



## Smoothwall Express 2.0 Quick Start

### **A. Welcome**

This Quick Start Guide describes how to install and configure SmoothWall Express. It assumes you are familiar with PC software and preferably have a basic knowledge of TCP/IP networking. Full instructions are contained with the Installation and Administrator's Guides on the SmoothWall Express CD.

SmoothWall Express turns a PC into a dedicated hardware firewall, which sits between your private network and the Internet. It does not allow any unauthorized data to pass through the firewall. There are no services offered to the Internet and SmoothWall Express will not respond to the network messages that hackers use to identify potential targets. It is therefore quite simply invisible to the legions of script kiddies, hackers and crackers looking for an 'interesting' firewall to attack. In other words 'True Security'.

### **Warning!**

**Any** data stored on the hard drive of the PC on which SmoothWall is to be installed **will be overwritten as part of the installation**, so it is imperative prior to SmoothWall installation to back up any data that is considered valuable. Do NOT install SmoothWall Express onto your main or only PC - you **WILL** lose all the data on the hard disk. SmoothWall Limited cannot be held responsible for the loss of such data.

### **B. Burn SmoothWall Express CDROM from Downloaded .iso Image File**

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To install SmoothWall Express it is necessary to create a CDROM from the iso image file that has been downloaded or obtained from a magazine cover disk. All common CRRROM burning programs can do this but it is vital to select the "create CD from Image file" option. The .iso image file image file is a similar to a ZIP archive, it needs to be decompressed and expanded out to the individual directories and files that constitute SmoothWall Express. If the more normal "create Data CD" option were used then the .iso file will almost certainly be copied a single file to the CDROM.

### **C. Installation of SmoothWall Express**

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Note: Throughout the SmoothWall Express installation process use the cursor or **Tab** keys to move the highlighted selection bar, then press either the **Space Bar** or **ENTER key** to confirm your selection and move to the next screen.

The normal installation procedure is as follows:

1. Insert the SmoothWall Express CD into the CD-ROM drive of a Windows® PC (Internet Explorer version 5.5 or later is recommended). The Autorun procedure allows you to (a) read the license, (b) view/print the Installation and Administrator's Guide in Adobe Acrobat format, (c) create boot floppy disks, (d) browse the CD or (e) download Adobe Acrobat Reader.
2. View the Installation and Administrator's Guides using Acrobat Reader and print or save copies to the hard disk of your Windows® PC so you can refer to them while the CD is in use during the installation. Refer to the <http://www.smoothwall.org/web> site for additional information.

3. Check that the PC on which SmoothWall Express is to be loaded can boot from the CD-ROM drive. Most PCs from P166 onwards can be set to do this in their BIOS. If your PC is set to boot from CD-ROM, skip to step 6.
4. If the SmoothWall PC cannot boot from CD, you need to create two boot floppy disks from which to start the installation process. This can be done from the Autorun procedure or by running the **RawWriteWin** program from the CD's **/dosutils** directory. The image files for the two floppy disks are held in the **images** directory. Select the **Write** tab, then either browse the CD for the first boot floppy image file/ **images/bootdiskone-2.O.img** or key its name into the **Image file** name field. Insert a formatted floppy disk and click the **Write** button to transfer the disk image onto the floppy disk. When complete repeat the process for the second boot disk **Images/bootdisktwo-2.O.img**.
5. Boot the system from the first floppy disk - this will automatically run the SmoothWall Express loader program. From the first floppy disk will be loaded the Linux kernel and supporting libraries. Having loaded this operating system software, the loader program will request that the second floppy inserted. Remove the first boot floppy disk, insert the second disk and press the **ENTER** key. The second disk contains the Installation program and the Network Card drivers.
6. Load the SmoothWall Express CD into the CD-ROM drive of the PC onto which you will load Smoothwall Express. Power-up the PC and it will boot from the CD (or boot floppy if you needed one).
7. You will be greeted by a prompt informing you that the installation of SmoothWall Express is start. Press the **ENTER** key to proceed. The installation process is simple and takes you through a number of screens asking questions familiar to most PC users.
8. You may be prompted to choose the language to be used for the installation, the default being English.
9. Select the install software from CD-ROM option.
10. Confirm that the PC's hard disk is to be re-formatted. All existing data on the disk will be lost. If you need to keep any data then cancel the installation of SmoothWall Express now!
11. Once the PC's hard disk has been prepared the SmoothWall Express software is copied across from the CD.
12. The software will probe the PC to determine what hardware is installed. It looks first for a Network Interface Card (NIC or LAN card) which is later used to connect SmoothWall Express to the local (protected) network. Virtually all PCI bus cards will be automatically recognized and configure by the software, as will some but not all ISA bus cards. The Installation and Configuration guide contains information about how to configure cards which cannot be automatically detected.
13. You now have to supply a TCP/IP address for this card. Most small networks can safely use the default settings. Internal private addresses, such as this, are never exposed to the Internet.
14. A message is then displaying saying that the SmoothWall Express software has been successfully installed. Remove any CDs or floppy disks and press the Ok button to run the Setup program

