

Setting up Cygwin & OpenSSH for DRS

Tested for UCCX 8.0(2) & 8.5(1)

This document outlines how to setup Cygwin on XP, Vista & windows 7 machines. The steps given may not be complete. This document is only to help ease the process and does not guarantee that it will work.

This was tested with windows 7 (64-bit) & XP. Here are the necessary steps:

1. Download & install <http://cygwin.com/setup.exe>. For windows vista & 7 run exe file as administrator.
 - i. Click the little View button for "Full" view, find the package "openssh", click on the word "skip" so that an X appears in Column B (5.8p1-1)
2. Add the following in Environment Variables:
 - i. Under "User variables for ___" edit "path" variable adding `:c:\cygwin\bin` towards the end of the variable value.
 - ii. Under "System variables" > New... > Variable name type in `CYGWIN` > Variable value type in `ntsec tty`
3. Run Cygwin as administrator then issue the following commands.

```
chmod +r /etc/passwd
chmod u+w /etc/passwd
chmod +r /etc/group
chmod u+w /etc/group
chmod 755 /var
touch /var/log/sshd.log
chmod 664 /var/log/sshd.log
ssh-host-config
```

4. Answer the questions as follows:

```
*** Query: Should privileged separate be used? yes
*** Query: new local account 'sshd'? yes
*** Query: Do you want to install sshd as a service?
<Say "no" if it is already installed as a service> yes
*** Query: Enter the value of CYGWIN for the daemon: [] ntsec tty
*** Info: This script plans to use 'cyg_server'.
*** Info: 'cyg_server' will only be used by registered services.
*** Query: Do you want to use a different name? no
*** Query: Create new privileged user account 'cyg_server'? yes
*** Query: Please enter the password: Password
*** Query: Reenter: Password
*** Info: Host configuration finished. Have fun!
```

<<< this will only show in win 7

NOTE: For Windows XP, the userID will be the administrator account/password for that PC. You MUST have a password set for this to work.

5. Issue the `cyglsa-config` command, and reboot your computer.
6. Then issue the following:

```
mkpasswd -cl > /etc/passwd
mkgroup --local > /etc/group
```

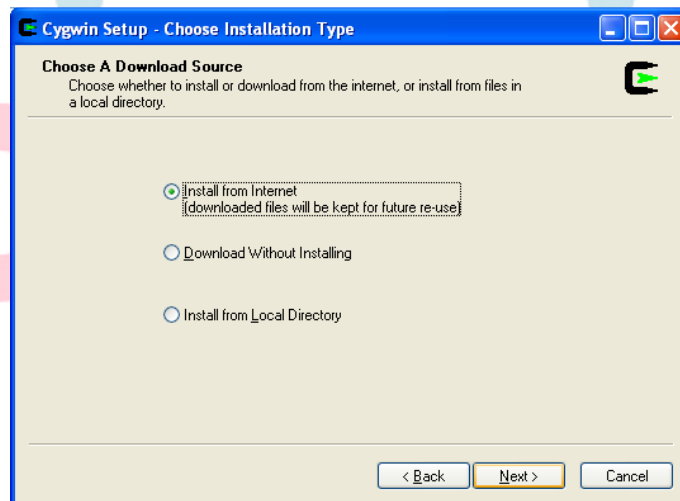
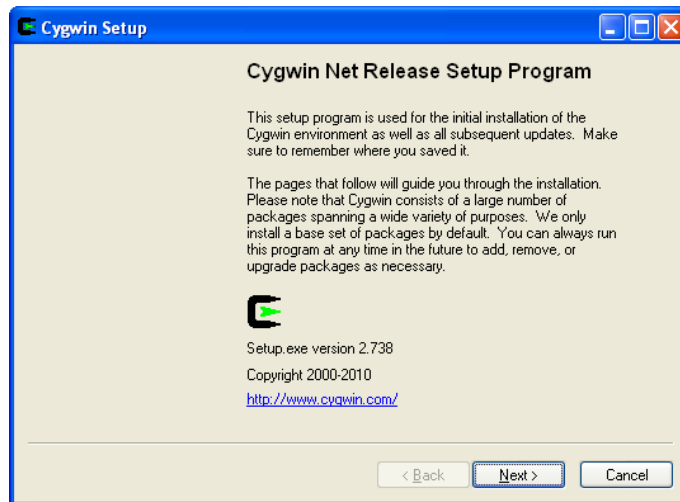
To start the sshd service, run `net start sshd` command or `cygrunserv --start sshd` command.

