New IPNext10000 Large Capacity Call Manager

High-performance Next Generation Large Capacity Call Manager Solution

AddPac

AddPac Technology

Sales and Marketing

www.addpac.com

Content

Product Overview

IPNext10000 Large Capacity Call Manager

- 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

Product Highlights

IPNext10000 Large Capacity Call Manager

IP based Advanced IP-PBX Solution

Various Call Scenario Support
SIP Proxy Service
IP Centrex Service

Interworking with Internal/External Powerful Application Server

Dual Call Manager Architecture for Fault Tolerant System

Smart Network Management System Support

Linux based Operation System

Support the Various Multimedia IP Terminals

APOS™ Technology
Multimedia Network Protocol

State-of-art VoIP SIP Signaling Stack

IPv4/IPv6 based Network Protocol & Voice Traffic QoS

Dual Power Supply System for Redundancy

Smart Multimedia Management for Operation & Management

Hardware Specification

IPNext10000 Large Capacity Call Manager System

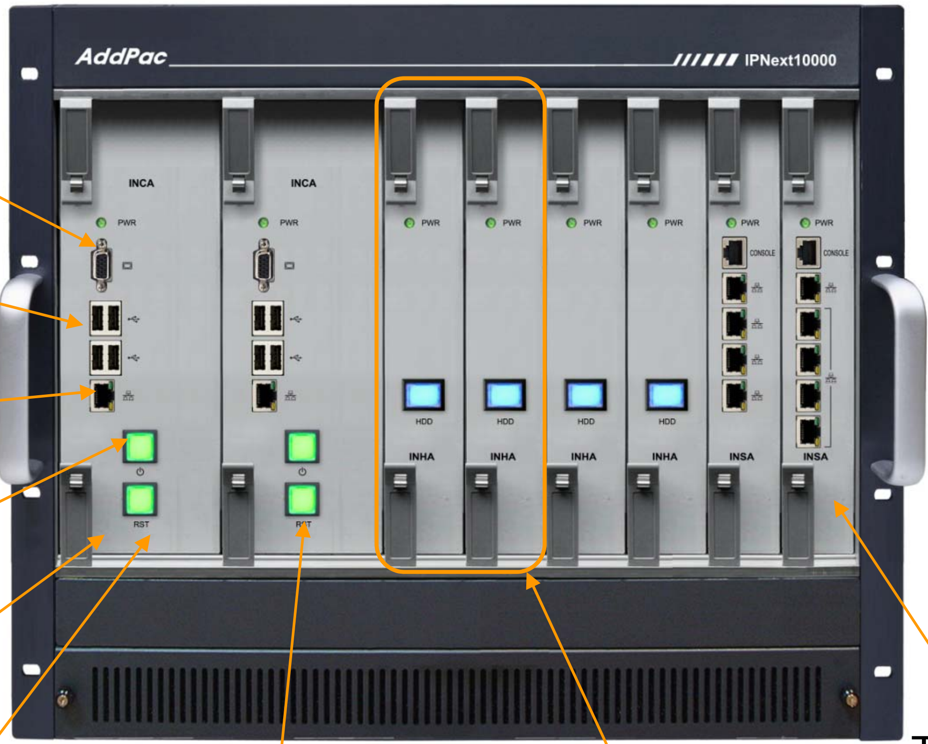
- High-End Computing Power
- Main Chassis
  - Dual Redundancy CPU Boards for System Fault Tolerant
    - One(1) 10/100/1000Mbps Gigabit Ethernet
    - Four(4) USB Interface Port
    - VGA Interface Port for External Video Monitor
    - Two(2) 3.5 Inch Hard Disk Interface Slot (RAID 1)
  - Dual Redundancy 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



VGA Connector

USB Interface

Gigabit Ethernet Port

Power On/Off Switch for System

CPU Board A (Hot-Swap)

Reset Switch

CPU Board B (Hot-Swap)

