

**Windows 2000-XP
V.N.C.
Virtual Network Computing**

Michel Cabaré
Septembre 2004

Ver: 1.0

Institut National Polytechnique de Grenoble



DÉPARTEMENT FORMATION CONTINUE

TABLE DES MATIÈRES

WHAT V.N.C. IS	3
VIRTUAL NETWORK COMPUTING.....	3
FREE DOWNLOAD	3
INSTALLING VNC	4
USING VNC.....	6
VIRTUAL NETWORK COMPUTING.....	6
ADVANCED FEATURES	8
REGISTER PARAMETERS FOR VNC SERVER.....	8
USING A WEB CONNECTION INSTEAD OF VNC VIEWER	9
CHANGING DEFAULT PORT OF VNC SERVER.....	11
VNC – FIREWALL - SSH.....	12
REGISTER PARAMETERS FOR VNC SERVER.....	12

WHAT V.N.C. IS


Virtual Network Computing

VNC (Virtual Network Computing) software makes it possible to view and fully-interact with one computer from any other computer or mobile device anywhere on the Internet.

VNC software is cross-platform, allowing remote control between different types of computer.

there is even a Java viewer, so that any desktop can be controlled remotely from within a browser without having to install software

Free Download

Adresse  <http://www.realvnc.com>,



At the **realvnc.com** website

There are plenty packages...

Installable packages:	Source code & documentation:
<input type="checkbox"/> Windows 9x/2000/NT/XP (x86)	<input type="checkbox"/> Windows sources
<input type="checkbox"/> Linux (x86)	<input type="checkbox"/> Unix/Linux sources
<input type="checkbox"/> Solaris 2.5 (SPARC)	<input type="checkbox"/> Java sources
<input type="checkbox"/> HP-UX 11	<input type="checkbox"/> Documentation

small size is a reliable feature

x86 Win32 full installation (server and viewer)	executable (.exe) (726K) zip archive (.zip) (703K)
x86 Win32 viewer program only	executable (.exe) (268K) zip archive (.zip) (124K)

The **server** program is the program you need to install on the machine you want to access....

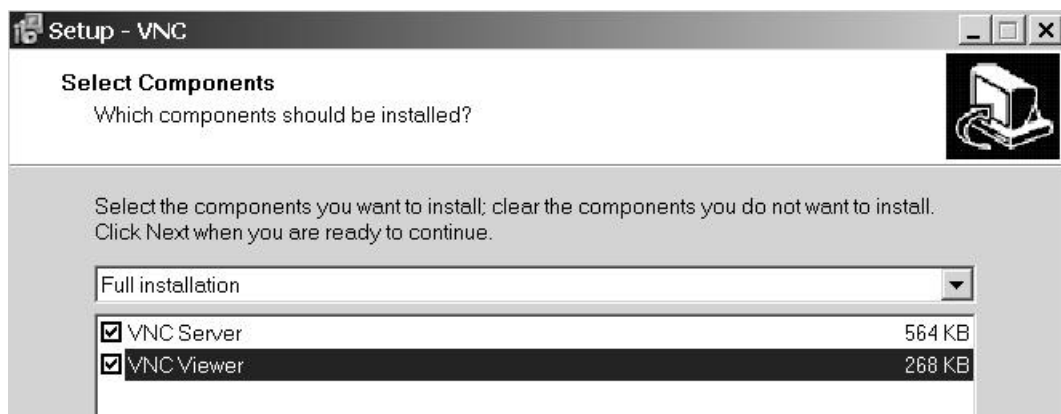
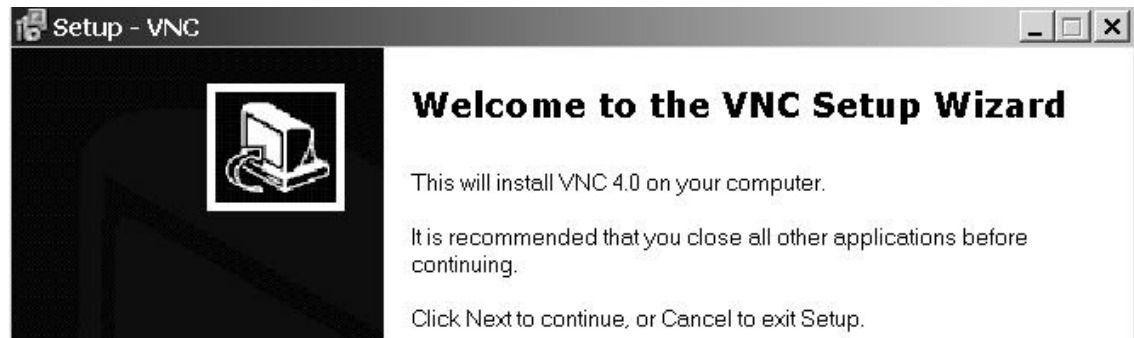
The **viewer** program is the program you need to install on a machine, to accede to a server-installed machine.

