

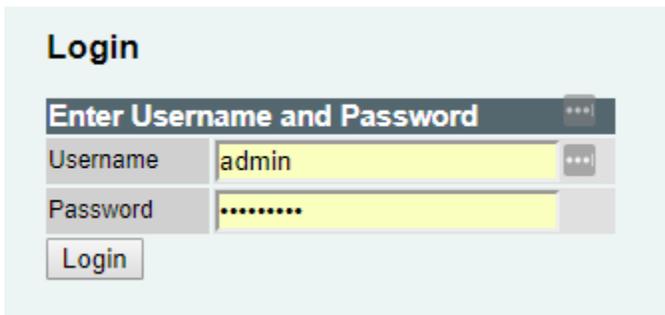
Vega with FreePBX (PJSIP on port 5060)

- Vega Configuration
- FreePBX Configuration
- Intrusion detection (Recommendation)

Vega Configuration

The following steps illustrate how to register your Vega product with FreePBX. This guide applies to all Vega products

1. Log into your Vega **webGUI**



Login

Enter Username and Password

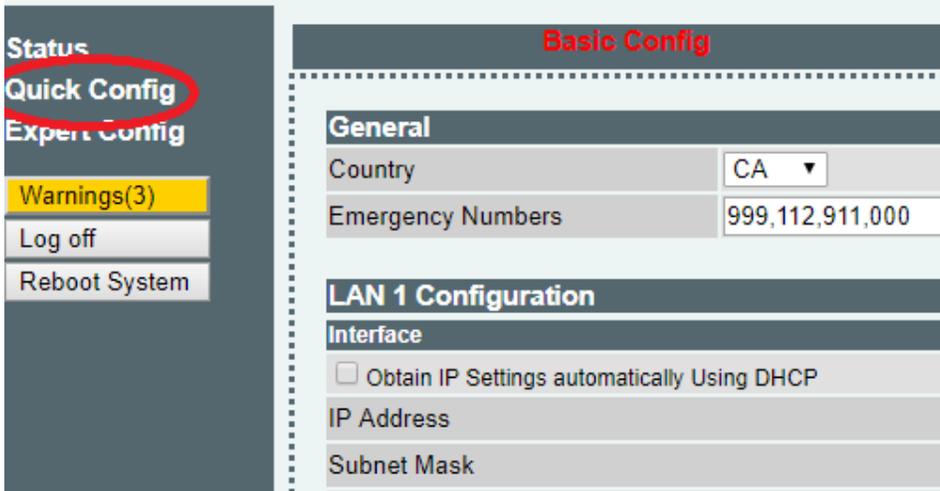
Username: admin

Password:

Login

2. Log into the **Quick Config**

**Any modifications performed in *Quick Config* will overwrite ALL configuration on the Vega (so if you have made any adjustments in *Expert Config*, they will be erased!!)



Status

Quick Config

Expert Config

Warnings(3)

Log off

Reboot System

Basic Config

General

Country: CA

Emergency Numbers: 999,112,911,000

LAN 1 Configuration

Interface

Obtain IP Settings automatically Using DHCP

IP Address

Subnet Mask

3. **Configure VoIP** Registration details as follows

Basic Config ? **VoIP** **FXS**

General VoIP Configuration

Registration Mode Off

Local Gateway Configuration

SIP Local Port 5060

Remote Server Configuration

SIP Server IP/FQDN 10.4.2.20 ?

SIP Server Port 5060 ?

