



ASX Austraclear

TECHNICAL FAQ's

September 2007

Information provided is for educational purposes and does not constitute financial product advice. You should obtain independent advice from an Australian financial services licensee before making any financial decisions. Although ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”) has made every effort to ensure the accuracy of the information as at the date of publication, ASX does not give any warranty or representation as to the accuracy, reliability or completeness of the information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way (including by way of negligence) from or in connection with any information provided or omitted or from any one acting or refraining to act in reliance on this information. This document is not a substitute for the Operating Rules of the relevant ASX entity and in the case of any inconsistency, the Operating Rules prevail.

© Copyright 2007 ASX Limited ABN 98 008 624 691. All rights reserved 2007.

ASX Limited
ABN 98 008 624 691

20 Bridge Street, Sydney NSW 2000
PO Box H224
Australia Square NSW 1215

Telephone: +61 2 9227 0000
Facsimile: +61 2 9227 0859
Email: info@asx.com.au

Updated: September 2007
Version: 2.0

CONTENTS

ASX Austraclear	1
1. PC Infrastructure	6
What is the recommended PC hardware specification for the ASX Austraclear system?	6
Where can we download the .Net Framework version 1.1 Redistributable package from?	6
Is the ASX Austraclear system browser based software?	6
Will the ASX Austraclear system deploy and run on NT4 or IE 5.5?	6
Will RITS/ACNZ dial-up sessions run on either the Windows 2000 or XP Operating Systems?	6
What Operating System versions and related service packs will be required to enable us to deploy the ASX Austraclear client prior to the live implementation date?	6
What is the minimum MDAC version requirement on the client PC to support .Net framework and the ASX Austraclear software?	6
Does the installation of .Net Framework affect the Active Directory?	6
If we will be using the Internet to access the ASX Austraclear system, is any sort of VPN client required to be installed on the clients to provide this access?	6
Can the ASX Austraclear system software be deployed and run in a CITRIX server / Windows 2000 Terminal server environment?	6
If we will be running RITS / ACNZ on the same PC as the ASX Austraclear system, how will the required Kea software be installed?	7
Is Windows XP Service Pack 1 and Service pack 2 supported?	7
Why is the MSI Security Policy required?	7
What specific changes does the security policy make to the client's PC operating system and/or .Net Framework	7
How often will this file need to be changed (as Admin rights are require to install it) ?	7
Network (including Proxy Servers)	7
What specific configuration changes are required to our firewalls and proxy servers?	7
Will the network upgrade involve any change to the existing routers at Participant sites? Will any required changes be done by the Participants or ASX?	7
If we do not have either a router or firewall configured, can you confirm that we therefore do not need to make any port configuration changes?	7
If TCP Port 900 is opened, what traffic will be going over TCP Port 900 eg http or https?	7
If our client PC's use private internal addresses and access the Internet via either a web proxy or NAT firewall, does access to the ANNI network work via Network Address Translation?	7
If we utilise 'destination NAT'ing' does the ASX need to know our original source IP address?	7
Is the DNS access for a publicly accessible DNS zone, or is it only accessible by authenticated clients? i.e. Can DNS be resolved via our internal forwarders?	7
(Internet Access) Will the DNS entries be added to the public Internet DNS system?	7
How do we configure TCP with the ASX DNS IP address?	8
With regards to DNS, does the application require TCP and UDP port 53 open from the client to the specified Internet addresses?	8
How will we access the ASX Austraclear system and RITS from our DR/BCP site if we are currently using a dial-up modem?	8
How will we connect to RITS/ACNZ going forward? Will the existing Keaterm sessions still be required for RITS/ACNZ?	8

