On PBX 1 dial the access number for the Vega 25 Phone port (connected to PBX 1 trunk interface). You will hear dial tone presented by the far end Vega 25. Dial your destination number (optionally terminated by # to speed up dialling), you will then hear the destination Vega 25 go off hook and then the far end PBX dial tone will be heard. Immediately after this, you will hear the requested telephone number being dialled. Call progress tones will then be supplied by the far end PBX. When the far end phone rings, answer it and you will be connected.

This is symmetric operation so may be tested in exactly the same manner from the destination PBX to PBX 1.

If Option 1 is configured then a call may be made to the PBX port that the Vega 25 is connected to. The destination Vega will present dial tone and the destination number can be dialled. As in the standard case, the number will then be dialled into the PBX and PBX call progress tones will be heard. When the far end phone is answered the caller and called party will be able to speak.

Note. If the standard mode is used, each pair of Vega 25s will allow 1 call PBX 1 to destination PBX and 1 call destination PBX to PBX 1 to be handled simultaneously. If option 1 is in use, it will utilise both PSTN ports (PBX trunk interfaces), so only 1 call may be made at a time. (A modification of option 1 can be made, adjusting the dial plan 2 to call 6601 instead of 6602 - this will mean that calls made to the FXO port will be routed to the auto-attendant or operator of the destination PBX - in this case 2 calls, one PBX 1 to destination PBX and the second, destination PBX to PBX 1 may be made simultaneously)

Problems outdialing on the FXO port? Hear busy tone after dialling the access code? - See the Vega 10/20/25 FAQ on the www.VegaAssist.com web site

Volume level of call to / from PBX not correct? - See the Vega 10/20/25 FAQ on the www.VegaAssist.com web site.

Appendix 1 - Reset Vega to factory defaults

To reset the Vega to its factory default values, using one of the phones attached to the Vega

- Press * * * *
- Press RESET# [telephone kevs:73738#]
- Press 1 The Vega will be reset to its factory default values

ALL PREVIOUSLY CONFIGURED ITEMS WILL BE LOST

If you are connected to the Vega using your web browser, either restart it, or press refresh to ensure that it displays the updated (default) values.

Appendix 2 – Enable DHCP

To enable DHCP, using one of the phones attached to the Vega: Press * * * *

Press 101# 1# 1 The Vega will now be configured for DHCP.

Appendix 3 – Set up fixed IP address

The Vega will now be configured for this static IP setup.

To set up a fixed IP address, using one of the phones attached to the Vega:

>	Press * * * *
≻	Press 101# 0# 1
≻	Press 111# a*b*c*d# 1
where a.l	o.c.d is the IP address required
≻	Press 121# w*x*y*z# 1
where w.	x.y.z is the subnet mask required
≻	Press 131# p*q*r*s# 1

where p.q.r.s is the Lan gateway

Version 0.3

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3 November 2004 For use with Vega 25 version 2.0.10 or greater.

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Configuration information is for example only - test well before deploying

Initial configuration

Vega 25 - R2.0.10 (between PBXs)



This document describes how to configure a Vega 25 gateway connected to one PBX, such that, with a similarly configured Vega 25 connected to another PBX, direct dialled calls can be made from PBX to PBX using VoIP.

Physically:

- the Phone port on the Vega 25 is connected to the analogue trunk interface of the PBX; this is used to receive calls from the PBX
- the PSTN Line port on the Vega 25 is connected to an analogue extension port of the PBX; this is used for making calls into the PBX.

In use, the caller dials an access number to reach the analogue trunk interface. The Vega then provides dial tone to the caller who can then enter the telephone number they wish to reach. The call is then connected and the parties speak to each other using VoIP to carry the call between the PBXs.

An option, "Option 1" is also indicated. This allows calls to be received from the PBX on the PSTN Line port of the Vega 25. This can be useful for call transfer when a PBX allows calls to be transferred to an extension port, but not a trunk interface port.

The configuration process is broken down into 3 stages as follows:

- Connect your Vega to LAN. Telephone and Power 1
- 2 Configure the basic LAN parameters
- 3 Configure Vega 25 to Vega 25 operation

You will need.

