DAXTEN®

THE BRAINS BEHIND
KVM SWITCHING & SHARING

Voyager IP

User guide

Specifications

Ethernet Connection	One – RJ 45 - 10/100 Mbit/sec auto-sensing.
Serial Port	One – RJ 45
Concurrent Users	1 user + 7 view Only for current session
Data Encryption	128bit SSL
TCP Ports	443, 900, 901, 902. Ports 900-902 are configurable from port number 800 upwards
USB Port	One – Reserved for future use.
Operating Systems	Target Server Windows, Dos, LINUX, UNIX, QNX, SGI, FreeBSD, BeOS, Open VMS, Novell 3.12 and later, Alpha UNIX, HP UX, SUN, Solaris, Java Desktop System Client Computer Windows 2000 or higher with IE 6.0 or higher and ActiveX
Resolution	Target Server Up to 1600 x 1200 @ 85Hz Client Computer Recommended - resolution should be higher than the Target Server
Video and mouse synchronization	Both auto and manual modes
Security	128-bit SSL encryption

NOTE: This equipment complies with the requirements of European EMC directive 89/336 EEC in respect of EN55022 Class B, EN 50082-1 and EN 60555-2.
This equipment has been found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Voyager IP

Introduction

The Voyager IP is a device that enables you to control your server over TCP/IP via LAN, WAN or Internet connection, from any location.

Product Features
- ➢ Bios level KVM control.
  - Control any server irrespective of the server status or network connectivity.
- ➢ Web based control.
  - Web browser control of target server, from any location via standard secured IP connection.
- ➢ Multi user view mode.
  - Allows multiple users to simultaneous view a remote session. Remote control between users with appropriate permissions.

Client Computer Requirements

The client computer requires Windows 2000 or later, with Internet Explorer 6.0 or later, 128bit encryption support for a secured connection.

Default IP Address

The Voyager IP boots with DHCP enabled, it looks for IP address from a DHCP server on the network. If no DHCP server is found, the Voyager IP is configured with a static IP address of 192.168.0.155

> **Note:** if a DHCP server becomes available later, the Voyager will pick up it's settings from the DHCP Server. To keep the static IP Address, disable DHCP as explained on page 4

You can identify the Voyager's IP address through the MAC address (see Label on the bottom of the Voyager IP.

Logging On

Complete the initial setup via the web interface.
- ➢ Open your Web browser.
- ➢ Enter the Voyager's system IP address. (e.g. https://192.168.0.155/config) and press enter, the login page will appear.
- ➢ Enter the Administrator user name and password.
- ➢ The network configuration page opens.

> **Note:** the default Administrator User Name is **admin** the default password is **admin** (both are lower case)

SSL Certificate notes

When you first connect to the Voyager IP unit's https configuration page, you will receive 2 browser security warnings. To proceed you will need to click Yes.

The first warning will disappear when the first client installs the Daxten [Voyager IP] root certificate.

The second warning can be avoided by adding a line to your window's 'hosts' file (normally found at \Windows\system32\drivers\etc)
The line format should be: **any-IP   any-name.daxten.kvmip**

Example:
192.168.0.155   VoyagerIP. daxten.kvmip

You can now browse the Voyager IP by typing https://VoyagerIP.daxten.kvmip
You can use any device name except for daxten.kvmip which is reserved by Daxten.

Network – Configuration

Device Name – Enter a name for the Voyager IP. The default Device Name takes the form of a six digit device number (D.N) prefixed with "D".

First TCP Port – Select 3 consecutive ports, enter the first port number of the series. The default port is 900, this should suit most installations.

> **Note:** Your firewall or router security access list must enable inbound communication through the selected TCP ports for the Voyager IP's IP address.
> For Client computer access from a secured LAN, the selected ports should be open for outbound communication.

LAN 1

Enable DHCP

When a DHCP server is active on the network to which the Voyager IP is connected, DHCP provides automatic IP assignment.

DHCP disabled

(Recommended) You can assign a fixed IP address to the Voyager IP
When DHCP is disabled, enter the IP Address, Subnet Mask, and Default Gateway for LAN 1, as provided by your Network Administrator.

