New IPNext10000 Large Capacity Call Manager

High-performance Next Generation Large Capacity Call Manager Solution



www.addpac.com

Content

- Product Overview
- Hardware Specification
- System Redundancy Features
- Software Service
- Call Manager Software Component
- IP Telephony Service and Features
- IP Centrex Service
- Network Service and Features
- AddPac User Terminals & Software
- Application Network Diagram
- Web based Smart Multimedia Manager
- Ordering Information





AddPac

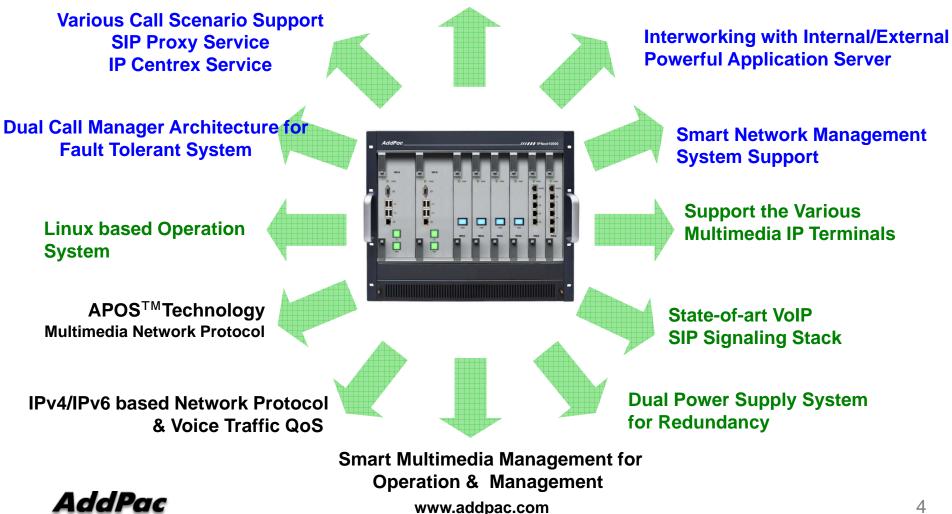
Product Overview

- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- One(1) System Dual Call Manager Redundancy Architecture
 - One(1) Gigabit Ethernet Interface, Two(2) Hard Disk / IP-PBX
 - Default : Single Call Manager
 - Option A : Dual Call Manager
 - Option B : One(1) Call Manager + One(1) Application Server
- IPv4/IPv6 based Dual Network Protocol Support
- External RTP Proxy Function Support
 - External RTP Proxy Server for Private Address : AP-RS3000
- External Application (IVR, RBT, UMS, etc) Server Support
 - External Application Server : AS10000
- Powerful Management and User Friendly Features
- Fault Tolerant and Scalability Architecture
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Linux Operation System
- Smart Multimedia Manager for IP-PBX Management
- Dual Redundancy Power Module

AddPac

Product Highlights

IPNext10000 Large Capacity Call Manager



IP based Advanced IP-PBX Solution

Hardware Specification

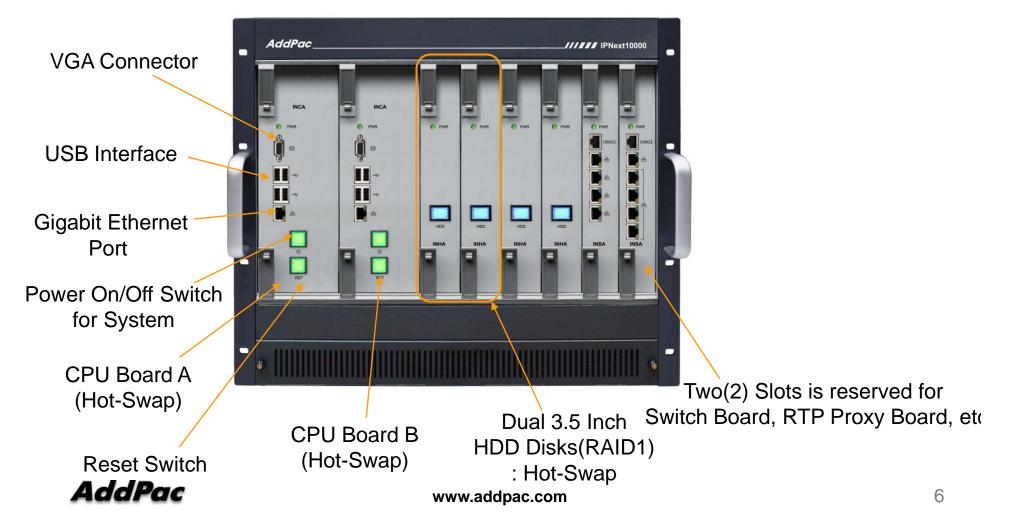
- High-End Computing Power
- Main Chassis
 - Dual Redundancy CPU Boards for System Fault Tolerant
 - One(1) 10/100/1000Mbps Gigabit Ethernet
 - Four(4) USB Interface Port
 - VGA Interface Port for External Video Monitor
 - Two(2) 3.5 Inch Hard Disk Interface Slot (RAID 1)
 - Dual Redundancy Power Supply Module
 - Hot-Swap Features
 - Right most two(2) slots is reserved for Switch Board, Proxy Server, etc

Hardware Specification

IPNext10000 Large Capacity IP-PBX System

RISC CPU

IPNext10000 Front Side



Hardware Specification

IPNext10000 Large Capacity Call Manager

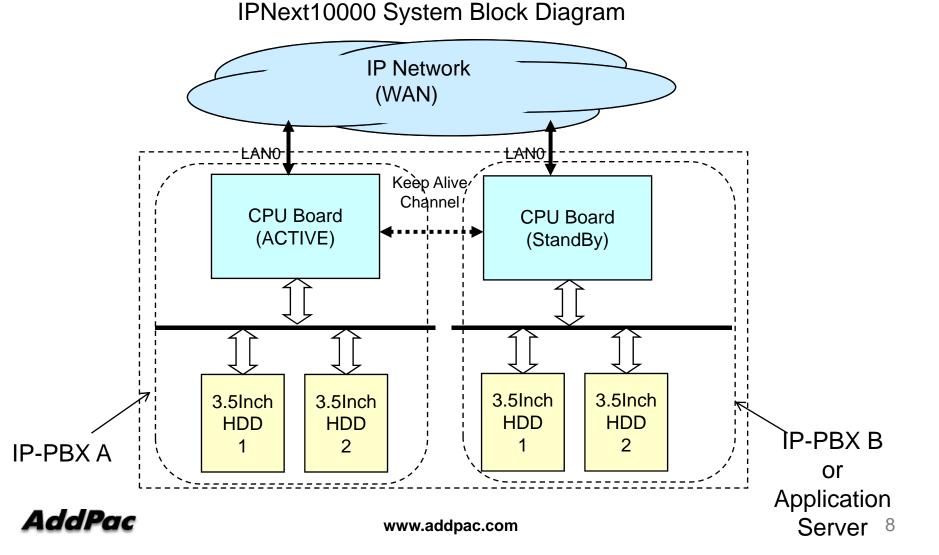


IPNext10000 Back Side FANs for Air Cooling **Dual Power Supply Dual Power Supply** for IP-PBX B for IP-PBX A



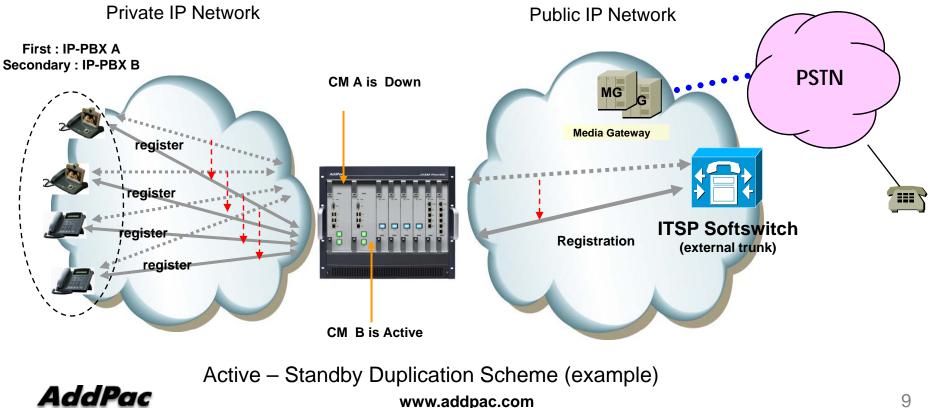
www.addpac.com

System Redundancy Features



System Redundancy Features

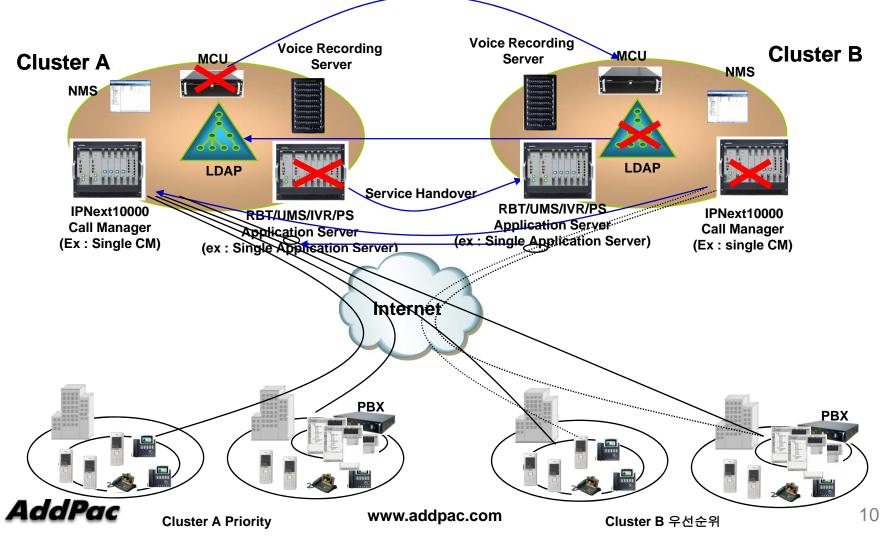
- Active– Active Duplication Scheme lacksquare
- Active Standby Duplication Scheme \bullet
- VRRP based Duplication Scheme



System Redundancy Features

IPNext10000 Large Capacity Call Manager

• Active-Active Redundancy (IP Centrex Service Example)