You can avoid viewer installation if you can have a recent browser with java machine.

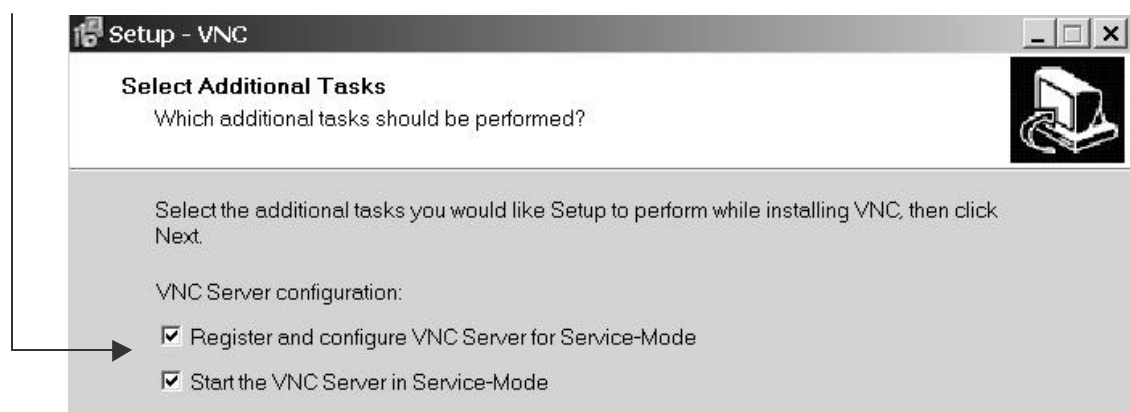
Installing VNC

Install server program

You must start from the full installation server and viewer package, and then double click...

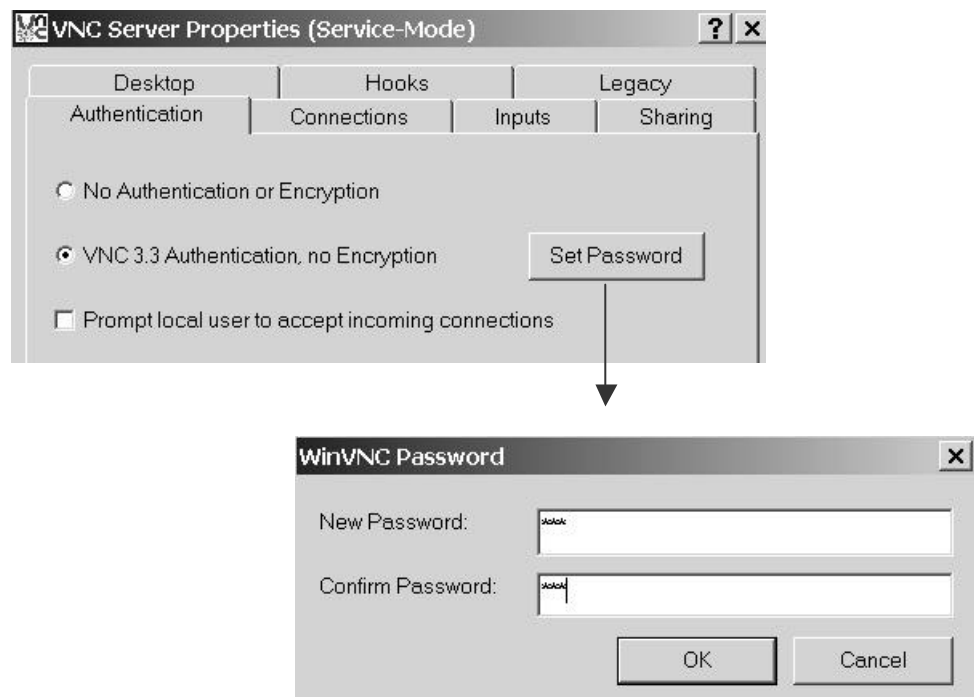


if you want, you can register VNC like a windows service, which is mean that it could be launched at the beginning of setup, and that you can manage from the Windows 2000 classical service interface.



automatically you will have to select a custom parameters if you install the server programm

It's really important to add a password, since VNC is a very powerfull toy!

