

# Initial configuration

## Vega 50 FXO (H.323)

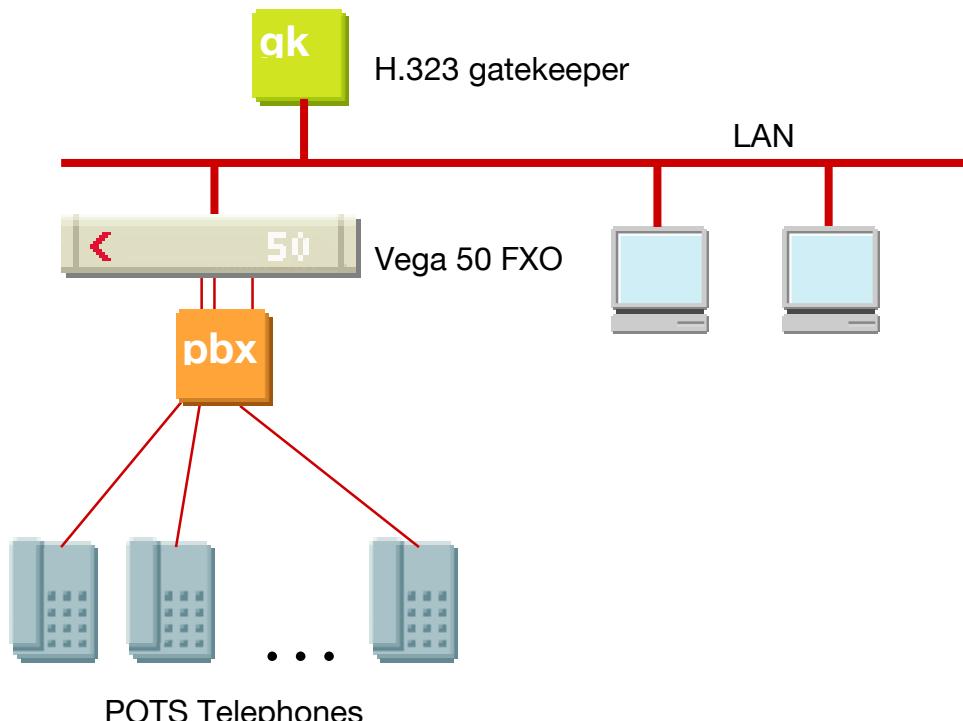
### Gatekeeper mode – R5.1



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

The instructions below will configure the Vega 50 FXO (connected to 8 extension ports of a PBX or a CO Switch) as follows:

- Calls presented to the Vega from the PBX or CO switch will be routed using the gatekeeper – the dialled number field will contain the port ID on which the call was received.
- Calls received by the Vega on the H.323 interface will be routed to the telephony interface. The physical interface over which the call is routed will be defined by the leading two digits of the phone number (06 .. 13). The digits following the leading two digits will be used as the digits to dial.



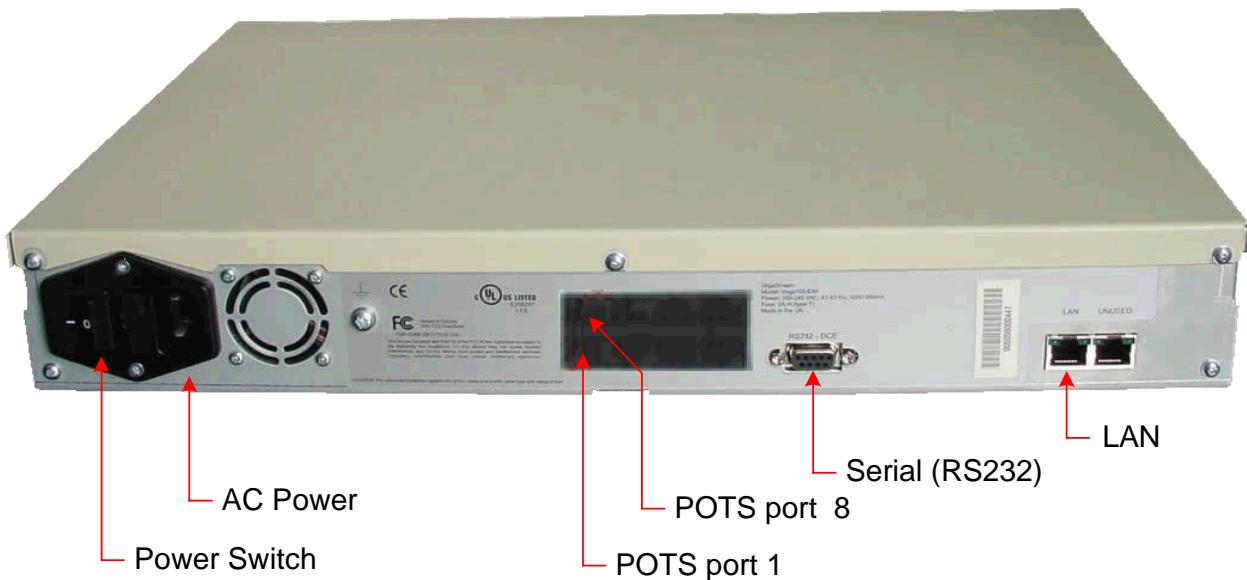
The configuration process is broken down into 11 stages as follows:

