

CDMA Gateway Solution



AddPac

AddPac Technology

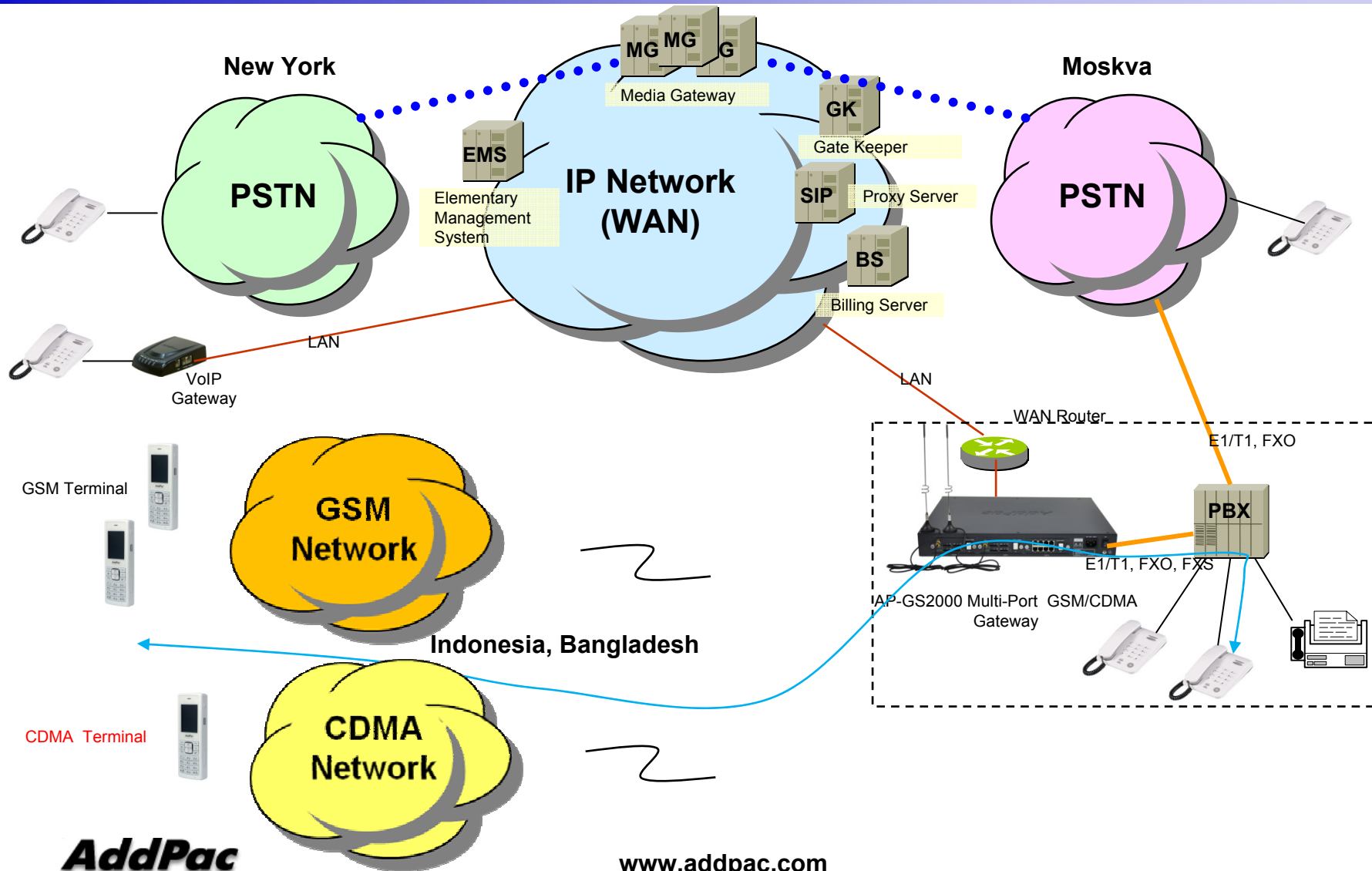
2011, Sales and Marketing

www.addpac.com

Contents

- GSM/CDMA Gateway Service Diagram
- 4-Port CDMA Module (AP-N1-CDMA4)
- CDMA Gateway Series
 - AP-GS1500(8ch)
 - AP-GS2000(12ch)
 - AP-GS2500(16ch)
 - AP-GS3000(36ch)
 - AP-GS3500(36ch)
- Smart Web Manager for GSM/CDMA Gateway
- Smart NMS for GSM/CDMA Gateway

GSM/CDMA Gateway Service Diagram



4-Port CDMA Module



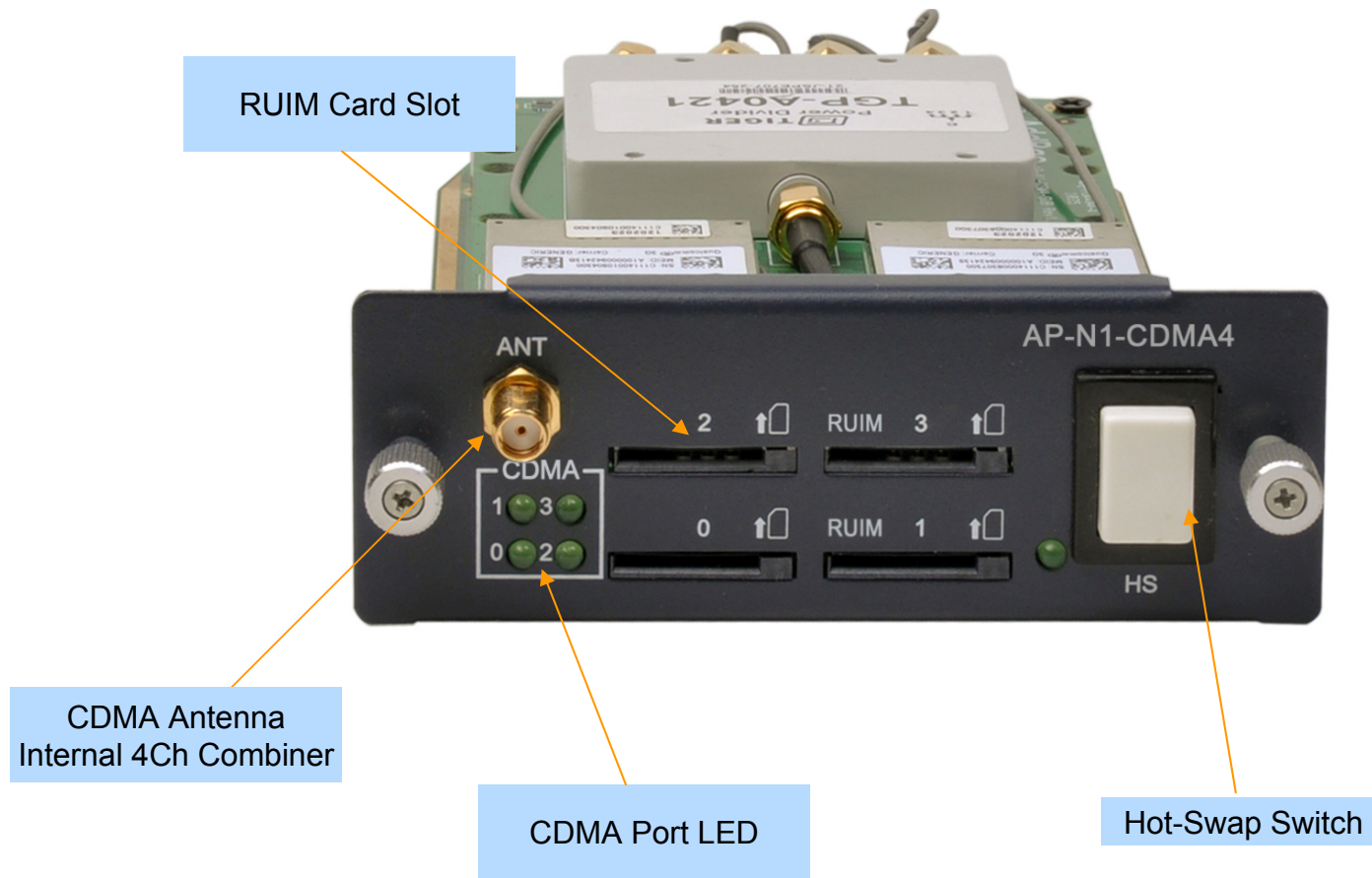
4-Port CDMA Module

AP-N1-CDMA4 4-Port CDMA Module

- CDMA2000 1xRTT (IS-2000)-(Dual Band)
- Band class0 (TX : 824~849 MHz / RX : 869~894MHz)
- Band class1 (TX : 1850~1910 MHz / RX : 1930~1990MHz)
- GPS L1 Support
- Output Power : 0.25W CDMA
- CDMA2000 Release A
- IS-637 : Short Message Service (Mobile Originated and Mobile Terminated)
- RUIM(for Asia Pacific Countries)
- 4-Port CDMA Module(AP-N1-CDMA4)
 - 4-Port RUIM Card Slot
 - Port LEDs for Link Activation Indication
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
 - Hot-Swap Button

Hardware Specification

AP-N1-CDMA4 4-Port CDMA Module











CDMA Gateway Series



CDMA Gateway Series

GSM/CDMA Gateway Comparison Table

Model	AP-GS1500	AP-GS2000	AP-GS2500	AP-GS3000	AP-GS3500
					
Available Modules	AP-N1-GSM4 AP-N1-CDMA4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4	AP-N1-GSM4 AP-N1-CDMA4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 AP-N1-CDMA4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 AP-N1-CDMA4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 AP-N1-CDMA4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1
GSM/CDMA Channel	Up to 8 Channel	Up to 12 Channel	Up to 16 Channel	Up to 36 Channel	Up to 36 Channel
GSM/CDMA Antenna	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module
Module Slot	Two(2) Module Slots for GSM/CDMA	Three(3) Module Slots for GSM/CDMA	Four(4) Module Slots for GSM/CDMA	Nine(9) Module Slots for GSM/CDMA, E1/T1 Module Slot	Nine(9) Module Slots for GSM/CDMA, E1/T1 Module Slot
LAN Port	2	2	2	2	2
Console	1	1	1	1	1
Power	Single PSU	Single PSU	Single PSU	Single PSU	Dual PSU (module)



AP-GS1500 GSM/CDMA Gateway

GSM Gateway

AP-GS1500 Multi-Port GSM/CDMA Gateway

- Two(2) Module Slots for 4-Port GSM Module, 4-Port CDMA Module 8FXS/8FXO Analog Interface (Up to 8-Port CDMA, 4-Port GSM+4-Port CDMA, 4-Port GSM +8FXS/8FXO Module)
- H.323/SIP/MGCP Triple Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2)10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- VPMS (VoIP Plug&Play Management System) & NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Powerful Web based Management
- Rack Mountable Chassis with Internal Power Supply

GSM/CDMA Gateway

AP-GS1500 Multi-Port GSM/CDMA Gateway

- RISC Microprocessor Computing Power
- Two(2) Module Slot for GSM, CDMA, Analog/Digital Interface
- 4-Port GSM Module(AP-N1-GSM4), Hot-Swap
 - 4-Port SIM Card Slot
 - One(1) GSM Antenna Interface (Internal 4 Channel Combiner)
- 4-Port CDMA Module(AP-N1-CDMA4), Hot-Swap
 - 4-Port RUIM Card Slot
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
- VoIP Interface Module, Hot-Swap
 - 8-Port FXS,8-Port FXO VoIP Module (AP-N1-FXS8, etc)
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply



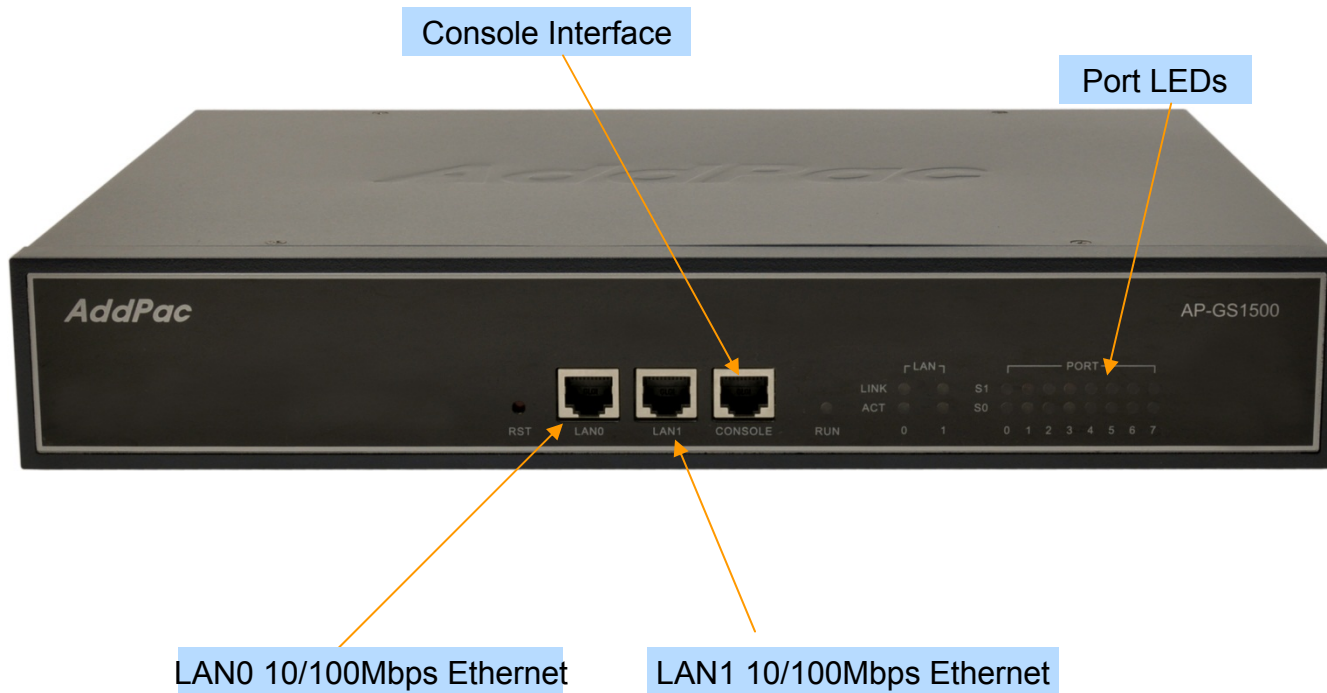
Hardware Specification

AP-GS1500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Front Side View



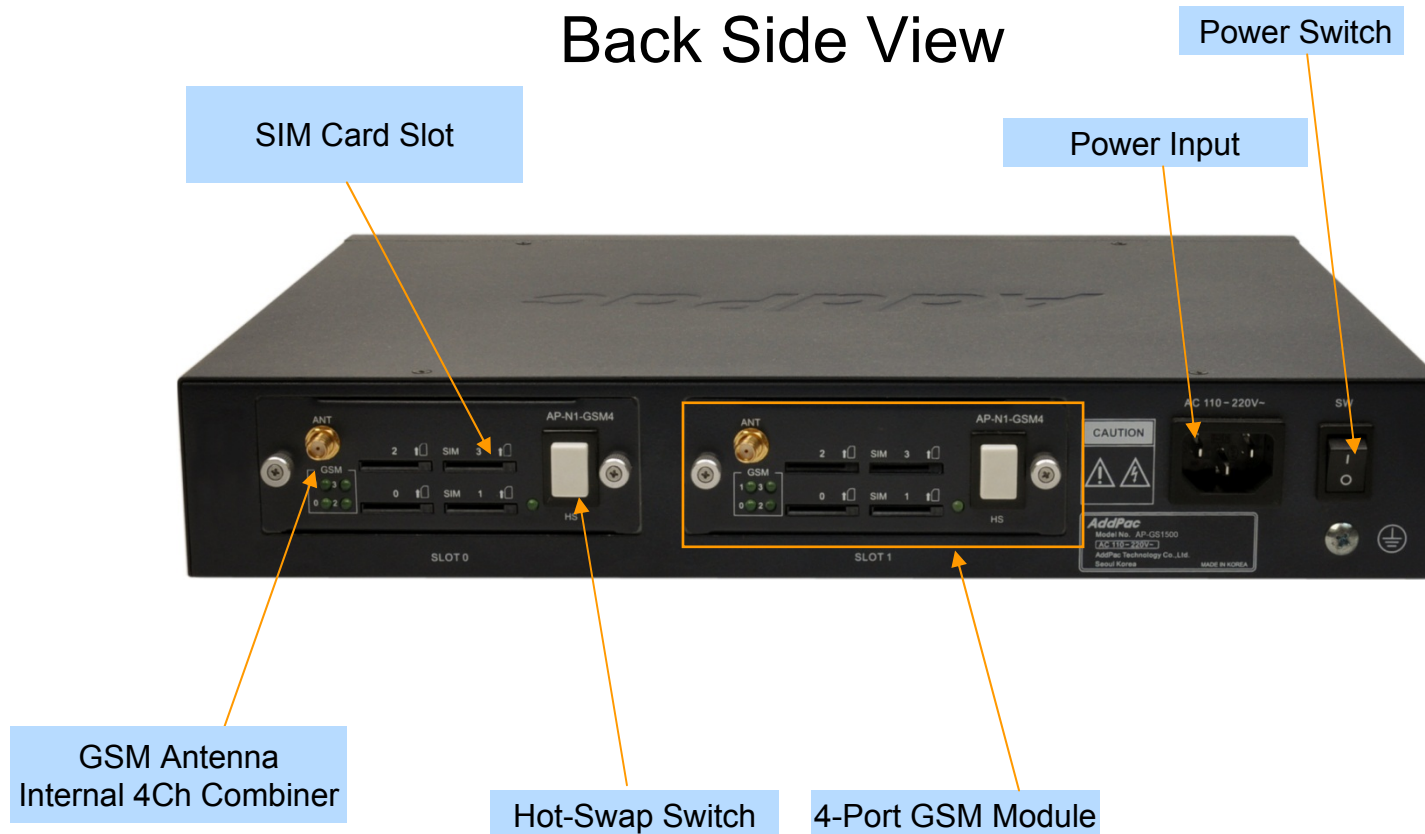
Hardware Specification

AP-GS1500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Back Side View



Hardware Specification

AP-GS1500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP



Hardware Specification

AP-GS1500 Multi-Port GSM/CDMA Gateway

AP-GS1500 Voice Modules

AP-N1-GSM4 4-Port GSM Module



AP-N1-CDMA4 4-Port CDMA Module



AP-N1-FXS8 8-Port FXS Module




AP-N1-FXO8 8-Port FXO Module



AP-N1-FXS4O4 4-Port FXS&4-Port FXO Module





AP-GS2000 GSM/CDMA Gateway

Main Features

AP-GS2000 Multi-Port GSM/CDMA Gateway

- Three Module Slots for 4-Port GSM Module, 4-Port CDMA Module, 8FXS/8FXO Analog Interface (Up to 8-Port GSM + 8FXS/8FXO Module, 12-Port CDMA, 12-Port GSM, etc)
- H.323/SIP/MGCP Triple Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- G.711/G.726/G.723/G.729, T.38 Fax, VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2) 10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- VPMS (VoIP Plug&Play Management System) for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Powerful Web based Management
- Rack Mountable Chassis with Internal Power Supply

