



HOB SCS

Version 2.1 Administrator's Guide

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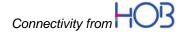
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Symbols and Conventions

This manual uses certain symbols and conventions, the meaning of which is defined below:



This symbol is used to mark useful tips that can make your work easier.



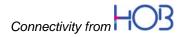
This symbol indicates text of an especially informative nature.



This symbol indicates an important tip or procedure that may have far-reaching effects. Please consider carefully the consequences of settings you make here.



This symbol indicates there is additional information on this topic in the online help.





Procedural steps are indicated by this symbol: The individual steps are numbered as follows, e.g.

- 1. Step
- 2. Step ...

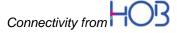


This symbol indicates active cross links (hyperlinks) to internal or external content. ...

- Keys or key combinations are displayed in square brackets, e.g. [Space].
- References to program commands and dialog boxes are printed in bold type, e.g., "Select the command **Open...**."
- Options and buttons that can be selected in dialog boxes are printed in bold type, e.g., "user defined."
- Text, screen displays and file names you enter yourself are displayed in the font Courier New. This input is case sensitive!
- In this documentation, the product name HOB WebSecureProxy is abbreviated as WSP.

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The Purpose of this Manual

The purpose of this manual is to provide you with basic information about HOB Secure Communications Server (hereafter HOB SCS), so that you can make the right decisions as to where and how to use this software to your best advantage.

In the following you will find, in addition to the software and hardware requirements, a step-by-step installation guide and a description of the individual components that are required in order to obtain a comprehensive software solution.

What is HOB SCS?

HOB SCS is a hardened, Open Source-based operating system, which is both easy to install and administrate. HOB SCS is a software component for the secure remote computing solution HOB Remote Desktop Virtual Private Network (hereafter HOB RD VPN), and has been specifically designed for use with HOB RD VPN, providing it with a highly secure and stable operating system. HOB SCS comes as a software platform installed from a DVD (HOB SCS SP) and as a virtual platform installed as an imported virtual appliance (HOB SCS VP).

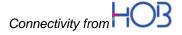
Updates and patches to the operating system can be installed easily and in no way interfere with the functionality of HOB RD VPN¹.

Benefits of HOB SCS

HOB SCS can be used under the widest array of application areas. There are versions for x86 (32 bit) and EM64T (64 bit), each with versions specially adapted for 1 processor architectures, for up to 16 processor units, and for up to 64 processor units.

The operating system HOB SCS was deliberately kept as simple as possible and free of unnecessary ballast. The integrated installation and administration program helps even newcomers get familiar with the use of Open Source software. HOB RD VPN can be run using its entire range of features and functions, including configuration adaptations: the integrated administration tool makes this possible. HOB SCS is, nonetheless, a complete operating system, with which IT professionals will enjoy working.

¹ For detailed information on HOB RD VPN, please consult the HOB RD VPN Administrator Guide or the HOB international website www.hobsoft.com.



1 HOB SCS SP: Installation as a Software Platform

1.1 System Requirements

- x86 or EM64T platform as of Pentium III, 1 GHz
- Minimum 512 MB RAM
- Minimum 4 GB hard drive
- At least 1 network card

1.2 Installation Step-By-Step

In the following you will find a step-by-step guide to installing HOB SCS with HOB RD VPN. This installation serves as an example for the most common installation scenarios HOB customers will encounter. HOB SCS can be installed on any standard hardware meeting the system requirements listed above.

It is recommended to install HOB SCS on a machine located within the DMZ between the corporate firewalls. This is the best logical position for such an installation.



HOB SCS is a full operating system. Installing this software will reformat the drive on which it is being installed, i.e., the hard drive, partition or VM will be completely overwritten and all previously stored data erased.

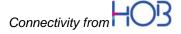
Be sure there is no data you wish to retain at the installation location.

1. Insert DVD

After inserting the HOB SCS DVD, you will have to boot your machine from this DVD to install the HOB SCS operating system and, if so desired, HOB RD VPN. For more information on HOB SCS, press the F1 key. To begin the installation process, press the enter key. A system check for the minimum requirements will be carried out.

After this check is successful, you can either press the enter key again to continue the installation, or you can abort the installation: in this case, no changes will have been made to your hard disk or existing OS.

The installation can be aborted at any time prior to step 17, "User Settings are Complete" (see page 8).



2. Select Keyboard Layout

In this window, select the keyboard layout you are using and press the enter key to continue. This keyboard setting is only used during installation or, when necessary, logging in over the console.

3. Enter Host and Domain Name

In this window, enter the host and domain name of the server on which you are installing HOB SCS and press the enter key to continue. The host and domain name are required for HOB RD VPN to function immediately after installation. These settings can be changed when necessary any time after installation using the HOBmin program. Please make sure that the host and domain names entered here correspond completely to those entered in your DNS server. See section 5, Network Settings for Selected Network Card(s), on page 6.