Figure 1 – LAN 1 Settings

Saving Changes

Click Save & Restart to save changes to the configuration, and restart the Voyager IP.

Administration – User Settings

Click on User Settings

On this page, the Administrator can create and edit users. There are three levels of users:-
  - Administrator
  - User
  - View only

Figure 2 – User Settings

Administrator

An Administrator has unrestricted access to all the Voyager's settings and windows. An Administrator can create and edit users and their passwords. An administrator can also "take over" a remote active session.

User

A User can access and control target services. A User does not have access to the configuration pages, advanced mouse settings and power cycling.

View Only

A View Only user can only view target server screens, without keyboard and mouse control. Only limited options are available to a View Only user such as Switch and Disconnect from servers.

Adding a User

Click on Add and then enter the users name and password. The password has to at least 6 characters letters or numbers and cannot include the User name as part of the password.
Depending on the security level chosen the user name and password parameters are different. See section Password Policy on page 6.

Select the permission type from the permissions box.
Click Apply, and the User will appear in the User list.

Editing a User

Click on Edit this allows you change all of the User settings for a user.
Click Apply to save the changes.

Deleting a User

Select a User from the User list click on Delete.
Click Apply to save the changes.

Blocking a User

An alternative to deleting a User, is to Block a user, this keeps the user settings, but blocks a User from accessing the system. Use the tick box to block and unblock user access.

Administration - Switch Configuration

When a KVM Switch is connected to the Voyager IP, you need to configure the KVM switch from the Voyager IP.

From the menu click Switch Configuration, the KVM Switch configuration window appears.
Select the manufacturer of the KVM Switch and the KVM Switch model. The number of possible servers to connect to appears in the **Server Name** section.

Change the name of the connected servers by highlighting the server and typing a name. Click Apply to save the changes.
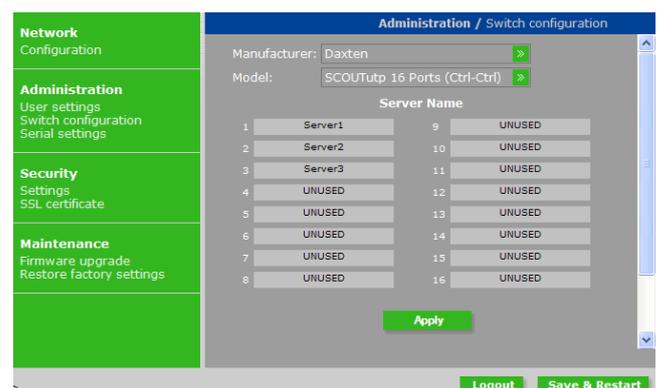

Figure 3 – Switch Configuration

Note: Server names left as UNUSED cannot be accessed.

Install the Switch definition file

If the KVM Switch is not listed in the Manufacturer & Model list, contact Daxten for an updated list.

Load the Switch definition file on the client computer.

Locate and install the Switch Definition file, this will update the Manufacturer & Model list.

Administration - Serial Settings

If Serial Devices are to be connected to the Voyager IP Units, the serial settings need to be configured. From the menu click Serial Settings, the Serial Settings window appears

Enter a name for the Serial device, and select the correct parameters for the device.

Show
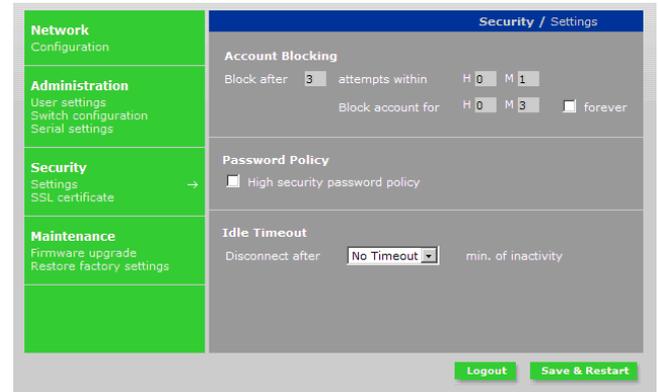Tick Show to make the Serial device appear in the Server/Devices List.

