

Inter*Linx* Installation Guide

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Hardware Requirement

Specification

The minimum hardware specification for InterLinx is as follows: -

	Minimum	Recommended
Processor	1GHz Celeron or Duron	Pentium 4 at 2GHz or Athlon 2000 XP
Hard Disk	30Gb	More than 30Gb if you have many users who keep their Email on InterLinx.
RAM	128Mb	256Mb. More if you have lots of users with large amounts of Email.
LAN Adapter(s)	Intel EtherExpress Pro 100, 3COM 905, SiS and RealTek	Intel EtherExpress Pro 100
Graphics	VGA	VGA
ISDN	Eicon Diva ISDN PCI	Eicon Diva ISDN PCI

The machine must support booting from its CD-ROM drive and the CD drive must be configured as the master drive on the secondary IDE channel.

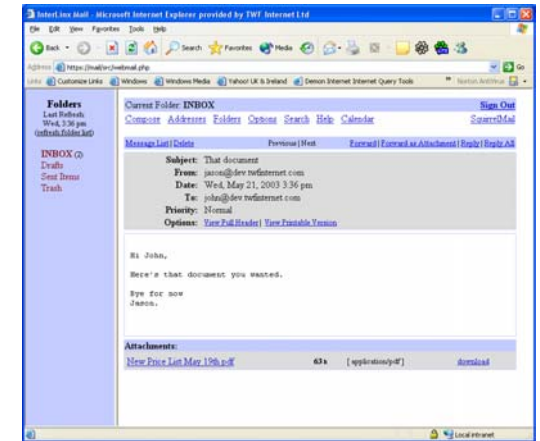
Configuration

InterLinx can be configured to use ISDN or Ethernet-based Internet connections.

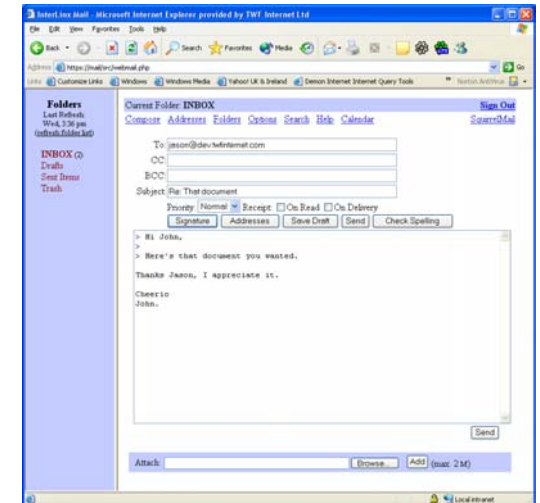
For ISDN you need to have one LAN adapter of the type mentioned above and one Eicon Diva ISDN PCI adapter.

For Ethernet you need (preferably) a matching pair of LAN adapters. One will be used for connecting to your LAN whilst the other connects to your Internet feed.

4. You can click on the subject link to read the Email. The system behaves much like a standard Email client. You can reply to messages, forward them, manage attachments, build an address book and even spell check your messages.



5. Replying to an Email brings up the compose page. Again this should be familiar to most people and it is very easy to use. Click **Send** when you are happy with your reply.



InterLinx Webmail

Email held on InterLinx can be viewed and managed using a web browser either from within the organization or from anywhere on the Internet.

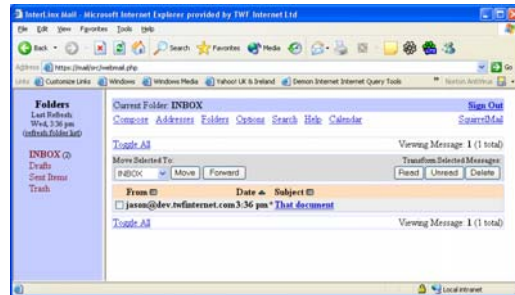
1. Open Internet Explorer and type **https://mail** into the address line. You will then be given a Security Alert, the reason for this is that you are trying to use the webmail service over an encrypted connection (https) and in order for this to happen Internet Explorer needs to trust the security certificate. In this case the certificate is valid but it has not been bought from a commercial certificate provider (such as Verisign or Thawte.) InterLinx builds its own certificates which ensure that the connection is absolutely secure however these 'self-signed' certificates are not automatically trusted by Internet Explorer. Put simply, click **Yes** here and your connection is completely secure.



