CALUG - PBX in a Flash

- Overview
- Planning
- Security
- Setup
- Bells and Whistles
- Summary

Overview

- Swift Staffing
- Opensource Programs
- Asterisk – Digium
- Traditional (POTS) vs VOIP
- Hosted, Commercial or Your Box

Planning

- Determine What Features are Important
- System Design
- Connectivity
- Digital Phones
- Router Capabilities
- VOIP Provider

Security

- VOIP Systems Compromised
- Iptables
- Hardware Firewalls
- Fail2ban
- Passwords
- Updates
- Logs
- VPN
- Webmin

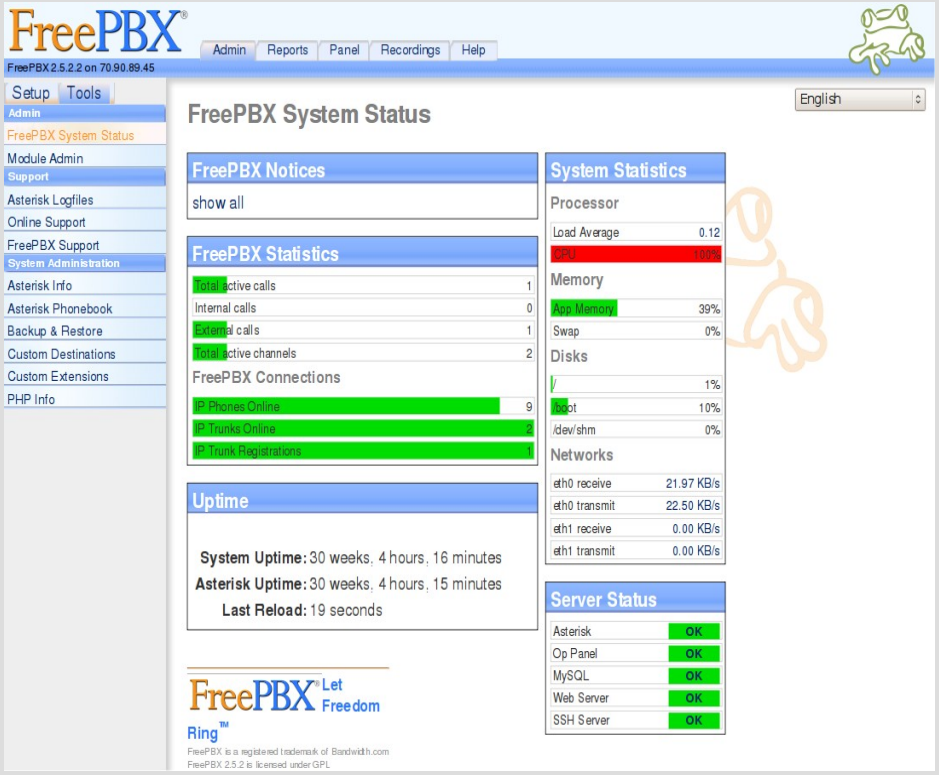
PBX In A Flash Install

- Download iso (pbxinaflash.net/downloads)
- Vmware appliance
- Extract iso and install
- CentOS 5.x based with webmin, asterisk and scripts
- Update-scripts and change default passwords
- Assign static ip
- Access IP address
- Port forward UDP 5004-5082, 10000-20000,4569, 2727

