

Hearty Welcome

Matrix SETU VP

A SIP Based VoIP Phone



SETU VP

- A Feature-rich Executive IP Phone
- Two Ethernet Interfaces
- Compatible with any SIP Infrastructure like
 - ✓ Soft Switches, IP PBXs, Registrars & Proxies
- Supports Non-Proxy Calling through Peer-to-Peer Calling

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SETU VP248



SETU VP248SE	2 Lines x 24 Characters Backlit LCD
SETU VP248PE	6 Lines x 24 Characters Backlit LCD

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SETU VP236



SETU VP236S	2 Lines x 24 Characters Backlit LCD
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System Capacity & Resources

Connector Type	Application	No. of Ports
DC Jack	To Connect Power Adaptor, 5V 2.5Amp. DC	1
RJ45,10/100 Base T	To Connect Ethernet Cable through Router or Modem	2
Audio Jack	To Connect Head Phone with Suitable Impedance	1
RJ 11	To Connect Handset with Speaker and MIC	1

Matrix SETU VP248-Hardware Features



Matrix SETU VP248-Hardware Features

- 2 Ethernet Ports
- 1 Speaker Key
- 16 Programmable Keys
- 5 Navigation Keys
- 17 Touch Sense Keys
- Full Duplex Speaker Phone
- Head Set Interface
- Ringer LED
- Swivel Backlit LCD display

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Matrix SETU VP236-Hardware Features



Matrix SETU VP236-Hardware Features

- 2 Ethernet Ports
- 1 Speaker Key
- 18 Programmable Keys
- 5 Navigation Keys
- Full Duplex Speaker Phone
- Head Set Interface
- Ringer LED
- Swivel Backlit LCD display

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Software Features

- 3-Party Conference
- 4-Call Appearance
- Anonymous Call Rejection
- Auto Answer
- Auto Call Back
- Auto Configuration
- Black Listed Callers List
- Call Appearance
- Call Log
- Call Mute
- Call Progress Tones and Rings
- Call Toggle
- Calling Options
- CLIP
- CLIR
- Comfort Noise Generation
- Day Light Saving
- DHCP Client
- Dial Plan
- Do Not Disturb (DND)
- Echo Cancellation
- Hotline

Software Features

- Key Assignments
- Keypad Lock
- LED Indications
- Multiple Gateway
- Password Protection
- Peer-to-Peer Calling
- Phone Book
- PPPoE
- Quality of Service
- Remote Programming
- Receiving a call (Handset, Headset and Speakers)
- Speed Dial
- STUN
- VLAN Tagging
- Search Contact
- Selective SIP Line
- SIP Accounts
- SIP Over TCP
- 100 Rel / PRACK



Software Features

- Supplementary Services
 - ✓ Call Forward on Busy
 - ✓ Call Forward on No Reply
 - ✓ Call Hold
 - ✓ Call Waiting
 - ✓ Call Transfer-Blind
 - ✓ Call Transfer-Attended
 - ✓ Voice Activity Detection
 - ✓ Voice Mail
 - ✓ Volume Settings
 - ✓ Web Jeeves

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Anonymous Call Rejection

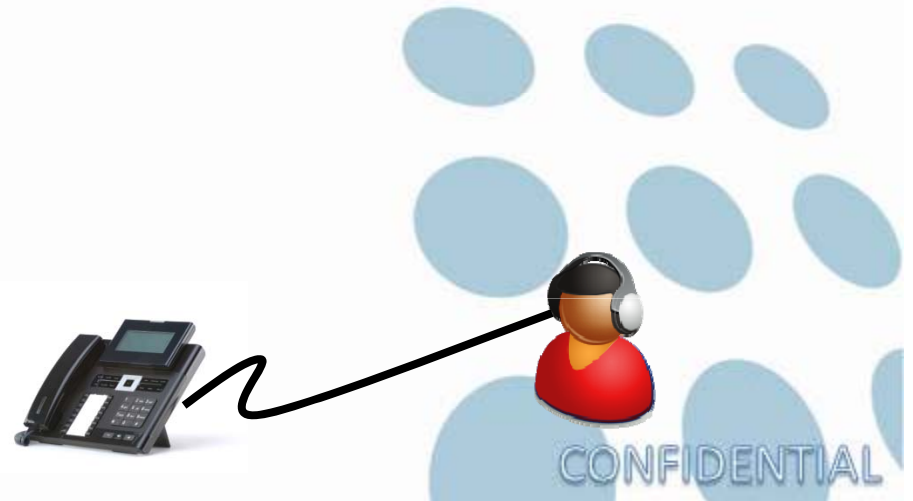
- An Incoming Call Without Caller Line Identification (CLI) Number is Termed as Anonymous Call
- Instead of Number, the term "Anonymous" is Displayed on the Screen
- SETU VP Phones Offer the Flexibility to Reject Such Calls
- All Calls Rejected by this Feature are Stored in the Call Logs, in the "Rejected Calls" List as "Anonymous"