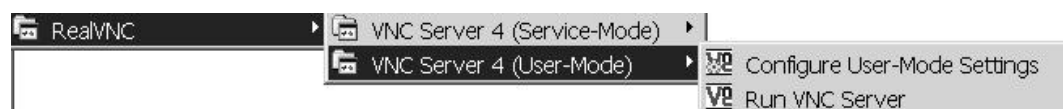


you will see in the task bar the vnc icon  08:52

You can see here the service specific menu



You can see here the vnc user specific menu

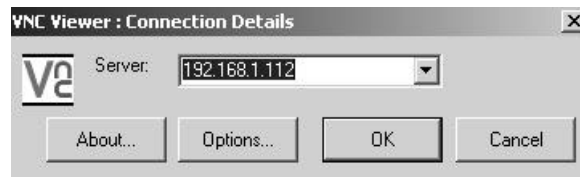


USING VNC

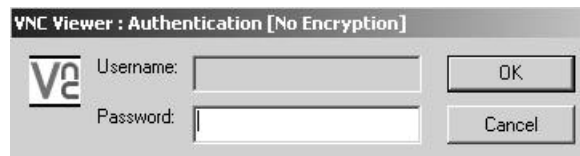
Virtual Network Computing

You must have a machine running with a VNC server...and of course you must know the IP address of the machine (or at least the host name)