If we are running a stand-alone PC for the ASX Austraclear system who is responsible for connection of the PC to the router?	8
Why does port 53 need to be open, and what sort of traffic is going via port 53?	8
Deployment (File and Browser)	8
Do we need to upgrade to the ASX Austraclear system, or can we simply continue using the existing Austraclear system?	8
How do you install and configure the software onto the PC?	8
Is the software that is downloaded for the ASX Austraclear system specific to the current user or the local machine?	8
How is the ASX Austraclear software actually launched?	9
What is the 'Web Launcher' and what does it do?	9
How do I authenticate to the application	9
Can we package the ASX Austraclear system software as part of our standard method of rolling out the SOE to PC's?	9
When I click on the link for "Training/Sociability Bed" nothing happens?	9
Does the installation of the trust file (security policy) need to be repeated with each new release of software?	9
What is the difference between File and Browser deployment model?	9
Is the web launcher Trust Relationship (Security Policy) .msi file needed for File Deployment?	9
Security (including Digital Certificates)	9
What is a Client side digital certificate?	9
What does a client side digital certificate mean for me?	10
Where is the certificate stored? (i.e. on the c: drive, on the LAN etc)	10
Will the certificates be exportable or transferable?	10
Will the digital certificates for IT support staff any different from those used by the general users?	10
How are digital certificates configured for use at our BCP/DR site? i.e. can they be exported, or do new certificates need to be downloaded?	10
Does the RSA SecurID system require any special firewall rules or does it run over the HTTPS stream?	10
Is there any associated software that requires installing on a user's PC to facilitate the Checkpoint client authentication?	10
How is the .Net security policy configured as part of the installation procedures?	10
Is the location of the digital certificate configurable by the Participants?	10
Are digital certificates stored as part of the roaming user profile?	10
Are the certificates linked to a specific user?	10
How are users uniquely identified prior to being issued with a certificate?	10
How is a certificate cancelled if a user leaves?	10
Can the certificate be transferred to the replacement user?	10
Can the certificate be configured by the Participant i.e. be password protected?	11
What options do we have for transferring certificates to our BCP / DR site (other than copying to a floppy disc)?	11
Can a user's certificate be used on multiple PC's, and how would this work in practice?	11
Can different certificates be used on the same PC?	11
I am getting an error when selecting "Enroll" on the ASX Austraclear Digital ID Centre page?	11

When attempting to access the URL https://exigotc.austraclear.com.au I receive a Security alert that “Revocation information for security certificate for this site in is not available. Do you want to proceed?”	11
What is the “Challenge Phrase” when enrolling for a Digital Certificate?	11
Business Continuity Processing / Disaster Recovery (BCP / DR)	11
What is the next stage in Sociability Testing?	11
What is required for BCP / DR sociability testing?	11
What is a RSA SecurID card and how do I obtain one?	12

Frequently Asked Questions

1. PC Infrastructure

What is the recommended PC hardware specification for the ASX Austraclear system?

The recommended specification is an Intel P4 2.4 GHz PC with 512 MB memory.

Where can we download the .Net Framework version 1.1 Redistributable package from?

The .Net Framework can be obtained as a free download from the Microsoft web site. Going forward, Microsoft will include the .Net framework in service packs and new versions of Windows.

<http://microsoft.com/downloads/details.aspx?FamilyId=262D25E3-F589-4842-8157-034D1E7CF3A3&displaylang=en>.

Is the ASX Austraclear system browser based software?

No. The ASX Austraclear system is a .Net Windows Form application which can either be launched by your web browser or installed as an application via File Deployment and launched from the Start menu.

Will the ASX Austraclear system deploy and run on NT4 or IE 5.5?

Our Vendor has advised that due to Microsoft support for NT4 ending on 30th June 2003, and support for Internet Explorer 5.5 ending on 31st December 2003, EXIGO® will NOT be supported on either the Windows NT4 or Internet Explorer 5.5 platforms.

Will RITS/ACNZ dial-up sessions run on either the Windows 2000 or XP Operating Systems?

ASX testing has confirmed that these applications will run on Windows 2000 and XP.

What Operating System versions and related service packs will be required to enable us to deploy the ASX Austraclear client prior to the live implementation date?