Auto Answer

- Feature Requirement:
 - ✓ Answer Incoming Calls without Lifting the Handset or Pressing a Button
- Basic Operation:
 - ✓ During Busy Hours, wear the Headset
 - ✓ A Call Comes
 - ✓ The Phone Routes the Speech of the Caller to the Headset Port
 - ✓ Auto Answer Time:
 - ✓ What More, One can even Pre-Set Time Period to Answer any Incoming Call

Auto Answer: Application

- Call Center Application:
 - ✓ SETU VP Phones are put to their Best Use in Workplaces with Heavy Call Traffic
 - ✓ In 'Call Centers' an Employee Receives Numerous Calls Every Day
 - ✓ It is Not Practically Possible to Press a Button or Lift the Handset for Each Incoming Call
 - ✓ Using a Headset to Answer Calls is Much Easier and Faster Alternative then Lifting the Handset or Pressing a Button



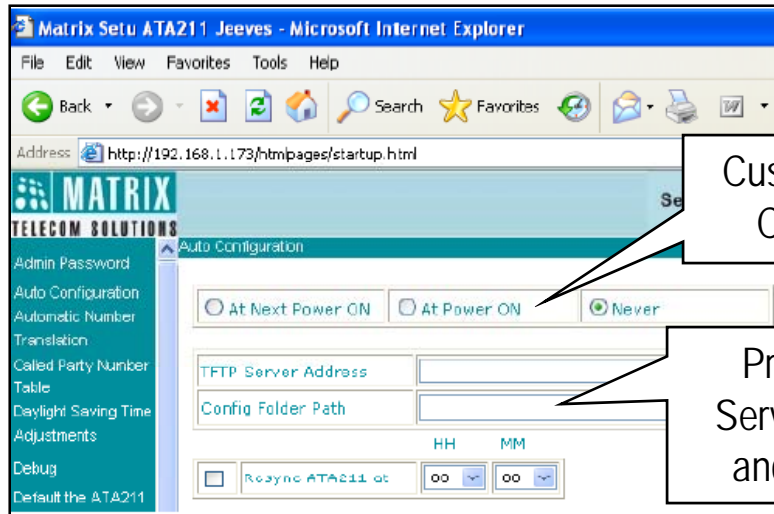
Auto Call Back

- Feature Requirement:
 - ✓ In Case a Called Party is Found Busy
 - ✓ Auto Call Back can be set instead of Repeatedly Attempting until the Call is Through
- Basic Operation:
 - ✓ A Party Called is found Busy
 - ✓ Caller Sets Auto Call Back by Pressing a Pre-Assigned Code
 - ✓ The Phone will now Send a Request (SUBSCRIBE) to the Called Number
 - ✓ Now it will Wait for a Time Period till it Receives a Notification Message (NOTIFY) from the Called Number when it gets Free

Auto Configuration

- SETU VP Need to be Configured for Certain Basic Parameters before Use
- SETU VP Users Mostly take an ITSP Connection to Make Calls
- It is Desirable to Configure SETU VP from a Central Location, Avoiding Technical Difficulties during Configuration Process
- Auto Configuration Allows SETU VP to be Configured from a Central Location (Service Provider Can Store the Configuration Files on a Central TFTP Server)
- SETU VP will Periodically Searches for Configuration Files on its Own