SIP Server Transport Mode udp

SIP Accessibility Check options

Registration and Authentication ID Reg and Auth ID

Authentication Password ****

- a. Click on the 'Registration Mode' and select 'Off'
- b. Insert your FreePBX IP address in 'SIP Server IP/Name'
- c. Enter the PJSIP port (5060)

4. Finish configuring your Vega by clicking on the last tab.
In our example we are using a Vega 100

Basic Config ? **VoIP** **T1** Submit New Install? Exit

Telephone Connections

| Interface | Handle Emergency Calls? | Telephone Number List Same As Interface | Telephone number list |
|-----------|-------------------------------------|---|-----------------------|
| 0401 | <input checked="" type="checkbox"/> | None | .* |
| 0402 | <input type="checkbox"/> | None | .* |
| 0403 | <input type="checkbox"/> | None | .* |
| 0404 | <input type="checkbox"/> | None | .* |

Port Settings

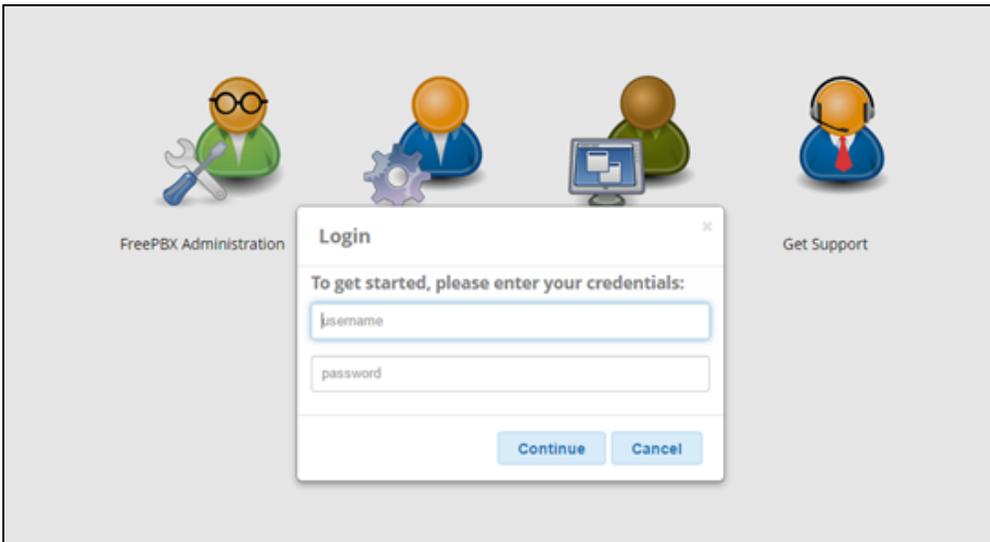
Topology T1 Protocol auto Framing auto

| Interface | NT? | Number of Channels | Channel Allocation |
|-----------|-------------------------------------|--------------------|--------------------|
| 0401 | <input type="checkbox"/> | auto | default |
| 0402 | <input checked="" type="checkbox"/> | auto | default |
| 0403 | <input type="checkbox"/> | auto | default |
| 0404 | <input checked="" type="checkbox"/> | auto | default |

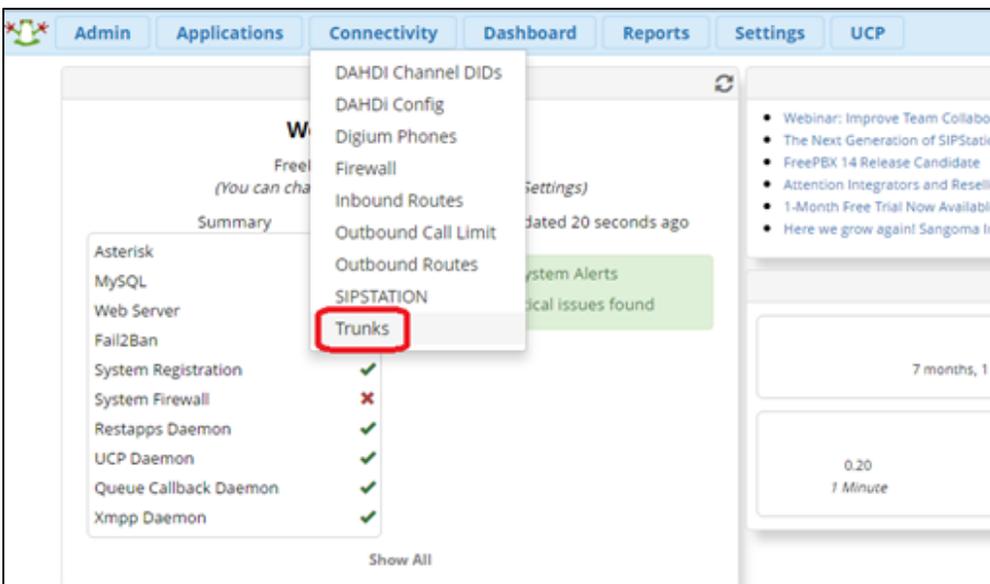
The Vega will ask you to **apply** and **save** your changes.