Dual 3.5 Inch HDD Disks(RAID1) : Hot-Swap

Two(2) Slots is reserved for Switch Board, RTP Proxy Board, etc

Hardware Specification

IPNext10000 Large Capacity Call Manager

RISC
CPU

IPNext10000 Back Side

FANs for Air Cooling

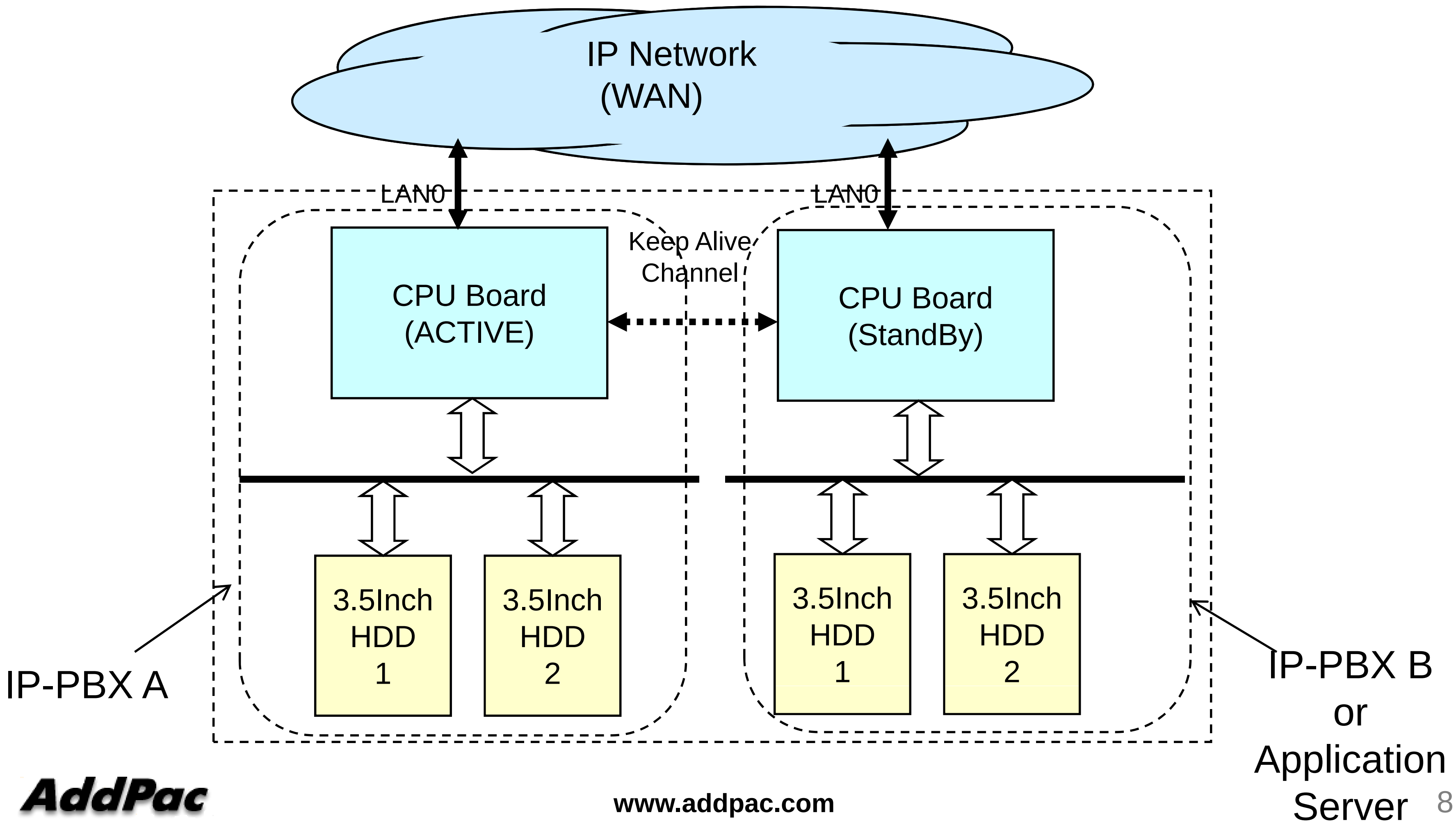
Dual Power Supply
for IP-PBX A

Dual Power Supply
for IP-PBX B

System Redundancy Features

IPNext10000 Large Capacity Call Manager

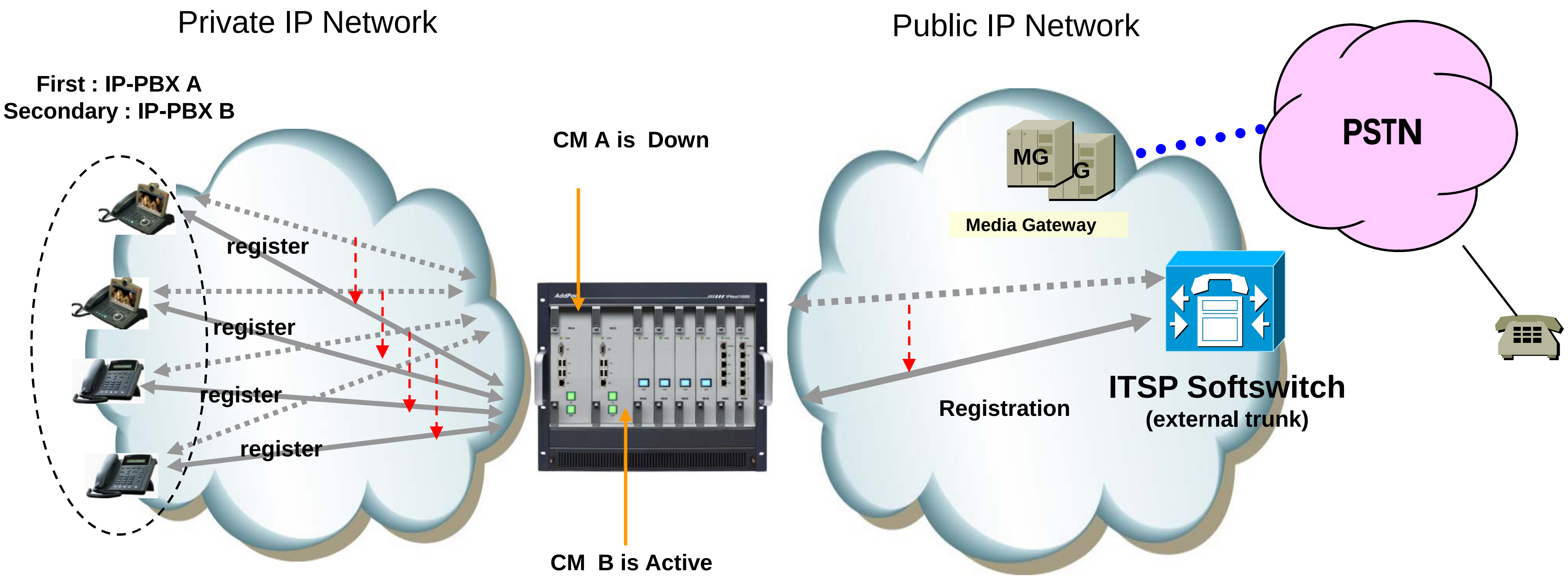
IPNext10000 System Block Diagram



System Redundancy Features

IPNext10000 Large Capacity Call Manager

- Active– Active Duplication Scheme
- Active – Standby Duplication Scheme
- VRRP based Duplication Scheme

