

Initial configuration

Vega 50 10 FXO

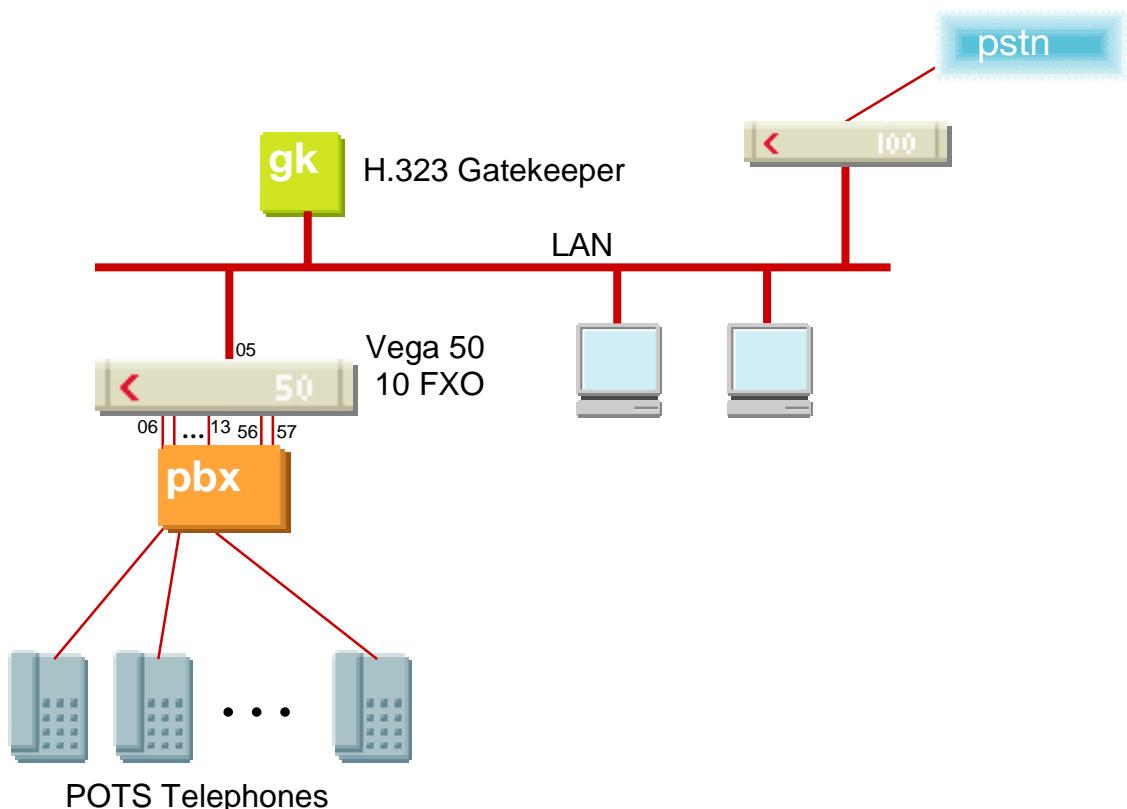
(H.323) – R5.2



This document describes how to configure the Vega 50 10 FXO H.323 gateway using the web browser interface. The configuration described here will allow the Vega to be rapidly installed and tested.

The instructions below will configure the Vega 50 FXO (connected to 10 extension ports of a PBX or a CO Switch) to operate as follows:

- Calls presented to the Vega from the PBX or CO switch will be routed using the H.323 gatekeeper; the telephone number passed to the gatekeeper will be the port ID on which the call was received (06 .. 13 or 56, 57).
- Calls received by the Vega on the H.323 interface will be routed to one of the telephony interfaces. The physical interface over which the call is routed will be defined by the leading two digits of the telephone number (06 .. 13 or 56, 57). The digits following the leading two digits will be used as the digits to dial.



The configuration process is broken down into 11 stages as follows:

- 1 Connect your Vega to LAN, telephone lines and Power
- 2 Configure the basic LAN parameters
- 3 Configure password and login timeout
- 4 Check and configure LAN settings and Host name
- 5 Configure the Dial Plan
- 6 Configure for Gatekeeper operation
- 7 Configure for Gatekeeper operation
- 8 Configure POTS parameters
- 9 Configure pointer to CD ROM documentation
- 10 Save Changes
- 11 Archive Vega Configuration

Please also see:

- 12 Technical Support



Before installing your Vega, ensure that you read the VegaStream VoIP Gateways Safety and Compliance Information document.

LAN:

Using the yellow booted cable connect the LAN port on the Vega to a standard or fast Ethernet hub or switch (10 baseT or 100 baseTx). The connector nearest the ferrite core should be plugged into the Vega.

Telephony:

Connect telephones to FXS ports 1 to 8. Note the port numbers increase in an anticlockwise direction from the bottom left corner. And to ports 9 and 10 on the separate pair of connectors.

FXO 9 IF: 56	FXO 10 IF: 57
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FXO 8 IF:13	FXO 7 IF:12	FXO 6 IF:11	FXO 5 IF:10
FXO 1 IF:06	FXO 2 IF:07	FXO 3 IF:08	FXO 4 IF:09

Power:

Insert the power cable into the AC power inlet on the Vega and switch on. The power LED on the front panel will illuminate.

The LAN LEDs will also illuminate indicating 10 (baseT) or 100 (baseTx) connection, and the FDX LED will illuminate if Full Duplex mode has been negotiated.

2. Configure the basic LAN parameters

If a DHCP server is available, by default, the Vega will automatically pick up an IP address. If you know the IP address served to the Vega, skip this section and start at section [3](#).

If DHCP is not to be used to provide the Vega with an IP address, or you need to check the IP address provided to the Vega, connect the serial interface of the Vega to a PC serial interface using a 9 way male to female straight through cable.