4. Select Network Card

In this window, select the network card(s) you want to use. You can select all available network cards or only one. At least one must be selected. If you select more than one, each card can be configured individually. Use the arrow keys to highlight the desired network card/s and use the space bar to select it/them (places an "x" in front of the card's name).

Deploying several network cards can be useful: for example, one can be used for Internet traffic and another for internal data transfers (LAN traffic) and/ or for network administration.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 5, Network Settings for Selected Network Card(s), on page 6.

5. Network Settings for Selected Network Card(s)

If you have selected multiple cards, they can all be configured here.

Enter here the IP address and Netmask number of your selected network card and press the enter key to continue.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 5, Network Settings for Selected Network Card(s), on page 6.

6. Default Gateway

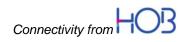
Enter here the IP address of the default gateway and press the enter key to continue.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 5, Network Settings for Selected Network Card(s), on page 6.

7. DNS Server

In this window you can enter the IP addresses of up to three DNS servers. You must enter at least one.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 5, Network Settings for Selected Network Card(s), on page 6.



8. User Name and Password

Enter here the user name and password you want to use for HOB SCS. The username and password for HOB RD VPN will be configured at a later stage. For more information on creating and administrating HOB RD VPN users, see the HOB RD VPN Administration Guide. This user can also logon to the console, so choose a secure password.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 4.3.2, User Administration, on page 20.

9. Select Time Zone

In this window, set the date and time zone for your server.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 10, Time Settings on page 7.

10. Time Settings

Here you can check and/or correct the date and time on your server. So that everything works properly right from the start, you should check and, if necessary, adjust the time settings now.

The server time settings can be checked/corrected after installation using the HOBmin program. See section 10, Time Settings on page 7.

11. Setting NTP Servers

In this window you can select up to two NTP servers for time synchronization (optional, none need be set). The NTP servers can be selected from the list of detected NTP servers or, if desired, select "Edit" to enter an NTP server of your choice.

These settings can be changed when necessary any time after installation using the HOBmin program. See section 10, Time Settings on page 7.

12. Install HOB Software

Here you can select the HOB software to be installed together with HOB SCS.

You can install HOB RD VPN, HOB RD VPN Compact or HOB RD VPN NetAccess. Additionally, the HOB PPP Tunnel Server or HOB PPP Tunnel Gateway can be installed. Also, you can install only the HOB PPP Tunnel components:

RD VPN with RDP (JWT) (with or without the PPP Tunnel Server, with or without the PPP Tunnel Gateway)

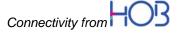
RD VPN with Terminal Emulations and RDP (J-Term)(with or without the PPP Tunnel Server, with or without the PPP Tunnel Gateway)

RD VPN Compact (with or without the PPP Tunnel Server, with or without the PPP Tunnel Gateway)

RD VPN NetAccess (with or without the PPP Tunnel Server, with or without the PPP Tunnel Gateway)

HOB PPP Tunnel Gateway (with or without the HOB PPP Tunnel Server) HOB PPP Tunnel Server (with or without the HOB PPP Tunnel Gateway)

You can install all three HOB software components (HOB RD VPN, HOB PPP Tunnel Gateway, HOB PPP Tunnel Server), or any combination thereof. The following four steps pertain to this software installation.



13. License Agreement for HOB Software

The license agreement must be accepted to continue with the installation.

14. License Kev

In the License Key field, enter a valid license key for HOB RD VPN HOB RD VPN Compact, HOB RD VPN NetAccess or, if you want a trial installation, leave this field blank. You will have a fully functional trial installation for thirty days, after which you can license the software or stop using it.

The license key can be entered or, if new functionalities/features are purchased, changed after installation using the HOBmin program. If you only install the HOB PPP Tunnel components, no license key need be entered.

15. Install HOB RD VPN

Enter here the IP address of the server to which you want HOB RD VPN or HOB RD VPN Compact to connect. This will be a Windows Terminal Server. If you have also installed terminal emulation capacity (J-Term), you can configure 3270, 5250 or VT Telnet connectivity. This can also be done after installation using HOB EA Administration (for more information, please refer to the relevant sections in the HOB RD VPN Administrator Guide). If you have installed HOB RD VPN NetAccess, the window for terminal configuration will not appear.

16. HOBmin Administration Server

In this window you can set the port on which HOBmin, the HOB SCS administration tool, is to listen. As default, port 10000 is set. You can also set the HOBmin server to only accept connection requests from either one or two allowed IP addresses or networks. This is meant to increase security on a server that is accessible from the Internet. If you leave these fields blank, HOBmin will accept logons (with the proper logon credentials) from any IP address. The settings made here can be changed in the HOBmin program by an administrator at any subsequent time (see section 4.3.1 Access Control, page 20, for more information).

17. User Settings are Complete



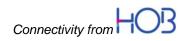
A window appears with the text "User settings are complete. The system is ready to begin installation now. The hard drive [name of hard drive appears] will be formatted and all data will be deleted. Continue?"