PBX In A Flash

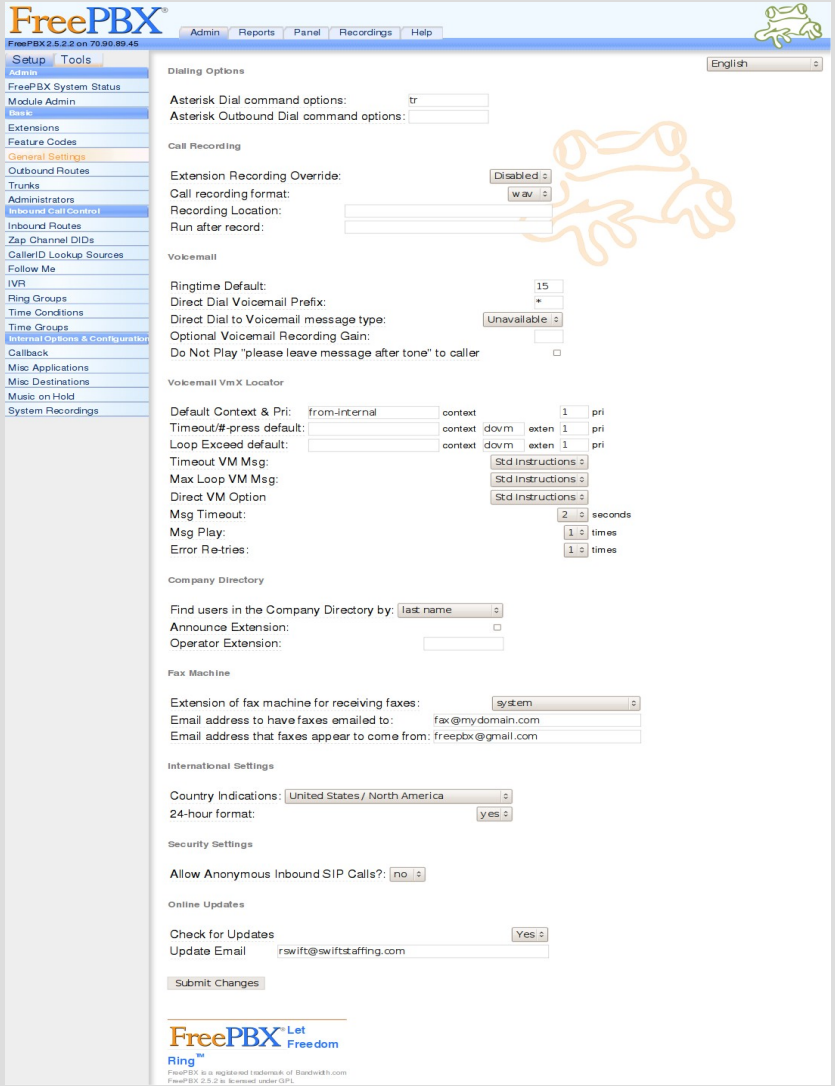
- PBX Opening Panel
- Admin Access
- Flash Panel
- Conferencing

FreePBX



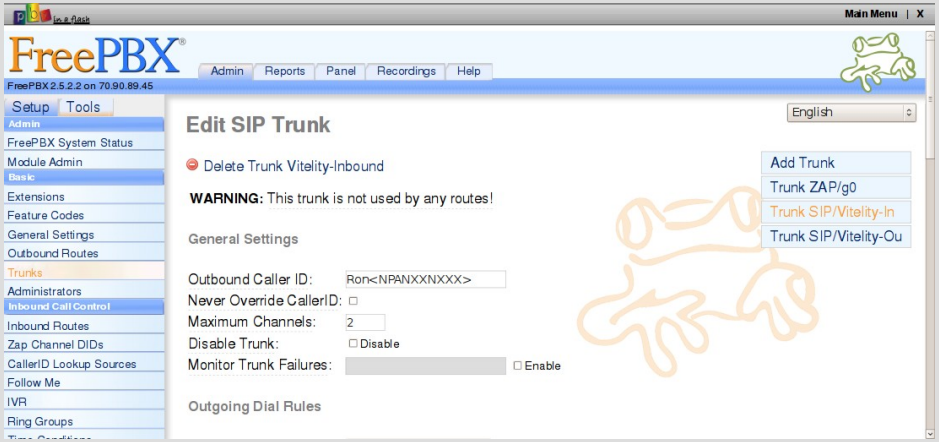
- FreePBX interface
- System Status
- Update Modules