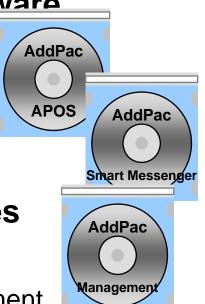


Software Service

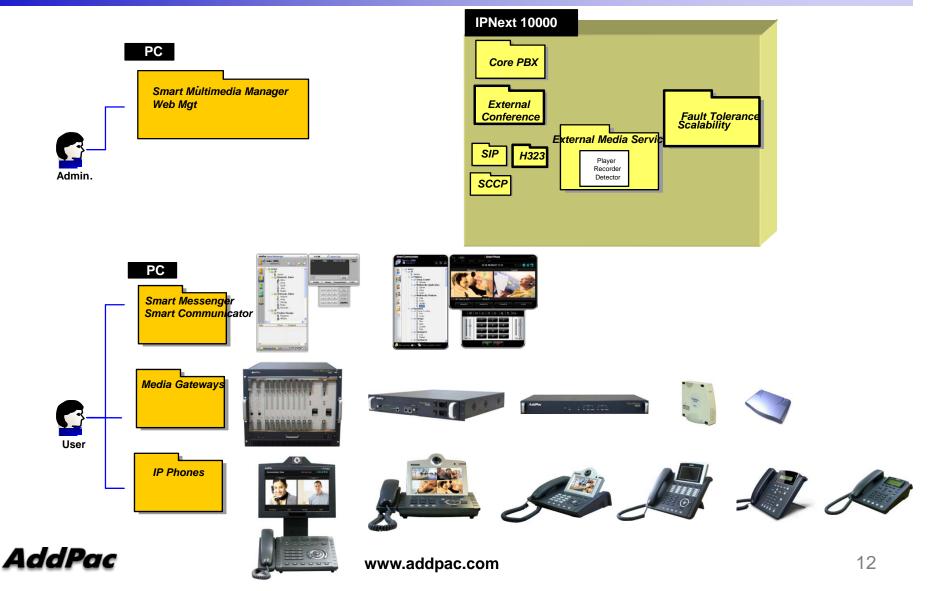
IPNext10000 Large Capacity Call Manager

Built-in AddPac APOS Internetworking Software

- Scalability, Functionality, and Stability Features
- Advanced Call Manager Features
- QoS Control Features
- Firmware Upgradeable Architecture
- Industry Standard Network Protocol Features
- Highly User Friendly Management Features
 - Smart Multimedia Manager for Operation & Management



IP-PBX Software Components



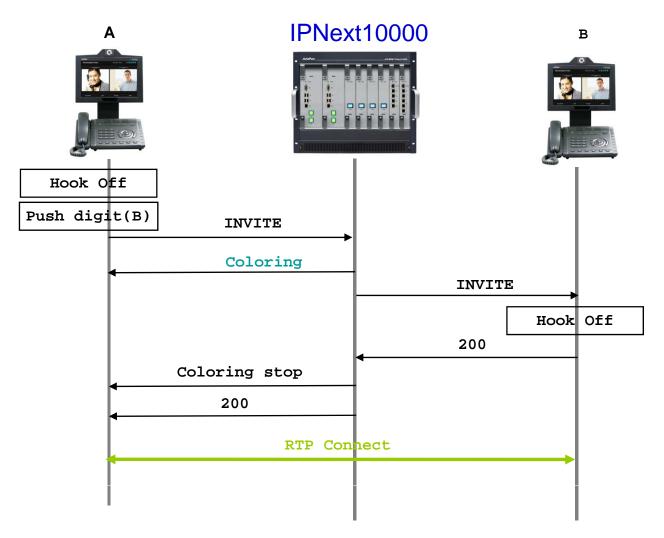
IP Telephony Service and Features

- Basic Call
- Coloring Service
- Music On Hold
- Blind Transfer
- Call Pickup
- Group Call Pickup
- Consult Call
- Switching Call
- Consult Transfer
- Call Waiting
- Call Park
- Call Pickup Remote
- Hunt Group
- etc



SIP based Basic Call Scenario

IPNext10000 Large Capacity Call Manager

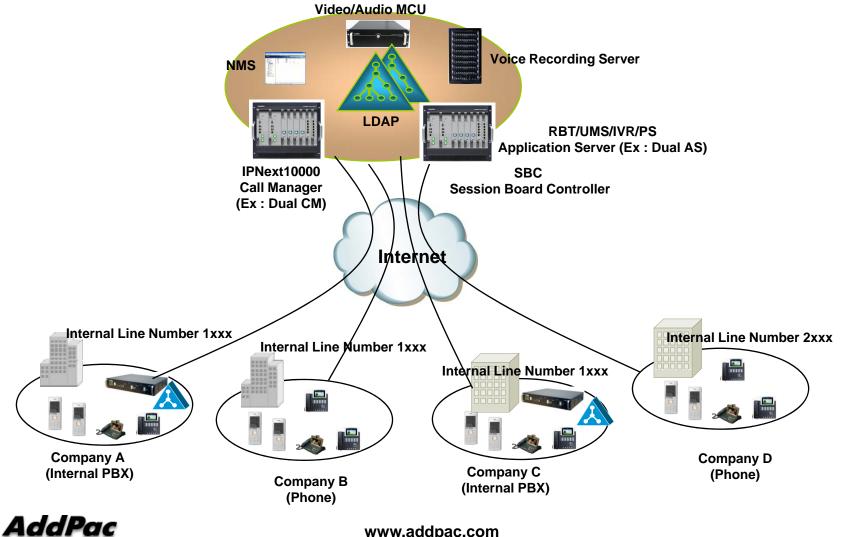


AddPac

www.addpac.com

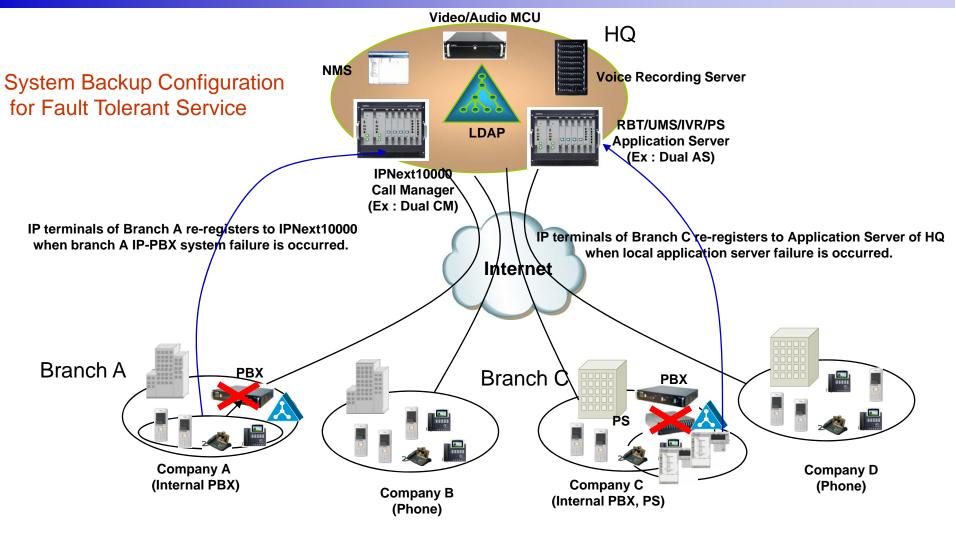
IP Centrex Service

IPNext10000 Large Capacity Call Manager



www.addpac.com

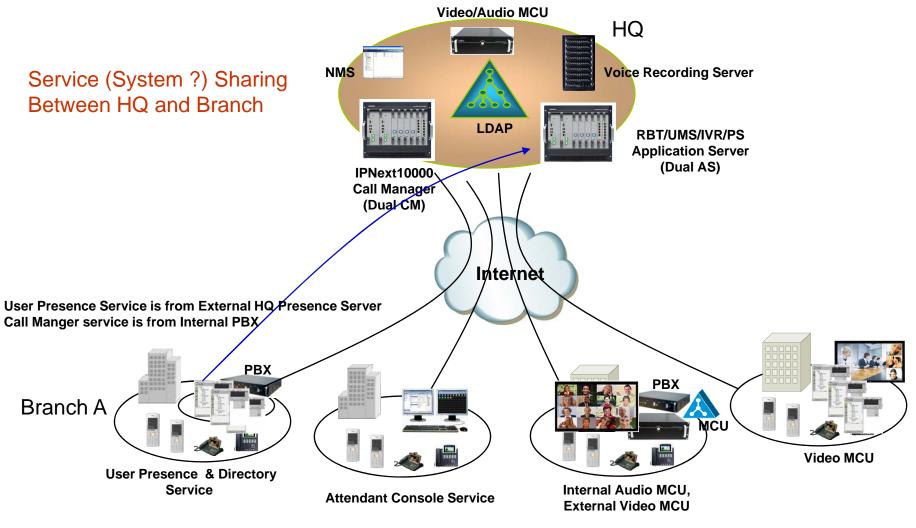
IP Centrex Service





IP Centrex Service

IPNext10000 Large Capacity Call Manager



AddPac

IPNext10000 Large Capacity Call Manager

Basic Network Protocols

- ARP, IP, IPv6, TCP, UDP, ICMP, ICMPv6, SCTP, IGMP, MLD Routing Protocol

- IPv4 : Static
- IPv6 : Static

Service Protocol

- FTP, Telnet, TFTP, DHCP Server/Relay, SNMP Server
- CDP (Cisco Discovery Protocol)
- DNS Resolver , DDNS(nsupdate)
- Bridge
- Syslog
- IP/IPv6 policy control (QoS)
- VPDN (Virtual Provate Dial-up Network : L2TP Server)



IPNext10000 Large Capacity Call Manager

IPv4/IPv6 Interworking

- NAT/PAT for IPv4
- IP connect (formerly ip-share) and device cascade for IPv4
- IP/IP, IP/GRE tunneling
- NAT-PT
- 6to4, Autoconfig tunneling
- **IPv4 Address Configuration**
 - Fixed (Static)
 - DHCP
 - PPPoE

IPv6 Address Configuration

- Fixed (Static)
- EUI-64

- Autoconfig (Neighbor Advertisement and Solicitation)



IPNext10000 Large Capacity Call Manager

Miscellaneous

- Cisco Style CLI
- Standard & Extended IPv4/IPv6 Access List
- Multi-level User Account Management
- IP accounting
- fsh (Embedded file system shell)
- STUN Client