Hardware Specification

AP-GS2000 Multi-Port GSM/CDMA Gateway

- RISC Microprocessor Computing Power
- Three Module Slot for GSM, CDMA, Analog/Digital Interface
- 4-Port GSM Module(AP-N1-GSM4), Hot-Swap
 - 4-Port SIM Card Slot
 - One(1) GSM Antenna Interface (Internal 4 Channel Combiner)
- 4-Port CDMA Module(AP-N1-CDMA4), Hot-Swap
 - 4-Port RUIM Card Slot
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
- VoIP Interface Module, Hot-Swap
 - 8-Port FXS Module, Digital E1/T1 Module (AP-N1-FXS8, AP-N1-FXO8, etc)
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply

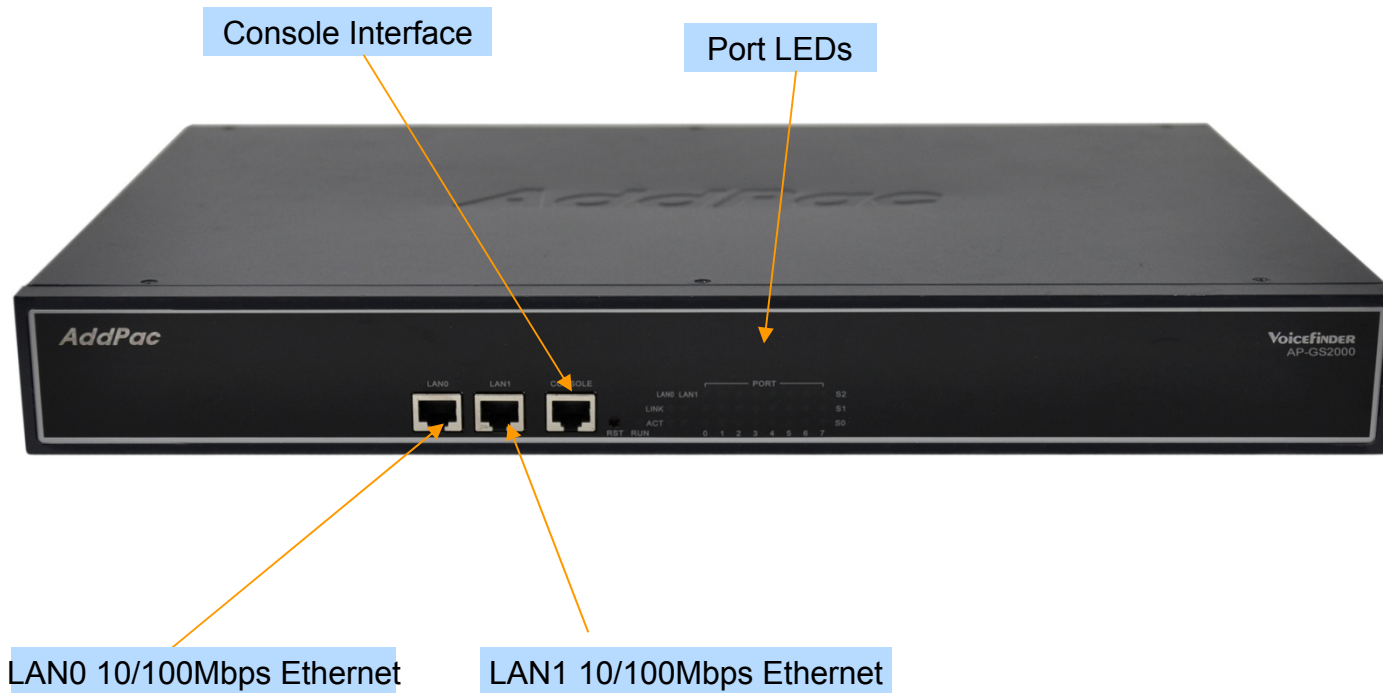


Hardware Specification

AP-GS2000 Multi-Port GSM/CDMA Gateway

Hardware Specification

Front Side View

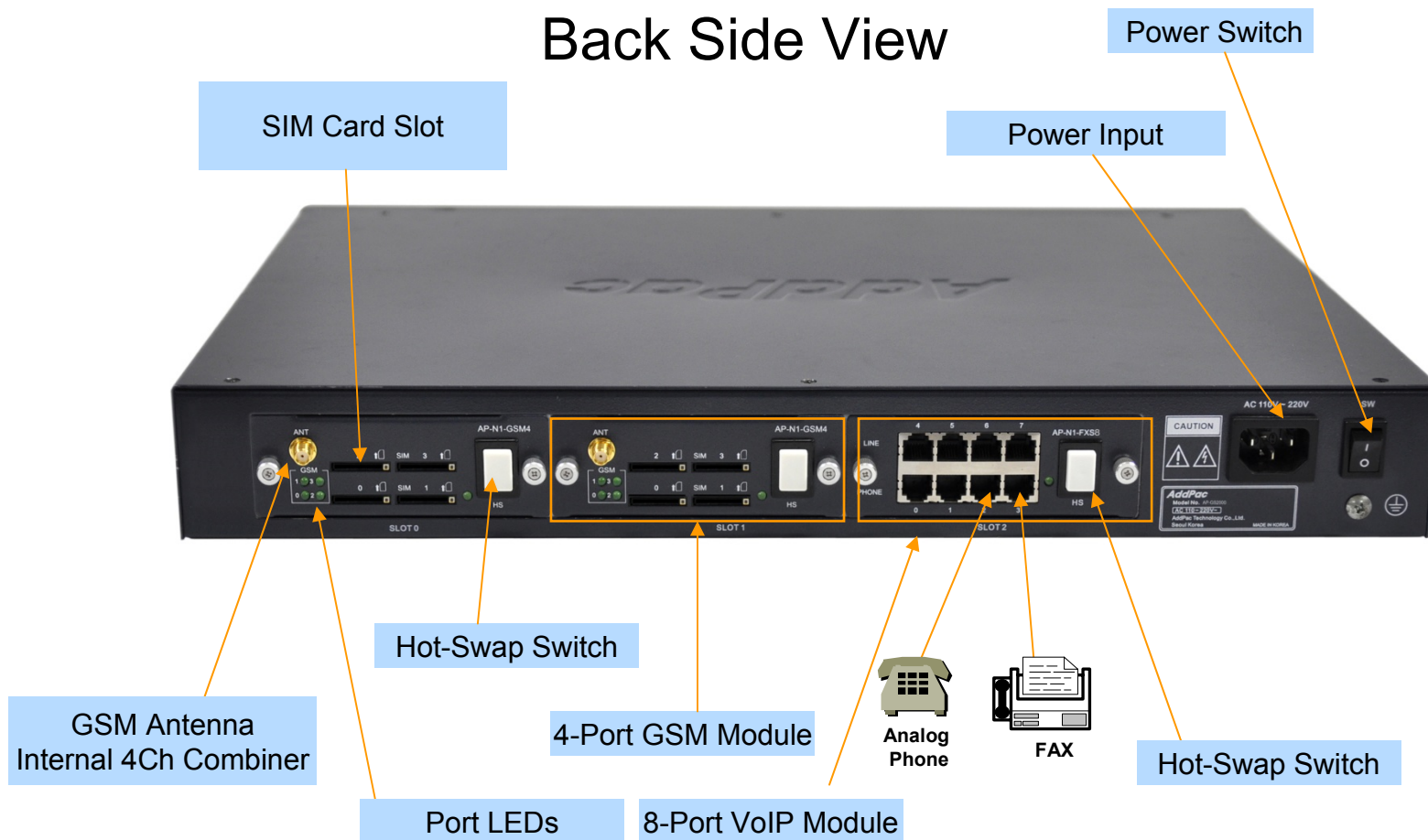


Hardware Specification

AP-GS2000 Multi-Port GSM/CDMA Gateway

Hardware Specification

Back Side View



Hardware Specification







AP-GS2000 Multi-Port GSM/CDMA Gateway



Hardware Specification

AP-GS2000 Multi-Port GSM/CDMA Gateway

AP-GS2000 Voice Modules

AP-N1-GSM4 4-Port GSM Module	
AP-N1-CDMA4 4-Port CDMA Module	
AP-N1-FXS8 8-Port FXS Module	
AP-N1-FXO8 8-Port FXO Module	
AP-N1-FXS4O4 4-Port FXS&4-Port FXO Module	
AP-N1-E1 1-Port Digital E1/T1 Module	



AP-GS2500 GSM Gateway

Main Features

AP-GS2500 Multi-Port GSM/CDMA Gateway

- Four(4) Module Slots for 4-Port GSM Module, 8FXS/8FXO Analog Interface (Up to 12-Port GSM +8FXS/8FXO Module, 16-Port CDMA, 16-Port GSM)
- H.323/SIP/MGCP Triple Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2)10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- VPMS (VoIP Plug&Play Management System) & NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Powerful Web based Management
- Rack Mountable Chassis with Internal Power Supply

Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

- RISC Microprocessor Computing Power
- Four(4) Module Slot for GSM, Analog/Digital Interface
- 4-Port GSM Module(AP-N1-GSM4), Hot-Swap
 - 4-Port SIM Card Slot
 - One(1) GSM Antenna Interface (Internal 4 Channel Combiner)
- 4-Port CDMA Module(AP-N1-CDMA4), Hot-Swap
 - 4-Port RUIM Card Slot
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
- VoIP Interface Module, Hot-Swap
 - 8-Port FXS Module, Digital E1/T1 Module (AP-N1-FXS8, AP-N1-FXO8, etc)
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply



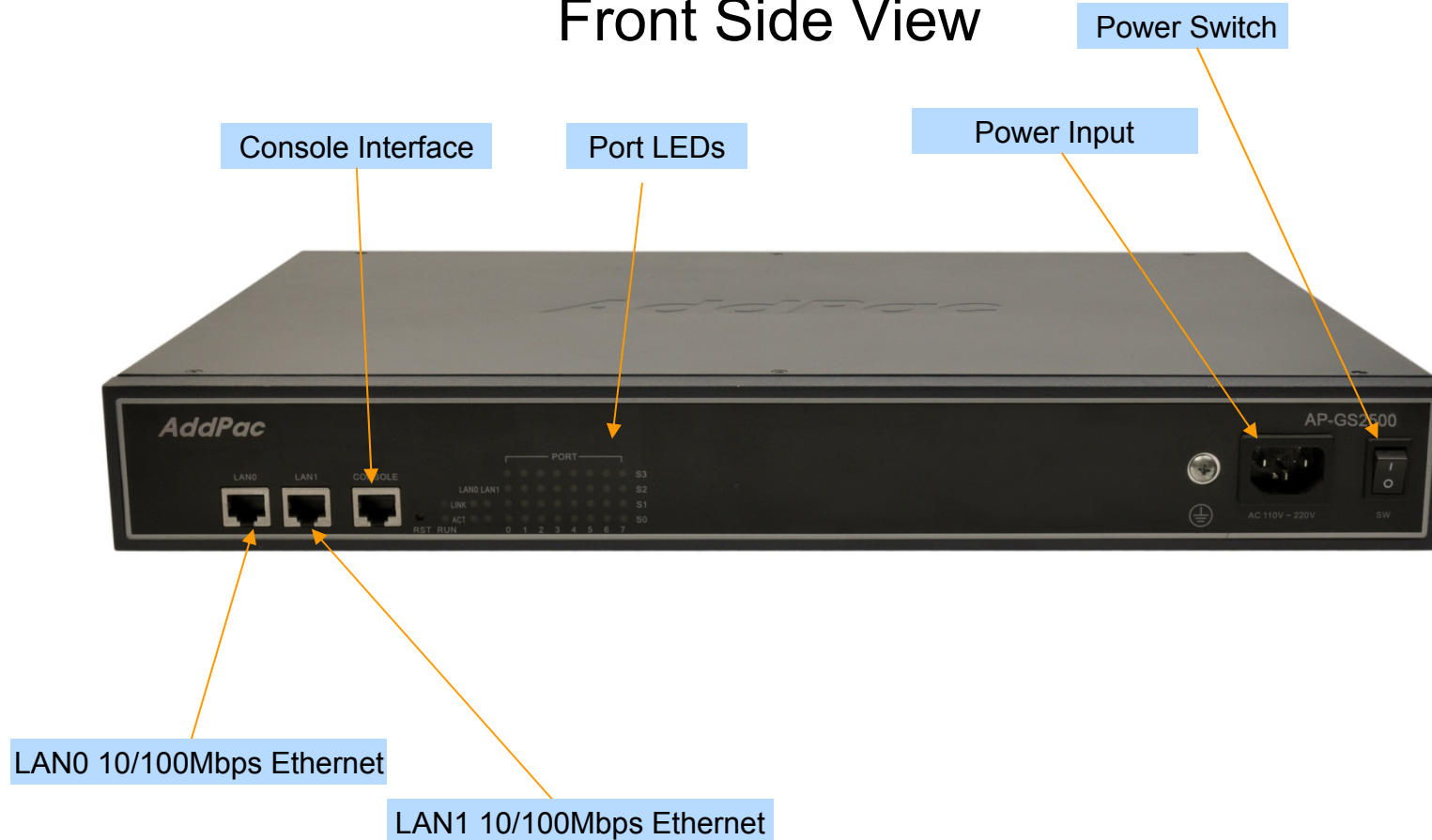
Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Front Side View



Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Back Side View (16-Port GSM, 16-Port CDMA)

SIM Card Slot



GSM Antenna
Internal 4Ch Combiner

4-Port GSM Module

Hot-Swap Switch

Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Back Side View (12-Port GSM+ 8-Port FXS)



Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

RISC
CPU







High-end
DSP




Hardware Specification

AP-GS2500 Multi-Port GSM/CDMA Gateway

AP-GS2500 Voice Modules

AP-N1-GSM4 4-Port GSM Module	
AP-N1-CDMA4 4-Port CDMA Module	
AP-N1-FXS8 8-Port FXS Module	
AP-N1-FXO8 8-Port FXO Module	
AP-N1-FXS4O4 4-Port FXS&4-Port FXO Module	
AP-N1-E1 1-Port Digital E1/T1 Module	



AP-GS3000 GSM/CDMA Gateway

Main Features

AP-GS3000 Multi-Port GSM/CDMA Gateway

- Ten(10) Module Slots for 4-Port GSM Module, 8FXS/8FXO Analog Interface (Up to 36-Port GSM, Up to 36-Port CDMA, Digital E1/T1 Module, CPU Module)
- H.323/SIP/MGCP Triple Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2)10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- VPMS (VoIP Plug&Play Management System) & NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Powerful Web based Management
- Rack Mountable Chassis with Internal Power Supply