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

Please also see:

- 12 Technical Support

# 1. Connect your Vega to LAN, Telephone and Power



***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 the PBX or CO switch to the 8 POTS ports. Note the port numbers (interface IDs) increase in an anticlockwise direction from the bottom left corner. Interface IDs are as follows:

13	12	11	10
06	07	08	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 the Vega has an LCD display, or you know the IP address served to the Vega, skip this section and start at [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

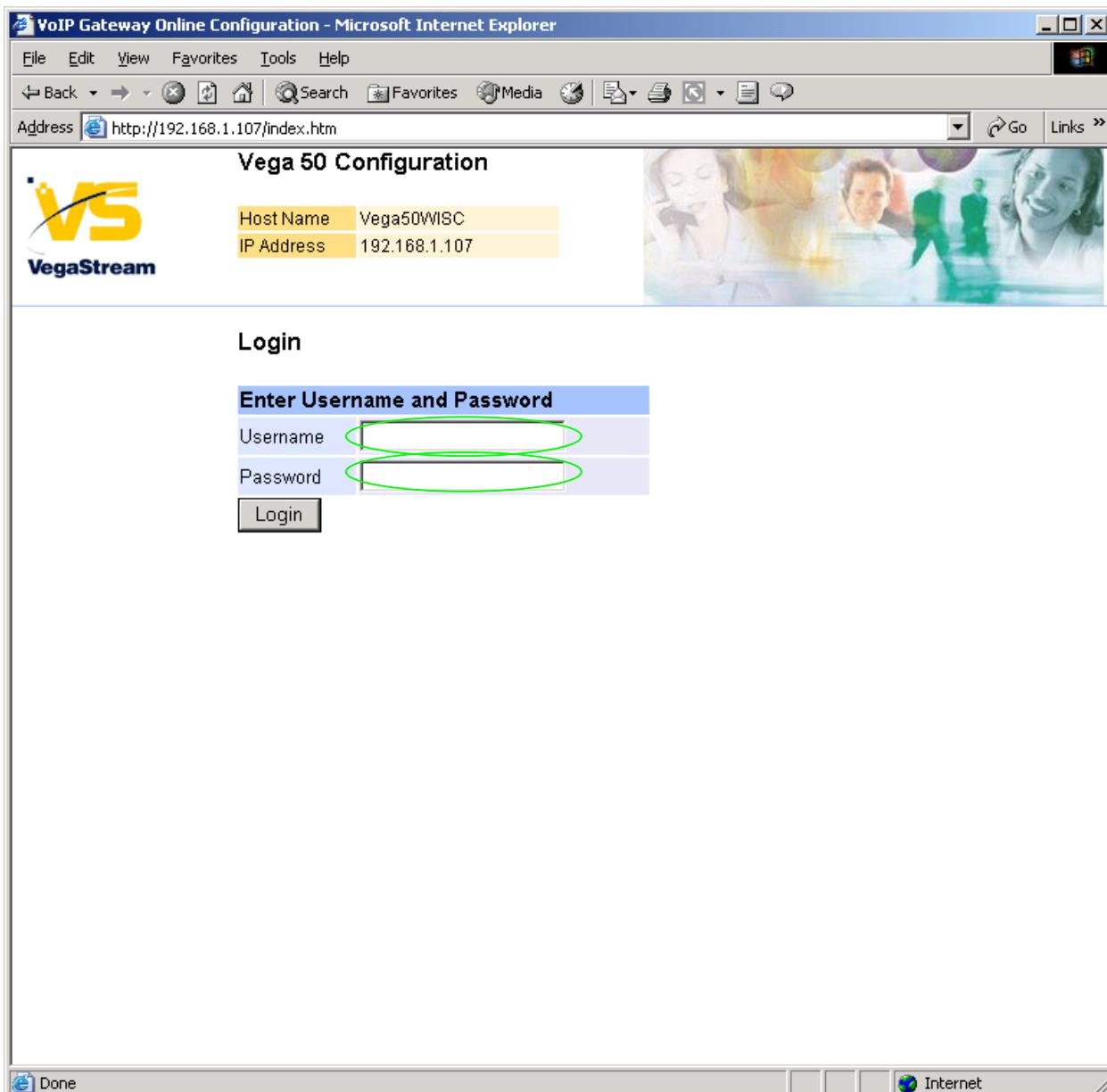
### 3. Configure password and login timeout