ASX is endeavouring to ensure all recommendations meet or exceed reasonable performance standards for all Participants. Although development of the product is continuing, early communication of the minimum requirements to Participants is seen as essential. On occasions further testing of the product may identify opportunities for improvement that could result in operating system upgrades.

ASX will continue to work on avoiding any further changes to minimum standards or specifications, however if significant improvements can be identified then Participants will receive the recommendations. ASX does not envisage any further changes to minimum standards or the published specifications at this stage.

What is the minimum MDAC version requirement on the client PC to support .Net framework and the ASX Austraclear software?

MDAC is not required for the ASX Austraclear system.

Does the installation of .Net Framework affect the Active Directory?

No, the installation of the .Net Framework does not impact the Active Directory.

If we will be using the Internet to access the ASX Austraclear system, is any sort of VPN client required to be installed on the clients to provide this access?

There is no VPN software required to access EXIGO. The client uses SSL encryption to connect to the servers.

Can the ASX Austraclear system software be deployed and run in a CITRIX server / Windows 2000 Terminal server environment?

The deployment and execution of the new system software on a Citrix or Windows 2000 Terminal Server environment will have to be confirmed by Participants on an individual basis. This is the case as each Citrix-type configuration is likely to be unique to each individual Participant, and we are therefore not able to provide a generic confirmation regarding its suitability for the ASX Austraclear system.

However, initial test results with a Participant running a Citrix environment have been positive.

If we will be running RITS / ACNZ on the same PC as the ASX Austraclear system, how will the required Kea software be installed?

The Kea software and installation instructions will be provided by the ASX. Please contact the ASX Austraclear helpdesk to arrange installation.

Is Windows XP Service Pack 1 and Service pack 2 supported?

Yes. The ASX Austraclear system will run on Windows XP SP1 or SP2

Why is the MSI Security Policy required?

The MSI Security Policy is required for the web-launcher process. It configures the trust relationship between the middle tier and the client PC.

What specific changes does the security policy make to the client's PC operating system and/or .Net Framework

It adds the OM Web launcher key to the .Net security configuration which allows the browser to use .Net to download the ASX Austraclear application.

How often will this file need to be changed (as Admin rights are require to install it) ?

This unique key does not change between versions of the web launcher.

Network (including Proxy Servers)

What specific configuration changes are required to our firewalls and proxy servers?

The required changes are described in detail in the Participant Technical Briefing Papers and the appropriate ASX Austraclear Domain Names papers, for both ANNI and Internet users, which are available on the ASX Austraclear web site.

<http://www.sfe.com.au/index.html?content/austraclear/operations/exigo.htm>

Will the network upgrade involve any change to the existing routers at Participant sites? Will any required changes be done by the Participants or ASX?

For Tier 1 participants a router upgrade will be required.

If we do not have either a router or firewall configured, can you confirm that we therefore do not need to make any port configuration changes?

If the Participant does not use a router or firewall, no port configuration changes are required.

If TCP Port 900 is opened, what traffic will be going over TCP Port 900 eg http or https?

HTTP. TCP Port 900 is not used by the ASX Austraclear system

If our client PC's use private internal addresses and access the Internet via either a web proxy or NAT firewall, does access to the ANNI network work via Network Address Translation?

Yes it does.

If we utilise 'destination NAT'ing' does the ASX need to know our original source IP address?

Yes. This information is required to enable the ASX to configure our routers with the appropriate Network Address Translation information.

Is the DNS access for a publicly accessible DNS zone, or is it only accessible by authenticated clients? i.e. Can DNS be resolved via our internal forwarders?

Yes, DNS can be resolved by your internal forwarders.

(Internet Access) Will the DNS entries be added to the public Internet DNS system?

Yes. The details have been published.

How do we configure TCP with the ASX DNS IP address?

Either the Participant workstations or the Participant DNS server should be configured to point at the ASX DNS servers. On workstations this is done through control panel/network settings.

With regards to DNS, does the application require TCP and UDP port 53 open from the client to the specified Internet addresses?