IPNext10000 Large Capacity Call Manager

SNMP MIBs

- MIB-II
- RMON MIBs (Statistics, History, Alarm, Hosts Group)
- RFC2465 Management Information Base for IP Version 6: Textual Conventions and General Group
- RFC2466 Management Information Base for IP Version 6: ICMPv6 Group
- RFC2452 IP Version 6 Management Information Base for the Transmission Control Protocol
- RFC2454 IP Version 6 Management Information Base for the User Datagram Protocol
- AddPac Enterprise MIBs
- etc

IP Phone Comparison Table

	AP-IP300	AP-IP250	AP-IP230	AP-IP160	AP-IP120	AP-IP90
LCD Size	4.3 Inch Color LCD	4.3 Inch Color LCD	5 Inch Color LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD
Touch Screen	N/A	Support	Support	N/A	N/A	N/A
Speed-Dial Keys	25 Key with Presence LED	Touch Screen based 25 Keys	Touch Screen based 25 Keys	16 Key with Presence LED	12 Key with Presence LED	N/A
Voice Codec	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
3-Party Conversation	Support	Support	Support	Support	Support	Support
LAN Port	2	2	2	2	2	2
PoE(Option)	Support	Support	Support	Support	Support	Support
FXO(Option)	Support	Support	Support	Support	Support	Support



IP Video Phone Comparison Table

	AP-VP500	AP-VP350	AP-VP300N	AP-VP280	AP-VP250	AP-VP230	AP-VP150	AP-VP120
LCD Size	12.1 Inch Touch Screen	7Inch Touch Screen	7Inch Touch Screen	7Inch Touch Screen	4.3Inch Touch Screen	5Inch Touch Screen	4.3Inch Touch Screen	4.3Inch
Camera	CCD	CCD	CCD	CMOS	CMOS	CMOS	CCD	CMOS
Video Codec	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
Video MCU	N/A	4-Party Video MCU	N/A	N/A	N/A	N/A	N/A	N/A
Voice MCU	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party
LAN Port	2	2	2	2	2	2	2	2
PoE	N/A	N/A	Support	N/A	Support	Support	Support	Support



IP Extend Key Pack for AddPac IP-PBX



IP Extend Key Pack Comparison Table

Model	AP-PT100	AP-PT50	AP-PT20
Service Features			
Кеу Туре	7 inch LCD Touch Screen	Push Button with User Presence Indication	Push Button with User Presence Indication
		LAMP	LAMP
Key Number	Default : 9(row) x 4(column) = 36	60 Key	40 Key
User Presence Indication	Support	LED on, LED off, LED Blink	LED on, LED off, LED Blink
Multiple Cascading	Support	Support	Support
Speaker	Support	Support	Support
LAN Port	2	2	2
PoE(Option)	Support	Support	Support
Application	IP Phone or Video Phone Extend Key Pack	IP Phone or Video Phone Extend Key Pack	IP Phone or Video Phone Extend Key Pack



IP Wifi Phone AP-WP100 IP Wifi Phone

- Wi-Fi IP Phone Solution
- Various Call Scenario Support (IP-PBX)
- State-of-art SIP Signaling
- IEEE802.11b/g up to 54Mbps



- WPA(Wifi Protected Access), 802.11i Security Standard
- Wi-Fi IP Audio Broadcasting Terminal Solution
- External Audio In/Out Port for Headset
- Firmware Upgradeable Architecture
- VoIP Solution with Outstanding Network Service Capability
- Audio Privacy Protection



Smart Communicator

AP-SMP100 Soft Phone (Video/Voice)

- MS-Window based Soft-Phone
- Smart Multimedia (Video/Voice) Soft-Phone
- IP Real-time Audio/Video Broadcasting Terminal Solution
- Built-In Smart Messenger Function
- Up to 30fps with VGA-Resolution(MPEG-4)
- Video Conference Call Support (AddPac External MCU Interworking)
- Advanced Voice/Video Traffic QoS
- SIP, H.323* Signaling Support
- Support Various Call Signal via AddPac IP-PBX Inter-working







Smart Messenger

- MS-Window based Application
- Support Messenger Service
- Support Various Address Book
- Support User Presence Information
- Support User Search Feature
- Interoperation with Address Book and Smart Phone
- Support Smart Phone Control and Setup
 - Call Control and Forward Setup
- Support Unified Message Box
 - Voice Mail Box
 - Short Message Box







Smart Messenger



Smart Window(1/2)

Smart Window is simple web based personal information management program for IP-PBX, Call Manager, etc.

Service Features

- User Information
 - Personal information configuration
- Alarm
 - Alarm event configuration
- User Search
 - User search using search keyword
- Call Forwarding
 - Call forwarding configuration
- Speed Dial
 - Speed dial configuration
- Conference*
 - Configuration of audio, video multiparty conference



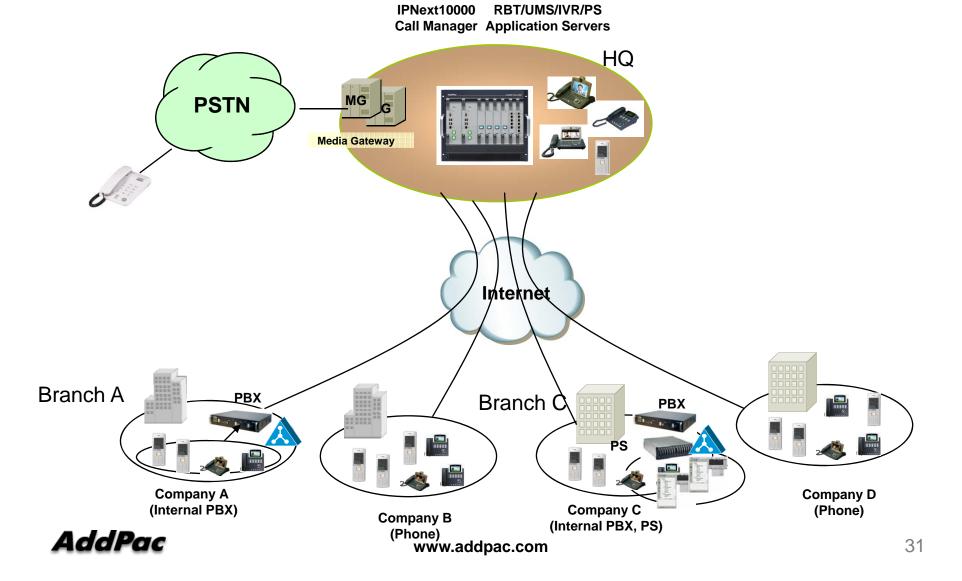
Smart Window (2/2)

Main Layout of Smart Window consists of Menu, Contents, Help Message, etc.



Main Layout

Standard IP-PBX Application



Web Smart Multimedia Manager (WSMM) IP-PBX Series



Contents

- Overview
- System Requirement
- WSMM Login
- Extension Management
- Trunks Management
- PBX Services Management
- System Admin Management
- Summary
- User Portal web page



Overview

What's New in WSMM (Web based Smart Multimedia Manager)

- Simple Menu and Easy Configuration
- Provides Built-In IVR Scenario Editor and Service Configuration
- Provides easy-to-user IP-PBX System API Services and ways to integration with 3rd party systems
- Integrated voice line management such as FXS, FXO, E1, GSM, 3G
- User portal to configure personal information, call forwarding
- Diagnostic tool to analyze SIP Call flow, current status and problems for terminal and trunk

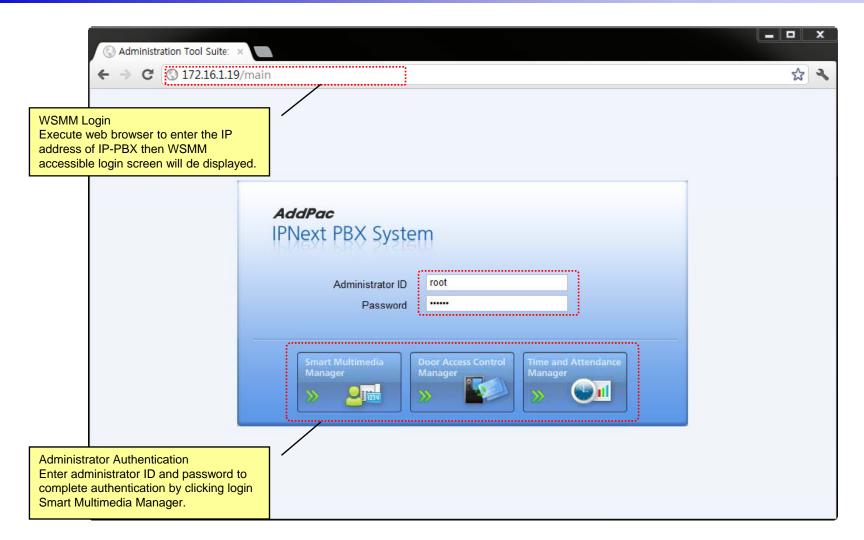


System Requirement

WSMM (Web based Smart Multimedia Manager)

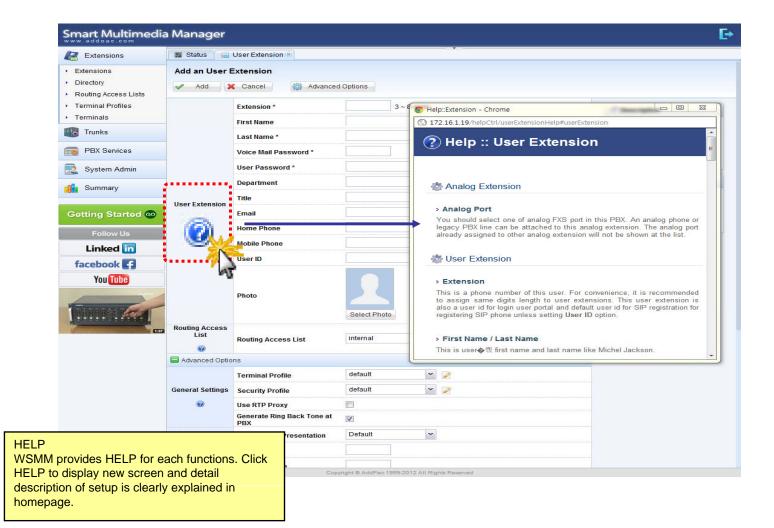
- Windows XP, Vista, Windows 7, Windows Server 2000/2003
- Linux / Unix Platform
- Microsoft Internet Explorer 7.0 / 8.0 / 9.0
- Google Chrome / Mozilla Firefox / Safari / Opera
- Javascript + HTML supported browser (Android, iPhone, iPad,...)