There are three options listed under the text:

OK – Select this to finalize the installation. The hard drive will be formatted and all existing data on it irretrievably lost.

Cancel – Select this to cancel the installation. No change will be made to the existing system.

Back – Select this to return to the previous installation window. Each installation step (window) has a **Back** option, with which you can return to the previous step to make any desired changes.



18. Conclusion

After selecting "OK" in the window mentioned above, the installation will be carried out. After installation is complete, a new window will open and instruct you to remove the DVD and press any key to reboot. This window will also give you a URL to enter into your browser in order to access the HOBmin server. Alternatively, you can enter the HOBmin server's IP address.

1.2.1 Launching HOBmin

After completing the installation, reboot your system to launch HOB SCS. To open the administration tool HOBmin, you will have to start a browser (from a different machine than that on which HOB SCS was installed, as the installation of HOB SCS doesn't include a browser) and enter the IP address and port on which HOBmin listens (example: 192.168.10.10:10000), as configured in the installation.

1.2.2 Launching HOB RD VPN

To open HOB RD VPN, start your browser (Internet Explorer, Mozilla Firefox, Apple Safari, etc.) and enter the IP address of the HOB RD VPN start page which was configured during the installation. Please remember to specify "https" when entering the URL. The HOB RD VPN login page will open. Here, enter the default username and password for HOB RD VPN.

The default login credentials are:

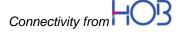
- For administrator rights username administrator password adminpw
- For user rights username quest password quest

If you have logged in as an **administrator**, the HOB RD VPN welcome page will open presenting you with a wide range of options for running or configuring sessions. For more information on this page, please see the HOB RD VPN Administrator Guide.

If you have logged in as a **user**, the HOB EA Session Manager window will open, allowing you to run and edit those sessions for which the user is authorized. As default, this selection is limited. Changes can be made using HOB Enterprise Access Administration, a component of HOB RD VPN. For more information on this component, please see the HOB RD VPN Administrator Guide.



We recommend you perform thorough testing.



2 HOB SCS VP: Installation as a Virtual Platform

2.1 System Requirements

- Minimum 512 MB RAM
- Minimum 10 GB hard drive in datastore on VM host
- · At least 1 network card

2.2 Installation Guide

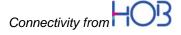
The following is a short guide to installing HOB SCS VP. As this is a virtual appliance, pre-configured (except for your system-specific settings) and ready to run, the installation is simple and fast. HOB SCS VP is optimized for VMware vSphere or higher, and includes the VMware Network Drivers required for smooth integration in the VMware vSphere. This virtual appliance comes with full versions of HOB RD VPN, HOB RD VPN Compact and HOB RD VPN NetAccess.

It is recommended to install HOB SCS VP on a host located within the DMZ between the corporate firewalls. This is the best logical position for such an installation.

We will proceed with the assumption you already have a VMware vSphere installed in your system and are familiar with VMware technology.

- Download the HOB SCS VP software either from the provided link to our Website using your login credentials, or from the delivered software medium (located in the OVF folder).
- Import the virtual appliance with your VMware vSphere Client, using the
 import Virtual Appliance function. While importing, you will have to accept
 the EULA, name your virtual appliance, select the location in the datacenter,
 the host and datastore where the virtual appliances files are to be stored,
 and map the networks in the virtual appliance to those in your virtual
 infrastructure. For more information on importing virtual appliances, please
 consult your VMware vSphere documentation.
- After importing HOB SCS VP, go back to your VMware vSphere Client. If the host on which you install HOB SCS VP supports paravirtualization, we recommend that you set this now.
 To do this, in the VMware vSphere Client, select "Edit VM settings > Options" and, on the "Options" tab, activate the "Support VMI Paravirtualization" checkbox.
- Open the console and start the Virtual Machine. HOB SCS will boot the kernel and you can select the settings as described in the Software Appliance Installation Section.

After installation and completed configuration, HOB SCS VP runs just as the software appliance version HOB SCS SP. All further information in this documentation, unless explicitly otherwise stated, is valid for both versions.



3 Updating from Previous Versions to HOB SCS 2.1

If you already have installed HOB SCS Version 1.1, 1.1.1 or 1.2, you can update this to the new version 2.1.

To do this, proceed as follows:

1. Create a Backup

Create a backup copy in the existing HOB SCS system via the function HOBmin → Backup. This can be either an automatically or manually created backup.

If the backup copy is stored on the HOB SCS system, it will have to be copied to a remote system via the function HOBmin \rightarrow Backup.

2. Install HOB SCS 2.1

After the backup has been created and safely stored, install the new HOB SCS version 2.1. Proceed as with a new installation. Any values entered during installation (incl. IP addresses, HOBmin users and passwords, etc.) will be replaced by those from the backup copy when that is played back in.