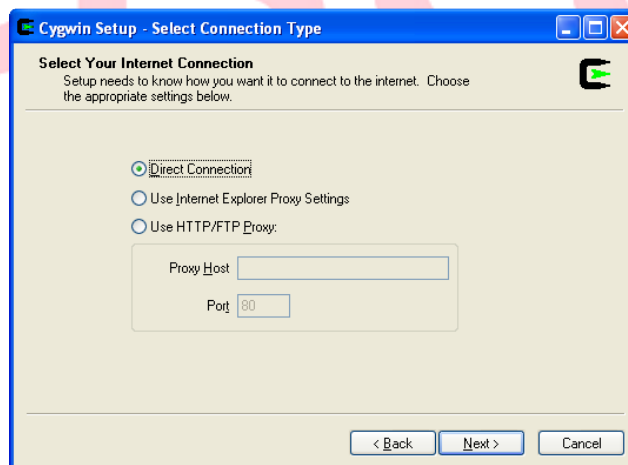
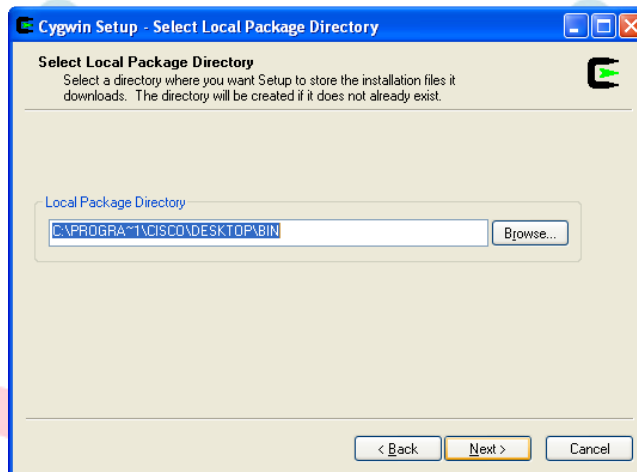
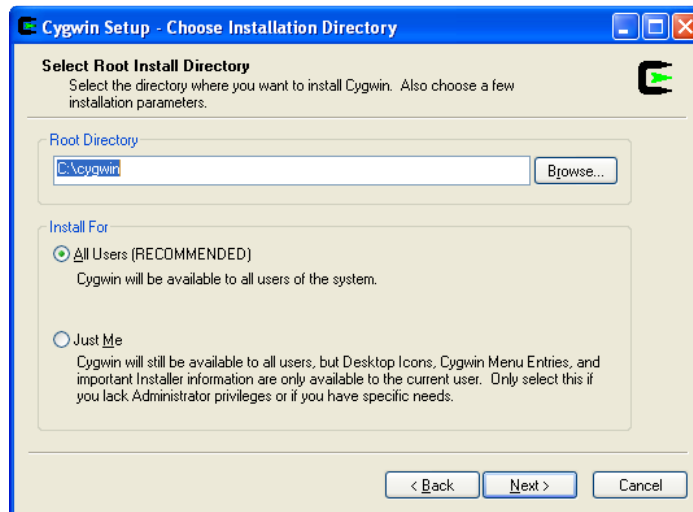
Test: Go to your command prompt. Type in “ssh cyg_server@ip_address” or on windows XP “ssh windows_userID@ip_address”. In our example, password is ‘Password’. ip_address is your pc ip. Say **yes** to the RSA authenticity message.

