

Delivering iDataFax access when desktops and networks are locked down
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Delivering iDataFax Access when PCs and Networks are Locked Down “or unstable”

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What the issue is

- Local policy restrictions
 - No unapproved 3rd applications on desktops
 - No direct access to the Internet
 - Proxy servers not allowing non web based SSL traffic on port 443

What the issue is (cont)

- Unstable Internet pipes
 - 3rd world site locations
 - Overloaded Proxies/Firewalls/Routers
 - Misconfigured Network Infrastructures

What the issue is (cont)

- Support and troubleshooting challenges
 - Language
 - Timezones
 - Prioritization by remote IT support

Examples

- VA Hospitals in the USA require FIPS-140 certification for encrypted connections
- Clinic in Toronto with mis-configured home base router losing packets
- Norwegian Hospital sites PC and Network lockdown
 - Lengthy approval process for 3rd party applications installs
 - Access to port 443 directly or via proxy server not allowed
- Unstable Internet pipes in certain countries

Initial Steps

- Created Troubleshooting Guide
 - Instructions provided to help user isolate cause
 - Not very effective at resolving the problem but only in helping identify likely cause
 - Users are powerless to solve the issue without buy-in from their local IT services provider
 - End users often don't understand how local IT policy enforcement impacts their use of outward-facing applications

Initial Steps

- Purchase of independent laptop and broadband wireless service
 - Expensive solution - both capital and ongoing monthly costs
 - Local wireless service can still be unstable
 - Distance from towers
 - Interference from location in buildings
 - Optics of having to have separate hardware, etc

Solution Requirements

- Zero client install delivery
- Connection fully encrypted
 - Ideally FIPS-140 compliant
- Able to tunnel through Proxy servers
 - Supports SSL encryption over port 80
- Can re-establish connection to iDataFax login session if connection drops
- Can be managed locally
- Is cost effective for PHRI to provide

Solutions Explored

- Separate Laptop and broadband wireless
- Citrix services
- Windows 2008 TermServ RemoteApp
- Thorin Remote iDataFax Virtual Client
- Anyware Group ROAM Solution

Separate Laptop and broadband wireless

- Not very cost effective
- Laptop/Windows service difficulties
 - Updates, virus protection, break/fix servicing
- Still presents issues if wireless reliability is not good

Citrix services

- **Benefits**
 - Enterprise solution
 - Mature solution
- **Drawbacks**
 - Is not part of current PHRI ICT service offerings
 - Net new application environment to support
 - Higher costs to implement and support

Windows 2008 TermServ RemoteApp

- **Benefits**
 - Allows remote desktop over HTTPS
 - Client and access is part of standard Windows OS
- **Drawbacks**
 - Requires the acceptance of an ActiveX component which may be prevented by local security policies
 - Requires configuring and managing Terminal Services Gateway for HTTPS encryption
 - Terminal server licensing considerations for large user base

Thorin Remote iDataFax Virtual Client

- **Benefits**
 - Very clean interface
 - No extraneous components required (ActiveX or Java Runtime version requirements)
 - Can license just the number of keys needed. No minimum user levels required.
- **Drawbacks**
 - Physical USB sticks to manage
 - More and more site implementing USB lockdown
 - Higher cost than alternative solution

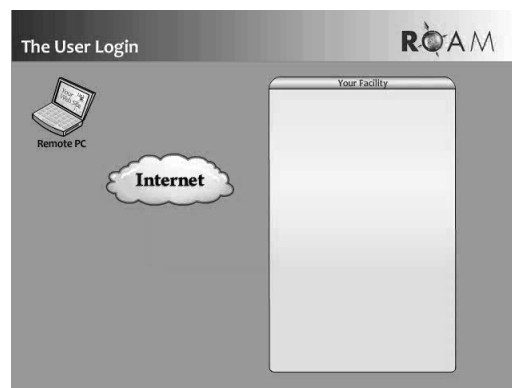
Anywhere Group ROAM Solution

- **Benefits**
 - Completely Web based. No hardware to manage
 - Appliance based (locally installed)
 - FIPS-140 encryption compliant
 - Easy and flexible user management
- **Drawbacks**
 - Requires Java runtime at a certain minimal version
 - Requires user to click OK to some items prior to getting login screens
 - Minimum user license level purchase required

Chosen Solution

- Top 3 finalists were:
 - Windows RemoteApp
 - Thorin Key
 - Anyware ROAM
- PHRI selected Anyware ROAM
 - It met all our requirements
 - It provided a known service level for a known cost
 - It was an appliance based solution requiring little to no additional PHRI staff support load
 - It had a very responsive and directly available vendor team to address any needs we had

How ROAM works



A Live Demonstration

- Any web browser to:
 - <https://apps.phri.ca>
- If port 443 is blocked then use:
 - <https://apps.phri.ca:80>

Questions and Answers

- Thank you