Figure 4 – Security Settings

Security Settings
From the Security section click on Settings to access the security window, from here you can configure the security settings such as Account Blocking, Password Policy and Idle Timeout.

Account Blocking -This lets you configure the number of login attempts with an incorrect username or password, after which there is a time bar or total lock

Password Policy - Allows you to select standard password policy or a High security password policy.

Standard Security Password	High Security Password
6 Characters or more	8 Characters or more, must include at least 1 numeric 1 upper case letter 1 "special" character as follows **!@#$%^&*()_-+={[}]"':;?/><**
Must not include the User Name	Must not include the User Name

Tick / un-tick the tick box for the High Security Password policy Settings.

Idle Time out - Allows you select the period of inactivity after which a user is disconnected from the system. Select No Timeout to disable this option.

Security – SSL Certificate

To install a SSL certificate, select SSL Certificate.

Certificate File – Click Browse to locate the **cer** file.
Private File – Click Browse to locate the **private key** file.
Key Password - Type the "private key" password.
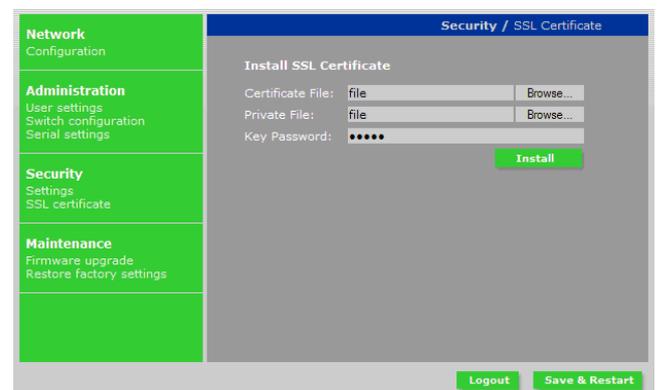Click Save & Restart

Figure 5 – Install SSL Certificate

Maintenance – Firmware Upgrade

An upgrade of the Voyager IP will introduce new features. Firmware upgrades will be available for download from the Daxten website. Save the firmware file on the Client computer.
Select Firmware Upgrade.

Click Browse to locate the firmware upgrade file.
Click Start Upgrade, when complete click Reboot, this will reboot the unit and after 30 seconds the Login page will appear.
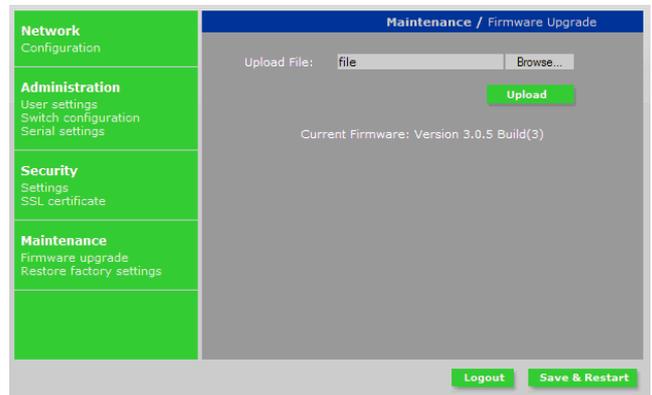

Figure 6 – Firmware Upgrade

Note! Some firmware upgrades may erase User Settings, KVM Switch Settings, mouse and video adjustments and RS232 setting.
Refer to the firmware release note for more information.

Restore Factory Settings

The Voyager IP can be restored to its factory settings. This erases all the Voyager IP settings, including Network settings*, Servers, Switches, Users, Passwords etc.

* There is an option to save the Network Settings.

Warning!
Once reset the data cannot be retrieved.