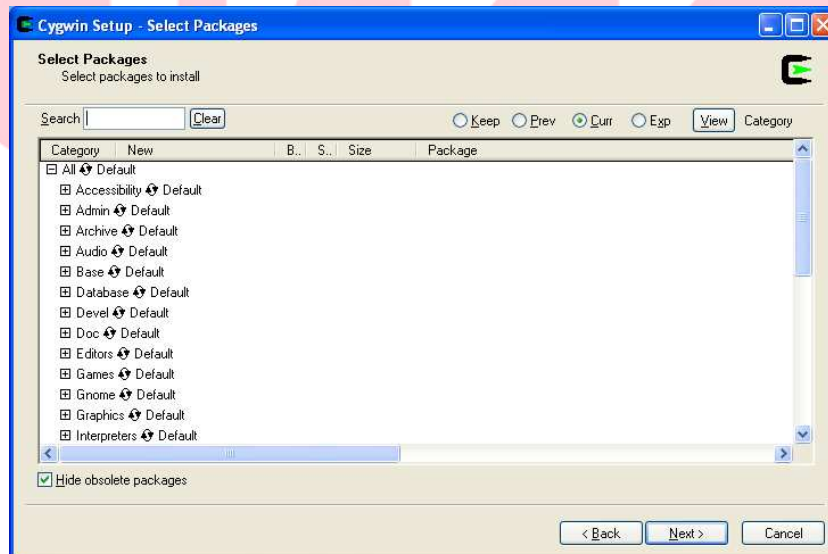
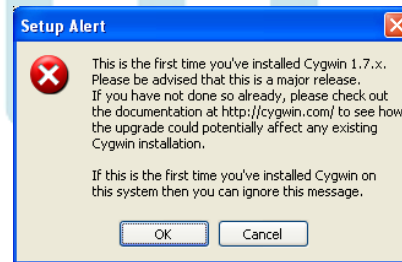
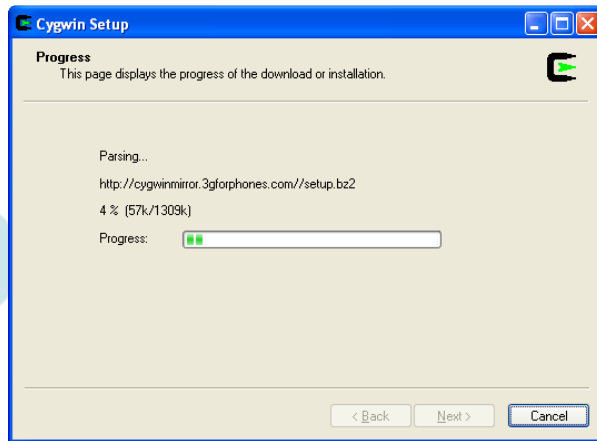
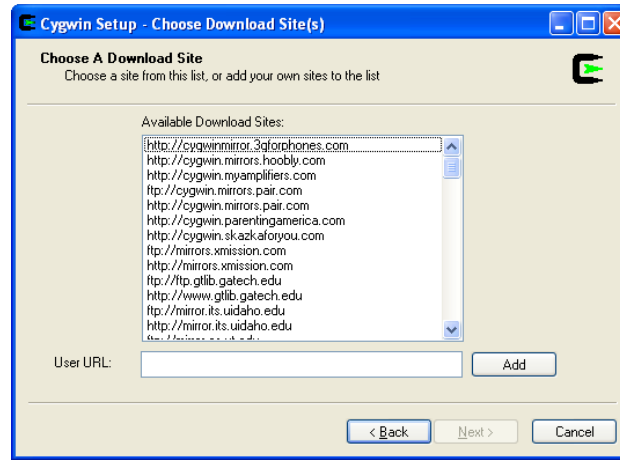
So according to this configuration, the username is ‘cyg_server’, password is ‘Password’.