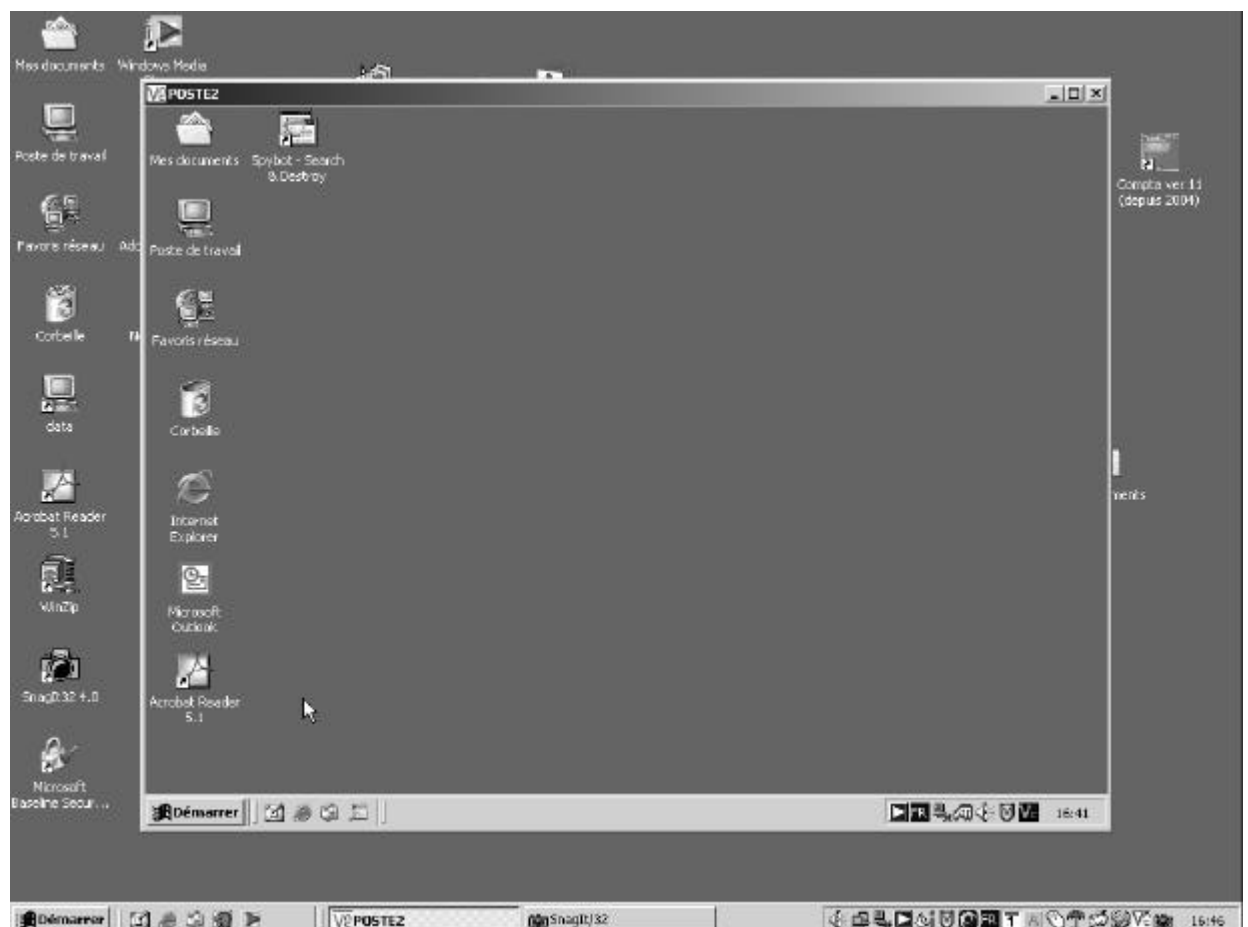
 Run VNC Viewer you have



and then



that's all !

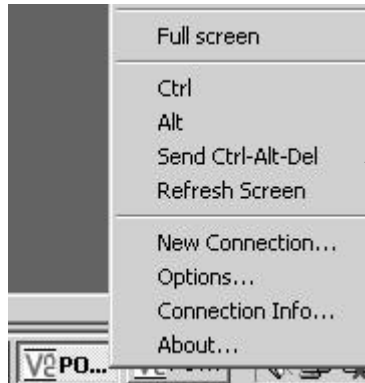


N.B: you can have as many VNC session you want, each one controlling a distant computer....



if you want to send special keyboard touch, like **CTRL-ALT-DEL**, (end of session for example) as they are caught by your own system, you need to send these touch in a special way.

So you must have right clic on the VNC session you want to use

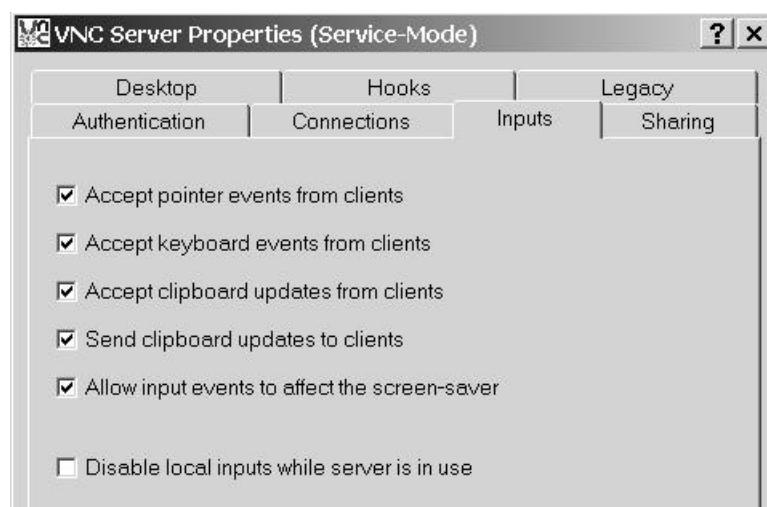
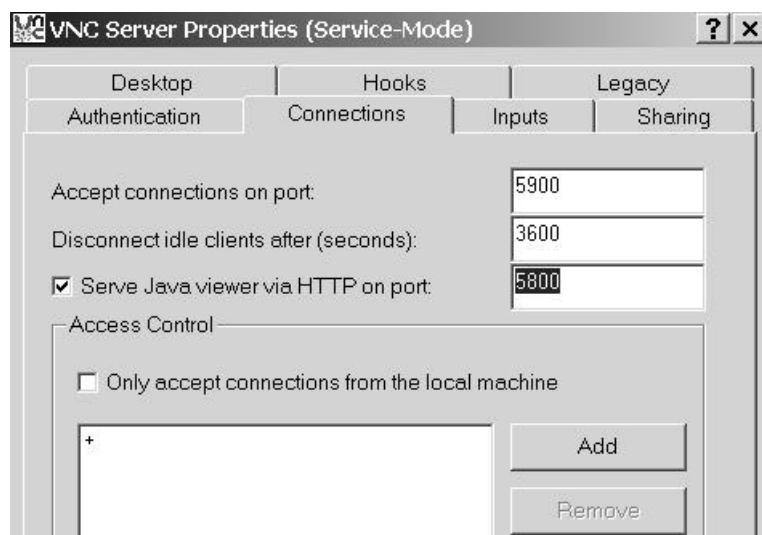
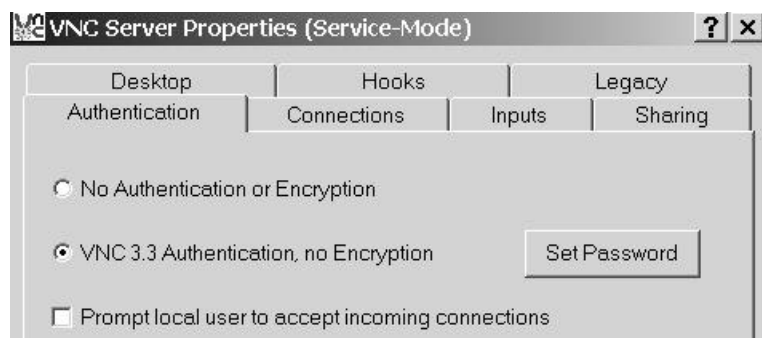