Hardware Specification

AP-GS3000 Multi-Port GSM/CDMA Gateway

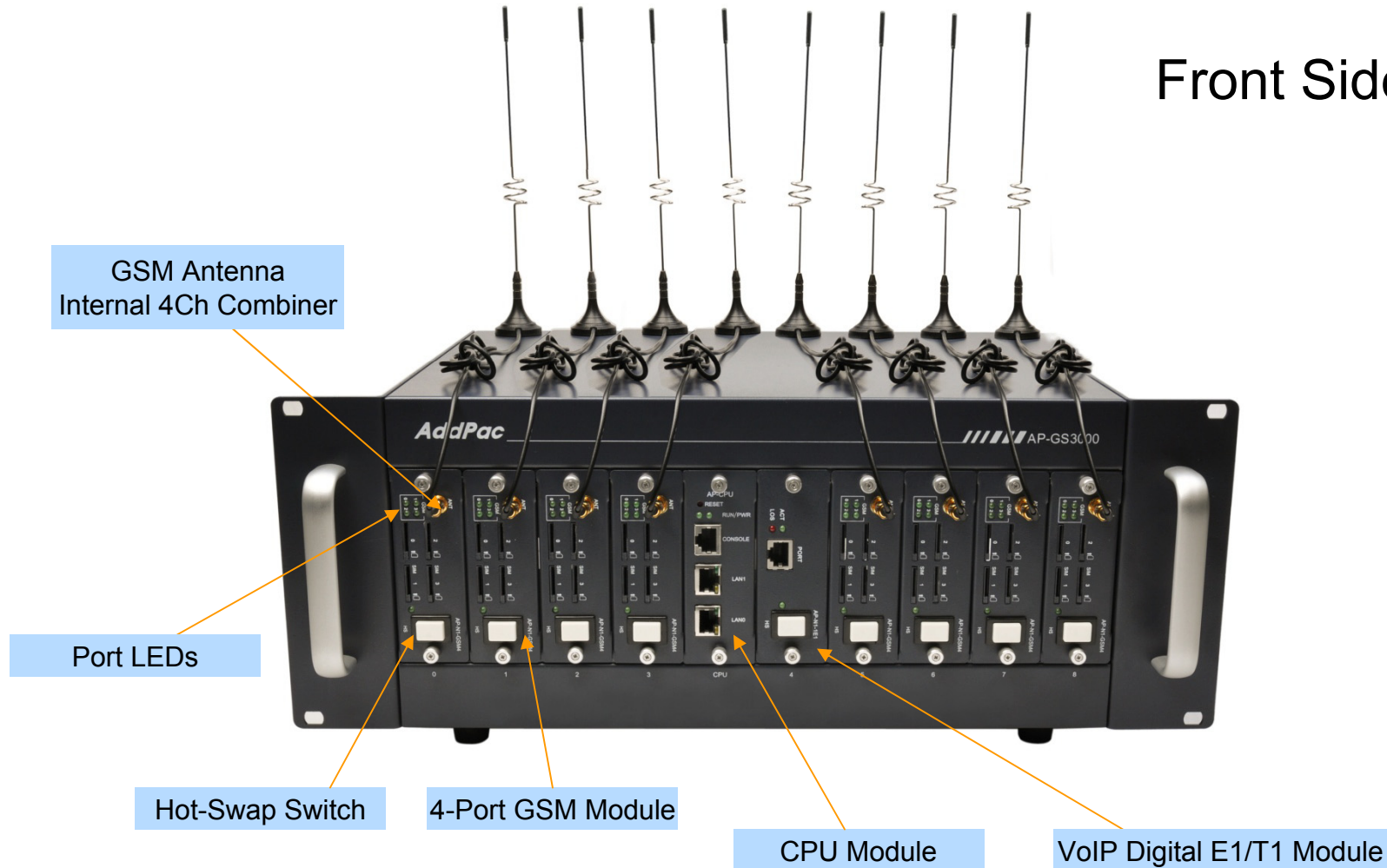
- RISC Microprocessor Computing Power
- Ten(10) Module Slot for GSM, Analog/Digital Interface
- 4-Port GSM Module(AP-N1-GSM4), Hot-Swap
 - 4-Port SIM Card Slot
 - One(1) GSM Antenna Interface (Internal 4 Channel Combiner)
- 4-Port CDMA Module(AP-N1-CDMA4), Hot-Swap
 - 4-Port RUIM Card Slot
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
- VoIP Interface Module, Hot-Swap
 - 8-Port FXS Module, Digital E1/T1 Module (AP-N1-FXS8, AP-N1-FXO8, etc)
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply



Hardware Specification

AP-GS3000 Multi-Port GSM Gateway

Front Side View



Hardware Specification

AP-GS3000 Multi-Port GSM Gateway



Back Side View

Cooling FAN







Power Switch

Power Inlet (110~220V)

Hardware Specification

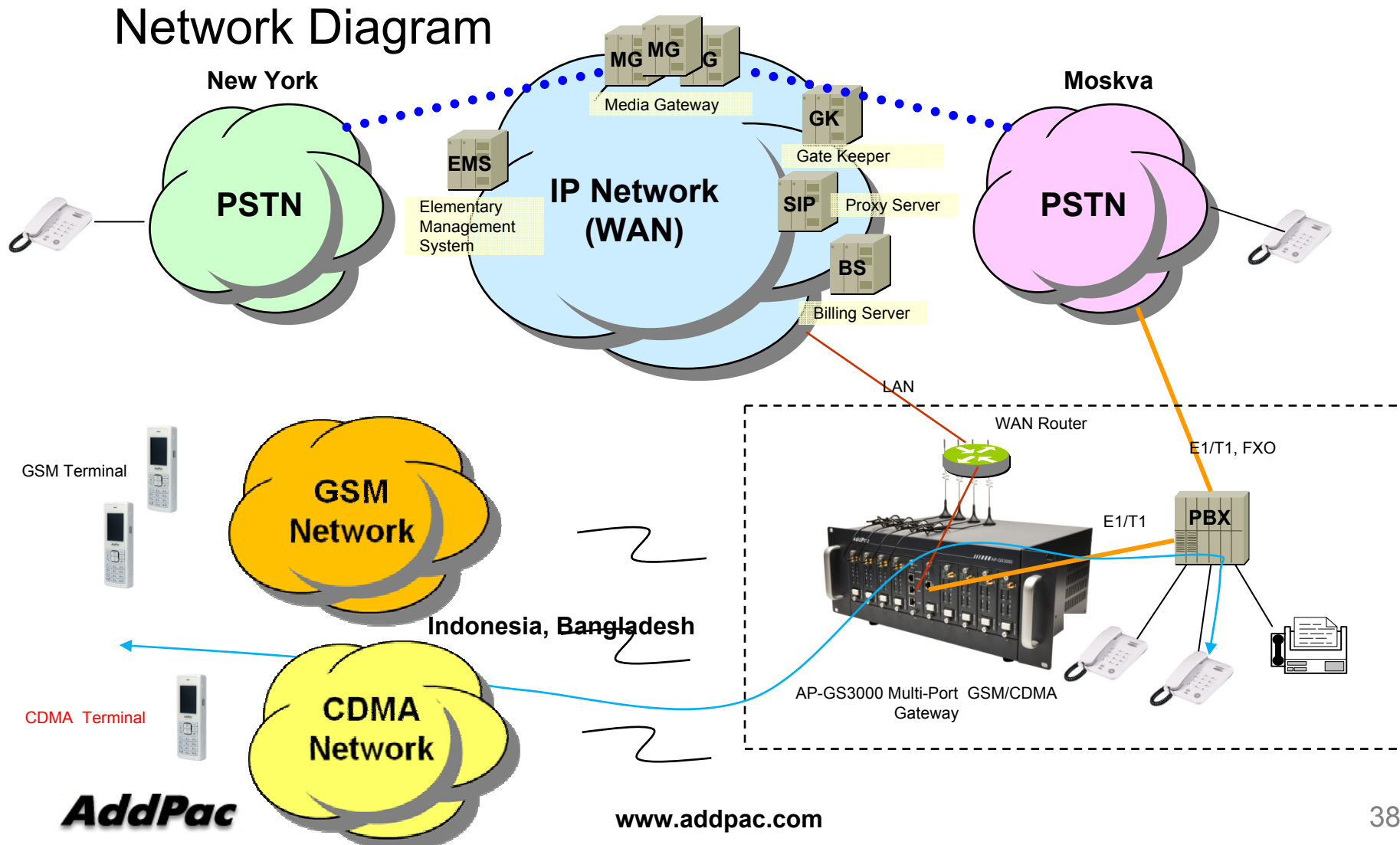
AP-GS3000 Multi-Port GSM/CDMA Gateway


AP-GS3000 Voice Modules

AP-N1-GSM4 4-Port GSM Module	
AP-N1-CDMA4 4-Port CDMA Module	
AP-N1-FXS8 8-Port FXS Module	
AP-N1-FXO8 8-Port FXO Module	
AP-N1-FXS4O4 4-Port FXS&4-Port FXO Module	
AP-N1-E1 1-Port Digital E1/T1 Module	

Network Service Diagram

AP-GS3000 Multi-Port GSM Gateway





AP-GS3500 GSM/CDMA Gateway

Main Features

AP-GS3500 Multi-Port GSM/CDMA Gateway

- Ten(10) Module Slots for 4-Port GSM Module, 8FXS/8FXO Analog Interface (Up to 36-Port GSM, Up to 36-Port CDMA, Digital E1/T1 Module, CPU Module)
- H.323/SIP/MGCP Triple Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2)10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- VPMS (VoIP Plug&Play Management System) & NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Powerful Web based Management
- Rack Mountable Chassis with Internal Power Supply

Hardware Specification

AP-GS3500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

- RISC Microprocessor Computing Power
- Ten(10) Module Slot for GSM, Analog/Digital Interface
- 4-Port GSM Module(AP-N1-GSM4), Hot-Swap
 - 4-Port SIM Card Slot
 - One(1) GSM Antenna Interface (Internal 4 Channel Combiner)
- 4-Port CDMA Module(AP-N1-CDMA4), Hot-Swap
 - 4-Port RUIM Card Slot
 - One(1) CDMA Antenna Interface (Internal 4 Channel Combiner)
- VoIP Interface Module, Hot-Swap
 - 8-Port FXS Module, Digital E1/T1 Module (AP-N1-FXS8, AP-N1-FXO8, etc)
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Dual Power Supply



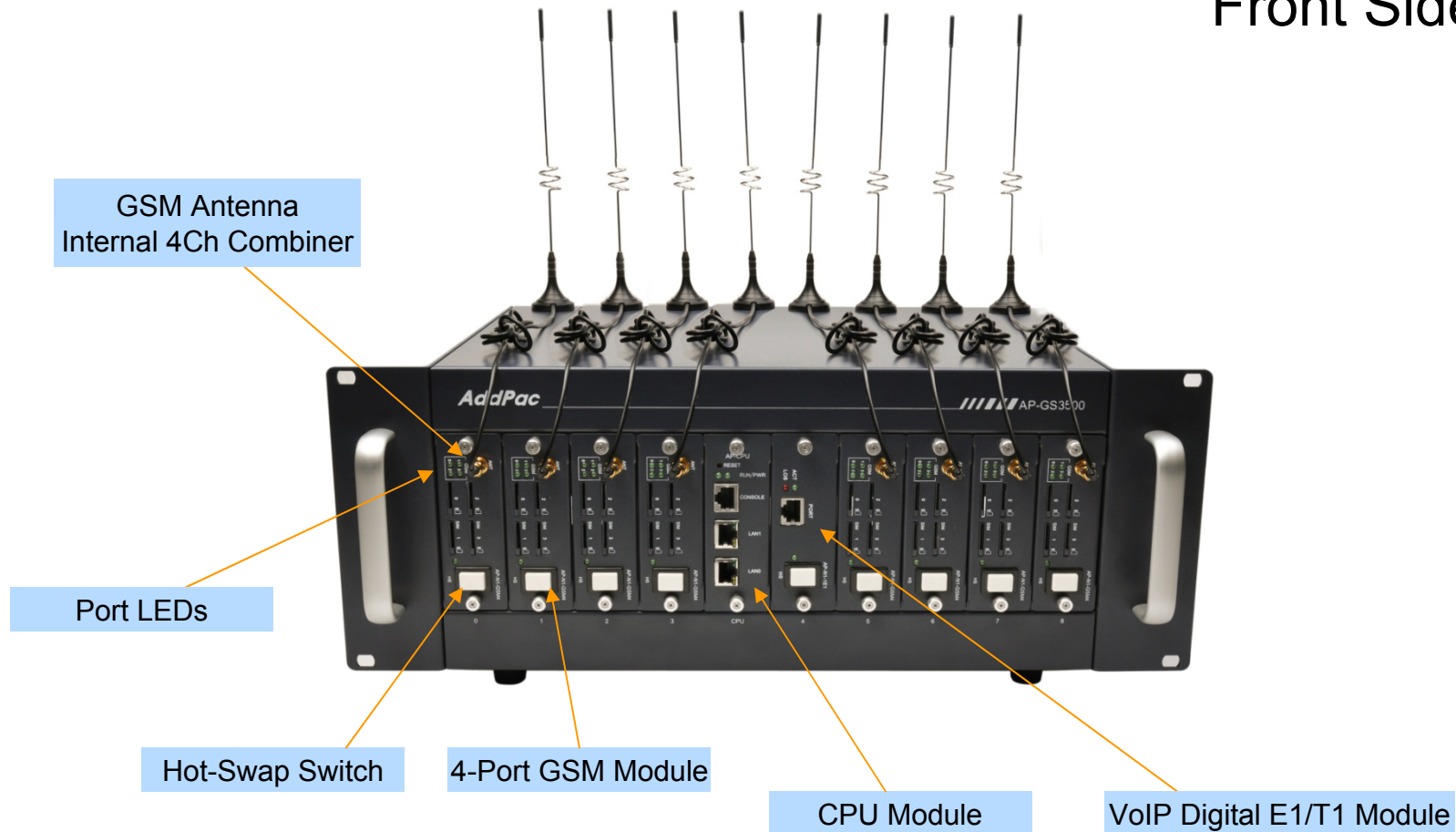
Hardware Specification

AP-GS3500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Front Side View



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Hardware Specification

AP-GS3500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

Back Side View









Hardware Specification

AP-GS3500 Multi-Port GSM/CDMA Gateway

RISC
CPU

High-end
DSP

AP-GS3500 Voice Modules

AP-N1-GSM4 4-Port GSM Module	
AP-N1-CDMA4 4-Port CDMA Module	
AP-N1-FXS8 8-Port FXS Module	
AP-N1-FXO8 8-Port FXO Module	
AP-N1-FXS4O4 4-Port FXS&4-Port FXO Module	
AP-N1-E1 1-Port Digital E1/T1 Module	



Smart Web Manager for GSM/CDMA Gateway

Contents

- Main Page Layout
- System Configuration
 - Network Setup, Language, NAT, PPTP, NTP
- Basic Configuration
 - Protocol, SIP Server , FXS Extension, GSM Extension
 - DTMF/CODEC, VoIP Dial Plan, GSM Dial Plan, Static Routing, Hot Line
- Advanced Configuration
 - Gain/CID, GSM PINs, FAX, Service, Filtering, Security
 - GSM Web Callback, GSM Callback
- Miscellaneous Configuration
 - Call Status, System Status, Alarm Status, GSM Status
 - Call Log, System Log, Ping, BTS Selection, GSM BTS Info
- LCR(Least Cost Routing)
 - Black & White List, Time Interval, Tariff Group, LCR Test
- SMS
 - Inbox, SMS New Message

Main Page Layout

Smart Web Manager
www.addpac.com

Main Menu
For easy system setup, provide the various menu and category

- System
 - Network Setup
 - Language
 - NAT
 - PPTP
 - NTP
- Basic
 - Protocol
 - Server SIP
 - SIP Registration
 - FXS Extension
 - GSM Extension
 - DTMF/CODEC
 - VoIP Dial Plan
 - GSM Dial Plan
 - Static Route
 - Hot Line
- Advanced
 - Gain & CID
 - GSM PINs
 - Fax
 - Service
 - Filtering
 - Security
 - SNMP
 - WEB Callback
 - GSM Callback

Tool Bar
Provide frequently used tools like as System Update, Configuration Backup, Initialization, Restart, Telnet

System Information

H/W Version	2.0
SW Version	8.00d
MAC Address	0002.a400.0000
VoIP Protocol	SIP
Voice Interface Module	G(2)S(2)
Registration Status	Registered
Supported Codec List	
Network Information	Static 172.16.9.16
WAN LINK Status	100Mbps FULL Duplex Link UP
LAN LINK Status	Link Down
Current Time	Fri Jan 1 01:49:57 2010
System Startup Time	Fri Jan 1 00:00:00 2010
	0 days 01:49:57
	0

Information
Display the current system version and status summary

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface : G(2)S(2)
Protocol : SIP
Status : Registered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description
Display the help message if you move mouse over main menu

Workspace
Workspace for detailed action

System – Network Setup

Host Name
Create a representative name for the site to be installed

Static IP
This is static IP mode. Specify the addressed IP from the service provider

PPPoE
This is ADSL mode. This mode is used for addressing IP though authentication from the modem.
At this time, the modem must be configured in a way that the device can be authenticated.

DHCP
This is dynamic IP mode which is set at default. The IP can be addressed from the external DHCP server.

VLAN
Configure VLAN mode and ID.

WAN Link
Controls and recognizes WAN port
Specify the connection speed of WAN port connection automatically.

MAC
Change MAC address of WAN interface. Without address entry, use the basic MAC Address.

Smart Web Manager

Network Setup

Hostname: GS1002

Static IP

IP Address: 172.16.9.16 A.B.C.D
Network Mask: 255.255.0.0 A.B.C.D
Default Router: 172.16.1.1 A.B.C.D
DNS Server: Primary DNS Server
Secondary DNS Server

PPPoE(ADSL)

Username:
Password:

DHCP

VLAN ID: 0

Auto

Speed: 100 10
Duplex: full half

WAN Link Control: Manual

MAC(Hardware) Address: [][][][][][]

Apply

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Registered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

This command sets up WAN port. The static IP address is to be assigned to the WAN port. The static IP address of the device can be changed. MAC Address change can be used only when necessary. It is recommended to use the address created by the user not the address of the device

UnRead SMS Messages

System - Language

Smart Web Manager
www.addpac.com

System

- Network Setup
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PIN

Configure Language

한국어

English

Apply

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Registered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Choose the basic language to be applied. English is set at default.

Configure Language
English, Korea

System - NAT

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security

NAT Static Table

IP Protocol	Global Port	Local Address	Local Port	Control
tcp	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

When many PCs are connected to LAN, create a table for delivering TCP/UDP port to PC.