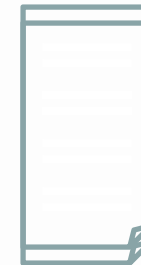
Auto Configuration



Customer's Choice

Pre-Defined Server Address and File Path

Configuration File Downloaded via TFTP



TFTP Server

ITSP Premise



SETU VP248

Customer's Premises



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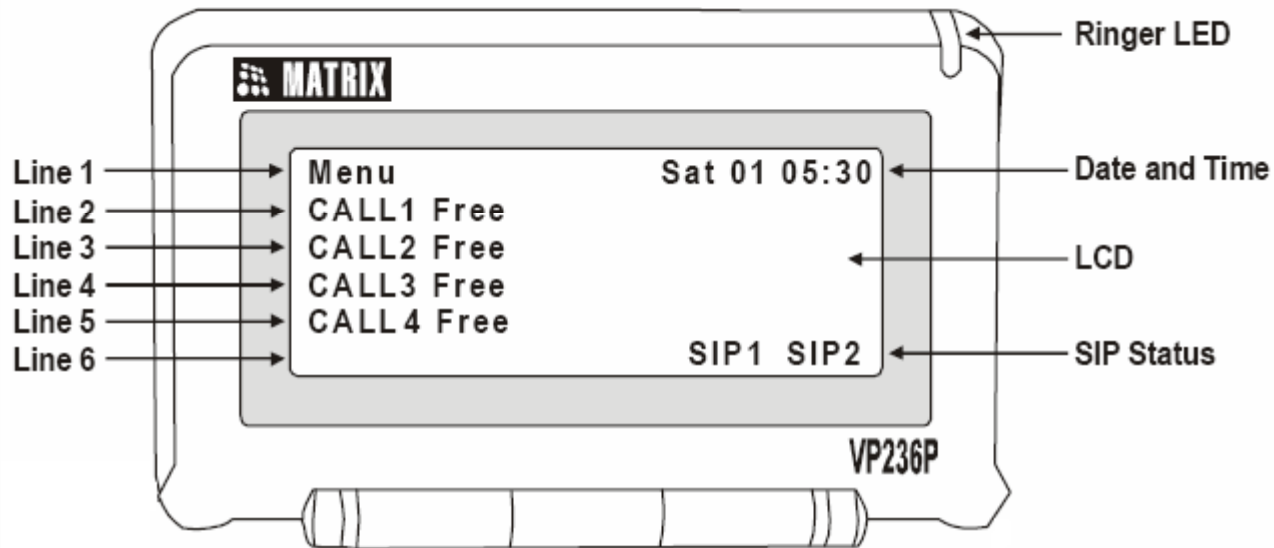


Black Listed Callers List

- Reject Incoming Calls from Specific Addresses or Contacts
- Program Up to 10 Such Numbers in the List of "Blacklisted Callers"
- Benefit:
 - ✓ Shields One from Unwanted Calls

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Call Appearance



- Indication for an Incoming Second Call, during an Ongoing Call
- User can Put the Ongoing Call on Hold
- Both Calls are Indicated on the LCD Display
- Any More Incoming Calls are Displayed Under Waiting List
- SETU VP Supports Maximum of '4' Call Appearances by Default (Programmable)

Call Progress Tones and Rings

- Different Tones to Indicate the Progress of a Call
 - ✓ Dial Tone, Ring Back Tone, Busy Tone, Error Tone, Feature Tone and Confirmation Tones, with Different Cadence, with Specific Frequency are Offered
- User can Select a Tone which Matches with the Tones Used in a Particular Region

CLIP

- Detection of DTMF, FSK ITU-T V.23 and FSK Bellcore 212A
- CLIP for External Numbers, Internal Numbers
- This Feature can be Enabled / Disabled as Per Required

CLIR

- CLIR Caller Line Identity Restriction
- Benefit
 - ✓ Used When One Doesn't want to Disclose his Identity to the Called Party

Dial Plan

- Functions like LCR (Least Cost Routing)
- Numbers to be Dialed, are Pre-Programmed to Use the Most Economical SIP Account
- Basic Operation
 - ✓ User Dials a Number
 - ✓ SETU VP Searches for a Matching Number in the Programmed Number's list
 - ✓ A Number is then Dialed as Per the 'Best-Fit' Logic
 - ✓ 10 Numbers can be Programmed & Mapped along with Preferred SIP Account

