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Hearty Welcome

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Introduction

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Introduction

- Seamless Connectivity Between VoIP and PSTN Network
- Feature Rich and Dependable VoIP-FXO-FXS Gateway
- Faster VoIP-FXS, VoIP-FXO and FXO-FXS Call Processing
- Universal and Transparent Call Routing
- Gateway for Existing IP-PBX/PBX
- Advanced Least Cost Routing (LCR) Algorithm
- Flexible Architecture with Support from 8 to 32 FXO/FXS Ports

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SETU VFXTH

SETU VFXTH

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SETU VFXTH Configurations

Sr. No	Configuration	VoIP Channels	FXO Ports	FXS Ports
1	SETU VFXTH0016	16	0	16
2	SETU VFXTH0024	24	0	24
3	SETU VFXTH0032	32	0	32
4	SETU VFXTH0800	08	08	0
5	SETU VFXTH1600	16	16	0
6	SETU VFXTH2400	24	24	0
7	SETU VFXTH3200	32	32	0
8	SETU VFXTH0808	16	08	08
9	SETU VFXTH1212	24	12	12
10	SETU VFXTH1616	32	16	16

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Specifications

SPECIFICATIONS	
Maximum Number of VoIP Channels	32 Channels
Maximum Number of FXO Ports (RJ11)	32 Ports
Maximum Number of FXS Ports (RJ11)	32 Ports
WAN Port (Ethernet Port)	1 Ethernet Port
Power Supply	External Adaptor 24V DC/2.5A
Power Consumption	60 Watt (Typical)
LED Indications	1 GREEN colour LED for Power, 1 Dual Colour LED for Status, 32 Single Colour LEDs for each Port
Dimensions (W x H x D)	40.7 X 5.1 X 17.2 Cm (16.0” X 2.0” X 6.8”)
Installation Mounting	Table-Top, Wall and Rack Mount

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VoIP Connectivity

- 9 SIP Accounts
- Up to 32 VoIP Channels
- VoIP Proxy Calls (SIP Accounts)
- Peer-to-Peer Calls (500 Entries)

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Applications

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Applications

- VoIP Gateway for a TDM PBX
- FXO Gateway for an IP PBX
- Network Two TDM PBXs Over the IP Network
- Multi-Site Connectivity

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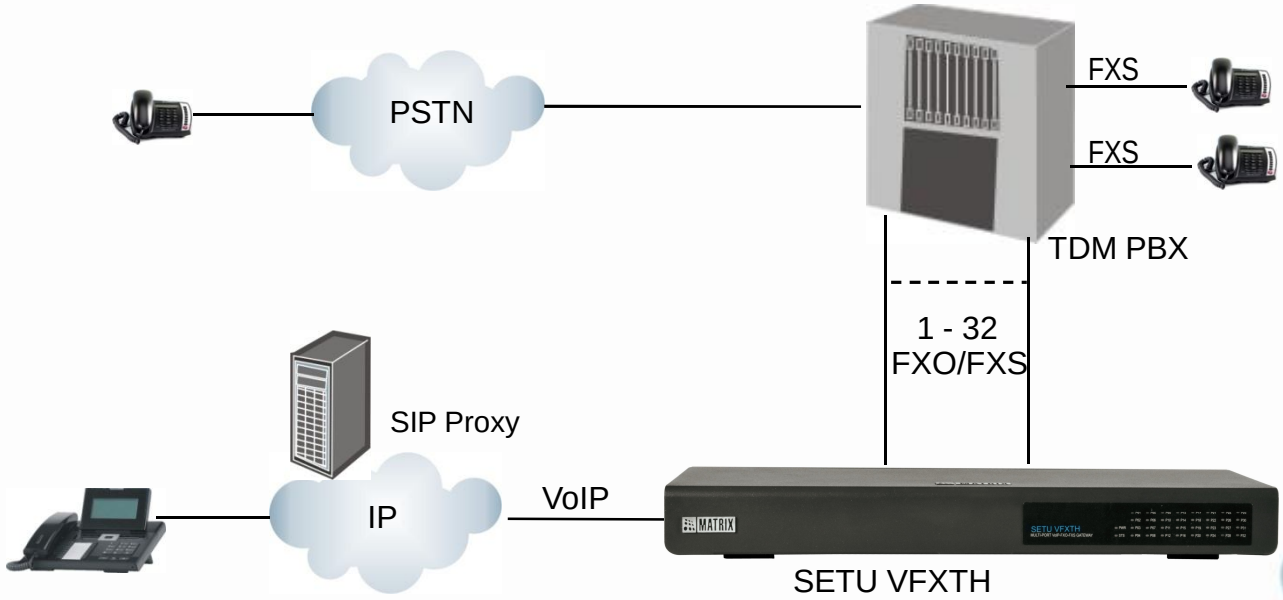
VoIP Gateway for TDM PBX