NAT Static Table
When many PCs are connected to LAN, create a table for delivering TCP/UDP port to PC

System - PPTP

The screenshot shows the 'Smart Web Manager' interface for configuring PPTP. The main content area is titled 'Tunneling' and contains three sections: 'Mode', 'Source & Destination', and 'Service'. Three yellow callout boxes provide additional context for these sections.

System

- Network Setup
- Language
- NAT
- **PPTP**
- NTP

Basic

- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

System

- GSM PINs
- Fax

Tunneling

Mode

- None(Disable Tunneling, default)
- PPTP(Point-to-Point Tunneling Protocol)

Username:

Password:

Authentication

- None (No Authentication)
- PAP (PPP Authentication Protocol)
- CHAP(Challenge Handshake Authentication Protocol)

Phone Number

- None (default)
- Hostname (Use hostname as phone number)
- User Define

Source

Destination A.B.C.D (Tunnel End Point Address)

Service

- Voice and Data Use Tunnel Interface (default)
- Voice Use Tunnel Interface, Data Use Ethernet Interface
- Data Use Tunnel Interface, Voice Use Ethernet Interface

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

This is the settings for using PPTP(Point-to-Point Tunneling Protocol). For the setting to be used for tunneling, please contact the manufacturer of the device

Tunneling Mode
Configure Tunneling mode

Tunneling source & destination
Source LAN port & destination IP

Tunneling Service
Service mode

System - NTP

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- **NTP**

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route

NTP

Enable Disable

Primary Server (Domain Name or IP Address)

Secondary Server (Domain Name or IP Address)

Interval (1~72 hours)

Hours Offset : (-23~23 hours) : (0~60 minute)

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

NTP
Configure NTP server (s) & Options

Basic - Protocol

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- **Protocol**
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Protocol

SIP(Session Initiation Protocol)

Apply

Configure VoIP signaling protocol SIP , H.323 (optional)

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure the settings of the protocol to be used for VoIP communication

Basic – SIP Server

Smart Web Manager
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SIP (Session Initiation Protocol)

Use SIP Server Yes No

Primary SIP Server Server address (IP or Domain Name) and Port (default 5060)

Secondary SIP Server Server address (IP or Domain Name) and Port (default 5060)

Local Domain name (SIP userpart of authentication)

SIP Signaling Port (default 5060, between 1 to 65535)

Register Expiration (in seconds, default 60, between 10 to 86400)

Session Re-Fresh INVITE UPDATE

Session Expire Time (in seconds, default 1800, between 30 to 86400, 0 = disable)

Apply

SIP Server
Primary & Secondary server,
Local domain name,
SIP Signaling Port (reboot necessary)
Timer
* register expire
* session refresh
* session expire

Information
AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description
Configure the settings for SIP.
Contact your service provider
for the settings

Basic – FXS Extension

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- **FXS Extension**
- GSM Extension

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

FXS Extension

Port Information

Port	P0	P1	P2	P3
SLOT0	GSM	GSM	FXS	FXS

FXS Extension Configuration

Index	Port	Numbers	Preference	HuntStop	Select
0	0/2	1234	0	0	<input type="checkbox"/>

Information

AddPac Technology
 Model : GS1002_G2
 H/W Version : 2.0
 S/W Version : 8.00d
 Smart Web Version : 0.4
 Smart Web Build : Mar 24 2010
 Voice Interface
 G(2)S(2)
 Protocol : SIP
 Status : Unregistered
 CurrentCalls : 0 Call
 Network : Static 172.16.9.16
 Mac Address : 0002.a400.0000
 Unread Message:
 P0:0(0)
 P0:1(0)

Description

Set up for using FXS port to extension number (forwarding No)

Port Information
voice port type & physical port

FXS Extension
Configure phone-number for using inter-office Preference (0 : highest)

Basic – GSM Extension

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP

System

- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension**

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

GSM Extension

Port Information

Port	P0	P1	P2	P3
SLOT0	GSM	GSM	FXS	FXS

GSM Extension Configuration

Index	Port	Numbers	Preference	HuntStop	Select
0	0/0	T	0	X	<input type="checkbox"/>

GSM Extension with Translation

Port	Destination Pattern	Digits to Insert	Number of Digits to Delete
P0:0	33	8	1
P0:1			0

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Set up for using GSM port to extension number (forwarding No)

Port Information
voice port type & physical port

GSM Extension
Configure GSM phone-number for receiving a call (usually 'T' is used for each port)

GSM Extension with Translation
Used to GSM callback

- The Received CID is not real serving number.
- The specified translation rule is applied.

Basic – DTMF/CODEC

Smart Web Manager
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System

- Network Setup
- Language

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- **DTMF/CODEC**
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

DTMF/CODEC

Voice CODEC

Preference 1	None
Preference 2	None
Preference 3	None
Preference 4	None
Preference 5	None
Preference 6	None

DTMF Relay mode

- DTMF relay by In-band voice
- DTMF relay by RTP payload defined by RFC 2833
- DTMF relay by Out-of-band signal
- DTMF relay by Cisco out-of-band signal

CODEC
Configure voice codec preference
(g711a, g711u, g729, g7231, g726)

DTMF
Configure DTMF relay method
(in-band, RFC2833, out-of-band, CISCO type out-of-band)

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure the settings for GSM Dial Plan and Prefix table

Basic – VoIP Dial Plan

VoIP PLAN
 Configure translation rule for VOIP Peer.
 - first, 'Number of Digits to Delete' option is applied.
 - second, 'Digits to Insert' option is applied.

(ex) Origin called Number = 123456
 Number of Digits to Delete = 2
 Digits to Insert = "88"

 result = 883456

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

VoIP Dial Plan / Prefix

Plan Table

Index	Digits to Insert	Number of Digits to Delete	Digit Pattern	Control
0	2	0	T	<input type="checkbox"/>

Prefix Table

Index	Prefix	PlanIndex	Control
0	T	2	<input type="checkbox"/>

Information

AddPac Technology
 Model : GS1002_G2
 H/W Version : 2.0
 S/W Version : 8.00d
 Smart Web Version : 0.4
 Smart Web Build : Mar 24 2010
 Voice Interface
 G(2)S(2)
 Protocol : SIP
 Status : Unregistered
 CurrentCalls: 0 Call
 Network : Static 172.16.9.16
 Mac Address: 0002.a400.0000
 Unread Message:
 P0:0(0)
 P0:1(0)

Description

Configure the settings for the outbound call of main/remote and incoming E1 and routing

Prefix Table
 Configure VoIP Peer with translation rule.
 (Serviced by SIP SERVER)

Basic – GSM Dial Plan

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Port Information
voice port type & physical port

Port	P0	P1	P2	P3
SLOT0	GSM	GSM	FXS	FXS

Plan Table

Index	Digits to Insert	Number of Digits to Delete	Digit Pattern	Control
0	1	1	2T	<input type="checkbox"/>

Prefix Table

Index	Prefix	2nd Prefix	PlanIndex	Slot/Port	Control
0	33	2T	0	0/0	<input type="checkbox"/>

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Hot Line Setup

VoIP PLAN
Configure translation rule for GSM Peer.
- first, 'Number of Digits to Delete' option is applied.
- second, 'Digits to Insert' option is applied.

(ex) Origin called Number = 123456
Number of Digits to Delete = 2
Digits to Insert = "88"

result = 883456

Prefix Table
Configure GSM Peer with translation rule.

Miscellaneous

- WEB Callback
- GSM Callback
- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Basic – Static Route

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- **Static Route**
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Static Route

Set Remote Site Call(5-digit number is set to begin *2->*2...)

No	Remote Site IP	Prefix	Insert Digit	Delete Digit	Name of Remote Site	Answer Addr	Control
0	172.16.1.1	2...	172.16.9.16	0	Factory	T	<input type="checkbox"/>
*	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Static Route
Configure Static VoIP Peer for using Inter-Office .
(Already, I know IP & phone-number)

Basic – Hot Line

Smart Web Manager
www.addpac.com

Hot Line

Hot Line Configuration

Port	Hot Line Number	Digit Input Timeout <0~10 sec>
S0P0(G)	<input type="text"/>	<input type="text" value="n.a."/>
S0P1(G)	<input type="text"/>	<input type="text" value="n.a."/>
S0P2(S)	<input type="text" value="8888"/>	<input type="text" value="5"/>
S0P3(S)	<input type="text"/>	<input type="text"/>

Apply

Hot Line
- Used as baby-call(Connection PLAR)
- Timer (FXS port only : No Digit event is occurred for configured timer value, Auto-Dialing will be started)

Information
AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Advanced – Gain & CID

Smart Web Manager
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System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- **Gain & CID**
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM RTS Info

Gain

Port	Port Type	InputGain	OutputGain	Caller ID
P0:0	GSM	0	0	<input checked="" type="checkbox"/>
P0:1	GSM	0	0	<input checked="" type="checkbox"/>
P0:2	FXS	0	0	<input checked="" type="checkbox"/>
P0:3	FXS	0	0	<input checked="" type="checkbox"/>

Apply

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Adjust the input voice volume from FXS/FXO/E1/E&M to DSP and the output volume from DSP to the phone or PSTN line;

Gain & CID
Configure Input-gain, output-gain and caller-ID.

Advanced – GSM PINs

Smart Web Manager
www.addpac.com

GSM PINs

PINs ⓘ

Port	PIN for SIM card
P0:0	<input type="text"/>
P0:1	<input type="text"/>

GSM PIN
Configure GSM PIN(Personal Identification Number)

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure GSM PINs

Advanced - Fax

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- **Fax**
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Fax

Fax Mode T.38 Inband T.38 Bypass

Fax Rate Disable 2400 4800 7200 9600 12000 14400

Apply

FAX
Configure fax mode & rate (VoIP Lines)

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Enable or disable T.38/Inband T.38, which is fax internet protocol and specify Baudrate

Advanced - Service

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- **Service**
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Service

Applicaton Services

- Enable Telnet Server Port (default 23, 1-65535)
- Enable HTTP Server Port (default 80, 1-65535)
- Enable FTP Control Port (default 21, 1-65535)
Data Port (default 20, 1-65535)
- Enable Syslog Primary Server Port (default 514)
Secondary Server Port (default 514)
Log Level
Log Command

Timer

- Inter Digit Time sec (default 3, 1-600)

Call Service

- Transfer Hook-Flash Not-assigned
- Hold Hook-Flash Not-assigned

SIP Transfer

- Mode blind Attended

Apply

Information

AddPac Technology
Model : GS1002_G2
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S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Enable or disable Telnet, HTTP, FTP and specify the access port and Call Hold/Transfer and Timer .

Service

- Configure application service(Telnet, HTTP, ftp, syslog)
- Configure IDT(Inter Digit Time)
- Configure Call-Transfer-Mode & Hook-Flash-Usage-Type.
- Configure Call-Transfer-Mode.

Advanced - Filtering

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- **Filtering**
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Filter

FTP Filter

Network Addr	Network Mask	Control
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

HTTP Filter

Network Addr	Network Mask	Control
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

Telnet Filter

Network Addr	Network Mask	Control
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

For FTP, HTTP, Telnet, set up one IP or IP band for allowing access

Filter
Configure application service filter with IP & Subnet mask.

Advanced - Security

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- **Security**
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Security

IP Filtering Enable Disable

WarDialing Filtering Enable Disable

Allow Digit Length(IP to PSTN) Min Max

SIP Shutdown Enable Disable

Apply

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure the settings for IP authentication and protocol and incoming number

Security

- IP Filtering : Allowing only the inbound call which is registered to Call-Routing of the server by static IP.
- WarDialing : Allowing only the inbound call with the number registered to Inter-Office and phone-number.
- Digit Length : Allowing only the inbound call with the number registered to Inter-Office and phone-number
- SIP : SIP signaling packets are filtered.

Advanced – GSM Web Callback

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Calling Number White List
The employee working at the out of office are usually registered.

WEB Callback
The employee working at the out of office can use web call agent.

Status Viewer
Display real-time call status.

Calling Number Whitelist

index	DialPattern	Control
0	01023234444	<input type="checkbox"/>

WEB Callback

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Execute GSM call service function and Configure call service whitelist

Advanced – GSM Callback

GSM Callback
 The employee working at the out of office can use this function.

- The Call received from GSM network is automatically disconnected.
- GSM gateway calls to the calling number.

Calling Number White List
 The employee working at the out of office are usually registered.

Callback
 The white list group is adapted to specific GSM port

Smart Web Manager
 www.addpac.com

GSM Callback

Calling Number Whitelist

Group	Index	DialPattern	Control
3	0	123T	<input type="checkbox"/>

3 | 0 | [] | [Delete] | [Add]

Callback

GSM Port	My Number	WhiteList Group
P0:0		3
P0:1		N.A.

[Apply]

Information

AddPac Technology
 Model : GS1002_G2
 HW Version : 2.0
 SW Version : 8.00d
 Smart Web Version : 0.4
 Smart Web Build : Mar 24 2010
 Voice Interface
 G(2)S(2)
 Protocol : SIP
 Status : Unregistered
 CurrentCalls : 0 Call
 Network : Static 172.16.9.16
 Mac Address : 0002.a400.0000
 Unread Message:
 P0:0(0)
 P0:1(0)

Description

Execute GSM callback function and Configure callback whitelist

Miscellaneous – Call Status

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- DTMF

Call Status

Port Status (Analog)

Slot	Port Group				
	Port	0()	1()	2()	3()
SLOT 0	Status	I	I	I	I
	Select	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unblock Block

Connection State : (Connected) (Disconnected || Blocked)
Call State : (Idle) (Ring || Dial) (Called) (Calling) (Blocked)

Call Status

Port	Direction	Established Time	Calling Number	Called Number	CODEC	Src/Dest. IP

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Verify port status and retrieve the present call information

Miscellaneous

- Security
- SNMP
- WEB Callback
- GSM Callback

Call Status

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Analog Port
Real-time display about analog port status (occupation, call status). Provide a specific port blocking function

Active Call Status
Real-time display about current active call status (calling party addr, called party addr. Codec, etc)

Miscellaneous – System Status

System Status

- voice port status & information
- SIP-UA status & information
- gateway status & information
- system utilization information

Smart Web Manager
www.addpac.com

System Status

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010

Voice Port

Port	LineType	Status	InGain	OutGain	TieType	TieDigits	CallNum	Tcalled	Tcalling
0/ 0	GSM	Idle	0	0	none		-1	-1	-1
0/ 1	GSM	Idle	0	0	none		-1	-1	-1
0/ 2	FXS	Idle	0	0	hot-line	8888	-1	-1	-1
0/ 3	FXS	Idle	0	0	none		-1	-1	-1

SIP-UA

Proxyserver Registration Information
proxyserver registration option = e164
Proxyserver list :

Server address	Port	Priority	Domain	Status (LastFailReason)
172.17.116.215	5060	128	any	Failed (Rx:OtherMsg)

Proxy Server registration status :

E.164	UserName	Password	Port	Status
1005	1005	NONE	0/ 2	Registered
33	33	NONE	0/ 0	Failed

SIP UA Timer counters
retry counter = 10

SIP UA Timer values
tretry (sip retry timer) = 500 msec.
tinterval (sip retry max interval timer) = 4 sec.
treg (sip register timer) = 60 sec.
tregtry (sip register retry timer) = 20 sec.
texpires (sip invite expire timer) = 180 sec.
tsipping (sip ping timer) = 45 sec.

SIP UA Session Timer value
Min-SE = 1800 sec.
Session-Expires = 1800 sec.

SIP DNS SRV Query : Disable
SIP Call Transfer Mode : Basic
SIP Media Channel Start Mode : Default
SIP Reliable Provisional Response Option : Supported with value <100rel>
SIP Response Option : default
SIP Local Domain : NULL
SIP Special Char : NULL
SIP Routing Method of Incoming Call : Default
SIP Remote-Party-ID : Disabled

Advanced

- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line
- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- **System Status**
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Description

Verify the present port information, Server Register status, CPU and Memory usage

Miscellaneous – Alarm Status

Smart Web Manager
www.addpac.com

Alarm Status

Interface Down Counter = 0
H323 Register Fail Counter = 0
SIP Register Fail Counter = 0

Clear

Alarm Status

- Interface Down count
- H323 register fail counter
- SIP register fail counter

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Verify the physical failure of LAN, H.323 / SIP Register Fail by increasing counter

Miscellaneous – GSM Status

Smart Web Manager
www.addpac.com

GSM Status

GSM Port Status & Information

Port	My Phone Number	Device Information		Accounting (Used/Quota/Free)	
		Register Status	Signal Strength	Voice Quota(secs)	SMS Quota(E.A.)
P0:0		REG	0dB	0 / 36000 / 36000	0 / 300 / 300
P0:1		REG	0dB	0 / -1 / -1	0 / -1 / -1

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Diaplay GSM wireless status

GSM Status

- my number
- GSM register status
- GSM signal strength
- Account information
 - * voice quota (used / quota / free)
 - * SMS quota (used / quota / free)

Miscellaneous – Call Log

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP

Registration

- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping

Call Log

CallNum	EventTime	Descript	CallingPartyNum	CalledPartyNum	RemoteInfo	SetupTime	Dur	Reason
< 1>	Jan 1 02:49:50	local	8888	9999	:		0	Local:CallClear

Call Log
Show call history information

- * call number
- * event time
- * description
- * calling number
- * called number
- * remote IP information
- * call setup time
- * call duration
- * call clear reason

Miscellaneous – System Log

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

Basic

- Protocol
- Server SIP
- SIP Registration
- FXS Extension
- GSM Extension
- DTMF/CODEC
- VoIP Dial Plan
- GSM Dial Plan
- Static Route
- Hot Line

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- Alarm Status
- GSM Status
- Call Log
- **System Log**
- Ping
- BTS Selection
- GSM BTS Info

System Log

command logging buffers (messages logged)

event logging buffers (messages logged)

System Log
- command log
- system alarm log (ex : interface down)

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Retrieve the system log

Miscellaneous - Ping

Smart Web Manager
www.addpac.com

System

- Network Setup
- Language
- NAT

Advanced

- Gain & CID
- GSM PINs
- Fax
- Service
- Filtering
- Security
- SNMP
- WEB Callback
- GSM Callback

Miscellaneous

- Call Status
- System Status
- [Alarm Status](#)
- GSM Status
- Call Log
- System Log
- **Ping**
- BTS Selection
- GSM BTS Info

Ping

Host address Start

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Verify the physical failure of LAN, H.323 / SIP Register Fail by increasing counter

PING
You can diagnose network status by PING.