You have you special touch here

ADVANCED FEATURES

register parameters for VNC server

for Configure VNC service double clic on RealVNC icon on the task bar :



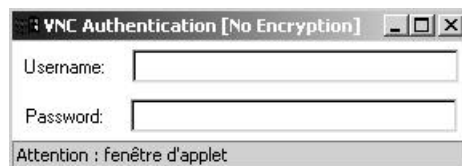
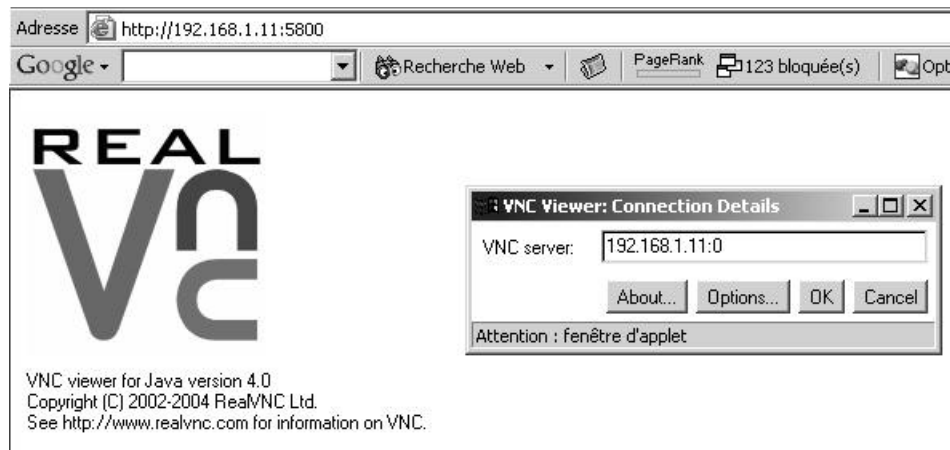
Using a Web connection instead of VNC viewer

Use a VNC Connection via a web browser , you must have a browser who enable **JAVA** machine, an must know that the default **TCP-IP port** used by VNC is **5800**.

So the URL you have to write seems something like that, for a machine with IP adress 192.168.1.11 :

http://192.168.1.11:5800

you obtain

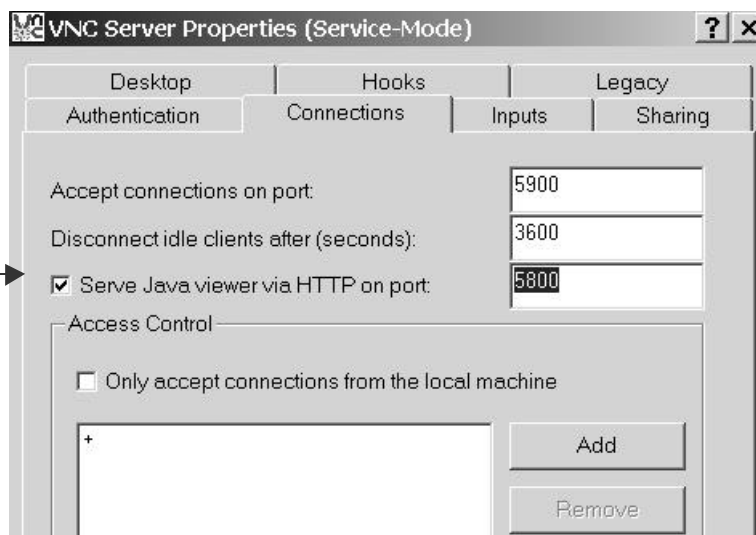


and after identification

you have quiet a normal VNC screen

N.B: The main difference, is that you don't have the possibility to send keyboard touch or configure screen resolution...

