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Glossary

The following terminologies relate to either standard Internet Protocol (IP) and/or IPitomy?s suite of products.

A

Analogue Telephone Adapter (ATA)

Connects a telephone to a high-speed modem and facilitates VoIP or fax calls over the internet.

Automatic Call Distribution (ACD)

The IPitomy?s ACD product is an IP-based component that allows management of calls and features Virtual Call Centers, Skills-based Routing, Multiple Queue Assignments and Overflow/Load Balancing.

R

Backbone

Global network connections that route voice and data traffic from one major metropolitan area to another.

Bandwidth

The transmission capacity of a given device or network.

Broadband

An internet connection that is always-on and fast.

Glossary

Browser

A software application that allows users to view and navigate to information on the Web. Microsoft® Explorer® and Mozilla Firefox® are two common browsers.

Busy Lamp Field (BLF)

This is an LED on a phone that designates the status or another phone or feature in the PBX.

Caller ID

Displays the name and telephone number of a person calling.

Call Detail Record (CDR)

Information about calls collected from the IPitomy IP PBX for a specified period of time. This report is downloadable. The report details the numbers of calls, call duration, call origination and call destination.

Class of Service (CoS)

Class of Service defines which outbound routes a particular extension or feature has access to for outbound dialing.

Cloud Computing

Refers to applications and services offered over the Internet. These services are offered from data centers all over the world, which collectively are referred to as the "http://wiki.ipitomy.comcloud."http://wiki.ipitomy.com This metaphor represents the intangible, yet universal nature of the Internet.

CODEC (Compression-Decompression)

Defines the algorithm used to compress and decompress audio, video, etc. The IPitomy PBX has man

D

Digital Subscriber Line (DSL)

This service provides digital phone service over an analog line.

Browser 2

Direct Inward Dial (DID)

When a trunk has multiple lines, you can use a DID to route calls in the PBX to specific destination.

Domain Name Server (DNS)

These are servers on the public internet which resolve the domain name into an IP address. Without a valid DNS server, many of the services used by the PBX (Time, Email, etc) will not be accessible if they use a domain name.

Do Not Disturb

Prevents notification of incoming calls.

DTMF (Dual-tone Multi-frequency)

This is the touch-tone or audio signal a phone sends to a phone system to get it to perform some action.

Dynamic IP

An IP address that changes and is not static.

Dynamic Host Configuration Protocol (DHCP)

This is a computer networking protocol used by hosts (DHCP clients) to retrieve IP address assignments and other configuration information.

\mathbf{E}

Encryption

The process of scrambling data to prevent the accurate interpretation of this data by anyone except those for whom it is intended.

Ethernet

A family of frame-based computer networking technologies for local area networks (LANs).

\mathbf{F}

Firewall

A firewall is a part of a computer system or network that is designed to block unauthorized access while permitting authorized communications. It is a device or set of devices which is configured to permit or deny computer based application upon a set of rules and other criteria.

Forward

The action of automatically configuring a call that was intended for one party to go to another destination.

G

Gateway

A device that interconnects networks with different, incompatible communications protocols.

H

I

Institute of Electrical and Electronics Engineers (IEEE)

An independent institute that develops networking standards.

Infrastructure

Currently installed computing and networking equipment.

IP Telephony

Phone service (voice calls) carried over a network using Session Initiation Protocol.

Interactive Voice Response (IVR)

IVR is a telephony technology that can read a combination of touch tone and voice input. It gives users the ability to access a database of information via phone. A typical IVR system has several menus of prerecorded options that the caller can choose from. While many choices are as basic as choosing a number, some options may require the caller to speak detailed information such as his name or account number. This input is read by the IVR system and is used to access the appropriate information in the database.

Internet Protocol (IP)

A protocol used to send data over a network. These are currently set to IPv4 meaning 4 octets ranging from 0-255. The public internet takes up a majority of these addresses, but there are certain ranges reserved for private LANs.

	Start	End	Number of Addresses
24-bit Block (/8 prefix, $1 \times A$)	10.0.0.0	10.255.255.255	16,777,216

Forward 4

20-bit Block (/12 prefix, $16 \times B$)	172.16.0.0 172.31.255.255	1,045,576
16-bit Block (/16 prefix, $256 \times C$)	192.168.0.0 192.168.255.255	65,536

Internet Service Provider (ISP)

A company that provides access to the Internet.

J

Jitter

This is the deviation in or displacement of some aspect of the pulses in a high-frequency digital signal. As the name suggests, jitter can be thought of as shaky pulses. The deviation can be in terms of amplitude, phase timing, or the width of the signal pulse.

K

L

Local Area Network (LAN)

A group of computers and other devices that share a common communications line. These devices most often share a server and are located within a small geographic area.

Loop Back

The term loopback is generally used to describe methods or procedures of routing electronic signals, digital data streams, or other flows of items, from their originating facility quickly back to the same source entity without intentional processing or modification. This is not something you want to do on a LAN.

\mathbf{M}

MAC Address

A **Media Access Control address** (**MAC address**) is a unique identifier assigned to network interfaces for communications on the physical network. http://en.wikipedia.org/wiki/MAC address

Message Waiting Light

A light on a phone indicating that a voicemail message is waiting.

Internet Protocol (IP) 5

Music on Hold

Music or announcements callers listen to while on hold.

N

Network

A group of computers or devices that share a common communication line and are typically used for the transmission of data and voice traffic.

Network Address Translation (NAT)

Network address translation converts your LAN IP to the Public IP, allowing traffic to go out to the internet and route back to the correct device on your LAN. http://en.wikipedia.org/wiki/Network address translation

0

Original Equipment Manufacturer (OEM)

This refers to a company that produces hardware to be marketed under another company's brand name.