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PSTN Gateway for IP PBX

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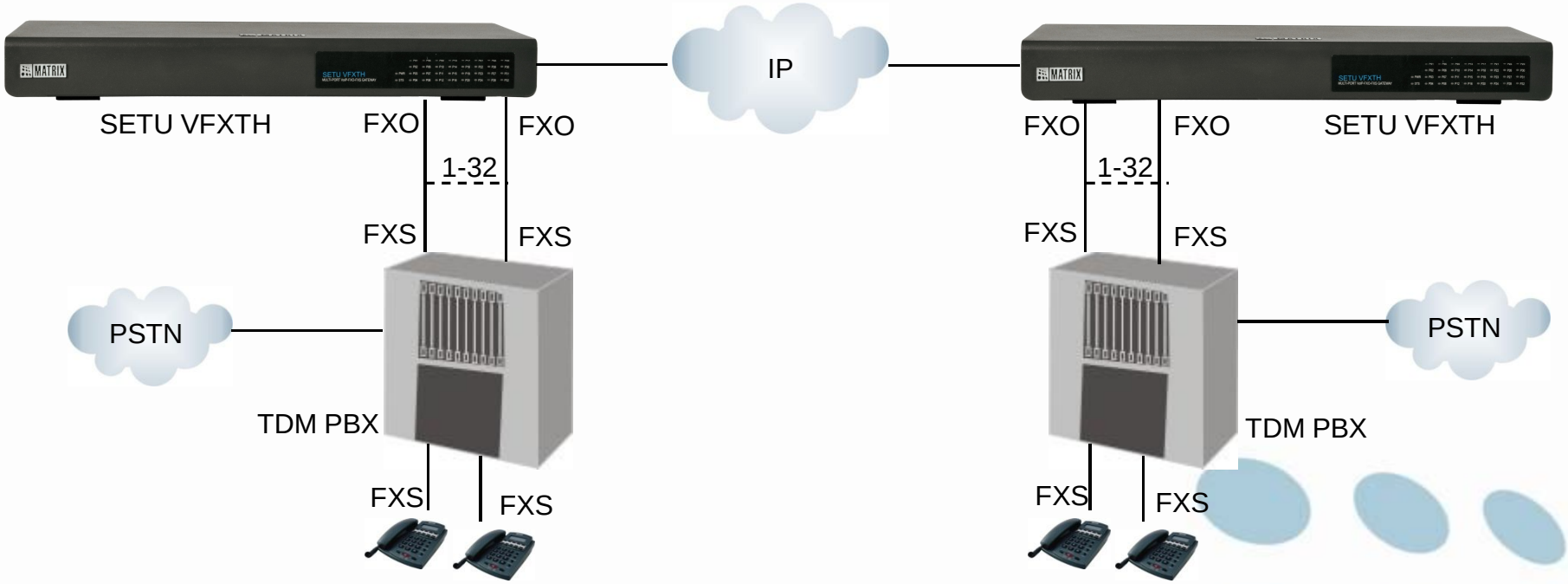
Network two PBXs over IP Network