Dial Plan

Index	Number	SIP Account
01	2001	SIP1
02	2002	SIP2
:	:	:
10	2010	SIP3

DHCP Client

- DHCP: Dynamic Host Configuration Protocol
- DHCP is a Client-Server Networking Protocol
- DHCP Provides Mechanism for Dynamic Allocation of IP Address to Host (Computers) on the Network
- Basic Operation
 - ✓ DHCP Client Requests Server for Specific Information Required to Participate on the Internet Network
 - ✓ DHCP Server Provides Configuration Parameters Specific to the DHCP Client



Do-Not-Disturb (DND)

- Provides User a Flexibility to Stop Receiving Incoming calls
- DND is a Programmable Feature for SIP Account

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Peer-to-Peer

- SETU VP can Call another ATA's Extension or Soft phone (On Same LAN/Same Location or On Virtual LAN/Remote Location) without going through Proxy
- Extension Number of Remote ATA , along-with its' IP Address is Programmed in Peer-to-Peer Calling Table
- Total 500 Numbers Can be Programmed

Peer-to-Peer calling

Index	Number	IP Address
01	2001	192.168.1.10
02	2002	192.168.1.125
:	:	:
500	2010	192.168.1.145

Password Protection

- SETU VP Provides Password Facility to Ensure System Security
- Feature Benefit
 - ✓ It Allows User to Set Password of their Choice
 - ✓ Prevents Un-authorized use and Tampering with System Settings



Phone Book

- Store Name and Number in the Phone Memory
- Store a Maximum of 100 Contacts
- Program Phone Book either from Web or through Phone
- Search Contact Feature
 - ✓ Search Contacts in the Middle of an Active Call

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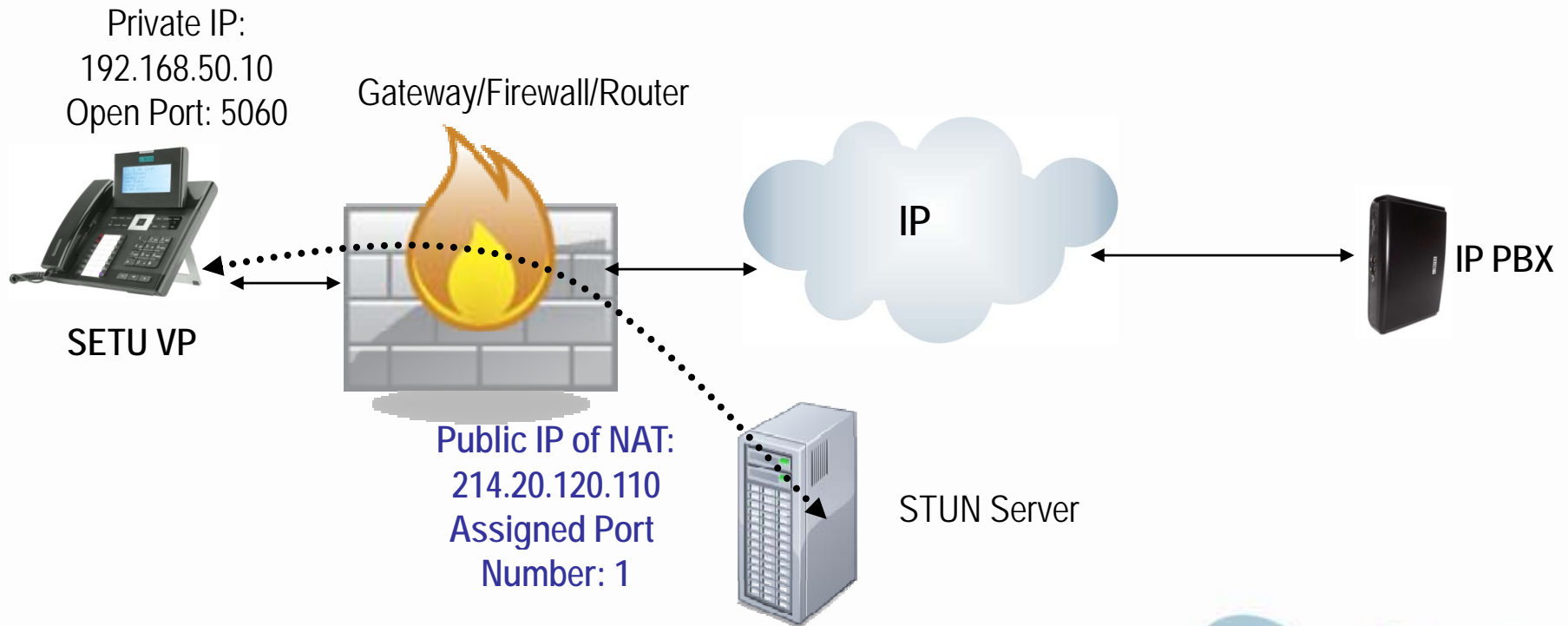
PPPoE

