MBI, Customer Care

Use of Open Sky™ Proxy and Socks Server for the most common Internet applications

Configuration Guide

12/05/2003

Introduction

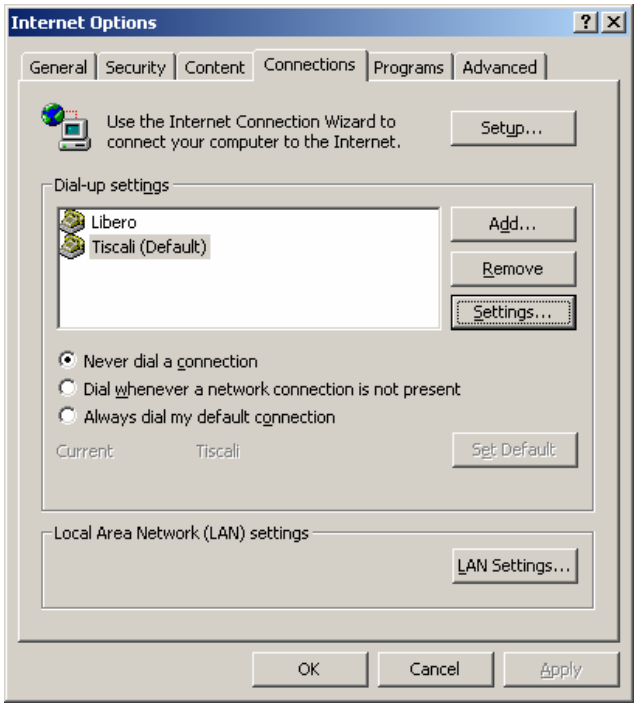
This document explains how to take advantage of the SOCKS server offered by the Opensky platform, by describing the configurations to be done in the most used applications. Opensky also offers an HTTP proxy, which is reccomended for normal web traffic (e.g. normal browsing). The exact address of both the HTTP and SOCKS proxies is shown after the "Satlogin" operation. This address depends on the user account properties; in the rest of the document, it is assumed that the address of the SOCKS server is "193.251.135.110": please change it according to your parameters.

In order to use the SOCKS server, usually you should configure properly your application. Notice that the SOCKS server is available only after the "Satlogin" operation. In the first part of the document, the setup procedure is described for most applications which support SOCKS servers.

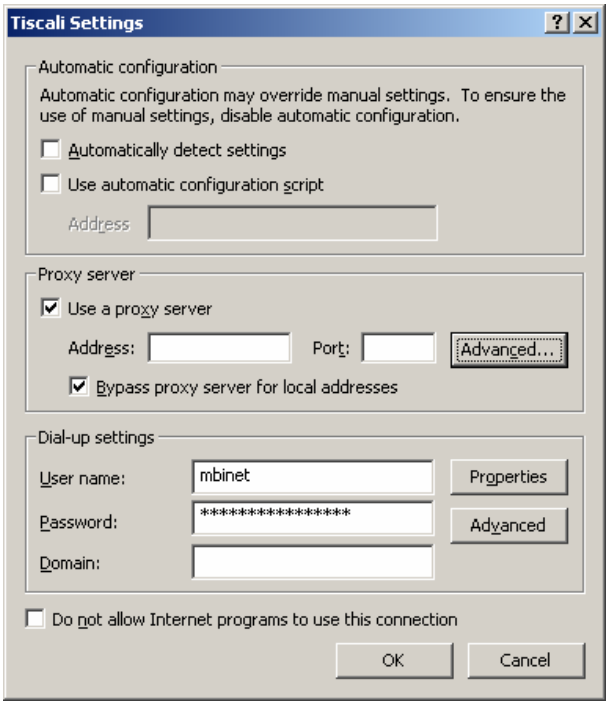
In the second part of the document, the use of some "socksifying" tools will be described. These tools allow to use SOCKS server within some applications which do not directly support SOCKS. Notice that these tools are not part of the Opensky distribution, nor they are endorsed by EUTELSAT by any means. They are described here only for user convenience, but any user should obtain them through appropriate channels, and install and use them under his own responsability.

Integrated Browser and Email/Newsgroup Clients:

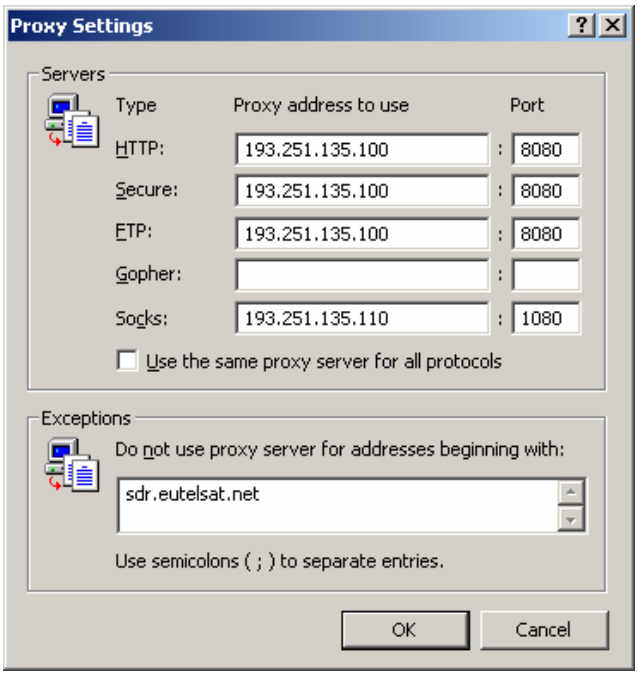
To setup Microsoft **Internet Explorer** (ver. 5.5) select *Internet Options* from the *Tools menu*, then select the *Connections* panel (Fig. 1): now select the Dial-up connection that is used for Opensky connections; click on the *Settings* button; a new window (Fig. 2) will pop-up and here select "*Use a proxy server*" and "*Bypass proxy server for local addresses*"; now click the *Advanced* button, another window (Fig. 3) will pop-up and here the OpenSky's Proxy and Socks addresses have to be set.