Configure a terminal emulator program (such as Microsoft's HyperTerminal) for:

- Speed = 115200 baud
- Data bits = 8
- Parity = none
- Stop bits = 1
- Flow Control = none

Press <Enter> to get the Username: prompt

At the prompts enter the default user name and password

Username: admin
Password: admin

To display the current IP address, type:

➤ show lan.ip

If this is not the IP address required, it can be overridden, together with other LAN parameters by typing:

➤ set lan.use_dhcp=0
➤ set lan.ip=aaa.bbb.ccc.ddd
➤ set lan.subnet=eee.fff.ggg.hhh
➤ set lan.gateway=iii.jjj.kkk.lll
➤ save
➤ reboot system

3. Configure password and login timeout

Now configuration will be carried out using a web browser.

- Enter the IP address of the Vega into the “Address” field of your web browser.



You will then be presented with the login page:

A screenshot of the Vega 50 Configuration login page. The title bar says "VoIP Gateway Online Configuration - Microsoft Internet Explorer". The address bar shows "Address http://172.19.1.170/index.htm". On the left, there's a red logo with "vegastream" and a red arrow pointing right. In the center, it displays "Host Name Vega50_IAD8" and "IP Address 172.19.1.170". To the right, it says "Vega 50 Configuration". Below this, there's a "Login" section with a blue header "Enter Username and Password". It has two input fields: "Username" and "Password", both of which are highlighted with a green oval. A "Login" button is below the password field. At the bottom, there's a "Done" button and an "Internet" icon.

Enter the default Username and Password

- Username: admin
- Password: admin
- Select

The screenshot shows the Vega 5008/5010 Online Configuration interface. At the top left is the VegaStream logo. On the right, the title "Vega 50 Configuration" is displayed. The left sidebar contains a navigation menu with links: Management, Logging, Maintenance, LAN, POTS, H.323, Dial Plan, Media Channels, Tones, **Users**, QoS, and Advanced. The "Users" link is circled in green. The main content area has a blue header "System Management". Below it is a "Quick Configuration Wizard" section with a button "Start Wizard". Under "System Time", there are fields for "Set Time (hh:mm:ss)" (00 : 58 : 35) and "Set Date (dd/mm/yyyy)" (01 / 01 / 1999), along with "Sync Time" and "Synchronise Time and Date" options (radio buttons for "With PC" and "With NTP server"). Further down are sections for "Call Reports" (links to "Show Calls" and "Show Trace"), "System Logs" (links to "Show Event Log" and "Show Billing Log"), and "Call Control". A "Save" button is located on the far left of the main content area.

- On the left hand side menu select [Users](#)

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address: http://172.19.1.170/vsframe?sid=142560322&frame_id=27

Vega Stream

Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

Vega 50 Configuration

Management

Logging

Maintenance

LAN

POTS

H.323

Dial Plan

Media Channels

Tones

Users

QoS

Advanced

Save

Log off

Help

Reboot System

Administrator

Logging	3
Billing	0
Prompt	%u%p>
Remote Access	1
Timeout	240

Administrator Password

New Password	(circled)
Re-enter Password	(circled)

Billing User

Logging	0
Billing	1
Prompt	%u%p>
Remote Access	1

Submit

Done Internet

Recommended: Change the password

- enter New Password and Re-enter Password then
- select **Submit** and then click "[here](#)" to return

Optional: Change the timeout¹ – default is 240 seconds; can extend to 7200 seconds (2hrs)

- select **Submit** and then click "[here](#)" to return

¹ If the web interface is not used for this length of time the Vega will automatically log off the session. This change is only activated by logging out and back into the web browser session.

4. Check and configure LAN settings and Host name

- On the left hand side menu select [LAN](#)
- Scroll down to see both **LAN Configuration** and **Physical layer Configuration** sections

The screenshot shows the Vega 5008/5010 Online Configuration interface. The left sidebar has a navigation menu with links like Management, Logging, Maintenance, LAN (which is selected), POTS, H.323, Dial Plan, Media Channels, Tones, Users, QoS, and Advanced. Below the menu are buttons for Save, Log off, Help, and Reboot System. The main area is titled "Vega 50 Configuration". It displays LAN Configuration settings: Host Name (Vega50_IAD8), IP Address (172.19.1.170), User Name (admin). A warning message "Unsaved Configuration Changes" is shown. Below this is the Physical Layer Configuration section, which includes Full Duplex (unchecked) and Ethernet Type (set to 10baseT & 100baseTX, highlighted with a green oval). There is also a QoS profile field set to 1. At the bottom are "Submit" and "Cancel" buttons.

Recommended: In the **Physical Layer Configuration** section statically select the Ethernet Type as either 100baseTx or 10 baseT – whichever is appropriate – (not 10baseT & 100baseTx autoselection)

- select and then click "[here](#)" to return

Optional: If there are any LAN values that need to be set up manually, set them up now (e.g. tftp and ftp addresses), then

- Select and then click "[here](#)" to return

5. Configure the Dial Plan

➤ On the left hand side menu select [Dial Plan](#)

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=142560322&frame_id=35

vegaStream

Host Name Vega50_IAD8
IP Address 172.19.1.170
User Name admin

⚠️ Unsaved & Unapplied Changes

Vega 50 Configuration

[Management](#)

[Logging](#)

[Maintenance](#)

[LAN](#)

[POTS](#)

[H.323](#)

[Dial Plan](#)

[Media Channels](#)

[Tones](#)

[Users](#)

[QoS](#)

[Advanced](#)

Dial Planner

Profiles

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	1	Vega50_IAD-8	>==>	Modify

[Delete](#) [Add](#)

Planner Groups

Del?	ID	Name	Cause	Lan	Gatekeeper	Active times	Priority	Chg?
<input type="checkbox"/>	1	LAN_Up	0	active	off	0000-2359	0	Modify
<input type="checkbox"/>	2	LAN_Down	0	inactive	off	0000-2359	0	Modify

[Delete](#) [Add](#)

Planner Whitelist Enable

Use Whitelist

[Submit](#)

Planner Whitelists

Del?	ID	Name	Number	Chg?
<input type="checkbox"/>	1	default	IF:*	Modify

[Delete](#) [Add](#)

Done Internet

Firstly, turn off the default profile:

In the **Profiles** section

➤ Select [Modify](#)

Dial Planner > Profile 1

Modify Profile

Profile ID	1
Enabled	<input checked="" type="checkbox"/>
Name	Vega50_IAD-8
Submit	