Related Links

Extensions	🛛 Status 🔒 User Extension 🗷								
Extensions	Modify the User Extension								
 Directory Routing Access Lists 	Apply X Cancel								
 Terminal Profiles 		Extension *	1009 3 ~ 8 digits			Description			
Terminals		First Name	ByoungG	00			A user extension is an IP		
Trunks		Last Name *	Choi]		Phone (SIP / SSCP phone) or soft phone for end user. It is		
PBX Services		Voice Mail Password *	Jser Password * 1111 For SIP registration Department root Search Title ex) manager Small ex) admin@addpac.com				composed of user profile, phone number and terminal belongs to the user.		
📃 System Admin		User Password *							
Summary		Department			Search		🖧 Related Links		
	User Extension	Title			ex) manager		WSMM User Portal		
Getting Started 60		Email			ex) admin@addpac.com		Routing Access Lists Terminal Profiles		
Follow Us		Home Phone				Security Profiles Pickup Group			
Linked in		Mobile Phone			ex) 123-456-7890	🖧 Related Links			
facebook 😭		User ID			SIP registration ID	WW Related LINKS			
You Tube						• WSMM User Portal			
	Routing Access	Photo			(Maximum File Size: 100KB)		<u> </u>		
Tanana						 Routing Access Liss 	<u></u>		
			Select PI	hoto		Terminal Profiles	45		
	List	Routing Access List	internal	~		 Security Profiles 			
	0		Pickup Group						
	Advanced Optio		al a famila	122					
	General Settings	Terminal Profile	default						
		Security Profile	default						
	U U	Use RTP Proxy							
d Links			Default	~					
A setup page provides	s related link	recontation			999-2012 All Rights Reserved				

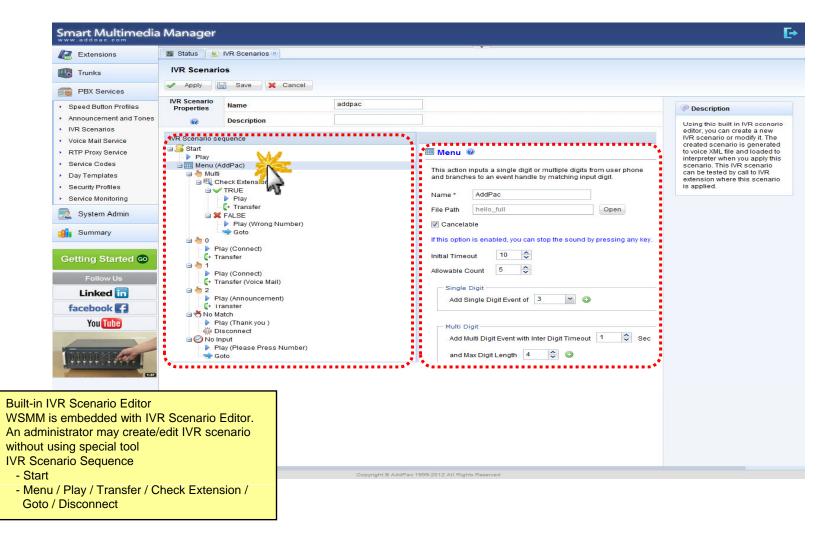


Diagnostic

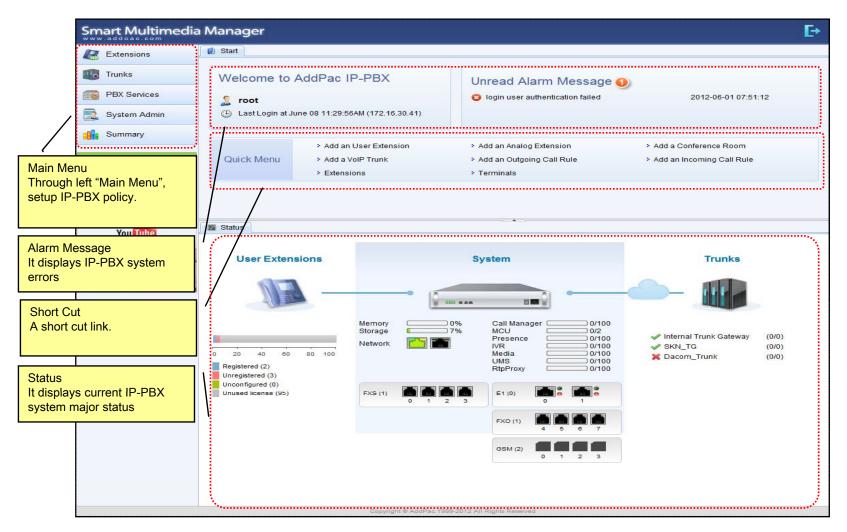
Smart Multimedia	Manag	ger		B
Extensions	📓 Status	🔍 🔍 Terminal Diagnostic 🖄		
→ Extensions	Termina	I Diagnostic 📰 1009 (1	172.16.18.100)	
Directory	🔀 Canc	el		
Routing Access Lists Terminal Profiles				
Terminal Promes Terminals		from the terminal by SIP Aware	tivity from PBX to the terminal by Network Connectivity Test and also you can check SIP awa	ireness of the terminal by checking response message
Trunks	Step 1.	Start Network Connectivity		
PBX Services		1. Network Connectivity Test	Successfully pinged 172.16.18.100 which is just provisioned to phone. Repy from 172.16.18.100: time=100ms loss=0%	Succeeded
🔜 System Admin		2. SIP Aware Test	This phone '172.16.18.100' is successfully responding SIP OPTIONS.	Succeeded Succeeded
Summary		otherwise the destination could	st call on the diagnostic terminal to some destination number. If this terminal has problem or be mobile or PSTN number. The call trace shows information whether the call is properly have one administrator at same time and simultaneous test call will not be allowed.	
Getting Started 😳		1005	Start Outbound Te	
Follow Us		Outbound Call Test	Make a test call '100 Tucceeded.	Succeede
Linked in		2012-06-12 20:15:36 devi	iceId: 70 caller: 1009 callee: 1005 Call Test Start.	
facebook		From 1009 (172.16. SIP/2.0 200 OK	18.100:5060)	
You Tube		Via: STP/2.0/UDP 172.16	17.30:5060;branch=z9hG4bKd84f0b0fa411 3172.16.17.30;tag=d84f0b0fa4 100>;tag=dc4fa2c5a4 2c8=80c5-0002a4038e2c@172.16.18.100	
Tunner Kal		CSeq: 11 INVIE Session-Expires: 1800;re User-Agent: AddPac SIP (Contact: sip:1009&172.16 Require: timer Content-Type: applicatio Content-Length: 179	efresher=uac Sateway 6.18.100	
		s=AddPac Gateway SDP	32254 IN IP4 172.16.18.100	
	Step 2.	c=IN IP4 172.16.18.100 t=1339532254 0		
nostic		8000/1		
ovides to display termina	l and tru	ink status (172.16.	18.100:5060)	
ection in IP-PBX		172.16.	17.30:5060;branch=z9hG4bKd84f0b0fa411	
1.		2.16.18.	1172.16.17.30>;tag=d84f0b0fa4 .100>;tag=dc4fa2c5a4 2c8=80c5-0002a4038e2c@172.16.18.100	
etwork Connection Test IP Aware Test		1800;re ac SIP (efresher=uac	
2.		plicatio		
utgoing Call Test		1/9		
			Copyright © AddPac 1999-2012 All Rights Reserved	



