

# Initial configuration

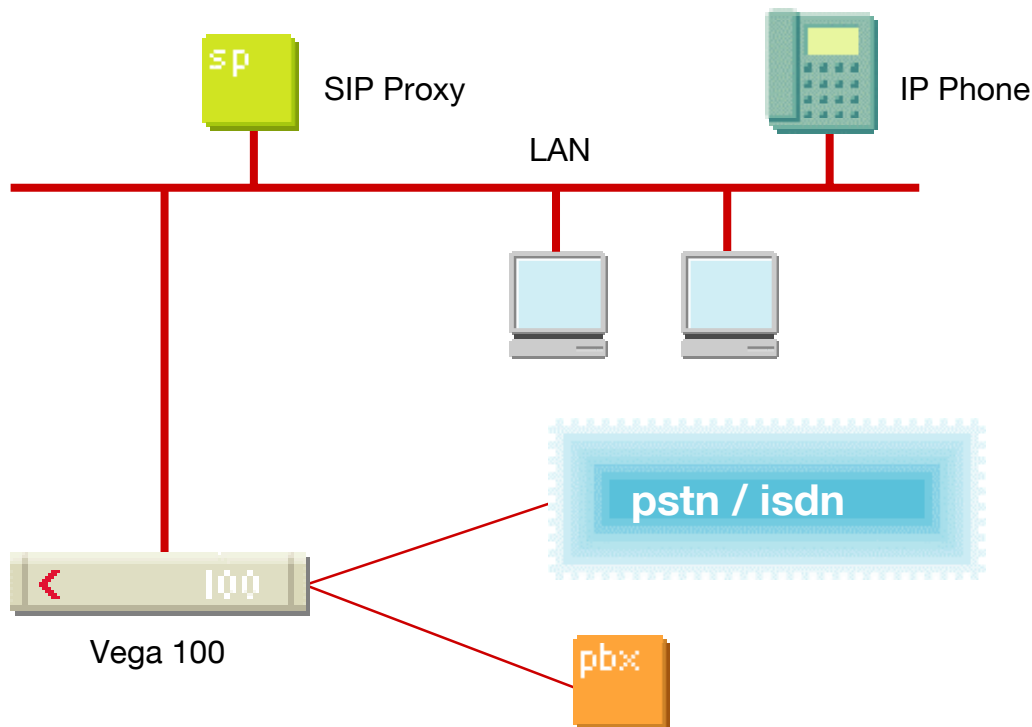
## Vega 100 E1 (SIP) – R5.1



This document describes how to configure the Vega 100 E1 SIP 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 100 to be a transparent gateway for a SIP Proxy.

- Calls made from the PBX or PSTN to the Vega will be forwarded to the SIP Proxy. The telephone number passed to the Vega will be forwarded unchanged to the SIP Proxy.
- Calls made from the SIP Proxy to the Vega will be forwarded to the PSTN or to the PBX based on the leading two digits of the telephone number passed by the proxy. A leading 01 will cause the call to be routed to the PSTN, and a leading 02 will cause the call to be routed to the PBX. The digits following the 01 or 02 will be passed as the dialed digits.



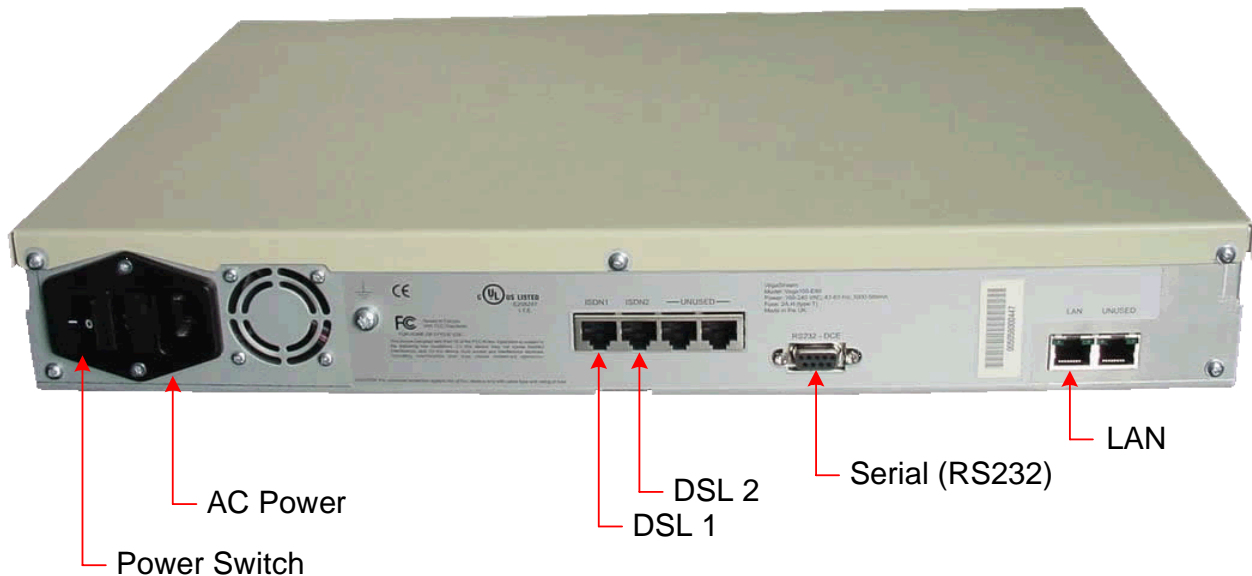
The configuration process is broken down into 11 stages as follows:

- 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 Configure the Dial Plan
- 6 Registration
- 7 Configure SIP and audio parameters
- 8 Configure DSLs
- 9 Configure pointer to CD ROM documentation
- 10 Save Changes
- 11 Archive Vega Configuration

Please also see:

- 12 Technical Support
- 13 Advanced configuration

# 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 [5] 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:

Connection to a PBX - If you are connecting the Vega 100 to a PBX, the Vega 100 acts as the NeTwork equipment and a red-booted cable must be used.