2. You will now be shown the InterLinx Webmail sign-on page. Enter your InterLinx user name and password then click **Login**. Notice the lock at the bottom of the browser window which indicates an encrypted connection, this ensures that your user name and password details are secure.



3. This is the standard Inbox view for the InterLinx Webmail system. You can see that John has a new Email waiting.



Setup Form

It is advised that you complete the InterLinx Setup Form prior to beginning the installation of your InterLinx server.

Activation Code

1. You need to decide on a primary domain name for your InterLinx server. This should be the domain you intend to use for your Email addresses and for the DNS domain names of your LAN equipment. If you already have a Microsoft Active Directory domain name configured for your Windows servers and PCs, it would be advisable to use that for your InterLinx primary domain name.
2. You need to find the ID number of your InterLinx dongle. This is an eight digital (hexadecimal) number printed on your dongle.
3. Make a note of both of these items on your Setup Form.
4. Visit <http://register.twifinternet.com> and enter this information along with your contact details.
5. Write your new Activation Code on your Setup Form. You might want to print-out the resultant web page for your records.

Note: In sites with multiple domains, you can add Email support for any number of additional domains via the InterLinx Admin system.

LAN Settings

1. As with all TCP/IP devices, InterLinx needs a unique IP address on your network. If you do not have an IP addressing scheme already in use, an appropriate scheme is pre-configured as part of the InterLinx installation process. If you do have an IP scheme, choose an unused IP address for your InterLinx server and make a note of it on your setup form.
2. InterLinx uses a 'bitwise' subnet mask format rather than the usual four-part notation. This table will help translate your present subnet mask to a bitwise version.

Four-Part Notation	Bitwise Notation
255.0.0.0	8
255.255.0.0	16
255.255.255.0	24

In the vast majority of networks, one of these four-part subnets will be in use. If your LAN happens to have an existing bitwise (or 'classless') subnet configuration you are free to use that at installation time.

WAN/Internet Connection

InterLinx supports connection to the Internet via ISDN or Ethernet-based ISP services, such as leased-lines, DSL, cable modem and satellite.

ISDN Configuration

1. Your dialup account name and login password should be provided by your ISP.
2. Some telephone companies and ISPs require that you enter your own ISDN telephone number into your equipment before you can call out. Enter your ISP number on the Setup Form. If you do not know your own ISDN number, you can usually just enter '00'.
3. InterLinx allows for the use of two telephone numbers in-order to reach your ISP. They are regarded as a primary and a secondary number. If your ISP provides two dialup numbers enter them both and InterLinx will switch to the second number if a connection problem occurs. If you only have one number, enter that into *both* fields.
4. Some ISDN ISP services provide a fixed (static) IP address for your connection. This usually takes the form of an IP for your server and a point-to-point (gateway) address at the ISP. If you have these items, then enter them on to your form, if not you can leave them out and simply accepted the defaults provided by the InterLinx installation program.

Ethernet Configuration

1. Many DSL and cable modem services provide a complete set of IP configuration details using the DHCP protocol. This is very convenient as it allow you to simply let InterLinx handle the configuration of the external (ISP-side) Ethernet connection. Check your service documentation to see if it includes DHCP configuration. If not, proceed with gathering the following information.
2. The IP address is the one provided to you by your ISP. If you have been given more than one, we recommend using the first available address.
3. The subnet mask, network address, broadcast address and gateway/router addresses should all be provided by your ISP. If not, you will need to get in contact with them to acquire the missing items.

DHCP (Dynamic Host Configuration Protocol)

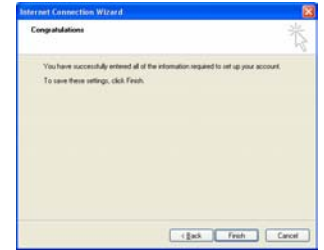
1. InterLinx can act as a DHCP server for your LAN. DHCP allows for the automatic configuration of your PCs, Macs and IP-enabled devices. If you wish to use DHCP, you will need to specify a range of addresses that InterLinx can freely give out to devices that ask for one, ie. IP addresses not already in use.
2. Make a note of the address range you intend to use on your Setup Form.