(Fig. 1)



(Fig. 2)

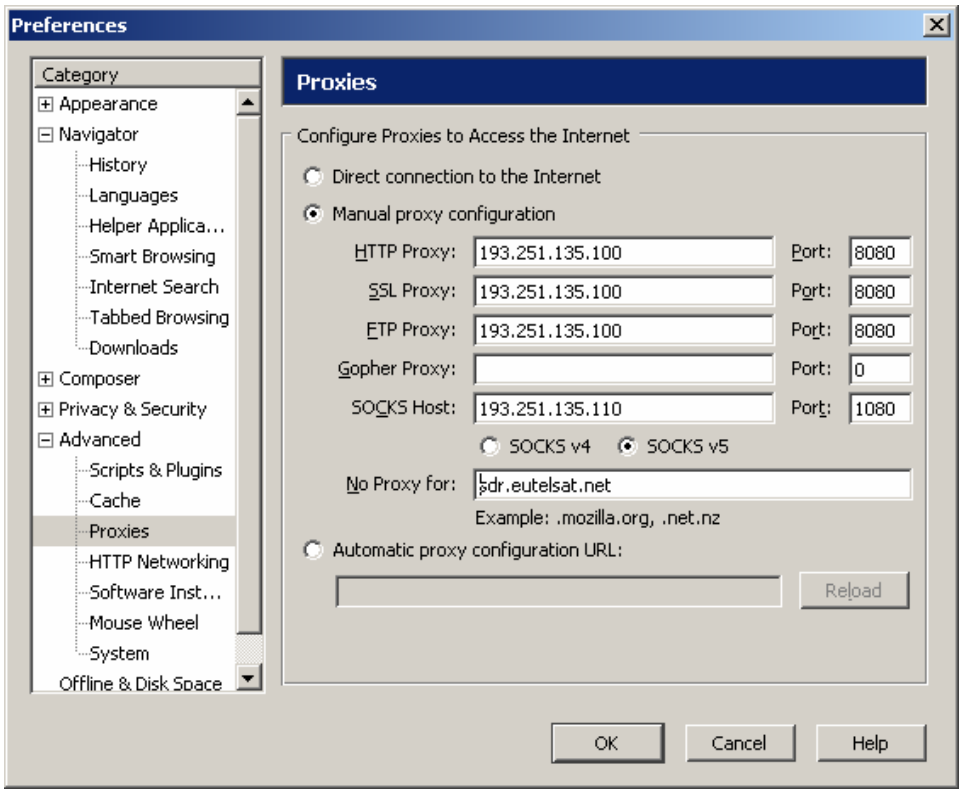


(Fig. 3)

Note that if a server is specified for a particular protocol – i.e. a Proxy is set for the HTTP – the socks is bypassed and all the data (for that protocol) are received via the Proxy server. This is the reccomended configuration, as HTTP is more efficient than SOCKS for web-type traffic.

Outlook Express (the Microsoft Email / Newsgroup client integrated in Windows) uses the Internet Explorer settings, however both e-mail and newsgroup messages will always be received via modem (both POP3 and IMAP protocols), bypassing the Socks settings. If you want to use Outlook Express with Opensky, you should use "socksfy" tools, as described in the second part of this document.

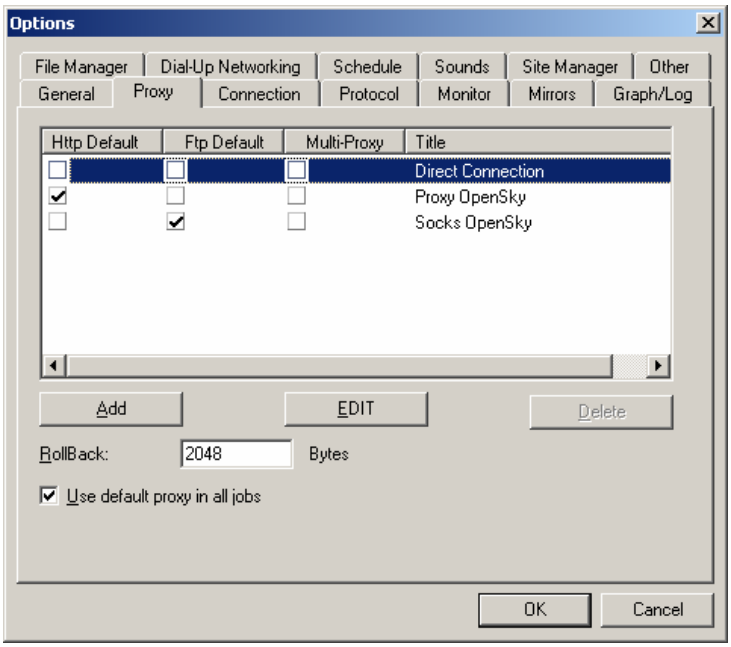
To setup **Netscape Navigator** (ver. 6.02) and **Mozilla** (ver. 1.2) select *Preferences* from the *Edit* menu; now a new window (Fig. 4) will appear and from that select *Proxies* and then insert the OpenSky Proxy and Socks Server addresses.
Note that if a server is specified for a particular protocol – i.e. a Proxy is set for the HTTP – the socks is bypassed and all the data (for that protocol) are received via the Proxy server. This is the reccomended configuration.