Figure 7 – Restore factory settings

Select Restore Factory Settings, the restore factory setting page shown above appears.
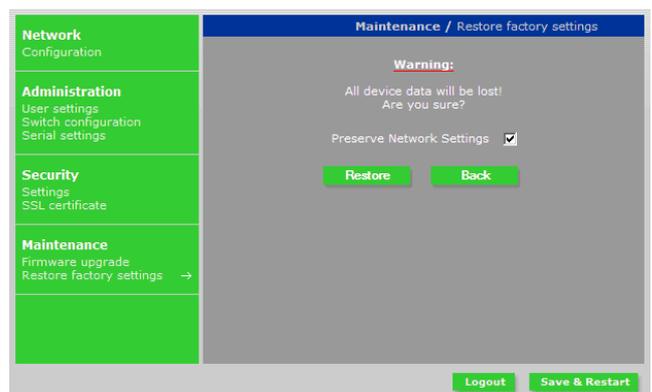Tick the tick box if you want to preserve the network settings. Click Restore

Logging Out

To exit the configuration menu, and close the session, click Logout
There can only be one Administrator logged into the configuration page at one time. There is a idle time out of 30 minutes, after which the session will terminate.

Starting a remote session

On a client computer, start Internet Explorer (version 6.0 and higher) type the Voyager IP's IP address (https://192.168.0.155 default). Enter your username and password on the login page.

The screen of the Target Server connected directly to the Voyager IP or the currently selected server on the KVM Switch connected to the Voyager IP appears. The first time you connect you must install the Daxten Certificate and Active X control. You must be logged on as an administrator on the client computer to install the Active X Control. Once the Active X control is installed all user types can login.
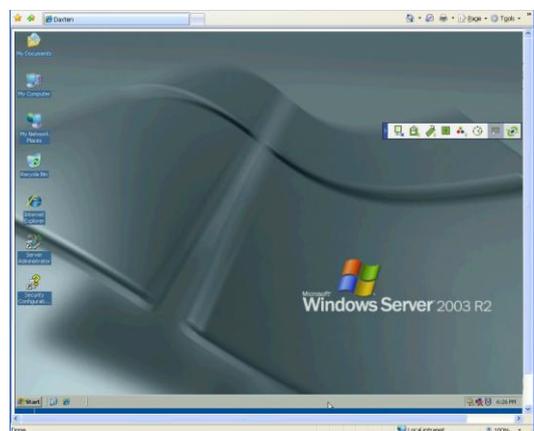

Figure 8 – Remote session window

Full screen mode

To work in full screen mode:
1. Ensure that the client computer has the same resolution as the Target Server.
2. Press `F11`, Internet Explorer window disappears leaving the Explorer toolbar at the top.
3. Right click the Explorer toolbar and check **Auto-Hide**, the Explorer toolbar disappears leaving you in full screen mode.

To Exit full screen mode:
1. Press `F11`, or move the mouse cursor at the top of the screen to display Internet Explorer's toolbar and then click restore button.

Note: Full Screen mode can also be activated from the toolbar menu, see page 11.

Taking over a busy remote session

When connecting to a busy Target Server, an Administrator has the option to take over the current session. A User only has this option if another User is using the current session. A User does not have the option to take over an Administrators session. You have the option to Take Over, View Only or Cancel.

Moving or hiding the Toolbar

The toolbar can be dragged and dropped anywhere on the screen, by clicking and dragging the logo.
To hide the Toolbar, either:

Double click the Voyager IP's system tray icon.
Alternatively, press `F9` to display the toolbar and repeat the steps above. See also page 11.
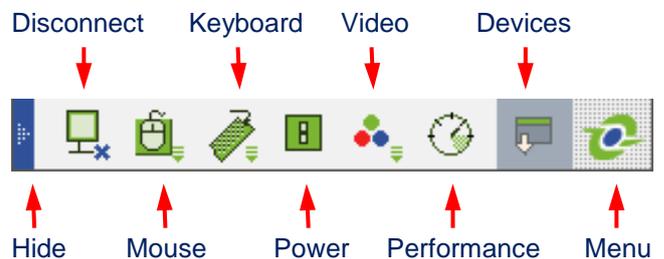To minimize the Toolbar click the arrow. Click the arrow again to maximize the Toolbar.

Figure 9 – Remote session Toolbar

Switching to a different server / device
To connect to a different server or device:
1. From the Toolbar click the Device List icon, or right click the Menu icon. A list of connected servers / devices appears.
2. Click the desired server or Serial Device, the screen of the server or the Serial device window appears.