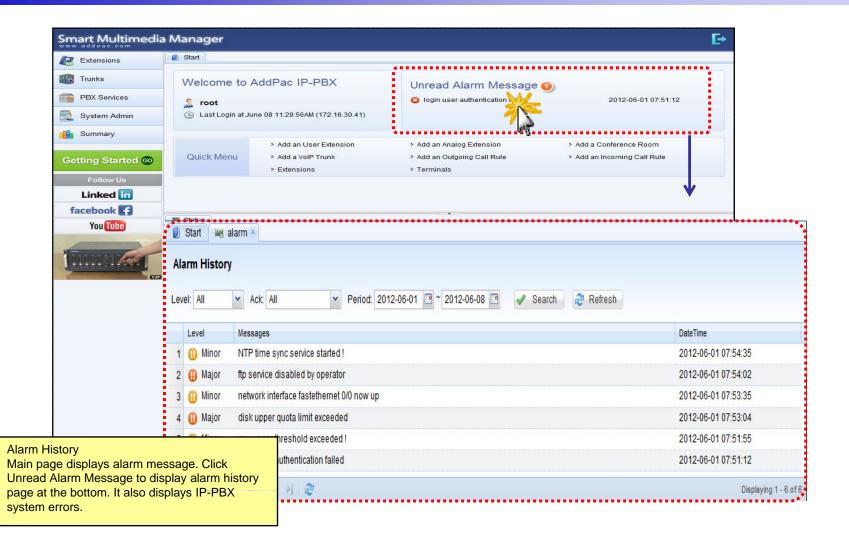
Built-in IVR Scenario Editor



Main

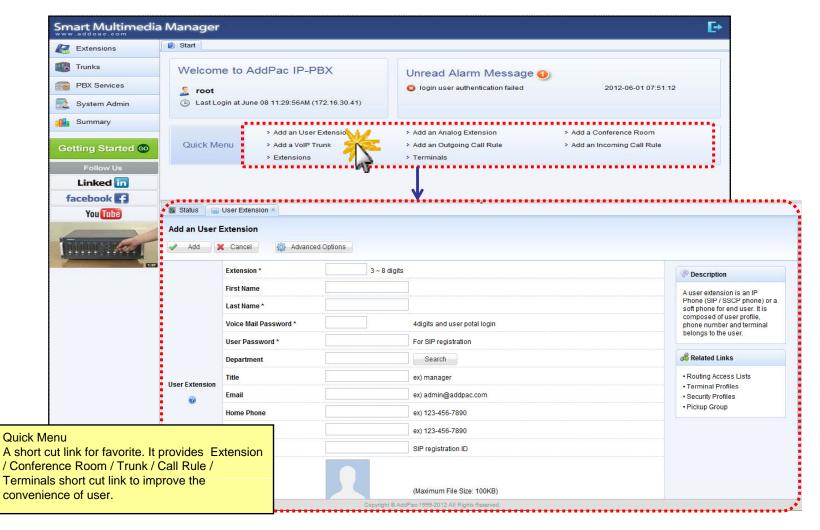


Main - Alarm History

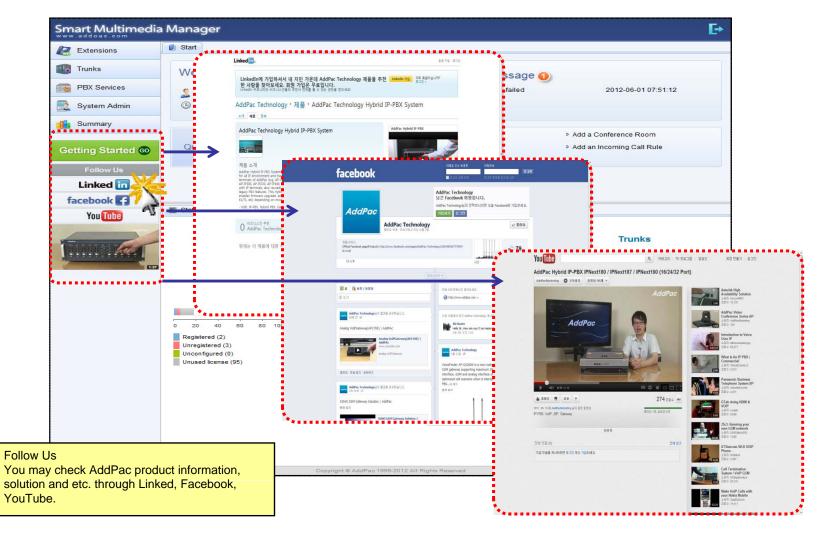




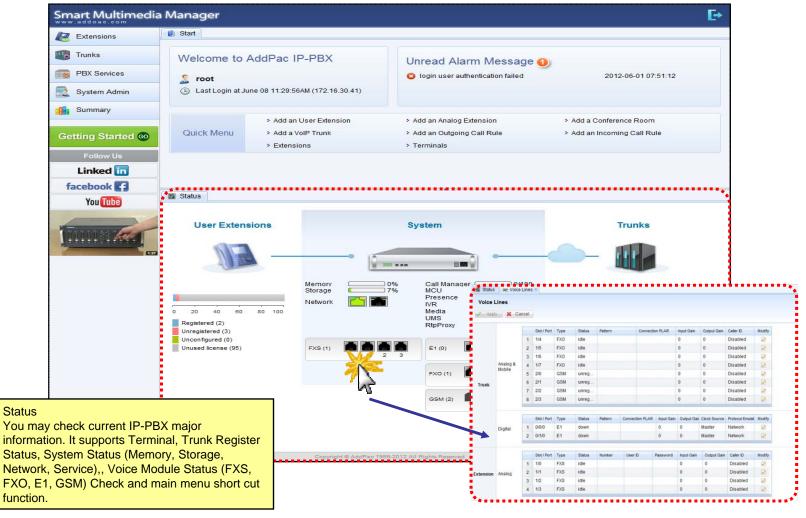
Main – Quick Menu



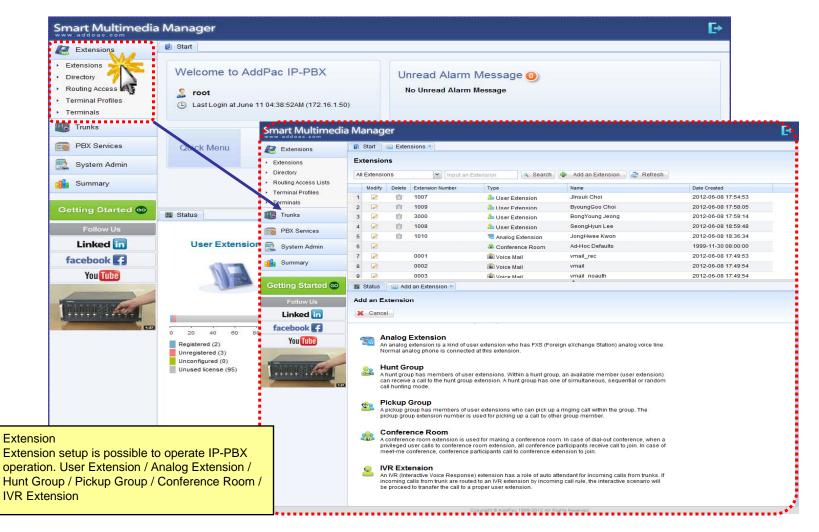
Main – Follow Us



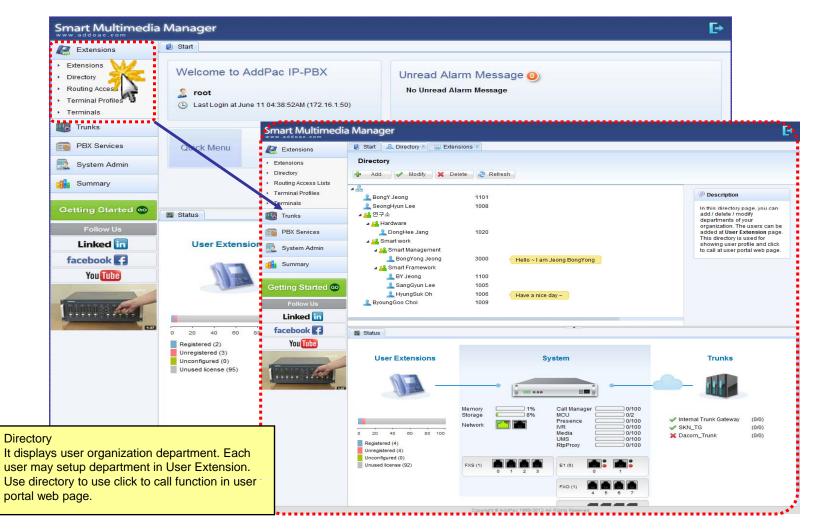
Main – Status Monitoring



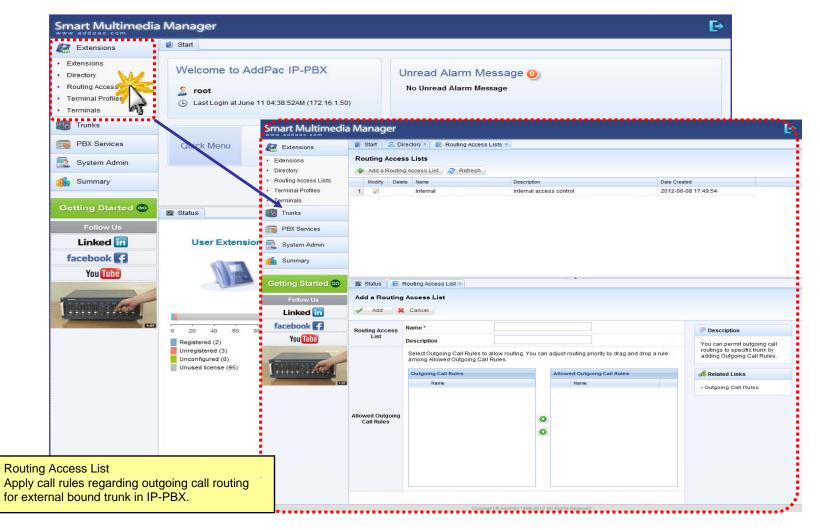
Extension - Extensions



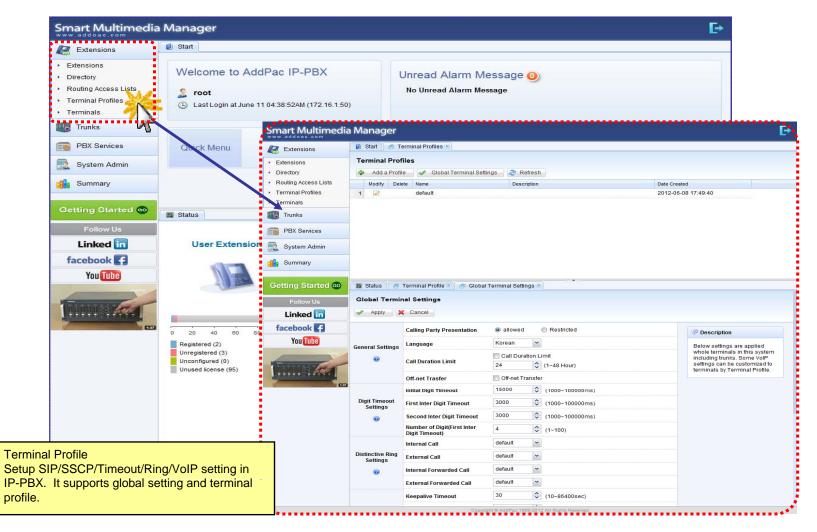
Extension - Directory



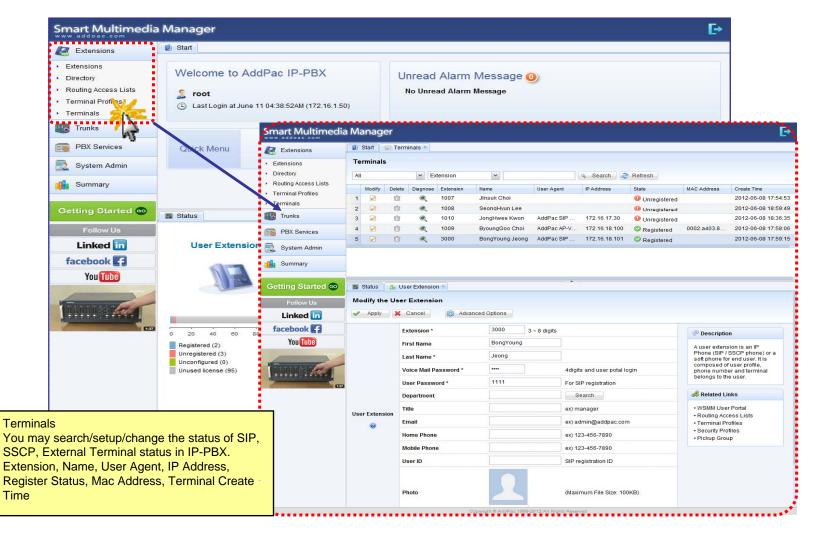
Extension - Routing Access List



Extension - Terminal Profile



Extension - Terminals

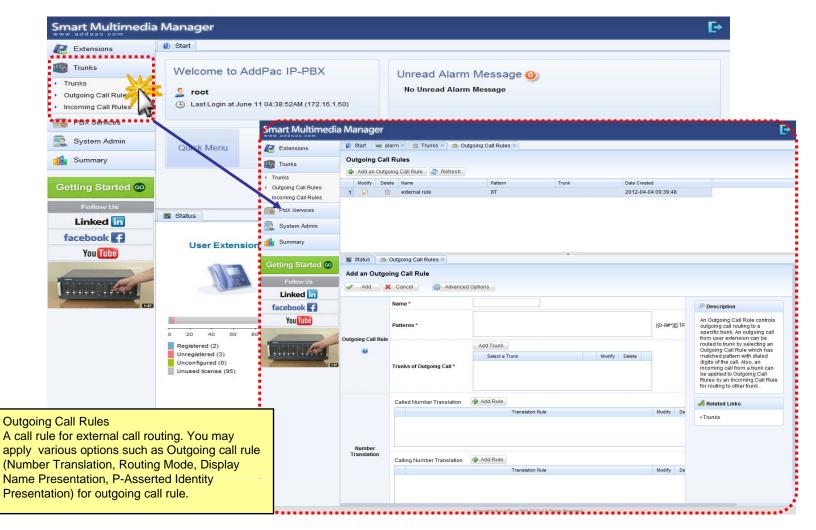


Trunk - Trunks

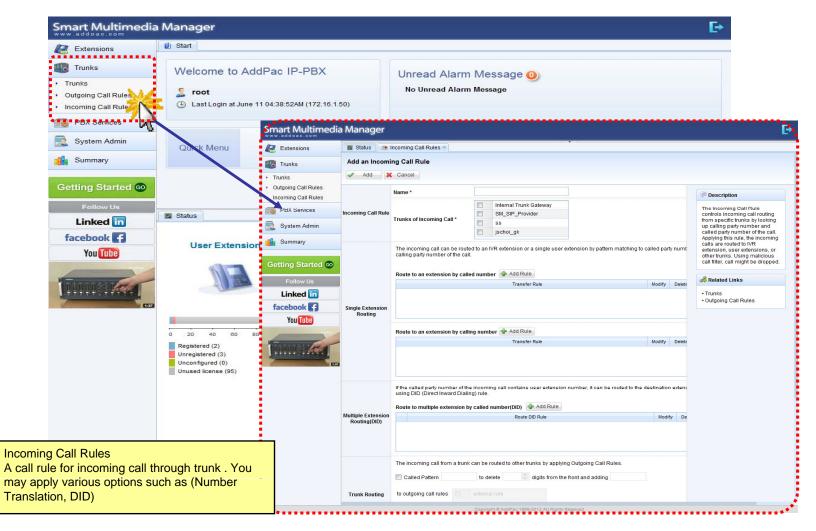
Extensions	💋 Start									
 Trunks Trunks Outgoing Call Russ Incoming Call Rules 	Welcome to Ad	dPac IP-PBX	0)		ad Alarm Messa nread Alarm Message	ge 🕛				
PBX Services		Smart Multimedi	a Manage	er		•••••]
System Admin	Quick Menu	Extensions								
Summary		Trunks	Trunks							
Getting Started ©		Trunks Outgoing Call Rules Incoming Call Rules	All Trunks Modify	Delete Diag	Name Internal Trunk Gateway	Type VolP Trunk	IP Address 127.0.0.1	State	Description	Date Create 2012-06-0