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:



Enter the default Username and Password

- Username: admin
- Password: admin
- Select

The screenshot shows the 'Vega 50 Configuration' interface. At the top left is the VegaStream logo. On the right is a decorative graphic of three people in business attire. The main menu on the left includes links for Management, Logging, Maintenance, LAN, POTS, H.323, Dial Plan, Media Channels, Tones, **Users** (which is circled in red), QoS, and Advanced. Below the menu are buttons for Save, Log off, Help, and Reboot System. The central area has a blue header 'System Management'. Underneath are several sections: 'Quick Configuration Wizard' (with a 'Start Wizard' button), 'System Time' (with fields for Set Time and Set Date, and radio buttons for Synchronise Time and Date with PC or NTP server), 'Call Reports' (with links to Show Calls and Show Trace), 'System Logs' (with links to Show Event Log and Show Billing Log), and 'Call Control' (with a dropdown menu for 'All further calls are' set to 'Unblocked' and a 'Submit' button). At the bottom left is a 'Done' button.

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

**Recommended:** Change the password

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

**Optional:** Change the timeout<sup>1</sup> – default is 240 seconds; can extend to 7200 seconds (2hrs)

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

---

<sup>1</sup> 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 browser session.

## 4. Check and configure LAN settings and Host name

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

Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=2063688227&frame\_id=1

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

⚠️ Unsaved Configuration Changes

**Management** **Local Area Network (changed)**

Warning: Changing these parameters may prevent remote access.

**Current Mode: Standard Ethernet Mode**

Change to VLAN (8021q) Ethernet mode

**LAN Configuration**

Use DHCP	<input checked="" type="checkbox"/>	
Host Name	Vega50WISC	
IP Address	DHCP defined	
Subnet Mask	DHCP defined	
Domain Name Server	DHCP defined	Use DHCP <input checked="" type="checkbox"/>
Default Gateway	DHCP defined	Use DHCP <input checked="" type="checkbox"/>
TFTP Server	DHCP defined	Use DHCP <input checked="" type="checkbox"/>
Network Time Server	DHCP defined	Use DHCP <input checked="" type="checkbox"/>
FTP Server	0.0.0.0	
NTP Offset (hhmm)	0000	
NTP Poll Interval	0	

**Physical Layer Configuration**

Full Duplex

Save Log off Help Reboot System

**Optional:** If there are any LAN values that need to be set up (e.g. NTP server or tftp server) set them up now, then

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

## 5. Select Gatekeeper mode

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

Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=2063688227&frame\_id=9

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

⚠️ Unsaved Configuration Changes

**Management**

**H.323**

**Current Mode: Standalone Mode**

Change to Gatekeeper mode **Gatekeeper Mode**

**H.323 LAN Configuration**

Interface ID	05
Cost Index	1
Maximum Calls	8
Default Gateway	0.0.0.0
Use Fast Start	<input checked="" type="checkbox"/>
Accept Fast Start	<input type="radio"/> no <input checked="" 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

Save Log off Help Reboot System

Done Internet

➤ Select **Gatekeeper Mode**



➤ Select **OK**

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=9

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**VS VegaStream**

**Unsaved & Unapplied Changes**

**H.323**

**Current Mode: Gatekeeper**

Change to Standalone Mode Standalone Mode

**H.323 LAN Configuration**

Interface ID	05
Cost Index	1
Maximum Calls	8
Default Gateway	0.0.0.0
Use Fast Start	<input checked="" type="checkbox"/>
Accept Fast Start	<input type="radio"/> no <input checked="" 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

Save Log off Help Reboot System Apply Changes Submit

Done Internet

➤ Scroll to the bottom of the page

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=9

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**H.245 After Fast Start**

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

**Unsaved & Unapplied Changes**

**H.323 Gatekeeper**

Auto Discover  **Default Gatekeeper**  Cumulative

**Submit**

**H.323 Gatekeeper Terminal Alias**

Del?	Alias ID	Type	Name	Chg?
<input type="checkbox"/>	1	h323	NULL	<a href="#">Modify</a>

**Delete** **Add**

**Advanced H323 Configuration**

[Advanced H323](#)

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

**Done** **Internet**

- 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

Check gatekeeper Terminal alias – this needs to match the gatekeeper’s expectations. By default it is set to an H.323 type alias “Vega50”. If a different alias is required select **Modify** and make the appropriate changes

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

## 6. Configure the Dial Plan

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

The screenshot shows the Vega 50 FXO/FX5 configuration interface. The main content area is titled 'Vega 50 Configuration'. On the left, a sidebar lists various management options. The 'Dial Plan' option is selected and highlighted. The main panel shows the 'Dial Planner' configuration. Under 'Profiles', there is a table with one row. The 'Chg?' column for the first row has a blue 'Modify' link, which is circled in red. Under 'Planner Groups', there is another table with one row. At the bottom, there are sections for 'Planner Whitelist Enable' (with a checked checkbox) and 'Planner Whitelists' (with a table showing one entry). A status bar at the bottom right indicates an 'Internet' connection.