PING
Show real time ping status.

Miscellaneous – BTS Selection

Smart Web Manager
www.addpac.com

GSM / BTS Control

Port	BTS Selection Mode	BCCH	RSSI & Timer
P0:0	Auto	72EA	-25B -1(sec)
P0:1	Auto	72EA	-25B -1(sec)

P0:0 [v] Auto [v] [] -10 dB [v] 0 sec [v]
[Apply]

BTS control
Configure BTS selection option
* Auto mode
* forced BCCH
* forced RSSI level

Information
AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description
Configure BTS selection mode

Miscellaneous – GSM BTS Info

Smart Web Manager
www.addpac.com

- System**
 - Network Setup
 - Language
 - NAT
 - PPTP
 - NTP
- Basic**
 - Protocol
 - Server SIP
 - SIP Registration
 - FXS Extension
 - GSM Extension
 - DTMF/CODEC
 - VoIP Dial Plan
 - GSM Dial Plan
 - Static Route
 - Hot Line
- Advanced**
 - Gain & CID
 - GSM PINs
 - Fax
 - Service
 - Filtering
 - Security
 - SNMP
 - WEB Callback
 - GSM Callback
- Miscellaneous**
 - Call Status
 - System Status
 - Alarm Status
 - GSM Status
 - Call Log
 - System Log
 - Ping
 - BTS Selection
 - GSM BTS Info

GSM BCCH Cell Information

PORT 0:0

PORT 0:1

BCCH Cell Information
Shows serving cell information (center circle) and neighboring cell information.
 * LAC : Location Area Code
 * CI : Cell ID
 * BSIC : Basic Station ID Code
 * BCCH : Broadcast Control Channel
 * RSSI : Receiver Signal Strength

Information

AddPac Technology
 Model : GS1002_G2
 HW Version : 2.0
 SW Version : 8.00d
 Smart Web Version : 0.4
 Smart Web Build : Mar 24 2010
 Voice Interface
 G(2)S(2)
 Protocol : SIP
 Status : Unregistered
 CurrentCalls : 0 Call
 Network : Static 172.16.9.16
 Mac Address: 0002.a400.0000
 Unread Message:
 P0:0(0)
 P0:1(0)

Description

Verify GSM wireless signal status

LCR – Black & White List

Smart Web Manager
www.addpac.com

GSM LCR / Black List & White List

BlackList

Index	DialPattern	Control
0	888T	<input type="checkbox"/>
		Delete
0	<input type="text"/>	Add

WhiteList

Index	DialPattern	Control
0	2...	<input type="checkbox"/>
		Delete
0	<input type="text"/>	Apply

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure black & white list

LCR Black & White List
Black List : The patterns are disallowed GSM outbound call.
White List : The patterns are allowed GSM outbound call.

LCR – Time Interval

The screenshot displays the Smart Web Manager interface for configuring GSM LCR / Time Interval Groups. The main content area is titled "GSM LCR / Time Interval Group" and contains a "TimeInterval" section. This section features a table with the following data:

Group	Days	StartTime(hh:mm)	EndTime(hh:mm)	Control
0	Weekdays	00:00	23:59	<input type="checkbox"/>

Below the table, there are input fields for adding a new group: a dropdown for "Group" (set to 0), a dropdown for "Days" (set to weekend), two dropdowns for "StartTime" (set to 0 and 0), and two dropdowns for "EndTime" (set to 0 and 0). There are "Delete" and "Add" buttons.

A yellow callout box points to the table with the text: "Time Interval GSM outbound call is restricted by Time Interval".

The left sidebar shows a navigation menu with categories: System (Network Setup, Language, NAT, PPTP, NTP), Basic (Protocol, Server SIP, SIP Registration, FXS Extension, GSM Extension, DTMF/CODEC, VoIP Dial Plan, GSM Dial Plan, Static Route, Hot Line), Advanced (Gain & CID, GSM PINs, Fax, Service, Filtering, Security, SNMP, WEB Callback, GSM Callback), and Miscellaneous (Call Status, System Status, Alarm Status, GSM Status, Call Log, System Log, Ping, BTS Selection, GSM BTS Info).

The right sidebar contains "Information" and "Description" sections. The "Information" section lists: AddPac Technology, Model: GS1002_G2, HW Version: 2.0, SW Version: 8.00d, Smart Web Version: 0.4, Smart Web Build: Mar 24 2010, Voice Interface G(2)S(2), Protocol: SIP, Status: Unregistered, CurrentCalls: 0 Call, Network: Static 172.16.9.16, Mac Address: 0002.a400.0000, Unread Message: P0:0(0), P0:1(0). The "Description" section contains: Configure time interval group.

LCR – Tariff Group

Smart Web Manager
www.addpac.com

GSM LCR / Tariff Group

Tariff Group

Group	Time Group	Restore Call Limit		Accounting Period		Free Quota		Control
Type	RestoreDay	First(sec)	Others(sec)	Voice(min)	SMS(E.A.)			
0	0	monthly	15	30	10	600	300	<input type="checkbox"/>
0	0	daily	1					Delete Add

TariffPort

Port	TariffGroup
P0:0	0
P0:1	N.A.
P0:2	N.A.
P0:3	N.A.

Information

AddPac Technology
Model : GS1002_G2
HW Version : 2.0
SW Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

Configure tariff group

Time Interval Group
Time interval Group is adapted to this tariff group.

Restore call limit
Quota restore time

Accounting Period
Used to voice call.
(ex)
- configured as First (30 seconds) Others(10 seconds)

first connect -- 30 seconds are accounted.
after 30 seconds -- 10 seconds are additionally accounted.
after 10 seconds – 10 seconds are additionally accounted.
and so on.

Tariff Group
Tariff group is adapted to specific GSM port.

Free quota
Free quota information.
Current Usage information is supported at GSM Status.

LCR – LCR Test

The screenshot shows the 'Smart Web Manager' interface for an LCR Test. The main area is titled 'LCR Test' and contains input fields for 'Caller:' (8888) and 'Called Number:' (9999), along with a 'Start' button. Below these is a log window showing the simulation results. Two yellow callout boxes provide additional context: one identifies the 'LCR Test LCR simulator' and the other states 'Show real time simulation status.' The log output shows a failed attempt to route the call from 8888 to 9999.

System

- Network Setup
- Language
- NAT
- PPTP
- NTP

LCR Test
LCR simulator

- SIP Registration
- FXS Extension
- GSM Extension

LCR Test
Show real time simulation status.

Advanced

- Gain & CID
- GSM PIN

LCR Test

Caller:

Called Number:

```
< 1> LCR : =====
< 2> LCR : == GSM LCR(Least Cost Route) Simulator Start ==
< 3> LCR : =====
< 4> LCR : -- src digits : 8888(GSM) -> dst digits : 9999(GSM)
< 5> LCR : -- MatchAllProcess After Sorted
< 6> LCR : <0> id(3048) dest(T) prefer(0) selected(0)
< 7> LCR : -- Trying : <0> id(3048) dest(T)
< 8> LCR : -- Error: Outbound White Group(id:1) UnMatched
< 9> LCR : -----
< 10> LCR : -- Result : Fail
< 11> LCR : =====
< 12> LCR : == GSM LCR(Least Cost Route) Simulator End ==
< 13> LCR : =====
```

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

LCR Test

SMS – Inbox

Smart Web Manager
www.addpac.com

GSM SMS / InBox

number of messages are 0 P0:0 OK

Index	Sender	Received	Message	Select
				Delete

GSM SMS / In Box

- total message
- unread messages (Blue color)
- received time
- content

Information

AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description

SMS – SMS New Message

The screenshot shows the 'Smart Web Manager' interface for sending an SMS message. The main content area is titled 'GSM SMS / New Message'. It features a form with the following fields:

- Phone Number:
- Message:
- Port:

A 'Send' button is located below the form. A red dashed box highlights the form fields, and a yellow box with the text 'New Message send a new message to the other GSM mobile phone.' is positioned below the form. A line points from the yellow box to the form area.

On the left side, there is a navigation menu with the following categories:

- System
 - Network Setup
 - Language
 - NAT
 - PPTP
 - NTP
- Basic
 - Protocol
 - Server SIP
 - SIP Registration
 - FXS Extension
 - GSM Extension
 - DTMF/CODEC
 - VoIP Dial Plan
 - GSM Dial Plan
 - Static Route
 - Hot Line
- Advanced
 - Gain & CID
 - GSM PINs
 - Fax
 - Service
 - Filtering
 - Security
 - SNMP
 - WEB Callback
 - GSM Callback
- Miscellaneous
 - Call Status
 - System Status
 - Alarm Status
 - GSM Status
 - Call Log
 - System Log
 - Ping
 - BTS Selection
 - GSM BTS Info

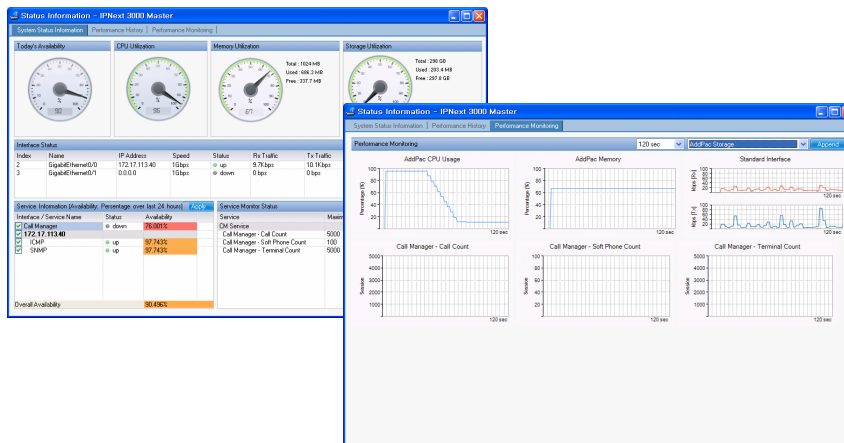
On the right side, there is an 'Information' panel with the following details:

- AddPac Technology
- Model: GS1002_G2
- HW Version: 2.0
- SW Version: 8.00d
- Smart Web Version: 0.4
- Smart Web Build: Mar 24 2010
- Voice Interface
 - G(2)S(2)
- Protocol: SIP
- Status: Unregistered
- CurrentCalls: 0 Call
- Network: Static 172.16.9.16
- Mac Address: 0002.a400.0000
- Unread Message:
 - P0:0(0)
 - P0:1(0)

Below the information panel is a 'Description' section with a text area.

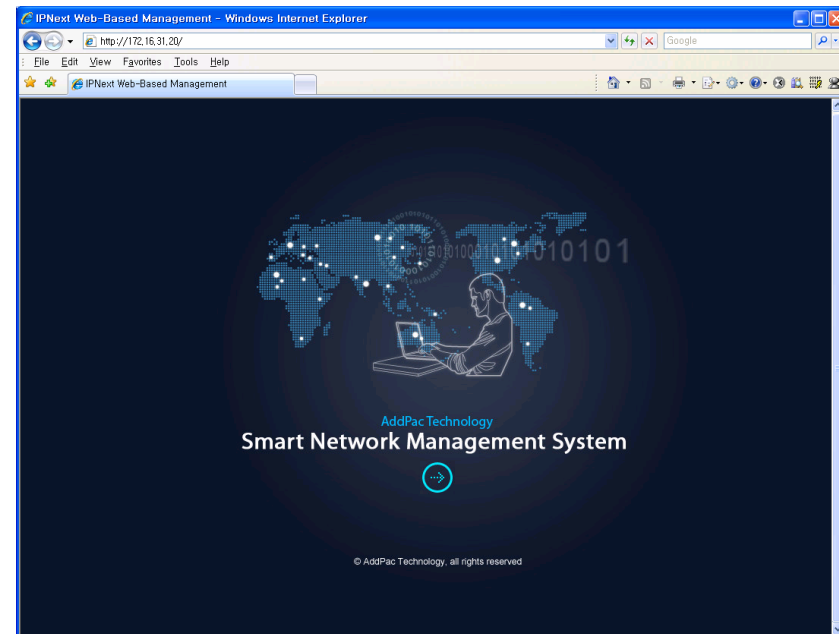
Smart NMS

Smart Network Management System for GSM/CDMA Gateway



Contents

- System Requirement
- Smart NMS Networking Diagram
- Web-based Management
- Network Resource Management
- Device Fault Management
- Device Fault History Management
- Device Status Information
- Notification Management
- Fault Statistics
- Model & Service Management



System Requirement

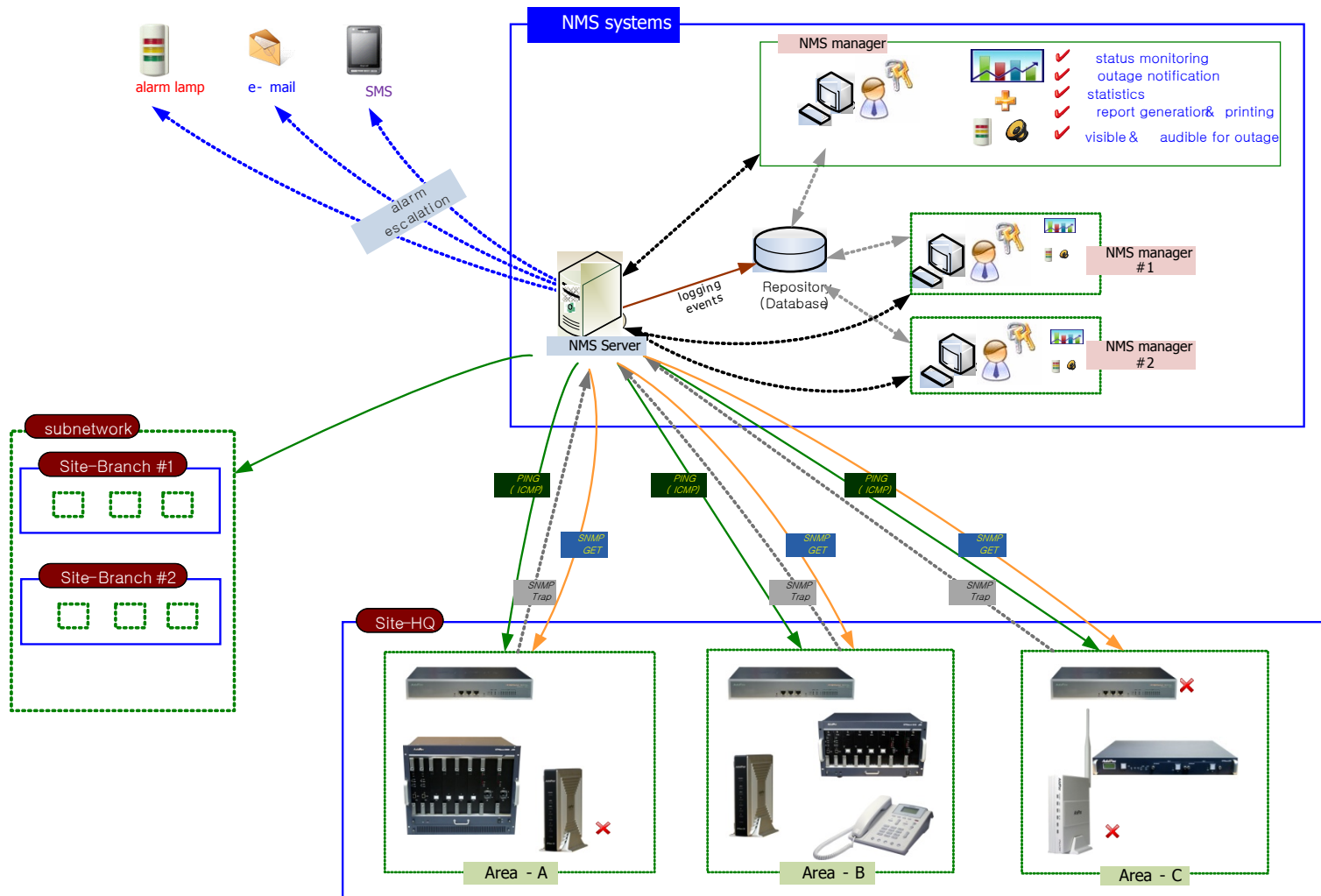
NMS Server

- OS : RHEL (Redhat Enterprise Linux) 5.0 or higher
- CPU : Quad-Core 2.0 GHz / 1333MHz FSB 2x4 MB cache
- Physical Memory : 4 GB
- HDD : 300 G
- JRE (Java Runtime Environment) 1.5.1 or Higher
- Database : PostgreSQL 8.1.11

NMS Client

- Windows XP, Vista, Windows Server 2000/2003
- Microsoft Internet Explorer 6.0 or higher

NMS Networking Diagram



Web-based Management

- **Easy Access via Web browser**
 - Microsoft Internet Explorer 6.0 or higher compatible
- **Version Control**
 - Automatic version check
 - New version software download feature
- **UI control**
 - User friendly GUI management

Version Control

The screenshot displays the IPNext Web-Based Management interface within a Windows Internet Explorer browser window. The browser's address bar shows the URL `http://172.16.31.20/`. The main content area features a dark blue background with a world map and binary code, and the text "AddPac Technology Smart Network Management System".