For each trunk that is to be connected to the PBX, insert one end of a red booted cable into one of the Vega 100 DSL sockets [DSL 1 or DSL 2] and the other end to the PBX.

Connection to the PSTN - If you are connecting the Vega 100 directly to the public telephone network it acts as the Terminal Equipment and the blue-booted cable must be used.

For each trunk that is to be connected to the PSTN, insert one end of a blue booted cable to one of the Vega 100 DSL sockets [DSL1 or DSL2] and the other end to the PSTN terminating box.

## 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
```

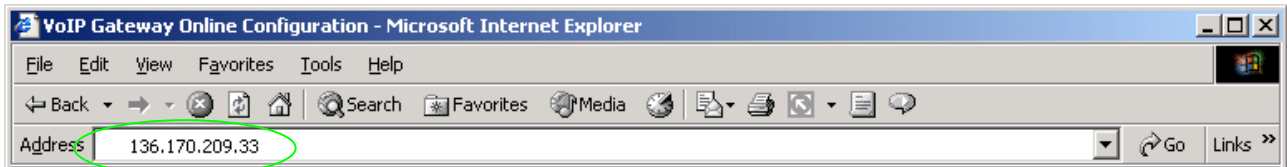
If this is not the IP address required, it can be overridden, together with other LAN parameters by typing:

```
> 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
```

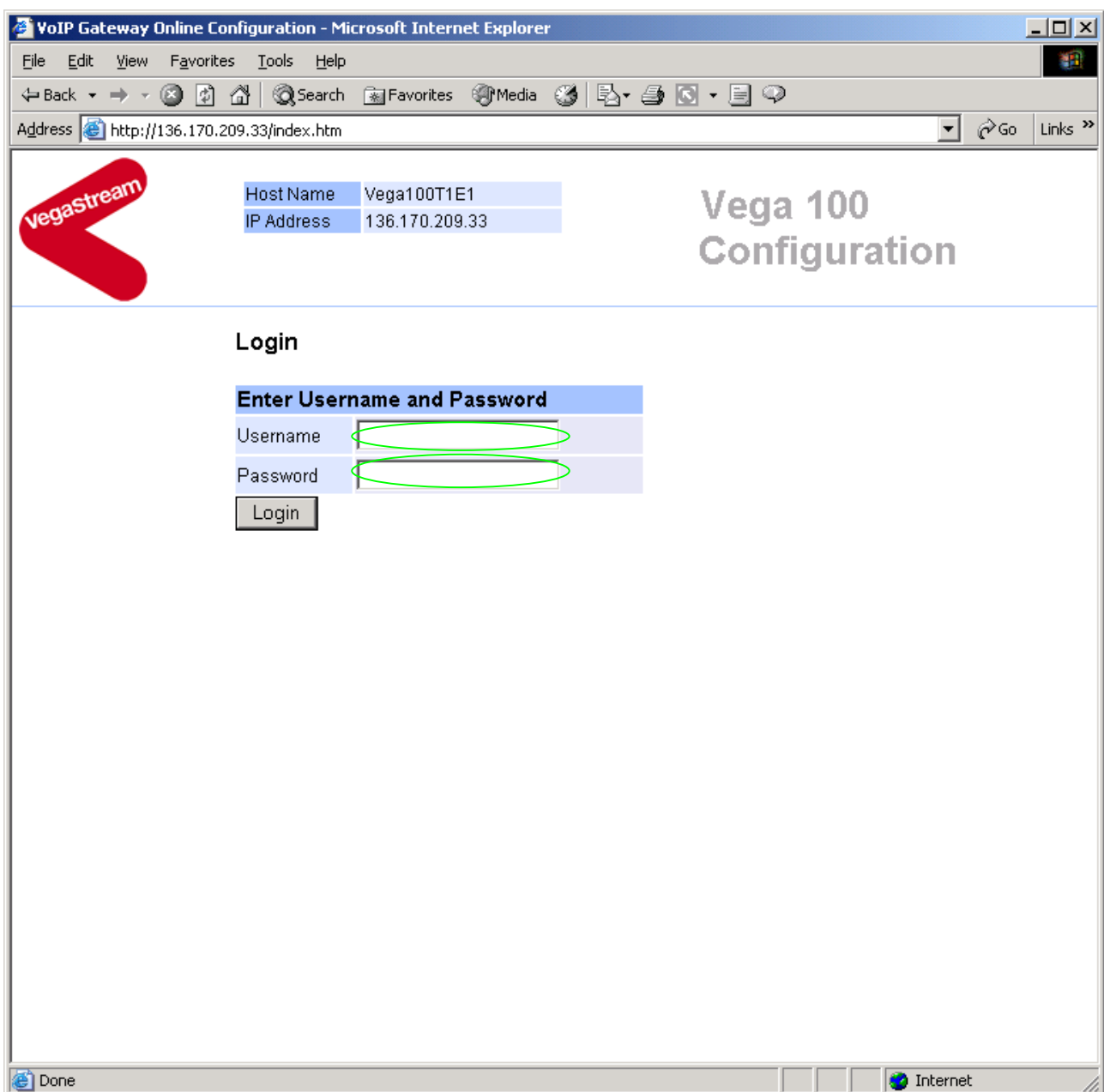
### 3. Configure password and login timeout

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:



Enter the default Username and Password

- Username: admin
- Password: admin
- Select

**Vega 100 T1E1 Online Configuration - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address [http://136.170.209.33/vsframe?sid=-1124482659&frame\\_id=6](http://136.170.209.33/vsframe?sid=-1124482659&frame_id=6) Go Links >>

**VegaStream**

Host Name	Vega100T1E1
IP Address	136.170.209.33
User Name	admin

## Vega 100 Configuration

**Management** ▶ **System Management**

[Logging](#)  
[Maintenance](#)  
[LAN](#)  
[DSL](#)  
[Dial Plan](#)  
[Media Channels](#)  
[Tones](#)  
[SIP](#)  
[Users](#)  
[QoS](#)  
[Advanced](#)

Save  
Log off  
Help  
Reboot System

Tip: Place the cursor of the mouse on name or input fields to get concise help.

### Quick Configuration Wizard

Quick step by step essential configuration

### System Time

Set Time (hh:mm:ss)  :  :

Set Date (dd/mm/yyyy)  /  /

Synchronise Time and Date  With PC  With NTP server

### Call Reports

Report call progress summary [Show Calls](#)

Report on all call progress statistics [Show Trace](#)

### System Logs

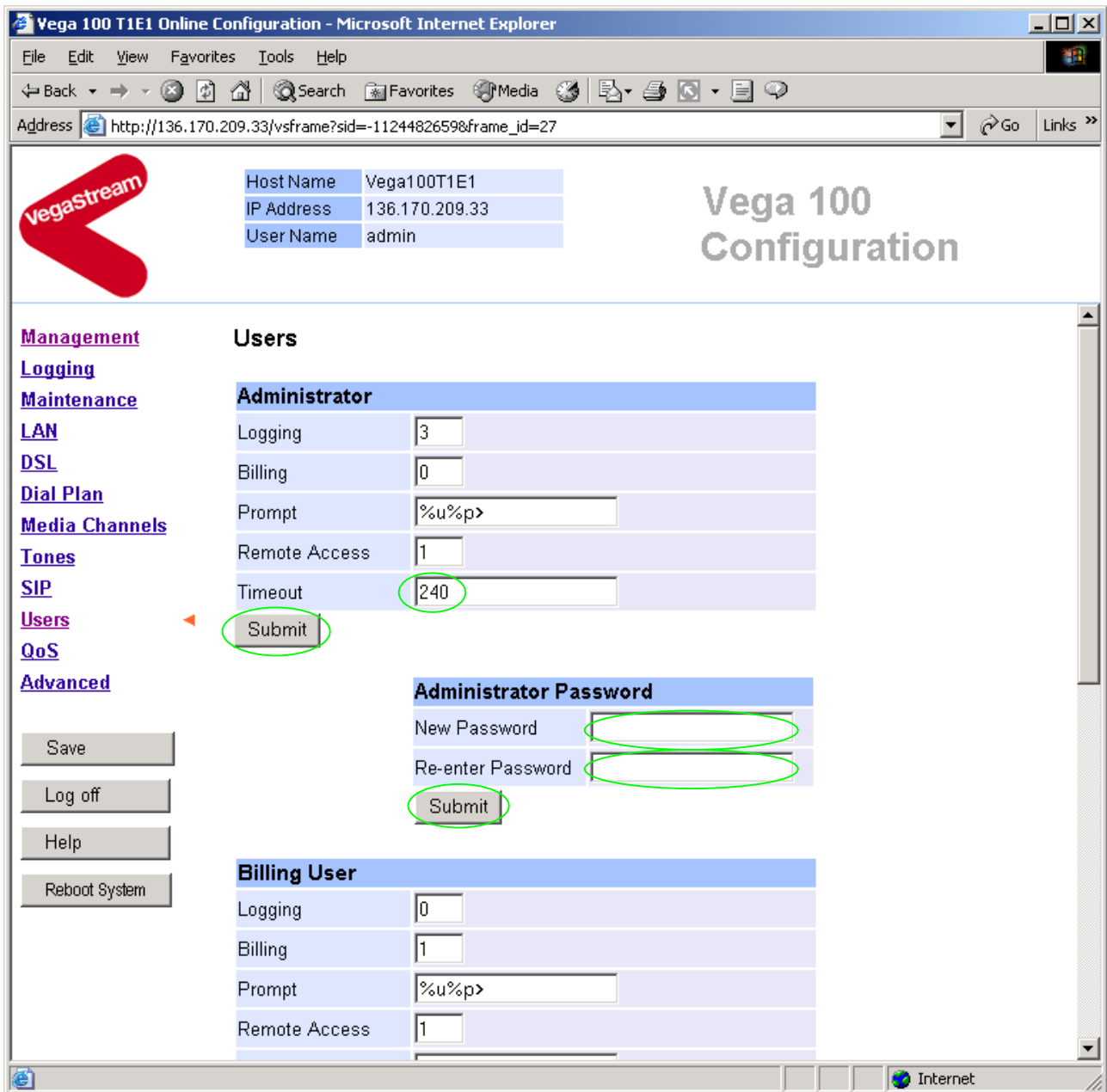
Show the Event Log [Show Event Log](#)

Show the Billing Log [Show Billing Log](#)

### Call Control

All further calls are

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



**Recommended:** Change the password

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

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

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

<sup>1</sup> If the web browser 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](#)

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

Unsaved Configuration Changes

**Local Area Network (changed)**

Warning: Changing these parameters may prevent remote access.

**Current Mode: Standard Ethernet Mode**

Change to VLAN (8021q) Ethernet mode    VLAN Mode

**LAN Configuration**

Use DHCP	<input checked="" type="checkbox"/>	
Host Name	Vega100T1E1	
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	192.168.1.108	
NTP Offset (hhmm)	0000	
NTP Poll Interval	0	

**Physical Layer Configuration**

Full Duplex	<input type="checkbox"/>
-------------	--------------------------

**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](#)

VegaStream

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

Vega 100 Configuration

Unsaved Configuration Changes

**Management**  
[Logging](#)  
[Maintenance](#)  
[LAN](#)  
[DSL](#)  
[Dial Plan](#) ◀  
[Media Channels](#)  
[Tones](#)  
[SIP](#)  
[Users](#)  
[QoS](#)  
[Advanced](#)

**Dial Planner**

**Profiles**

Del?	Profile ID	Enabled	Name	Plans	Chg?
<input type="checkbox"/>	1	1	Vega100T1E1_default	====>	<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

Done Internet

Firstly, turn off the default profile:

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

➤ Select [Modify](#)

[Dial Planner](#) > Profile 1

Modify Profile	
Profile ID	1
Enabled	<input checked="" type="checkbox"/>
Name	Vega100T1E1_default
<input type="button" value="Submit"/>	