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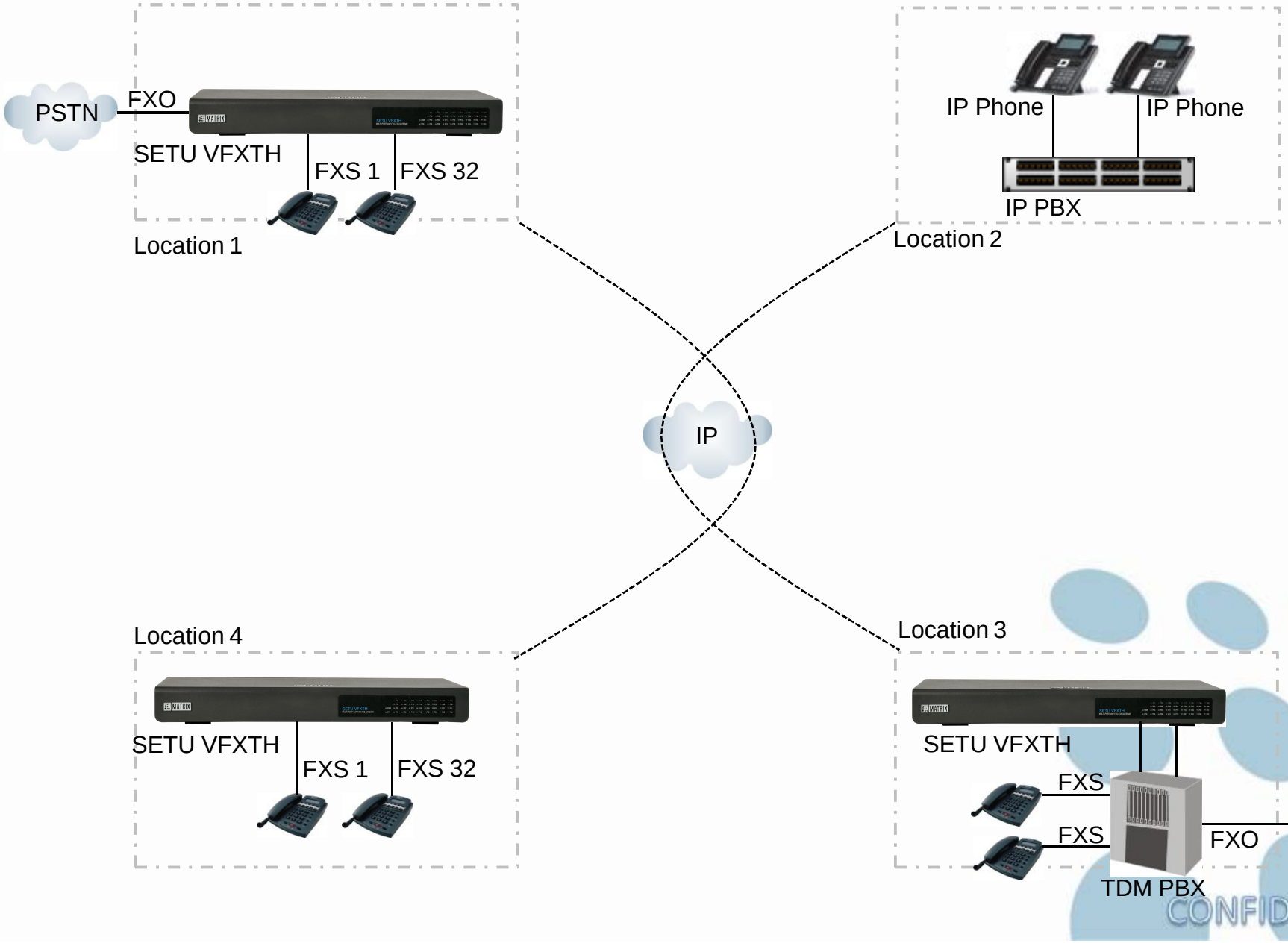
Multi-site Connectivity