Once your Setup Form is complete, you are in a position to start the installation of the InterLinx system on to your chosen hardware.

6. The account has now been added.

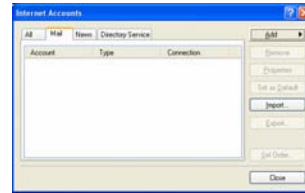
7. Close the 'Accounts' window.

Incoming Email will now appear in your 'Local Folders' Inbox. The 'General' tab in the 'Tools' -> 'Options' window includes a field for how often Outlook checks for new mail.

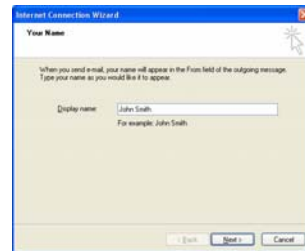


Configuring Outlook Express with POP3

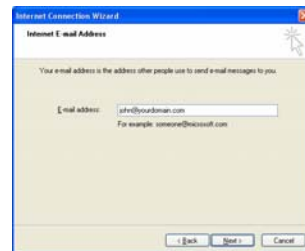
1. Open Outlook Express then from the 'Tools' menu choose **Accounts**. Click on **Add** then **Mail**.



2. Enter the name of user. This is what gets displayed when Email arrives at the recipient so 'proper' case is important. Click **Next**.



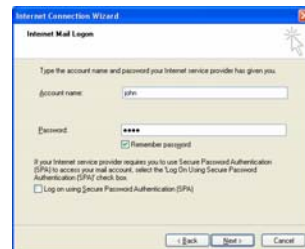
3. Enter the Email address and then click **Next**.



4. Select the mail server type of **POP3** and enter the names as shown then click **Next**.



5. Enter the InterLinX account details.



Software Installation

Note: This process will wipe everything off the hard disk of your chosen hardware. InterLinX is not a program that runs on top of Windows, it entirely replaces the operating system and all of the software on that machine.

Step 1 – Partitioning

1. Connect the dongle to the printer port on your machine.
2. Switch on the machine and insert the InterLinX Installation CD.
3. At the first screen press <Enter> to continue the process.
4. At the login screen type `root` and press <Enter>
5. At the system prompt type `step1` and press <Enter>
6. The TWF Internet Ltd Licence Agreement is now displayed. Page through it using <Space>. To accept the agreement, type `yes` or to reject the agreement type `no`.
7. The machine will then wipe the hard drive and create a new set of partitions.
8. When finished, the machine will restart.

Step 2 – Format and Copy

1. Let the machine boot off the CD.
2. At the first screen press <Enter> to continue the process.
3. At the login screen type `root` and press <Enter>
4. At the system prompt type `step2` and press <Enter>
5. The machine will then format the new partitions and copy the InterLinX software.
6. When finished, the machine will restart.

Step 3 – Quick Setup

1. Let the machine boot off the CD.
2. This time, at the first prompt enter `step3` and press <Enter>
3. At the login screen type `root` and enter the default password 'Tgutgsb,'
4. At the system prompt type `step3` and press <Enter>
5. It is vital to set a strong password for the InterLinX root user. You will be required to enter your new password twice. (It is not displayed on-screen as you enter it.)
6. You will now need to login to the InterLinX Admin system. Enter `admin` as the username and `admin` as the password.
7. You are now presented with the Quick Setup screen. This screen closely matches the layout of the Quick Setup form you have already completed. You can use the arrow keys and <Tab> to move between the fields. Use backspace to remove text that needs to be changed and <Enter> to select ISDN or Ethernet.
8. Once you have entered all of the information from your Setup Form, move to the Update field and type `x`. This will acknowledge the update and the machine will restart.
9. As the machine is restarting remove the InterLinX Installation CD from the drive so that it boots from the hard disk.

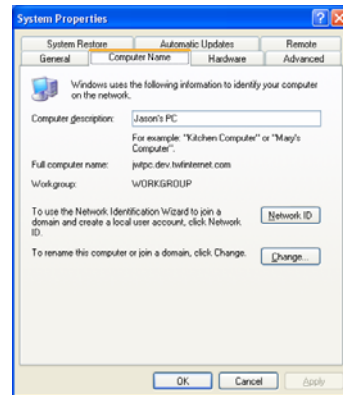
You now need to turn your attention to your desktop computers.