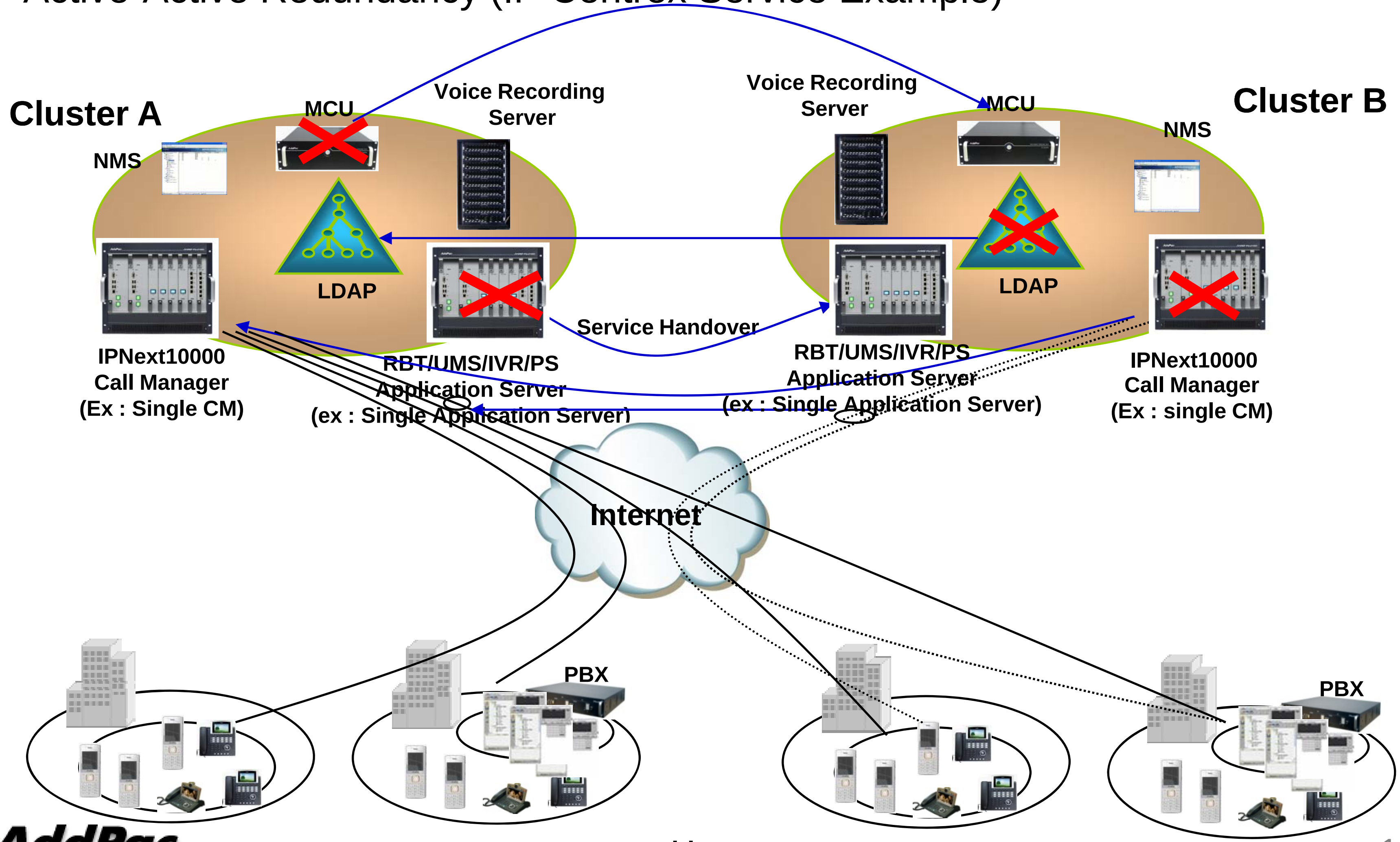


Active – Standby Duplication Scheme (example)

System Redundancy Features

IPNext10000 Large Capacity Call Manager

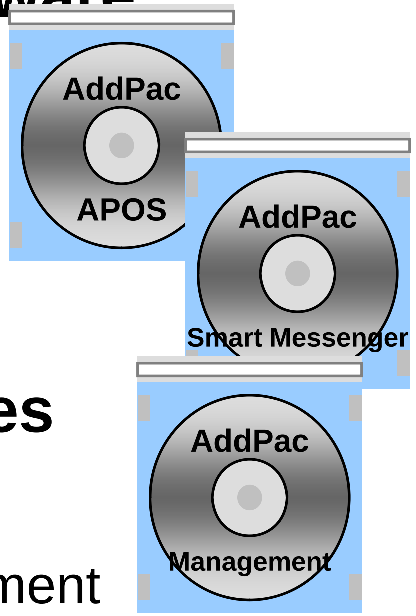
- Active-Active Redundancy (IP Centrex Service Example)