Changing the performance settings

The bandwidth settings can be altered from the toolbar.

To alter the settings, from the Toolbar click the Performance icon. The settings box appears.

Figure 10 – Settings Box.

Bandwidth

Chose from the following options

Adaptive – automatically adapts to the best compression and colours.

Low - Use for high compression and 16 colours

Medium – Use for medium compression and 256 colours, this is the recommended setting for a standard internet connection.

High – For low compression and high colours (16 bit), recommended setting for a LAN.

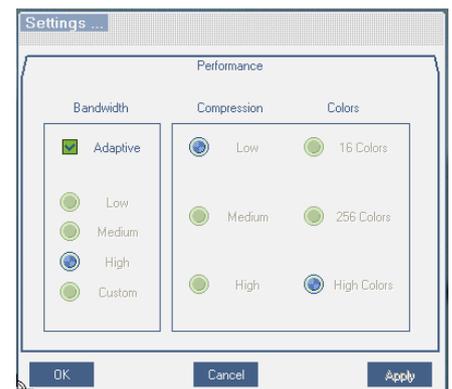**Custom** – allows you to choose your own compression and colour level.

Adjusting the Video settings

To change the video settings, from the Toolbar click the Video icon. This will give you the following options:

➢ Refresh
➢ Manual Video Adjust
➢ Auto Video Adjust

Refresh – Refreshes the Video image (Press `Ctrl` + `R`).

Manual Video Adjust – Used to fine tuning the video settings or for a non standard Video signal.

To adjust the video manually:

1. Click Manual Video Adjust, a slider bar appears, and a Red frame appears around the screen. This represents the screen area of the server at its current resolution. Perform the adjustments' inside and relative to the red frame.
2. Move the sliders to change the displayed image. Click in the area of the sliders for fine tuning.
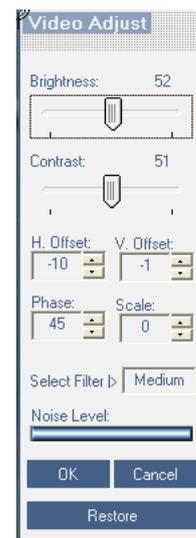
Figure 11 – Manual Video Adjustments controls.

Brightness / Contrast - use the scales to adjust the brightness and contrast of the displayed image.

Horizontal Offset - defines the starting position of each line on the displayed image.

Vertical Offset - defines the vertical starting position of the displayed image.

Phase - defines the point at which each pixel is sampled.

Noise Level - represents the Video "noise" when a static screen is displayed.

Automated adjust – When checked, the video adjusts automatically whenever there is a change in the screen resolution.

Auto Video Adjust

To Adjust the video automatically, open a Windows Explorer (or similar) in the background, click Auto Video Adjust. The process will take a few seconds. If the process runs more than three times, then there is an abnormal noise level. Check the video cable and ensure that there is no dynamic video application running on the Target Server's desktop.

Perform as necessary for each Target server or screen resolution.

Power Cycle

The optional KB-Power and KB-Power IPMI offer remote power control via a remote session.

To shut down and restart the Target Server via KB-Power / KB-Power IPMI, from the toolbar click the Power icon. A prompt appears, click Yes to continue.

Only an administrator can initiate a hard reset command.

The Power Management Console can be accessed when the Power Management Console is activated.

Keyboard key sequences

Click the Keyboard icon. A list of defined keyboard sequences appears, when clicked these will be transmitted to the Target Server and will not affect the client computer.

For example, select **Ctrl-Alt-Del** to send this three key sequence to the Target Server.

To add a keyboard sequence, Click Add/Remove, the Special Key Manager box appears.

To add a predefined sequence:

Click Add Predefined, a list of sequences appears.

Figure 12 – Special key Manager Box.

Select the desired sequence and click OK. The sequence appears in the Special Key Manager Box.

