

Individual E-mail Address Solutions for PKI

With the introduction of PKI encryption technology, and after some debate, it has been advised that individual e-mail accounts need to be set up for every GP (and possibly Practice staff) wishing to participate in the PKI system and register as an individual. With this in mind, the Division has put together some solutions for setting this up.



Depending on the size and budget of your practice, we have three alternatives. Where pricing is given, you should check with your computer service provider before proceeding, as prices will vary. The three alternatives we have put together are;

- **Minimum Cost**
- **Internet Sharing**
- **Domain Name and Mail Server**

Please note that web-based e-mail accounts such as Hotmail and Yahoo! cannot be used for the PKI encrypted e-mail system as the security software needs to be installed into an e-mail program and cannot be integrated into your web browser.

Minimum Cost Solution

This is the most cost-effective solution, using a single computer with an internet connection a single e-mail program configured for use by several users.

What you will need

- Additional mailboxes at your ISP
- PKI compliant e-mail program, using multiple profiles such as;
 - Outlook Express 5 / 6 (preferred)
 - Outlook 98 / 2000 / 2002
 - Netscape Communicator 4.7x

Additional mailboxes at your ISP

Unless you decide to go with the Domain Name & Mail Server solution, you will need to set up additional POP mailboxes with your ISP. A POP box is like a post office box, which holds your e-mail at your ISP until you are ready to collect it.

You will require one POP mailbox per individual e-mail address, and these will need to be set up by calling your ISP. Costs for this setup will vary, depending on your service provider. Some will give you these for free, others may charge a setup fee and ongoing maintenance fee.

e.g. Netlink charges \$55 setup and \$55 per year, Ozemail charges \$11 and \$11 respectively.

Also, give some thought to the e-mail addresses you would like before calling. These will typically be in the form of; doctorname@yourisp.com.au

e.g. doctorbob@netlink.com.au or nick.riviera@ozemail.com.au.

PKI compliant E-mail program using multiple profiles

Outlook Express 5/ 6, Outlook 98 / 2000 / 2002 or Netscape Communicator 4. 7x should be installed on the computer with the internet connection and set up to use multiple profiles. Other versions of Netscape will work, but specific help will not be provided from HeSA. The program is then set up with all the different doctor's details (name, e-mail address etc) under separate profiles.

When the program is started, you will be asked which user you are. For example, Dr Nick Riviera would pick his name from the list of doctors and the e-mail program would then bring up his and only his e-mails. To change doctors, you need to exit the program and then start again selecting a different doctor from the list, and plug in the appropriate doctor's iKey.

Pros	Cons
Cheap Setup Costs	Doctors all having to share one computer for e-mails, availability can be an issue
Uses existing internet connection	All accounts kept in one place, so a problem will probably affect all doctors at once.
	iKeys need to be swapped as each doctor enters into his e-mail profile
	Changing addresses requires setup by ISP
	Reduced privacy (people looking over your shoulder)

Internet Sharing Method

This is a slightly more complex solution, using a program to share internet and e-mail access from a computer with an internet connection to the rest of the computer network. The other computers on the network are then able to access their e-mail and internet as if they each had a modem and phone line set up. Each doctor's workstation has a separate e-mail program.

What you will need

- Additional mailboxes at your ISP
- Internet sharing software, such as;
 - Wingate
 - WinRoute
 - WinProxy
- PKI compliant e-mail program on each doctor's workstation, such as;
 - Outlook Express 5 / 6 (preferred)
 - Outlook 98 / 2000 / 2002
 - Eudora 4.3
 - Netscape Communicator 4.7x
 - Lotus Notes

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Internet Sharing Software

Internet sharing software is installed on the computer which currently has the modem and internet set up. It allows other computers connected to the network to access this internet connection as if it were it's own. When a user accesses their e-mail or internet programs, the internet computer will automatically dial the ISP and disconnect when the connection is no longer needed.

There are dozens of programs available for internet sharing, all with varying features and capabilities. Some examples are Wingate, WinRoute and WinProxy. When choosing software, make sure it can run an SMTP and POP proxy (the protocols used for sending and receiving e-mails).

Wingate is recommended as a suitable solution, as it is relatively inexpensive, reliable, and allows sharing of both e-mail and web browsing. We also have previous experience with this software and would be more likely to be able to offer guidance in this area.

Below are prices for this package (Wingate 5 Plus), obtained from the Wingate website. Their address is <http://www.wingate.com>

Wingate 5.x Plus

Maximum Simultaneous Users	Price (AUD)
3 User	\$83.13
6 User	\$156.92
12 User	\$298.22
25 User	\$549.42
50 User	\$941.92

Please note the number of users pertains to the maximum number of simultaneous connections. So a practice with 8 GP's may be fine with a 6 user license, provided all GP's are not trying to collect e-mail or surf the web at the same time.

