

A Good Day for Corporate Web Browsing

Failure to protect an organization's critical information may cause serious damage and in extreme cases even result in its demise. Taking into account the security requirements of large and small organizations as well as IT and end-user needs, Jetro Platforms - one of the leading developers of Server-Based application virtualization software - has developed a specialized secure Internet browsing solution - the COCKPIT2i™. This unique solution handles virtualization seamlessly and efficiently; taking a novel approach that enables 100% secure Internet browsing.

Critical Defense - A Centralized Internet Browser Virtualization Solution

Protecting the corporate network from risks posed by continuous exposure to the internet has become one of the main tasks of IT and network managers. Traditional secure web browsing solutions focus on trying to screen content and prevent it from penetrating the corporate network, yet many who use them quickly find that this approach is simply not enough.

According to Giora Shaked, CEO of Jetro Platforms, the company has taken a fresh approach to dealing with Internet security, which sets it apart from the competition. "Several vendors tried to develop a client-side security solution using virtualization technology", he says, "by creating a replicated and isolated local environment where applications can run without affecting the main environment of the computer." In contrast to client-side approaches, Jetro offers a server-side solution.

For the IT manager, a server-side solution is much easier to implement because a centralized solution is indifferent to the particular specifications of the client computers. In addition, a centralized solution is as understandable as installing a firewall. "The technological and methodological message Jetro is trying to convey is very simple - we do not let anything in or out," says Shaked. That's one motto that IT and security professionals understand immediately.

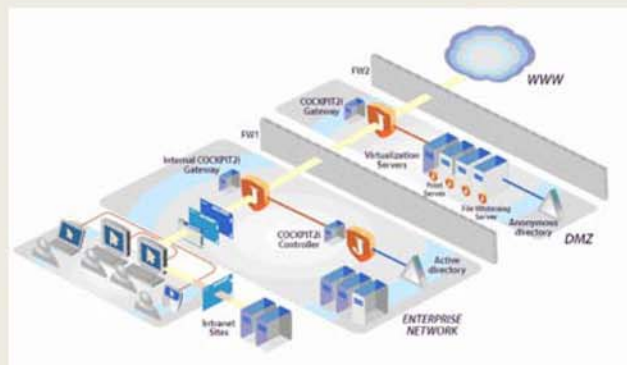
And how is that done? "We lock down the Internet ports in the firewall," Shaked explains. "No more HTTP or FTP. All other solutions let HTTP in and rely on client-side termination. This fundamental difference makes the infrastructure more robust and secure, and allows the IT staff sleep at night".

Jetro identified the need for a specific requirement for banks, insurance companies, large enterprises and official institutions: virtualization of the Internet browser. According to Shaked, all of the corporations above can benefit from a virtualization of the web browsing session, in a manner that complies with the security policy and the regulations (physical separation of the work environment and the Internet, 257 and 357 standards, etc.).

How does Internet Browsing Virtualization Work?

In a nutshell - the browsing takes place outside of the organization. Once that's done all threats remain outside of the

organization network as well. When a user attempts to click on a link to an external web page, the system creates a secure browsing environment within dedicated servers - outside of the organization. The system replaces the local browser with a remote virtual browser and synchronizes both environments bi-directionally (links, home, favorites, browsing history, bookmarks, etc.). An anonymous session lets the user gain full access to the Internet (this process is depicted in the diagram below).



Jetro COCKPIT2i System Architecture

The SRDP (Secured RDP) format encapsulates the content securely, using RDP for screen video transfer and other secure methods for printing uploading and downloading of data. This allows the user to perform actions such as copying and pasting text. Visual content is presented as a snapshot of the original. This process is managed in a personalized, transparent manner, and is characterized by high performance and operational efficiency.

While other solutions rely of statistics of failure and success, the COCKPIT2i does not take any chances. "Jetro's secure browsing solution is the only solution that 'leaves the Internet outside' and transmits a perfectly safe video-like image of the content to the end-user," says Shaked. This is a notable difference that should appeal to organization that cannot afford even a

highly improbable breach. "In other words, we can protect not only against all known threats, but also against threats that today are still unknown to us – or to our customers," says Shaked.

So what is the worse case scenario? A very successful hacker can only penetrate the DMZ environment and cause a temporary browsing server downtime. But even the most sophisticated of hackers cannot penetrate a network he is not connected to. "That's why, with COCKPIT2i there can be no leak or theft of corporate information", explains Shaked.