- disable (un-tick) Enabled, then
- select **Submit** and then click “[here](#)” to return

Now create a new profile and in it create a dial plan entry to handle calls being sent outbound on the LAN:

Dial Planner

Profiles

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	0	Vega50_IAD-8	====>	Modify
Delete Add					

In the **Profiles** section

- Select **Add**

Dial Planner

Profiles

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	0	Vega50_IAD-8	====>	Modify
<input type="checkbox"/>	2	1	new_profile	====>	Modify
Delete Add					

In the **Profiles** section, on Profile 2 (the new profile):

- Select [Modify](#)

Dial Planner > Profile 2

Modify Profile

Profile ID	2
Enabled	<input checked="" type="checkbox"/>
Name	new_profile
Submit	

Plans in this Profile

Del?	Plan ID	Name	Srce	Dest	Cost	Group	Chg?
<input type="checkbox"/>	1	new_plan	TEL:<..><.*>	IF:<1>,TEL:<2>	0	0	Modify
Delete Add							

➤ Set Name = Outbound_To_LAN

➤ select **Submit** and then click “[here](#)” to return

Dial Planner

Profiles						
Del?	Profile ID	Enabled	Name	Plans	Chg?	
<input type="checkbox"/>	1	0	Vega50_IAD-8	====>	Modify	
<input type="checkbox"/>	2	1	Outbound_To_LAN	====>	Modify	
Delete Add						

In the **Profiles** section, on Profile 2 (the new profile):

➤Select [Modify](#)

Plans in this Profile								
Del?	Plan ID	Name	Srce	Dest	Cost	Group	Chg?	
<input type="checkbox"/>	1	new_plan	TEL:<..><.*>	IF:<1>,TEL:<2>	0	0	Modify	
Delete Add								

In the **Plans in this Profile**, Plan ID 1:

➤Select [Modify](#)

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=142560322&frame_id=35

Vega Stream

Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

Vega 50 Configuration

Dial Planner > Profile 2 > Plan 1

Modify Plan

Plan ID	1
Profile ID	2
Name	new_plan
Source	TEL:<..><*>
Destination	IF:<1>,TEL:<2>
Cost Index	0
Group	0 - no group

Regular Expressions for Source

- . Any character
- [...] Any character within the parentheses
- [x-y] Any character in the range x-y
- [^...] Any character except those within the parentheses
- * The character before repeated zero or more times
- + The character/expression before repeated one or more times
- ? The character/expression before repeated zero or more times
- \ The character following is taken literally
- <...> Capture the sequence in parentheses and store as <n> where n is the nth occurrence of <> in the source expression

Save Log off Help Reboot System Apply Changes

Internet

- Set Name = Any_Tel_Port
- Set Source = IF:<. [^5]>
- Set Destination = IF:05, TEL:<1>
- Select **Apply** and then click “here” to return
- Select  ... to return to the **Dial Planner Profiles** section

(This takes a call from any of the telephony ports and stores the interface ID on which the call arrived in store <1>)

(This routes the call to the H.323 interface and passes the calling port's interface ID – stored in <1> - as the destination telephone number)

Now add a new profile and in it create a dial plan entry to handle calls being received inbound from the LAN:

In a similar manner to adding profile 2 add another profile, profile 3,

- Set Name = Inbound_From_LAN

Modify the first plan for Profile 3:

- Set Name = To_FXO_Ports
- Set Source = IF:05, TEL:<..><.*>
- Set Destination = IF:<1>, TEL:<2>

(This takes the two leading digits of the telephone number presented and stores them in store <1>, the remainder of the digits are stored in <2>)

(Use the 2 digits in store <1> as the interface ID to dial out from, and the digits in store <2> as the telephone number to dial)

- Select **Apply** and then click “[here](#)” to return

Note 1: The Relationship between physical ports and Interface Ids is as follows:

FXO 1 = IF:06

FXO 2 = IF:07

...

FXO 8 = IF:13

FXO 9 = IF:56

FXO 10 = IF:57

H.323 LAN = IF:05

Note 2: For calls from H.323 to the FXO lines, the gatekeeper must choose the appropriate interface on the Vega to dial out from; when the gatekeeper presents a call to the Vega the telephone number field must contain *ppttt...t* where *pp* = port number (06, 07, ... 13, or 56 or 57) and *ttt...t* is the telephone number to onward dial.

For more details on the operation of the dial planner, including the various tokens that may be used, see the section “The Dial Planner” in the Vega Primer.

6. Configure for Gatekeeper operation

- On the left hand side menu select [H.323](#)

Host Name: Vega50_IAD8
IP Address: 172.19.1.170
User Name: admin

Vega 50 Configuration

Management

Logging

Maintenance

LAN

POTS

H.323

Dial Plan

Media Channels

Tones

Users

QoS

Advanced

Current Mode: Standalone Mode

Change to Gatekeeper mode

Gatekeeper Mode

Interface ID: 05
Cost Index: 1
Maximum Calls: 10
Default Gateway: 0.0.0.0
Use Fast Start:
Accept Fast Start: no after connect after alert after proceeding
H245 After Fast Start:
Use Early H245:
Accept Early H245:
Use H245 tunnelling:
Accept H245 tunnelling:
Setup Mapping: 1
QoS profile: 0
Submit