IP address of destination gateway

For this example it is assumed that

- this Vega 25 will have its phone port called 5501 and its PSTN port called 5502
- the destination Vega 25 will have its phone port called 6601 and its PSTN port called 6602

When configuring the partner Vega use 6601 where 5501 is typed, 6602 for 5502 and vice-versa.

Note, the phone numbers used in configuring the Vega 25s does not have to bear any relation to PBX extension numbers - they are only used by the Vega gateways.

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1. Connect your Vega to LAN, Telephone and Power

LAN:

Using the supplied LAN cable connect the LAN port on the Vega 25 to a standard or fast Ethernet hub or switch (10 baseT or 100 baseTx).

Telephony:

Plug a phone into the Phone socket and the PSTN line into the Line socket.

Power:

Insert the power cable into the power inlet on the Vega 25 marked "DC 5V". Plug the other end into the mains supply. The "ACT" power LED by the "DC 5V" connector will illuminate (and flash).

2. Configure the basic LAN parameters

If a DHCP server is available, the Vega will automatically pick up an IP address.

- To find the IP address of the Vega 25, pick up the phone handset attached to the Vega:
 - Press * * * *
 - Press 110#

The IP address will be read back.

If this is wrong, or other IP configuration needs to be carried out, see the Installation and Initial Configuration guide, or the instructions in Appendix 2 and Appendix 3 of this document.

3. Configure Vega 25 to Vega 25 operation

Configuration is carried out using a web browser.

Enter the IP address of the Vega into the "Address" field of your web browser, preceded by http:// and followed by admin/advanced

e.g. http://192.168.1.10/admin/advanced

Select the Line 1 tab:

- In the SIP Settings section:
 - > SIP Port \rightarrow 5060

In the Proxy and Registration section:

- ightarrow Proxy → IP address of the destination Vega gateway
- Register
- > Use OB proxy in Dialog → no
- > Make call without reg \rightarrow yes
- > Ans call without reg \rightarrow yes

In the Subscriber Information section:

This subscriber information is not actually used to route calls, so can be any values that do not clash with other devices

➢ Display name → dummy display name, e.g. London PBX

 \rightarrow no

> User ID \rightarrow set to the telephone number to be used for this line, e.g. 5501

In the **Dial Plan** section:

➢ Dial Plan→ (S0 <:6602>)

where 6602 is the phone number of the PSTN port on the destination Vega

Press Submit all changes

Version 0.3 3 November 2004 For use with Vega 25 version 2.0.10 or greater. © 2004 VegaStream Ltd. Configuration information is for example only – test well before deploying. Select the PSTN Line tab:

In the NAT Settings section:

> NAT Keep Alive Enable → no

In the SIP Settings section:

> SIP Port → 5060

In the Proxy and Registration section:

- \blacktriangleright Proxy \rightarrow set this to the IP address of remote gateway
- ➢ Register → no
- ➤ Use OB proxy in Dialog → no
- ➤ Make call without reg → yes
- ➢ Ans call without reg → yes

In the Subscriber Information section:

- ➢ Display name → dummy display name, e.g. Washington PBX
- > User ID → set to the telephone number of this line, e.g. 5502

In the **Dial Plans** section:

- Option 1: ----- Dial Plan 2 \rightarrow (S0<:6602>)
- > Dial Plan 3 → (xx.<:@gw0>)

In the VoIP to PSTN Gateway Setup section:

- > VoIP-To-PSTN Gateway Enable \rightarrow yes
- ➢ VoIP Caller Auth Method → None
- > Default VoIP caller DP → 3

In the PSTN-To-VoIP Gateway Setup section:

- > PSTN-To-VoIP Gateway Enable \rightarrow no Option 1: ------ \rightarrow yes
- > PSTN Ring Thru Line 1 → no
 - Option 1: ----- PSTN Caller Default DP = 2

In the FXO Timer Values (sec) section:

> PSTN Answer Delay $\rightarrow 0$

Press Submit all changes

Select the Regional tab

In the Control Timer values (sec) section:

➤ Interdigit Long Timer → 5

In the Miscellaneous section:

Caller ID Method → ETSI FSK With PR(UK)

Press Submit all changes

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