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

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

**Dial Planner**

Profiles						
Del?	Profile ID	Enabled	Name	Plans	Chg?	
<input type="checkbox"/>	1	0	Vega100T1E1_default	===>	<a href="#">Modify</a>	
<input type="button" value="Delete"/> <input type="button" value="Add"/>						

In the **Profiles** section

- Select

**Dial Planner**

Profiles						
Del?	Profile ID	Enabled	Name	Plans	Chg?	
<input type="checkbox"/>	1	0	Vega100T1E1_default	===>	<a href="#">Modify</a>	
<input type="checkbox"/>	2	1	new_profile	===>	<a href="#">Modify</a>	
<input type="button" value="Delete"/> <input type="button" value="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
<input type="button" value="Submit"/>	

- Set Name = ISDN\_To\_LAN
- select  and then click "[here](#)" to return

## Dial Planner

Profiles						
Del?	Profile ID	Enabled	Name	Plans	Chg?	
<input type="checkbox"/>	1	0	Vega100T1E1_default	====>	<a href="#">Modify</a>	
<input type="checkbox"/>	2	1	ISDN_To_LAN	====>	<a href="#">Modify</a>	

In the **Profiles** section, on Profile 2 (the ISDN\_To\_LAN profile):

- Select [Modify](#)

### Dial Planner > Profile 2

Modify Profile	
Profile ID	2
Enabled	<input checked="" type="checkbox"/>
Name	<input type="text" value="ISDN_To_LAN"/>

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

In the **Plans in this Profile** section:

- Select [Modify](#)

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

- Set Name = From\_ISDN\_or\_PBX
- Set Source = IF: [^9] . , TEL: < . \* > *(This takes a call from either of the two ISDN interfaces and stores the telephone number presented in store <1>)*
- Set Destination = IF: 99 , TEL: < 1 > *(This routes the call to IF:99 (the LAN) and passes the received telephone number on as the destination telephone number)*
- select **Apply** and then click "[here](#)" to return

VegaStream

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

Unsaved Configuration Changes

Vega 100 Configuration

Management  
Logging  
Maintenance  
LAN  
DSL  
**Dial Plan**  
Media Channels  
Tones  
SIP  
Users  
QoS  
Advanced

Dial Planner > Profile 2

**Modify Profile**

Profile ID 2  
Enabled   
Name ISDN\_To\_LAN  
Submit

**Plans in this Profile**

Del?	Plan ID	Name	Src	Dest	Cost	Group	Chg?
<input type="checkbox"/>	1	From_ISDN_or_PBX	IF:[*9].,TEL:<*>	IF:99,TEL:<1>	0	0	<a href="#">Modify</a>

Delete Add

Save  
Log off  
Help  
Reboot System

Done Internet

➤ 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 3,

- set Name = LAN\_to\_ISDN\_or\_PBX

Modify the first plan for Profile 3:

- set Name = From\_LAN
- set Source = IF:99, TEL:<.><.\*>
- set Destination = IF:<1>, TEL:<2>

*(For calls from IF:99 (LAN), take the first two digits presented and store them in store <1>; take any further digits and store them in store <2>)*

*(The first two digits presented define the interface – 01 or 02 – and the remainder of the digits are passed on as the telephone number)*

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

**Note:** The SIP Proxy must choose the appropriate interface on the Vega to dial out from; when the Proxy presents a call to the Vega, the INVITE message starts something like:

```
INVITE sip:021344784900@172.20.11.2 SIP/2.0
```

*The digits preceding the @ (the telephone number field) must contain either 01ttt...t or 02ttt...t, where ttt...t is the telephone number to dial and 01 or 02 is the interface through which the call is to be made.*

***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. Registration

The Vega 100 does not support registration with a SIP Proxy. Registration is designed to register end users with a proxy, and the Vega 100 does not support end users, but is a gateway to a wider network of users.

The SIP proxy must be manually configured to accept calls from the Vega 100 (the telephone number for the call to be routed to will be in the request URI).

For outgoing calls the Proxy must send the call to the Vega 100 with a request URI of the format `iittt...t@contact_address`

where `ii` is the interface number through which to make the call (Vega interface 01 or 02) and where `ttt...t` is the telephone number for the Vega to dial



## 7. Configure SIP and audio parameters

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

The screenshot shows the Vega 100 Configuration web interface. The left sidebar contains a menu with items: Management, Logging, Maintenance, LAN, DSL, Dial Plan, Media Channels, Tones, SIP (highlighted with a red arrow), Users, QoS, and Advanced. The main content area is titled 'SIP Configuration' and is divided into two sections: 'General' and 'Multiple Proxy Support'. In the 'General' section, the 'Default Proxy Host Name/IP' field is set to '0.0.0.0', the 'Local Domain' is 'vegastream.com', and the 'Accept Non-Proxy Invites' checkbox is unchecked. In the 'Multiple Proxy Support' section, the 'Mode' is set to 'normal', and there are two proxy entries in a table:

Backup Proxy	Enabled	IP/Name	Port	Chg?
1	1	0.0.0.0	5060	<a href="#">Modify</a>
2	1	0.0.0.0	5060	<a href="#">Modify</a>

In the **General** section:

- set Default Proxy Host Name/IP = IP\_address\_of\_SIP\_proxy, or DNS\_hostname\_of\_the\_SIP\_Proxy
- set Local Domain = Public\_name\_of\_proxy\_used\_by\_other\_devices\_to\_send\_their\_INVITES\_to  
(this value is the “outside world’s” name or IP address for the proxy)

**Optional:** To allow devices other than the proxy to make calls directly through the Vega

- tick Accept Non-Proxy Invites

If only the proxy is allowed to route the calls to the Vega ensure that this tick box is clear.

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

➤ Scroll down to the Audio section

In the **Audio** section

➤ Select the audio codecs desired using the drop down menus

Unless there is a specific reason not to allow a specific codec to be used, it is recommended that all codecs should be enabled as follows:

Audio	
Audio Profile 1	<input type="text" value="G723"/>
Audio Profile 2	<input type="text" value="G729"/>
Audio Profile 3	<input type="text" value="G711 Alaw"/>
Audio Profile 4	<input type="text" value="G711 Ulaw"/>
<input type="button" value="Submit"/>	

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

## 8. Configure DSLs

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

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

Unsaved Configuration Changes

**Management**  
[Logging](#)  
[Maintenance](#)  
[LAN](#)  
[DSL](#)  
[Dial Plan](#)  
[Media Channels](#)  
[Tones](#)  
[SIP](#)  
[Users](#)  
[QoS](#)  
[Advanced](#)

**DSL**

**DSL Configuration**

Network Type	ETSI
Network Topology	E1
Line Encoding	HDB3
Framing	CRC4
Bus Master	1

Submit

**PORT Configuration**

PORT ID	Enabled	NT	Clock Master	Layer 1	E1 rx Short Haul	T1 tx equalization	ISDN	CAS	Groups	Chg?
1	1	0	0	g711Alaw64k	1	sh220_330	==>	==>	==>	<a href="#">Modify</a>
2	1	1	1	g711Alaw64k	1	sh220_330	==>	==>	==>	<a href="#">Modify</a>

Delete Add

Save  
Log off  
Help  
Reboot System