➤ Select



➤ Select

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=9 Go Links

Vega 50 Configuration

VegaStream

Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

Management

Logging

Maintenance

LAN

POTS

H.323

Dial Plan

Media Channels

Tones

Users

QoS

Advanced

Save

Log off

Help

Reboot System

Apply Changes

Unsaved & Unapplied Changes

Current Mode: Gatekeeper

Change to Standalone Mode **Standalone Mode**

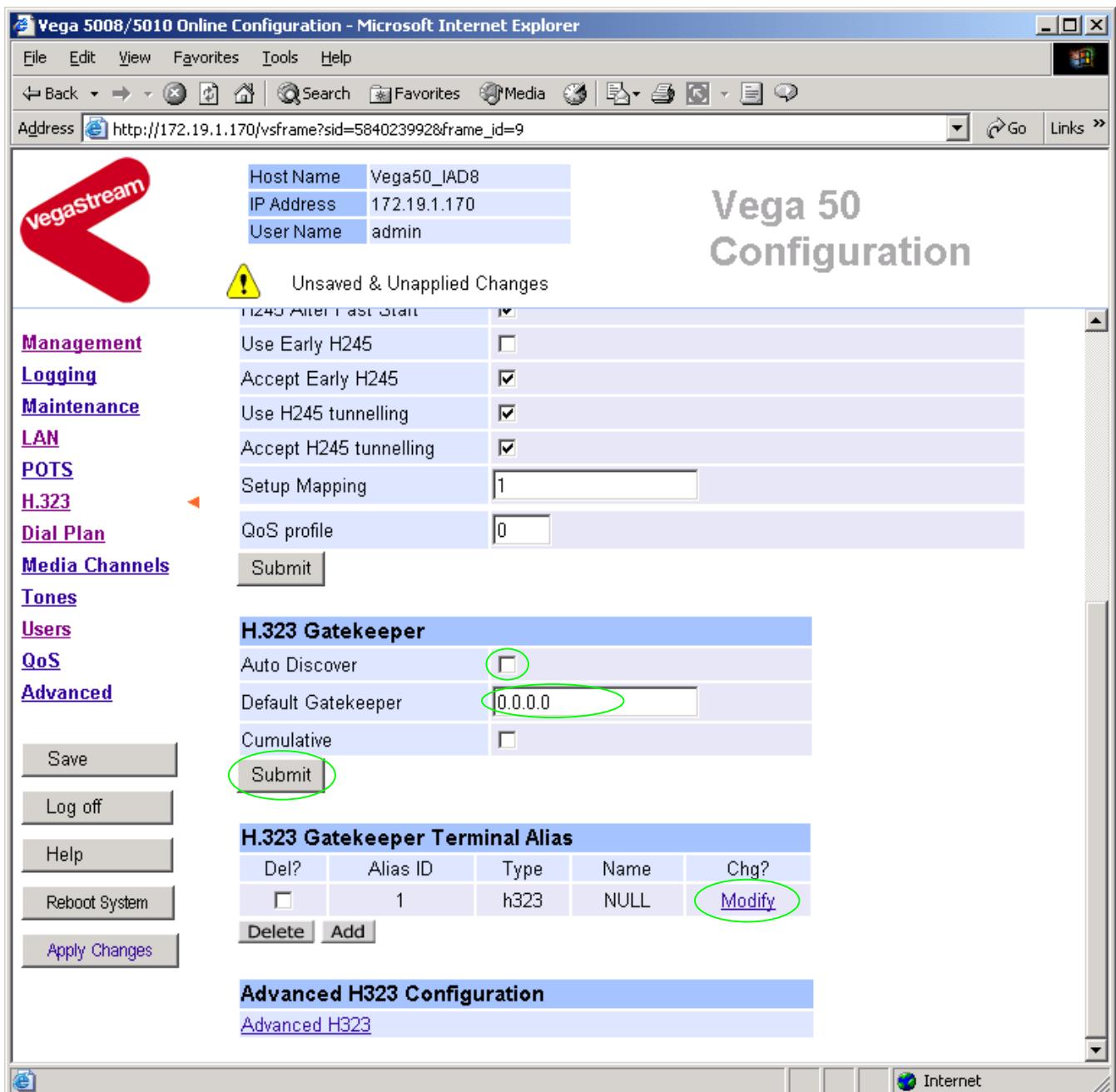
H.323 Configuration

Interface ID	05
Cost Index	1
Maximum Calls	10
Default Gateway	0.0.0.0
Use Fast Start	<input checked="" type="checkbox"/>
Accept Fast Start	<input type="radio"/> no <input type="radio"/> after connect <input checked="" type="radio"/> after alert <input type="radio"/> after proceeding
H245 After Fast Start	<input checked="" type="checkbox"/>
Use Early H245	<input type="checkbox"/>
Accept Early H245	<input checked="" type="checkbox"/>
Use H245 tunnelling	<input checked="" type="checkbox"/>
Accept H245 tunnelling	<input checked="" type="checkbox"/>
Setup Mapping	1
QoS profile	0

Submit

Internet

- Scroll to the bottom of the page



- Either configure the H.323 Gatekeeper “Default Gatekeeper” with the IP address of the Gatekeeper, or tick Auto Discover.
- select **Submit** and then click “[here](#)” to return

Set up the gatekeeper Terminal alias – this needs to match the gatekeeper’s expectations. By default it is turned off (Name=NULL), set it to, for example, alias Type=h323, Name=Vega50_10FXO.

In the H.323 Gatekeeper Terminal Alias section

- select [Modify](#) and make the changes
- select **Submit** and then click “[here](#)” to return

If more than one alias is required then select **Add** and configure as required.

7. Configure audio parameters

- On the left hand side menu select [Media Channels](#)

The screenshot shows the 'Vega 5008/5010 Online Configuration' interface in Microsoft Internet Explorer. The main title bar says 'Vega 5008/5010 Online Configuration - Microsoft Internet Explorer'. The left sidebar has a red 'vegastream' logo and a navigation menu with links like Management, Logging, Maintenance, LAN, POTS, H.323, Dial Plan, Media Channels (which is selected and highlighted in blue), Tones, Users, QoS, and Advanced. Below the menu are buttons for Save, Log off, Help, Reboot System, and Apply Changes. The main content area is titled 'Media Channels' and contains two tables under 'Codec Configuration' and 'H.245 Capabilities'. A third table for 'H.245 Capability Descriptors' is also visible. A yellow warning icon with the text 'Unsaved & Unapplied Changes' is present. The 'Vega 50 Configuration' watermark is in the top right.