Software Service

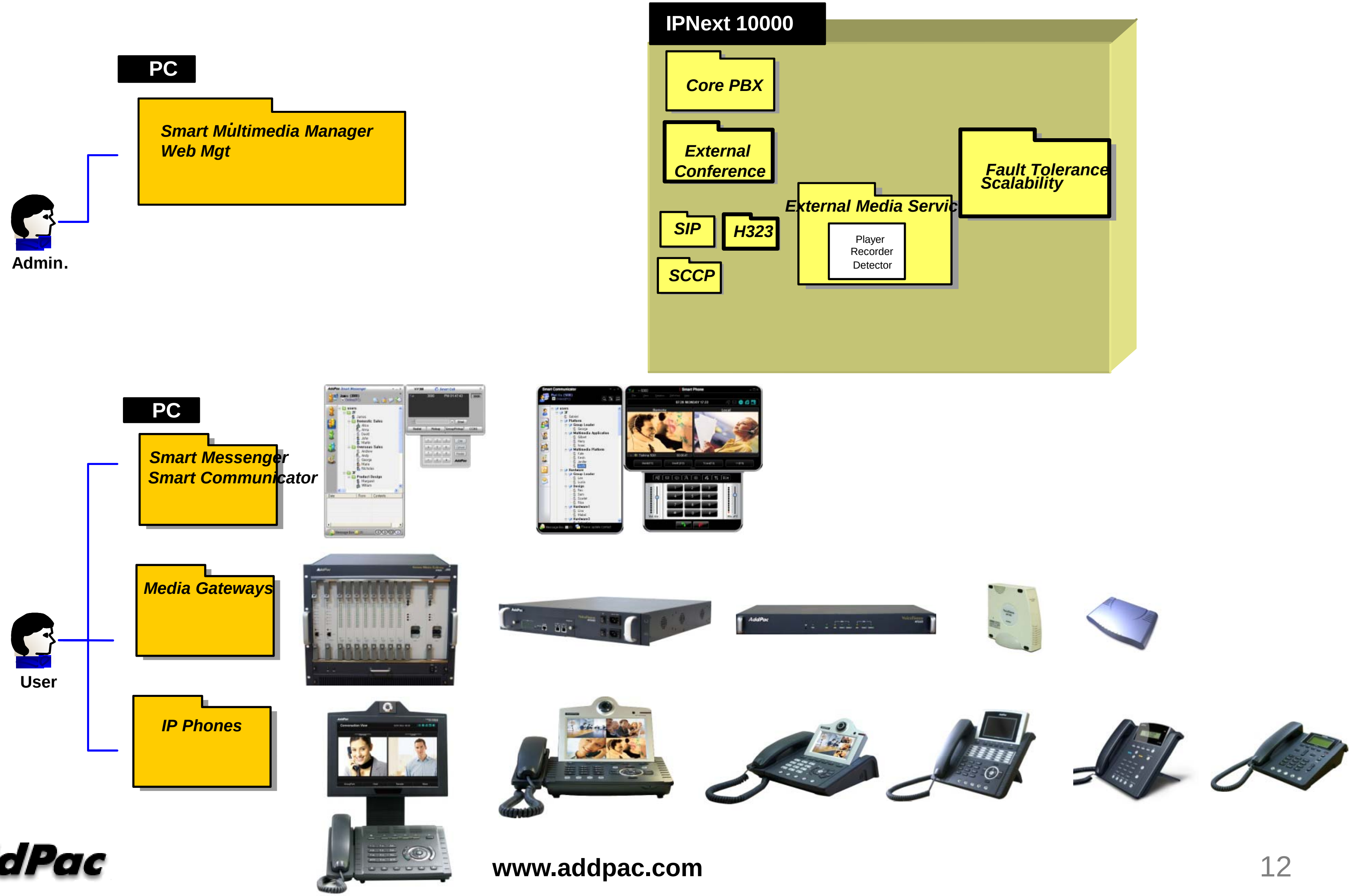
IPNext10000 Large Capacity Call Manager

- **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

IPNext10000 Large Capacity Call Manager



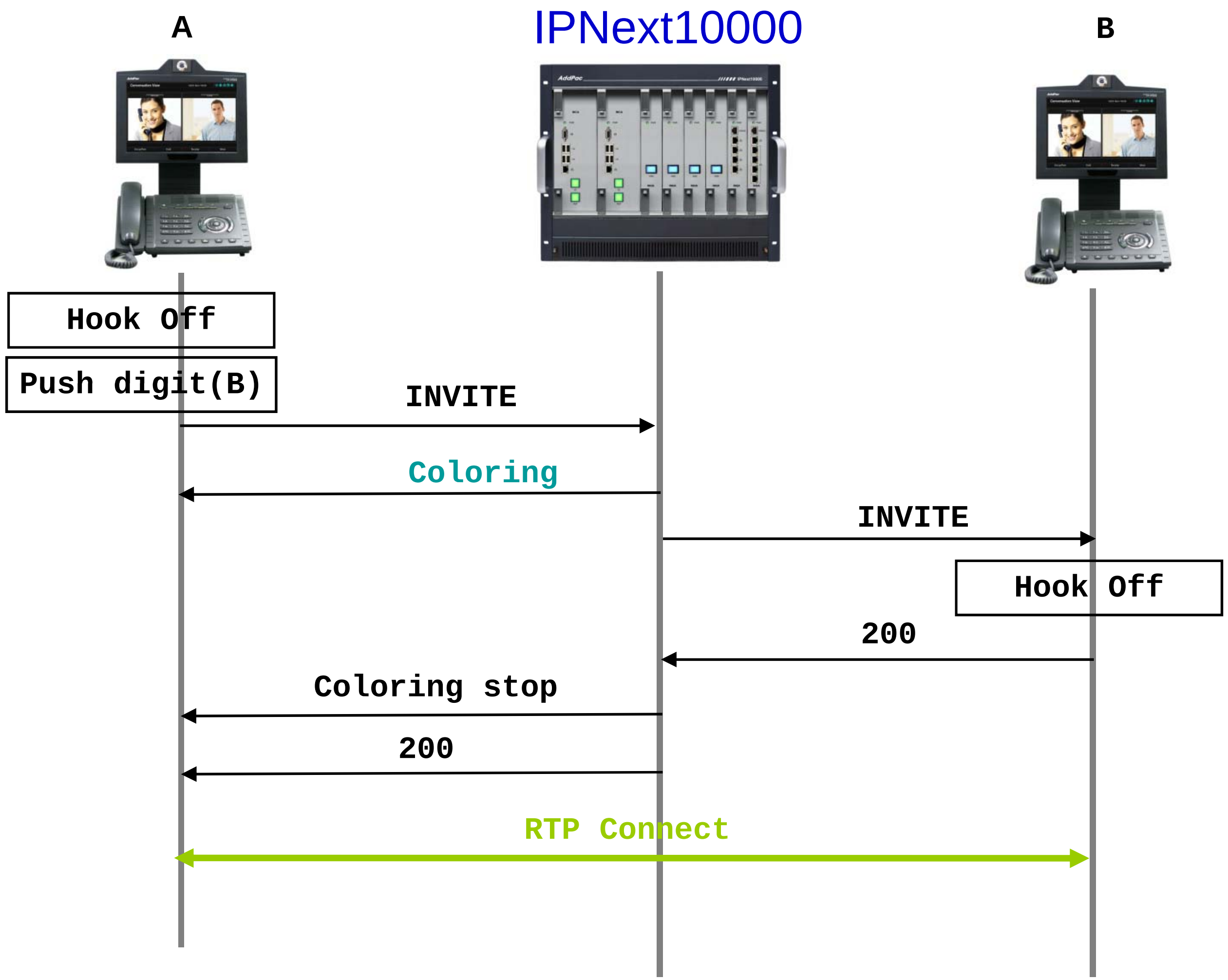
IP Telephony Service and Features

IPNext10000 Large Capacity Call Manager

- 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

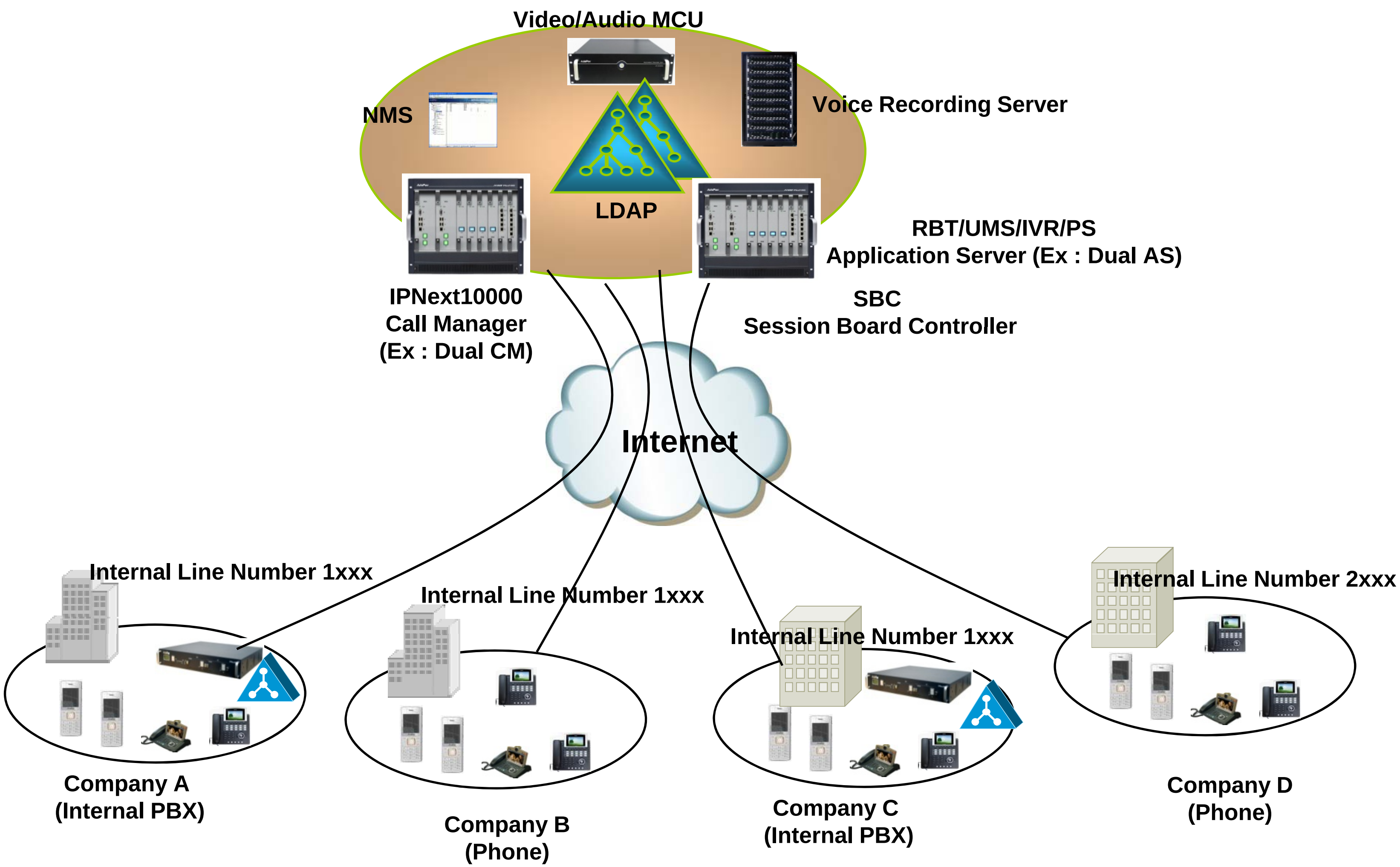
SIP based Basic Call Scenario

IPNext10000 Large Capacity Call Manager



IP Centrex Service

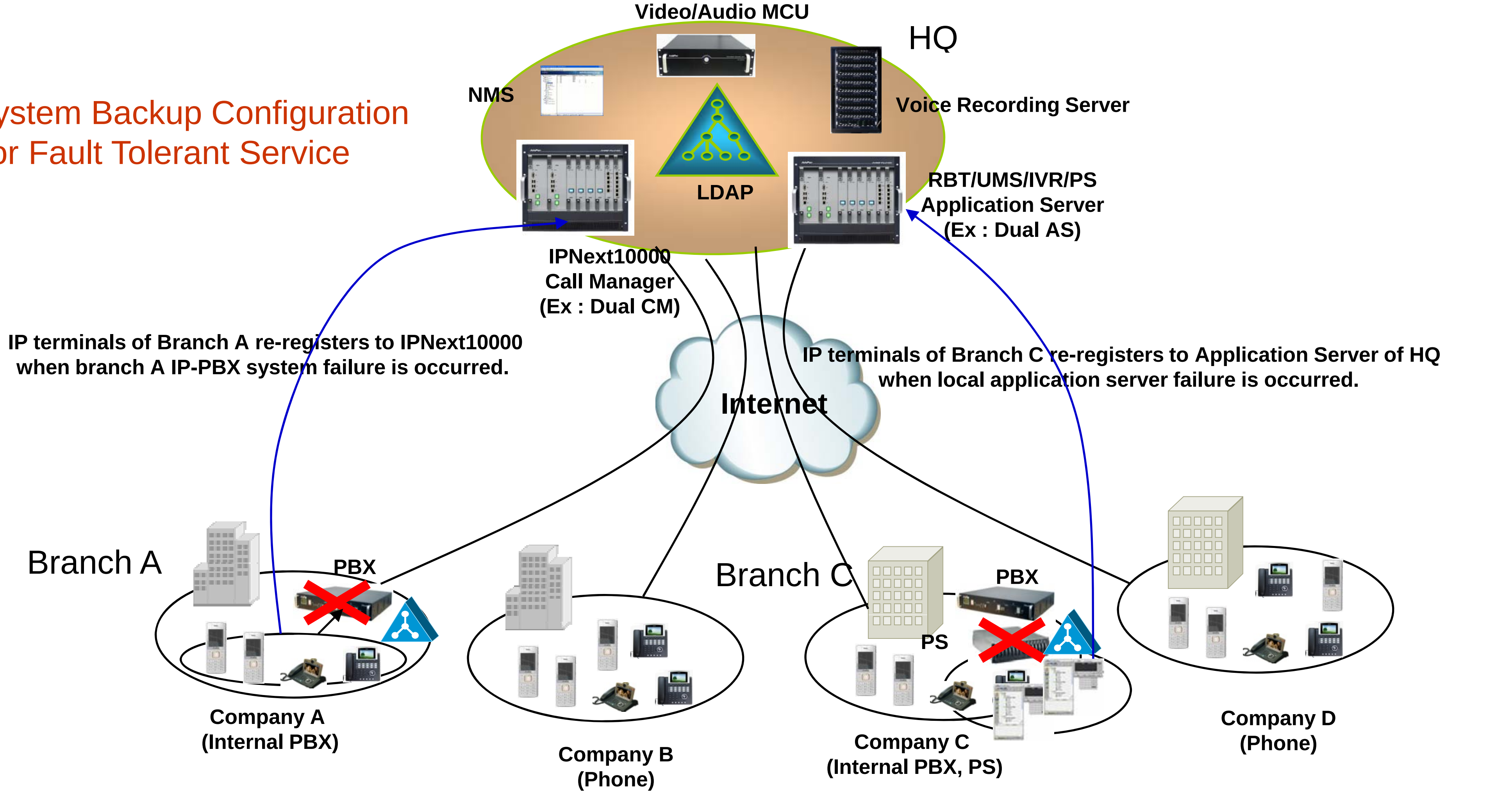
IPNext10000 Large Capacity Call Manager



IP Centrex Service

IPNext10000 Large Capacity Call Manager

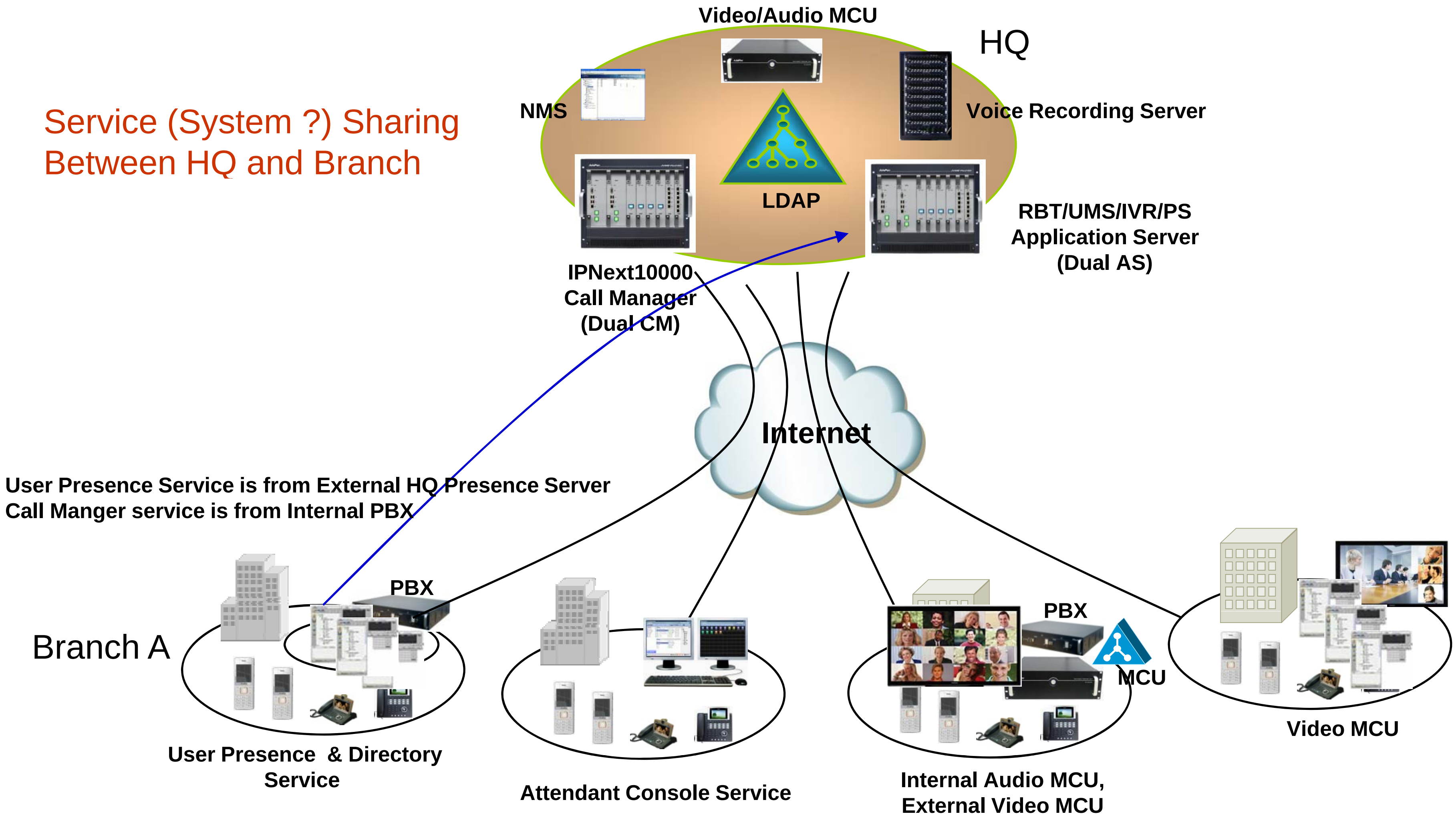