- PPPoE : Point-to-Point Protocol over Ethernet
- A Network Protocol for Encapsulating PPP Frames in Ethernet Frames
- Feature Requirement
 - ✓ It is used to Virtually Dial Another Ethernet Machine and Make a Point-to-Point Connection
 - ✓ Mainly used for xDSL Services using xDSL Modem
- Feature Benefit
 - ✓ Offers Standard PPP Features such as : Authentication, Encryption and Compression

STUN Support

- STUN : Simple Traversal of User Datagram Protocol (UDP) through Network Address Translators (NAT's)
- A Client-Server Protocol
- STUN Allows SETU VP Series to Work behind a Symmetrical NAT and Establish a VoIP Call
- STUN Allows a Client behind NAT to
 - ✓ Discover its Public IP Address
 - ✓ Discover the Type of NAT
 - ✓ Discover the Internet Side Port (Port on which Received Response from External SIP Terminals can be Mapped to its Own Open Port)

STUN-Application Scenario

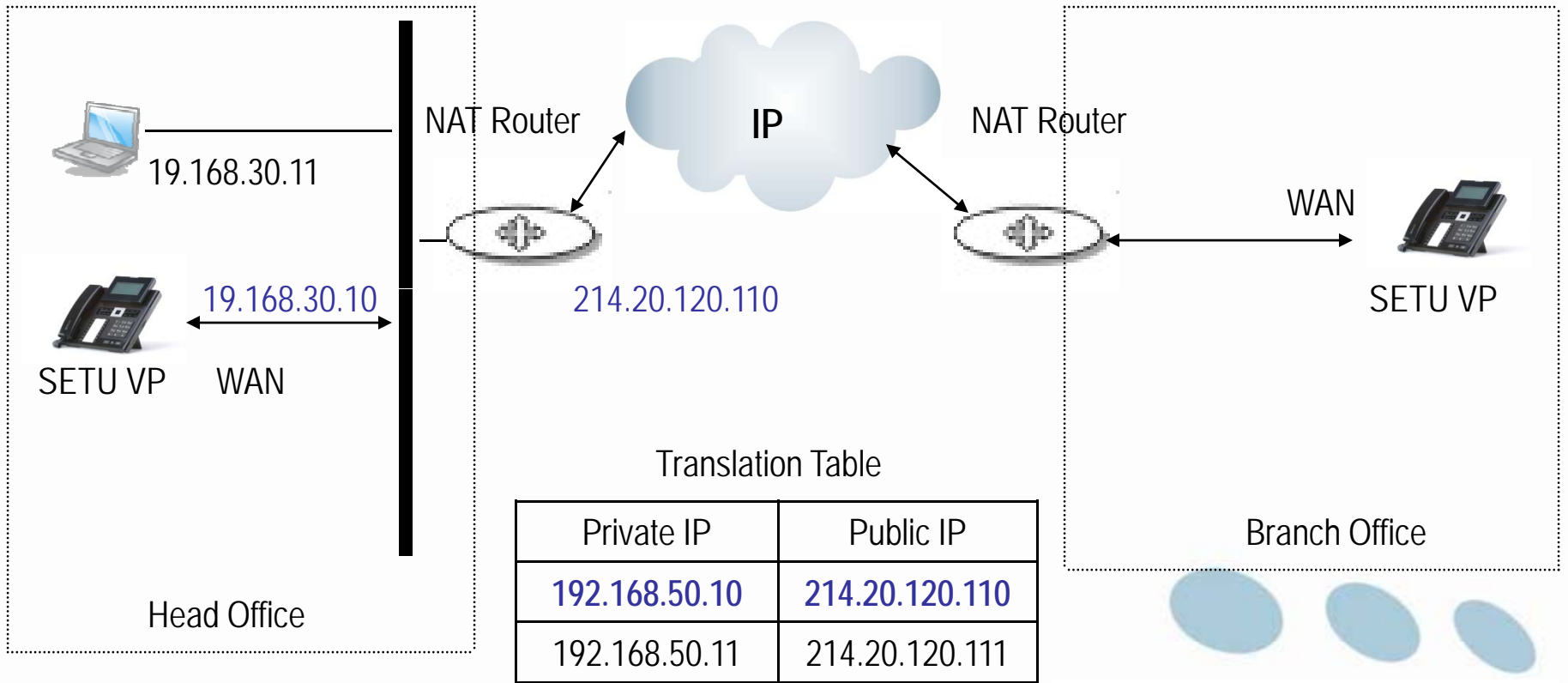