General Settings



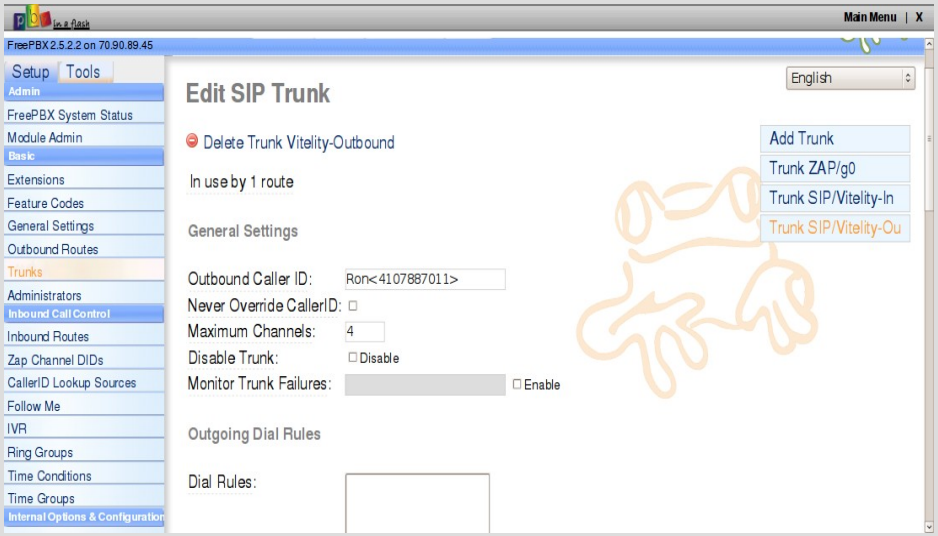
- Default settings
- Email for updates
- Don't allow anonymous inbound sip calls

Inbound Trunk



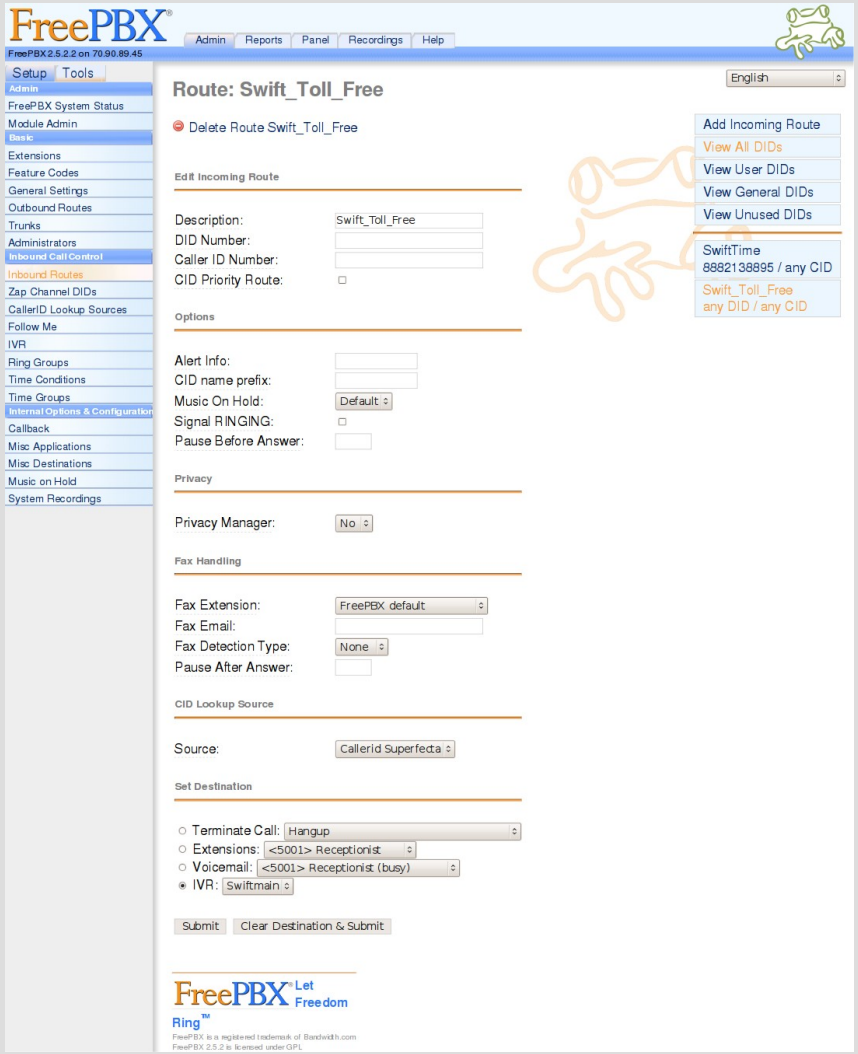
- Settings from VOIP Provider
- DID Callerid
- Peer Details
- Registration string