Firstly, turn off the default profile:

In the **Profiles** section, Profile ID 1

- Select [Modify](#)

## Profile

Modify Profile	
Profile ID	1
Enabled	<input checked="" type="checkbox"/>
Name	Vega50_default
<input type="button" value="Apply"/>	

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

**Vega 50 FXO/FXS Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back → Stop Home Search Favorites Media Stop Print Find Go Links

Address: http://192.168.1.107/vsframe?sid=493945719&frame\_id=35

**Vega 50 Configuration**

Host Name: Vega50WISC  
IP Address: 192.168.1.107  
User Name: admin

**⚠ Unsaved & Unapplied Changes**

**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	0	Vega50_default	==>	<a href="#">Modify</a>
<input type="button" value="Delete"/> <input type="button" value="Add"/>					

**Planner Groups**

Del?	ID	Name	Cause	Lan	Gatekeeper	Active times	Priority	Chg?
<input type="checkbox"/>	1	Default	0	off	off	0000-2359	0	<a href="#">Modify</a>
<input type="button" value="Delete"/> <input type="button" value="Add"/>								

**Planner Whitelist Enable**

Use Whitelist	<input type="checkbox"/>
<input type="button" value="Submit"/>	

**Planner Whitelists**

Del?	ID	Name	Number	Chg?
<input type="checkbox"/>	1	default	IF:.*	<a href="#">Modify</a>
<input type="button" value="Delete"/> <input type="button" value="Add"/>				

Now create a new profile and in it create a dial plan entry to handle calls being sent from the PBX / CO switch to the LAN:

In the **Profiles** section

- Select

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Links Go

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=35

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

⚠️ Unsaved & Unapplied Changes

**Management** **Dial Planner**

**Profiles**

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	0	Vega50_default	====>	<a href="#">Modify</a>
<input type="checkbox"/>	2	1	new_profile	====>	<a href="#">Modify</a>

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

**Planner Groups**

Del?	ID	Name	Cause	Lan	Gatekeeper	Active times	Priority	Chg?
<input type="checkbox"/>	1	Default	0	off	off	0000-2359	0	<a href="#">Modify</a>

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

**Planner Whitelist Enable**

Use Whitelist

[Submit](#)

**Planner Whitelists**

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

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

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

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

- Select [Modify](#)

### Profile

**Modify Profile**

Profile ID	2
Enabled	<input checked="" type="checkbox"/>
Name	<input type="text" value="new_profile"/>
<a href="#">Apply</a>	

- Set Name = Outbound\_To\_LAN
- select [Submit](#) and then click “[here](#)” to return

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Links Go

Address http://192.168.1.107/vsframe?sid=-493945719&frame\_id=35

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**VegaStream**

**Dial Planner**

**Profiles**

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	0	Vega50_default	====>	<a href="#">Modify</a>
<input type="checkbox"/>	2	1	Outbound_To_LAN	====>	<a href="#">Modify</a>

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

**Planner Groups**

Del?	ID	Name	Cause	Lan	Gatekeeper	Active times	Priority	Chg?
<input type="checkbox"/>	1	Default	0	off	off	0000-2359	0	<a href="#">Modify</a>

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

**Planner Whitelist Enable**

Use Whitelist

[Submit](#)

**Planner Whitelists**

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

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

[Save](#)

[Log off](#)

[Help](#)

[Reboot System](#)

[Apply Changes](#)

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

In the **Profiles** section for Profile 2 (Outbound\_To\_LAN):

- Select [Modify](#)

### [Dial Planner > Profile 2](#)

**Modify Profile**

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

[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	<a href="#">Modify</a>

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

In the **Plans in this Profile** section for Plan ID 1:

- Select [Modify](#)

The screenshot shows the Vega 50 Configuration interface in Microsoft Internet Explorer. The title bar reads "Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer". The address bar shows the URL "http://192.168.1.107/vsframe?sid=-493945719&frame\_id=35". The main content area displays the "Vega 50 Configuration" page. On the left, there is a sidebar with links: Management, Logging, Maintenance, LAN, POTS, H.323, Dial Plan (highlighted in red), Media Channels, Tones, Users, QoS, and Advanced. The "Dial Planner > Profile 2 > Plan 1" section is currently active. A "Modify Plan" dialog is open, showing the following fields:

Plan ID	1
Profile ID	2
Name	<input type="text" value="new_plan"/>
Source	<input type="text" value="TEL:&lt;..&gt;&lt;*&gt;"/>
Destination	<input type="text" value="IF:&lt;1&gt;,TEL:&lt;2&gt;"/>
Cost Index	<input type="text" value="0"/>
Group	<input type="button" value="0 - no group"/>

Below the dialog, a "Regular Expressions for Source" table is displayed:

.	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

At the bottom of the dialog, there are "Apply" and "Generate Prefix Match" buttons. The "Apply" button is circled in green.

- Set Name = To\_LAN
- Set Source = IF:<. [^5]>
- Set Destination = IF:05 , TEL:<1>
- select [Apply](#) and then click "[here](#)" to return

*(This takes a call from any of the 8 telephony ports and stores the interface ID on which the call arrived in store <1>)*

*(This routes the call to IF:05 (the LAN) and passes the interface ID – stored in <1> – as the destination telephone number)*

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

Now create 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 ID 3,

- Set Name = Inbound\_from\_LAN

Modify the first plan for Profile 3:

- Set Name = From\_LAN
- Set Source = IF:05, TEL:< . . >< . \* >

*(This takes the two leading digits of the telephone number presented and stores them in <1>. The remainder of the dialled digits are then stored in <2>)*

- Set Destination = IF:<1>, TEL:<2> *(Use the 2 digits in store <1> as the interface ID to dial out from and the digits in <2> as the telephone number to dial)*
  
- select **Apply** and then click “[here](#)” to return

**Note:** *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 pp ttt...t where pp = port number to dial from (06 to 13) and ttt...t is the telephone number to 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.**

## 7. Configure audio parameters

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

The screenshot shows the Vega 50 FXO/FX5 Online Configuration interface in Microsoft Internet Explorer. The main title bar reads "Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer". The address bar shows the URL "http://192.168.1.107/vsframe?sid=-493945719&frame\_id=24". The left sidebar contains navigation links: Management, Logging, Maintenance, LAN, POTS, H.323, Dial Plan, Media Channels (selected), Tones, Users, QoS, and Advanced. Under Media Channels, there are buttons for Save, Log off, Help, and Reboot System. The main content area is titled "Vega 50 Configuration" and displays host name, IP address, and user name. A warning message "Unsaved Configuration Changes" is shown with a yellow exclamation mark icon. The "Media Channels" section is expanded, showing "Codec Configuration" with options like g729AnnexA, g729, g711Alaw64k, g711Ulaw64k, g7231, and T38. Below it is the "H.245 Capabilities" table:

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

At the bottom of this table is a "Delete" button and an "Add" button, with the "Add" button circled in green. The "H.245 Capability Descriptors" table follows:

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

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	<a href="#">Modify</a>
<input type="checkbox"/>	2	g711Alaw64k	<a href="#">Modify</a>
<input type="checkbox"/>	3	g711Ulaw64k	<a href="#">Modify</a>
<input type="checkbox"/>	4	t38tcp	<a href="#">Modify</a>
<input type="checkbox"/>	5	t38udp	<a href="#">Modify</a>
<input type="checkbox"/>	6	g7231	<a href="#">Modify</a>

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

### In H.245 Capabilities

- Select [Add](#) again

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

[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: 5px; width: 150px;">         g711Alaw64k          g711Ulaw64k  <b>g7231</b>          g729          g729AnnexA          t38tcp          t38udp       </div>
<a href="#">Submit</a>	

- 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	<a href="#">Modify</a>
<input type="checkbox"/>	2	g729AnnexA	<a href="#">Modify</a>
<input type="checkbox"/>	3	g729	<a href="#">Modify</a>
<input type="checkbox"/>	4	g711Alaw64k	<a href="#">Modify</a>
<input type="checkbox"/>	5	g711Ulaw64k	<a href="#">Modify</a>
<input type="checkbox"/>	6	t38tcp	<a href="#">Modify</a>
<input type="checkbox"/>	7	t38udp	<a href="#">Modify</a>

[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	<a href="#">Modify</a>
<input type="checkbox"/>	2	t38Tcp	4	<a href="#">Modify</a>
<input type="checkbox"/>	3	t38Udp	5	<a href="#">Modify</a>

[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	<a href="#">Modify</a>
<input type="checkbox"/>	2	t38Tcp	6	<a href="#">Modify</a>
<input type="checkbox"/>	3	t38Udp	7	<a href="#">Modify</a>