Setting Up a Windows 2000/XP PC

In-order for your Windows machines to see InterLinx they need to have the TCP/IP protocol configured on their network card. TCP/IP is at the heart of networking on Windows 2000/XP and is therefore probably already installed, however for 2000/XP to work at its best with InterLinx you need to configure your domain name to be the same as the primary domain name installed on the InterLinx and set InterLinx as your DNS server.

Assuming the domain name for your LAN (and InterLinx) is *twfinternet.com* and that the IP address of InterLinx on your LAN is *10.1.1.1*, the configuration steps are as follows: -

1. Right-click on **My Computer** on the desktop. Choose **Properties** from the menu then select **Computer Name** in the tabs.

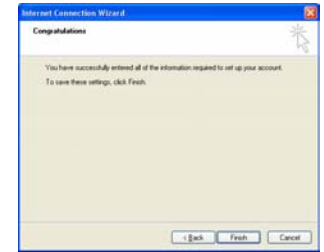


2. Click on **Change** then **More...** and enter your primary domain name in the **Primary DNS suffix of this computer** field. Click **OK**.



3. Click **OK** on the **Computer Name Changes** window and **OK** on the **System Properties** window. Some systems may require a restart at this point.
4. Right-click on **My Network Places** either in the desktop or in the Start menu and choose **Properties** from the menu.
5. Right-click on your **Local Area Connection** and choose **Properties** from the menu.

6. The account has now been added.

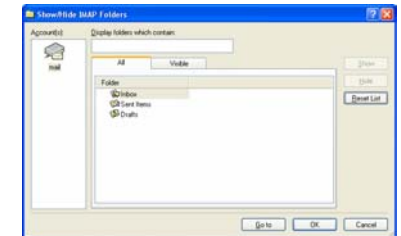


7. Close the 'Accounts' window.

8. You will now be asked to download the IMAP folders from the mail server. Click **Yes**.



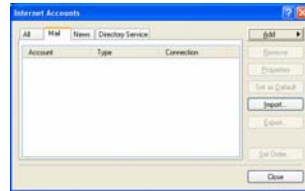
9. Outlook will now show the available folder. Click **OK** to add them all.



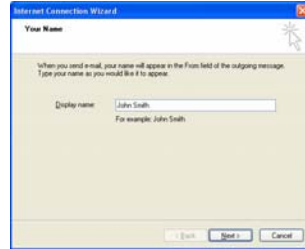
10. You will now see a new set of folders in the Outlook folder list. New Emails will automatically appear in the Inbox, you do not need to set any additional collection options.

Configuring Outlook Express with IMAP

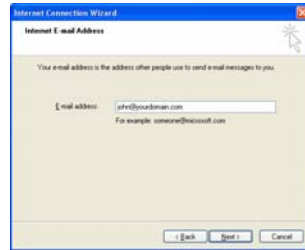
1. Open Outlook Express then from the 'Tools' menu choose **Accounts**. Click on **Add** then **Mail**.



2. Enter the name of user. This is what gets displayed when Email arrives at the recipient so 'proper' case is important. Click **Next**.



3. Enter the Email address and then click **Next**.



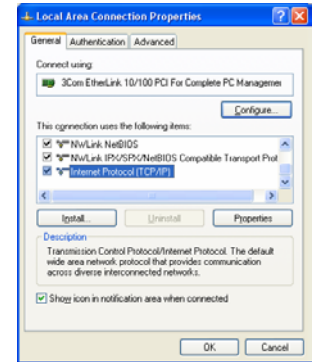
4. Select the mail server type of **IMAP** and enter names as shown then click **Next**.