Outbound Trunk



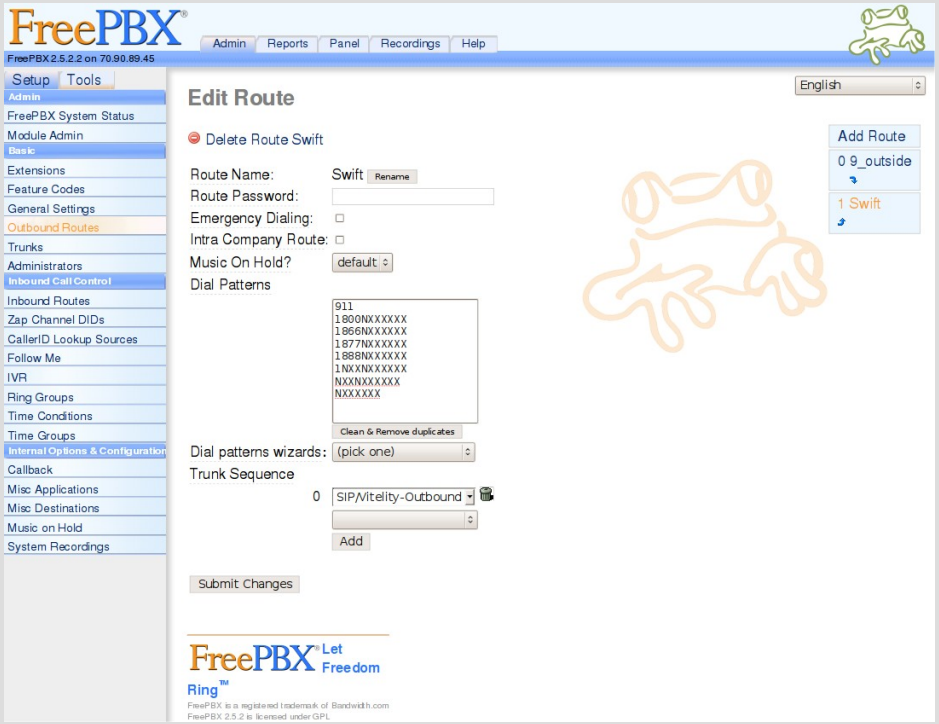
- Peer call settings
- VOIP Provider Specific
- No Register String

Inbound Route



- Determines how inbound calls are handled
- Callerid
- Fax Features
- Set Call Destination – Extension, Ring Group, IVR, Queue