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

- Scroll to the bottom of the Media Channels page

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=24

**Vega 50 Configuration**

**VegaStream**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**Unsaved & Unapplied Changes**

**Management**

**Logging**

**Maintenance**

**LAN**

**POTS**

**H.323**

**Dial Plan**

**Media Channels** ▶

**Tones**

**Users**

**QoS**

**Advanced**

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

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

**H.245 Capability Descriptors**

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

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

**H.245 Preferred Index**

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

[Submit](#)

Save Log off Help Reboot System Apply Changes

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
<a href="#">Submit</a>	

- 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

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

The screenshot shows the Vega 50 FXO/FX5 Online Configuration interface in Microsoft Internet Explorer. The title bar reads "Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer". The left sidebar contains navigation links: Management, Logging, Maintenance, LAN, POTS (which is selected), H.323, Dial Plan, Media Channels, Tones, Users, QoS, and Advanced. Below these are buttons for Save, Log off, Help, Reboot System, and Apply Changes. The main content area is titled "Vega 50 Configuration" and shows host name, IP address, and user name. A warning message "Unsaved & Unapplied Changes" is displayed. The "POTS Configuration" section is active, showing DTMF configuration (Termination Char: \*, Dial Timeout: 10, Caller ID Type: off) and POTS identities (User Name Prefix: NULL, User Number Prefix: NULL, User Name Suffix: vega1, User Number Suffix: 01, Authentication User Name Prefix: NULL, Authentication User Number Prefix: NULL, Authentication User Name Suffix: vega1, Authentication User Number Suffix: 01). A "Submit" button is present at the bottom of each form.

- Scroll down to the bottom of the page

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=5

**Vega 50 Configuration**

**VegaStream**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**Unsaved & Unapplied Changes**

<b>Management</b>	User Number Suffix	01
<b>Logging</b>	Authentication User Name Prefix	NULL
<b>Maintenance</b>	Authentication User Number Prefix	NULL
<b>LAN</b>	Authentication User Name Suffix	vega1
<b>POTS</b>	Authentication User Number Suffix	01
<b>H.323</b>		
<b>Dial Plan</b>		
<b>Media Channels</b>		
<b>Tones</b>		
<b>Users</b>		
<b>QoS</b>		
<b>Advanced</b>		

**Submit**

**QSLAC Codec Configuration**

QSL ID	Enabled	Layer 1	Caller ID	Groups	Chg?
1	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
2	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
3	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
4	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
5	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
6	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
7	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
8	1	g711Alaw64k	on	====>	<a href="#">Modify</a>

**Delete** **Add**

**Advanced POTS Configuration**

[Advanced POTS](#)

**Done** **Internet**

For QSL ID 1 in the **QSLACK Codec Configuration** section:

- Select [Modify](#)

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=5

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**VegaStream**

**POTS > QSLAC 1**

**Modify QSL**

QSL ID	1
Enabled	<input checked="" type="checkbox"/>
Layer 1	g711Alaw64k
Caller ID	on
NT	<input type="checkbox"/>

**Groups in this QSL**

Group ID	User Name	User Number	Authentication User Name	Authentication User Number	Password	Interface	Cost	DN	Ring Index	Chg?
1	port1	01	port1	01	user1	06	1	06	2	<a href="#">Modify</a>

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

[Submit](#)

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

- Ensure that NT mode is disabled – NT is not ticked, then
- select [Submit](#) and then click “[here](#)” to return

Repeat setting Not NT for QSL ID 2 to 8

**QSLAC Codec Configuration**

QSL ID	Enabled	Layer 1	Caller ID	Groups	Chg?
1	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
2	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
3	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
4	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
5	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
6	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
7	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
8	1	g711Alaw64k	on	====>	<a href="#">Modify</a>

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

The Vega FXO is alerted to new 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:

- Scroll down to the bottom of the page

**Vega 50 FXO/FXS Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address http://192.168.1.107/vsframe?sid=14301&frame\_id=5

**Vega 50 Configuration**

Host Name	Vega50WISC
IP Address	192.168.1.107
User Name	admin

**Management**

User Number Suffix	01
Authentication User Name Prefix	NULL
Authentication User Number Prefix	NULL
Authentication User Name Suffix	vega1
Authentication User Number Suffix	01

**QoS**

**Advanced**

Save Log off Help Reboot System Apply Changes

**QSLAC Codec Configuration**

QSL ID	Enabled	Layer 1	Caller ID	Groups	Chg?
1	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
2	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
3	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
4	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
5	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
6	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
7	1	g711Alaw64k	on	====>	<a href="#">Modify</a>
8	1	g711Alaw64k	on	====>	<a href="#">Modify</a>

Delete Add

**Advanced POTS Configuration**

[Advanced POTS](#)

Done Internet

- Select [Advanced POTS](#)