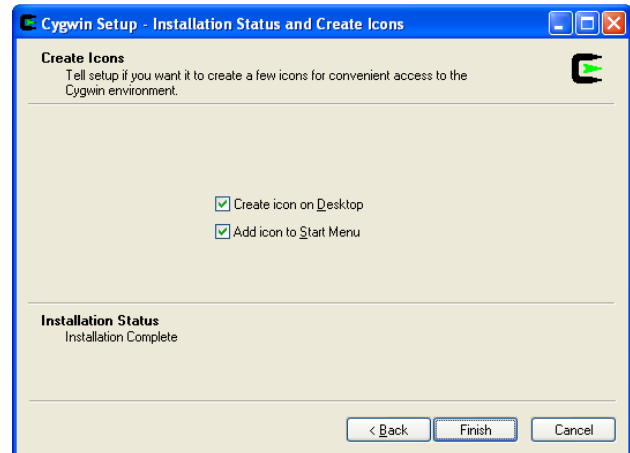
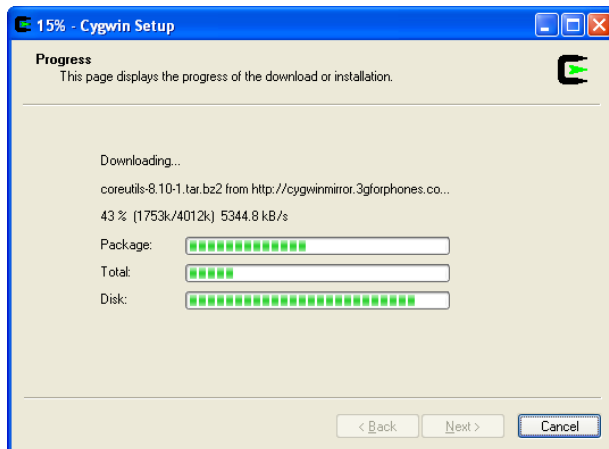
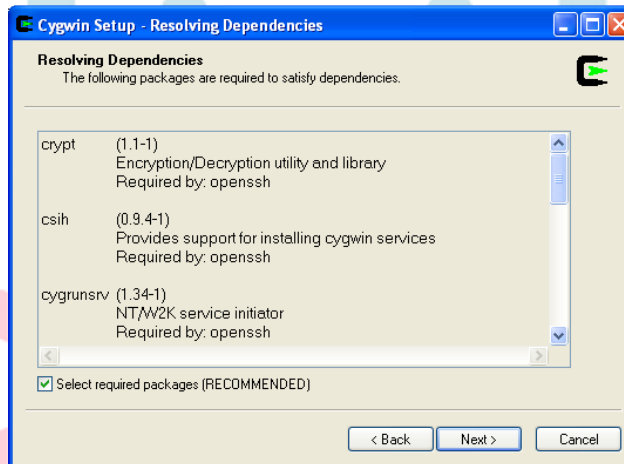
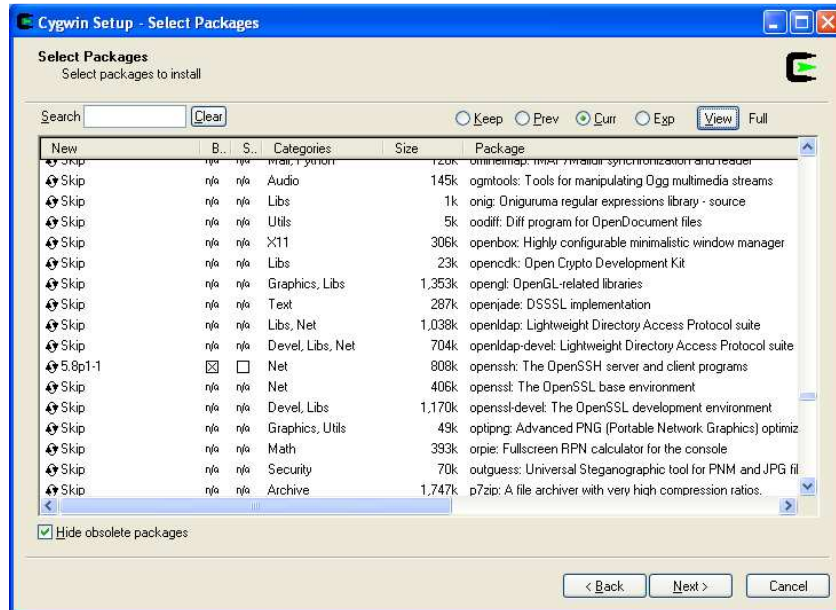
If you run Disaster Recovery System, your backups will be stored in **c:\cygwin** folder.

