RECEIVED LIBRARY
JUN 21 2010
KIRKLAND & ELLIS LLP
CHICAGO OFFICE

Wireless Encyclopedia

Eion Reference

Published By:
Althos Publishing

ALTHOS

404 Wake Chapel Road
Fuquay-Varina, NC 27526 USA
Telephone: 1-800-227-9681
1-919-557-2260
Fax: 1-919-557-2261
email: Success@Althos.com
web: www.Althos.com

DEFS-VOIP-2021-CC-00000085

META 1024
META V. VOIP-PAL
GOOGLE EXHIBIT 1024

Althos

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying recording or by any information storage and retrieval system without written permission from the authors and publisher, except for the inclusion of brief quotations in a review.

Copyright © 2007 By Althos Publishing
First Printing

Printed and Bound by Lightning Source Printing, La Vergne, TN USA

Every effort has been made to make this manual as complete and as accurate as possible. However, there may be mistakes both typographical and in content. Therefore, this text should be used only as a general guide and not as the ultimate source of information. Furthermore, this manual contains information on telecommunications accurate only up to the printing date. The purpose of this manual to educate. The authors and Althos Publishing shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the information contained in this book.

International Standard Book Number: 1-932813-99-3

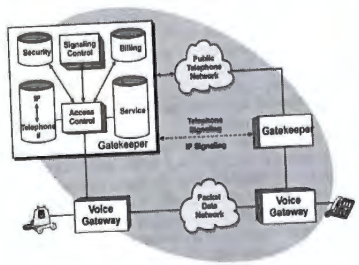
This figure shows how a gatekeeper sets up connections between Internet telephones and telephone gateways. The gatekeeper receives registration messages from an Internet telephone when it is first connected to the Internet. This registration message indicates the current Internet address (IP address) of the Internet telephone. When the Internet telephone desires to make a call, it sends a message to the ITSP that includes the destination telephone number it wants to talk to. The ITSP reviews the destination telephone number with a list of authorized gateways. This list identifies to the ITSP one or more gateways that are located near the destination number and that can deliver the call. The ITSP sends a setup message to the gateway that includes the destination telephone number, the parameters of the call (bandwidth and type of speech compression), along with the current Internet address of the calling Internet telephone. The gatekeeper then sends the address of the destination gateway to the calling Internet telephone. The Internet telephone then can send packets directly to the gateway and the gateway initiates a local call to the destination telephone. If the destination telephone answers, two audio paths between the gateway and the Internet telephone are created. One for each direction and the call operates as a telephone call.

Gatekeeper Cluster-A group of gatekeepers that are linked together (possibly using GUP) to increase the reliability of a system.

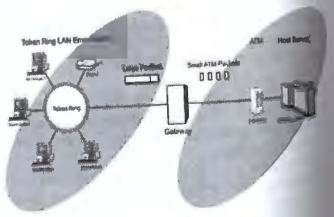
Gatekeeper Update Protocol (GUP)-A proprietary protocol developed by Cisco to provide gatekeeper redundancy and load sharing. GUP can provide information about a gatekeeper's memory, CPU usage, number of endpoints that are registered, and available bandwidth. GUP is based on TCP.

Gateway-A gateway is a communications device or assembly that transforms data that is received from one network into a format that can be used by a different network. A gateway usually has more intelligence (processing function) than a bridge as it can adjust the protocols and timing between two dissimilar computer systems or data networks. A gateway can also be a router when its key function is to switch data between network points.

This figure shows how a gateway can convert large packets from a FDDI into very small packets in an ATM network. Not only does the gateway have to divide the packets, it must also convert the addresses and control messages into formats that can be understood on both networks.



Voice Gatekeeper Operation



Gateway Operation

Gateway D-Gateway Daemon

Gateway GPRS Support Node (GGSN)-A packet switching system that is used to connect a GSM mobile communication network (GPRS Support Nodes) to other packet networks such as the Internet.

Gateway Location Protocol (GLP)-A protocol that was initially developed by a working group within the IETF to allow the gateway selection process in telephone and multimedia networks. This protocol is now called telephony routing over Internet protocol (TRIP).

Gateway Mobile Switching Center (GMSC)-A switching system that is used in a mobile communications network that also connects to other networks such as the public switched telephone network (PSTN).

Gating Pulse-A pulse that operates a logic gate.

Gaussian Distribution-A statistical distribution that is used to represent occurences of specific events that follow a relatively even distribution around their center reference point. Gaussian distribution is a bell-shaped curve and it is also called a normal distribution. Also called white noise.

Gaussian Frequency Shift Keying (GFSK)-Gaussian frequency shift keying is a form of frequency modulation in which the modulating signal shifts the output frequency between predetermined values to represent a digital signal and that information signal (data) is passed through a Gaussian filter prior to modulation to minimize the rapid changes to the carrier signal. Typically, one frequency shift is used to represent a digital one (sometimes called a mark) and the other frequency shift represents a digital zero (sometimes called a space).

Gaussian Minimum Shift Keying (GMSK)-A form of frequency modulation in which the modulating signal shifts the output frequency between predetermined values. A form of MSK that uses Gaussian low pass filtering of the binary data to reduce sideband energy.

GAVDP-General Audio Video Distribution Profile

GAZPACHO-Generation, Alignment, Zero [suppression], Polar, Alarm, Clock, Hunt, Office

GB-Gigabyte

GBH-Group Busy Hour

GBN-GPRS Backbone Network

Gbps-Gigabits Per Second

GC-Gate Controller

GCAC-Generic Connection Admission Control

GCF-Gatekeeper Confirm

GCIDs-Global Call Identifiers

GCR-Group Call Register

GCRA-Generic Cell Rate Algorithm

GD-Graceful Discard

GDDM-Graphical Data Display Manager

GDF-Group Distribuiton Frame

GDI-Graphics Device Interface

GDMF-Generic Data Message Format

GDOI-Group Domain of Interpretation

GDOP-Geometric Dilution of Precision

GDP-PI-GDP Price Index

GDS-Global Directory Service

GED-Global Engineering Documents

Geek-A geek is a person who is focused on technology, typically computers who does not tend to conform to mainstream habits such as dressing for success and/or regular bathing.

General Mobile Radio Service (GMRS)-General mobile radio service is a licensed FM radio service that operates at on channels in the 462 MHz and 467 MHz UHF band.

General Packet Radio Service (GPRS)-General packet radio service is a packet data communication system that uses the global system for mobile (GSM) radio system packet radio transmission. The GPRS system modifies the GSM channel allocation and time slot control processes to allow for the dynamic assignment of time slots to individual users. GPRS provides a maximum radio channel data transmission rate of 171.2 kbps.

This figure shows some of the key GPRS network elements that include a gateway GPRS network support node (GGSN), a serving GPRS support node (SGSN) and a GPRS backbone network (the Internet in this example.) This example shows that the GPRS system adds dynamic time slot control to the standard GSM radio system. To provide packet data service, the GPRS system, the SGSN provides the processes of switching and access control that is similar to a mobile switching center (MSC) and a visitor location register (VLR). However, the SGSN provides for switching and access control (authorization and tracking) based on packets of data rather than continuous connections. The SGSN registers and maintains a list of active packet data radios in its network and coordinates the packet transfer between the mobile radios. The GGSN is a packet switching system that is used to connect a GSM mobile communication network (GPRS Support Nodes) to other packet networks such as the Internet.

G

DEFS-VOIP-2021-CC-00000087
META 1024
META V. VOIP-PAL