➤ In the **DSL Configuration** section check that the Network Type = ETSI.  
If required QSIG is also an acceptable Network Type for E1 Vega 100s.

➤ In the **DSL Configuration** section check that the Network Topology = E1

➤ In the **DSL Configuration** section check that the Line Encoding = HDB3  
(Note, the other available options: AMI, and B8ZS are not supported on the E1 interface)

➤ In the **DSL Configuration** section select the Framing Method as required:

## DSL

DSL Configuration	
Network Type	ETSI
Network Topology	E1
Line Encoding	HDB3
Framing	CRC4
Bus Master	ESF SF
<input type="button" value="Submit"/>	CRC4 PCM30 AUTO

- CRC4 = CRC4 supported (usual ISDN configuration)
- PCM30 = no CRC4
- AUTO=CRC4

Note, ESF and SF are not supported on the E1 interface

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

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

**Vega 100 Configuration**

Unsaved Configuration Changes

**Management**  
[Logging](#)  
[Maintenance](#)  
[LAN](#)  
[DSL](#)  
[Dial Plan](#)  
[Media Channels](#)  
[Tones](#)  
[SIP](#)  
[Users](#)  
[QoS](#)  
[Advanced](#)

**DSL**

**DSL Configuration**

Network Type: ETSI  
Network Topology: E1  
Line Encoding: HDB3  
Framing: CRC4  
Bus Master: 1  
Submit

**PORT Configuration**

PORT ID	Enabled	NT	Clock Master	Layer 1	E1 rx Short Haul	T1 tx equalization	ISDN	CAS	Groups	Chg?
1	1	0	0	g711Alaw64k	1	sh220_330	====>	====>	====>	<a href="#">Modify</a>
2	1	1	1	g711Alaw64k	1	sh220_330	====>	====>	====>	<a href="#">Modify</a>

Delete Add

Save  
Log off  
Help  
Reboot System

Visit the VegaStream website Internet

For the configuration indicated in the initial diagram DSL1 = connection to the PSTN and DSL 2 is a connection to a PBX. Therefore the Vega needs DSL 1 configured as TE (and a blue booted cable used on DSL 1), and DSL 2 configured as NT (and a red booted cable used on DSL 2).

Bus Master needs to be configured to point to a TE trunk – to identify where the Vega will synchronise its internal clock from – in this configuration this should be 1 (DSL 1).

These are the default settings of the Vega and so no changes are required to the Network Terminator, Clock\_Master, or Bus\_Master settings.

In the **Port Configuration** section, for PORT ID 1:

➤ Select [Modify](#)

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

### Vega 100 Configuration

**Port 1**

**Port Configuration**

Port ID	1
Enabled	<input checked="" type="checkbox"/>
Network Terminator	<input type="checkbox"/>
Clock Master	<input type="checkbox"/>
Layer 1	g711Alaw64k
Set E1 RX short haul	<input checked="" type="checkbox"/>
T1 TX equalization	sh220_330

Submit

**ISDN Configuration**

DTMF Termination Char	*
DTMF Dial Timeout	2
Setup Mapping	0
Cause Mapping	0

Submit

**CAS Configuration**

Dial Format String	.
--------------------	---

➤ Ensure Layer 1 = g711Alaw64k

➤ If not, change it and select [Submit](#) and then click [here](#) to return

- Note:**
1. If a configuration is to be used that requires the Network Terminator value to be changed, this can be altered as well. Typically if NT is ticked then Clock Master should also be ticked. If NT is un-ticked (TE mode) then typically Clock Master should also be un-ticked.
  2. if either trunk is TE then the Bus Master value (in the ISDN Configuration section) should be set to point to the (one of the) TE trunk(s); 1 for DSL 1 and 2 for DSL 2.

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

In the **Port Configuration** section, for PORT ID 1:

- Again select [Modify](#)
- Scroll down to the Groups section

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

**Vega 100 Configuration**

Unsaved & Unapplied Changes

DTMF Termination Char \*

DTMF Dial Timeout 2

Setup Mapping 0

Cause Mapping 0

Submit

**CAS Configuration**

Dial Format String .

Digit Dial Timeout 6

Info dtmf

Signal em\_wink

Tone Delay 50