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Software Features

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Features

- Access Codes
- Allowed and Denied Numbers List
- Automatic Number Translation
- Black Listed Callers
- Call Transfer (Attended/Blind)
- Call Detail Records (CDR)
- Call Progress Tone and Rings
- CLI on FXS Port
- Conference
- CLI Based Call Routing
- Date and Time Settings
- Daylight Saving Mode
- Digest Authentication
- Dynamic DNS

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Features

- Do Not Disturb
- Emergency Number Dialing
- Fax over IP
- Hotline
- Least Cost Routing
- MAC Cloning
- NAT and STUN Support
- PCAP Trace
- PIN Authentication
- PPPoE
- Peer-to-Peer Calling
- Prefix to Domain Name Conversion
- Supplementary Services
- System Log Client
- VLAN Tagging
- Real Time Clock
- Universal Call Routing
- Web-based Programming

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Access Codes

- A String of Digits Dialed to Access Supplementary Features
- A String of Digits Used to Enable/Disable Features or Enter Programming Mode
- Access Codes of Your Choice can be Programmed
- Access Code for Programming Mode can not be Changed
- Access Code Can be Maximum of 4 Digits
- To Create an Access Code 0-9, *, # and ^ Signs are Allowed

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Allowed and Denied Numbers

- Can be Programmed to Allow or Deny Numbers from being Dialed
- Avoid Misuse and Restrict Unproductive Calls
- Very Useful Feature to Control Cost
- Can be Programmed Separately for VoIP, FXO and FXS Ports
- 24 Number Lists can be Programmed
- 64 Entries per List are Supported

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Automatic Number Translation

- Translates full Number or Part of a Dialed Number to Match with Numbering Plan of the Destination Network
- Automatic Number Translation (ANT) is Supported on VoIP, FXO and FXS Ports
  - ✓ User Dial 001-xxxx to Reach a Number in the USA, But as the ITSP Understands 1-xxxx so ANT Replaces the Number 001-xxxx with 1-xxxx to let the ITSP Understand the Dialed Number String

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Call Detail Record (CDR)

- Call Details can be Generated Using Various Filters
  - ✓ Calls Originated from FXO, FXS and SIP Ports
  - ✓ Calls Terminated on FXO, FXS and SIP Ports
  - ✓ Calls Made Between with Date, Day and Time
  - ✓ Calls With and Without Pin Authentication Number
  - ✓ Called and Calling Party Numbers Matching with Numbers List
  - ✓ Call Duration with Hour, Minutes and Seconds
- Call Details of 2000 Calls can be Stored in the Buffer
- Call Details can be Downloaded to a Computer

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Caller Line Identification

- Display Calling Party's Name and Number on FXS Port
- Supports CLI on FXO and SIP Ports
- CLIP on Call Transfer
- Supported CLI
  - ✓ DTMF
  - ✓ V.23 FSK
  - ✓ Bellcore FSK

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Call Progress Tones and Rings

- Different Countries have Different Tones to Indicate the Process of Call Activities such as Dial Tone, Ring Back Tone, Error Tone, Busy Tone etc
- Specific Cadence can be Programmed to Match the Tone Used in Each Country
- Call Progress Tones can be Programmed Country wise or can be Customised as per the User Requirement

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Conference

- Built-in Feature
- 3-Party Conference
- Applicable if the Call is Originated from and Terminated on FXS Port
- External and Internal Parties are Possible
- Crystal Clear Voice