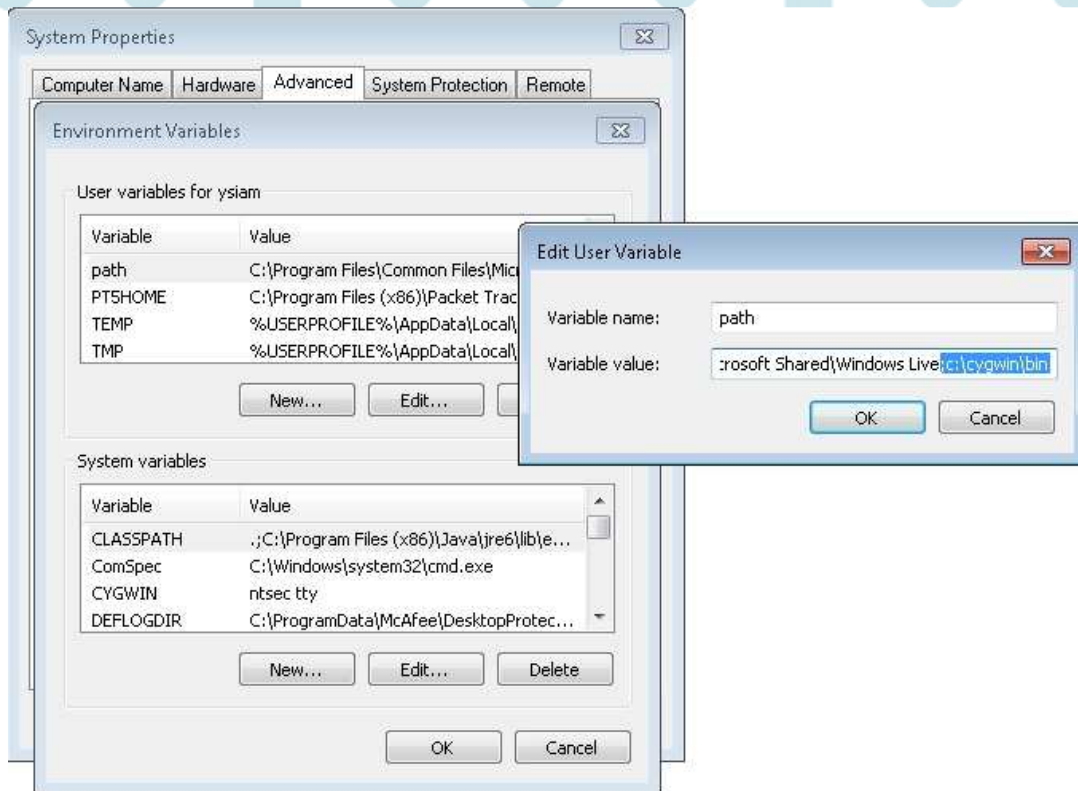
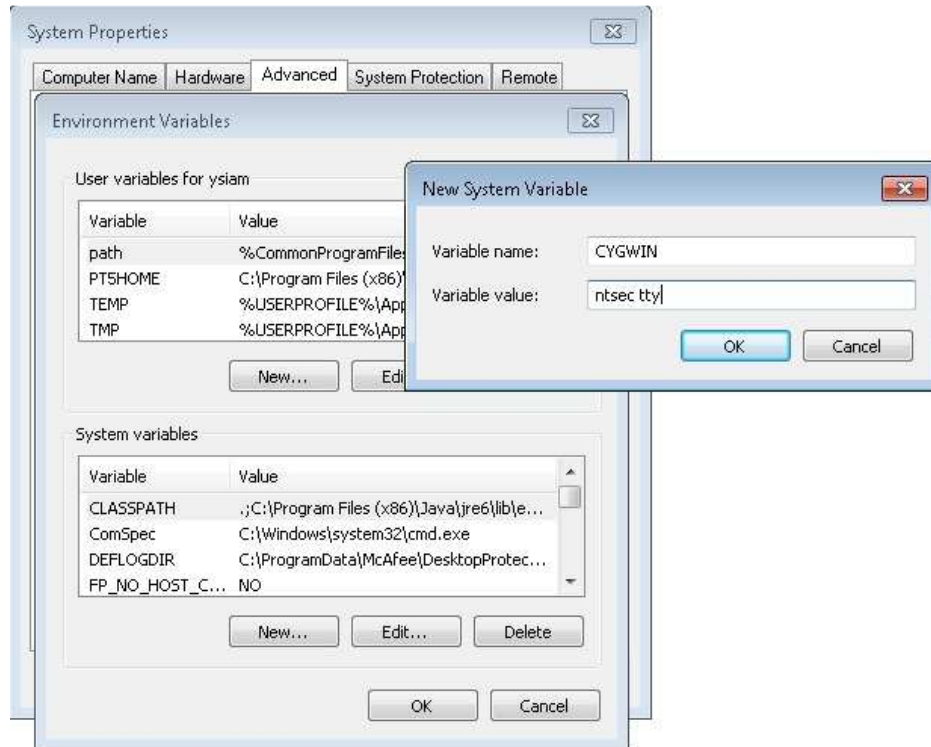
Screenshots of the setup:











```
119996369 [unknown (0x360)] install 216 sig_send: wait for sig_complete event fa
iled, signal 6, rc 258, Win32 error 0
'./.inputrc' -> '/home/rtpipcc/./.inputrc'

rtpipcc@RTP-IPCC-PC1 ~
$ c
bash: c: command not found

rtpipcc@RTP-IPCC-PC1 ~
$

rtpipcc@RTP-IPCC-PC1 ~
$

rtpipcc@RTP-IPCC-PC1 ~
$

rtpipcc@RTP-IPCC-PC1 ~
$

rtpipcc@RTP-IPCC-PC1 ~
$ chmod +r /etc/passwd

rtpipcc@RTP-IPCC-PC1 ~
$ chmod u+w /etc/passwd

rtpipcc@RTP-IPCC-PC1 ~
$ chmod +r /etc/group

rtpipcc@RTP-IPCC-PC1 ~
$ chmod u+w /etc/group

rtpipcc@RTP-IPCC-PC1 ~
$ chmod 755 /var

rtpipcc@RTP-IPCC-PC1 ~
$ touch /var/log/sshd.log

rtpipcc@RTP-IPCC-PC1 ~
$ chmod 664 /var/log/sshd.log

rtpipcc@RTP-IPCC-PC1 ~
$ ssh-host-config
```

```
rtpipcc@RTP-IPCC-PC1 ~
$ chmod +r /etc/passwd

rtpipcc@RTP-IPCC-PC1 ~
$ chmod u+w /etc/passwd

rtpipcc@RTP-IPCC-PC1 ~
$ chmod +r /etc/group

rtpipcc@RTP-IPCC-PC1 ~
$ chmod u+w /etc/group

rtpipcc@RTP-IPCC-PC1 ~
$ chmod 755 /var

rtpipcc@RTP-IPCC-PC1 ~
$ touch /var/log/sshd.log

rtpipcc@RTP-IPCC-PC1 ~
$ chmod 664 /var/log/sshd.log

rtpipcc@RTP-IPCC-PC1 ~
$ ssh-host-config
*** Info: Generating /etc/ssh_host_key
*** Info: Generating /etc/ssh_host_rsa_key
*** Info: Generating /etc/ssh_host_dsa_key
*** Info: Generating /etc/ssh_host_ecdsa_key
*** Info: Creating default /etc/ssh_config file
*** Info: Creating default /etc/sshd_config file
*** Info: Privilege separation is set to yes by default since OpenSSH 3.3.
*** Info: However, this requires a non-privileged account called 'sshd'.