- STUN Client sends a Request to STUN Server
- The Server Reports Back with the Public IP Address of the NAT Router and which Port is Opened by NAT to Allow Incoming Traffic Back into the Network
- SETU VP236 can Now Communicate the Public IP and Port details While Attempting to Communicate With the Remote IP PBX

NAT Support

- Network Address Translation
- A Technology used by Firewalls and Routers
- Feature Benefits
 - ✓ Allows Multiple Devices in a LAN to Share a Single Public IP Address
 - ✓ Enhances Security by Avoiding Direct Communication

NAT Router-Basic Operation



Private IP Translated to Public IP



Response Delivered to Device which Started the Connection





Speed Dial

- A Quick Way to Dial Number, Dial Number at Touch of a Single Key
- Benefit
 - ✓ Eliminates the Need to Press Several Digits

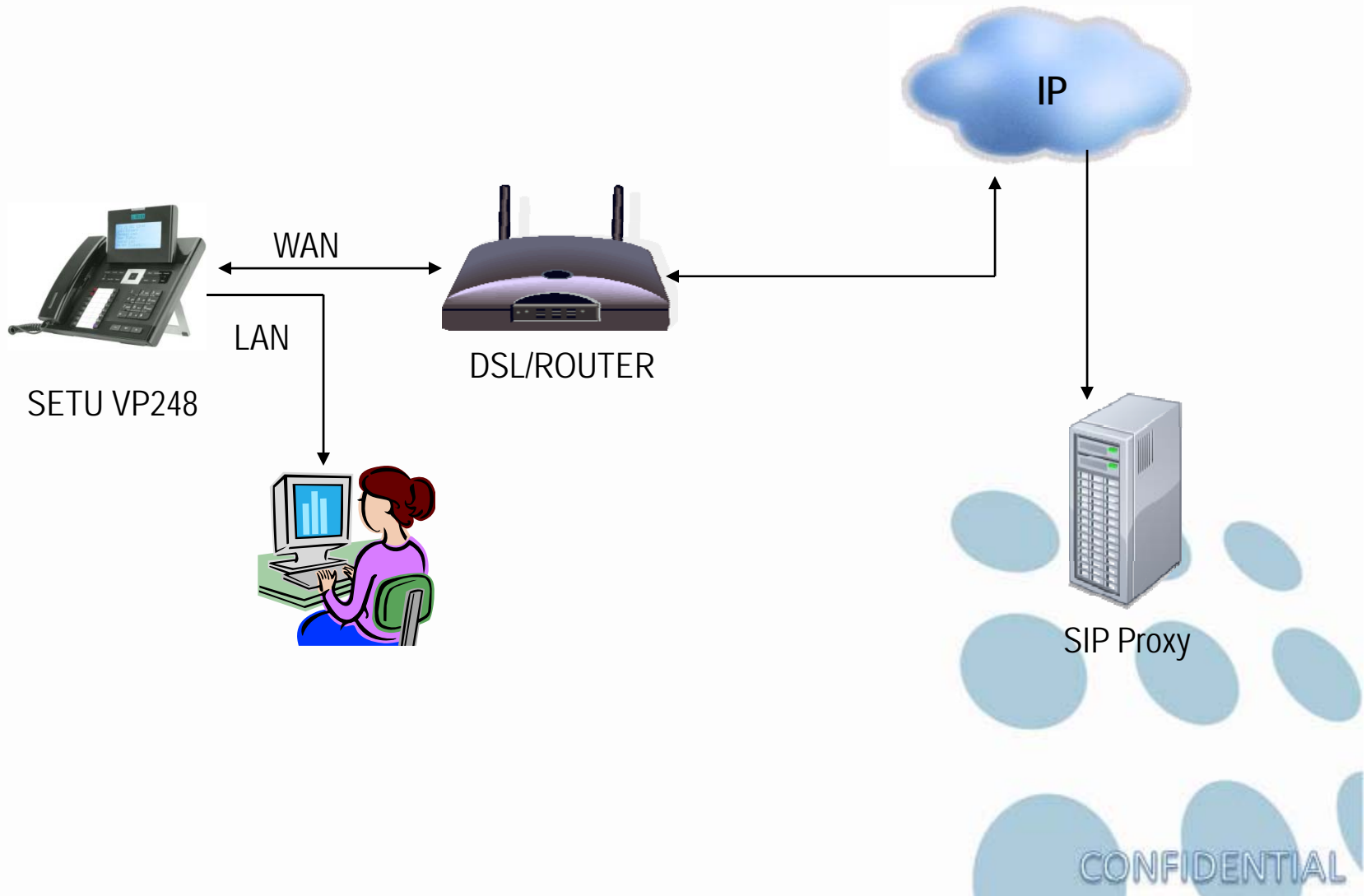
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Web based Programming

