

Getting Started

HOBLink JWT



Software Version 3.1

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Who should be interested in HOBLink JWT?

You use **Windows** client operating systems and ...

... you are looking for an easy, fast and secure way to access Windows applications on a central server

... you are considering a server-based computing architecture

... you are not satisfied with your current server-based computing tool (too complex, too expensive, too insecure, too difficult to deploy).

... you need on-demand, multi-user access to your MS Windows Terminal Servers from one or more non-Windows platforms

... you want to get rid of print hassles and workflow clogs in your Windows Terminal Server environment

... you want to reduce administrative overhead and increase user productivity while retaining extensive user management

... you want to enhance the value of your Windows Terminal Server investment

... money and time count!

... you have heard about HOBLink JWT and wonder why so many companies go with this solution.

You are using **Apple® Mac®** machines and ...

... you're looking for a easy and fast way to access Windows applications

... you are a Mac® business user and planning or already using tools like Dave, VNC, Timbuk2, Virtual PC or CITRIX MetaFrame

... you are a Mac home user and you would like to use Windows applications

... you need to administrate your Windows 2000 Server remotely from your Apple Mac

... you are an ASP and you would like to give your customers using Apple Mac access to Windows applications

... you have home offices with an Apple Mac that also need to use Windows applications

... you are using an iBook/PowerBook and you want to use Windows applications "on the road" while you are traveling

... you have a cross-platform environment including Apple Mac and other platforms and all the users need to work with the same Windows applications for better compatibility

... you're using Microsoft Project on Windows and on the Mac and you would like to give your users access to the same project

... you want to have "Strong Encryption" for your Apple Mac to Windows communication

... you're considering a server-based computing environment for your Apple Mac users.

... you really want to have a fast and easy-to-setup solution to access Windows applications

... money and time count!

About this Guide

This guide is designed to provide you with background information on HOBLink JWT, allowing you to make initial decisions about where and how you can install and use the product in your enterprise.

In addition to the software and hardware requirements, you'll find a description of the components that make up typical solutions using HOBLink JWT.

Since security is often a key issue in this area, we have also included a section in which possible security solutions in combination with HOBLink JWT are outlined.

What is HOBLink JWT?

HOBLink JWT is a Web-based solution for on-demand, multi-user access to Windows applications and data on Windows Terminal Servers. Completely written in Java, HOBLink JWT gives you a cost-effective and easy way to access centralized Windows applications from a variety of platforms, including Apple® Mac®, Unix/Linux, OS/2 and, of course, Windows. In addition, it offers the system administrators broad-based control over user settings and modifications, reducing administration workload and increasing user productivity.

HOBLink JWT – Key Features

- Cost-efficient, on-demand access to centralized Windows applications from Windows, Mac, Unix/Linux, OS/2, NCs, etc.
- Effective load balancing and easy-to-use application publishing help streamline application delivery
- Eliminates print hassles and workflow clogs with “Easy Print” functionality and Universal Printer Support
- When supplemented with HOB Web Secure, it prevents unauthorized Web access to your Terminal Servers

Your Major Benefits with HOBLink JWT

HOBLink JWT enables fast and easy access to centralized Windows applications from any device, independent of its operating system and *without any redundant server component for the communication*. The main advantages are:

Investment Protection / Windows Anywhere

HOBLink JWT supports almost any hardware device with a Java-enabled operating system. No additional client software or hardware is necessary. Just install HOBLink JWT in your existing environment and you're up and running in minutes!

Centralized Administration

With the Microsoft Windows Terminal Services Architecture, all Windows applications run centralized on the server and are managed from a central location. As a server-based solution, HOBLink JWT compliments this architecture, enabling central user management and administration.

Support Friendly

Because of the central installation, support costs can be greatly reduced. There is absolutely no support necessary on the client side.

Reduction of TCO and TCA

Due to its server-based architecture, HOBLink JWT helps to reduce the Total Cost of Ownership and the Total Cost of Application to a minimum.

Required Components for the HOBLink JWT Solution

There are three primary components involved in the HOBLink JWT solution: the **Windows Terminal Servers**, the **HOBLink JWT client** and, for the server-based version, the **Web server**.