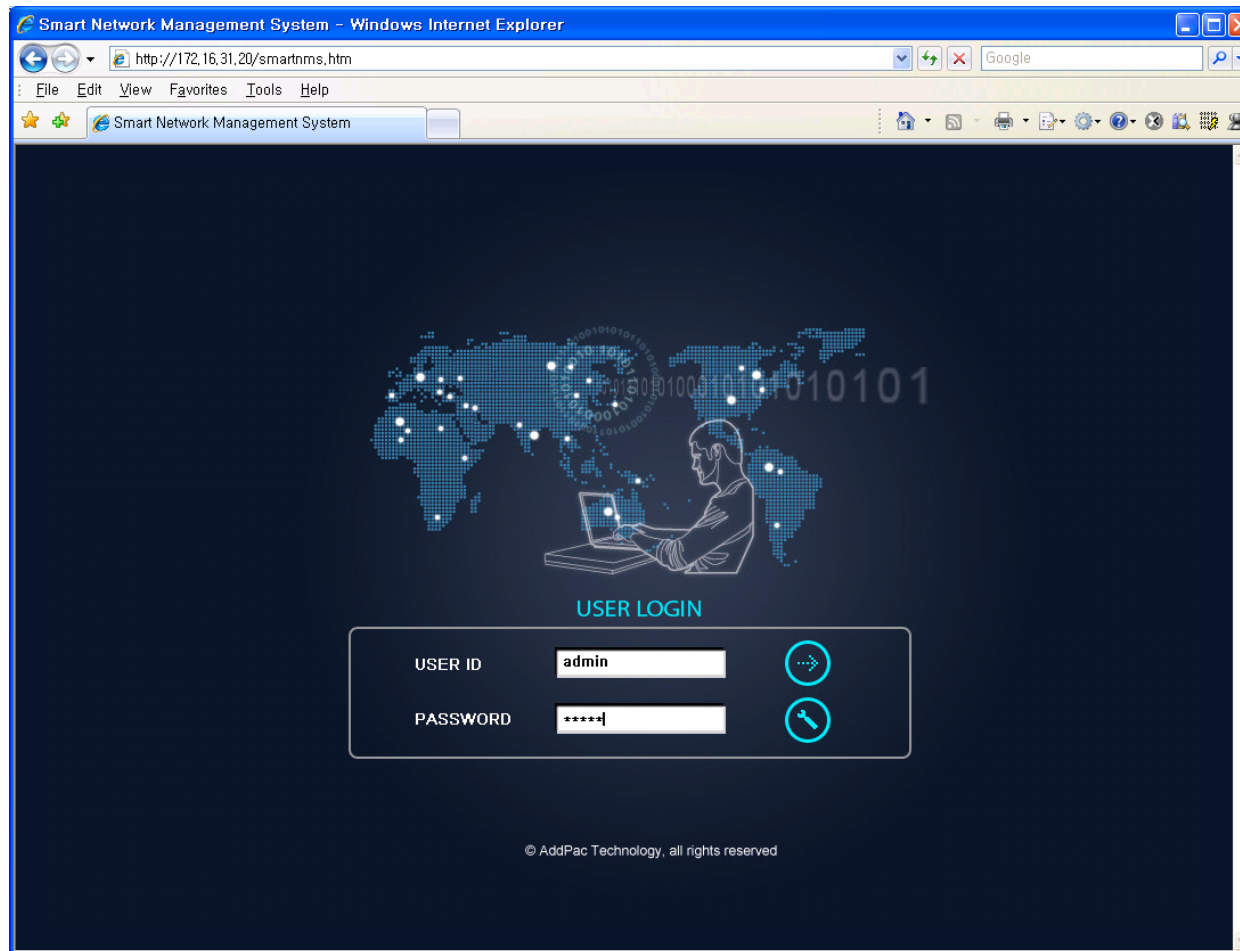
Two callout boxes highlight specific features:

- Automatic version check:** A yellow callout box with an arrow pointing to the top right of the browser window.
- New S/W version update:** A yellow callout box with an arrow pointing to the "Downloading installnms" dialog box.

The "Launching Application" dialog box contains the text: "Verifying application requirements. This may take a few moments." The "Downloading installnms" dialog box shows the following details:

- Name: `installnms`
- From: `172.16.31.20`
- Download progress: 6.29 MB of 10.1 MB
- Buttons: "Cancel"

Web-based Login



Network Resource Management

- Network resource management with hierarchical structure
- Role-based resource management for each administrator

The screenshot displays the AddPac Network Resource Management interface. On the left, a hierarchical tree structure shows the organization of network resources, including sites like 'AddPac', 'Seoul', and 'GangNamGu'. A context menu is open over the 'GangNamGu' node, with 'Execute SMM' highlighted. An orange callout box points to this menu with the text: 'can cooperate with the application executables such as SMM'. In the center, a table lists device categories such as 'Desktop', 'Network Camera', and 'Server'. An orange callout box points to this table with the text: 'manage the complex network with a structured, hierarchical form'. On the right, a 'User Properties' dialog box is open, showing a 'Site' tab with a tree view of the same hierarchical structure. An orange callout box points to this dialog with the text: 'can assign the hierarchical node to the operator and manage role-based policy'. At the bottom, a status bar shows 'Total Categories : 6'.

Device Fault Management

- Centralized fault summary information in main window
- Display current fault device through tree view
- Notify administrator with detailed fault information
- Provide device availability information for 24hrs

Device Fault Management

main window

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a navigation menu with options like NMS, Account, Configuration, Monitoring, Notification, Fault, Statistics, and View. The central area is divided into several sections:

- Current Outage Devices (11):** A tree view on the left showing a hierarchy of devices under 'AddPac', including Branch AQ, Branch GX, and HeadQuarter.
- Service Outages:** A table in the center showing site device fault summaries. It includes columns for Site, Type, Outages, Availability, and Description. The overall total device fault statistics are shown at the bottom of this table as 30 / 11 / 34 with 78.650% availability.
- Device Categories:** A table on the right showing device fault summary for category (classification). It lists categories like Desktop, Network Camera, Phone, Server, Switch, and VoIP Gateway, along with their respective Outages and Availability percentages.
- Your Outstanding Notices (16):** A table at the bottom showing current device fault event messages, including columns for Ack, ID, Send Time, Site, Device Name, IP Address, Service, and Message.

current device fault list with hierarchy view

site device fault summary

overall total device fault statistics

device fault summary for category (classification)

current device fault event message are shown as below

Device Fault Management

Smart Network Management System - Windows Internet Explorer

http://172.16.31.20/smartnms.htm

NMS Account Configuration Monitoring Notification Fault Statistics View Help

Current Outage Devices (12) Site

Service Outages Device Monitoring - <All>

View Mode Large Small Refresh Import

display message icon when the device have a notification for event

device status matrix with several severity such as critical, major, minor

* severity color

- 1) red : critical
- 2) orange : major
- 3) light blue : normal

Name	Service...	Availability
Branch AQ		
NMS Camera	6 of 12	48.994 %
NMS_IP_PBX...	3 of 3	0.000 %
Branch GX		
00_IVR_server	3 of 3	0.000 %
00_IVR_slave...	3 of 3	0.000 %
00_NR_server	1 of 2	98.015 %
00_PS_server	3 of 3	0.000 %
00_PS_slave...	2 of 3	32.703 %
IPNext 3000 ...	1 of 3	90.536 %
IPNext 3000 S...	1 of 3	90.584 %
UMS slave	3 of 3	0.000 %
HeadQuarter		
UMS server(o...	3 of 3	0.000 %
Subnetwork #2		
Center		
NMS_SOHO_...	2 of 2	92.939 %

Total Monitoring Devices : 34

PK	ID	Send time	Site	Device Name	IP Address	Service	Message
	9525	4/10/2009 5:21:06 PM	/AddPac/Branch GX	00_NR_server	172.17.111.21	SNMP	인터페이스 172.17.111.21 (172.17.111.21)의 장비명(00_NR_server)의 서비스 SNMP가 2009년 4월 10일 금요일 오후 5시 21분 06초에 실패함.
	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Center	NMS_SOHO_PBX			device NMS_SOHO_PBX, all services are down
	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed.
	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed.
	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down

4/10/2009 5:16:30 PM 172.16.31.20:5101 admin Version 1.2.3384

Device Fault Management

The screenshot displays the Smart Network Management System (NMS) interface within a Windows Internet Explorer browser. The main area shows a 'Device Monitoring' view with a 'device status matrix with small view mode'. The matrix consists of a grid of device icons, each with a status indicator (green for OK, red for fault, yellow for warning). A red arrow points to the 'NMS Camera' device, which is highlighted with a red box. Below the matrix, there is a table of 'Your Outstanding Notices' with 18 entries.

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server			device 00_RBT_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeting			device 5th floor meeting room phone device, all services are down.
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent.	NMS_SOHD_PBX			device NMS_SOHD_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed.
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device [NMS_Camera 2] interface 172.16.253.118 (172.16.253.118) not response or delete by administrator
<input type="checkbox"/>	9238	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	device [NMS_Camera 2] interface 172.16.253.118 (172.16.253.118) service ICMP not response or delete by administrator

Device Fault History Management

- Provide both summary view and detailed event message
- Can Write troubleshooting job note for each event manually
- Administrator can query for a history fault with search condition
- Each fault is related to the several raw events

Device Fault History Management

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a list of fault events with columns for Ack, ID, Send Time, Site, Device Name, IP Address, Service, Message, and Respond Time. An 'Advanced Search' dialog box is open, allowing users to filter events based on Sub Network, Site, IP Address, Notice Status Type, Level (Severity), Message Contains, Notices After, Notices Before, and Sort By.

daily fault event summary statistics information

DateTime	Outstanding	Acknowledge
2009-04-10	4	27
2009-04-09	2	76
2009-04-08	0	96
2009-04-07	0	40
2009-04-06	7	489
2009-04-05	0	722
2009-04-04	0	708
2009-04-03	1	476
2009-04-02	0	248
2009-04-01	0	19
2009-03-31	0	37
2009-03-30	0	9
2009-03-29	0	3
2009-03-28	0	1
2009-03-27	0	14
2009-03-26	0	52
2009-03-25	0	8
2009-03-24	0	19
2009-03-23	0	59
2009-03-22	0	102
2009-03-21	0	17
2009-03-20	0	21
2009-03-18	0	48
2009-03-17	0	41
2009-03-13	0	36
2009-03-07	0	1
2009-03-06	0	482
2009-03-05	0	38
2009-03-04	0	13

detail fault event history list up with filter condition (advanced search)

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message	Respond Time
<input type="checkbox"/>	9528	4/10/2009 5:51:06 PM	/AddPac/Branch AQ	NMS Camera	172.16.4.180	SNMP	interface 172.16.4.180 (172.16.4.180) device(NMS Camera) service SNMP failed at 2009-4-10 5:51 06 PM	4/10/2009 5:51:35 PM
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeting room phone device			device 5th floor meeting room phone device, all services are down.	4/10/2009 5:35:25 PM
<input type="checkbox"/>	9526	4/10/2009 5:33:42 PM	/AddPac/Branch GX	00_NR_server	172.17.11.41	Call Manager	interface 172.17.11.41 (172.17.11.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed.	4/10/2009 5:22:43 PM
<input type="checkbox"/>	9525	4/10/2009 5:21:06 PM	/AddPac/Branch GX	00_NR_server	172.17.11.40	Call Manager	interface 172.17.11.40 (172.17.11.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed.	4/10/2009 5:17:56 PM
<input type="checkbox"/>	9524	4/10/2009 5:17:29 PM	/AddPac/Branch GX	00_NR_server	172.17.11.41	Call Manager	interface 172.17.11.41 (172.17.11.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed.	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9522	4/10/2009 3:36:26 PM	/AddPac/HeadQuarter	IP_PBX_Slave(our company)			device NMS_SOHD_PBX, all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9521	4/10/2009 3:36:18 PM	/AddPac/HeadQuarter	PS_server(our company)			device PS_server(our company) all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9520	4/10/2009 3:36:17 PM	/AddPac/HeadQuarter	RBT server(our company)			device RBT server(our company) all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9519	4/10/2009 3:36:17 PM	/AddPac/HeadQuarter	UMS_server #2			device UMS_server #2 all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9518	4/10/2009 3:36:09 PM	/AddPac/HeadQuarter	Recording Server (our company)			device Recording Server (our company) all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9517	4/10/2009 3:36:08 PM	/AddPac/HeadQuarter	company_MCU_server			device company_MCU_server all services are down	4/10/2009 4:03:14 PM
<input type="checkbox"/>	9516	4/10/2009 3:36:00 PM	/AddPac/Branch GX	00_PS_Slave_server			device 00_PS_Slave_server all services are down	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9514	4/10/2009 3:35:50 PM	/AddPac/Branch GX	00_PS_server			device 00_PS_server all services are down	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9513	4/10/2009 3:35:41 PM	/AddPac/HeadQuarter	5th floor meeting room phone device			device 5th floor meeting room phone device, all services are down.	4/10/2009 4:02:43 PM
<input type="checkbox"/>	9512	4/10/2009 3:35:41 PM	/AddPac/HeadQuarter	IP_PBX_Master (our company)			device IP_PBX_Master (our company) all services are down	4/10/2009 4:02:44 PM
<input type="checkbox"/>	9511	4/10/2009 3:35:33 PM	/AddPac/Branch KT	172.16.51.12			device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator	4/10/2009 4:02:43 PM

Device Fault History Management

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a table of events with columns for Ack, ID, Send Time, Site, Device Name, IP Address, Service, Message, Responder, and Respond Time. A 'Troubleshooting Note' dialog box is open, allowing users to add, edit, or delete notes for specific events. Another dialog box shows a note that has been manually cleared by an administrator. An orange callout box points to the note entry field with the text: "Can write troubleshooting note if needed".

DateTime	Outstanding	Acknowledge
2009-04-10	4	27
2009-04-09	2	76
2009-04-08	0	96
2009-04-07	0	40
2009-04-06	7	489
2009-04-05	0	722
2009-04-04	0	708
2009-04-03	1	476
2009-04-02	0	248
2009-04-01	0	19
2009-03-31	0	37
2009-03-30	0	9
2009-03-29	0	3
2009-03-28	0	1
2009-03-27	0	14
2009-03-26	0	52
2009-03-25	0	8
2009-03-24	0	19
2009-03-23	0	59
2009-03-22	0	102
2009-03-21	0	117
2009-03-20	0	122
2009-03-19	0	127
2009-03-18	0	132
2009-03-17	0	137
2009-03-16	0	142
2009-03-15	0	147
2009-03-14	0	152
2009-03-13	0	157
2009-03-12	0	162
2009-03-11	0	167
2009-03-10	0	172
2009-03-09	0	177
2009-03-08	0	182
2009-03-07	0	187
2009-03-06	0	192
2009-03-05	0	197
2009-03-04	0	202

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message	Responder	Respond Time
<input checked="" type="checkbox"/>	9528	4/10/2009 5:51:06 PM	/AddPac/Branch AQ	NMS Camera	172.16.4.180	SNMP	interface 172.16.4.180 (172.16.4.180) device(NMS Camera) service SNMP failed at 2009-4-10 5:51 06 PM	auto-acknowledged	4/10/2009 5:51:35 PM
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/Branch AQ	5th floor meeting room phone device			device 5th floor meeting room phone device, all services are down.	to-acknowledged	4/10/2009 5:35:25 PM
<input type="checkbox"/>	9526	4/10/2009 5:33:42 PM	/AddPac/Branch GX					to-acknowledged	4/10/2009 5:35:25 PM
<input type="checkbox"/>	9525	4/10/2009 5:21:06 PM	/AddPac/Branch GX					to-acknowledged	4/10/2009 5:22:43 PM
<input type="checkbox"/>	9524	4/10/2009 5:17:29 PM	/AddPac/Branch GX					to-acknowledged	4/10/2009 5:17:56 PM
<input type="checkbox"/>	9522	4/10/2009 3:36:26 PM	/AddPac/Branch AQ	IP: cor				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9521	4/10/2009 3:36:18 PM	/AddPac/Branch AQ	PS RB cor				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9520	4/10/2009 3:36:17 PM	/AddPac/Branch AQ	UW Re (ou				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9519	4/10/2009 3:36:17 PM	/AddPac/Branch AQ	ter co				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9518	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	00				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9517	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	5th floor meeting room phone device				to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9516	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9515	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9514	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9513	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9512	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9511	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9510	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9509	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9508	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9507	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9506	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9505	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9504	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9503	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9502	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9501	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9499	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9498	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9497	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9496	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9495	4/10/2009 3:36:09 PM	/AddPac/Branch AQ	IP: 172.16.4.180				to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed	to-acknowledged	4/10/2009 4:03:14 PM
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.	to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_31.13			device NMS_IP_PBX_31.13 all services down.	to-acknowledged	4/10/2009 4:02:54 PM
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator	to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9238	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service ICMP not response or deleted by administrator	to-acknowledged	4/10/2009 4:03:13 PM
<input type="checkbox"/>	9237	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	SNMP	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service SNMP not response or deleted by administrator	to-acknowledged	4/10/2009 4:02:43 PM

Current Device Fault (Outage)

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a tree view of network devices on the left and a table of 'Current Outage Devices' on the right. The table lists various devices and their availability percentages. An orange callout box points to this table with the text: "Display the current all device faults".