Preferences
Category
Appearance
Navigator
History
Languages
Helper Applica...
Smart Browsing
Internet Search
Tabbed Browsing
Downloads
Composer
Privacy & Security
Advanced
Scripts & Plugins
Cache
Proxies
HTTP Networking
Software Inst...
Mouse Wheel
System
Offline & Disk Space
Proxies
Configure Proxies to Access the Internet
Direct connection to the Internet
Manual proxy configuration
HTTP Proxy: 193.251.135.100 Port: 8080
SSL Proxy: 193.251.135.100 Port: 8080
FTP Proxy: 193.251.135.100 Port: 8080
Gopher Proxy: Port: 0
SOCKS Host: 193.251.135.110 Port: 1080
SOCKS v4 SOCKS v5
No Proxy for: sdr.eutelsat.net
Example: .mozilla.org, .net.nz
Automatic proxy configuration URL:
Reload
OK
Cancel
Help

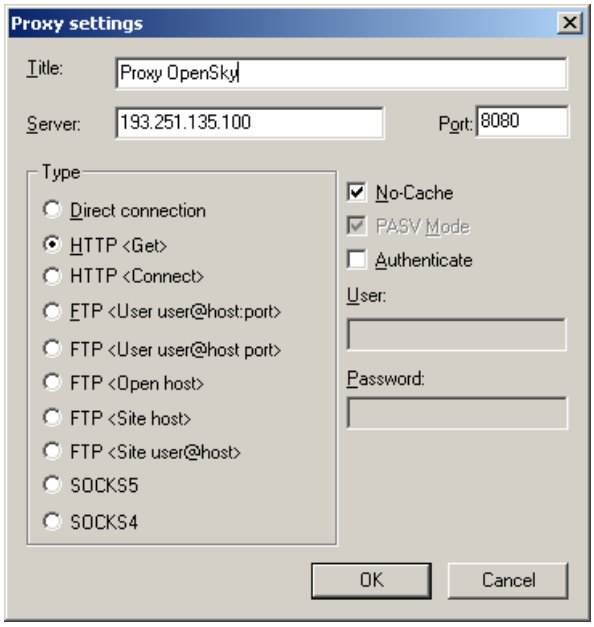
(Fig. 4)

Download Managers

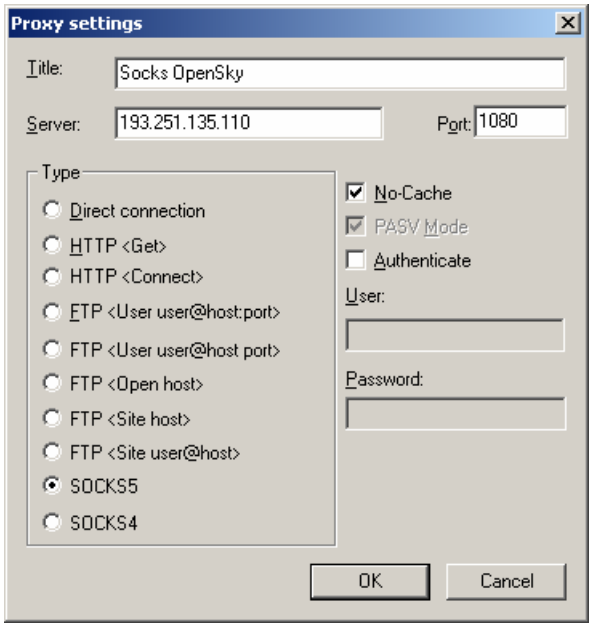
To configure **FlashGet** (ver. 1.3) select *Options* from the *Tools* menu, then select the *Proxy* panel (Fig. 5); now click on the *Add* button and insert the OpenSky Proxy (Fig. 6) or the Socks (Fig. 7) depending on which protocol has to be used.



(Fig. 5)

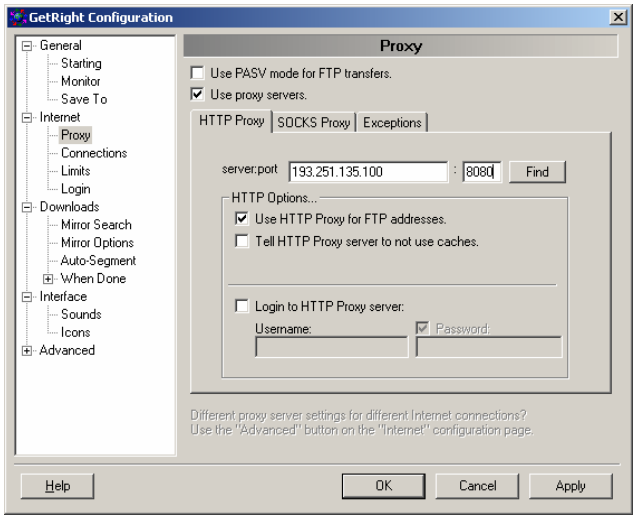


(Fig. 6)

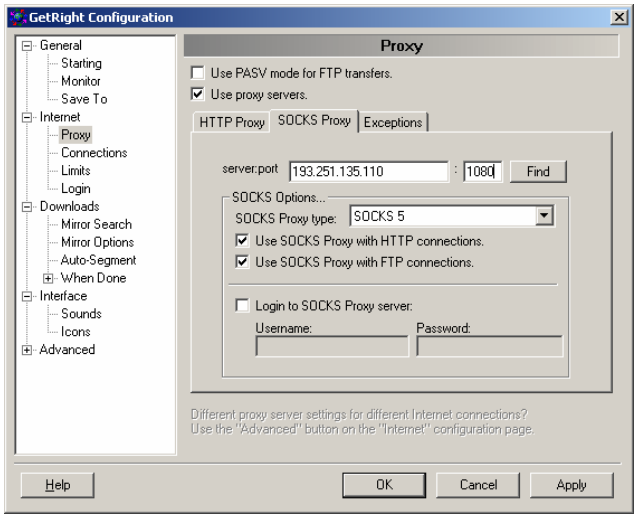


(Fig. 7)

To configure **Getright** (ver. 4.5d) select *Getright Configuration* from the *Options* menu, then select the *Proxy* panel (Fig. 8): insert the OpenSky Proxy (Fig. 8) or the Socks (Fig. 9) depending on which protocol has to be used.



