

**Introduction**  
**To**  
**iSTAR SecuOffice™**

2005-11-1

# iSTAR SecuOffice™

## The network is the computer

The slogan “The Network is the Computer” is made popular by SUN to underscore the phenomenal growth of the Internet, the vast amount of information available on the web, and the critical importance of interconnectivity among business partners in this day and age. However, the reality of Internet today is far short of its potential as a platform for universal connectivity and a shared repository of valuable data. The Internet is more like a jungle than a friendly collection of useful resources. To fulfill the ideal of “The network is the computer”, it must first be trimmed and put under control before it becomes safe to use. The network will not grow into a single universal computing device for all of us. With effective tools, it will evolve into many VPNs (Virtual Private Networks), individually tailored for each of us.

## The network is the office

Given the clear trend that connectivity to the net will be mostly wireless, the portability of computing powers afforded by various wireless networks will free office workers from fixed locations and static office environment. This mobility of workforce is not only the outcome of technological advances, but also the results of increasingly dynamic work requirements. International trade, worldwide distribution, and global sourcing of goods and services are not only effective means for gaining competitive edge, but oftentimes also critical to an enterprise’s survivability. This increasingly global exposure of company businesses and the relentless pace of market changes demand highly mobile workforces and close interconnectivity in order to satisfy dynamic business needs. In order to be mobile and effective at the same time, remote access to office resources becomes one of the top priority items.

Instead of “The network is the computer”, the more practical goal is to achieve “The network is the office”, where each office worker is given a virtual office space on the net, individually protected, mobile, convenient and secure in accessing their authorized resources. It is virtual in the sense that it is available anywhere anytime, looks and feels the same always, and is fully protected in its access to corporate resources.

## Telecommuting

In addition to those business needs that demand mobility and interconnectivity, the cost of commuting to work adds more incentives for the corporations to structure their work environment dynamically. Traffic gridlock, sprawling urban landscapes, energy cost, and traveling expenses all exert pressure on the traditional style of work. Telecommuting, i.e. work from home or through networks, has become an effective means for boosting productivity.

Recently a strong push for telecommuting comes from an unexpected direction. Globalization of businesses and world traveling bring with them the new and real danger of frequent breakouts of epidemics. While SARS is still fresh in our memory, the likelihood of Avian Flu becoming a deadly and fast-spreading pandemic with devastating impact is now front-and-center in world news. Judging from the increasingly “small” world, it is probably a safe bet that similar public health disasters will occur at ever-higher frequency in the future. They will continue to come with disastrous consequences to enterprises’ productivity. Last time during SARS crisis, in areas most affected, access to work was severely restricted. Many companies instituted rotating shifts for white-collar workers. Corporate facilities were made available only to a portion of the employees and the rest must stay home. Effective telecommuting infrastructure would have helped tremendously to alleviate the lost productivity.

## Remote access to work

There are many network tools available to help remote user access corporate resources or work from home. However, a common deficiency shared by those tools is the need to change one’s mode of work while away from office. Before taking a trip, a user often needs to forward his emails to a different server, to use web email vs. the familiar Outlook, or to put up with some “Outlook-like” software while away from office. While on the road, one needs to log into a different “remote access server”, which requires a different set of login credentials. Instead of the familiar office computing environment, the station is given an IP address situated in a strange DMZ LAN, from which locating ordinary resources becomes a struggle. Then there is the risk of introducing worms or viruses from remote station, even when the visiting user is satisfactorily authenticated. Network administrators also need to adjust their corporate infrastructure to accommodate remote users, which involves the set-up of different

authentication servers, different authentication policies, different access LAN, security filters, etc.