Yes. DNS uses port 53 for both UDP and TCP traffic. It uses TCP mainly for zone transfers, but can fall back from UDP to TCP for regular DNS queries if UDP responses are truncated. In addition some debugging tools use TCP by default for talking to servers. While DNS clients and servers use mainly UDP for query / response traffic, the ASX requests that TCP / UDP port 53 is allowed through Participant firewalls.

How will we access the ASX Austraclear system and RITS from our DR/BCP site if we are currently using a dial-up modem?

If a Participant is currently accessing the system via a dial-up modem from their BCP site, they will need to ensure that they have internet connectivity in order to access the ASX Austraclear system, but will continue to use the existing dial-up modem for accessing RITS / ACNZ

How will we connect to RITS/ACNZ going forward? Will the existing Kea term sessions still be required for RITS/ACNZ?

Yes, the existing Kea session will still be required to access RITS/ACNZ and the method of connecting to these systems will remain the same.

If we are running a stand-alone PC for the ASX Austraclear system who is responsible for connection of the PC to the router?

The Participants are responsible for setting up their own internal network infrastructure. ASX can provide technical assistance if required

Why does port 53 need to be open, and what sort of traffic is going via port 53?

Port 53 is used by DNS (Domain Name Server). The Participant's local DNS server will need to communicate with the ASX DNS servers. This is required to facilitate fail over from primary ASX production site to the ASX Backup site.

Deployment (File and Browser)***Do we need to upgrade to the ASX Austraclear system, or can we simply continue using the existing Austraclear system?***

In order to continue using ASX Austraclear after the live implementation date, you will need to have upgraded to the ASX Austraclear system. The existing system (FINTRACS) will be decommissioned once the replacement system has been implemented.

How do you install and configure the software onto the PC?

There are two methods available for deployment. The first method is the Browser model which uses .Net zero deployment. You access the ASX Austraclear homepage and click on the appropriate link initiating the web launcher, which manages the software download and execution.

The alternative method is the File deployment model in which an installation file can be downloaded from our website. You are then able install the system by executing the file. Using this method would allow you to package the system for rollout to multiple PC's. Detailed information regarding each method is available on the ASX Austraclear website.

Is the software that is downloaded for the ASX Austraclear system specific to the current user or the local machine?

Using the Browser Deployment model the downloaded files are stored in the user's profile directory in the local machine. Thus, the user can transfer to a different PC anytime, as long as the PC requirements are met by the local machine i.e. .Net framework, Security Policy and other requirements as explained in the Technical Briefing Papers (This is true if roaming profiles are used).

Using the File deployment model the initial installation file (compressed file) needs to be saved into a local directory. However, once executed, the application will be saved in the local machine's "Program Files" directory.

How is the ASX Austraclear software actually launched?

Under the Browser deployment model the system is installed as a .Net Windows Forms application via a .Net feature known as ".Net zero deployment". This model enables users to launch and access the system via the browser, i.e. Internet Explorer 6.

Under the File Deployment model, the software is launched from the Start menu or by using a desktop shortcut.

What is the 'Web Launcher' and what does it do?

The web launcher is only used in the Browser Deployment model and is responsible for performing the deployment and providing feedback to the user in terms of a progress bar and details of each activity it performs. If an application download is required it will also indicate the size of that download. Once the application is downloaded to the client PC the web launcher will launch the application. A splash page will be displayed followed by the login prompt.

How do I authenticate to the application

The application will prompt you to enter your SecurID details when you enter your user name and password. You must also have a valid digital certificate installed on your PC

Can we package the ASX Austraclear system software as part of our standard method of rolling out the SOE to PC's?

Using the File deployment model it would be possible to package the software and do a rollout to multiple PC's. However, the Participant then assumes responsibility for ensuring that their users have the most recent version of the software available.

When I click on the link for "Training/Sociability Bed" nothing happens?