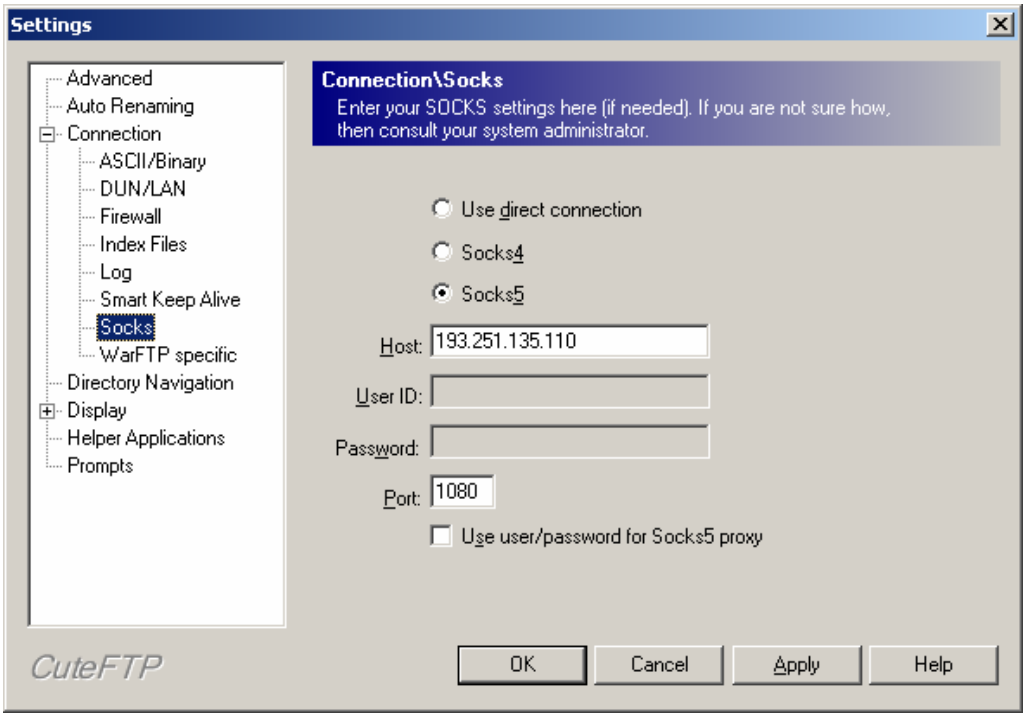
(Fig. 8)



(Fig. 9)

FTP Clients

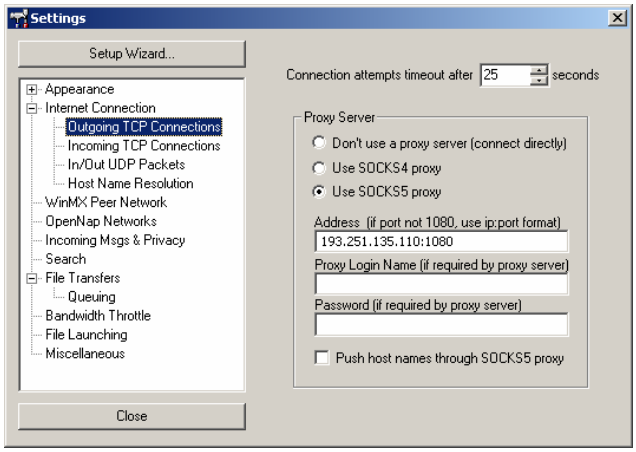
To configure **CuteFTP** (ver. 4.2.5) select *Settings* from the *Edit* menu, then select the *Socks* panel (Fig. 10) where has to be set the OpenSky Socks address.



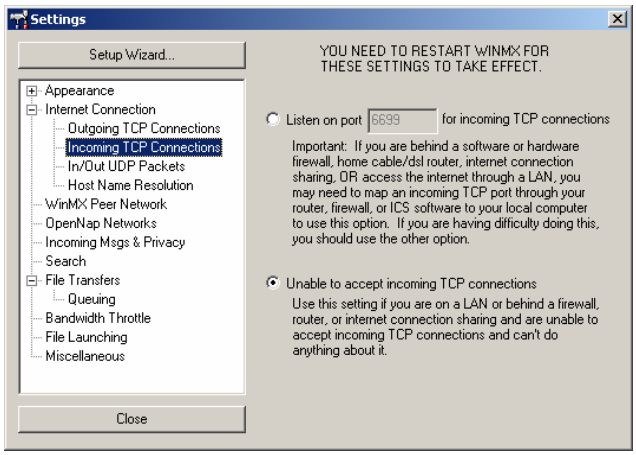
(Fig. 10)

File Sharing Clients

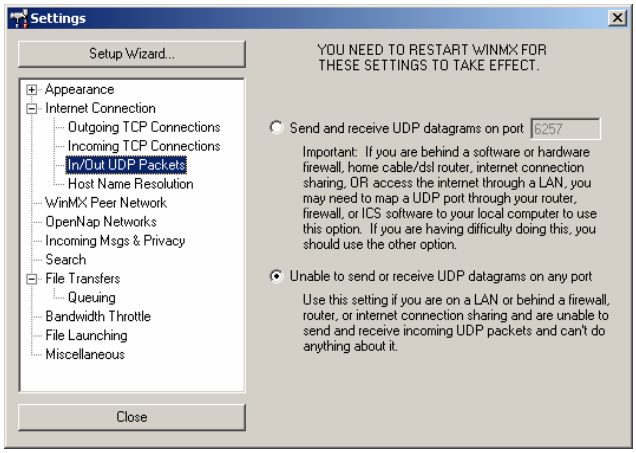
To configure **WinMX** (ver. 3.31) click the *Settings* button and select *Outgoing TCP Connection*: here insert the OpenSky Socks address (Fig. 11); in the *Outgoing TCP Connection* panel select *Unable to accept incoming TCP connections* (Fig. 12), in the *In/Out UDP Packets* panel select *Unable to send and receive UDP datagram on any port* (Fig. 13), in the *Host name resolution* panel select *Use operating system to resolve host names* (Fig.14).



