

AARENET CARRIER GRADE VOIP SYSTEMS AND VIRTUAL PBX – SYSTEM FEATURES

High availability
99.999%

Standard 19" Hard-
ware DELL Servers

Flexible licencing
concept

Self-provisioning of
accredited termi-
nals

SYSTEM ARCHITECTURE

- Standard SIP control of Media gateways
- SIP interconnect to remote softswitch
- N+1 high availability (99,999%)
- DTMF transport type negotiation
- T.38 fax relay, fax bypass, modem by-pass
- RFC4040 (clear mode)
- DELL PE620R Server cord hardware, standard 19" Rack Version

SIP RELATED FUNCTIONALITY

- RFC3261: SIP: Session Initiation Protocol
- Registrar Server
- MD5 authentication
- Several Numbers per Account
- Integrated Media Proxy and Media Server (Announcements)
- NAT traversal support
- SIP trunk
- Support Info (SIP-Traces, Problem-Log)

TSP FEATURES AND TOOLS

- Web admin portal
- Auto-provisioning of customer devices
- Automatic upgrade of firmware
- End2End Monitoring of connected appliances
- Multi Tenant Support and Multi Tier Structure
- Centralized Configuration
- Centralized Provisioning
- Centralized CDR's
- Real-Time Rating Engine
- Configurable Event Alarming via Email
- SS7 Support via Gateways
- SNMP Access
- Built in diagnostic tools
- SIP Interoperation with Tier1 carriers Colt, BT, DT(*)
- Accredited IP Phones supporting WEB GUI
 - Aastra 67X0i family,
 - Panasonic KX-UT123, UT136, UT248,
 - Snom 300, 700 and 800 family
 - Yealink T42G, T46G, T48G
 - Yealink T19, T20, T21
 - Alcatel Business Phones IP 100, IP 150
- Supported standards CE, WEE, ETSI compliant

OPERATOR FEATURES

- System Statistics (Status Graphs)
- Administrative Override (call blocking, Class of Service)
- Subscriber Locking (inbound, outbound, off-net)
- Peering Configurations (LCR, weight, fail-over)
- Individual Billing Plans
- Integrated real time billing

SUPPORT AND MANAGEMENT

- Support and Service Levels
 - Basic: 8/5
 - Standard: 8/5 plus updates
 - Premium: 24/7 plus updates plus support
 - Customised: flexible
- Enhanced System monitor and External alarming to SC

LICENCING FLEXIBILITY

- Accounts / Users flexible allocation
- Number of concurrent calls

APPLICATIONS INTEGRATION

- XML Interfaces
- Billing Exports in .CSV
- Fax, Door intercom, EFTPOS
- Support of all ISDN functionalities
- FMC, Soft client integration with CTI functionality, IOS and Android app
- Customizable integrated WebPortal for Endusers

ENVIRONMENTAL CONDITIONS

- Operating Temperature: 10° C to 35° C
- Operating Relative Humidity (non-condensing twmax=29C): 20% to 80% non-condensing
- Maximum humidity gradient: 10% per hour, operational and non-operational conditions

Fixed Mobile Convergence and seamless WiFi 2 GSM bidirectional hand-over

Fraud protection

Softclients for Android, IOS and Windows

DEDICATED PER VIRTUAL PBX

- Directory and user profile
- Music on Hold
- Call detail list
- Least Cost Routing (static)
- Multiple Route Choice
- Regular expressions based Number Re-writing
- Call blocking / barring
- Credit limit per account (Top Stop)
- Hunting groups (sequential, random)
- Speed dialing
- Call restriction / permission per subscriber
- Standard call features: CHD, CW, DND, ECT, BCT, comfort REDIAL, IVR
- CLI Signalisation : CLIP, CLIR, COLP, COLR, MCID (**)
- Call distribution: Team/line keys
- Multiple registrations per number
- Extended CD rules (busy, delayed)
- CF, CFU, CFB, CFNR, CFXREG, DND
- Day/Night/Weekend timed activation
- CLI dependent forwarding
- Voice mail Remote access and voice2mail
- IVR extended 2voice, 2call, 2dial, 2hangup. Unlimited actions and announcements
- conference service
 - 3rd party add on
 - up to 10 participants (predefined)
- CTI Outlook integration (1st PTY)
- Desktop client (Windows, Mac OSX)

FAX

- via analogue interface ATA
- T.38 Fax protocol support
- Patton-Inalp ATA SN4112, SN4114, SN4118

T.38 Fax support

180'000 Busy Hour Call Attempts, 4'000 Concurrent Calls on single Service Center

System Performance Typical Specifications

Typical system: 100'000 devices with registration interval 900sec. 50'000 devices with each 8 teamkeys with subscription interval 900sec. 4'000 concurrent calls

Carrier Grade Service Center

Media Server Throughput Capacity

Calls with transcoding G-729-2-G-711	Calls without Transcoding	Call Attempts per Minute	Busy Hour Call Attempts	Modular expandable
		3'000	180'000	YES
900	2'000			YES

FMC AND MOBILITY SOLUTION

- Use of VPBX functions on mobile phone, Calls from Wi-Fi hotspots , Seamless in-call handover between WLAN and mobile network
- One Number Concept (landline number), MC Client for Symbian, iPhone and Android
- Remote Office Integration worldwide with or without VPN
- Secure QR-Code auto configuration
- Power usage optimized through PUSH message functionality (iPhone, Android)
- Home office integration

USER AND CALL FEATURES

- Call related functionality Routing based variants: rule, subscriber, domain, gateway, destination, emergency, time of day, numbering plan

SOFTWARE FEATURES

- Linux OS based
- Java application
- SQL, Ajax and SOAP interfaces

	size	redundant	basic setup accounts / nis	max. config	upgrade to CG
Entry Level	1x1U	NO	1'000/10'000	5'000/50'000	YES
Entry Level	2x1U	YES	1'000/10'000	5'000/50'000	YES
Carrier Grade	6x1U	YES	5'000/50'000	unl. / unl.	N.A.

The Aarenet VoIP System is a Carrier VoIP Switch and provides telephony services that are unique in extent and quality for its price range. Modular design allows optimized adaptation to individual customer needs. It is the key element for telephony services in a modern NGN environment.

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