System Backup Configuration for Fault Tolerant Service



IP Centrex Service

IPNext10000 Large Capacity Call Manager

Service (System ?) Sharing
Between HQ and Branch



Network Service and Features

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)

Network Service and Features

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)

Network Service and Features

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

Network Service and Features

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 / Service Features	AP-PT100 	AP-PT50 	AP-PT20 
Key Type	7 inch LCD Touch Screen	Push Button with User Presence Indication LAMP	Push Button with User Presence Indication 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 Inter-working)
- 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

AP-VP300

AP-VP280

Smart Messenger

Smart Window(1/2)

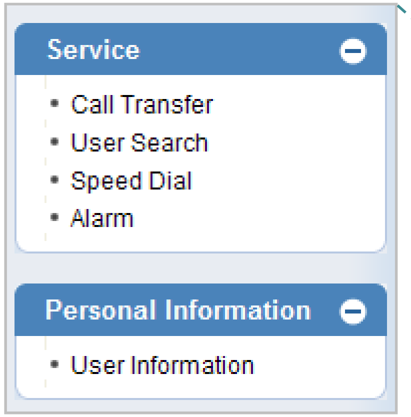
Smart Window is simple web based personal information management program for IP-PBX, Call Manager, etc.

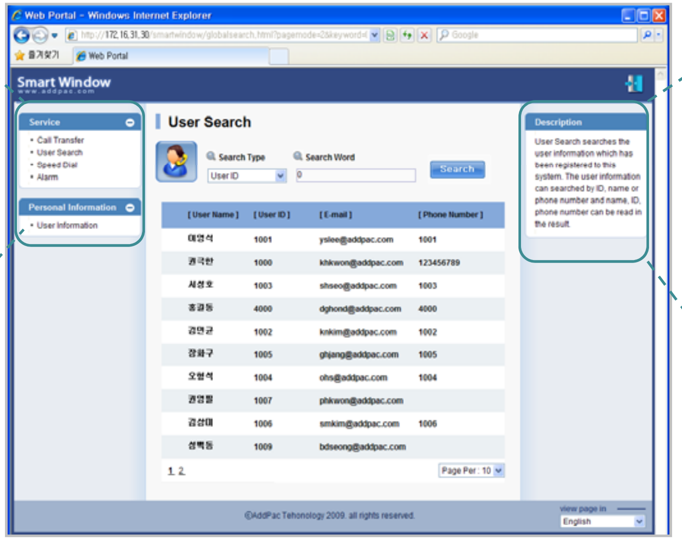
Service Features

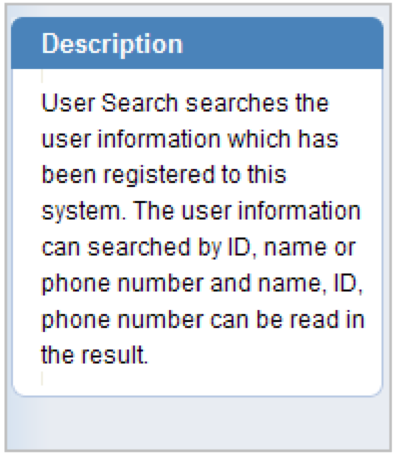
- User Information
  - Personal information configuration
- Alarm
  - Alarm event configuration
- User Search
  - User search using search keyword
- Call Forwarding
  - Call forwarding configuration
- Speed Dial
  - Speed dial configuration
- Conference*
  - Configuration of audio, video multiparty conference