Follow Us	Ma Status	PBX Services	2 🖉 3 🖉		Dacom_Trunk SKN_TG	SIP Proxy Server VoIP Trunk	172.16.19.201 172.16.19.200	 Unregistered Registered 		2012-06-0 2012-06-0
Linked in facebook	User Extension	System Admin								
		Getting Started 😳								
		Follow Us Linked in facebook	Add a Tru		ink 🕫					
	0 20 40 80 8 Registered (2) Unregistered (3) Unused license (95)	Follow Us Linked in facebook f You Tube	Add a Tru Cancel Th Th Th Th IP Sh tel sou	olP Trunk bis is a generic unk could be V PBX or other S IP Proxy S is could be Vo ephone netwo reatures. 1 tgoing calls. .323 Gatek	VolP Trunk which can register to olP gateway which has analog PX end to the second second second second end to the second second second second end to the second second second second second file PEx should register to the St	(S, FXO, E&M line, digita SIP Proxy Server and pr Pretwork. Also, this cou P Proxy Server for receiv	al E1, T1 line or mobile rovides VoIP service to uld be an IP-PBX who ving Incoming calls ar	e GSM line, or o public provides SIP nd sending	Description Using the trunks extensions in the communicate we retwork or mob other VoIP netw branches.	nis PBX can vith remote telephone bile network or