Terminal Server/Terminal Services Supported by HOBLink JWT

HOBLink JWT communicates with Microsoft Windows Terminal Servers / Terminal Services supported by:

- Microsoft Windows NT 4 Server – Terminal Server Edition and
- Microsoft Windows 2000 Server Family
 - Windows 2000 Server
 - Windows 2000 Advanced Server
 - Windows 2000 Data Center Server
- Microsoft Windows XP Professional Workstation (one session only)
- Microsoft Windows 2003 Server

Hardware / Memory Requirements for the Terminal Server

The hardware requirements for the Windows Terminals Servers depend on a variety of factors, including the number of clients needing access, the applications running on the servers and the behavior of the users (e.g. light or power users). Therefore, in order to better calculate how your servers should be equipped, we recommend you use the following guide from Microsoft:

“Windows 2000 Terminal Services Capacity and Scaling”

This guide can be viewed at the following Web address:

<http://www.microsoft.com/technet/prodtechnol/win2kts/maintain/optimize/w2ktsscl.mspx>.

This does not, of course, eliminate the need to test as extensively as possible.

Requirements for the Client

Java Virtual Machine

HOBLink JWT requires a platform that is enabled for Java. This means that a so-called Java Virtual Machine (JVM) must be installed on the client. However, since a Java Virtual Machine (JVM) is found in most popular Web browsers, you normally do not have to install any additional software on your computer to run HOBLink JWT. If you do need to install a JVM, you can use the one included in the scope of delivery of HOBLink JWT.

We recommend using one of the following browsers:

- Microsoft Internet Explorer
Minimum: version 4.0;
Currently recommended: version 6.0 or higher, with Sun Java PlugIn 1.3
Note: A JVM is *not* included with MS Internet Explorer v. 6.0 or higher.
- or -
- Netscape Navigator/Communicator
Minimum: version 4.5
Currently recommended: version 6.2 or higher, with Sun Java PlugIn 1.3

The standards for JVMs are usually expressed in terms of JDK (Java Development Kit) or JRE (Java Runtime Environment).

- HOBLink JWT can be run on any platform that supports JDK (JRE) v. 1.1 or higher.
- If you're using HOBLink JWT on Unix platforms, we recommend JDK (JRE) v. 1.3 or higher.
- For Macintosh, you need Macintosh Runtime for Java (MRJ), Version 2.2 or higher

▶ See the HOBLink JWT User Manual for information about where you can download a JVM for your platform

Hardware / Memory Requirements:

PC with Pentium Processor: The minimum requirement is an Intel Pentium processor with 133 MHz and 64 MB RAM.

Mac: Apple Mac OS (v. 9.5 or higher) G3, G4, iBook, Cube with at least a 300 MHz processor and a minimum of 128 MB RAM. We strongly recommend using Microsoft Internet Explorer 5.0 on Mac.

Network Computers: The minimum requirement for Network Computers is 64 MB RAM.

Requirements for the Web Server

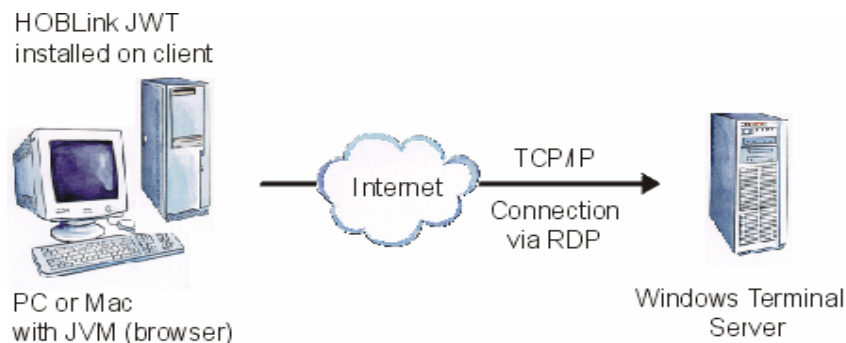
HOBLink JWT can be installed either locally or centrally on a Web server. HOBLink JWT supports all known Web servers in the market. There are no special requirements.

Local Client vs. Web Server Installation

HOBLink JWT can be installed either locally on a client PC/Mac or centrally on a Web server.

Local Installation

When installed on the client, HOBLink JWT runs as a Java application on the local system and attaches directly to the Terminal Server.