FreePBX Configuration

1. Log into the **FreePBX webGUI**



2. Click on **Trunks**, located under **Connectivity**



3. Click on 'Add SIP (chan_pjsip) Trunk', to add a new trunk



4. Define the **Trunk Name**. In our example, we called it 'vega' which is the same as the Registration/Authentication ID we entered in the Vega Quick Config Wizard.

| General | Dialed Number Manipulation Rules | pjsip Settings |
|--------------------------------------|----------------------------------|----------------------------------|
| Trunk Name ? | | vega |
| Hide CallerID ? | | Yes No |
| Outbound CallerID ? | | 1122334455 |
| CID Options ? | | Allow Any CID Block Foreign CIDs |
| Maximum Channels ? | | |
| Asterisk Trunk Dial Options ? | | T Override System |
| Continue if Busy ? | | Yes No |
| Disable Trunk ? | | Yes No |
| Monitor Trunk Failures ? | | Yes No |

5. Configure the **PJSIP Settings** under the **General** Tab as follows:

- Leave the **Username** blank, since the Username is the trunk name
- Enter the Authentication Password (**secret**). In our example it is 'sangoma1'
- Set the **Authentication** option as **Both**
- Set the **Registration** parameter as **Receive**, since the Vega is sending the SIP registration string to FreePBX
- Leave the rest of the options with their default values.
- Click on the **Submit** button.

General Dialed Number Manipulation Rules **pjsip Settings** 

PJSIP Settings

General Advanced Codecs

Username

Secret

Authentication Outbound Inbound **Both** None

Registration Send **Receive** None

Language Code

SIP Server

SIP Server Port

Context

Transport

6. The last step is to **Apply Configuration**.



To verify registration Open the 'Status' Page of the Vega Gateway webgui and look at *SIP Registrations*

| SIP Registrations | |
|--|-------------------------|
| Registered Users | 1 of 8 users registered |
| <input type="button" value="SIP Registrations"/> | |

```
SIP REG
-----
SIP Profile 1 - registration expiry = 600s
-----
SIP REG USER 1
--- address - vega@10.4.2.20
--- registrar - 10.4.2.20:5060
--- auth user - vega
--- contact - [sip:vega@10.4.2.21:5060]
--- state - registered (user 1)
--- TTL - 400 seconds
```

Intrusion detection (Recommendation)

In order to have the **Vega** register to **FreePBX** we recommend adding the Vega's IP Address (or add the entire subnet where the Vega is installed) to the **Intrusion Detection** module whitelist.

- To do this navigate to **Admin -> System Admin -> Intrusion Detection**
- Add the Vega's IP or Subnet in the **Whitelist** field
- **Submit** changes
- **Restart** the Intrusion Detection service

| | |
|---|---|
| Status | running |
| Intrusion Detection ? | Stop Restart |
| Ban Time ? | 1800 |
| Length of time in seconds a remote IP is banned before being reset. | |
| Max Retry ? | 8 |
| Find Time ? | 600 |
| E-mail: ? | email |
| Whitelist ? | 127.0.0.1 10.100.0.0/24 10.4.2.0/24 |