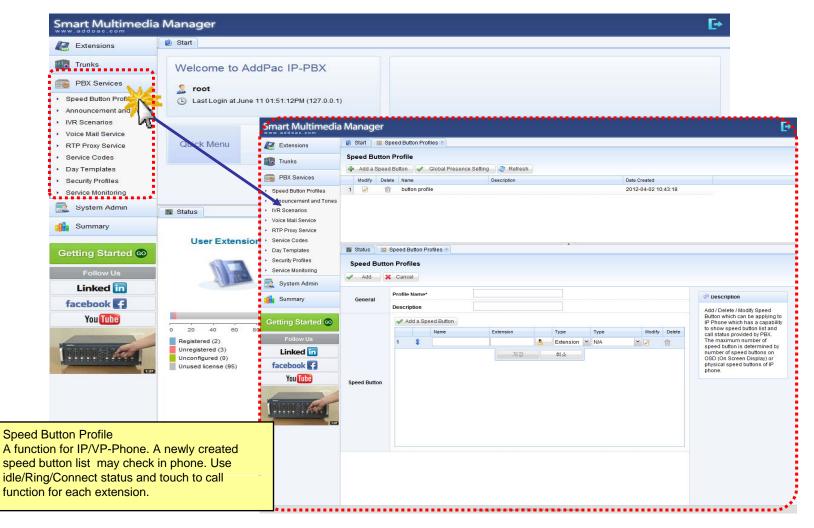
Trunk - Outgoing Call Rules



Trunk - Incoming Call Rules

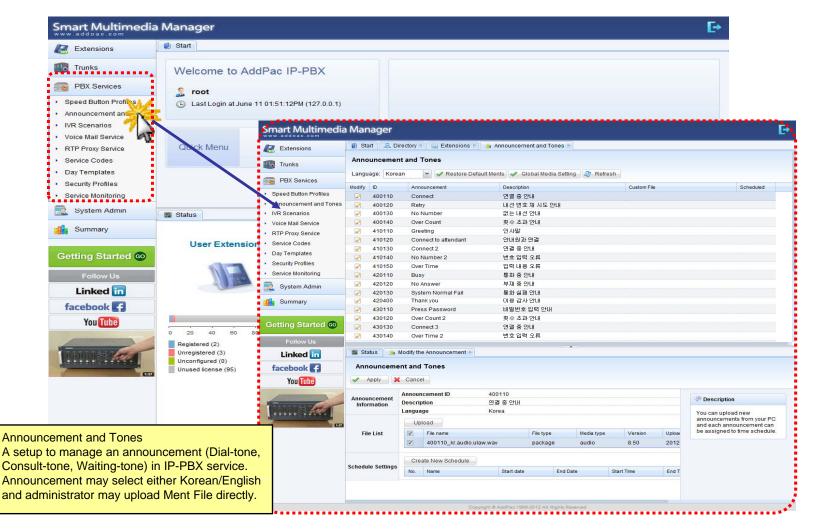


PBX Service - Speed Button Profiles

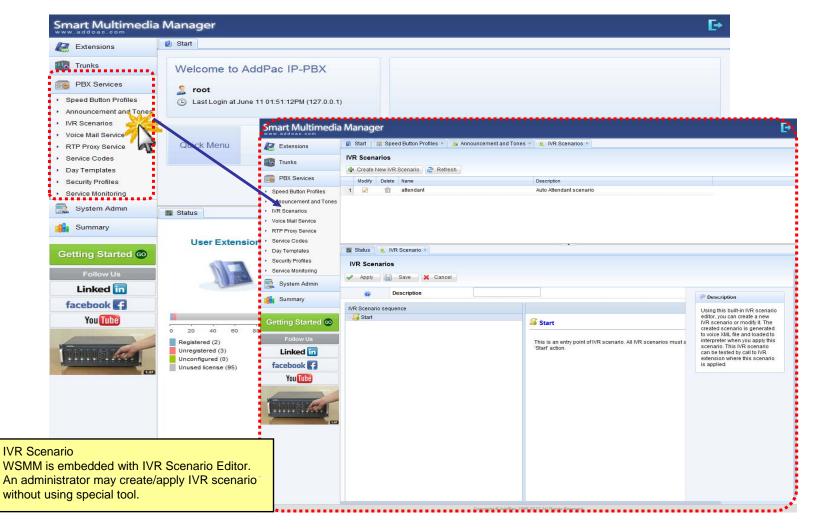




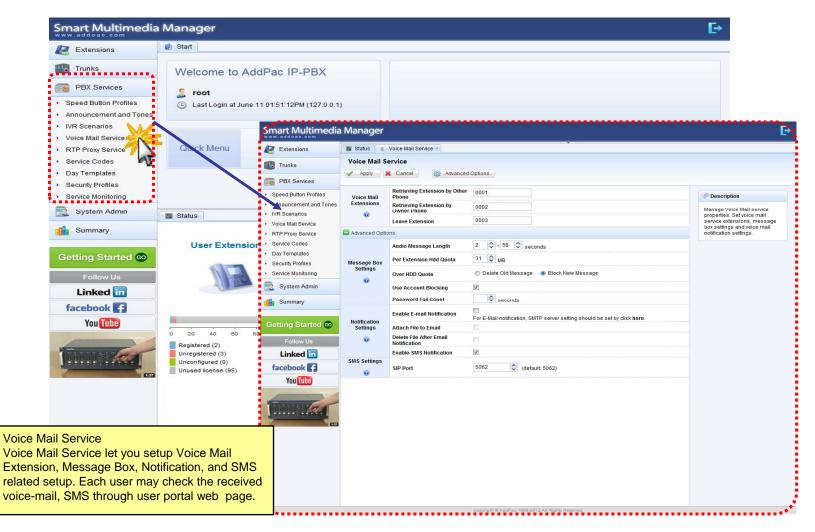
PBX Service - Announcement and Tones



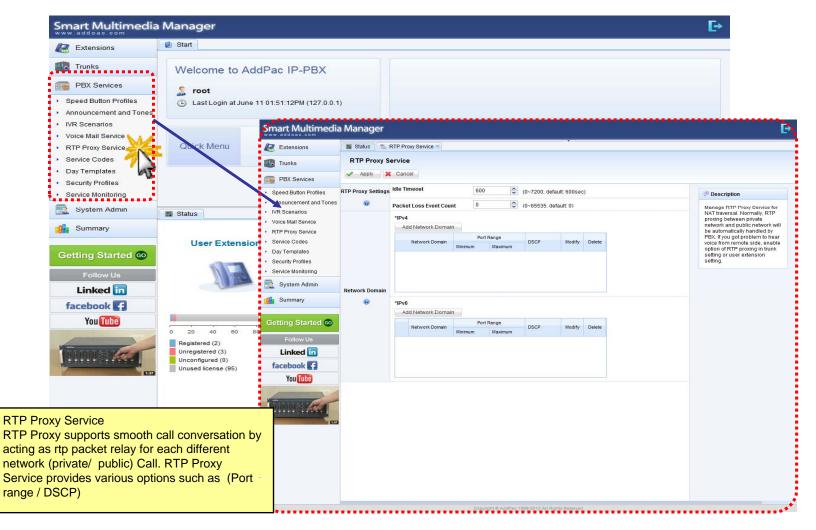
PBX Service - IVR Scenarios



PBX Service - Voice Mail Services



PBX Service - RTP Proxy Service

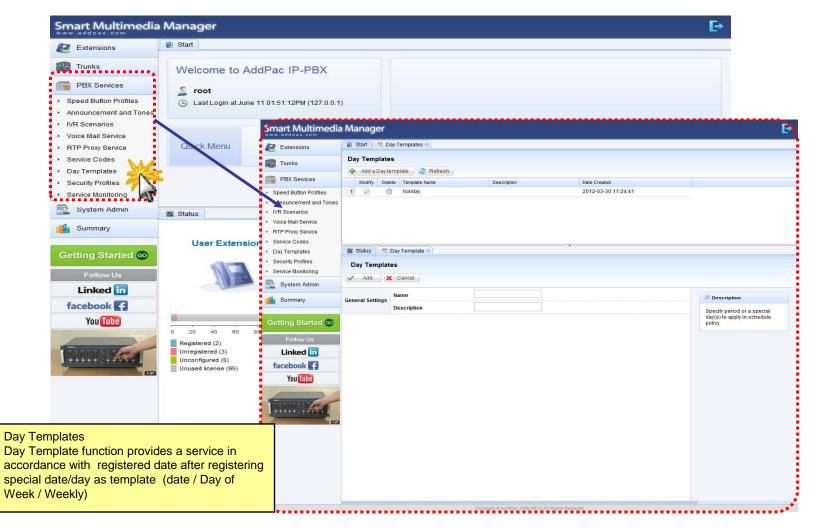




PBX Service - Service Codes

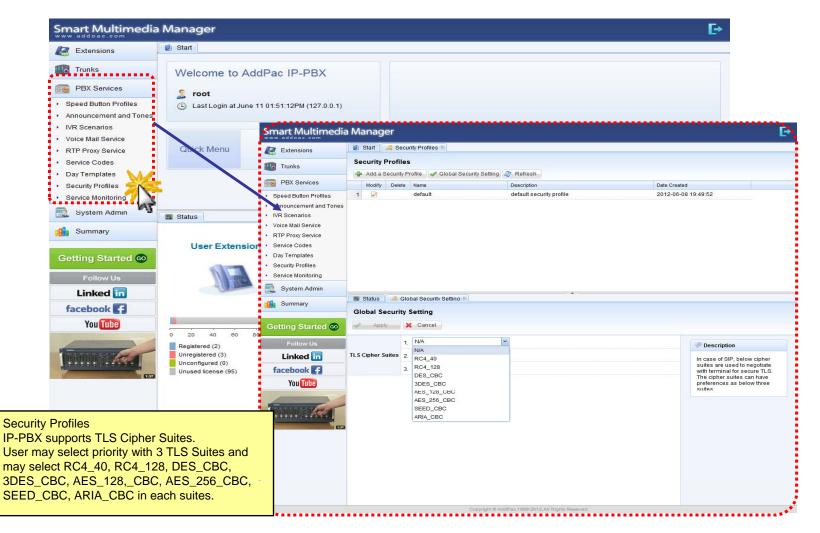
Extensions	Start						
Trunks	Welcome to AddP	ac IP-PBX					
PBX Services	🤰 root						
 Speed Button Profiles Announcement and Tones 	 Last Login at June 11 0⁻ 	1:51:12PM (127.0.0.1)				
 IVR Scenarios Voice Mail Service 	S.	mart Multimedia	a Manager				
 RTP Proxy Service 		Z Extensions	-	RTP Proxy Service 📧 💽 强 Service Codes 🗷			
 Service Codes 		Trunks	Service Codes				
🕨 Day Templates 🛛 🧖 🔨			Apply 💥 Cancel 🎆 Advanced Options				
 Security Profiles 		PBX Services		lionen e			
 Service Monitoring 		Speed Button Profiles		Call Park	* • 9 🗘	Description	
System Admin	Ma Status	IVR Scenarios Voice Mail Service RTP Proxy Service	General Code	Call Pickup		The Service code or Feature code is a special digit(#.*)	
Summan/	•			Call Forwarding All Register	* ¥ 3 \$ 2 \$	starting digits for activating a PBX service. Since these	
Summary				Call Forwarding All Activation	* • 3 \$ 4 \$	services can be activated by keypad, the most of analog	
	USCI Extension		Advanced Opti	Call Forwarding All Deactivation	* 🕶 3 🗘 5 🗘	phone or IP phone can use t code. You can change defau	
Getting Started 🚳			Advanced Opti		* v 1 🗘 1 🗘	service code to your familiar code.	
Follow Us		Service Monitoring		Call Reject(Absence) Activation	* ¥ 1 🗘 2 🗘		
Linked in		System Admin		Call Reject(Do Not Disturb) Activation	* v 1 0 0		
facebook 🖬		Summary		Call Reject Deactivation	* v 2 0 0		
					* v 2 ÷ 1 ÷		
You Tube	0 20 40 80 80	etting Started 😳		Call Waiting Deactivation			
	Registered (2)	Follow Us		Call Forwarding All to Voicemail Register	* * 5 \$ 1 \$		
The second second	Unregistered (3)	Linked in facebook		Call Forwarding Busy Register	• • 3 • 2 •		
Taxaa a second a se	Unconfigured (0) Unused license (95)			Call Forwarding NoAnswer Register	* ¥ 3 🗘 3 🗘		
		You Tube		Call Forwarding NotReachable Register	* • 6 0 1 0		
				Call Frowarding Cancel	* • 3 • 0 •		
	1	TATAL STREET		Call Forwarding Busy Activation			
			Advanced Option		• • 3 ÷ 7 ÷		
ice Codes oction to setup additional service phone per in IP-PBX. It is a service code to use			811 	Call Forwarding NoAnswer Activation	* ¥ 3 🗘 8 🗘		
				Call Forwarding NoAnswer Deactivation	* • 3 \$ 9 \$		
				Call Forwarding NotReachable Activation Call Frowarding NotReachable			
onal service in SIP term				Deactivation	* • 6 \$ 5 \$		
and may assign maxir				CCBS Register	* ~ 4 \$ 0 \$		
ers.			CCBS Cancel	* 🛩 4 🗘 1 🗘			