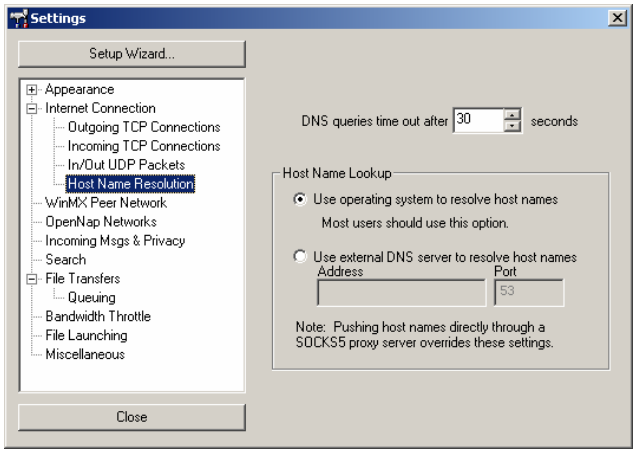
(Fig. 11)



(Fig. 12)

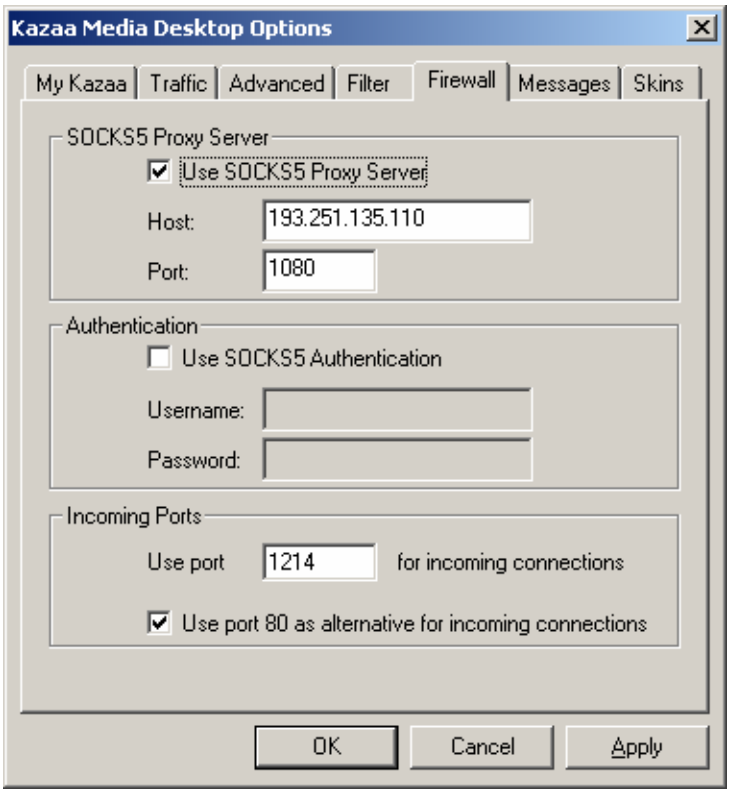


(Fig. 13)



(Fig. 14)

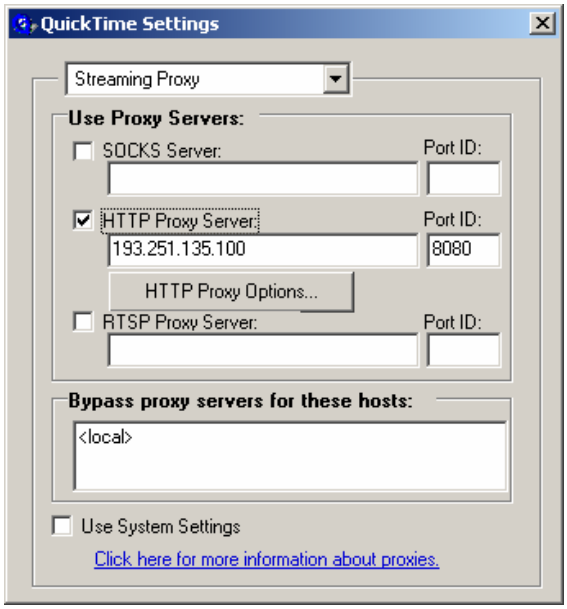
To configure **Kazaa Lite** (ver. 2.00) select *Options* from the *Tools* menu, then select the *Firewall* panel (Fig. 15) and here insert the OpenSky Socks.



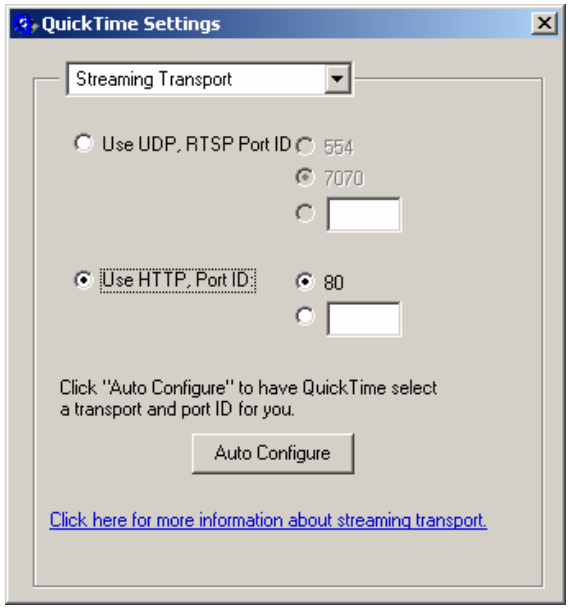
(Fig. 15)

Multimedia Players

To setup **QuickTime** (ver. 6.0) select *Preferences -> QuickTime Preferences* from the *Edit* menu; now select *Streaming Proxy* (Fig. 16) and set the OpenSky Proxy; then select *Streaming Transport* and set *Use HTTP, port ID 80* (Fig. 17).