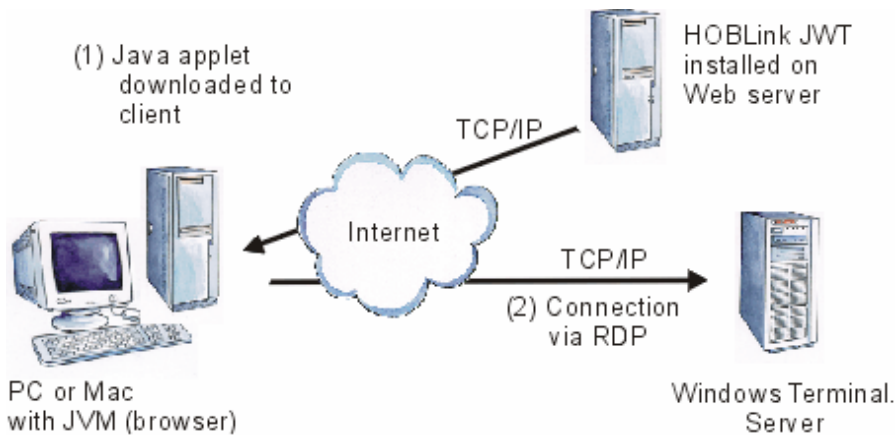


Local Installation for HOBLink JWT

This is often a good solution if your office only has a few workstations that need Terminal Server access, or if you don't have (do not want) a Web server.

Web Server-based Installation

The second option is to install HOBLink JWT on a Web server and download it as a Java applet to the client computer. From there, the applet is automatically started and connects to the Terminal server.



Web Server Installation for HOBLink JWT

With the server-based model, you have all the advantages of centralized maintenance and management. Your administrator only has to install and maintain HOBLink JWT at one location (on the Web server) and it is available to every workstation in your Intranet or the Internet – whether you have 10 or 10,000.

You can also make use of the “Smart Update” feature, which installs the applet in your browser and allows an applet download only when the software on the server has been updated.

Security with HOBLink JWT

Data security, both in public networks like the Internet as well as in private corporate networks, is a crucial, life-and-death issue for most enterprises. When sensitive data falls into the wrong hands, it can lead to the ruin of a company.

HOBLink JWT, of course, fully supports the integrated Microsoft encryption functions for the RDP protocol, up to the high-level RC4 encryption with a 128-bit key length.

HOBLink JWT + HOBLink Secure = Secure Communication

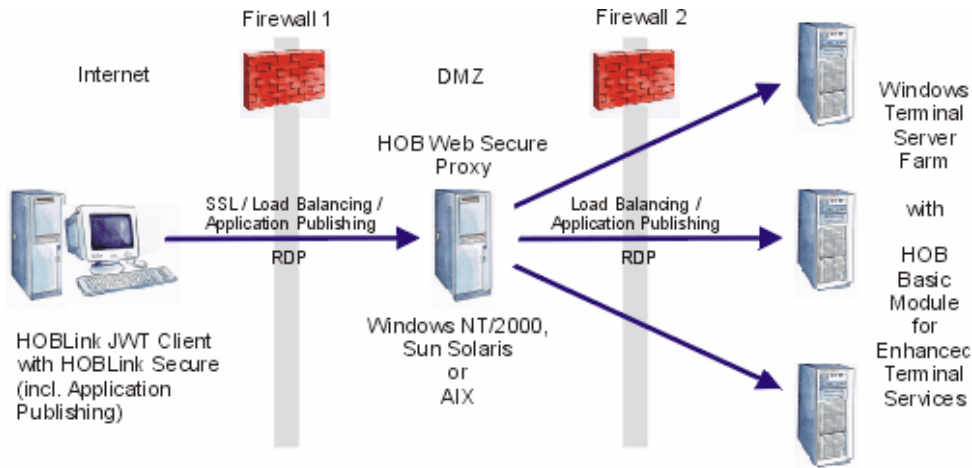
For this reason, HOB has developed a complete security package – **HOBLink Secure** – which can be implemented with HOBLink JWT to provide maximum security, “strong” encryption and excellent authentication. HOBLink Secure is designed for use in TCP/IP networks on the basis of SSL3 (Secure Socket Layer), and TLS (Transport Layer Security) and allows encryption with a key length of up to 256 bits. Even when using the highest performance processors, this “strong encryption” cannot be deciphered. In addition, it is possible to compress the data (V42.bis), allowing for faster transmission rates, especially with narrow bandwidths. Furthermore, an optional tool – the HOBLink Certificate Generator – enables you to create large numbers of certificates and keys automatically.