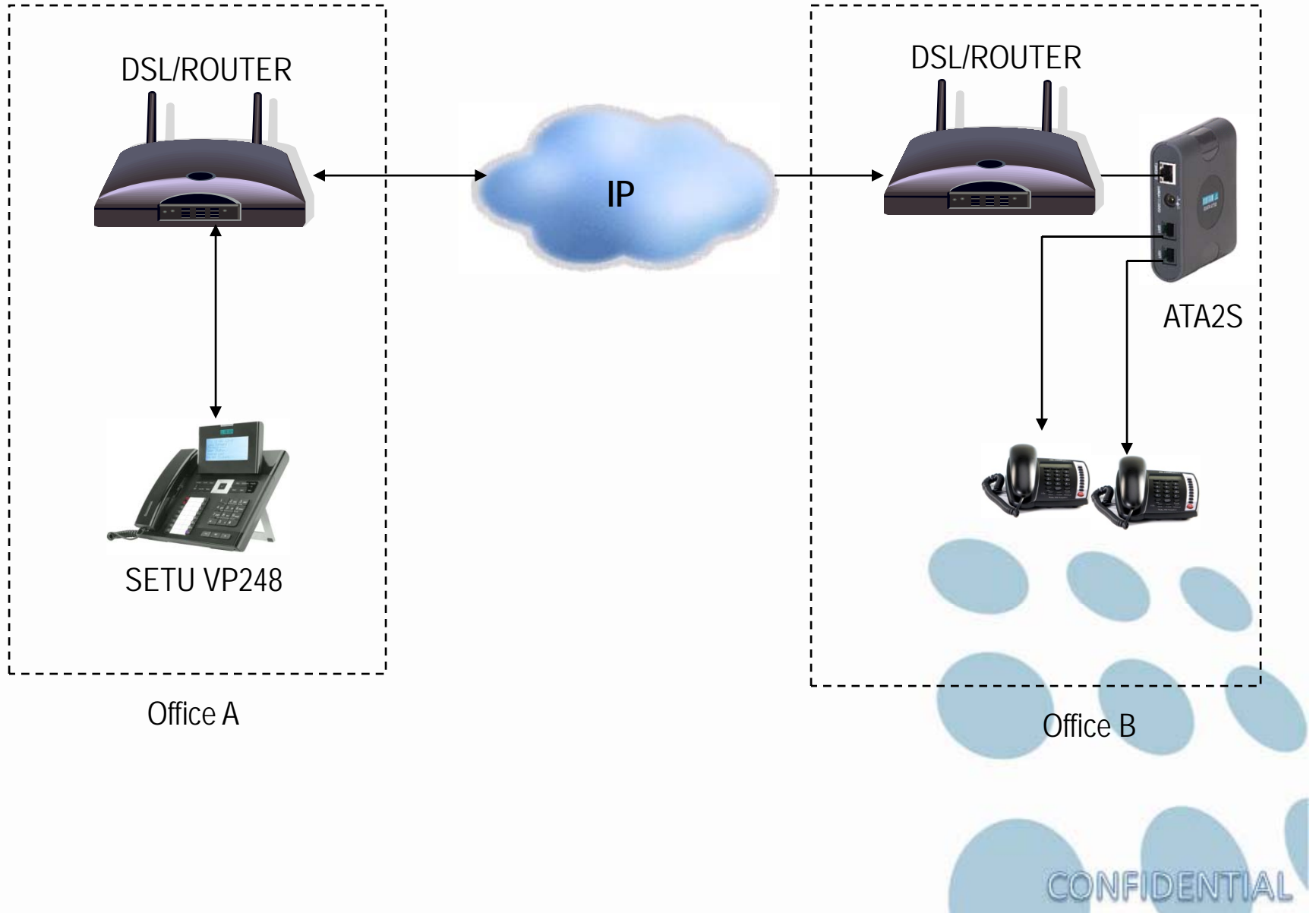
- SETU VP-Jeeves is a Web based Software Tool
- Intuitive, User Friendly GUI based Programming Tool
- It is Pre-Loaded in the SETU VP
- Feature Benefit
 - ✓ Allows User to Configure WAN, SIP, Dial Plan, Peer-to-Peer setting of VP
 - ✓ User can Save/Upload the Changes Made
 - ✓ Jeeves-Being Password Protected, Prevents VP from Unauthorized use or Tampering of Settings