*** Info: For more info on privilege separation read /usr/share/doc/openssh/README.privsep.
*** Query: Should privilege separation be used? (yes/no) yes
*** Info: Note that creating a new user requires that the current account have
*** Info: Administrator privileges. Should this script attempt to create a
*** Query: new local account 'sshd'? (yes/no) yes
*** Info: Updating /etc/sshd_config file
*** Info: Added ssh to C:\WINDOWS\system32\drivers\services

*** Warning: The following functions require administrator privileges!

*** Query: Do you want to install sshd as a service?
*** Query: (Say "no" if it is already installed as a service) (yes/no) yes
*** Query: Enter the value of CYGWIN for the daemon: [ ] ntsec tty

*** Info: The sshd service has been installed under the LocalSystem
*** Info: account (also known as SYSTEM). To start the service now, call
*** Info: 'net start sshd' or 'cygrunsrv -S sshd'. Otherwise, it
*** Info: will start automatically after the next reboot.

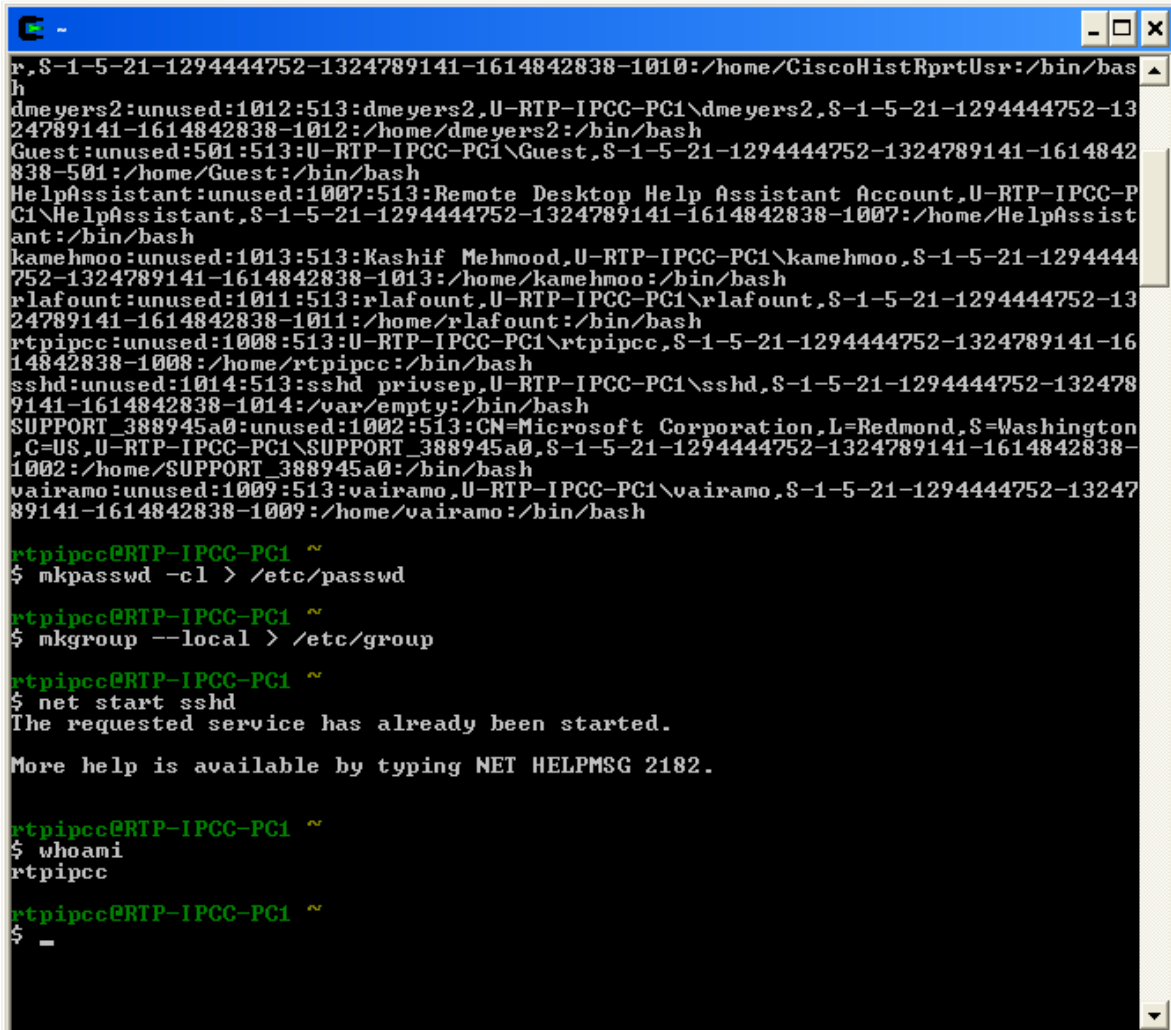
*** Info: Host configuration finished. Have fun!

rtpipcc@RTP-IPCC-PC1 ~
$
```



```
~  
$ touch /var/log/sshd.log  
rtpipcc@RTP-IPCC-PC1 ~  
$ chmod 664 /var/log/sshd.log  
rtpipcc@RTP-IPCC-PC1 ~  
$ ssh-host-config  
*** Info: Generating /etc/ssh_host_key  
*** Info: Generating /etc/ssh_host_rsa_key  
*** Info: Generating /etc/ssh_host_dsa_key  
*** Info: Generating /etc/ssh_host_ecdsa_key  
*** Info: Creating default /etc/ssh_config file  
*** Info: Creating default /etc/sshd_config file  
*** Info: Privilege separation is set to yes by default since OpenSSH 3.3.  