Del?	H245 Cap ID	Name	Chg?
<input type="checkbox"/>	1	g7231	Modify
<input type="checkbox"/>	2	g711Alaw64k	Modify
<input type="checkbox"/>	3	g711Ulaw64k	Modify
<input type="checkbox"/>	4	t38tcp	Modify
<input type="checkbox"/>	5	t38udp	Modify

Add (highlighted with a green circle)

Del?	ID	Description	Caps	Chg?
<input type="checkbox"/>	1	voice	1,2,3	Modify
<input type="checkbox"/>	2	t38Tcp	4	Modify
<input type="checkbox"/>	3	ISDN	5	Modify

Add more codecs so that by default the Vega will handle calls with any of the codecs it supports.

In H.245 Capabilities

- Select **Add**

H.245 Capabilities			
Del?	H245 Cap ID	Name	Chg?
<input type="checkbox"/>	1	g7231	Modify
<input type="checkbox"/>	2	g711Alaw64k	Modify
<input type="checkbox"/>	3	g711Ulaw64k	Modify
<input type="checkbox"/>	4	t38tcp	Modify
<input type="checkbox"/>	5	t38udp	Modify
<input type="checkbox"/>	6	g7231	Modify

[Delete](#) [Add](#)

In H.245 Capabilities

- Select [Add](#) again

H.245 Capabilities			
Del?	H245 Cap ID	Name	Chg?
<input type="checkbox"/>	1	g7231	Modify
<input type="checkbox"/>	2	g711Alaw64k	Modify
<input type="checkbox"/>	3	g711Ulaw64k	Modify
<input type="checkbox"/>	4	t38tcp	Modify
<input type="checkbox"/>	5	t38udp	Modify
<input type="checkbox"/>	6	g7231	Modify
<input type="checkbox"/>	7	g7231	Modify

[Delete](#) [Add](#)

- Select [Modify](#) on H245 Cap ID 1

[Media Channels](#) > H.245 Capability 1

Modify Capability	
Capability ID	1
Name	<input type="text" value="g7231"/> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-top: 2px;"> g711Alaw64k g711Ulaw64k g7231 g729 g729AnnexA t38tcp t38udp </div>
Submit	

- Select required codec type – in this case g7231
- select [Submit](#) and then click “[here](#)” to return

Modify all H245 Cap ID entries until the list looks as follows:

H.245 Capabilities

Del?	H245 Cap ID	Name	Chg?
<input type="checkbox"/>	1	g7231	Modify
<input type="checkbox"/>	2	g729AnnexA	Modify
<input type="checkbox"/>	3	g729	Modify
<input type="checkbox"/>	4	g711Alaw64k	Modify
<input type="checkbox"/>	5	g711Ulaw64k	Modify
<input type="checkbox"/>	6	t38tcp	Modify
<input type="checkbox"/>	7	t38udp	Modify

[Delete](#) [Add](#)

Now update the Capability Description list that tells the Vega which of the codecs it can use.

H.245 Capability Descriptors

Del?	ID	Description	Caps	Chg?
<input type="checkbox"/>	1	voice	1,2,3	Modify
<input type="checkbox"/>	2	t38Tcp	4	Modify
<input type="checkbox"/>	3	t38Udp	5	Modify

[Delete](#) [Add](#)

Update entry 1 to select all voice codecs, and the other entries to configure them for the correct capability IDs.

For each capability:

- Select [Modify](#)
- Adjust them so that they have the capabilities as indicated below:

H.245 Capability Descriptors

Del?	ID	Description	Caps	Chg?
<input type="checkbox"/>	1	voice	1,2,3,4,5	Modify
<input type="checkbox"/>	2	t38Tcp	6	Modify
<input type="checkbox"/>	3	t38Udp	7	Modify

[Delete](#) [Add](#)

- Scroll to the bottom of the Media Channels page

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address: http://172.19.1.170/vsframe?sid=584023992&frame_id=24

Vega Stream

Host Name: Vega50_IAD8
IP Address: 172.19.1.170
User Name: admin

Vega 50 Configuration

Unsaved & Unapplied Changes

Del?	H245 Cap ID	Name	Chg?
<input type="checkbox"/>	1	g7231	Modify
<input type="checkbox"/>	2	g729AnnexA	Modify
<input type="checkbox"/>	3	g729	Modify
<input type="checkbox"/>	4	g711Alaw64k	Modify
<input type="checkbox"/>	5	g711Ulaw64k	Modify
<input type="checkbox"/>	6	t38tcp	Modify
<input type="checkbox"/>	7	t38udp	Modify

[Delete](#) [Add](#)

Management
Logging
Maintenance
LAN
POTS
H.323
Dial Plan
Media Channels ▶
Tones
Users
QoS
Advanced

[Save](#)
[Log off](#)
[Help](#)
[Reboot System](#)
[Apply Changes](#)

H.245 Capability Descriptors

Del?	ID	Description	Caps	Chg?
<input type="checkbox"/>	1	voice	1,2,3,4,5	Modify
<input type="checkbox"/>	2	t38Tcp	6	Modify
<input type="checkbox"/>	3	t38Udp	7	Modify

[Delete](#) [Add](#)

H.245 Preferred Index

Preferred Index	0 - no preference
Voice Capdesc Index	0 - no preference
Fax Capdesc Index	2 - t38Tcp

[Submit](#)

Internet

In the **H.245 Preferred Index** section:

- Set Voice Capdesc Index to: 1-voice

H.245 Preferred Index

Preferred Index	0 - no preference
Voice Capdesc Index	0 - no preference
Fax Capdesc Index	0 - no preference 1 - voice 2 - t38Tcp 3 - t38Udp
Submit	

- select [Submit](#) and then click "[here](#)" to return

This has selected all voice codecs to be offered for calls.

With Fax Capdesc Index set to "2 - t38Tcp" it has selected this codec for fax transfers. Note, it is recommended that only a single T.38 codec is offered (as configured here), because if both are offered negotiations do not always complete correctly.

8. Configure POTS parameters

For FXO ports it is necessary to configure the Vega to recognise the cadence of the ring tone that it will receive to indicate that there is a new call for it, also the impedance of the FXO interface.

Configuring Ring Cadence Detection for FXO ports

The Vega FXO ports are alerted to new telephony calls arriving by the PBX or CO switch presenting ringing voltage to the Vega. The Vega needs to have parameters adjusted to configure the detector for the ring tone(s) it is going to be presented with.