**Vega 50 FXO/FXS Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=32

**Vega 50 Configuration**

**VegaStream**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**⚠️ Unsaved & Unapplied Changes**

**POTS > Advanced**

**FXO and FXS common parameters**

Hook Flash Time (ms)	200
Line Reversal	<input type="checkbox"/>
Poll Time (ms)	25

**Submit**

**FXO parameters**

Loop Current Detect	<input type="checkbox"/>
Line Reversal Sample Delay (ms)	50
DTMF Hold-off Time (ms)	150
Line Reversal Debounce Time (ms)	50
Early Line Seize	<input type="checkbox"/>
Early Line Seize Timeout (s)	30
Ringback present	<input checked="" type="checkbox"/>

**Submit**

**FXO ring-detection parameters**

Ring Cadence Delta	14
Ring Cadence Threshold	56

**Save**

**Log off**

**Help**

**Reboot System**

**Apply Changes**

**Done**

**Internet**

➤ Scroll down to the bottom of the page

Vega 50 FXO/FXS Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links Go

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=32

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

⚠️ Unsaved & Unapplied Changes

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

Early Line Seize Timeout (s) 30  
Ringback present

Submit

◀ FXO ring-detection parameters

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

Submit **Configure Ring Detect Values**

**FXS parameters**

Hook Debounce Time (ms) 70

Save Log off Help Reboot System Apply Changes

Submit

FXS ring-generation parameters

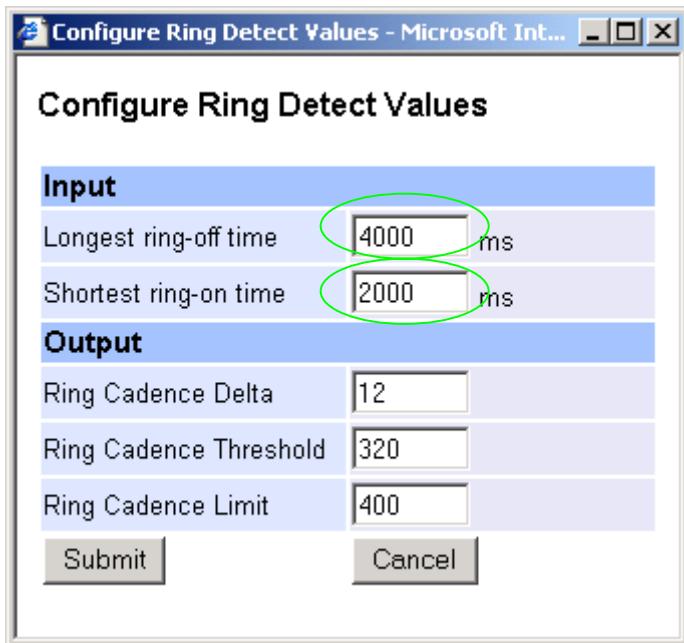
Def?	ID	Name	Frequency	Repeat	Ring1 On	Ring1 Off	Ring2 On	Ring2 Off	Ring3 On	Ring3 Off	Chg?
<input type="checkbox"/>	1	External	50	1	400	200	400	2000	0	500	<a href="#">Modify</a>
<input type="checkbox"/>	2	Internal	50	0	2000	4000	2000	4000	0	500	<a href="#">Modify</a>
<input type="checkbox"/>	3	bellcore-r1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

Delete Add

Done 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

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

- select

Vega 50 FXO/FXS Online Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=32 Go Links

### Vega 50 Configuration

**VegaStream**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

**Unsaved & Unapplied Changes**

**Management** Early Line Seize Timeout (s) 30

**Logging** Ringback present

**Maintenance** **Submit**

**LAN**

**POTS**

**H.323**

**Dial Plan**

**Media Channels**

**Tones**

**Users**

**QoS**

**Advanced**

**FXO ring-detection parameters**

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

**Submit** **Configure Ring Detect Values**

**FXS parameters**

Hook Debounce Time (ms) 70

**Submit**

**FXS ring-generation parameters**

Def?	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	<a href="#">Modify</a>
<input type="checkbox"/>	2	Internal	50	0	2000	4000	2000	4000	0	500	<a href="#">Modify</a>
<input type="checkbox"/>	3	bellcore-r1	20	1	400	400	900	400	400	3500	<a href="#">Modify</a>