This problem has been identified as being caused by the installation of a customised version of Internet Explorer 6. Please refer to the following Microsoft site for further information regarding the underlying cause and possible solutions. A hot fix is available from Microsoft Support.

<http://support.microsoft.com/default.aspx?scid=kb;en-us;281679>

Does the installation of the trust file (security policy) need to be repeated with each new release of software?

No, the installation of the trust file is a one-off, which is performed the first time a user logs into the new system. This step would only need to be repeated if a user needs to access the system from a new or different PC.

What is the difference between File and Browser deployment model?

The File deployment method does not maintain automatic version control, and the software will need to be manually updated when there is a new release. The software is password protected and available on the ASX Austraclear homepage for downloading. The file deployment version of the software can be packaged and rolled out to the users. This method of deployment does not require the web launcher trust relationship .msi to be installed.

Browser deployment method requires Internet Explorer 6 and the web launcher trust relationship .msi to be installed. The browser deployment method checks the version of the software each time the user logs in, and allows the user to update the software if necessary.

Is the web launcher Trust Relationship (Security Policy) .msi file needed for File Deployment?

No, the web launcher Trust Relationship (Security Policy) .msi file is only needed for Browser deployment and is not required for File Deployment.

Security (including Digital Certificates)

What is a Client side digital certificate?

A Digital Certificate is the electronic version of an ID card that establishes your credentials and authenticates your connection when performing transactions.. Please refer to:

<http://www.microsoft.com/windows/ie/using/howto/digitalcert/using.asp>

What does a client side digital certificate mean for me?

Client side certificates have been introduced into the environment to provide two factor authentication. In simple terms, this means that it is possible to cryptographically tie a transaction to a particular username and certificate. The two factor authentication component simply means that the user must both have and know something, just like a PIN number on an ATM card.

Where is the certificate stored? (i.e. on the c: drive, on the LAN etc)

The certificates are stored in the individual browser certificate store on a per user basis. For example, if a certificate is saved in one user's profile it will not be available in another user's profile. However as the certificates are exportable, they could also be saved on the Participant's LAN.

Will the certificates be exportable or transferable?

Yes, the digital certificates can be configured in exportable mode.

Will the digital certificates for IT support staff any different from those used by the general users?

No, the same format digital certificates will be issued to all users of the ASX Austraclear system.

How are digital certificates configured for use at our BCP/DR site? i.e. can they be exported, or do new certificates need to be downloaded?

The digital certificates are configured in an exportable format, meaning that they can be copied from one PC to another, or other appropriate electronic media, e.g. USB smart card. Further end-user documentation will be provided as part of the scheduled training.

Does the RSA SecurID system require any special firewall rules or does it run over the HTTPS stream?

No special firewall rules are required

Is there any associated software that requires installing on a user's PC to facilitate the Checkpoint client authentication?

No software is required.

How is the .Net security policy configured as part of the installation procedures?

The .Net framework requires a Security Policy to be applied before application deployments can take place. The update must be done by an administrator, preferably at the same time the framework is installed. The policy is available via the initial ASX Austraclear home page.

Is the location of the digital certificate configurable by the Participants?

The certificate storage location is completely configurable by Participants. The certificate can be exported to other appropriate forms of media, including USB drives, IKEYS etc.

Are digital certificates stored as part of the roaming user profile?

Yes, the certificates can be stored as part of the user's roaming profile. However, they can also be stored on any other media preferred by the Participants.

Are the certificates linked to a specific user?

Yes, the certificates are linked to a specific ASX Austraclear (EXIGO) username. Participants are not allowed to share usernames/password pairs across the system.

How are users uniquely identified prior to being issued with a certificate?

Users are identified by First name, Surname, E-mail address, EXIGO Username, Passcode and Participant Id prior to being issued with a digital certificate.

How is a certificate cancelled if a user leaves?

If a user leaves an organisation the ASX Austraclear helpdesk should be contacted to revoke the individual's certificate and lock the corresponding user account.