Matrix SETU VP-Applications

SETU VP236: Residential Application



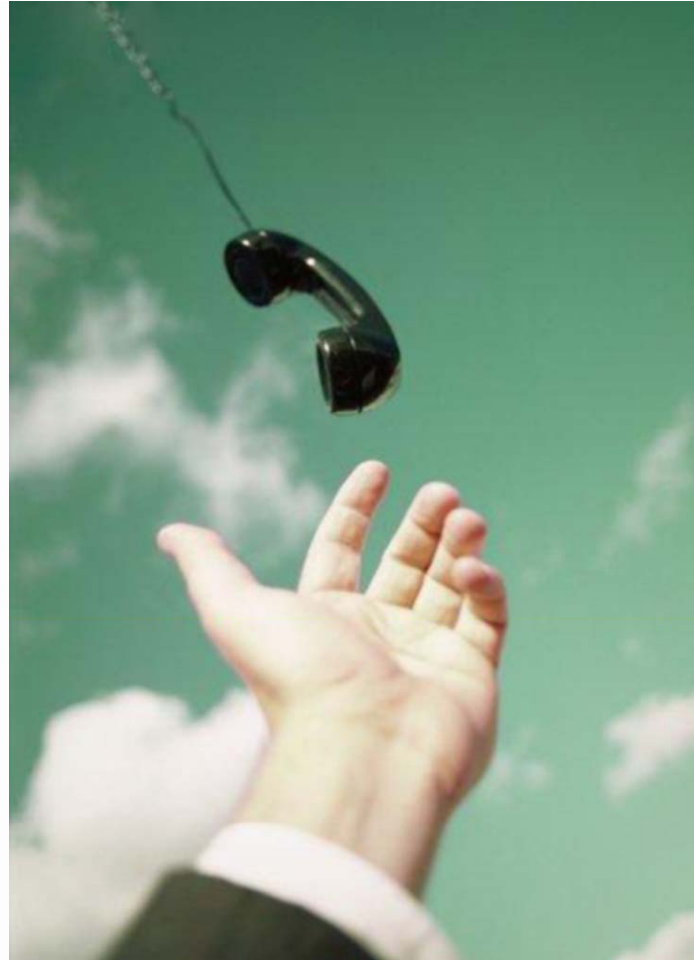
Peer-to-Peer Calling





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



Thank You



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