for security if you want, you can disconnect Java viewer



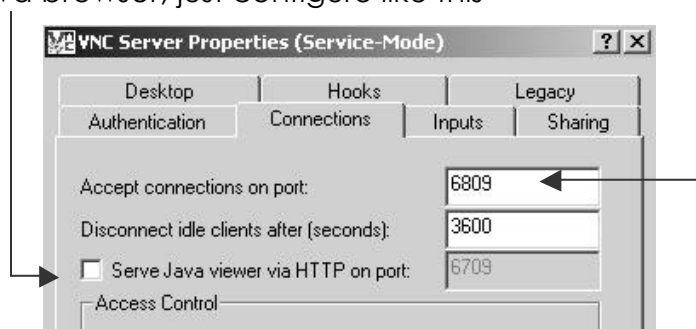
Changing default port of VNC server

you must know that the default **TCP-IP port** used by VNC is **5800 and 5900**.

```
Starting nmap 3.50 < http://www.insecure.org/nmap > at 2004-10-15 18:52 Paris, M
adrid (heure d'été)
Interesting ports on PORTABLE (192.168.1.11):
<The 1653 ports scanned but not shown below are in state: closed>
PORT      STATE SERVICE
135/tcp   open  msrpc
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
1025/tcp  open  NFS-or-IIS
5800/tcp  open  vnc-http
5900/tcp  open  vnc

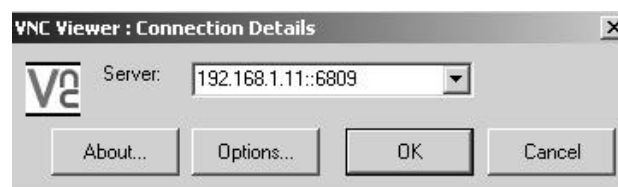
Nmap run completed -- 1 IP address (1 host up) scanned in 2.234 seconds
```

imagine you want enhanced your security, so you want change de default VNC port 5800 by a personal port 6809, and disconnect responding to a java browser, just configure like this



Now, if you want to connect to this particular VNC server, you must specify in your IP address the Ip port by : : like this example :

192.168.1.11::6809



VNC – FIREWALL - SSH

register parameters for VNC server

Access to your VNC desktop generally allows access to your whole environment, so security is obviously important. VNC uses a challenge-response password scheme to make the initial connection: the server sends a random series of bytes, which are encrypted using the password typed in, and then returned to the server, which checks them against the 'right' answer. After that the data is unencrypted and could, in theory, be watched by other malicious users, though it's a bit harder to snoop a VNC session than, say, a telnet, rlogin, or X session. Since VNC runs over a simple single TCP/IP socket, it is easy to add support for SSL or some other encryption scheme if this is important to you, or to tunnel it through something like SSH or Zebedee.

SSH allows you to redirect remote TCP/IP ports so that all traffic is strongly encrypted, and this can be combined with VNC. SSH can also compress the encrypted data - this can be very useful if using VNC over slow links. See the ['Using SSH with VNC'](#) page. Zebedee is a similar system which can be sometimes simpler to use. You can find info [here](#).

While we're on the subject of security, you should also be aware that only the first 8 characters of VNC passwords are significant. This is because the 'getpass' call used in the Unix server to read a password has this restriction, and the other platforms have been made compatible with this.

Firewall - WAN to LAN - Rule Summary

The default action for packets not matching following rules: Block

☒ Default Permit Log

No.	Source IP	Destination IP	Service	Action	Log
1	Any	Any	BOOTP_CLIENT(UDP:68)	Forward	None
2	Any	Any	PING(ICMP:0)	Forward	None
3	Any	192.168.1.103	HTTP(TCP:80)	Forward	Both
4	Any	192.168.1.101	*VPN-srvdc1(TCP:6801)	Forward	None
5	Any	192.168.1.103	*VPN-Web(TCP:6803)	Forward	None
6	Any	192.168.1.10	*VPN-travail(TCP:6810)	Forward	None
7					
8					
9					
10					

Rules Reorder: Move rule number 1 to rule number 1 Move

BackApplyCancel