An 'Event Detail' window is open for event ID 45412. It shows the following information:

- Event Time: 4/10/2009 9:26:04 PM
- Site: /AddPac/Branch GX
- Device Name: 00_RBT_server
- Device Model: AP-RBT1000
- Severity: Critical
- Log Message: device 00_RBT_server down
- Description: device 00_RBT_server's all interface down. A new Outage record has been created and service level availability calculations will be impacted until this outage is resolved.

An orange callout box points to the 'Event Detail' window with the text: "Can view the event data related to the current device fault and can write troubleshooting note if needed". Below the description is a 'Troubleshooting Note List' table with columns for Time, User, Status, and Note.

At the bottom of the interface, there is a section for 'Your Outstanding Notices (18)' with a table listing various notices and their details.

Device Event History

Smart Network Management System - Windows Internet Explorer

http://172.16.31.20/smartnms.htm

NMS Account Configuration Monitoring Notification Fault Statistics View Help

Site Event Summary Service Outages Event Notification Destination Paths Users View Current Outages View Outages View Events

Event Time	Outsta...	Ackno...	Not Clea...	Cleared	In Pr...
2009-04-13	40	0	40	0	0
2009-04-12	6	0	6	0	0
2009-04-11	314	0	314	0	0
2009-04-10	182	0	182	0	0
2009-04-09	290	0	290	0	0
2009-04-08	412	0	412	0	0
2009-04-07	448	0	448	0	0
2009-04-06	1453	0	1453	0	0
2009-04-05	1704	0	1704	0	0
2009-04-04	1712	0	1712	0	0
2009-04-03	1276	0	1276	0	0
2009-04-02	799	0	799	0	0
2009-04-01	271	0	271	0	0
2009-03-31	277	0	277	0	0
2009-03-30	212	0	212	0	0
2009-03-29	17	0	17	0	0
2009-03-28	2	0	2	0	0
2009-03-27	108	0	108	0	0
2009-03-26	292	0	292	0	0
2009-03-25	46	0	46	0	0
2009-03-24	121	0	121	0	0
2009-03-23	1904	0	1904	0	0
2009-03-22	2643	0	2643	0	0
2009-03-21	354	0	354	0	0
2009-03-20	172	0	172	0	0
2009-03-19	1	0	1	0	0
2009-03-18	1294	0	1294	0	0
2009-03-17	788	0	788	0	0
2009-03-16	14	0	14	0	0
2009-03-15	3	0	3	0	0

Limit: 20 Refresh Advanced Search Acknowledge Events Troubleshooting Note

Ack	ID	Severity	Event Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	45786	Critical	4/13/2009 11:24:42 AM	/AddPac/Branch GX	SE_MG3000N_A	172.17.111.25		Agent Up with enterprise: 1.3.6.1.4.1.4855.3.2.255 args [1]: 1.3.6.1.4.1.4855.3.2.255"
<input type="checkbox"/>	45785	Cleared	4/13/2009 11:15:59 AM	/AddPac/Branch GX	00_NR_server	172.17.111.21	SNMP	SNMP data collection on interface 172.17.111.21 previously failed and has been restored. Node 00_NR_server is up.
<input type="checkbox"/>	45784	Cleared	4/13/2009 11:15:52 AM	/AddPac/Branch GX	00_NR_server	172.17.111.21		Agent Up with Possible Changes (coldStart Trap) enterprise: 1.3.6.1.4.1.4855.3.2.10 [1]: 1.3.6.1.4.1.4855.3.2.10"
<input type="checkbox"/>	45783	Critical	4/13/2009 11:15:51 AM	/AddPac/Branch GX	00_NR_server	172.17.111.21		Node 00_NR_server is down.
<input type="checkbox"/>	45782	Critical	4/13/2009 11:15:13 AM	/AddPac/Branch GX	00_NR_server	172.17.111.21	SNMP	SNMP data collection on interface 172.17.111.21 failed.
<input type="checkbox"/>	45781	Warning	4/13/2009 11:14:57 AM	/AddPac/Branch GX	00_NR_server	172.17.111.21	SNMP	SNMP thresholding on interface 172.16.31.13 failed.
<input type="checkbox"/>	45780	Warning	4/13/2009 10:00:15 AM	/AddPac/Branch AQ	NMS_IP_PBX_31...	172.16.31.13	SNMP	SNMP thresholding on interface 172.16.31.16 failed.
<input type="checkbox"/>	45779	Warning	4/13/2009 10:00:15 AM	/Subnetwork #2/Cent...	NMS_IP_PBX_31...	172.16.31.16	SNMP	SNMP data collection on interface 172.17.113.201 failed.
<input type="checkbox"/>	45778	Warning	4/13/2009 9:59:51 AM	/AddPac/Branch GX	UMS slave	172.17.113.201	SNMP	SNMP data collection on interface 172.17.113.201 failed.
<input type="checkbox"/>	45777	Warning	4/13/2009 9:59:46 AM	/AddPac/Branch GX	UMS slave	172.17.113.201	SNMP	SNMP data collection on interface 61.33.161.43 failed.
<input type="checkbox"/>	45776	Warning	4/13/2009 9:59:42 AM	/AddPac/HeadQuarter	UMS server(our co...	61.33.161.43	SNMP	SNMP data collection on interface 61.33.161.43 failed.
<input type="checkbox"/>	45775	Warning	4/13/2009 9:59:41 AM	/AddPac/HeadQuarter	UMS server(our co...	61.33.161.43	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45774	Warning	4/13/2009 9:59:36 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45773	Warning	4/13/2009 9:59:33 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45772	Warning	4/13/2009 9:59:32 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45771	Warning	4/13/2009 9:59:27 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45770	Warning	4/13/2009 9:59:24 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45769	Warning	4/13/2009 9:59:23 AM	/Subnetwork #2/Cent...	NMS_SOHO_PBX	172.16.19.50	SNMP	SNMP data collection on interface 172.16.19.50 failed.
<input type="checkbox"/>	45768	Warning	4/13/2009 9:59:18 AM	/AddPac/Branch AQ	NMS_IP_PBX_31...	172.16.31.13	SNMP	SNMP data collection on interface 172.16.31.13 failed.
<input type="checkbox"/>	45767	Warning	4/13/2009 9:59:15 AM	/AddPac/Branch AQ	NMS_IP_PBX_31...	172.16.31.13	SNMP	SNMP data collection on interface 172.16.31.13 failed.

Results: 1 to 20 of 25346 Search Constraints: user=admin

summarize daily event statistics data

Site	Device Name	IP Address	Service	Message
/AddPac/Branch GX	00_RBT_server			device 00_RBT_server's all services are down.
/AddPac/HeadQuarter	5th floor meeting...			device 5th floor meeting room phone device, all services are down.
/Subnetwork #2/Cent...	NMS_SOHO_PBX			device NMS_SOHO_PBX, all services are down.
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave 172.17.113.41 Call Manager 2009-4-10 11:37:12 failed.
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	device NMS_IP_PBX_31 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator

Your Outstanding Notices (18) All Outstanding Notices (18)

4/13/2009 11:46:45 AM 172.16.31.20:5101 admin Version 1.2.3384

Can view all events for devices with search condition

Device Status Information

- System Performance Information (CPU, HDD, Memory,...)
- Provide device current service status (up/down)
- Provide device main status (max value vs current value)
- Display Graph Series with System Performance Information
- Monitor Main Status Flow with System Monitoring View

Device Status Information

Status Information - IPNext 3000 Master

System Status Information | Performance History | Performance Monitoring

Today's Availability

90

CPU Utilization

95

Memory Utilization

67

Total : 1024 MB
Used : 686.3 MB
Free : 337.7 MB

Storage Utilization

0

Total : 298 GB
Used : 203.4 MB
Free : 297.8 GB

/hd

Interface Status

Index	Name	IP Address	Speed	Status	Rx Traffic	Tx Traffic	Errors (pkts)
2	GigabitEthernet0/0	172.17.113.40	1Gbps	● up	9.7Kbps	10.1Kbps	0
3	GigabitEthernet0/1	0.0.0.0	1Gbps	● down	0 bps	0 bps	0

Service Information (Availability: Percentage over last 24 hours) [Apply](#)

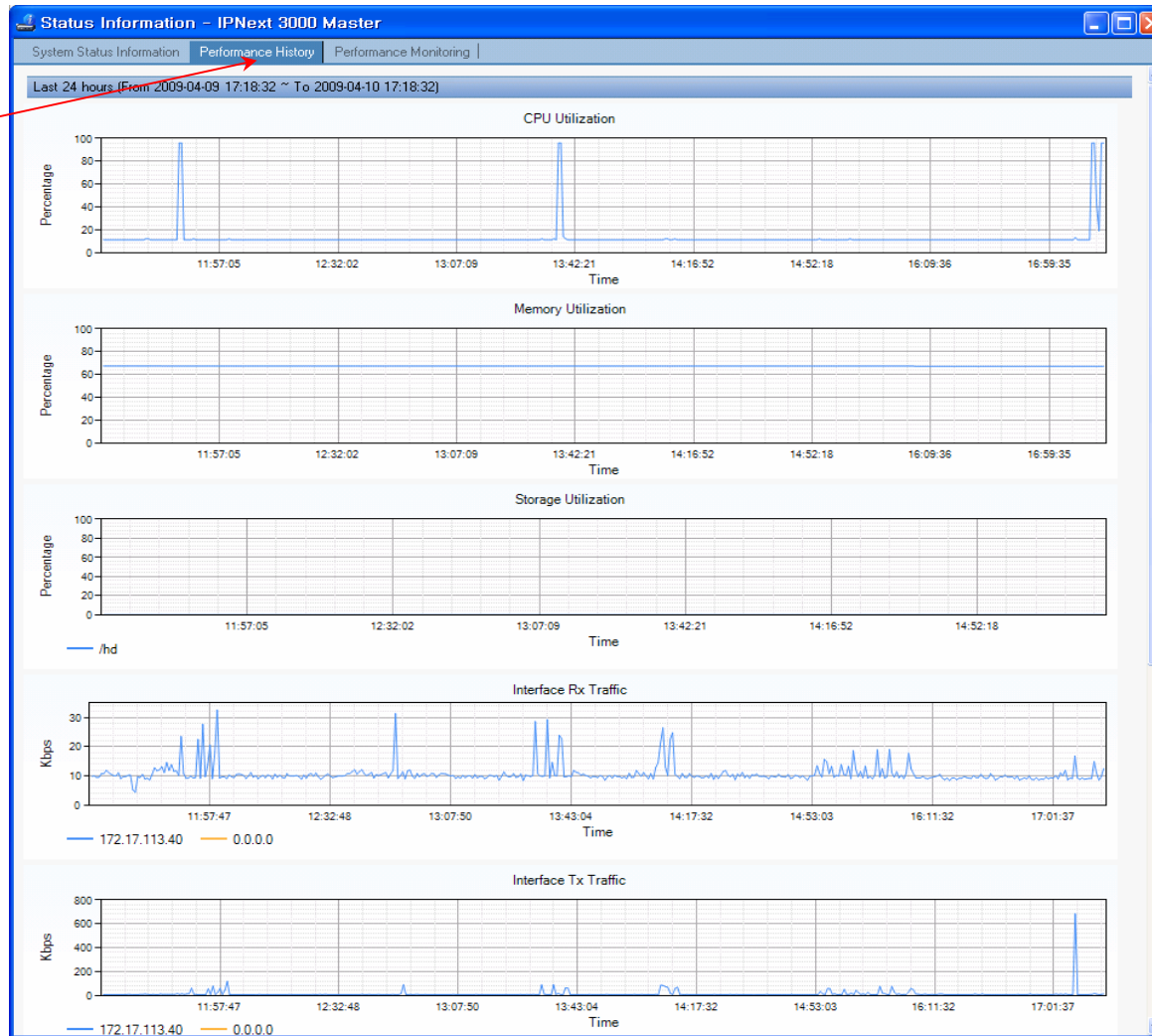
Interface / Service Name	Status	Availability
<input checked="" type="checkbox"/> Call Manager	● down	76.001%
<input checked="" type="checkbox"/> 172.17.113.40		
<input checked="" type="checkbox"/> ICMP	● up	97.743%
<input checked="" type="checkbox"/> SNMP	● up	97.743%
Overall Availability		90.496%

Service Monitor Status

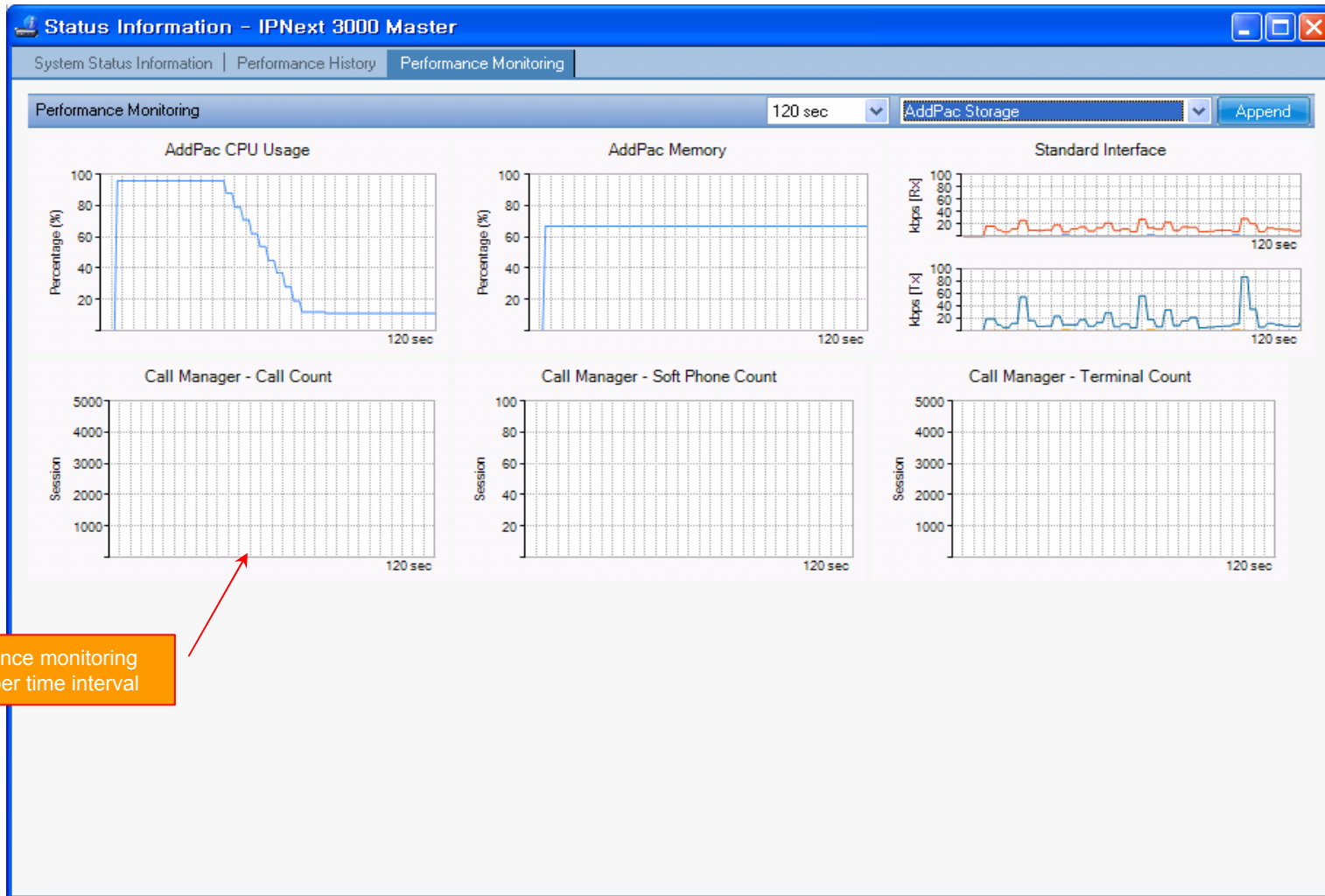
Service	Maximum	Value	Used
CM Service			
Call Manager - Call Count	5000	0	0%
Call Manager - Soft Phone Count	100	0	0%
Call Manager - Terminal Count	5000	7	0%

Device Status Information

performance analysis graph for last 24 hours



Device Status Information



Notification Management

- Notify administrator for important event such as critical device fault when proper action needs
- Provide several notification channel such as SMS, e-mail, alarm lamp
- Notification channel configuration for each event
- Manage notification with device category such as Server, Terminal, PC, etc
- Provide Alarm with audible (play sound), visible (alarm lamp) form

Event Notification Management

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a tree view of devices and a table of event notifications. A dialog box titled 'Event Notification Properties' is open, showing configuration details for a notification named 'serviceUnresponsive'.