Now configure the FXO ring cadence detector so that it detects incoming ring cadences correctly:

- On the left hand side menu select [POTS](#)

The screenshot shows the Vega 5008/5010 Online Configuration interface in Microsoft Internet Explorer. The title bar reads "Vega 5008/5010 Online Configuration - Microsoft Internet Explorer". The left sidebar contains a navigation menu with links: Management, Logging, Maintenance, LAN, POTS (which is currently selected), H.323, Dial Plan, Media Channels, Tones, Users, QoS, and Advanced. Below the menu are buttons for Save, Log off, Help, Reboot System, and Apply Changes. The main content area has a header "Vega 50 Configuration". It displays "POTS Configuration" and "Port Configuration" tables. The "Port Configuration" table lists 10 ports with columns: Port ID, Enabled, mt, Caller ID, Layer 1, Hardware profile, Interfaces, and Chg?. All ports are set to 1. The "Advanced POTS Configuration" section at the bottom has a link "Advanced POTS" circled in green. A warning message "Unsaved & Unapplied Changes" is displayed with a yellow exclamation mark icon.

Port ID	Enabled	mt	Caller ID	Layer 1	Hardware profile	Interfaces	Chg?
1	1	0	on	g711Alaw64k	1	====>	Modify
2	1	0	on	g711Alaw64k	1	====>	Modify
3	1	0	on	g711Alaw64k	1	====>	Modify
4	1	0	on	g711Alaw64k	1	====>	Modify
5	1	0	on	g711Alaw64k	1	====>	Modify
6	1	0	on	g711Alaw64k	1	====>	Modify
7	1	0	on	g711Alaw64k	1	====>	Modify
8	1	0	on	g711Alaw64k	1	====>	Modify
9	1	0	on	g711Alaw64k	1	====>	Modify
10	1	0	on	g711Alaw64k	1	====>	Modify

- Select [Advanced POTS](#)
- Scroll down to the **FXO Configuration** section

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=32

Vega 50 Configuration

Management

Logging

Maintenance

LAN

POTS ◀

H.323

Dial Plan

Media Channels

Tones

Users

QoS

Advanced

VegaStream

Host Name Vega50_JAD8
IP Address 172.19.1.170
User Name admin

⚠ Unsaved & Unapplied Changes

FXS Configuration

Ring Generation Parameters

Del?	ID	Name	Fre-quency	Repeat	Ring1 On	Ring1 Off	Ring2 On	Ring2 Off	Ring3 On	Ring3 Off	Chg?
<input type="checkbox"/>	1	External	50	1	400	200	400	2000	0	500	Modify
<input type="checkbox"/>	2	Internal	50	0	2000	4000	2000	4000	0	500	Modify
<input type="checkbox"/>	3	bellcore-r1	20	1	400	400	900	400	400	3500	Modify

[Delete](#) [Add](#)

Hardware Profile Configuration

Profile ID	Hookflash Debounce Time	Loop Current Break	Loop Current Delay	Loop Current Time	Hookflash Time	Line Reversal	Impedance	Chg?
1	70	off	9000	300	200	0	default	Modify

[Delete](#) [Add](#)

FXO Configuration

Hardware Profile Configuration

Profile ID	Loop Current Detect	Loop Current Time	Hookflash Time	Early Line Seize	Early Line Seize Time	Line Reversal Detect	Force Disconnects	DTMF Holdoff Time	Ringback Present	Impedance	Port Release Delay	Port Not Released Cause	More	Chg?
1	0	300	200	0	30	0	1	200	1	CTR21	0	34	====>	Modify

[Delete](#) [Add](#)

Save

Log off

Help

Reboot System

Apply Changes

Internet

- In the FXO Configuration **Hardware Profile Configuration** section select [Modify](#)
- Scroll down to the bottom of the page, to the **FXO ring-detection parameters** section

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://172.19.1.170/vsframe?sid=584023992&frame_id=32

Vega 50 Configuration

vegaStream

Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

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Early Line Seize Timeout (s)	30
Line Reversal Detection	<input type="checkbox"/>
Line Reversal Debounce Time (ms)	50
Force Disconnects	<input checked="" type="checkbox"/>
DTMF Hold-off Time (ms)	200
Line Reversal Sample Delay (ms)	50
Ringback Present	<input checked="" type="checkbox"/>
Impedance	CTR21
Port Release Delay (s)	0
Port Not Released Cause Code	34

Submit

Save

Log off

Help

Reboot System

Apply Changes

FXO ring-detection parameters

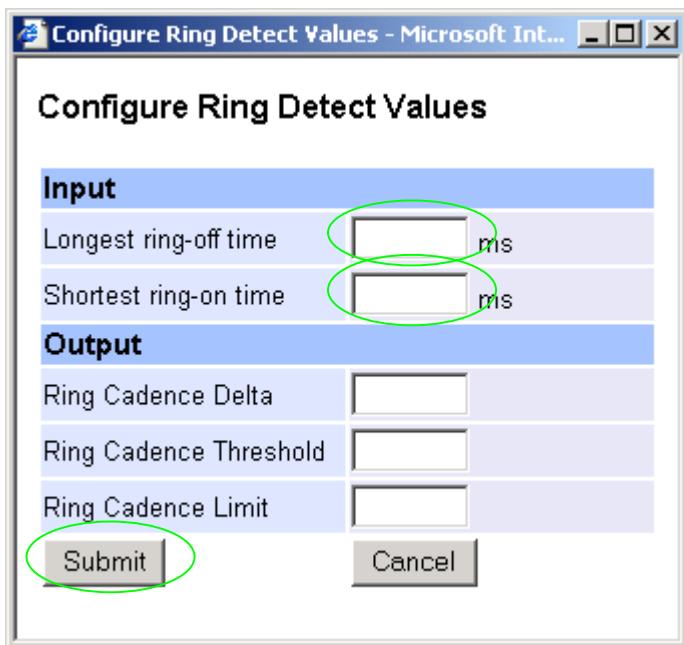
Ring Cadence Delta	14
Ring Cadence Threshold	56
Ring Cadence Limit	200

Submit

Configure Ring Detect Values

Internet

➤ Select **Configure Ring Detect Values**



- Set Longest ring-off time = length of longest silence in the incoming ringing voltage cadence
- Set Shortest ring-on time = length of shortest ring in the incoming ringing voltage cadence
- select

Table 1 lists the standard values to use in the UK and USA.