Note: HOBLink Secure is an additional product and must be purchased separately from HOBLink JWT.

HOB Web Secure

The HOB Web Secure solution is a high-end Internet connectivity product delivered with HOBLink Secure and specially designed for use with MS Terminal Server farms. The Web Secure Proxy software is usually installed on a computer located between the HOBLink JWT clients and the Terminal Server farm, shielding the servers from unfriendly access or attacks (e.g., from the Internet). This solution combines the SSL-encrypted client-server communication with HOB’s advanced features for Terminal Servers.

Note: The Web Secure Proxy is included as a component of HOBLink Secure.

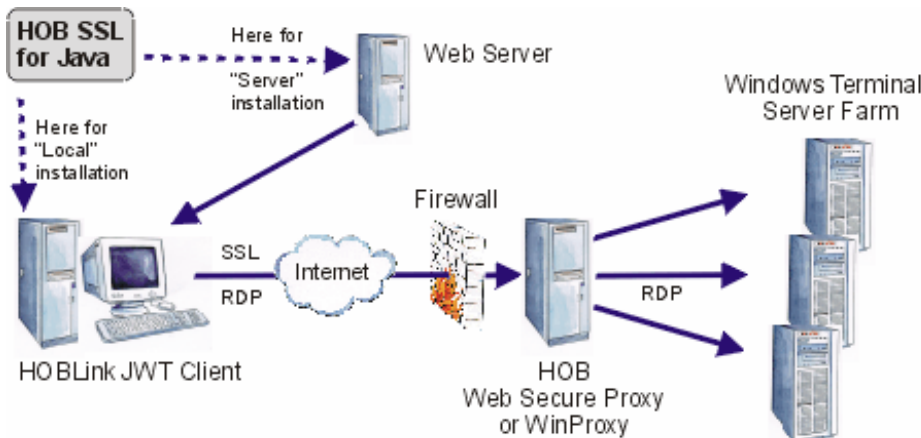


A Possible Scenario with the HOB Web Secure Solution

The HOB Web Secure solution provides much more than just a standard SSL connection, since it is specially designed to support the optional Enhanced Terminal Services provided by HOBLink JWT – i.e. HOB Load Balancing and Application Publishing. This means that clients, for example, can connect via an SSL-protected link directly to an application published by the server farm – no small feat, technically speaking. In addition, all of these features run via a single port in your firewall, which closes any potential security loopholes and provides the tightest security possible.

Chief Components of the HOBLink Secure Solution

There are a number of different scenarios possible when using HOB Web Secure, but in general, the same basic components are usually required:



Basic HOBLink Secure/Web Secure components used with HOBLink JWT.

- **Web Secure Proxy**

The Web Secure Proxy is designed for use primarily when you have server farms or multiple servers and want to use SSL. For this reason, the proxy software should normally be installed on a computer located between the JWT client and the Terminal Server, but it is also possible to install it on the Terminal Server itself. Specific versions are available for MS Windows, Sun Solaris and AIX platforms.

Note: Another SSL proxy is also delivered with HOBLink Secure, the **WinProxy**. This proxy can be used for SSL connections or non-SSL connections, but does not support load balancing and application publishing. Therefore, it is most suitable for setting up SSL connections to a single server.

- **SSL for Java**

This software installs the client components for HOBLink Secure on a computer with a JVM (version 1.1.4 or higher). Depending on the installation model of the software (“local” or “server-based”), SSL for Java has to be installed either on the local client or Web server.

- **The HOBLink Security Manager**

The HOBLink Security Manager generates configuration files for clients and servers where HOBLink Secure is being used. Its most important task is building and maintaining certificate databases for clients and servers. The HOBLink Security Manager is a Java application that can be installed on any computer with a JVM (version 1.1.7 or higher). For security reasons, we recommend using a stand-alone computer that is protected from unauthorized access. The HOBLink Security Manager creates the following certificate and configuration files:

hclient.cfg / hserver.cfg (configuration file for Client and Server).

hclient.cdb / hserver.cdb (Client and Server certificate database)

hclient.pwd / hserver.pwd (password file)

If You Need More Information or Assistance...

We hope that this guide has given you the information you need to get started with HOBLink JWT.

However if you still need more information or support, please refer to the items below:

Website: [HOBLink JWT](#)

Download: [HOB Download Center](#)

Support: support@hobsoft.com

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