## **iSTAR SecuOffice™**

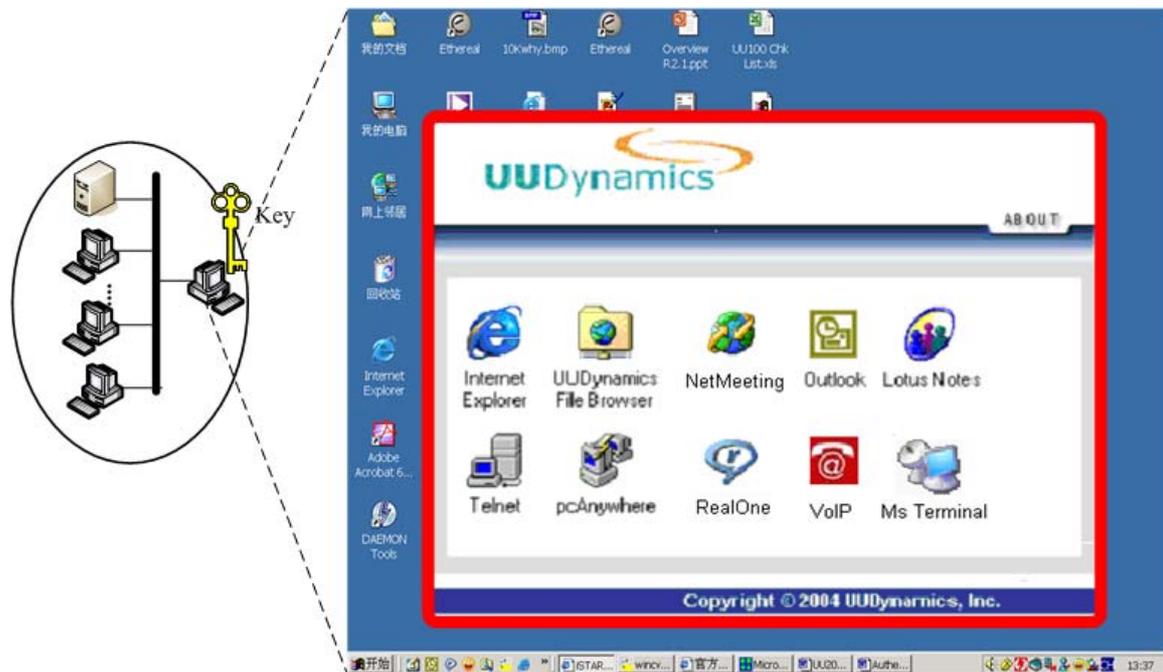


### **The Network is the Office**

UUDynamics' **iSTAR SecuOffice™** offers a revolutionary shift of paradigm. Instead of thinking in terms of remotely accessing corporate resources while away from office, **iSTAR SecuOffice™** considers "the network is the office", and your workstation a secured channel into corporate facilities. Under this new paradigm, there is no more distinction between local and remote access. Regardless where one opens up his workstation, one logs in as always, and finds his authorized resources as always, anytime, from anywhere. One gets one's emails through Outlook at his home office, and does the same at his home when telecommuting. All his applications, Intranet browsing, file manager, Microsoft LCS, NetMeeting, etc., all look and feel the

same when working under **iSTAR SecuOffice™**. **iSTAR SecuOffice™** even equips this virtual private office a phone extension to his corporate PBX (compatibility assumed).

## **iSTAR SecuOffice™ Workspace**

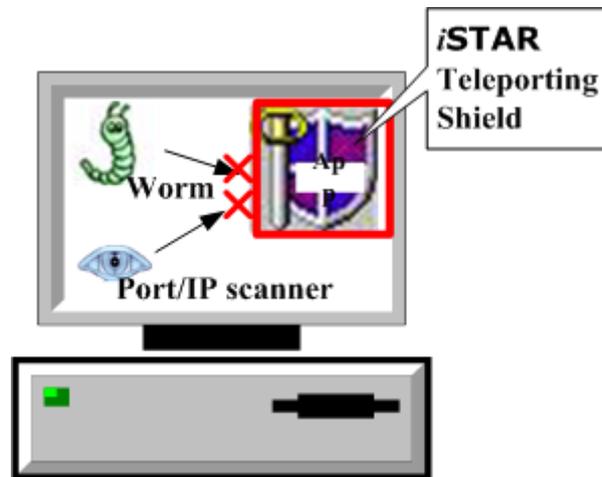


### **iSTAR SecuOffice™ Workspace**

Under **iSTAR SecuOffice™**, the workspace looks like a desktop with application icons. Those icons are “virtual applications” in their purist forms. To launch an application, a user simply double-clicks on the icon and off the application goes to its destined office location, either locally or remotely, without the need to make changes to the local IP address plan or to make local plan consistent with remote plan, without the need to shut off other “local” applications, without occupying local ports or other irrelevant resources, without the risk of transmitting viruses or worms from unrelated or unintended blind spots, and without making remote facilities vulnerable to IP or port scanning.

This **iSTAR SecuOffice™** Workspace can be created anywhere, without manual installation or downloading. It is truly a plug-n-play access to one’s office facilities.

# Security of *iSTAR* SecuOffice™



## Protection of launched applications

The *iSTAR* SecuOffice™ workspace securely channels the applications into their office environment through familiar icons. The channeling (or tunneling) is done per application through a proprietary “teleporting” technology, and is constructed on the application layer. This protection mechanism is fundamentally different from other VPN schemes. For instance, under IPSec, the connection to corporate resources is built on a lower level of network layers, where the protection mechanism must translate higher-level policies into low-level “filters” by professional firewall administrators. Since “filters” are mostly based on low-level ports and IP addresses, they are error-prone and difficult to maintain. They are also vulnerable to IP scanning and port scanning, two most popular and highly effective hacking tools. *iSTAR* SecuOffice™ is immune to those risks. It builds a shield around the launched applications and “teleports” their network contexts to their various destined environments where the desired resources are located. It applies complete control over each application’s network accesses and provides seamless and transparent protection independent from local environment.

## More information

Thanks for taking time to read our presentation. For more information about *iSTAR*™ products, please visit our web site at <http://www.uudynamics.com>