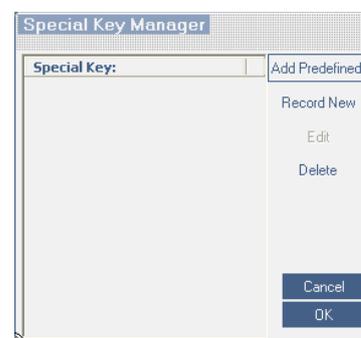Click OK, the sequence appears in the Keyboard Key sequence list.

To record a Key sequence:
1. From the Special Key Manager Box press **Record Now**, the Add Special Key box appears.
2. Give the key sequence a name in the label box.
3. Click **Start Recording**.
4. Press the desired keys, the keys appear in the area provided.
5. Click **Stop Recording**.
6. Click **OK**.

To edit a key sequence
1. From the Special Key Manager Box select the desired key.
2. Click Edit.
3. Click **Start Recording.**
4. Press the desired keys, the keys appear in the area provided.
5. Click **Stop Recording**.
6. Click **OK**.

Synchronising mouse pointers

On a client computer, two mouse pointers appear. The Client computer's mouse pointer on top of the Target Servers. The two mouse pointers should be synchronised. The following explains what to do if they are not synchronised.

> **Note:** Before synchronising mouse pointers adjust the video of the Target Server otherwise mouse synchronisation may not work.

Aligning the mice pointers

The two mice pointers may appear a apart from each other, to align the mouse pointers from the toolbar click the Mouse icon and then **Align** or press **Ctrl** **M** to align the mice pointers.

Calibrating mice pointers

A Target Server may have different mouse pointer speed
The Client computer and Target Server may have different mouse pointer speed settings. Calibrating will automatically discover the mouse speed of the Target Server and aligns the two pointers.

To calibrate a Windows 2000, NT4 or 98 Target Server :

From the Toolbar click the Mouse icon and then **Calibrate**. The Voyager IP saves this alignment so calibration is only required once per Target Server.

If the Video Noise Level is higher than zero, calibration may not work. Use the Video Adjustments to eliminate the noise.

> **Note:** If the mouse settings on the Target Server are changed, you will need to synchronise the mouse pointers manually.

Manual mouse synchronisation

To calibrate a Windows XP, 2003, Linux, Novell, SCO Unix or SUN Target Server, or if the mouse settings on the Target Server are changed, the mouse pointers must be synchronised manually.

1. From the Toolbar click the Mouse icon and then **Manual Settings**.
2. Select the Target Server's operating System and click OK. Instructions and sliders appear.
3. Follow the instructions and adjust the relevant sliders to the same values set on the Target Server's mouse properties window.
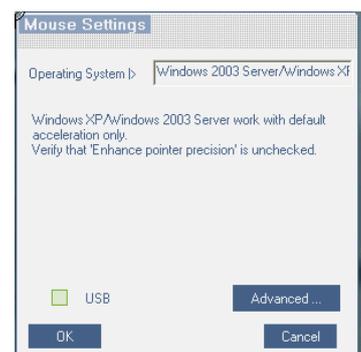

Figure 13 – Mouse Settings box.

2 Examples:

- ➢ For Windows XP, go to the Mouse settings on the Target Server and uncheck Enhance pointer precision.
- ➢ For Windows NT4. If Mouse Properties were ever changed for the Target Server – even if they have been returned to their original state - uncheck default - .

Click OK. The mouse pointers should be synchronized.

USB

The USB option in the Mouse Settings box is for SCOUTutp or a SCOUTmatrix USB CPU Connector, for unsupported operating systems and SUN Solaris. Use this option if you are sure of the custom acceleration algorithm you are using, or have been advised to do so by customer support.

Advanced – Mouse Emulation

In the Advanced Mouse settings, you can set the type of mouse that you would like the Voyager IP to emulate. We recommend not changing the advanced settings unless there is erratic mouse behaviour (the mouse is making random clicks and jumping arbitrarily around the screen).

Click Advanced, the Moue Emulation box appears, select the type of mouse connected to the local console port of the Voyager IP, e.g. if the local mouse is a non Microsoft 2 button mouse, select **Standard Mouse** and un-tick **Microsoft Mouse**.