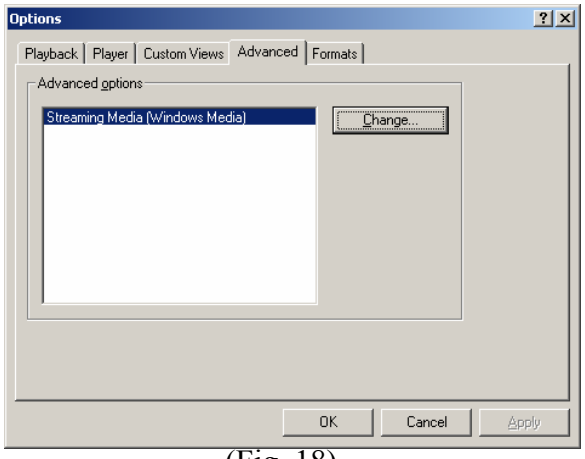


(Fig. 16)

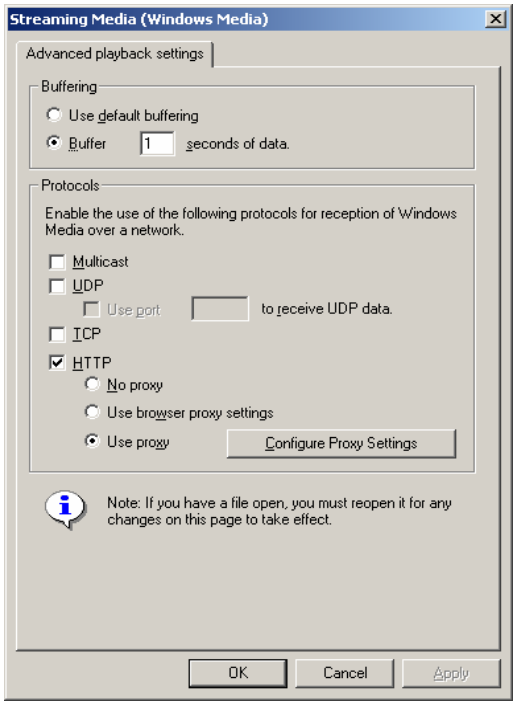


(Fig. 17)

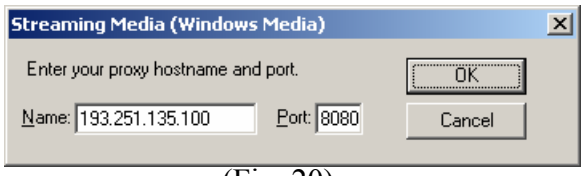
To setup **Windows MediaPlayer** (ver. 6.4) select *Options* from the *View* menu, then select the *Advanced* panel (Fig. 18): click on the *Change* button and select *HTTP, use Proxy* (Fig. 19); click on the *Configure Proxy Settings* button and set the OpenSky Proxy (Fig. 20).



(Fig. 18)

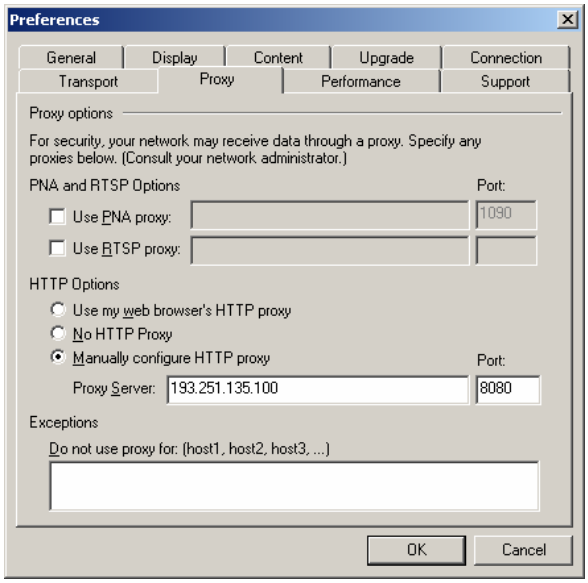


(Fig. 19)

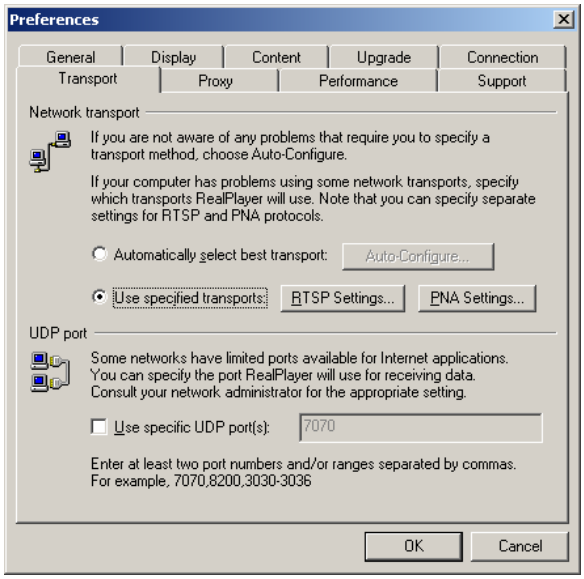


(Fig. 20)

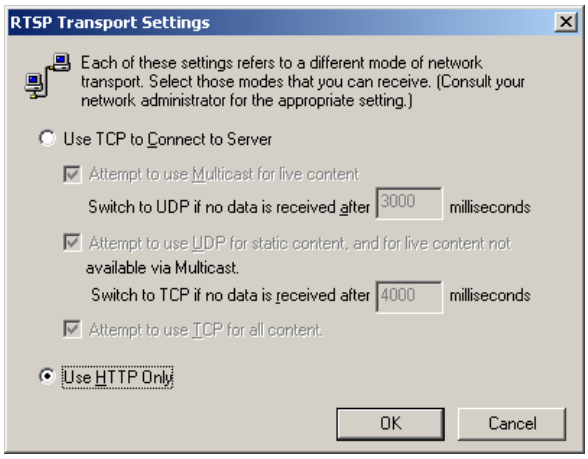
To setup **Real Player** (ver. 8.0) select *Preferences* from the *View* menu, then select the *Proxy* panel (Fig. 21) and here insert the OpenSky Proxy; in the *Transport* panel select *Use specified transports* (Fig. 22): click on the *RTSP Settings* button and set *Use HTTP only* (Fig. 23), click on the *PNA Settings* button and set *Use HTTP only* (Fig. 24).