3. Restore HOB SCS

After the new version of HOB SCS has been installed and the system restarted, the backup copy made previously has to be transferred to the newly installed HOB SCS version. To do this, use the function HOBmin \rightarrow SCS \rightarrow Backups and upload the backup. Then click the Restore button for the uploaded backup. The configuration will then be restored.

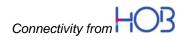
After a backup has been restored, HOB SCS must be restarted to activate the changed settings.

Notes:

HOB SCS can only be updated in the above-described manner. The reasons for this are, among others, the following:

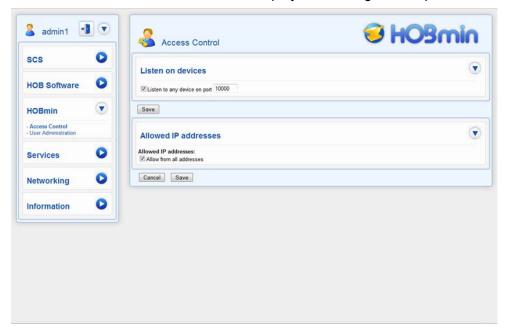
- 1. After a new installation, there are no "artifacts" left over from the older version.
- 2. An update can also be done on new hardware.
- 3. The customer can also easily return to the previous version, as he has to have made a backup.
- 4. The separation of installation and updating makes the update process more flexible

For example, by using a patch the update process can be adapted to specific customer needs.



4 HOBmin – The SCS Administration Tool

HOBmin is an integrated administration tool for HOB SCS and HOB RD VPN. With this tool, authorized users, e.g., system administrators can make configuration adaptations to HOB SCS and/or access the HOB RD VPN administration tool, HOB EA Administration. HOBmin is organized in six main sections, "SCS," "HOB Software," "HOBmin," "Services," "Networking" and "Information." By default, only the "System Information" item is expanded, i.e., showing its individual menu items. There are also a logout button and an "expand all menu items" button at the top of the menu on the left, where the user name, in our demonstration "admin1" also will be displayed. By clicking one of the menu items, the contents of that item will be displayed in the right-hand pane.



The HOBmin window showing the Access Control pane on the right with the six main sections listed on the left.

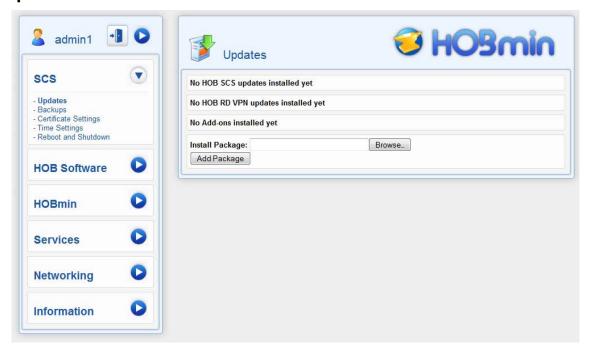
To open HOBmin, using a browser, enter the DNS name or IP address of the machine on which HOB SCS is installed, plus the listen port configured during installation (as default, port 10000). A login page opens in which you enter the user name and password created during installation. You will then see the HOBmin window, which is described in detail in the following sections.



HOBmin can only be accessed over https. Please remember to specify this when entering the URL.

4.1 SCS Section

4.1.1 Updates

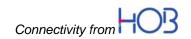


On the "Updates" tab you can install patches for HOB SCS, HOB RD VPN or additional components (Add-ons). To install a patch you must first download it from the HOB Website or if the HOB PPP Tunnel components are to be installed at a later time, you can find the required patches on the installation medium under "Patches." A patch is a packed file in the form hob-scs.name-version.tar.bz2 (e.g., hob-scs.ppptgw-2.1.tar.bz2). Use the "Browse..." button to find a patch that has been downloaded to your system and, once a patch has been selected, use the "Add Package" button to install it. Follow the instructions in HOBmin.

4.1.2 Backup

The Backup tab – This tab has three activity areas.

- First, there is the "Create Backup" button: Click this button to create a
 backup copy of the HOB SCS operating system's configuration and the
 entire HOB RD VPN configuration (LDAP-dependent settings are not
 backed up). Here you can also add a comment to the backup you create in
 case you want a reference for subsequent use.
- The second area lists existing backups. After installation, there is only one backup, created directly after installation in order to restore the default configuration settings, if desired. When backups are created, they will be listed here with check boxes, with which you can select the backup you wish to download to your local machine or restore.
 - To restore a backup, click the "Restore" button at the very right of the "Existing backups:" row. You will then be asked whether you are sure you



want to restore the selected file. Click the "No! Back to Index!" button to return to the previous screen, or click the "Yes! Restore now!" button to continue the restoration process. After clicking the "Yes! Restore now!" button, the backup file will be compared to the currently running system for differences. After this comparison is complete, you will be asked again. After the backup has been restored, you will be prompted to reboot HOB SCS.

To delete backups, select the backup/s to be deleted and click the "Delete selected backup/s" button.