5. Enter the InterLinX account details.

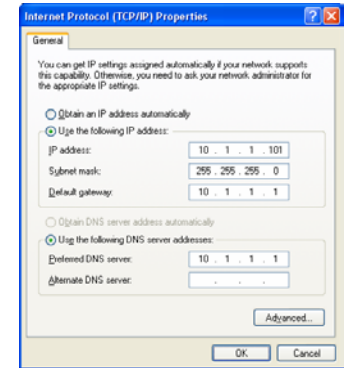


6. Highlight the **Internet Protocol** in the list and click on **Properties**.

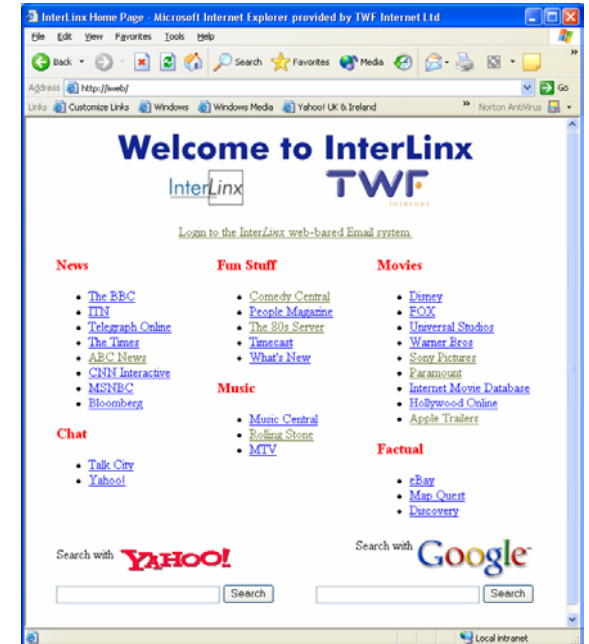


7. Enter the IP address of your InterLinX as the **Default Gateway** and **Preferred DNS Server**. Click **OK** to continue.

Note: In Active Directory environments you may already have a working DNS service on your network. In which case simply add the hostnames **interlinx**, **mail**, **admin**, **cache** and **iweb** to the local zone and point them to the InterLinX IP address.

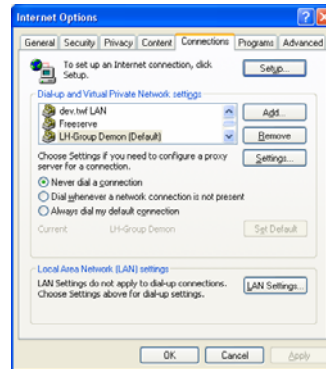


From Internet Explorer you should now be able to access the default InterLinX intranet. Type **iweb** into the address line of IE.

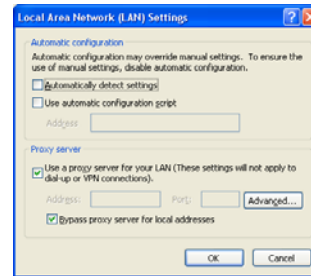


By configuring Internet Explorer to use the InterLinx caching web proxy you get all of the benefits of web caching, activity monitoring, site blocking and content control. To enable this you can either install the pre-configured version of Internet Explorer that is included with InterLinx or you can configure your browser manually.

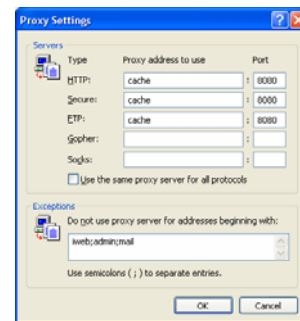
1. Choose **Tools** from the IE menu then **Internet Options**. Now select **Connections** from the tabs.



2. Click on **LAN Settings**. Check **Use a proxy server...** and **Bypass proxy server for local addresses**.



3. Click on the **Advanced** button. For best results make it read as shown.



4. Keep clicking **OK** to exit from the Internet Options windows. Your browser is now correctly configured. Enter the name of your favourite site into the address line a press return.

Configuring Outlook with POP3

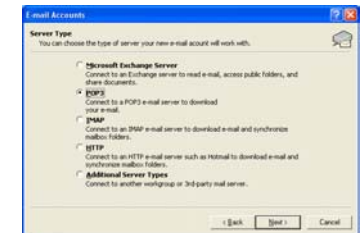
1. Open the control panel and double-click on **Mail**. Click on **Email Accounts**.



