h %o %f %l %b log file = /var/log/rsyncd.log [AFFA] path = /cygdrive comment = cygdrive root dir

Uid 18 is the userid of the System account. Gid 544 is the groupid of the Administrators group (may be shown as root/gid 0 on the Cygwin console).

Install rsyncd as a service.

```
cygrunsrv --install "rsyncd" --path /usr/bin/rsync --args "--daemon --no-detach" \
--desc "Starts a rsync daemon for accepting incoming rsync connections" \
--disp "Rsync Daemon" --type auto
```

Start the rsyncd service

net start rsyncd

Don't forget to open port 873 for the IP address of the Affa server in the Windows firewall.

Testing

Login the Affa server and run the following command, where IP\_ADDRESS is the IP address of the Windows computer.

	ı
'rsync -av affa@IP ADDRESS::'AFFA/'	
_	1
· · · · · · · · · · · · · · · · · · ·	

You should receive a file list of all your drives.

## Security

The rsync daemon protocol does not provide any encryption of the data that is transferred over the connection. Use it only in the local net or VPN.

## Uninstall

- Login with the local Administrator account and run the Cygwin Bash Shell
- Stop services

```
-----
                      -----
net stop sshd
net stop rsyncd
      _____
-----

    Uninstall services

_____
sc delete sshd
sc delete rsyncd
1_____
 Remove local user sshd
 _____
net user /delete sshd
   _____

    Remove local sshd server (Windows 2003 server only)

 _____
net user /delete sshd server
 -----
 Close the Cygwin Bash Shell
 Remove folder c:\cygwin
```

## References

- Affa Contrib
- http://marc-abramowitz.com/archives/2007/10/14/solving-rsync-hangs-with-cygwin/

Retrieved from "http://wiki.contribs.org/Rsyncd\_setup\_on\_a\_windows\_computer\_for\_use\_with\_Affa\_backup" Categories: Incomplete | Backup | Howto

- This page was last modified on 22 December 2008, at 22:19.
- Content is available under GNU Free Documentation License 1.2.