You can also send backup files to an external server (recommended, for example, for disaster recovery). To do this, you have to enter the login credentials for the server to which the logs are to be sent, as well as its host name and path. This file transfer can be done over either FTP or SSH-protected via SCP (Secure Copy Protocol) or with SMB (to Windows servers).



Please enter the name and share of your SMB/CIFS server! For example: //myservername/share (Please note: It is imperative to use "/" instead of "\"). This is the root name of your share in the network. You can enter a path in the "Path:" field.

Example: Path: /Documents/backups.

 The third area is for uploading backups to the HOBmin server that have been saved on the SCP, FTP or SMB (Windows) servers specified in the above-mentioned fields.

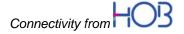
The Planned Backups tab – This tab also has two activity areas.

- First, there is the "Existing planned backups:" area, where the existing
 planned backups are listed. This list shows the type of planned backup
 (daily or weekly), the date and time (for daily backups only the time is
 shown), the server to which the backups are sent, the path to this server,
 the user on the remote or local system under which the backup is stored,
 the status of the backup ("Pending" or "Worked") and a field in which the
 planned backup can be deleted.
- In the second area you can create new planned backups. These can be set
 to be run either daily, at a specified time, or weekly, on a specified day and
 time. These backups can be stored either locally or on a specified external
 server, which is defined in the area that opens after selecting the type of
 remote server to be used (SCP, FTP, or SMB).



Please enter the name and share of your SMB/CIFS server! For example: //myservername/share (Please note: It is imperative to use "/" instead of "\"). This is the root name of your share in the network. You can enter a path in the "Path:" field.

Example: Path: /Documents/backups.



4.1.3 Certificate Settings

The Certificate Settings screen two panes and in the lower pane it has four tabs:

- In the upper pane the details of the currently used certificates for HOBmin and for HOB RD VPN are displayed. Whether these certificates are one and the same is also displayed.
- Create HOBmin certificate Here you can create a new, self-signed certificate for the HOBmin server. It is recommended to create or upload a new certificate immediately after installation, as the default certificate created after installation is for demonstration purposes only and provides minimal security. By checking the radio button at the bottom of this section you can also use this certificate for HOB RD VPN.
- Upload HOBmin certificate With this tab you can upload an existing selfsigned or third-party certificate in PEM format for use with HOB SCS and, if desired, for HOB RD VPN.
- Manage HOB RD VPN Certificates (security units) Here you can upload
 and download HOB security units. You can also download automatically
 created backups of your old security units.
 If HOBmin and HOB RD VPN use different certificates, another pane is
 displayed in which you can convert one certificate to the other, i.e., set both
 services to use the same certificate.
- Web Server Gate certificates In the event that you want to access SSL URLs (https) over the Web Server Gate, HOB RD VPN will need the corresponding root certificate. Public root certificates are included in the installation. If, however, you want to use your own certificates, you can import them here.

4.1.4 Time Settings

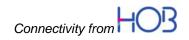
Here you can monitor and/or edit your server's time settings for any time zone in the world. The time information stated in the top section is a static display; to see the actual current time on the server, please reload the page.

4.1.5 Reboot and Shutdown

In this window you can reboot or shut off the HOB SCS operating system (with the buttons "Reboot System" or "Shutdown System"), or restart only the program HOBmin "Restart HOBmin").

4.2 HOB Software Section

This section depends on the installed HOB product/s (HOB RD VPN, HOB RD VPN Compact, HOB RD VPN NetAccess and/or the HOB PPP Tunnel components, HOB PP Tunnel Server and HOB PPP Tunnel Gateway.



4.2.1 HOB RD VPN, HOB RD VPN Compact, HOB RD VPN NetAccess

Here you can see the status of the HOB RD VPN solution/s you have installed. The following actions can be carried out from this window:

- Start or Stop / Restart HOB RD VPN or refresh the status display.
- Start HOB RD VPN Administration With this button you can open the
 HOB EA Administration program, which is the administration tool for the
 configuration of all the HOB software installed with HOB SCS. This is the
 only way to start HOB ES Administration if your WebSecureProxy is not
 running. EA Administration can also be started from the HOB RD VPN html
 page if you are logged in as an administrator and the WebSecureProxy is
 running.
- For more information on these programs and all other HOB software, please refer to the corresponding software manual, e.g., the HOB RD VPN Administrator Guide, or the HOB website www.hobsoft.com.
 Also see section 1.2.2, Launching HOB RD VPN, on page 9.
- If you have not entered a license key (license number) during installation, you can enter one here or, if you have purchased a key to activate additional features or functionalities, you can enter this here. Even if a key has been entered, for security reasons, this field afterwards will appear blank.
- In this section you can download a WebSecureProxy configuration file.

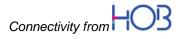
4.2.2 HOB RD VPN Customization

This section is only available if HOB RD VPN or HOB RD VPN Compact have been installed and relates only to these products.