2. Select 'Add a new e-mail account' and click **Next**.



3. Select 'POP3' and click **Next**.

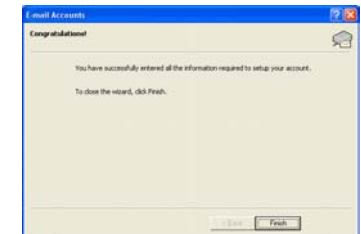


4. Complete the form as shown. 'Your Name' is what gets displayed in the From field on the recipient's Email client. 'Email Address' is the address the recipient replies to. 'Incoming' and 'Outbound mail server' fields should be set to 'mail' whilst the 'User Name' and 'Password' fields are the InterLinx account details. You may wish to click 'Test Account Settings' to ensure that the account details you have entered are correct. Click **Next** when the form is complete.



5. The process of adding the Email account is now complete.

Mail that is collected from this account will appear in the Inbox of your Outlook Today Personal Folders.



Configuring Outlook with IMAP

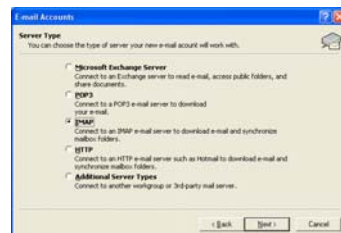
1. Open the control panel and double-click on **Mail**. Click on **Email Accounts**.



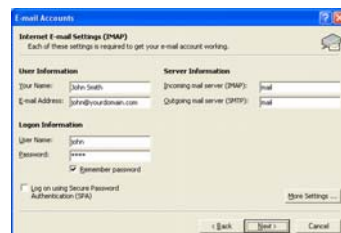
2. Select 'Add a new e-mail account' and click **Next**.



3. Select 'IMAP' and click **Next**.

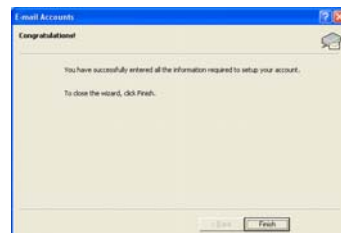


4. Complete the form as shown. 'Your Name' is what gets displayed in the From field on the recipient's Email client. 'Email Address' is the address the recipient replies to. 'Incoming' and 'Outbound mail server' fields should be set to 'mail' whilst the 'User Name' and 'Password' fields are the InterLinx account details. Click **Next** when the form is complete.



5. The process of adding the Email account is now complete.

When you go into Outlook you should see a new entry in your folders called 'mail', you may wish to give it a better name. We also recommend right-clicking on the 'mail' folder and choosing **Update Folder List** to get the complete set of mail folders provided by the InterLinx mailbox.



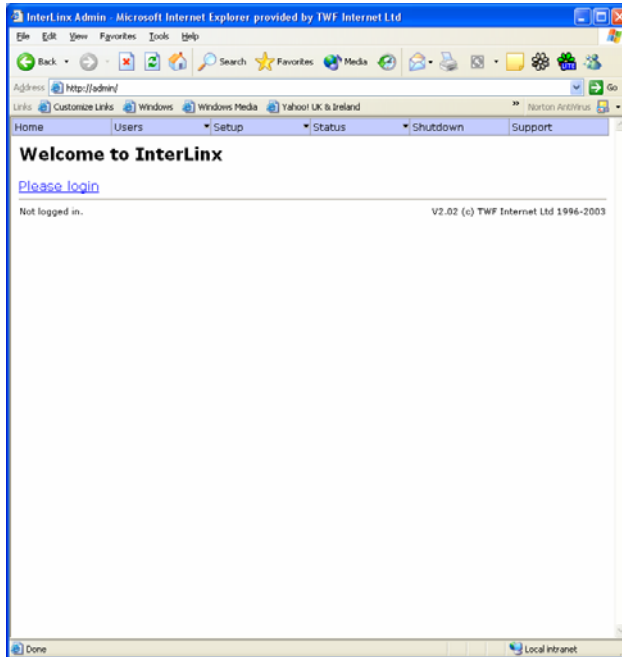
5. When you web browse through InterLinx you are asked to enter a user name and password (this only happens for the first web site to try and visit.) This allows InterLinx to record the web pages that are visited against a user's name and to control the content that they see.
6. As a test you can use the default Administrator user to web browse. Enter **admin** in the 'User name' field and **admin** in the 'Password' field. (We do not advise checking **Remember my password**.)
7. You should now get your web site.



