



Take It With You: Session Mobility and Wyse Thin Clients

Network-Centric Computing Solutions

A white paper by
Wyse Technology Inc.

WYSE
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THE NEED FOR SESSION MOBILITY

Easy access to information is not only expected in today's work environment, it is essential for productivity. While wireless devices can assist, in many cases full-size displays and keyboards are required, or it is not possible to carry a mobile device at all times. In environments such as hospitals, factories, warehouses, and maintenance bays, it is common to have computing devices located at convenient access locations where appropriate applications are made available to multiple personnel, based on their log-in credentials. However for the on-the-go worker, this creates the need not only to log on at each access point, but also to open the appropriate applications and files to get to where they left off during a previous session.

In the case of a hospital clinical environment, this is very much the case. A doctor or nurse may need to go through this process in every room they visit. At a VA hospital facility, it was determined that this process added an average of four minutes to every visit. Although it is tempting to leave applications open if the user is leaving for a short amount of time, it is important for security and privacy issues to ensure that the user closes their session before leaving.

ENTER SESSION MOBILITY

The ideal solution would be for the user to have the ability to take a session with them, and pick up where they left off, whether they come back to that specific workstation or go to a different workstation. Wyse Technology has developed such a solution which leverages thin-client computing.

Network-Based Computing and Thin Clients

Network-based computing refers to the practice of running all client applications on centralized servers, rather than on the client device. Microsoft® Terminal Services and Citrix® MetaFrame® enable commonly used desktop applications to run in a multi-user Windows® server environment. As a result, a thin client can be utilized instead of a traditional PC for the client device. The thin-client device is diskless, which provides significant benefits in security and manageability vs. traditional PC-based desktops.

In a thin-client architecture, all client applications are running on a centralized server, and the application session does not depend on any specific thin-client device. This architecture makes session mobility possible. By enabling this capability, along with smart card technology, it can be further extended.

User Experience

Wyse has developed and deployed such configurations within the VA hospital environments. Here's how it works:

- The user initially logs onto a thin-client workstation with their normal authentication (user name and password).
- When deployed with smart cards, they are also required to insert their smart card into the reader. Wyse provides smart card readers which are built into the keyboard.
- When the user wishes to leave the workstation, they simply remove the smart card. Their local session will automatically disappear from the screen and log off locally (no need to close applications or log off).
- Their session is still running on the central server. The administrator can define how long this session will remain open, after which it will automatically close out (typically 30-60 minutes). If individual applications are set to time out during a shorter period of time, they will do so.
- The user can return to either the same thin-client workstation, or ANY other workstation in the facility. Upon their return, they insert the smart card, and they will be prompted for an 8-character PIN. They will not need to reenter their authentication since they were already properly connected to their previous session at the exact point where they left off.
- Even if other personnel had used the thin-client workstation in the interim, this will have no affect. These other users will also have similar capabilities to take their sessions with them to other locations.

What Is Required?

Wyse "Take It With You" smart card-enabled session mobility will work with network-based computing environments utilizing Microsoft Terminal Services as well as Citrix MetaFrame. Wyse provides the smart card-enabled keyboard and a firmware plug-in to enable operation on all the Winterm™ 3 series thin clients, based on Windows CE, or the Winterm 9 series thin clients, based on Windows XP Embedded.



Wyse Smart Card Keyboard

Enabling smart cards requires one of two solutions:

Enterprise/PKI Enabled Solution: Wyse has tested smart card session mobility with the One VA smart card solution which is being deployed as part of the VA AAIP initiative. With this approach, smart card middleware such as ActivCard Gold™ will need to be loaded on the Terminal Server. Since this is a PKI-enabled solution, a certificate server will need to be established for exchange of certificates.

Local Solution: Wyse also offers a Local Smart Card Manager software solution. This solution is not PKI enabled, but provides a low-cost and easy-to-deploy alternative for sites which are not yet ready for a PKI-enabled deployment. It consists of the Local Smart Card Manager software which runs on a modestly configured Windows server, as well as an additional client plug-in for the Winterm 3 series thin clients. It also provides capability to author the smart cards. It utilizes all the same card readers as the enterprise solution, and thus can be used as an interim solution.

These solutions can also be configured for a wireless configuration. This is especially attractive for workstations mounted on mobile medical carts that often need to be left unattended for short periods to provide a way to quickly resume sessions.

You CAN Take It With You!

Session mobility has been deployed successfully with hundreds of users concurrently. Feedback has been extremely positive, both from the perspective of increased productivity, as well as user experience.

ABOUT WYSE

Wyse Technology is the vendor that big business worldwide trusts to implement scalable network-centric computing and access infrastructure device solutions. Wyse provides services, software, and hardware that shift computing complexity to the network, liberating IT departments from unnecessary support and maintenance functions, empowering users to be more productive in their jobs, and protecting and improving access to critical information and business applications. The company's innovative technology and deep domain knowledge – from the server to the edge of the network – position Wyse as the preeminent resource for large businesses seeking to build sustainable IT infrastructures through the adoption and optimization of a network-centric IT architecture. As the world's most popular provider of managed thin-client devices, Wyse provides end-user systems that can be centrally managed and controlled to conserve resources and increase productivity. Headquartered in San Jose, California with offices worldwide, Wyse has been #1 in thin-client market share for the last seven years, and has been named Microsoft "Embedded Partner of the Year" for three years.

Learn More

Visit us on the web at www.wyse.com or call 800 GET WYSE to get a risk-free trial of our world-leading Winterm thin clients today.



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