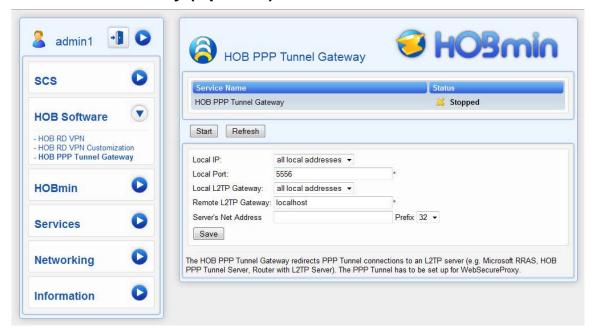
With this powerful module you can customize HOB RD VPN / Compact for you

With this powerful module you can customize HOB RD VPN / Compact for your needs.

- **Bookmarks** In this section you can place URLs as bookmarks on the HOB RD VPN / Compact login page. Simply enter the URL and select the corresponding Website.
- Download, Upload and Delete HOB RD VPN Welcome Sites Here you can customize your login pages. Please note, the pages created by the system cannot be modified, as these pages may be overwritten by updates.
- **HOB RD VPN Banner Exchange** Here you can replace the HOB RD VPN banner with a graphic image of your choice.



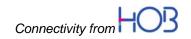
4.2.3 PPP Tunnel Gateway (Optional)



This item will only appear if the HOB PPP Tunnel Gateway component was selected in the installation of HOB SCS with HOB RD VPN, or subsequently installed as an add-on. The HOB PPP Tunnel Gateway Add on is included on the installation medium in the folder "Patches." The HOB PPP Tunnel allows a remote user (e.g., a business traveler, or someone working in a home office) to connect to the enterprise network over the Internet. The remote user gains full access to all network resources, just as if he/she were working on a machine within the enterprise network. A major advantage of this solution over classic IPsec VPNs is that no additional installation of software on the client machine is required. The only requirement on the client side is that the client machine must have a javaenabled browser and Windows Vista or newer, Mac OS X, Linux FreeBSD or Solaris as OS. On the server side (e.g., where HOB SCS is installed), three components are required: the HOB WebSecureProxy, xbipgw16 (e.g. the HOB PPP Tunnel Gateway), a functioning L2TP server (e.g., the HOB PPP Tunnel Server, see below). These components can be installed either all on the same machine, or on separate machines, depending on your configuration preferences. If HOB RD VPN is installed in the DMZ (recommended), you should install at least the L2TP server (e.g., HOB PPP Tunnel Server) in the local LAN.

The HOB PPP Tunnel Gateway section is divided into two parts:

- In the top part you see the tunnel gateway's status, which is either "Running" or "Stopped."
- A "Start" button, if the tunnel gateway isn't currently running, or a "Stop" and a "Restart" button if the tunnel gateway is already running. Refresh the screen to update the display.
- The second action area is important for the configuration of the PPP
 Tunnel Gateway. In the field "Local IP:" you can enter the IP address of the
 network card at which you want the gateway to listen for connections from



HOB RD VPN (optional, only used if there are more than one network cards active on the machine). It is safe to leave the default settings for all local addresses.

- The "Local Port:" field is required. In this field you enter the port to be listened on for connections from HOB RD VPN. This port must be the same one as is configured for the PPP Tunnel section of HOB RD VPN Administration. As default, port 5556 is set on both.
- The "Local L2TP Gateway:" field is optional and only needed if the L2TP server has more than one network card. This is the address where the Gateway communicates with the L2TP server, e.g., HOB PPP Tunnel Server.
- The "Remote L2TP Gateway:" field is required and is, as default, set to localhost (if you have installed the HOB PPP Tunnel Server on the same machine). You must enter here the IP address (or, if supported, the DNS name) of theL2TP server (e.g., the HOB PPP Tunnel Server, a Microsoft RRAS Server, or a router with an L2TP server).
- The server's net address: This is the network the client should reach over the HOB PPP Tunnel. Enter here the network for which the L2TP server assigns IP addresses. For example: The L2TP server assigns the IP addresses 192.168.10.10 – 192.168.10.20, you have to insert 192.168.10.0/24. Although this entry is only used by PPP Tunnel clients running under Mac OS X, Linux Free BSD and Solaris, it must be entered.

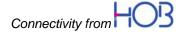
For more information on the HOB PPP Tunnel Gateway, please see the corresponding sections in the HOB RD VPN Administrator Guide.

4.2.4 PPP Tunnel Server (Optional)

This item will only appear if the HOB PPP Tunnel Server component was included in the installation of HOB SCS with HOB RD VPN, or subsequently installed.