Submit

**Groups**

Group ID	Interface ID	Cost Index	DN	First Channel	Last Channel	Alloc Channel	Tunnel Mode	Chg?
1	01	1	*	1	auto	default	off	<a href="#">Modify</a>

Delete Add

Save  
Log off  
Help  
Reboot System  
Apply Changes

In the **Groups** section, check that Last Channel = auto or 30, if not change it to auto or 30.

If changes are made


- select [Submit](#) and then click [here](#) to return
- select 
- Repeat for the other Port (PORT ID 2).

Table 1 can be used as a guide when setting up parameters for Vega 100 E1 ISDN installations.

**Table 1. Network type, Line Encoding, and Topology**

Product	Physical Connection	Network Topology	Network type	DSLs	Framing	Line Encoding	Calls
Vega 100-PRI-E1	E1-2.044 Mbps	E1	Euro ISDN	2	PCM30 / CRC4	HDB3	30 / 60
Vega 100-PRI-E1	E1-2.044 Mbps	E1	QSIG	2	PCM30 / CRC4	HDB3	30 / 60



## 9. Configure pointer to CD ROM documentation

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

Host Name Vega100T1E1  
IP Address 136.170.209.33  
User Name admin

**Vega 100 Configuration**

Unsaved & Unapplied Changes

**Management**  
[Logging](#)  
[Maintenance](#)  
**[LAN](#)**  
[DSL](#)  
[Dial Plan](#)  
[Media Channels](#)  
[Tones](#)  
[SIP](#)  
[Users](#)  
[QoS](#)  
[Advanced](#)

Subnet Mask DHCP defined  
Domain Name Server DHCP defined Use DHCP   
Default Gateway DHCP defined Use DHCP   
TFTP Server DHCP defined Use DHCP   
Network Time Server DHCP defined Use DHCP   
FTP Server 192.168.1.108  
NTP Offset (hhmm) 0000  
NTP Poll Interval 0

**Physical Layer Configuration**  
Full Duplex   
Ethernet Type 10baseT & 100baseTX  
QoS profile 1

Submit

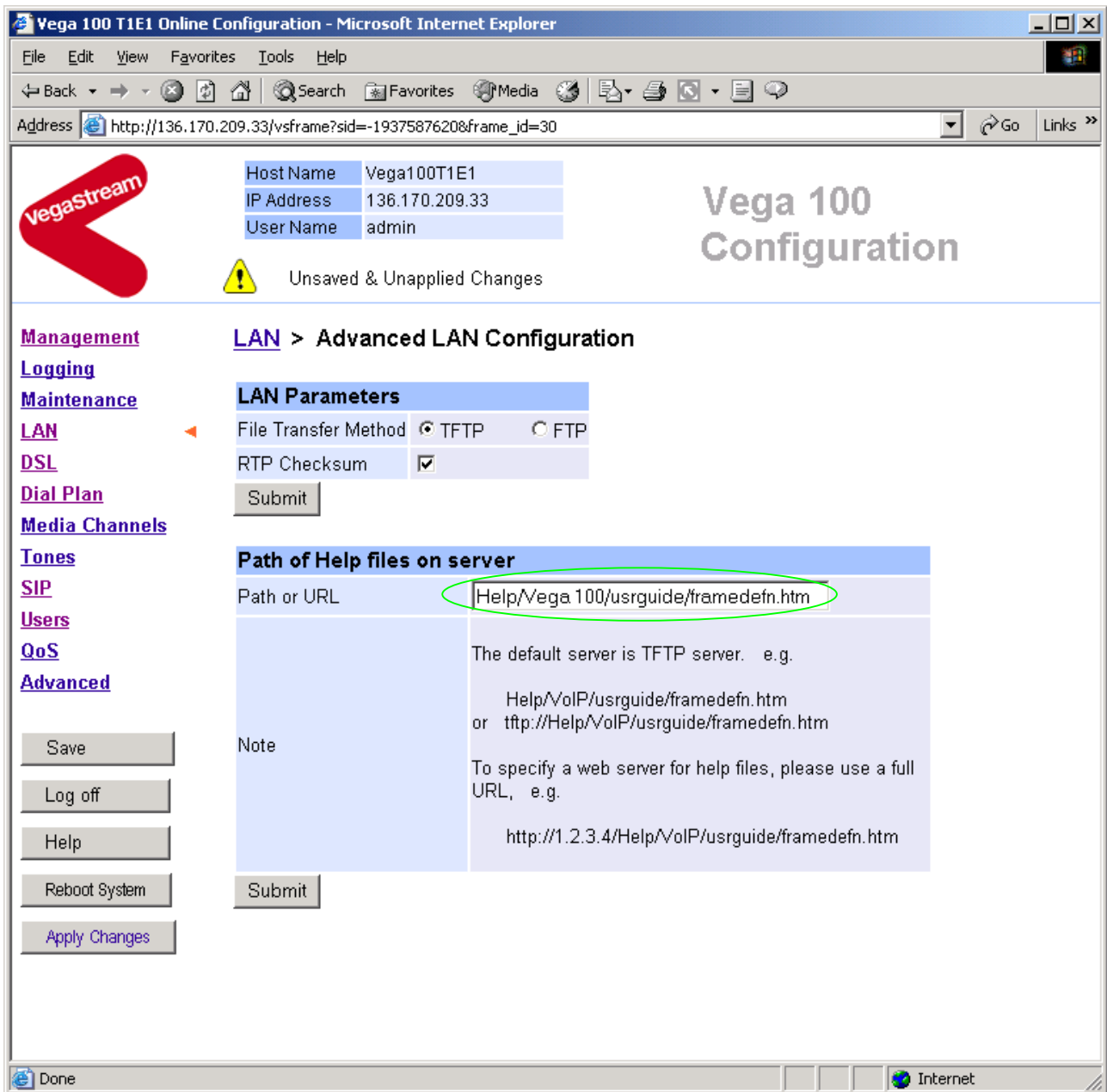
**Lan Hosts**

ID	Name	IP	Chg?
1	loopback	127.0.0.1	<a href="#">Modify</a>

Delete Add

**Advanced LAN Configuration**  
[Advanced LAN](#)


- Select [Advanced LAN](#)



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

- Set Path or URL = D:/Content/help/v100e1s\_R5.htm
- ... *N.B. use forward slashes "/" not back slashes "\".*

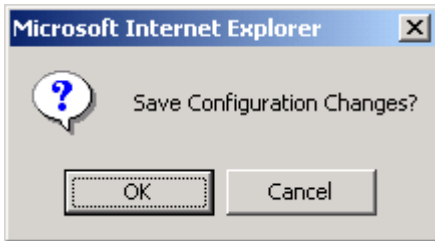
(Substitute the appropriate drive letter if D: is not the CD-ROM)

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

## 10. Save Changes

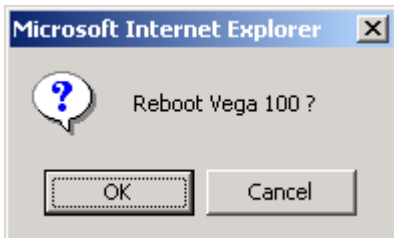
The changes to the configuration must be saved and activated. This is carried out as follows:

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



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

- On the left hand side menu select



- Select

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

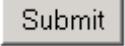
## 11. Archive Vega Configuration

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:



The screenshot shows a web interface with a blue header bar labeled "CLI Command". Below the header is a white text input field and a grey "Submit" button.

- 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)

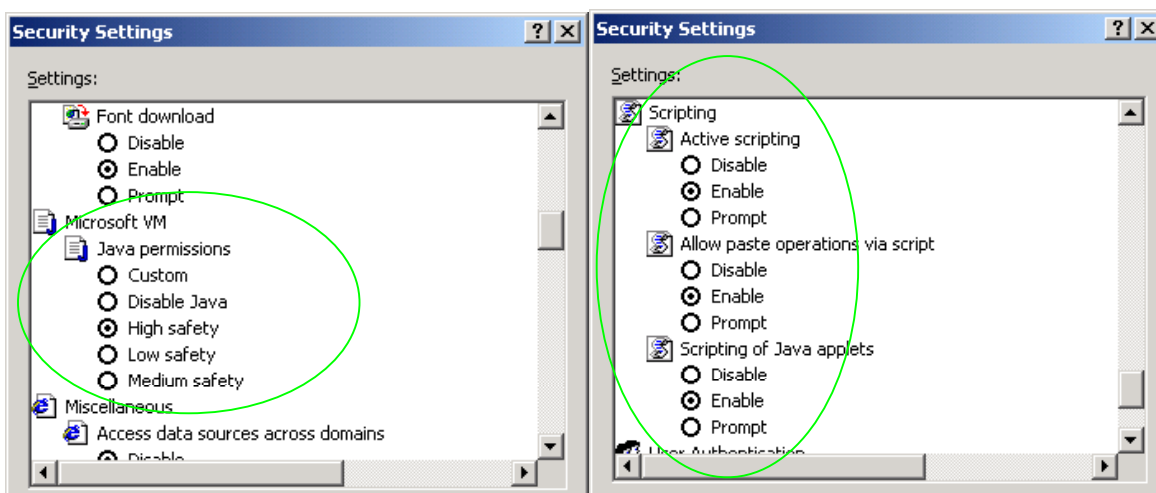
If you require help from VegaStream support personnel, please use the serial interface or telnet into the unit, log in and then type:

- show support
- 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](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. Loss of audio mid call – consider reducing the selection of available codecs (see section 7). 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 7).
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”.

## 13. Advanced configuration

E1 units have further configurable parameters that may be desirable to configure in order to fully integrate into the attached ISDN infrastructure.

### 13.1 Web browser configurable parameters

#### 13.1.1 Line impedance matching

The Vega E1 receiver sensitivity can be configured based on the line attenuation between the Vega and the closest repeater or other ISDN endpoint.

The configuration is achieved using:

```
[_advanced.isdn]
    e1_rx_short_haul=0 or 1    ; 0= long haul and
                               1 = short haul
```

or on the web browser interface, in the port configuration section off the DSL page:

Port Configuration	
Port ID	1
Enabled	<input checked="" type="checkbox"/>
Network Terminator	<input type="checkbox"/>
Clock Master	<input type="checkbox"/>
Layer 1	g711Alaw64k
Set E1 RX short haul	<input checked="" type="checkbox"/>
T1 TX equalization	sh220_330

Submit

Long haul should be selected when the cable between the Vega and the closest repeater or other ISDN endpoint introduces more than 6dB attenuation.

Short haul should be selected when the cable between the Vega and the closest repeater or other ISDN endpoint introduces less than or equal 6dB attenuation.

#### 13.1.2 Channel Allocation Strategies

The Vega allows configuration of the channel allocation strategy to be used for each DSL on outgoing calls. Four options are available,

- i) *Linear\_down* – where the Vega will use the highest available free channel to make the outbound call ... use this mode when the attached device is configured to make outbound calls using *Linear\_up*.
- ii) *Linear\_up* – where the Vega will use the lowest available free channel to make the outbound call ... use this mode when the attached device is configured to make outbound calls using *Linear\_down*.

- iii) *Round\_robin* – in this mode the Vega remembers the last allocated channel and then tries to use the next channel up from this for the next outbound call. (After reaching the highest channel ID it restarts at the lowest channel again.) ... use this mode when the attached device is configured to make outbound calls using *Round\_robin* mode.
- iv) *Default* – if the DSL is configured as NT then the Vega will use the *Linear\_up* scheme, and if the DSL is configured as TE then the Vega will use *Linear\_down*.

By default the Vega has `chan_alloc set=Default`

Using the web browser interface:

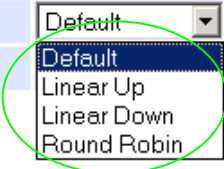
- On the left hand side menu select [DSL](#)
- Then select the Port to alter
- Scroll to the bottom of the page

In the Groups in this DSL:

- Select [Modify](#)

[DSL](#) > [Port 1](#) > Group 1

Modify Port Group	
Group ID	1
Port ID	1
Interface ID	<input type="text" value="01"/>
Cost Index	<input type="text" value="1"/>
DN	<input type="text" value="*"/>
First Channel	<input type="text" value="1"/>
Last Channel	<input type="text" value="auto"/>
Alloc Channel	<input type="text" value="Default"/>
Tunnel Mode	<input type="text" value="Default"/>
<input type="button" value="Submit"/>	



- Select the desired channel allocation strategy from the Alloc Channel pull down.
- select  and then click "[here](#)" to return
  
- Save and reboot system to activate the change

***Further details on this and other parameters may be found in the Vega Primer.***