Smart Window (2/2)

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







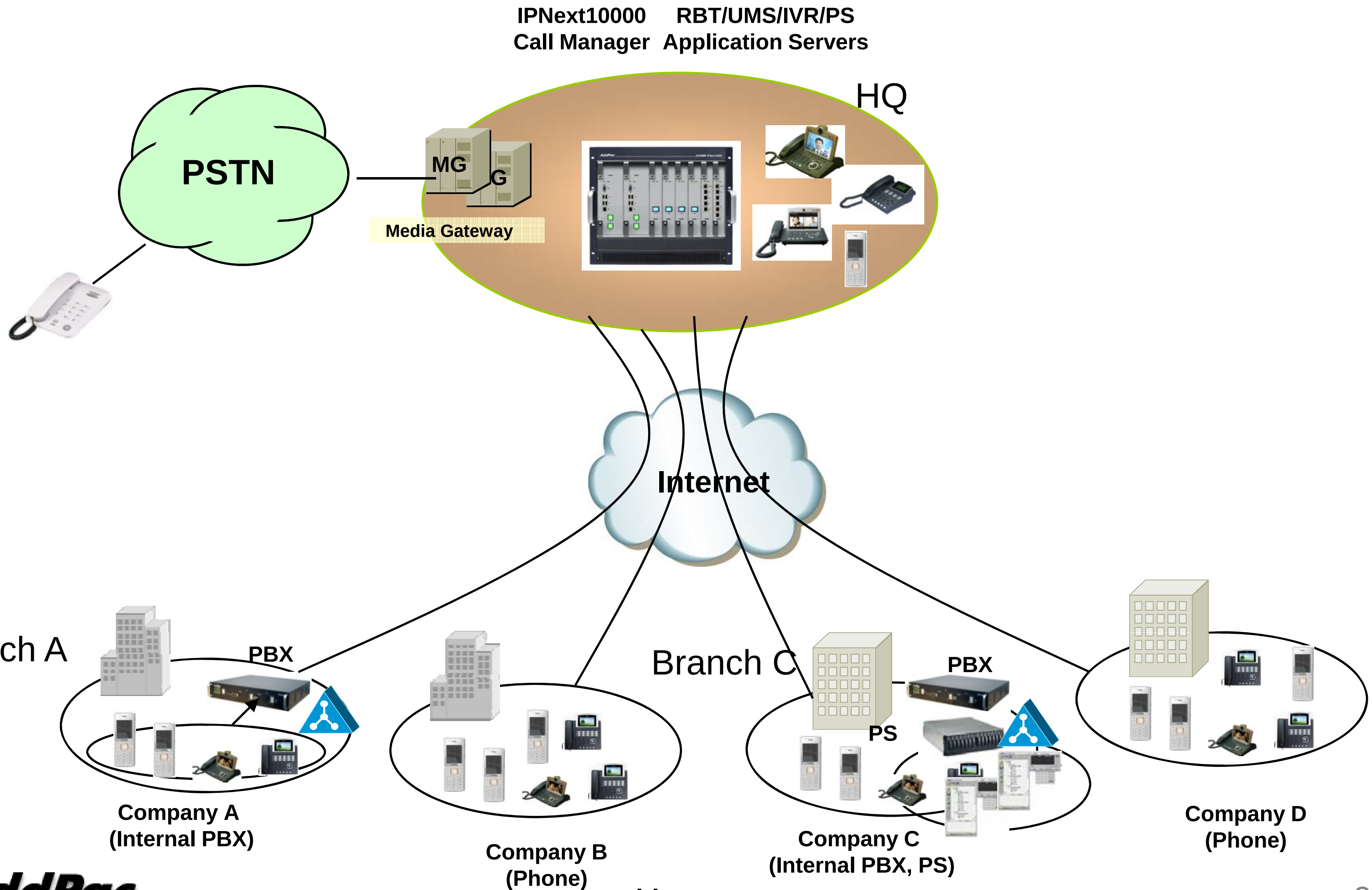
Main Menu

Help Message

Main Layout

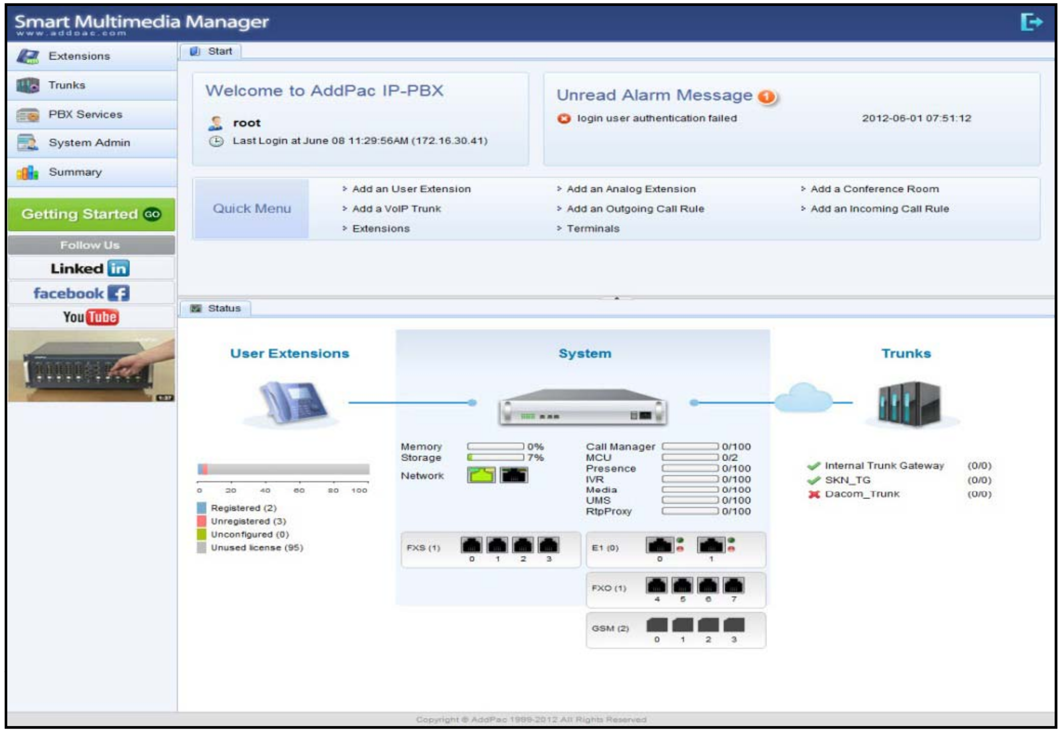
Standard IP-PBX Application

IPNext10000 Large Capacity Call Manager



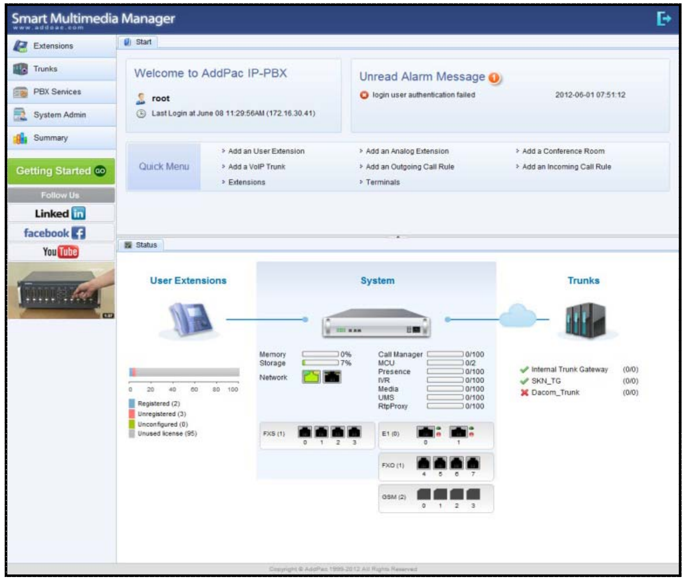
Web Smart Multimedia Manager (WSMM)

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)