The HOB PPP Tunnel Server section is divided into two parts:

- In the top part you see the tunnel gateway's status, which is either "Running" or "Not Running." This display is static, therefore you have to click the "Refresh Status" button to see if the status has changed.
- A "Start" button, if the tunnel server isn't currently running, or a "Stop" and a "Restart" button if the tunnel server is already running.
- The "Server Address:" field (required) This is set automatically to the last address listed in the IP-Address Range.
- The "IP-Address Range:" fields (required) Enter here the IP address range of for the client's dynamically generated IP addresses, e.g., 192.168.10.246 to 192.168.10.254.
- The "DNS 1:" field (required) Enter here the IP address of your DNS server.
- The "DNS 2:" field (optional) Enter here the IP address of your second DNS server, if there is one.



- The "WINS 1:" field (optional) Enter here the IP address of your WINS server.
- The "WINS 2:" field (optional) Enter here the IP address of your second WINS server, if there is one.
- The "EA Server:" field (required) Enter here the IP address of your HOB EA Server. You can set this to localhost if the HOB PPP Tunnel Server is on the same machine as HOB RD VPN. If one is located in the DMZ and one in the LAN, you have to allow communication over Port 13273 In your firewall.
- The "Save" button Click this button to save and activate your configuration.

4.3 HOBmin Section

4.3.1 Access Control

In the Access Control screen there are two sections:

- **Listen on Devices:** Here you can set HOBmin to listen on all devices (=Ethernet cards) on the same port, or set the devices individually to listen to different ports. After installation, "Listen on all devices, on port XXXX" is set (10000 is the default port).
- Allowed IP Addresses: Here you can set HOBmin to accept access from any IP address, or you can set it to accept access from only those IP addresses or networks you add here. As default, HOBmin is set to accept access from all IP addresses. This default setting can be changed at any time, also during installation, thus you can protect your system from the very beginning. Valid entries are:

IP addresses: 192.168.10.10

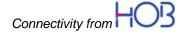
Networks: 192.168.10.0 or 192.168.10.0/24



To achieve higher security, it is recommended to use the IP address list to accept access to HOBmin only from trusted IP addresses or networks, especially if HOBmin is to be accessible over the Internet. This setting will, however, prohibit users as well as administrators from accessing HOBmin from any computer whose IP address has not been entered, greatly reducing flexibility. It is up to the system administrator or corporate IT policy makers to weigh the security advantage against the advantage of flexibility here.

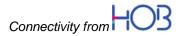
4.3.2 User Administration

The user administration window enables users with administration rights to change user language settings (currently, English, French or German), passwords and to create new users. There is one (and only one) root user set as default. This user cannot be deleted. A password can be set for this user but, for reasons



of security, this is not recommended. If you want to set your SSH server to accept root logins (see section 4.4.2 SSH Server, on page 22), you will have to enter a root password here. A user with administrator rights has full access to all HOBmin functions and features. A user with read-only rights, in addition to viewing settings, can change only his/her own password or language setting and cannot create new users. If you plan to use the console login (e.g., over SSH) for the new user, you must activate the "System User" checkbox. Users created here are for HOBmin only; HOB RD VPN users have to be created in the HOB RD VPN admin tool, HOB EA Administration. For more information on this, please refer to the relevant sections in the HOB RD VPN Administrator Guide.

The Logged in users section, when expanded, shows the currently logged in users in HOBmin. When a user is logged in as an administrator, this administrative user can log out any other logged in user.



4.4 Services

4.4.1 Log Server

This window has four sections:

- In the first area in you can see the status of your log server (running or not running), and stop or restart it. You can also refresh the view to reflect any changes made.
- In the second area you can set the log level. The available levels are Error, Warning, Info and Debug. This setting determines the type and amount of data that will be logged. HOB WebSecureProxy has to use the Warning setting, thus, if you select only Debug or Error, no HOB WebSecureProxy logs will be available.
- In the third area you can set HOBmin to additionally send all log output to a remote Syslog server of your choice.

4.4.2 SSH Server

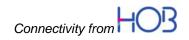
This window has two sections:

- In the first section you can see the status of your SSH server (running, not running) and stop, start or reload it. You can also see the connected users here, where you can also disconnect their sessions.
- In the second section (Remote Access Options) you can set the SSH server to accept or deny root logins. To enable root logins, a root password must be set in HOBmin User Administration (see section 4.3.2, User Administration, on page 20). Again, for reasons of security, this is not recommended.
 - If you deselect "Server is listening on all available IP-addresses" you can select the Network Cards (if you have more than one configured) SSH is listening on as well as the listening Port, which as default is port 22.

4.4.3 NTP Server

In the NTP Server section, you can see the status of your NTP service. You can also stop, start, or restart your NTP service. In the lower pane of this window, you can see the servers in use and select the ones you want to use. The NTP servers usually are set during installation or, if they weren't set then, they can be set now.

You may have to modify your firewall settings for the NTP servers to function properly!



4.5 Networking

4.5.1 Network Settings

There are two sections in this window. These sections are described as follows:

- Interfaces (the network card section/s) Here you can change the network card's (interface's) IP address and mask; if you have several NCs, you can enable or disable them here. If there is only one network card, it cannot be disabled. If you disable an interface (network card) and want to subsequently enable it, you will have to manually re-enter the IP address and mask. This information will, however, be displayed to the right of the entry fields. The default gateway also can be changed here. A system reboot is required to apply changes made to the network card settings.
- In the bottom section, "Settings," DNS servers can be edited or additional DNS servers added. The host and domain names for the server on which HOB SCS, HOBmin and HOB RD VPN are running also can be edited.