Accessing the InterLinx Admin System

The InterLinx Admin system is accessed using a web browsing from any machine on your network.

1. Open Internet Explorer and enter **admin** in the address line.
2. You can either click on **Please login** or use the menu bar to select what you want to do, either way you will be presented with a login box.



3. Enter **admin** as the 'User name' and **admin** as the 'Password.' Notice that unlike the web browsing login box, this says 'Internet Access Server Administration.'



Email Overview

InterLinx is a powerful and flexible Email server which can support the diverse needs of many hundreds of users. This flexibility presents a number of issues that you need to consider prior to configuring the Email software of your users.

The main consideration is to do with where you leave the user's Email. You can either leave their Email on InterLinx or you can have them collect it and store it on their local hard disk. The Pros and Cons of leaving users' mail on InterLinx are as follows: -

Pros

- **Accessibility:** Email can be accessed from anywhere including the user's desktop computer, a colleague's computer, a mobile computer, a desktop machine at home, a PDA or from any web browser anywhere in the world.
- **Sharing:** Multiple individuals can open the same mailbox at the same time.
- **Data Backup:** InterLinx allows all the Email stored on it to be copied to a data backup device.

Cons

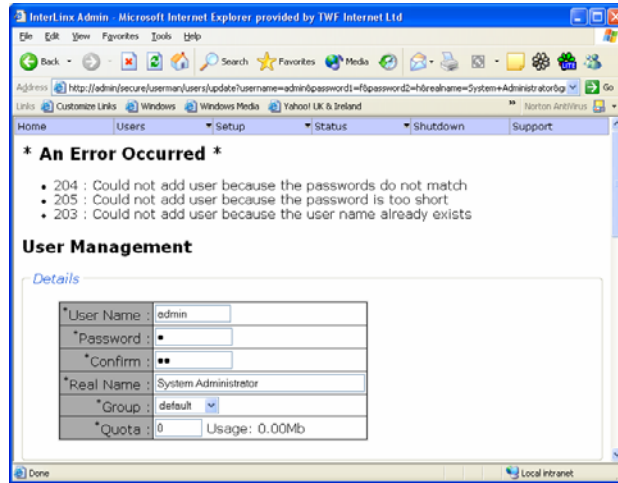
- **Disk Space:** InterLinx has a finite amount of disk space available for storing Email. If too many users have too much Email then it will not fit on the InterLinx hard disk.
- **Portability:** In-order to access your Email remotely you need to have an Internet connection. You are not downloading your Email and carrying it with you on your notebook computer; you need to be on-line in order to access it.

These issues need to be considered for each type of user that you have. For instance, if you have someone in an accounts department that works in front of their machine all day, they will not need remote access to their Email so it can be downloaded to their desktop hard drive, if that hard drive were to fail the loss of their Email would not be much of a problem.

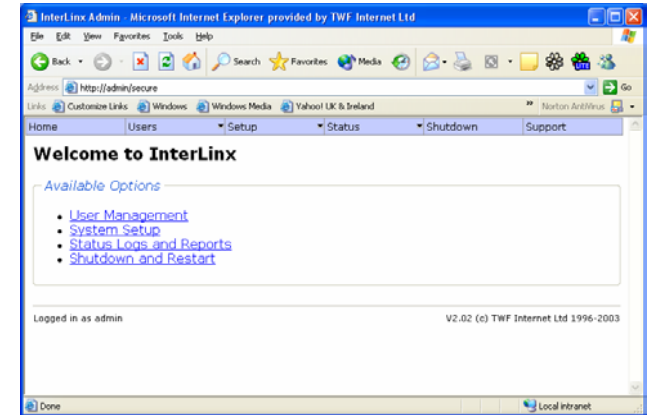
However, if your marketing director works with a desktop PC in the office, but also needs Email access on his home computer as well as on a notebook machine, he would be an ideal candidate for leaving his mail on InterLinx. He'd be able to get his Email on all of those computers as well as any other web browser in any location.

