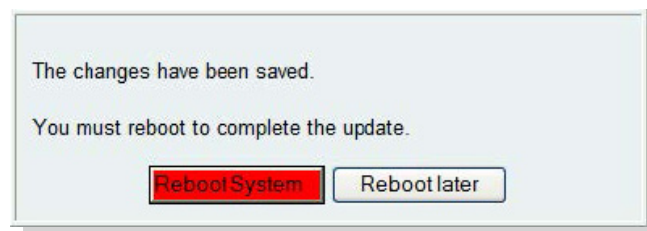
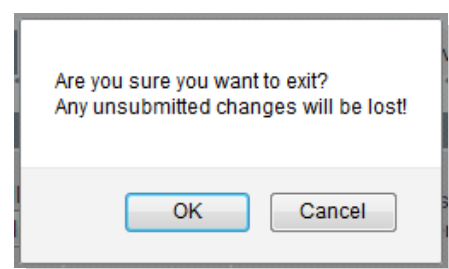


wish to do it manually later. If later is selected, the reboot button on the left hand side menu will be left RED to indicate that a reboot is still required to activate certain new parameters.



If you decide that you want to abandon the changes just made in Quick Config then select Exit. A confirmation request will be displayed, select OK to exit or cancel to return to the Quick Config pages.



6. Archive the Configuration

Save the configuration in an archive, off the Vega, by selecting *Expert Config > System*, then in the Configuration section select the Download button and save the file *config.txt*.

Certifications

EMC	
Emissions:	EN 55022:2010 EN 55022:2006 inc A1:2007 & A2:2010 VCCI (V-3/2012.04), AS/NZS CISPR 22 SANS 222:2006 / CISPR 22:2006 FCC/CFR 47:Part 15 Canadian Standard ICES-003:Issue 5 EN 61000-3-2:2006 inc A1/A2:2009 EN 61000-3-3:2008
Immunity:	EN 55024:2010 SANS 224:1997 / CISPR 24:1997

Safety	
IEC 60950-1/A1:2009	

TBR4	
AS/ACIF S038	

Telecom	
FCC part 68	ACTA Registration Number: SANISNAVEGAX00G Ringer Equivalence Number (REN): NA Facility Interface Code (FIC): 04DU9.BN, 04DU9.DN, 04DU9.1KN, 04DU9.1SN Service Order Code (SOC): NA USOC Jack Type: RJ45
IC CS-03, Issue9, Part VI	IC Registration Number: 5668A-VEGAX00G

Warranty

Standard 12-month warranty is included. Additional warranty services available, contact your Sales representative for more information.

How to Get Support

If you encounter problems, please visit wiki.sangoma.com or contact your authorized reseller directly.

Type	Description
1 ST LINE SUPPORT	Visit the online knowledge base at wiki.sangoma.com Our knowledge base contains hundreds of step-by-step tutorials, guides and troubleshooting information to help you find what you're looking for and get back to work as quickly as possible.
2 ND LINE SUPPORT	Contact your Point-of-Purchase (Reseller/Distributor)
3 RD LINE SUPPORT	Contact Sangoma Support at support.sangoma.com Log onto our online support portal to submit your support requests directly with Sangoma customer Engineers, processed in a priority sequence.

End-User License Agreement

To view the End-User License Agreement visit:
<http://www.sangoma.com/legal/>



400G

QUICK START GUIDE



VEGA400G



Congratulations on your purchase of a Vega Voice Over IP gateway. This Quick Start Guide will assist you through the process of configuring your new gateway.

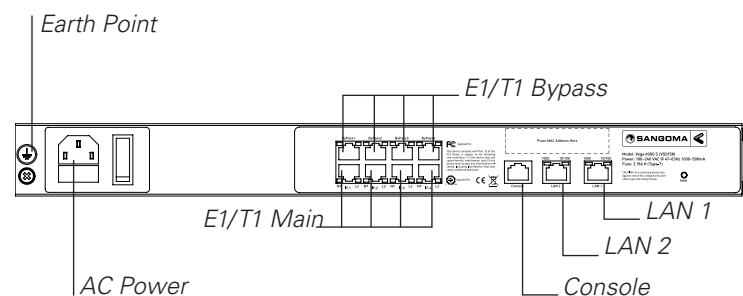
If you would like further details about the parameters you are configuring or you want to know more about the capabilities of your Vega, please visit wiki.sangoma.com and start by looking at the Quick SIP Config reference guide available in the Vega > Configuration section.

1. Before you Start

We advise that before connecting and using your Vega for the first time, you visit wiki.sangoma.com and read the "Safety and Compliance Information" document which contains important details that you should be aware of.

2. Connecting your Vega 400G

Connect your Vega using its telephony, Earth point, power and LAN connections.



With all models of Vega 400G, all 4 telephony connections (E1/T1: 1 to 4) are always available for use. The capacity of the Vega 400G you have purchased just affects the number of simultaneous calls that can be made to/from the VoIP interface. All Vega 400Gs allow the connection to all 4 telephony interfaces.

For normal operation connect to the main ports – for details about the operation of the ByPass ports see the documentation on wiki.sangoma.com.

WARNING *The Earth point on your Vega must be connected to a suitable earth. It serves a dual role as a safety Earth and it also stops noise on telephone lines in electrically noisy conditions.*

LAN interfaces 1 and 2 support 10, 100 or 1000 mbps connections and as default are configured to negotiate to the highest bitrate.