Can the certificate be transferred to the replacement user?

No, certificates cannot be transferred between users. If a user leaves the certificate will need to be revoked. A new certificate will then be issued to the replacement staff member.

Can the certificate be configured by the Participant i.e. be password protected?

Password protection and storage options are configurable by the Participant.

What options do we have for transferring certificates to our BCP / DR site (other than copying to a floppy disc)?

This is completely up to the Participant. For example, certificates can be copied across as part of a Windows Domain profile or on a USB drive or IKEY device.

Can a user's certificate be used on multiple PC's, and how would this work in practice?

A user's certificate can reside on multiple PCs (for BCP/DR requirements) by exporting it from the original PC. However, it is an ASX policy that username/password pairs are not shared amongst users.

Can different certificates be used on the same PC?

Yes, multiple certificates can be used on the same PC. When accessing the ASX Austraclear replacement system the user will be prompted by the EXIGO client to select the appropriate certificate.

I am getting an error when selecting "Enroll" on the ASX Austraclear Digital ID Centre page?

This error is most likely to be related to the Internet Explorer permissions when accessing the VeriSign web site. Please add the VeriSign web site to the "Trusted Sites" zone and repeat the operation. If you are still getting an error, logging on as a user with local Administrator rights may be necessary, and can be arranged with your local IT Help Desk.

When attempting to access the URL <https://exigotc.austraclear.com.au> I receive a Security alert that "Revocation information for security certificate for this site in is not available. Do you want to proceed?"

If you have the option to click "Yes" to proceed please do so. This warning occurs because the "Check for server certificate revocation" option under advanced settings in Internet Explorer has been selected.

What is the "Challenge Phrase" when enrolling for a Digital Certificate?

The Challenge Phrase is a unique phrase set by the user and not shared with anyone. This phrase can be used by a user to revoke the certificate if required. This phrase is private to the user and it cannot be changed by the user. It's format is alphanumeric, no punctuation and a maximum length of 32 characters.

Business Continuity Processing / Disaster Recovery (BCP / DR)***What is the next stage in Sociability Testing?***

Once you have successfully completed your primary Sociability Testing at your Production site, the next phase is to perform Sociability / Connectivity testing from your BCP / DR site, if appropriate. As indicated in the previous Technical Briefing Papers, the current Dial-up DR connection to the existing Austraclear system (FINTRACS) will be replaced by Internet BCP / DR connectivity to the ASX Austraclear system.

What is required for BCP / DR sociability testing?

The following basic components are required to be in place at your Business Continuity Processing / Disaster Recovery (BCP / DR) site prior to commencing testing:

- Appropriate Internet access at your DR / BCP site, to provide Internet connectivity to the ASX Austraclear system
- Hardware and Software as per the current recommended requirements, including .Net 1.1 (See User / Installation Guides)
- Implement and test the appropriate network infrastructure changes, if required (i.e. firewalls and proxy servers)
- RSA SecurID token / card at your DR site, to enable authentication to the ASX firewall (Please check availability of a SecurID token)
- Sociability Digital Certificate - please note that the original Sociability digital certificate will need to be exported for use on your DR PC (please see the CSDC Import & Export Procedures on the ASX Austraclear website)

- Sociability User Login - the same Sociability login details will be used for BCP / DR Sociability Testing (e.g. soc12345 etc)

Please refer to the BCP / DR Sociability testing User Guide on the ASX Austraclear homepage for further information in this regard.

What is a RSA SecurID card and how do I obtain one?

A RSA SecurID token (ACE card) is required to authenticate to the ASX Austraclear firewall when accessing the system via the Internet. If an additional SecurID token is required for your BCP /DR site, the appropriate application form is available on the ASX Austraclear homepage:

http://www.sfe.com.au/content/austraclear/operations/exigo/rsa_ace_registration.pdf

Please print and complete this form, ensuring that it is signed by two authorised signatories, and then return the completed form to ASX Austraclear via fax on 02 9256 0116.