Outbound Route



- Dial plan
- Trunk to use

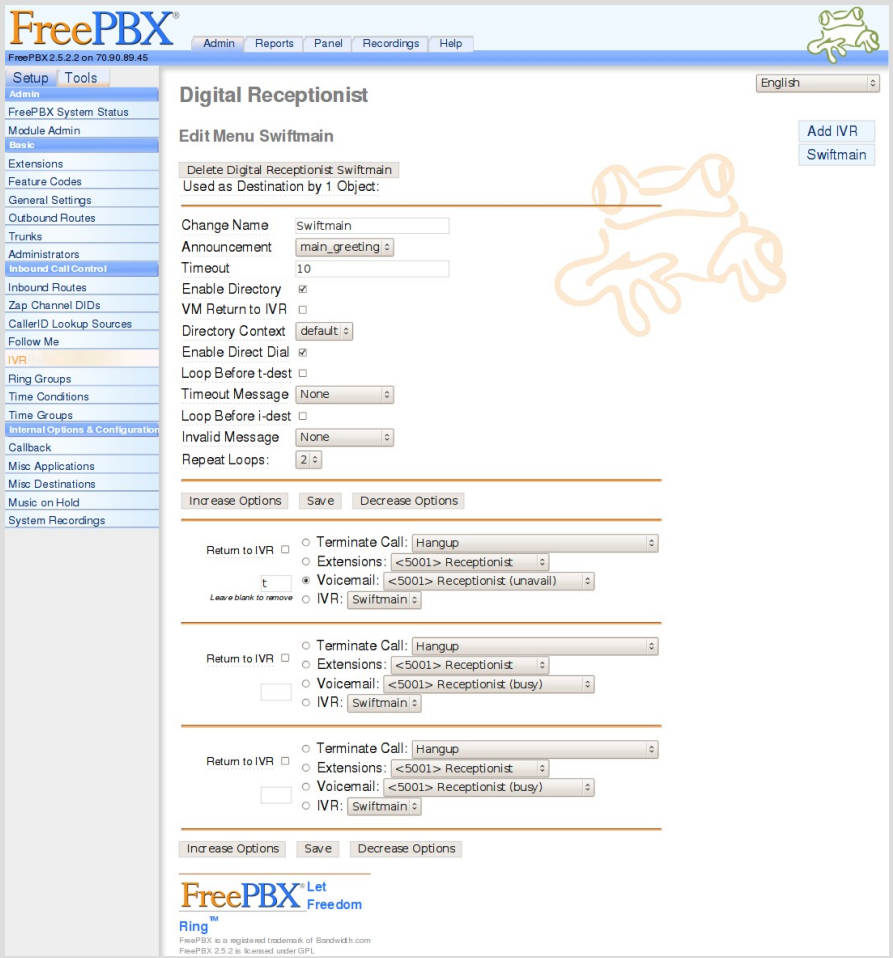
Extensions

- Don't use 70-79, 700-799 or 7777
- Add Generic SIP
- Extension
- Display name
- Secret
- Voicemail w/email notification

Follow Me Feature

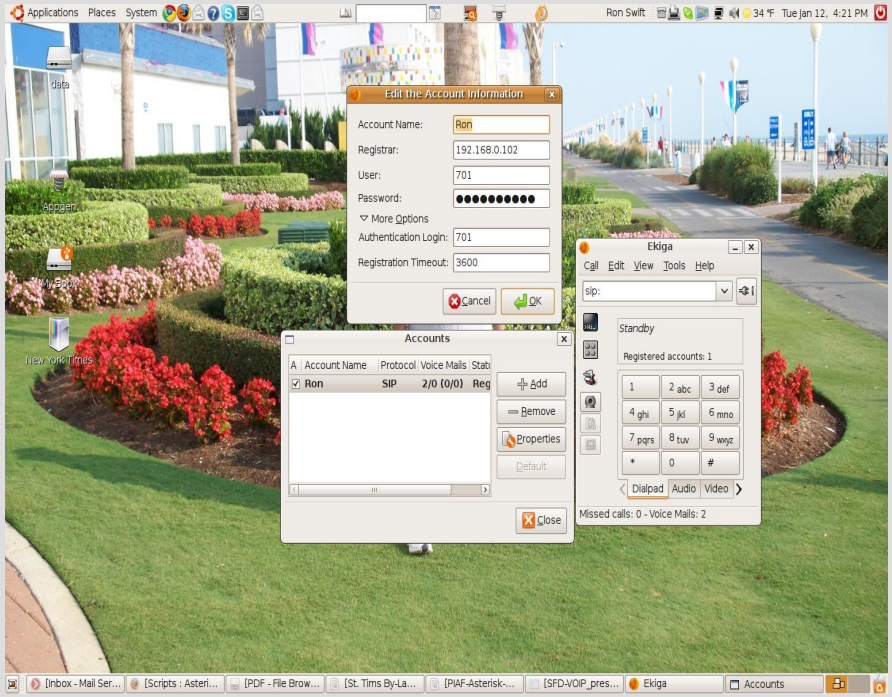
- Add to Extensions
- Calls can go to multiple devices
- Ring strategy
- Ring Time
- Destination if no answer

IVR Digital Receptionist



- Incoming Calls Automation
- Recorded Greetings
- Route to Extensions, Departments, Voicemail
- Queue
- Route by Time of Day

Sip Phone Setup



- Use Soft or Hard Phones
- Features Vary
- Server IP
- Extension
- Secret

Bells and Whistles

- Fax
- Integrate with CRM
- News and Weather Reporting
- Record Calls
- Wake up Calls
- Connect Multiple Locations
- Free Calls

Summary

- Plan your system
- Hosted and commercial options available
- Security is key as VOIP becomes more widely used.
- Broadband – Comcast, FIOS, T-1
- Setup is simple with PBX in a Flash iso
- Phone, Router, and VOIP Provider
- Feature rich and cost effective system
- PIAF Without Tears - Reference

Appendix

- SIP
- DID
- POTS
- QOS
- POE
- Enum
- Orgasmatron