*** Info: However, this requires a non-privileged account called 'sshd'.  
*** Info: For more info on privilege separation read /usr/share/doc/openssh/README.privsep.  
*** Query: Should privilege separation be used? <yes/no> yes  
*** Info: Note that creating a new user requires that the current account have  
*** Info: Administrator privileges. Should this script attempt to create a  
*** Query: new local account 'sshd'? <yes/no> yes  
*** Info: Updating /etc/sshd_config file  
*** Info: Added ssh to C:\WINDOWS\system32\drivers\services  
  
*** Warning: The following functions require administrator privileges!  
  
*** Query: Do you want to install sshd as a service?  
*** Query: <Say "no" if it is already installed as a service> <yes/no> yes  
*** Query: Enter the value of CYGWIN for the daemon: [ ] ntsec tty  
  
*** Info: The sshd service has been installed under the LocalSystem  
*** Info: account (also known as SYSTEM). To start the service now, call  
*** Info: 'net start sshd' or 'cygrunsrv -S sshd'. Otherwise, it  
*** Info: will start automatically after the next reboot.  
  
*** Info: Host configuration finished. Have fun!  
  
rtpipcc@RTP-IPCC-PC1 ~  
$ cyg-config  
bash: cyg-config: command not found  
  
rtpipcc@RTP-IPCC-PC1 ~  
$ cyglsa-config  
  
Warning: Registering the Cygwin LSA authentication package requires  
administrator privileges! You also have to reboot the machine to  
activate the change.  
  
Are you sure you want to continue? <yes/no> yes  
  
Cygwin LSA authentication package registered.  
  
Activating Cygwin's LSA authentication package requires to reboot.  
  
rtpipcc@RTP-IPCC-PC1 ~  
$
```