4.5.2 Static Routes

In this window you can set a static route to reach a host or network that is not accessible from your default gateway. In the field "Type" you select either a host or network. In the "Target" field, enter the IP address of your host or target network, select a prefix from the "Prefix" field and then enter the IP address of the static gateway you want to use in the "Gateway" field. Click the "Add" button to complete the configuration of your static route.

4.5.3 Query Servers

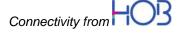
This module has two sections and is very helpful for setting up HOB RD VPN and for checking whether the connections to your target servers will work as configured.

In the top section, you can enter the servers you want to access via HOB RD VPN, and the protocol to be used for each of them, e.g., RDP to access terminal servers, http for Web Server Gate servers, etc.

Once a server is added to the list, you can query the servers, e.g., test whether these servers actually can be accessed using the selected protocols. As these connections are protocol-specific, this is not only a port test! This module is very helpful to check if your configurations will work, especially if the connections are to go through firewalls.

To save your server list, enter a name for it in the "Filename" field and click the "Save Server List" button. Once the server list is saved, you can load it the next time you have to check the connections.

In the second section you can make a ping test to a selected server and also resolve DNS Names or IP addresses.



4.6 Information Section

4.6.1 Show Status

This window provides you with an overview of the status of the HOB Services and System Services installed on the HOB SCS machine. Here you can see whether the services are running and if they are set to autostart. Detailed information is displayed by placing the cursor over the "i" button, and information on the CPU and memory use, as well as the amount of available memory (measured in MiB, short for mebibytes, 1 MiB = 2^{20} bytes). This section is for information only; settings cannot be made here. For information on how to make or change settings for the various services associated with HOB SCS, see section 4.4, Services, p.22.

4.7 System Information

In this window you can find important system information, such as system host name, operating system name and version number for SCS HOBmin and RD VPN, time on server, CPU information, used and available system resources, etc.

4.7.1 Processes

In this section, the processes running on the system are displayed along with information on the loads they place on the system. Individual processes can be terminated or otherwise ended here. However, this is not a recommended practice.

4.7.2 Logfiles

The Logfiles window opens with one section displaying the options for viewing the log files. The log file display can be configured to show a wide variety of details. Queries can be saved and run at any time. Query results can also be downloaded as .txt files for further processing. Please see the notes that can be displayed by clicking the information icons.

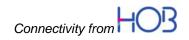
4.7.3 Documentation

In the Documentation window, links are displayed to the help files of the installed HOB software and to the HOB SCS Administrator's Guide.

4.7.4 Support

This section has two parts. In the top part, you can create/update a support file containing important system information for system debugging and general trouble shooting. This file is created and stored on the HOB SCS server.

You can protect the support file with a password and you can choose which information it is to contain. It can be downloaded to your local machine using the "Download" button in this window, which will appear after the support file has been generated.





5 Information and Support

If you would like further information, or if you need product support, you can contact us at:

Germany

Support http://www.hob.de/support/hotline.jsp

E-mail: support@hob.de
Phone: +49 9103 715-161
Fax: +49 9103 715-299

Home Page: http://www.hob.de/

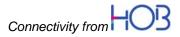
Worldwide

Web: http://www.hobsoft.com

Support: <u>mailto:support@hobsoft.com</u>

Phone: +49 9103 715-161 Fax: +49 9103 715-299

Headquarters Phone: +001 (646) 465-7650 (US and Canada) Fax: +001 (646) 437-3448



6 Appendix A: Open Source Licenses

6.1 GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

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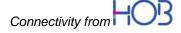
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The precise terms and conditions for copying, distribution and modification follow.

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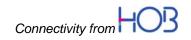
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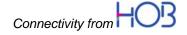
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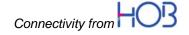
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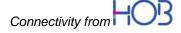
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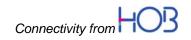
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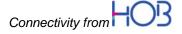
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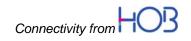
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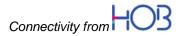
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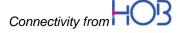
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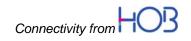
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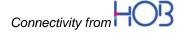
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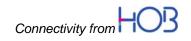
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Version 2.1, February 1999

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[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

6.3.1 Preamble

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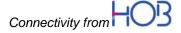
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To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that



the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free

software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

6.3.2 GNU LESSER GENERAL PUBLIC LICENSE

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

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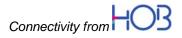
"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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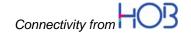
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Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

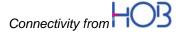
If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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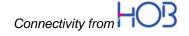
the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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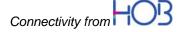
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