P

Packet

A unit of data transmitted over a network. This is a small amount of computer data sent over a network. Any time you receive data from the Internet, it comes to your computer in the form of many little packets. Each packet contains the address of its origin and destination, and information that connects it to the related packets being sent.

Park

Parks a call in a reserved extension (park slot) and allows the call to be retrieved from another extension.

POE (Power over Ethernet)

A method of providing power to a network device over the network cabling, eliminating the need for a power supply.

Music on Hold 6

Port

Ports can describe two different devices.

An Internet port.

This is a number that indicates what kind of protocol a server on the Internet is using. For example, Web servers typically are listed on port 80. Web browsers use this port by default when accessing Web pages

A hardware port.

This refers to any one of the ports that are on the back of a computer where devices can be hooked up (like a keyboard, mouse, printer, etc). Some common ports found on today's computers are USB, Firewire, and Ethernet.

PRI (Primary Rate Interface)

ISDN service provides 23 64-Kbps B (Bearer) channels and one 64-Kbps D (Data) channel (23 B and D). The D Channel is used for control in signaling information.

Private Branch Exchange (PBX)

An in-house telephone system that connects extensions and the Public Switched Telephone Network.

Public Switched Telephone Network (PSTN)

This is the global circuit-switched telephone network. It is similar to the Internet. However, on the Internet packets of data are sent and received using Internet protocol over a network.

0

Quality of Service (QoS)

The ability to provide different priority to different applications, users, or data flows, or to guarantee a certain level of performance to a data flow.

R

Redundant Array of Independent Disks (RAID)

This is a method of storing data on multiple hard disks. When disks are arranged in a RAID configuration, the computer sees them all as one large disk. However, they operate much more efficiently than a single hard drive. Since the data is spread out over multiple disks, the reading and writing operations can take place on multiple disks

Port 7

at once. This can speed up hard drive access time significantly. Multiple hard drives may not improve hard disk performance as much as multiple processors may enhance the CPU performance, but it is based on a similar logic.

Real-Time Protocol (RTP)

A standardized packet format for delivering audio and video over IP networks.

Router

A networking device that connects multiple networks together, such as a local network and the Internet.

S

Server

Any computer in a network that provides users access to files, printing, communications, etc.

Server Time

This is the time set on the server where the phone or device is located. The server time for IPitomy?s IP PBX system is synched to time.nist.gov server time.

Session Initiation Protocol (SIP)

A signaling protocol that establishes data sessions. For example when making a call from one extension to another on a VoIP phone system SIP sets up the call and creates the connection between the two extensions.

Smart Personal Console (SPC)

This user-friendly Web page gives a person the ability to set basic phone features (mailbox settings, phone key settings, call forwarding, etc) from anywhere. Additionally, the user can check their voicemail and call logs from the SPC.

Stateful Packet Inspection (SPI)

A stateful inspection is a firewall architecture that works at the network layer. Unlike static packet filtering, which examines a packet based on the information in its header, a stateful inspection tracks each connection traversing all interfaces of the firewall and makes sure they are valid.

Static IP

An IP address that does not change.

Subnet Mask

A subnet mask is a number that defines a range of IP Addresses that can be used in a network. Subnet masks are

used to designate subnetworks, or subnets, which are typically local networks LANs that are connected to the Internet. Systems within the same subnet can communicate directly with each other, while systems on different subnets must communicate through a router. Therefore, subnetworks can be used to partition multiple networks and limit the traffic between them.

Switch

A network device that connects network segments. These come in POE and non-POE varieties.

T

T1

A dedicated digital voice circuit that has 24 channels. This point-to-point circuit delivers 1.544 Mbps of bandwidth.

TFTP (Trivial File Transfer Protocol)

A simple protocol to transfer files. IPitomy uses this method in regards to phone firmware and configuration files. http://en.wikipedia.org/wiki/Trivial File Transfer Protocol

Time to Live (TTL)

This refers to an aspect of the Internet Protocol. TTL is used when a

"http://wiki.ipitomy.comping,"http://wiki.ipitomy.com or a request for a response, is sent to another computer, such as a server. The TTL represents the number of hops, or servers in different locations, the request can travel to before returning a failed attempt message.

Transfer

Sends a call to another extension.

Trunk

A communications channel between two points.

Transmission Control Protocol (TCP)

Packets sent via this method are verified end to end.

Subnet Mask 9

U

Upload

While downloading is receiving a file from another computer, uploading is the exact opposite. It is sending a file from your computer to another system. It is possible to upload and download at the same time, but it may cause slower transfer speeds, especially if you have a low bandwidth connection. Because most files are located on Internet servers, people generally do a lot more downloading than uploading.

Uniform Resource Locator (URL)

A URL is the address of a specific Web site or file on the Internet. It cannot have spaces or certain other characters and uses forward slashes to denote different directories. Some examples of URLs are http://www.cnet.com/, http://info.apple.com/.

Uninterruptible Power Supply (UPS)

A devise that maintains continual electrical power.

User Datagram Protocol (UDP)

Packets sent via this method are fire and forget.

\mathbf{V}

Virtual Private Network (VPN)

A computer network that uses a public telecommunication infrastructure, such as the Internet, to provide remote offices or individual users with secure access to their organization's network.

Voice Over Internet Protocol (VoIP)

The routing of voice traffic over the internet. VoIP is basically a telephone connection over the Internet. The data is sent digitally, using the Internet Protocol (IP) instead of analog telephone lines.

W

Wide Area Network (WAN)

A computer network that crosses geographic boundaries like cities, states or countries.

U 10

Wireless Local Area Network (WLAN)

A link between two or more computers in a network without wires. Wireless LANs use radio waves to communicate between computers in a limited area.

X

 \mathbf{Y}

Z