#### D. The Setup Program

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15. The Setup Program completes the basic configuration of SmoothWali Express. It allows you to configure your keyboard layout, hostname, DHCP server, system passwords and any proxy settings that may be required. It will probe for and configure ISDN cards, USB hardware and further Network Interface cards. If your Internet connection is via an Ethernet router or a cable modem you will need to configure a second NIC and select the **GREEN + RED** network configuration. If your Internet connection is via ISDN, USB ADSL or a modem, then use the default **GREEN (RED is modem/ISDN)** network configuration.
16. Most ISPs don't use Proxy Servers but if yours does it is necessary to enter its Hostname IP port used.
17. If an ADSL modem is to be used then the make/model must be selected and the VCI/VPI parameters configured in the Setup program. Likewise for an ISDN connection, the ISDN card must be either

automatically probed for or manually selected from a list. USB ISDN adapters cannot be identified by probing so must be manually selected/configured. The ISDN parameters such as the protocol and local phone number must be configured.

18. In the case of an Ethernet connection to the Internet, the IP address of the Red (Internet) interface must be specified as a static public IP address or the Red interface configured to request a dynamic (DHCP) address from the router to which it is attached.
19. SmoothWall Express's DHCP (Dynamic Host Configuration Protocol) Server can be enabled and configured. The use of DHCP simplifies the configuration of the PCs that will use SmoothWall as their protected gateway to the Internet. SmoothWall Express's DHCP server will dynamically allocate an IP address to each PC that requests a TCP/IP address. It also automatically transfers other TCP/IP information that is needed to use SmoothWall Express as an Internet gateway. This is much easier than having to configure this information into each PC that will communicate via SmoothWall Express
20. Setup finishes by rebooting the PC. Before confirming the reboot with the **Ok** button, ensure that all the network cables are plugged in and that your modem or ISDN card (if present) is connected and ready for use. After the reboot, when SmoothWall Express has been initialized and is ready for use, you should be presented with a simple Unix/Linux style Login screen. You have now successfully SmoothWall Express.

## E. Configure PCs to use SmoothWall Express as their Internet Gateway

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21. Configure the computers on your local network to use SmoothWall Express. Normally this means setting them to use a dynamic TCP/IP address provided by SmoothWall Express's DHCP server. The use of DHCP automatically sets the PC to use SmoothWall Express as its Internet Gateway and Domain Name Server (DNS).
22. For a Microsoft Windows® 98 PC, click **Start**, then **Settings**, then **Control Panel** and then the **Network** icon. Make sure the Network Adapter card is present in the **Configuration** list and that Microsoft TCP/IP protocol is configured for the adapter.
23. For Microsoft Windows® XP , from **My Network Places**, click **View network connection** and then double click **Local Area Connection** to display the connection properties.
24. Select the **TCP/IP** protocol item and click the **Properties** button to view the TCP/IP settings. Check that **Obtain an IP address automatically** is selected. All other settings should be OK. Alternatively configure a fixed IP address (normally the first three number groups will be the same as Smoothwall Express's IP address), then **Enable DNS** and set the **DNS Server** and the first **Installed Gateway** to SmoothWall Express's Green NIC IP address.

## F. Configure Dial-Up Connections via the Browser Interface

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25. After the reboot, SmoothWall Express's web server will be running so that configuration of the Modem/ISDN Dial-Up details can be performed from a web browser running on another PC. Into the browser's address field type: `https://192.168.0.1:441`, assuming the Setup program's default local network IP address was used.
26. A security certificate challenge message will be displayed - press the **Yes** button to proceed. You will then be presented with the SmoothWall Express Control page, with two rows of links at the top, which will take you to further configuration, management and reporting functions.
27. If using a Modem, ISDN or USB ADSL connection to the Internet, click **Networking** then **ppp settings** (dialup) to configure the connection. Five Dialup profiles can be stored, identified by **Profile name**. The **Number** field must contain the telephone number to be dialed for a modem or ISDN connection. Enter the Username and associated **Password** that you use to connect to your ISP. Click the **Save** button and check

that there are no error messages. When done return to the **Control** page and press **Connect**. SmoothWall Express will then dial your Internet Service Provider (ISP).

28. Reboot one of the PCs on your network and when you run an Internet program such as an email client or a web browser it will use SmoothWall Express as its Gateway to the Internet.

## G. Installation of Updates/Patches

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Please see the SmoothWall Express Administrator's Guide. Please note that the SmoothWall system must be connected "on-line" to the Internet for the installation of Updates to be successful - the software needs to access lists of applicable updates and modules which are held on web servers run by SmoothWall Limited.

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