Switch Acceleration – Some brands of KVM Switches (e.g. G&D, Rittal), accelerate the mouse, in addition to the acceleration provided by the operation system. If necessary use this option to compensate (decelerate) the switch acceleration and achieve full synchronisation.

Max Rate – defines the maximum mouse report rate. For SUN Solaris the default value is 20, in order to support older SUN versions.

Daxten Menu features

Right click the Daxten logo, a menu appears. From this menu you can access connected devices, and also the following features:

Disconnect – disconnect the session.

About – displays the Client, Firmware, Keyboard Mouse Emulation Firmware and Switch file versions installed on your Voyager IP unit.

Local Settings – click Local Settings and the Client Configuration box appears.

Pointer type – Allows you to select from drop down menu the mouse pointer type on the Client computer.

Hide Toolbar – Tick box option to hide the toolbar on the next connection. You can also toggle the toolbar on and off by pressing `F9`.

Full Screen Mode – Tick box option to make the remote session in full screen mode on the next connection. You can also toggle full Screen Mode by pressing `F11`.
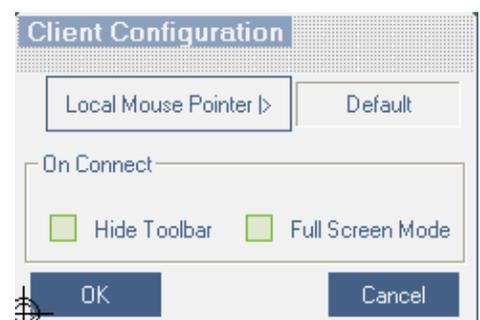

Figure 14 – Client Configuration box.

Disconnecting a remote session.

To disconnect the session on the Toolbar, click the Disconnect icon. The Login box appears; you can either login again or close the browser window.

Troubleshooting - Restoring factory defaults (Hard Reset)

You can restore the factory setting through the Web interface as described on page 7. However if you cannot access the system e.g. you have forgotten the User Name or Password, you can restore the factory defaults by performing a Factory Reset.

To perform a Factory Reset:
1. Press and hold down the Go Local button for 3-4 seconds while powering up the Voyager IP. The device boots up in safe mode.
2. Wait until the unit finishes booting.
3. Login with the default IP address of the unit: http://192.168.0.155/config. (Do not start the address with https). The Login box appears
4. Type username: **admin**, password: **SAFEmode**. (Case sensitive). This username and password will only work after the reset procedure described above. A menu appears
5. From the menu, choose **Restore Factory** Settings. A warning appears
6. Select Restore. The factory defaults are restored. When the process finishes
7. Click Reboot to restart the unit

Video resolution and refresh rates

Hz ➜	56	60	65	66	70	72	73	75	76	85	86
640x480		✔		✔	✔	✔		✔		✔	
720x400					✔					✔	
800x600	✔	✔				✔		✔		✔	✔
1024x768		✔			✔	✔	✔	✔	✔	✔	
1152x864								✔			
1152x900				✔					✔		
1280x720		✔									
1280x768		✔						✔			
1280x960		✔								✔	
1280x1024		✔				✔		✔	✔	✔	
1600x1200		✔	✔		✔			✔		✔	

Service Information

Technical Support

If you cannot determine the nature of a problem, please call Daxten and ask for Technical Support. If possible, call from a phone located near the unit, as we may be able to solve your problem directly over the phone. If we cannot solve your problem, and determine that the fault is in the unit, we will issue a Return Material Authorisation (RMA) number that must appear on the outside of all returned products. The unit should be double-packed in the original container, insured, and shipped to the address given to you by our Technical Support representative. The Technical Support offices are found on the back of this manual.

Limited Warranty

Daxten warrants to the end user that this product is and will be free from defects in materials and workmanship for a period of 24 months from the date of purchase. If during the warranty period the product should fail, the purchaser must promptly call Daxten for a RETURN MATERIALS AUTHORIZATION (RMA) number. Make sure that the RMA number appears on the packing slip, proof of purchase, AND ON THE OUTSIDE OF EACH SHIPPING CARTON. Unauthorized returns or collect shipments will be refused.