It is important that if both LAN 1 and LAN 2 are to be used that they are connected to separate (non-overlapping) subnets.

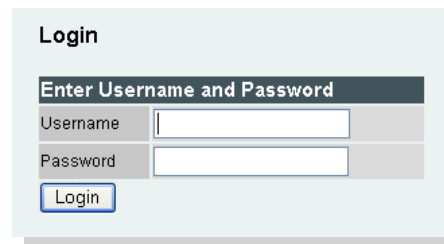
3. Getting an IP address

Vega gateways use DHCP to pick up IP addresses for its LAN interfaces. Each LAN interface is handled independently; if the LAN interface fails to get an IP address from the DHCP server, for example, because there is no DHCP server on the LAN, then the Vega will default the IP address of that LAN interface to 169.254.x.y where x and y are the decimal versions of the last two bytes of the LAN MAC address. The MAC addresses for LAN 1 and LAN 2 can be found on the rear of the Vega gateway near the ethernet ports. The LAN 1 MAC address is always the lower, even number and the LAN 2 MAC address is the LAN 1 MAC address plus 1.

A calculator that will calculate the 169.254.x.y address from the MAC address is available in the Vega Tools section of wiki.sangoma.com.

4. Logging into the Vega

Enter the IP address of your Vega gateway into the address line of your web browser and press enter or select "Go". The Vega will present you with a login screen:



Enter the username and password. By default these are set to:

Username = admin
Password = admin

5. Configuring your Vega

Select Quick Config. If a warning message appears informing that there is already configuration applied, remove the existing settings and start from the beginning by selecting "Continue", and then ticking the "New Install?" option. This will ensure that any old, unwanted configuration is removed as you submit your new settings. Do not tick this option if you are simply amending existing configuration.

WARNING *To exit Quick Config ALWAYS use either the Submit or Exit buttons adjacent to the Quick Config tabs. DO NOT use the navigation entries on the left hand menu, as using these may cause you to lose settings that you want to keep.*

a) Basic Config

Start by selecting the basic config tab. If this is a new installation, ensure that the "New Install?" option is ticked.

Select the country and choose the appropriate emergency numbers for the location of the Vega. Select the LAN settings and change the login password if required.

Note: If the LAN settings have previously been statically configured, ensure these settings are correctly reflected on the Basic Config page. Failure to do this may result in the IP address changing and the Vega becoming inaccessible over the LAN.

b) VoIP

REGISTRATION MODE:

Depending on the installation, if registration is required, it can be configured as one registration per gateway.

OUTBOUND PROXY:

Choose whether calls should be sent direct to the service provider or through an outbound proxy.

Note: The fields available to configure on the remainder of this tab are affected by the values chosen in the above two settings.

Configure the remaining settings, with values provided by your VoIP service provider or system administrator.

All IP address entries may be provided as dotted decimal values (a.b.c.d) or as DNS names (e.g. SIP.sangoma.com).

Configure the codec lineup for this installation in preference order.

e) E1/T1 Config

Start by configuring the Port Setting section. As these values relate to the physical interface connectivity, once you have set these values you should never have to return to reconfigure them.

Choose the required protocol; the framing will usually be set correctly by leaving the Vega set to "auto".

Select NT (Network) on each Vega interface that is connected to a PBX interface which is configured as TE (Terminal Equipment). Ensure NT is not ticked if the

interface is connected to the ISDN network (which is NT) or is connected to an NT interface on the PBX. Since all E1/T1 ports are enabled with pin switching, it should not be necessary to use cross-over cables.

Tip: If required, see the guide on wiki.sangoma.com for more information on Vega pinouts.

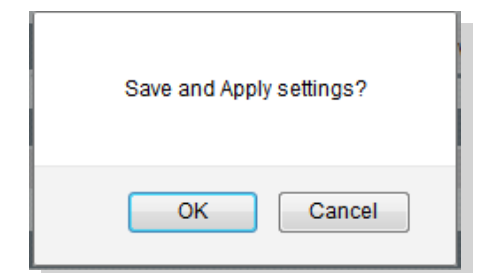
The number of channels setting only needs to be changed from auto if the interface is being plugged into a "fractional E1" or a "fractional T1" where only a proportion of the full number of channels available on the E1 or T1 are being used.

Now configure the "Telephone Connections" details. Here is a reference table for Regular Expressions. For more info, please visit the Config section on wiki.sangoma.com.

Regular Expressions	
.	Any single digit
[abc]	Range of digits 'a', 'b' and 'c'
[a-d]	Range of digits 'a' thru 'd'
[^abc]	Range of digits excluding 'a', 'b' and 'c'
*	Previous character or regular expression repeated 0 or more times
+	Previous character or regular expression repeated 1 or more times
?	Previous character or regular expression repeated 0 or 1 times
\	Turn off the regular expression meaning of the following character, e.g. \ <code>*</code> = DTMF <code>*</code>

f) Saving your Configuration

Press Submit to save, apply and activate the changes made using Quick Config. Pressing Submit will bring up a confirmation request. Select OK to continue and activate the changes or Cancel to go back to the Quick Config.



Selecting OK to the above question will activate most Quick Config settings. Some parameters, like the IP address of the Vega, will however require the Vega to be re-booted. If a reboot is required, the Vega will ask whether this should occur immediately or whether you