Usability and Productivity

Some organizations physically separate the internal and external networks. Yet in doing so they do not address the need for usability and tend to neglect some major security concerns. Even when the environments are separated – there will always be employees who will try to bypass the separation thereby violating the security policy. Studies show that files from the untrustworthy network find their way quite easily to the trusted network carried by insiders rather than by infiltrators. These bypasses tend to be the security soft spot of the organization.

Jetro offers the advantages of network separation while maintaining usability and productivity. "With our solution there is no need to use and support two computers," Shaked explains. "The user sees one browser and can easily copy, paste and print. In fact, the user does not even know that the browsing session is virtualized 'behind the scenes' since the process is totally transparent." This also eliminates the need to train the employees to use the system – allowing for significant savings in both time and money.

Word of an Impartial Jury: COCKPIT2i features the "highest possible level of web access security"

The secure browsing solution has been thoroughly reviewed by Comsec Consulting, a Security Consulting firm. Comsec's report clearly states that "while a combination of different solutions together may provide a reasonable solution, it still exposes the network to many risks".

The report goes on to say: "We have found that Jetro's COCKPIT2i, which was designed specifically for enterprise secure web browsing, provides the best performance, manageability and usability, while maintaining the highest possible level of web access security for corporate networks".

And it Keeps the Customers Happy

One of the many successful implementations of the COCKPIT2i solution took place at Bank of Israel, the regulator of the Israeli Banking and Financial Industry who defined the Network Security regulations for the banks. Among a variety of customers from the insurance industry, the first to adopt Jetro COCKPIT2i was the large Israeli insurance company Ayalon Insurance Group. Ayalon set out to ensure secure web browsing for their home employees while achieving full compliance with new national insurance regulations, without sacrificing usability.

"Ayalon Insurance Group aimed to comply with the requirement to separate the internal and external networks, achieve maximum security and grant the employees access to the Internet - all in a cost-effective manner", said Israela Titlebaum, Ayalon's chief security officer. "We achieved all this by implementing Jetro's secure browsing solution".

Another new customer in Israel is the Israeli Electricity Company who decided to deploy Jetro's COCKPIT2i after a long

evaluation procedure. The company has recently won the Best Computing Award for 2008 for its successful implementation of Jetro's Secure Web Browsing solution.

Application Virtualization – Main Benefits

No discussion about Application Virtualization would be complete without counting the many benefits of this technological approach. Application virtualization solutions are very useful for lowering the total cost of ownership, improving the quality of service, making the computing infrastructure more robust and enforcing security policy.

Jetro Platforms, a part of the RDT Group, is one of the virtualization market leaders. Jetro COCKPIT® is the company's flagship application virtualization solution. COCKPIT allows for centralized deployment and management of applications. The virtualization environment is characterized by short lag times even when using a narrow bandwidth. The technology does not require any client-side software installation or maintenance, while users enjoy perfect application availability and usability, including the ability to print from any endpoint.

"COCKPIT is much easier to deploy and own and is still considerably less expensive than the competing solutions. It also requires less IT expertise for management and maintenance", says Shaked.

Moreover, the next generation of the solution trumpets an entirely innovative vision: the application virtualization solution will become a totally open and independent environment, enabling applications from various platforms to run on a single customized desktop, using one management interface.

The Jetro COCKPIT2i Difference

Jetro's offering has several advantages over client-side Terminal Server solutions. For instance, the solution automatically manages the external user directory, handles cookies, supports the use of multiple browsers in the DMZ and at the endpoint (according to the nature and content of the link). In addition, the solution consolidates all the communication to a single IP address, synchronizes selected objects (bookmarks, links, etc.), tightens the security and vastly improves performance and user experience. COCKPIT2i also supports Flash technology and safe printing. Not bad for a system that also offers significant cost-position advantages.

Conclusion

Nowadays it is impossible to escape the never-ending discussions about virtualization solutions. It is as if virtualization is a new concept - not a self evident IT infrastructure fact that has been around since the dawn of computing (in fact, mainframes have relied on virtualization decades ago, and still do today). Modern virtualization solutions offer the benefits of both centralized and decentralized computing. But while server virtualization solutions have become commonplace and well understood, application virtualization solutions still have a long way to go in order to reach their full potential.

Application virtualization and Internet browser virtualization improve security and promote productivity very efficiently. The virtualization market as a whole is not fully fledged, but organizations can already enjoy some of its ripe offerings, improve the IT infrastructure and sustain the competitive advantage.