Ship prepaid to the Daxten office (see back page) where you purchased your product. The above limited warranty is voided by occurrence of any of the following events, upon which the product is provided as is, with all faults, and with all disclaimers of warranty identified below:

1. If non-Daxten approved power supply or cabling is attached to the product.
2. If defect or malfunction was caused by abuse, mishandling, unauthorized repair, or use other than intended.
3. If unauthorized modifications were made to product.
4. If unreported damages occurred in any shipment of the product.
5. If damages were due to or caused by equipment or software not provided by Daxten.
6. If the product is used with non-grounded or incorrectly polarized AC power.
7. If the product is used in contradiction to any instruction provided by any User Guide or Instruction Sheet provided to you or with the product.

EXCEPT AS SPECIFICALLY PROVIDED ABOVE AND TO THE MAXIMUM EXTENT ALLOWED BY LAW, DAXTEN DISCLAIMS ALL WARRANTIES AND CONDITIONS WHETHER EXPRESS, IMPLIED, OR STATUTORY AS TO ANY MATTER WHATSOEVER INCLUDING, WITHOUT LIMITATION, TITLE, NON-INFRINGEMENT, CONDITION, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR OR INTENDED PURPOSE.

EXCEPT AS EXPRESSLY PROVIDED ABOVE AND TO THE MAXIMUM EXTENT ALLOWED BY LAW, DAXTEN SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION, LOSS OF PROFIT, LOSS OF BUSINESS, LOSS OF INFORMATION, FINANCIAL LOSS, PERSONAL INJURY, LOSS OF PRIVACY OR NEGLIGENCE) WHICH MAY BE CAUSED BY OR RELATED TO, DIRECTLY OR INDIRECTLY, THE USE OF A PRODUCT OR SERVICE, THE INABILITY TO USE A PRODUCT OR SERVICE, INADEQUACY OF A PRODUCT OR SERVICE FOR ANY PURPOSE OR USE THEREOF OR BY ANY DEFECT OR DEFICIENCY THEREIN EVEN IF DAXTEN OR AN AUTHORIZED DAXTEN DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES.

Waste Electrical and Electronic Equipment (WEEE)

Within the European Union, this symbol indicates that this product should not be disposed in household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on how to recycle this product, please check with the reseller of the product that replaces this product "Take Back" or the original seller of this product.

DAXTEN®

THE BRAINS BEHIND
KVM SWITCHING & SHARING

www.daxten.com

Ireland
Bay 21
Free Zone West
Shannon, Co. Clare
info.ie@daxten.com
www.daxten.ie
Tel: +353 (0) 61 23 4000
Fax: +353 (0) 61 23 4099

•

Österreich
Künstlergasse 11/4
A-1150 Wien
info.at@daxten.com
www.daxten.at
Tel: +43 (0)1 879 77 65
Fax: +43 (0)1 879 77 65 30

•

España
C/Florian Rey, 8
50002 Zaragoza
info.es@daxten.com
www.daxten.com.es
Tel: +34 902 197 662
Fax: +34 976 201 633

•

Worldwide
info.eu@daxten.com
www.daxten.eu

•

USA
info.us@daxten.com
www.daxten.us

•

Deutschland
Salzufer 16, Geb. B
10587 Berlin
info.de@daxten.com
www.daxten.de
Tel: +49 (0) 30 8595 37-0
Fax: +49 (0) 30 8595 37-99

•

Sweden
info.se@daxten.com
www.daxten.se

•

Denmark
info.dk@daxten.com
www.daxten.dk

•

United Kingdom
5 Manhattan Business Park
Westgate
London W5 1UP
info.uk@daxten.com
www.daxten.co.uk
Tel: +44 (0) 20 8991 6200
Fax: +44 (0) 20 8991 6299

•

Schweiz
Badenerstrasse 701
8048 Zürich
info.ch@daxten.com
www.daxten.ch
Tel: +41 (0) 43 321 73 93
Fax:+41 (0) 43 321 73 94

•

France
44, rue du Général Leclerc
91230 Montgeron
info.fr@daxten.com
www.daxten.fr
Tel: +33 (01) 69 40 04 05
Fax:+33 (01) 69 03 75 19

•