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Daylight Saving

- Daylight Saving is the Procedure of Setting Clocks Ahead at a Particular Time of Year to Make way for Additional Hour of Daylight in the Evening
- Real Time Clock (RTC) Moves Backward or Forward Automatically in Tune with the Daylight Saving Requirement of the Country
- DST can be Forwarded or Set Backward According to Day-Month wise or Date-Month wise as Per the Requirement

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Do Not Disturb

- It is Applicable on FXS Ports
- Do Not Disturb (DND) Feature Enables User to have Privacy of not Receiving the Calls for Particular Time Period
- Outgoing Calls can be Made When Do Not Disturb (DND) is Enabled

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Digest Authentication

- An Industry Standard for Web Authentication
- Used to Authenticate a Caller in Peer-to-Peer Network
- Allows a Group of Devices to Make and Receive Calls Among them
- Authentication Password is to be Pre Configured in all the Devices
- Program such 500 Entries in Digest Authentication Table

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Emergency Number Dialing

- Allows the Caller to Contact Local Emergency Services Like
  - ✓ Police
  - ✓ Fire Station
  - ✓ Hospital
- Maximum 5 Emergency Numbers can be Programmed
- Dialed out Using Pre-assigned Port

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FAX Over IP

- Send and Receive FAX Using IP and PSTN Network
- VoIP to PSTN FAX is Possible if Supported by ITSP
- Send and Received Fax Over IP Using
  - ✓ T.38 (RTP)
  - ✓ T.38 (UDPTL)
  - ✓ Pass Through

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Hotline

- Get Connected to a Pre-defined Destination on Picking up the Receiver
- Hotline is Supported on FXS Ports
- Each FXS Port can have Different Hotline Number
- Provision to Impose Delay before Hotline Activation
- Delay Timer can be Minimum 1 and Maximum 9 Seconds

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Least Cost Routing (LCR)

- Different Service Providers have Different Tariffs for Different Regions and Countries
- System Automatically Select the Most Economical Route to Place the Call
- Route Selected Depends on the Destination Number Dialed
- Ensure each Call at Least Possible Cost

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Peer-to-Peer Calling

- Allows Making and Receiving Calls over IP Network without the help of a Proxy Server (Internet Telephony Service Provider)
- Program Destination number and Destination Address in the Peer-to-Peer Table
- Number can be of Minimum 1 and Maximum 24 Digits
- Useful for Inter-branch or Intra-office Communication
- Require Internet Connection with Fixed IP Addresses

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Prefix to Domain Name Conversion

- Applicable if Called Number is Routed through SIP Port
- On Dialing a Number, the Number is Converted to a Domain Name that is Understood by the ITSP (Internet Telephony Service Provider)
- Supported when a Number is Dialing Out from FXS Port
- 64 Numbers can be Programmed

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PIN Authentication

- PIN Authentication is to Authenticate a Caller to Prove Identity to Proceed the Call from One Network to Another
- Supported on FXO and VoIP (SIP) Ports
- Support 500 PIN Authentication Entries
- Very Useful Feature to Avoid Misuse of the Services

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Real Time Clock (RTC)

- Date and Time is Very Important Parameter for some Features like Call Detail Record (CDR), Daylight Saving Time etc.
- Real Time Clock uses the Simple Network Time Protocol (SNTP) to Get Time from the Time Server
- Flexibility to Choose one from Three Pre-configured free Reliable Time Servers
- Flexibility to Program Time Server Address of their Preference

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System Log

- System Log Protocol is Used for Sending Debug Messages on IP Network
- It is a Client/Server Protocol
- Uses UDP as Transport Protocol for Debugging Process
- Logging has Several Benefits
  - ✓ Easier and Faster Troubleshooting
  - ✓ Security Enhancement
  - ✓ Better System Administration

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Universal Call Routing

- SETU VFXTH Offers Network Connectivity like VoIP, FXO and FXS Ports
- Calls can be Originated and Terminated on any Port Type
- Calls Originated are Routed to the Destination as per Programmed Routing Mechanism
- More than One Destination Port can be Programmed for each Source Port
- Three Types of Routing Groups are Supported