Technically, the decision revolves around whether you use the POP3 protocol to download mail to the Email client or you use the IMAP protocol to have a client-server connection to your InterLinx mailbox.

15. Once you have finished entering the user details click **Update User**. InterLinx will then check the integrity of the information and report any errors at the top of the page.



4. Once correctly logged-in you will be presented with the top-level menu or the function you selected from the menu.



Managing Users

Users on InterLinX are used to handle Email (if you don't have a user account you can't have Email), to allow access to the web (and record the activity) and to allow remote access to your network over a VPN connection. For the purposes of this example we will simply create a user for web browsing and Email.

1. Open Internet Explorer and login to the InterLinX Admin system as shown above.

2. Choose **New User** from the **User** menu. This User Management page allows you to add a new user. All that is required to add a user to InterLinX is to complete the first 'Details' section of the page.



3. Each user needs to have a unique user name. You may wish to choose a naming scheme that matches the one used to access your existing servers. This user name is also the primary Email address for this account; essentially each user has username@yourdomain.com as a default Email address.

4. Choose a good password, use upper and lower case characters and numbers to ensure that the password cannot be easily guessed. On InterLinX passwords are the key to your Email and your web browsing records, and for certain users, VPN connectivity and access to the InterLinX Admin system. Enter it again in the 'Confirm' field.

5. Enter the user's real name so that InterLinX can provide meaningful reports as to a user's activity.

6. Users can be grouped together for administrative purposes. If you have defined groups already you can choose that here.

7. Users can leave their Email on InterLinX so that it can be accessed from anywhere and be copied to tape. However, disk space is finite so it is often preferable to limit the amount of InterLinX disk space a single user can consume. This is a number in megabytes.

If you press **Return** now or click **Update User** at the bottom of the page the user will be added with the default Email address (mentioned above) and the right to access the web via the InterLinX proxy. However you may wish to configure the user more specifically: -

8. The 'Services' section allows you to control the permissions that this user has.

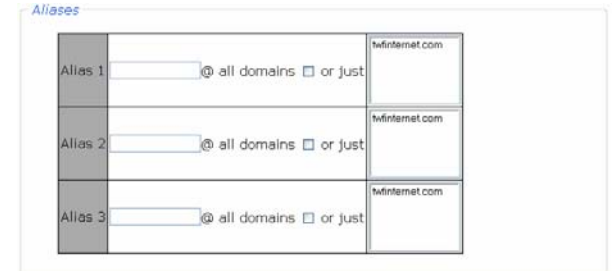


9. **Authenticated Websurfing** allows the user to browse the web via InterLinX by entering their user name and password. Most users have this permission.

10. **Point-to-Point Tunnelling Protocol** allows the user to connect to your network remotely via the PPTP protocol. Do not enable this permission unless you know what you are doing.

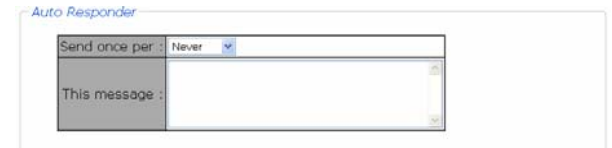
11. **Access Administration System** allows this user to access the InterLinX Admin system using his or her own user name and password. If you are the administrator, you may wish to do this for your own user.

12. The user name field constitutes the primary Email address for this user, however it is often better to have a longer address (such as john.smith@yourdomain.com) or a generic address (such as sales@yourdomain.com.)



To enable this InterLinX allows you to add Email aliases (additional addresses for this user) to the account. To do this simply enter the new address (that's everything you want before the @ sign) in the 'Alias 1' field and check the box. The list of domains on the right hand side allows you, in multi-domain configurations, to specify for which domains this address is to be used.

13. InterLinX is capable of automatically replying to an incoming Email with a pre-defined message. This Auto-Responder section can be viewed as a vacation message. You simply enter the message you wish to send then select the 'Send once per' field as appropriate.



14. Forwarding allows for Email to be sent on to one or more Email addresses. These addresses can be local to your network or can be external addresses. Simply enter the address (or list of addresses) in the 'Addresses' field. You can also choose whether the initial message remains on the InterLinX or is forwarded then discarded (this is known as 'Copy to self.')