After reboot:



```
r,S-1-5-21-1294444752-1324789141-1614842838-1010:/home/CiscoHistRprtUsr:/bin/bas
h
dmeysers2:unused:1012:513:dmeysers2,U-RTP-IPCC-PC1\dmeysers2,S-1-5-21-1294444752-13
24789141-1614842838-1012:/home/dmeysers2:/bin/bash
Guest:unused:501:513:U-RTP-IPCC-PC1\Guest,S-1-5-21-1294444752-1324789141-1614842
838-501:/home/Guest:/bin/bash
HelpAssistant:unused:1007:513:Remote Desktop Help Assistant Account,U-RTP-IPCC-P
C1\HelpAssistant,S-1-5-21-1294444752-1324789141-1614842838-1007:/home/HelpAssist
ant:/bin/bash
kamehmoo:unused:1013:513:Kashif Mehmood,U-RTP-IPCC-PC1\kamehmoo,S-1-5-21-1294444
752-1324789141-1614842838-1013:/home/kamehmoo:/bin/bash
rlafount:unused:1011:513:rlafount,U-RTP-IPCC-PC1\rlafount,S-1-5-21-1294444752-13
24789141-1614842838-1011:/home/rlafount:/bin/bash
rtpipcc:unused:1008:513:U-RTP-IPCC-PC1\rtpipcc,S-1-5-21-1294444752-1324789141-16
14842838-1008:/home/rtpipcc:/bin/bash
sshd:unused:1014:513:sshd_privsep,U-RTP-IPCC-PC1\sshd,S-1-5-21-1294444752-132478
9141-1614842838-1014:/var/empty:/bin/bash
SUPPORT_388945a0:unused:1002:513:CN=Microsoft Corporation,L=Redmond,S=Washington
,C=US,U-RTP-IPCC-PC1\SUPPORT_388945a0,S-1-5-21-1294444752-1324789141-1614842838-
1002:/home/SUPPORT_388945a0:/bin/bash
vairamo:unused:1009:513:vairamo,U-RTP-IPCC-PC1\vairamo,S-1-5-21-1294444752-13247
89141-1614842838-1009:/home/vairamo:/bin/bash

rtpipcc@RTP-IPCC-PC1 ~
$ mkpasswd -cl > /etc/passwd

rtpipcc@RTP-IPCC-PC1 ~
$ mkgroup --local > /etc/group

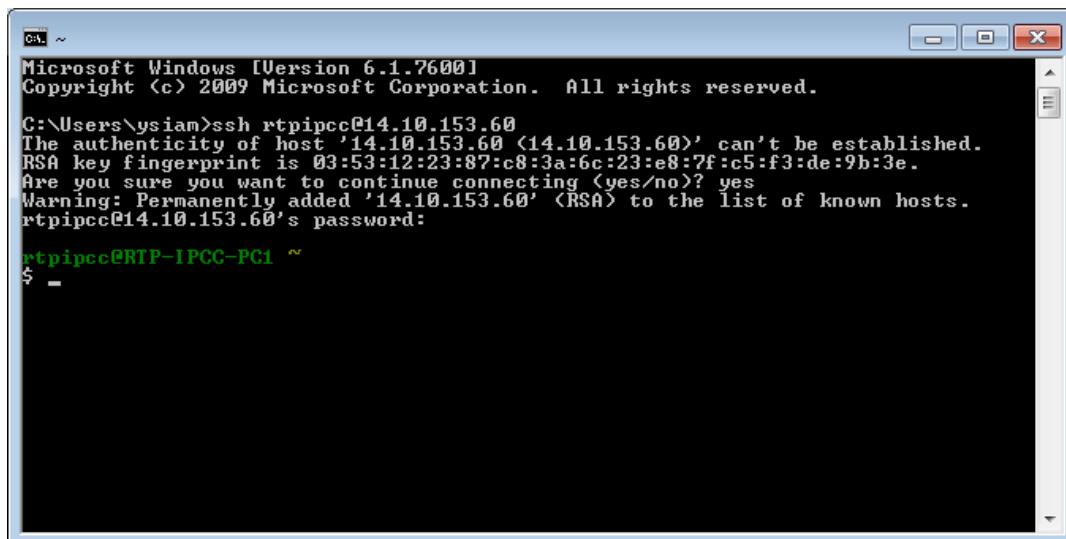
rtpipcc@RTP-IPCC-PC1 ~
$ net start sshd
The requested service has already been started.

More help is available by typing NET HELPMSG 2182.

rtpipcc@RTP-IPCC-PC1 ~
$ whoami
rtpipcc

rtpipcc@RTP-IPCC-PC1 ~
$ -
```

To Test, go on a different machine:



```
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\ysiam>ssh rtpipcc@14.10.153.60
The authenticity of host '14.10.153.60 (14.10.153.60)' can't be established.
RSA key fingerprint is 03:53:12:23:87:c8:3a:6c:23:e8:7f:c5:f3:de:9b:3e.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '14.10.153.60' (RSA) to the list of known hosts.
rtpipcc@14.10.153.60's password:

rtpipcc@RTP-IPCC-PC1 ~
$ -
```

☺ !!!ENJOY!!! ☺