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Target Customers

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Target Customers

- Corporate Offices and Factories
- Organizations with Field Staff
- Remote Project Sites
- Call Centers

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Matrix VoIP Product Range

VYOM CCX	High-Density Universal Gateway
SAPEX	All-in-One Embedded IP-PBX Server
SETU VGFX	Multi-port SIP based VoIP to GSM-FXO-FXS Gateway
SETU VFXTH	Multi-Port VoIP to FXO-FXS Gateway
SETU VFX	SIP based VoIP Gateway with 4/8 FXS Ports, 1 FXO (PSTN Pass-Through) and 1 Ethernet Port
SETU ATA211G	SIP Port VoIP to GSM and FXS Gateway
SETU ATA211	SIP based Analog Telephone Adaptor with 1 FXO, 1 FXS Port and 2 Ethernet Ports
SETU ATA2S	SIP based Analog Telephone Adaptor with 2 FXS Ports and 1 Ethernet Port
SETU ATA1S	SIP based Analog Telephone Adaptor with 1 FXS Port and 2 Ethernet Ports
SETU VP248PE	Executive IP-Phone with 6 Lines x 24 Characters LCD Display and PoE
SETU VP248SE	Executive IP-Phone with 2 Lines x 24 Characters LCD Display and PoE
SETU VP236SE	Executive IP-Phone with 2 Lines x 24 Characters LCD Display and PoE
SETU VP236S	Executive IP-Phone with 2 Lines x 24 Characters LCD Display

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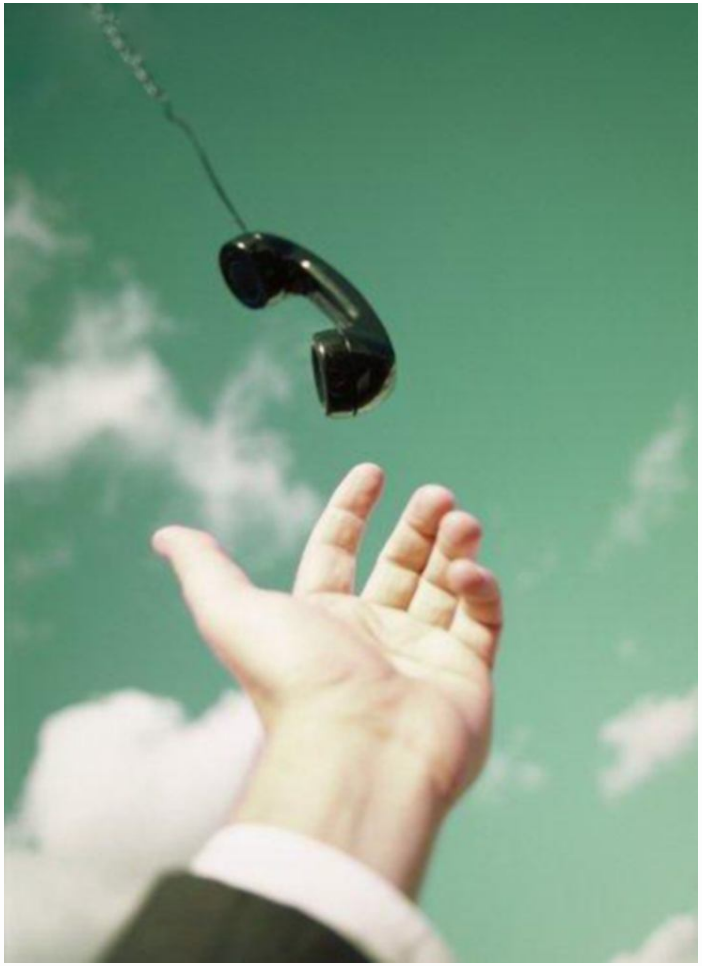

Thank You

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