PBX Service - Day Templates

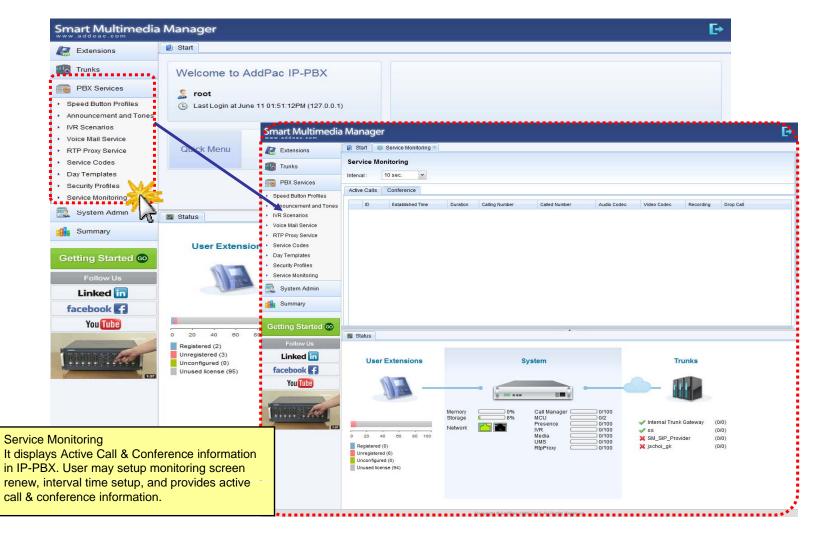




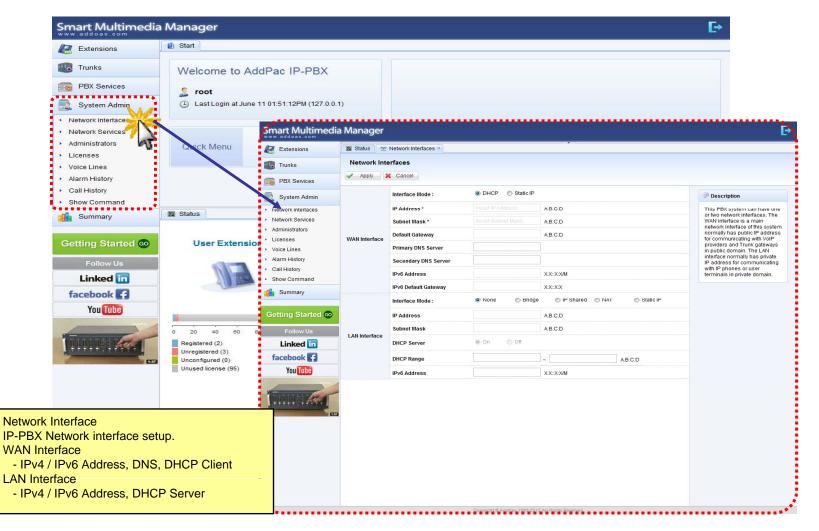
PBX Service - Security Profiles



PBX Service - Service Monitoring

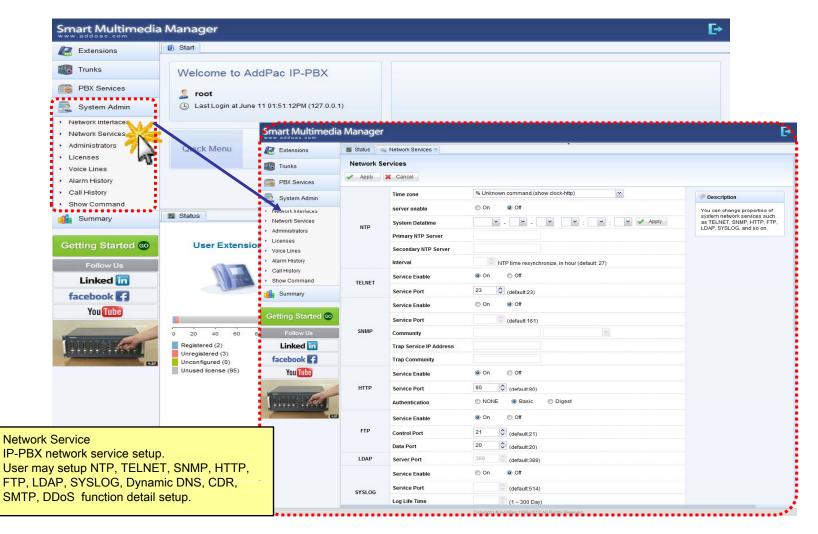


System Admin - Network Interface

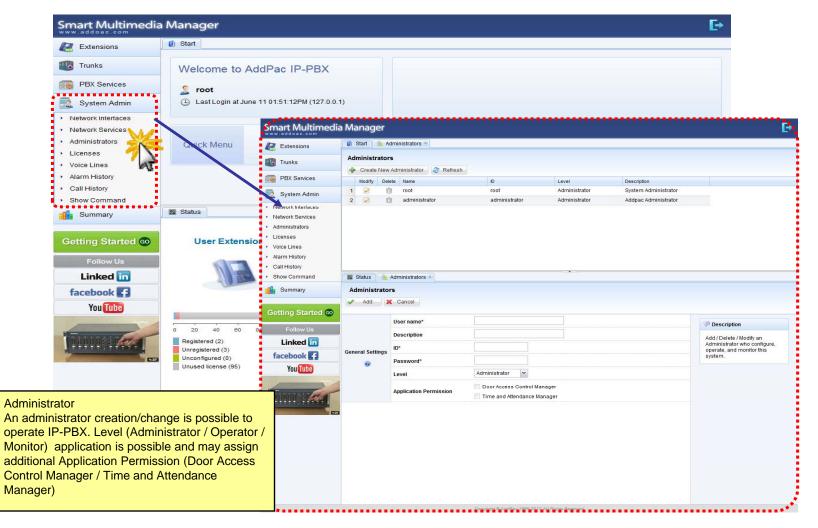




System Admin - Network Services

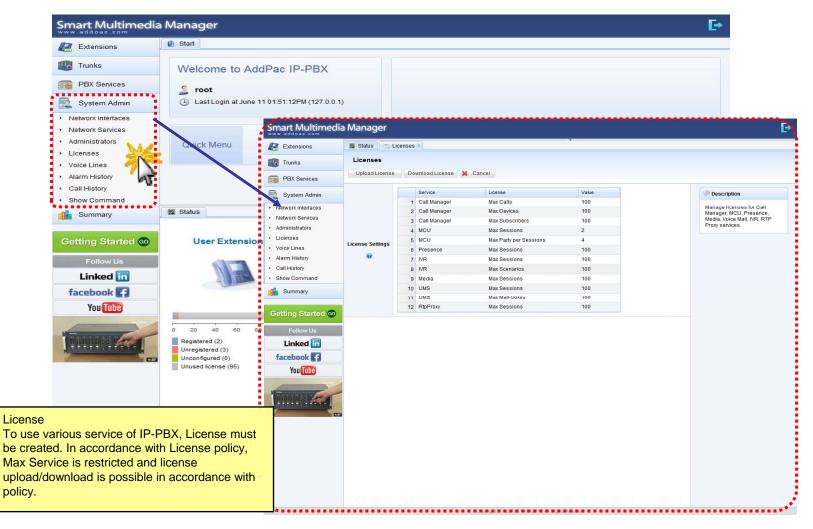


System Admin - Administrators



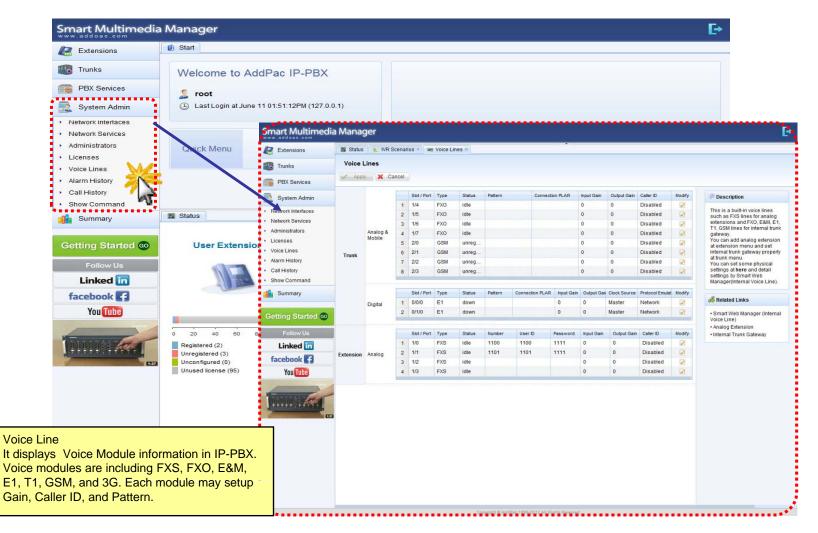


System Admin - Licenses

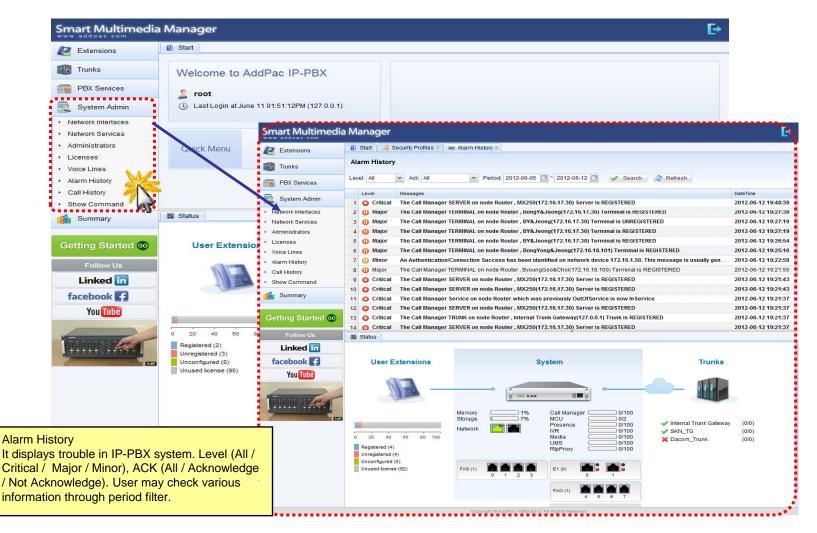




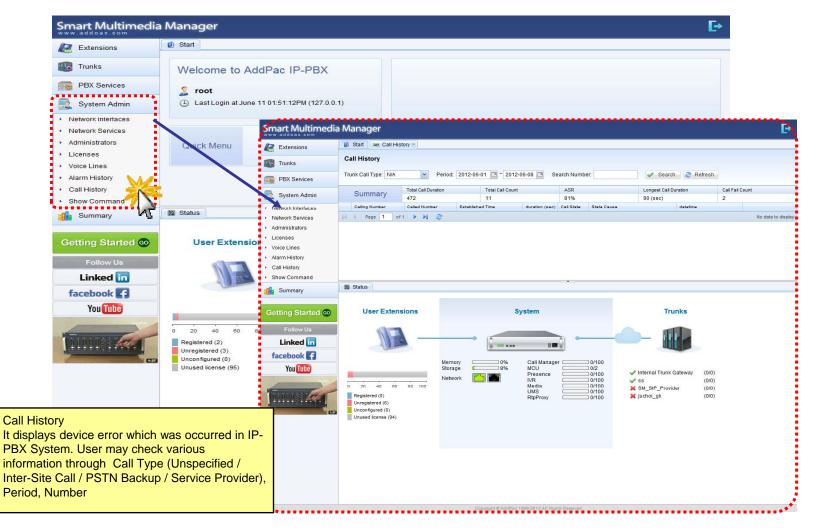
System Admin - Voice Lines



System Admin - Alarm History

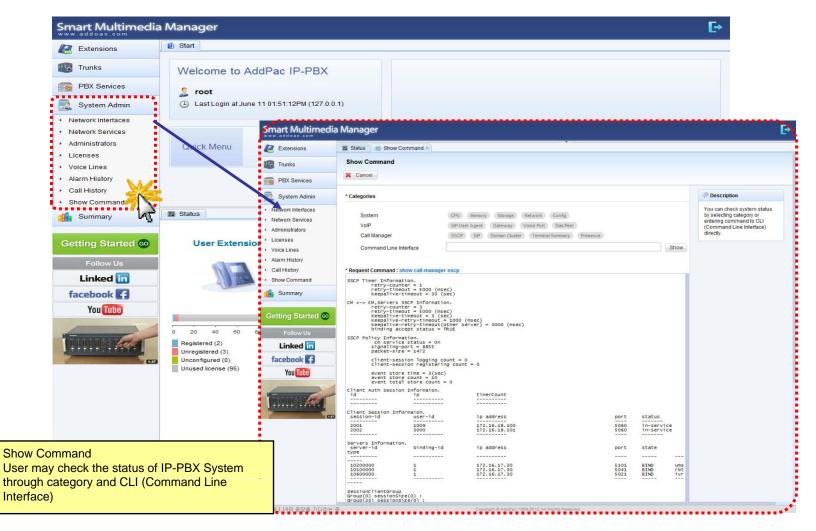


System Admin - Call History





System Admin - Show Command





Ordering Information

- IPNext10000 Next Generation IP-PBX Hardware
 - One(1) System Dual IP-PBX Main Body
- Built-in APOS Internetworking Software for IPNext10000
- Including 1 Year Hardware Warranty
- Product Documents
 - Install and Operation Guide (PDF)
- Pricing
 - AddPac Technology Regional Sales Manager
 - Authorized Sales and Marketing Representatives
 - Please Contact www.addpac.com

Thank you!

AddPac Technology Co., Ltd. Sales and Marketing

Phone +82.2.568.3848 (KOREA) FAX +82.2.568.3847 (KOREA) E-mail sales@addpac.com