**Delete** **Add**

Visit the VegaStream website

➤ 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 50 Configuration

Host Name: Vega50WISC  
IP Address: 192.168.1.107  
User Name: admin

⚠️ Unsaved & Unapplied Changes

**Management**

**Logging**

**Maintenance**

**LAN**

**POTS**

**H.323**

**Dial Plan**

**Media Channels**

**Tones**

**Users**

**QoS**

**Advanced**

Save

Log off

Help

Reboot System

Apply Changes

Lan Hosts

ID	Name	IP	Chg?
1	PHONE_06	0.0.0.0	<a href="#">Modify</a>
2	PHONE_07	0.0.0.0	<a href="#">Modify</a>
3	PHONE_08	0.0.0.0	<a href="#">Modify</a>
4	PHONE_09	0.0.0.0	<a href="#">Modify</a>
5	PHONE_10	0.0.0.0	<a href="#">Modify</a>
6	PHONE_11	0.0.0.0	<a href="#">Modify</a>
7	PHONE_12	0.0.0.0	<a href="#">Modify</a>
8	PHONE_13	0.0.0.0	<a href="#">Modify</a>

Submit

**Advanced LAN Configuration**

[Advanced LAN](#)

Done

Internet

- Select [Advanced LAN](#)

**Vega 50 FXO/FX5 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://192.168.1.107/vsframe?sid=493945719&frame\_id=30

**Vega 50 Configuration**

Host Name Vega50WISC  
IP Address 192.168.1.107  
User Name admin

⚠️ Unsaved & Unapplied Changes

**Management**  
**Logging**  
**Maintenance**  
**LAN** (highlighted)  
**POTS**  
**H.323**  
**Dial Plan**  
**Media Channels**  
**Tones**  
**Users**  
**QoS**  
**Advanced**

**LAN Parameters**

File Transfer Method  TFTP  FTP  
RTP Checksum

**Path of Help files on server**

Path or URL Help/Vega.100/usrguide/framedefn.htm (circled)

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

**Submit** (circled)

Save Log off Help Reboot System Apply Changes Done Internet

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

- Set Path or URL = D:/Content/help/v50fxoh\_R5.htm

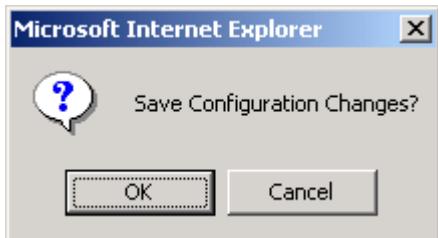
(Substitute appropriate drive letter if D: is not the CD-ROM)

- 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:

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



- Select [OK](#) and after the configuration has been saved click "[here](#)" to return
- On the left hand side menu select [Reboot System](#)



- Select [OK](#)

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](http://www.VegaAssist.com)

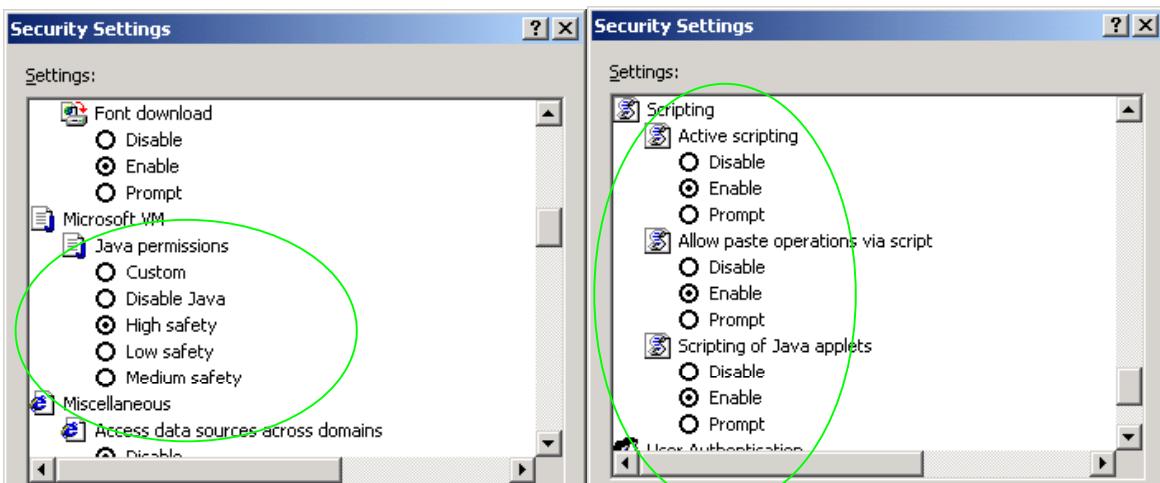
If you require help from VegaStream support personnel, please use the serial interface or telnet into the unit, log in and then type:

- show support
- 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](mailto: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. H.323 supports two methods for transmitting call setup details. There is a standard method and then Fast Start. To allow the Vega to accept calls using the Fast Start technique ensure “Accept Fast Start” is enabled ... see section 5

For the Vega to initiate calls using Fast Start ensure that “Use Fast Start” is enabled ... see section 5.