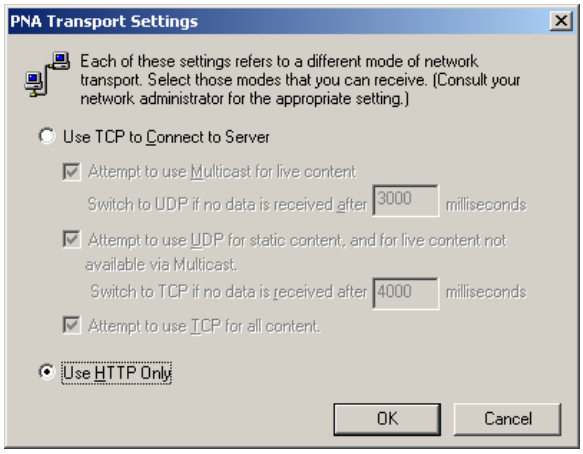
(Fig. 21)



(Fig. 22)



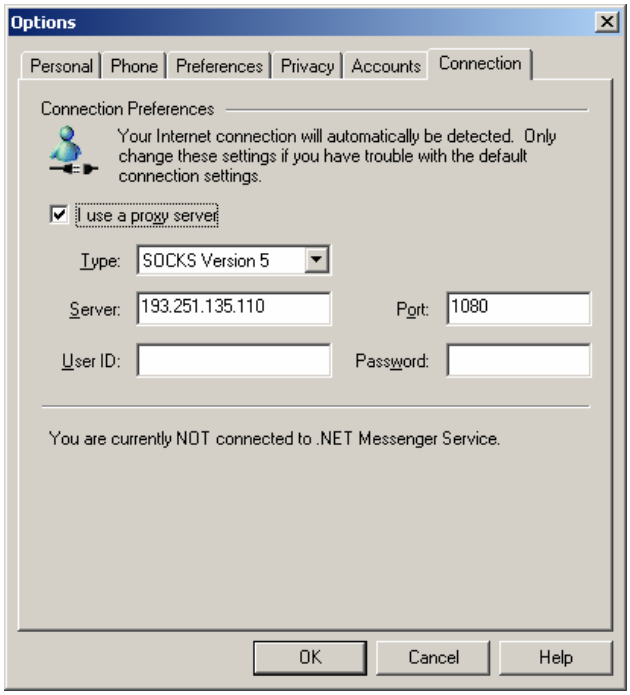
(Fig. 23)



(Fig. 24)

Chat Clients

To configure Microsoft **MSN Messenger** (ver. 4.6) select *Options* from the *Tools* menu, then select the *Connection* panel (Fig. 25) and insert the OpenSky Socks.



(Fig. 25)

Summary

Application	OpenSky Socks Support	Notes
Internet Explorer	Yes	HTTP, HTTPS and FTP protocols are supported
Outlook Express Email/Newsgroup	No	
Mozilla – Netscape	Yes	HTTP, HTTPS and FTP protocols are supported
Mozilla – Netscape Email/Newsgroup Client	Yes	
FlashGet	Yes	
GetRight	Yes	
CuteFTP	Yes	
WinMX	Yes	
Kazaa Lite	Yes	
QuickTime	No*	*=Supported only for HTTP contents
RealPlayer	No*	*=Supported only for HTTP contents
Windows Media Player	No	
Windows Messenger	Yes	The socks is used only for data transfers (files, chat, whiteboard) but not for audio or video.

HummingBird Socks Client (ver. 7.1)

The HummingBird Socks Client makes "socks-able" most TCP/IP application (even the ones which doesn't support the socks protocol) making possible the use of the OpenSky Socks in a transparent way for the user and offering the chance to use Internet applications that don't support internally the Socks protocol with the Fast Internet Service provided by OpenSky. Notice however that some applications may not work properly is Hummingbird Socks Client is installed.

The software can be downloaded from http://www.hummingbird.com/products/nc/socks/ (it is freeware for private use); it is also highly recommended to install the patch downloadable from ftp.hcl.com/pub/bbs/socks7101/hclsock5.zip.

Patch installation: after installing the program you should substitute the file "hclsock5.dll" (ver. 7.1.0.1) that comes with the software and that is resident in the folder:

"C:\WINDOWS\system\Hummingbird\Connectivity\7.10\Socks" (for Windows ME)
"C:\WINNT\system32\Hummingbird\Connectivity\7.10\Socks" (for Win2000)
"C:\WINDOWS\system32\Hummingbird\Connectivity\7.10\Socks" (for Windows XP),

with the file "hclsock5.dll" (ver. 7.1.0.2) found in the file hclsocks5.zip previously downloaded. To obtain the version of a DLL file, right-click on its icon, and select the Version tab.

In the same folder you fill find the configuration file "socks.cfg": it is a plain text file (that can be opened with Notepad or with any other text editor) that contains the program settings; into that file the following lines are to be added:

```
BIND-MODULE *
DIRECT 193.251.135.66 255.255.255.255 443
DIRECT 193.251.135.100 255.255.255.255
SOCKD5 @=193.251.135.110:1080 0.0.0.0 0.0.0.0
```

The first row specifies which services to make socks-able ('*' means all services), the second and the third rows specify the hosts that have to be reached without using the Socks (in this case the host for satlogin/satlogout operations and the HTTP Proxy address: this one is to be preferred in applications that support the HTTP, HTTPS or FTP).
Once saved the changes, close the file "socks.cfg" and then restart the Internet application to make it "socksfyied".

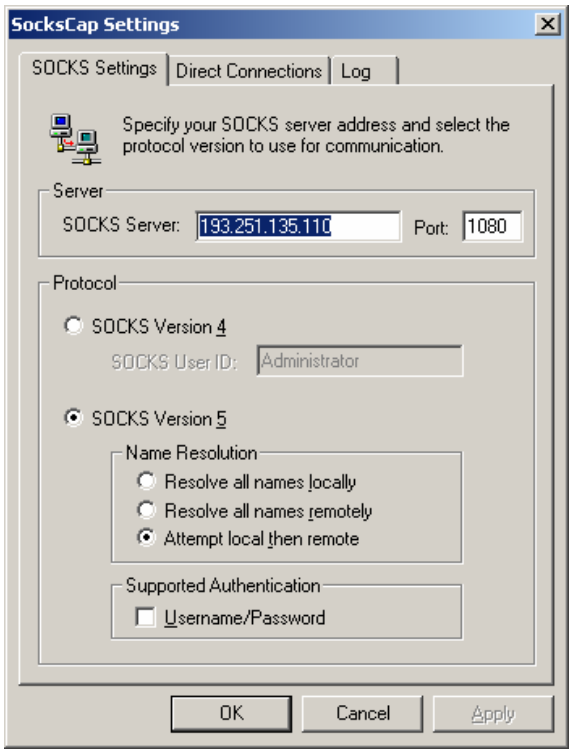
Notice that this software operates at the TCP stack level of your Windows machine. It is possible that it is in conflict with other TCP-related software, e.g. firewalls, anti-virus, network performance tools, etc.