Event Notification Properties Dialog:

- Notification Name: serviceUnresponsive
- Description: test
- Event: Node event: serviceUnresponsive
- Destination Path: default
- Notification Type: sms, alarmLamp, email
- Current Rule: IPADDR IPLIKE ****
- Apply Category: Desktop, Network Camera, Phone, Server, Switch
- Email Subject: Notice #%noticeid%: %service% service on %interface% (%interface%)
- Text Message: The %service% poll to interface %interface% (%interface%) on node %nodename% successfully completed a connection to the service listener on the remote machine. However, the synthetic transaction failed to complete within %parm[timeout]% milliseconds, over %parm[attempts]% attempts. This event will NOT impact service level agreements, but may be an indicator of other problems on that node.
- Special Values: Can be used in both the text message and email subject: %noticeid% = notification ID number, %time% = time sent, %severity% = event severity, %nodename% = may be IP address or empty, %interface% = IP address, may be empty, %service% = service name, may be empty, %eventid% = event ID, may be empty.
- Note: If the alert exceeds 80 bytes then the notification will be dispatched in two or more sms.
- Enable Notification:

Event Notification Table:

Notification Name	Event	Destination Path	Description
serviceUnresponsive	Node event: serviceUnresponsive	NMS Admin	test
serviceResponsive	Node event: serviceResponsive	NMS Admin	
interfaceDown	Node event: interfaceDown	NMS Admin	
nodeDown	Node event: nodeDown	NMS Admin	
interfaceUp	Node event: interfaceUp	NMS Admin	
nodeUp	Node event: nodeUp	NMS Admin	
nodeLostService	Node event: nodeLostService	NMS Admin	
nodeRegainedService	Node event: nodeRegainedService	NMS Admin	
coldStart	SNMP Trap: SNMP Cold Start	NMS Admin	
warmStart	SNMP Trap: SNMP Warm Start	NMS Admin	
authenticationFailure	SNMP Trap: SNMP Authn Failure	NMS Admin	
serviceDeleted	Node event: serviceDeleted	NMS Admin	
nodeAdded	Node event: nodeAdded	NMS Admin	
nodeInfoChanged	Node event: nodeInfoChanged	NMS Admin	
interfaceDeleted	Node event: interfaceDeleted	NMS Admin	
High Threshold	highThresholdExceeded	NMS Admin	
Low Threshold	lowThresholdExceeded	NMS Admin	
Low Threshold Rearmed	lowThresholdRearmed	NMS Admin	
High Threshold Rearmed	highThresholdRearmed	NMS Admin	

Your Outstanding Notices (18) Table:

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server		device.00_RBT_server.all services	
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th_floor_meeting...			
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_SOHO_PBX			
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		

apply notification policy with event-based filter (example : notify me when network link of device is downed through SMS, e-mail)

specify category when each event occurs

describe notification message content for e-mail or SMS

Event Notification Management

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a tree view of network devices and their service availability. A dialog box titled "Destination Path Properties" is open, showing configuration options for a destination path named "default". The dialog includes a table for defining notification channels:

Notification Type	Target	Auto Notify
alarmLamp	alarmLamp	on
email	admin	on
sms	admin	on

A red callout box with the text "define notification channel such as e-mail, sms, or alarmlamp" points to the "alarmLamp" entry in the table. The dialog also includes an "Escalation" section with a similar table and "Add", "Delete", "Help", "Ok", and "Cancel" buttons.

At the bottom of the interface, a table lists "Your Outstanding Notices (18)":

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RB_T_server			device 00_RB_T_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeting...			device 5th floor meeting room phone device, all services are down.
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_SOHD_PBX			device NMS_SOHD_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS_Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator

Event Notification Management

The screenshot displays the Smart Network Management System (NMS) interface. The main window shows a tree view of network devices and their availability. The 'Event Notification' section is active, and the 'Target Properties' dialog is open. The dialog allows configuration of notification types and target information. The 'Send to select user' option is selected, and the user is set to 'Account Administrator'. An orange callout box provides additional context: 'user account (administrator) setting for SMS, E-mail Notification or specify e-mail address or SMS phone number'.

Notification Type	Target	Auto Notify
alarmLamp	alarmLamp	on
email	admin	on
sms	admin	on

Ack	ID	Send Time	Site	Device Name	IP Address	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server		device 00_RBT_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeti...		device 5th floor meeting room phone device, all services are down.
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_SOHO_PBX		device NMS_SOHO_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server		device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...		device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator

Configuration

Smart Network Management System - Windows Internet Explorer

http://172.16.31.20/smartnms.htm

NMS Account Configuration Monitoring Notification Fault Statistics View Help

Current Outage Devices [13] Site

Name	Service...	Availability
AddPac		
Branch AQ		
NMS Camera	6 of 12	50.000 %
NMS_IP_PBX...	3 of 3	0.000 %
Branch GX		
00_IVR_server	3 of 3	0.000 %
00_IVR_slave...	3 of 3	0.000 %
00_PS_server	3 of 3	0.000 %
00_PS_Slave...	2 of 3	33.333 %
00_FBT_server	3 of 3	0.000 %
IPNext 3000 ...	1 of 3	66.667 %
IPNext 3000 S...	1 of 3	66.667 %
UMS slave	3 of 3	0.000 %
HeadQuarter		
5th floor meeti	1 of 1	0.000 %
UMS serverfo...	3 of 3	0.000 %
Subnetwork #2		
Center		
NMS_S0HD_...	2 of 2	0.000 %

Destination Path Name: default, onlyAlarmLamp

Configure Notification

External Notification Alarm Lamp

E-Mail SMS

Sender Email Address: nms@addpac.com

SMTP Server Host: 61.33.161.2

Authentication

Username: []

Password: []

Help Ok Cancel

global notification channel configuration

Your Outstanding Notices (18)

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_FBT_server			device 00_FBT_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeting...			device 5th floor meeting room phone device, all services are down.
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_S0HD_PBX			device NMS_S0HD_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface:172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS_Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator

Your Outstanding Notices (18) All Outstanding Notices (18)

4/13/2009 11:26:16 AM 172.16.31.20:5101 admin Version 1.2.3984

Audible & Visible Alarm

notify operator (or administrator)
1. Alarm lamp blink (on&off) (visible)
2. play alarm sound (audible)

can synchronize with alarm lamp equipment

Site	Type	Outages	Availability	Description
AddPac	Sub Netw...	32 / 12 / 32	92%	AddPac Technology C...
Seoul	Sub Netw...	2 / 1 / 2	33%	Seoul subnetwork

Category	Outages	Availability
Desktop	0 / 0 / 1	100%
Network Camera	6 / 1 / 2	57%
Phone	1 / 1 / 3	66%
Server	27 / 11 / 22	42%
Switch	0 / 0 / 0	100%
VoIP Gateway	0 / 0 / 6	100%

Overall Availability	34 / 13 / 34	27.690 %
Overall Categories Availability	34 / 13 / 34	49.470 %

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server			device 00_RBT_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuater	5th floor meeting...			device 5th floor meeting room phone device, all services are down.
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_S0HQ_PBX			device NMS_S0HQ_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IPNext 3000 Slave) service Call Manager 2009-4-10 11:37:12 failed.
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IPNext 3000 Master) service Call Manager 2009-4-10 11:37:12 failed
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) not response or delete by administrator
<input type="checkbox"/>	9238	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service ICMP not response or deleted by administrator
<input type="checkbox"/>	9237	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	SNMP	device (NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service SNMP not response or deleted by administrator
<input type="checkbox"/>	9236	4/6/2009 7:41:25 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	device(NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service ICMP not response or deleted by administrator
<input type="checkbox"/>	9235	4/6/2009 7:41:25 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	SNMP	device(NMS Camera 2) interface 172.16.253.118 (172.16.253.118) service SNMP not response or deleted by administrator

4/13/2009 11:52:14 AM 172.16.31.20:5101 admin Version 1.2.3384

Fault Statistics

- analyze for a fault event with graph and detailed list data
- Report form generation and print out for statistics result

Fault Statistics

The screenshot displays the Smart Network Management System (NMS) interface. The main content area is titled "Fault Statistics (Site)" and shows a bar chart of fault counts over time for various sites. Below the chart is a detailed data table for the date 4/9/2009, showing fault counts for different branches and a total count.

Search Condition: Hour: 4/ 9/2009 ~ 3/30/2009, Site: Branch A, Branch AQ, B

Fault Statistics (Site) Legend: Seoul, HeadQuarter, Center, Branch TG, Branch KT, Branch GX, Branch B, Branch AQ, Branch A

4/9/2009 Detailed Data Table:

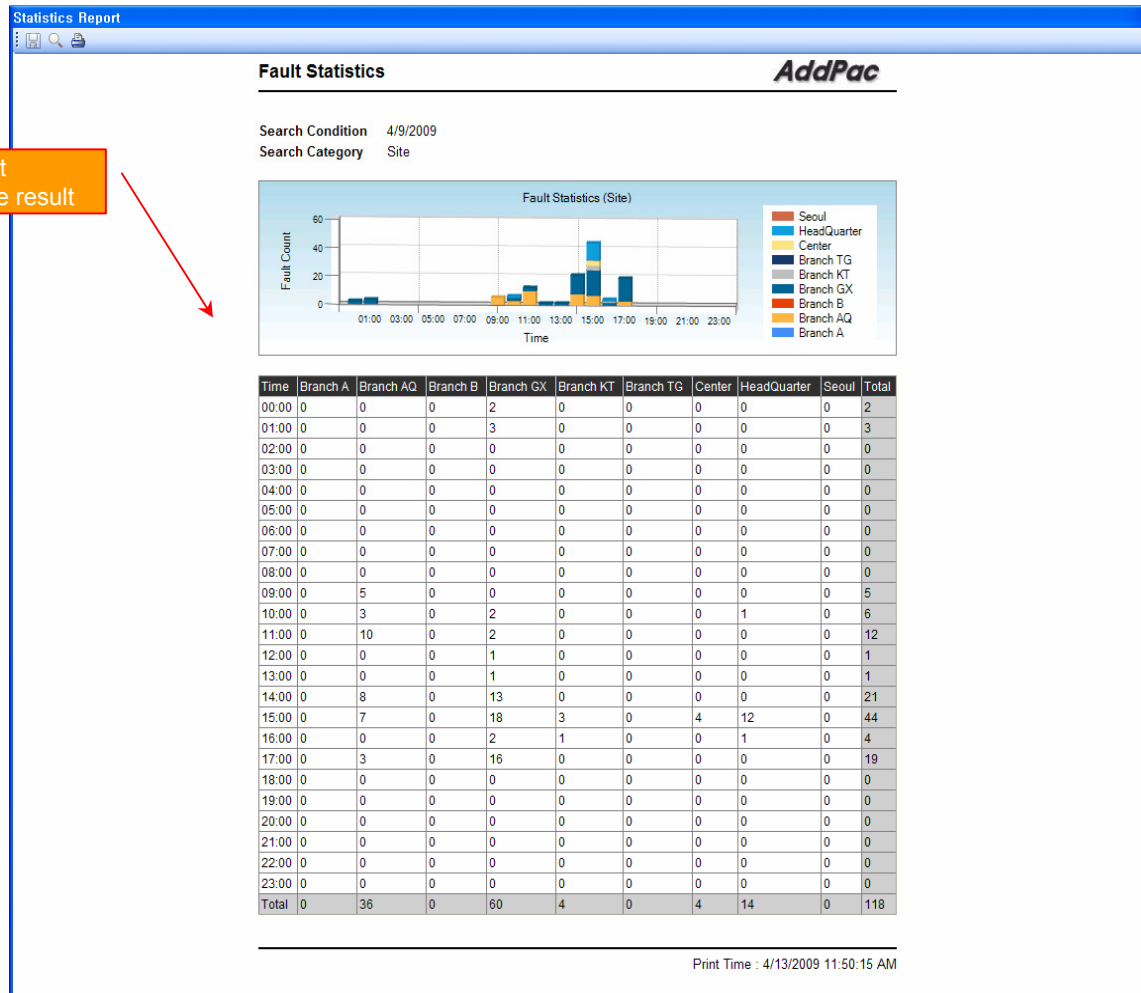
Time	Branch A	Branch AQ	Branch B	Branch GX	Branch KT	Branch TG	Center	HeadQuarter	Seoul	Total
07:00	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0
09:00	0	5	0	0	0	0	0	0	0	5
10:00	0	3	0	2	0	0	0	1	0	6
11:00	0	10	0	2	0	0	0	0	0	12
12:00	0	0	0	1	0	0	0	0	0	1
13:00	0	0	0	1	0	0	0	0	0	1
14:00	0	8	0	13	0	0	0	0	0	21
15:00	0	7	0	18	3	0	4	12	0	44
16:00	0	0	0	2	1	0	0	1	0	4
17:00	0	3	0	16	0	0	0	0	0	19
18:00	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0
Total	0	36	0	60	4	0	4	14	0	118

Callout 1: display graph for fault statistics with various search condition

Callout 2: display detailed data for fault statistics

Fault Statistics – Report Generation

report generation for fault statistics and print out the result



Model & Service Management

- Define new model with provided template image & properties
- Customize data collection with standard protocol such as TCP, SNMP

Device Model Management

manage device model with various properties such as model image

model image repository for selection

Name	Description
AddPac	AddPac Technology C...
Branch AQ	Branch AQ
Branch GX	Branch GX description
Branch KT	
HeadQuarter	Main HeadQuarter Cen...
Seoul	Seoul subnetwork
Seoul East Area	Seoul East Area
SongPaGu Area Ce...	SongPaGu Area Center
Subnetwork #2	Subnetwork #2
Branch 1G	Yeoksam Area
SeoChoGu	seoul seocho district
Seoul West Area	Seoul West Area
Gangseo Area	Gangseo Area
Seoul	
MokDong Area	MokDong Area

Model Name	Category
AP-IP200	Phone
AP-IP300	Phone
AP-IPC	Network Camera
AP-IPC250M	Network Camera
AP-IVR1000	Server
AP-MC1000	Server
AP-MC3000	Server
AP-MC5000	Server
AP-NR2000	Server
AP-PS2000	Server
AP-RBT1000	Server
AP-RS2000	Server
AP-UMS1000	Server
AP-UMS2000	Server
AP-VC2000	Phone
AP-VP200	Phone
AP-VP300	Phone
AP-VP350	Phone
AP-VP500	Phone
IPNext100	Server
IPNext1000	Server
IPNext180	Server
IPNext200	Server

Device Model Properties

General Service Availability System Monitoring Service Monitoring

Model Name: AP-IPC250M

Category: Network Camera

Management by SSCP:

SSCP Port: 5061 (1~65535)

Model Image:

Model Image Management

model image repository for selection

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server			device 00_RBT_server's all services are down.
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th_floor_meeting...			device 5th floor meeting room phone device, all se...
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_S0HD_PBX			device NMS_S0HD_PBX, all services are down
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113.41 (172.17.113.41) device (IP...
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	interface 172.17.113.40 (172.17.113.40) device (IP...
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			device 00_IVR_server all services are down.
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX_31.13 all services down.
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS Camera 2) interface 172.16.253.118...
<input type="checkbox"/>	9238	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	device (NMS Camera 2) interface 172.16.253.118...
<input type="checkbox"/>	9237	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.11		response or delete by administrator
<input type="checkbox"/>	9236	4/6/2009 7:41:25 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.11		device (NMS Camera 2) interface 172.16.253.118...

Service Definition

The screenshot displays the Smart NMS interface in Internet Explorer. The main window shows a tree view of sites on the left and a list of services in the center. A 'Service Properties' dialog box is open, showing the configuration for the 'Camera Operation Status' service. The dialog has two tabs: 'General' and 'SNMP'. The 'General' tab is active, showing the service name, protocol (SNMP), and port (161). The 'SNMP' tab is also visible, showing the Service OID (1.3.6.1.4.1.4855.7.51.1.3.0) and a service condition (Operator: =, Operand: 1).

Service Properties (General Tab):

Service Name	Camera Operation Status
Protocol	SNMP
Port	161
Interval	30000 (msec)
Timeout	3000 (msec)
Retry	3

Service Properties (SNMP Tab):

Service OID	1.3.6.1.4.1.4855.7.51.1.3.0
Service Condition	Operator: =, Operand: 1

Service List (Main Window):

Service Name	Protocol	Port
Call Manager	SNMP	161
Presence	SNMP	161
Media	SNMP	161
IPX	SNMP	161
RtpProxy	SNMP	161
MCU	SNMP	161
IVR	SNMP	161
Recording	SNMP	161
Tomcat	TCP	8080
FTP	TCP	21
Camera Pan	SNMP	161
Camera Tilt	SNMP	161
Camera Zoom	SNMP	161
Camera Operation Status	SNMP	161

Your Outstanding Notices (18):

Ack	ID	Send Time	Site	Device Name	IP Address	Service	Message
<input type="checkbox"/>	9535	4/10/2009 9:26:04 PM	/AddPac/Branch GX	00_RBT_server			device 00_RBT_serv
<input type="checkbox"/>	9527	4/10/2009 5:34:10 PM	/AddPac/HeadQuarter	5th floor meeting...			device 5th floor meet
<input type="checkbox"/>	9502	4/10/2009 3:34:29 PM	/Subnetwork #2/Cent...	NMS_SDHD_PBX			device NMS_SDHD_
<input type="checkbox"/>	9495	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Slave	172.17.113.41	Call Manager	interface 172.17.113
<input type="checkbox"/>	9494	4/10/2009 11:37:12 AM	/AddPac/Branch GX	IPNext 3000 Master	172.17.113.40	Call Manager	Call Manager 2009-4
<input type="checkbox"/>	9418	4/9/2009 2:20:01 PM	/AddPac/Branch GX	00_IVR_server			interface 172.17.113
<input type="checkbox"/>	9396	4/9/2009 10:57:37 AM	/AddPac/Branch AQ	NMS_IP_PBX_3...			device NMS_IP_PBX
<input type="checkbox"/>	9239	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118		device (NMS Camera
<input type="checkbox"/>	9238	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	response or delete by
<input type="checkbox"/>	9237	4/6/2009 7:49:20 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	SNMP	device (NMS Camera
<input type="checkbox"/>	9236	4/6/2009 7:41:25 PM	/AddPac/Branch AQ	NMS Camera 2	172.16.253.118	ICMP	SNMP not response o

define the service for data collection, current status with standard protocol such as TCP or SNMP



Thank you!

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