Table 1. Ring tones parameters

Ring tone values	Country	UK	USA
	Longest silence	2000ms	4000ms
	Shortest ring	400ms	2000ms

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=32

Vega 50 Configuration

vegaStream

Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

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Early Line Seize Timeout (s)	30
Line Reversal Detection	<input type="checkbox"/>
Line Reversal Debounce Time (ms)	50
Force Disconnects	<input checked="" type="checkbox"/>
DTMF Hold-off Time (ms)	200
Line Reversal Sample Delay (ms)	50
Ringback Present	<input checked="" type="checkbox"/>
Impedance	CTR21
Port Release Delay (s)	0
Port Not Released Cause Code	34

Submit

FXO ring-detection parameters

Ring Cadence Delta	12
Ring Cadence Threshold	320
Ring Cadence Limit	400

Submit (circled in green) **Configure Ring Detect Values**



Save

Log off

Help

Reboot System

Apply Changes

Visit the VegaStream website

Internet

- select **Submit** and then click "[here](#)" to return

Now configure the interface impedance

- On the left hand side menu select [POTS](#)
- Select [Advanced POTS](#)
- Scroll down to the **FXO Configuration** section

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=32

Vega 50 Configuration

FXS Configuration

Ring Generation Parameters

Del?	ID	Name	Frequency	Repeat	Ring1 On	Ring1 Off	Ring2 On	Ring2 Off	Ring3 On	Ring3 Off	Chg?
<input type="checkbox"/>	1	External	50	1	400	200	400	2000	0	500	Modify
<input type="checkbox"/>	2	Internal	50	0	2000	4000	2000	4000	0	500	Modify
<input type="checkbox"/>	3	bellcore-r1	20	1	400	400	900	400	400	3500	Modify

[Delete](#) [Add](#)

Hardware Profile Configuration

Profile ID	Hookflash Debounce Time	Loop Current Break	Loop Current Delay	Loop Current Time	Hookflash Time	Line Reversal	Impedance	Chg?
1	70	off	9000	300	200	0	default	Modify

[Delete](#) [Add](#)

Save

Log off

Help

Reboot System

[Apply Changes](#)

FXO Configuration

Hardware Profile Configuration

Profile ID	Loop Current Detect	Loop Current Time	Hookflash Time	Early Line Seize	Early Line Seize Time	Line Reversal Detect	Force Disconnects	DTMF Holdoff Time	Ringback Present	Impedance	Port Release Delay	Port Not Released Cause	More	Chg?
1	0	300	200	0	30	0	1	200	1	CTR21	0	34	====>	Modify

[Delete](#) [Add](#)

[Done](#) [Internet](#)

- In the FXO Configuration **Hardware Profile Configuration** section select [Modify](#)

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=32

Vega 50 Configuration

vegastream

Host Name Vega50_IAD8
IP Address 172.19.1.170
User Name admin

⚠️ Unsaved & Unapplied Changes

POTS > Advanced > FXO > 1

FXO parameters

Loop Current Detect	<input type="checkbox"/>
Loop Current Time	300
Hook Flash Time (ms)	200
Early Line Seize	<input type="checkbox"/>
Early Line Seize Time	30
Early Line Seize Timeout (s)	30
Line Reversal Detection	<input type="checkbox"/>
Line Reversal Debounce Time (ms)	50
Force Disconnects	<input checked="" type="checkbox"/>
DTMF Hold-off Time (ms)	200
Line Reversal Sample Delay (ms)	50
Ringback Present	<input checked="" type="checkbox"/>
Impedance	CTR21
Port Release Delay (s)	0
Port Not Released Cause Code	34

Save Log off Help Reboot System Apply Changes Submit Done

- In the **FXO parameters** section, select the appropriate Impedance for the lines that the Vega FXO ports are to be connected to:
 - CTR21 (typically Europe)
 - 600R (typically US)
 - 900R
 - default
- select **Submit** and then click “[here](#)” to return

9. Configure pointer to CD ROM documentation

- On the left hand side menu select [LAN](#)
- Scroll to the bottom of the screen

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

Address: http://172.19.1.170/vsframe?sid=584023992&frame_id=1

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Host Name: Vega50_IAD8
IP Address: 172.19.1.170
User Name: admin

Unsaved & Unapplied Changes

Subnet Mask:	255.255.254.0	
Domain Name Server:	0.0.0.0	Use DHCP: <input checked="" type="checkbox"/>
Default Gateway:	136.170.208.1	Use DHCP: <input checked="" type="checkbox"/>
TFTP Server:	172.19.1.107	Use DHCP: <input checked="" type="checkbox"/>
Network Time Server:	0.0.0.0	Use DHCP: <input checked="" type="checkbox"/>
FTP Server:	136.170.209.118	
NTP Offset (hhmm):	0000	
NTP Poll Interval:	0	

Physical Layer Configuration

Full Duplex:	<input type="checkbox"/>
Ethernet Type:	10baseT & 100baseTX
QoS profile:	1

Lan Hosts

ID	Name	IP	Chg?
1	loopback	127.0.0.1	Modify

Advanced LAN Configuration

[Advanced LAN](#)

Save Log off Help Reboot System Apply Changes

- Select [Advanced LAN](#)

Vega 5008/5010 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://172.19.1.170/vsframe?sid=584023992&frame_id=30 Go Links



Host Name	Vega50_IAD8
IP Address	172.19.1.170
User Name	admin

Vega 50 Configuration

Management **LAN** > Advanced LAN Configuration

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File Transfer Method TFTP FTP

RTP Checksum

Submit

Path of Help files on server

Path or URL (This field is circled in green)

Note

The default server is TFTP server. e.g.
Help/VoIP/usrguide/framedefn.htm
or tftp://Help/VoIP/usrguide/framedefn.htm

To specify a web server for help files, please use a full URL, e.g.
<http://1.2.3.4/Help/VoIP/usrguide/framedefn.htm>

Save **Log off** **Help** **Reboot System** **Submit** **Apply Changes**

Done

To configure for operation using the CD in the local PC CD-ROM drive,

- Set Path or URL = D:/Content/help/v50_10fxo_h_R5.htm
- ... N.B. use forward slashes "/" not back slashes "\".