Applications tested with the HummingBird Client and the OpenSky service

Application	Right behaviour	Notes
Internet Explorer (5.5)	Yes	
Outlook Express (5.5) Email/Newsgroup	Yes	
Mozilla (1.1) Netscape (6.02)	Yes	
Mozilla – Netscape Email/Newsgroup	Yes	
Eudora Email Client (5.1.1)	Yes	
Opera (6.03)	Yes	
FlashGet (1.3)	Yes	
GetRight (4.5d)	Yes	
BulletProof FTP (2.4)	Yes	
CuteFTP (4.2.5)	Yes	
WinMX (3.31)	Yes	
SSH Secure Shell (3.2)	Yes	
QuickTime (6.0)	No	Supported only for HTTP contents
RealPlayer (8.0)	No	Supported only for HTTP contents
Windows Media Player (7.1)	No	Supported only for HTTP contents
mIRC (6.02)	Yes	

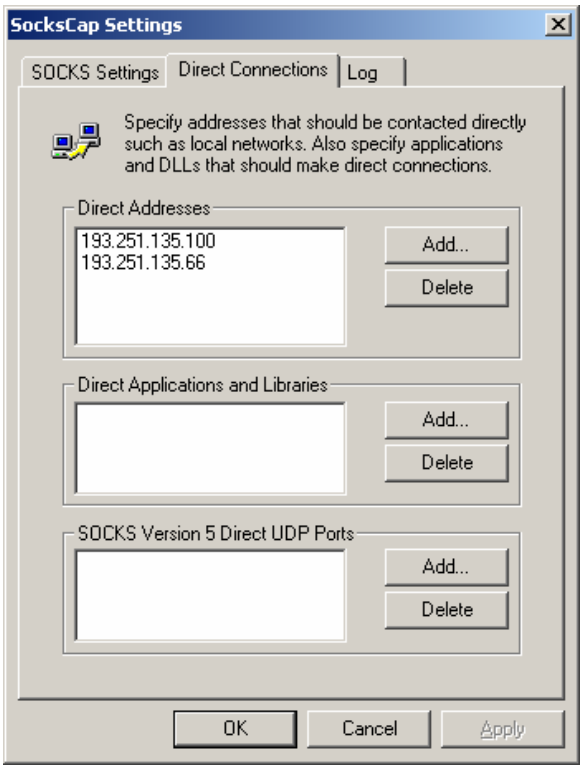
SocksCapV2 Client (version 2.32-021231)

The SocksCapV2 makes "socks-able" any TCP/IP application (even the ones which don't directly support the socks protocol) making possible the use of the OpenSky Socks in a transparent way for the user and offering the chance to use Internet applications that don't support internally the Socks protocol with the Fast Internet Service provided by OpenSky.
The program may be downloaded from http://www.socks.nec.com (freeware for private use).
It is possible to setup the application selecting *Settings* from the *Files* menu: then is just needed to set the OpenSky Socks Server address (Fig. 26).



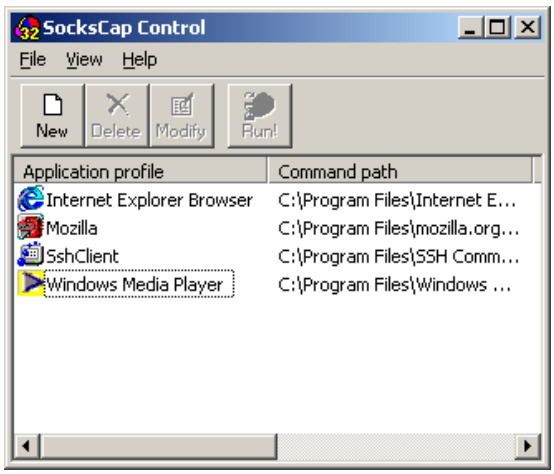
(Fig. 26)

In the *Direct Connection* panel (Fig. 27) is possible to set the addresses that have to be reached directly, without using the socks; in this case has been specified the host that contains the satlogin/satlogout page and the Proxy Server address: this one is to be preferred in applications that support the HTTP, HTTPS or FTP protocols so in the Internet applications to be used is suggested to use the Proxy if supported).



(Fig. 27)

Now to make socks-able an application just drag the icon used to launch it over the SocksCapV2 window. When the mouse will reach the window a menu will appear from which is possible to choose to start the selected application or to add it into the inserted profiles to make easier successive uses of that program; a SocksCap32 use example is showed in picture 28.



(Fig. 28)

Note that it is possible to *IMPORT/EXPORT* the settings of the program and of the socksfied applications using the *Import Setting* and *Export Setting* commands located in the *Files* menu.

Applications tested with the SocksCapV2 Client and the OpenSky service

Application	Right behaviour	Notes
Internet Explorer (5.5)	Yes	
Outlook Express (5.5) Email/Newsgroup	No	
Mozilla (1.1) Netscape (6.02)	Yes	
Mozilla – Netscape Email/Newsgroup Client	Yes	
Eudora Email Client (5.1.1)	Yes	
FlashGet (1.3)	Yes	
GetRight (4.5d)	Yes	
BulletProof FTP (2.4)	Yes	
CuteFTP (4.2.5)	Yes	
WinMX (3.31)	Yes	
SSH Secure Shell (3.2)	Yes	
QuickTime (6.0)	No	Supported just for HTTP contents
RealPlayer (8.0)	No	Supported just for HTTP contents
Windows Media Player (7.1)	No	Supported just for HTTP contents
mIRC (6.02)	Yes	
Windows Messenger (4.7)	Yes	The program makes a regular access to the service and the chat messages are received via socks but when sending files the receiver (that uses SocksCapV2) isn't able to receive them.