PKI compliant e-mail program on each doctor's workstation such as;

- **Outlook Express 5 / 6** (free)
Works with full 168-bit encryption, and is the preferred choice as it is free, easy-to-use and works with multiple profiles. HeSA provide full support for this package.
www.microsoft.com
- **Outlook 98 / 2000 / 2002**
This can manage multiple profiles (it can be used for several e-mail addresses in the one program), although is perhaps not quite as easy to use as Outlook Express. HeSA provide full support for this package.
www.microsoft.com
- **Eudora 4.3** (free)
Version 4.3 of this software is fully supported by HeSA. The currently downloadable version 5.x has reported problems, and HESA may not offer support for this.
www.eudora.com
- **Netscape Communicator 4.7x** (free)
Can manage multiple profiles but setup can be difficult. Higher versions will work, but these are not supported by HeSA.
www.netscape.com
- **Lotus Notes**
Works with mail-secure plug-in but setup can be difficult. Not supported by HeSA
www.lotus.com

Pros	Cons
Doctors all use e-mail from their desktops	Internet usage may increase
Also includes web browsing from desktops	Internal e-mails not instantaneous
Uses existing internet connection	Changing addresses requires setup by ISP
Reasonable pricing	

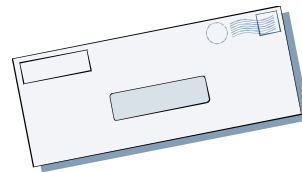
Domain Name & Mail Server Solution

This is the more costly of the three solutions provided here, providing individual e-mails and web browsing to all doctor's desktops. The computer with the current internet connection runs a mail server to handle internal and external e-mails, each doctor being able to use this e-mail from their desktops where their e-mail client is installed.

It is worth noting that in some circumstances, where a practice had 8 or more GP's, and costs of individual mailboxes was around \$50/year, this was actually a cheaper option than the previous method. This will vary greatly from practice to practice, so get your quotes first.

What You Will Need

- One POP mailbox at your ISP
- A Domain Name e.g. thepractice.com.au
- E-mail Redirection
- Mail Server software
- PKI compliant e-mail program on each doctor's desktop



POP Mailbox

You may be able to use the existing mailbox associated with your current e-mail account, but we would suggest having an extra mailbox set up by your ISP when organising redirection.

Domain name registration

You will need to register a domain name, which will be the basis of your new e-mail addresses (doctorname@domainname.com.au). This can also be used if you wish to have a website further down the track, which will have a URL of www.domainname.com.au

Registration can be done at <http://www.inwww.com/register/>, but be sure to read terms and conditions as Australian domain names (.com.au) have some restrictions. Pricing is \$140 (inc. GST) for 2 years on a .com.au domain name (e.g. dddgp.com.au). Your ISP can also organise this for you, but may charge a small fee for setting this up.

E-mail redirection (Domain delegation)

Once you have a domain name, your ISP will need to redirect all e-mails under that domain (anyone@domainname.com.au) to your new POP mailbox, so that your mail server can collect and sort them. Prices vary with this service, but it is advised to have this done via your own ISP to keep things simpler.

Netlink - \$275 (Inc. GST) one off admin fee

OzEmail - \$120 (Inc. GST) / year

Mail Server Software

The mail server software is required to collect e-mail from outside, sort it and have it ready for doctors to collect. You can manage your e-mail accounts internally, so adding removing or changing addresses is relatively simple. Features such as virus scanning (before the e-mail reaches the desktop) and the ability to archive a copy of all mail are of note.

There are several programs available in this area, the more widely used being Microsoft's Exchange Server and Qbik's MDAemon. MDAemon as compared to Exchange is cheaper, puts less load on the computer it is installed on and will run on all versions of Windows, not just NT/2000. Approximate pricing for MDAemon is given below, obtained from the Mdaemon website at <http://www.mdaemon.com>.

MDaemon 6.x Standard - Inc 12 months Upgrade Insurance

Number of e-mail accounts	Price (AUD)
6 User Accounts	\$164.51
12 User Accounts	\$299.11
25 User Accounts	\$493.53
50 User Accounts	\$732.82

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- **Outlook 98 / 2000 / 2002**
This can manage multiple profiles (it can be used for several e-mail addresses in the one program), although is perhaps not quite as easy to use as Outlook Express. HeSA provide full support for this package.
www.microsoft.com
- **Eudora 4.3** (free)
Version 4.3 of this software is fully supported by HeSA, and although the currently downloadable version 5.x version will work, you may not receive support for this.
www.eudora.com
- **Netscape Communicator 4.x** (free)
Can manage multiple profiles but setup can be difficult. Higher versions will work, but these are not supported by HeSA.
www.netscape.com
- **Lotus Notes**
Works with mail-secure plug-in but setup can be difficult. Not supported by HeSA
www.lotus.com

Optional

To enable web browsing from doctor's desktops, you may also want to integrate an internet sharing product such as WinGate, WinRoute or WinProxy. You may also receive a discount when purchasing both Wingate and MDAemon together as they are companion products.

Wingate 5.x Plus (to allow web browsing from doctor's desktops)

Maximum Simultaneous Users	Price (AUD)
3 User	\$83.13
6 User	\$156.92
12 User	\$298.22
25 User	\$549.42
50 User	\$941.92

Pros	Cons
Doctors all use e-mail from their desktops	More expensive solution
Uses existing internet connection	Increases load on internet computer
Internal e-mails instantaneous	More complex initial setup
E-mail addresses managed internally (easy to add/remove accounts)	
Extra functions such as anti-virus, automatic holiday replies, forwarding and archiving	