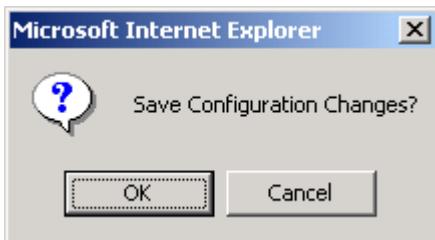
(Substitute appropriate drive letter if D: is not the CD-ROM)

- select **Submit** and then click "[here](#)" to return

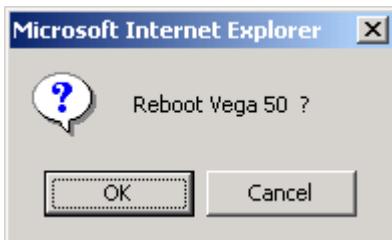
10. Save Changes

The changes to the configuration must be saved and activated. This is carried out as follows:

- Select



- Select and after the configuration has been saved click "[here](#)" to return
- Select



- Select

The Vega will reboot and once back on-line, it will be ready to take its first call.

11. Archive Vega Configuration

Once configured it is recommended that the configuration is archived to an external server.

To do this check that the tftp address is configured to point to a tftp server (in the [LAN](#) page), then on the left hand side menu select [Advanced](#), and scroll to the CLI Command section:

CLI Command

- in the text entry box type “PUT tftp:initial_cfg.txt”. Select

This will send all the configuration parameters to the tftp server and save them as the file “initial_cfg.txt”. (Note: you may want to choose a unique name rather than “initial_cfg.txt”, especially if you are configuring more than 1 unit).

The Vega configuration can be archived to an ftp server instead of a tftp server by configuring the ftp server address in the [LAN](#) page and then typing the CLI command “PUT FTP:initial_cfg.txt”. (Again a unique name can be used in place of “initial_cfg.txt”)

If the ftp server requires a login username and password configure the following:

- set _advanced.lan.ftp.anonymous_login=0
- set _advanced.lan.ftp.username=<ftp username>
- set _advanced.lan.ftp._password-<ftp password>

12. Technical Support

Support information can be found on the VegaStream Support web site www.VegaAssist.com

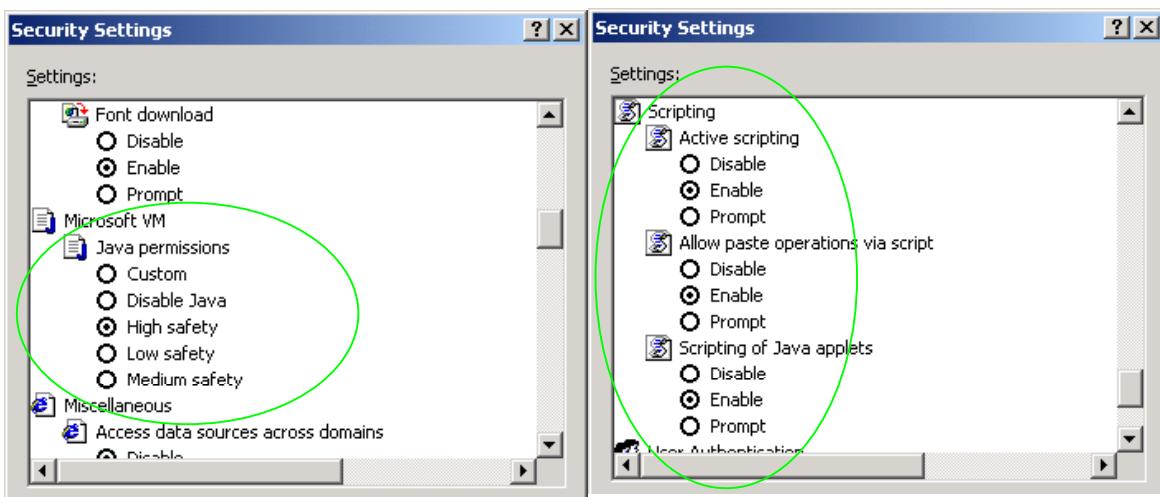
If you require help from VegaStream support personnel, please use the serial interface or telnet into the unit, log in and then type:

- show support
- sip monitor on
- log display on

Carry out the interaction you want explained, then copy the information provided by the Vega and e-mail it to support@VegaStream.com together with your question.

Notes:

1. If the screens do not appear as indicated, check that Java is enabled on your web browser (Tools>internet options>Security, select internet and custom level and configure Microsoft VM Java permissions and Scripting parameters as indicated below).



2. Where there are multiple sections – each with a **Submit** button – entries must be made to one section at a time, and those entries confirmed by the **Submit** button before the next section is altered. Each **Submit** button only confirms entries for its own section. Any changes in other sections will be discarded when the **Submit** is pressed.
3. Loss of audio mid call – consider reducing the selection of available codecs (see section 1.5). Some equipment, when presented with multiple codecs, may try and switch codec mid-call. Vegas do not support changing codec type mid-call.
4. Mismatched audio codecs. Use SIP monitor on to identify this. If the codecs of the endpoints are mismatched this will be reported as error 606 “No matching media”. To rectify, enable the appropriate audio codec (see section 1.5).
5. Outbound calls from the Vega send the INVITE to “Default Proxy Host Name/IP” with the request line: “INVITE sip: <dest TEL:>@Default Proxy Host Name/IP”.

Contact Details

Email: support@vegastream.com
Web: <http://www.vegastream.com>

EMEA Office

VegaStream Limited
Berkshire Court
Western Road
Bracknell
Berks RG12 1RE
UK

+44 (0) 1344 784900

USA Office

VegaStream Inc.
3701 FAU Boulevard
Suite 200
Boca Raton
FL 33431
USA

+1 561 995 2300