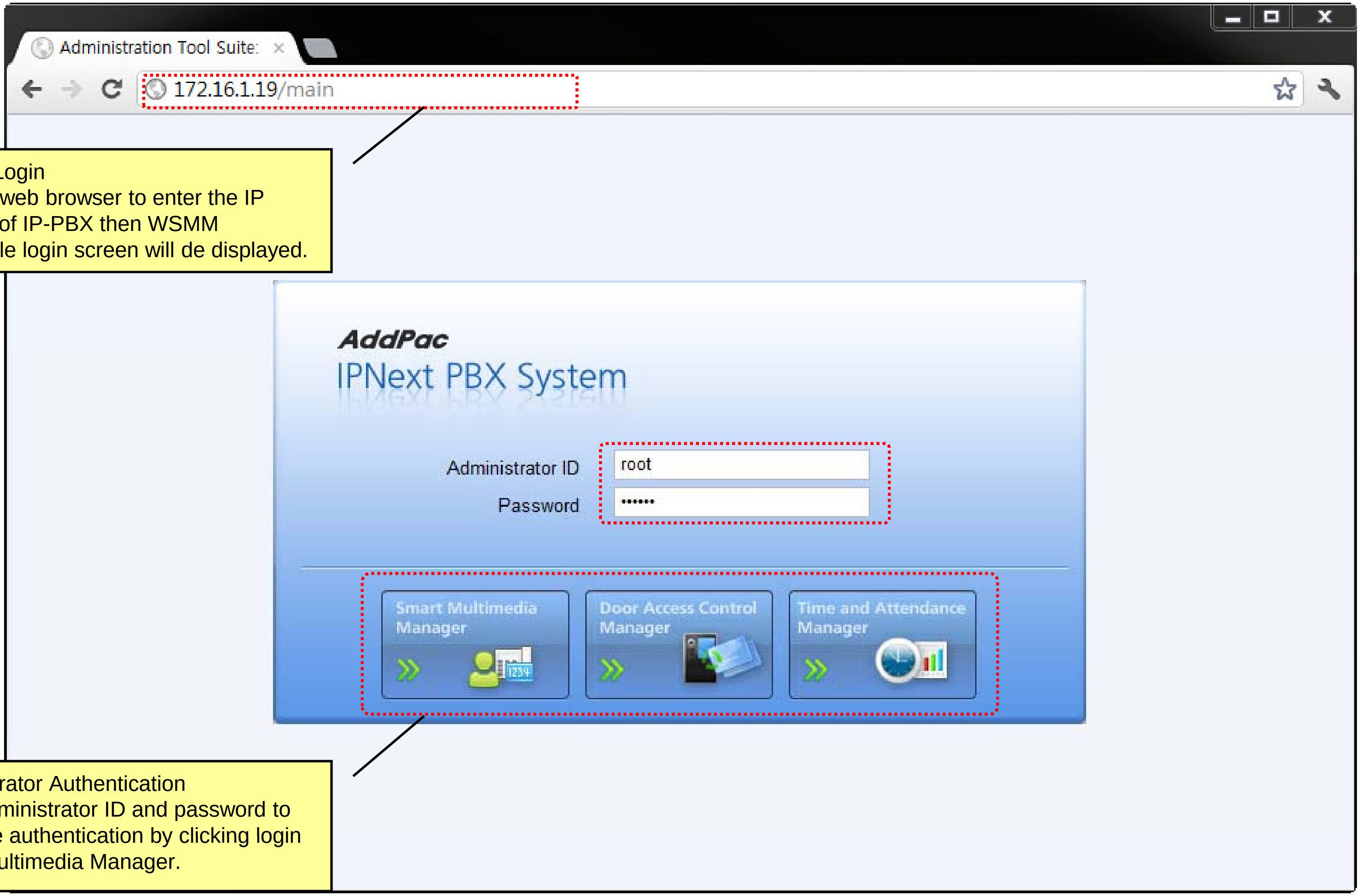
- Simple Menu and Easy Configuration
- Provides Built-In IVR Scenario Editor and Service Configuration
- Provides easy-to-user IP-PBX System API Services and ways to integration with 3rd party systems
- Integrated voice line management such as FXS, FXO, E1, GSM, 3G
- User portal to configure personal 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,...)

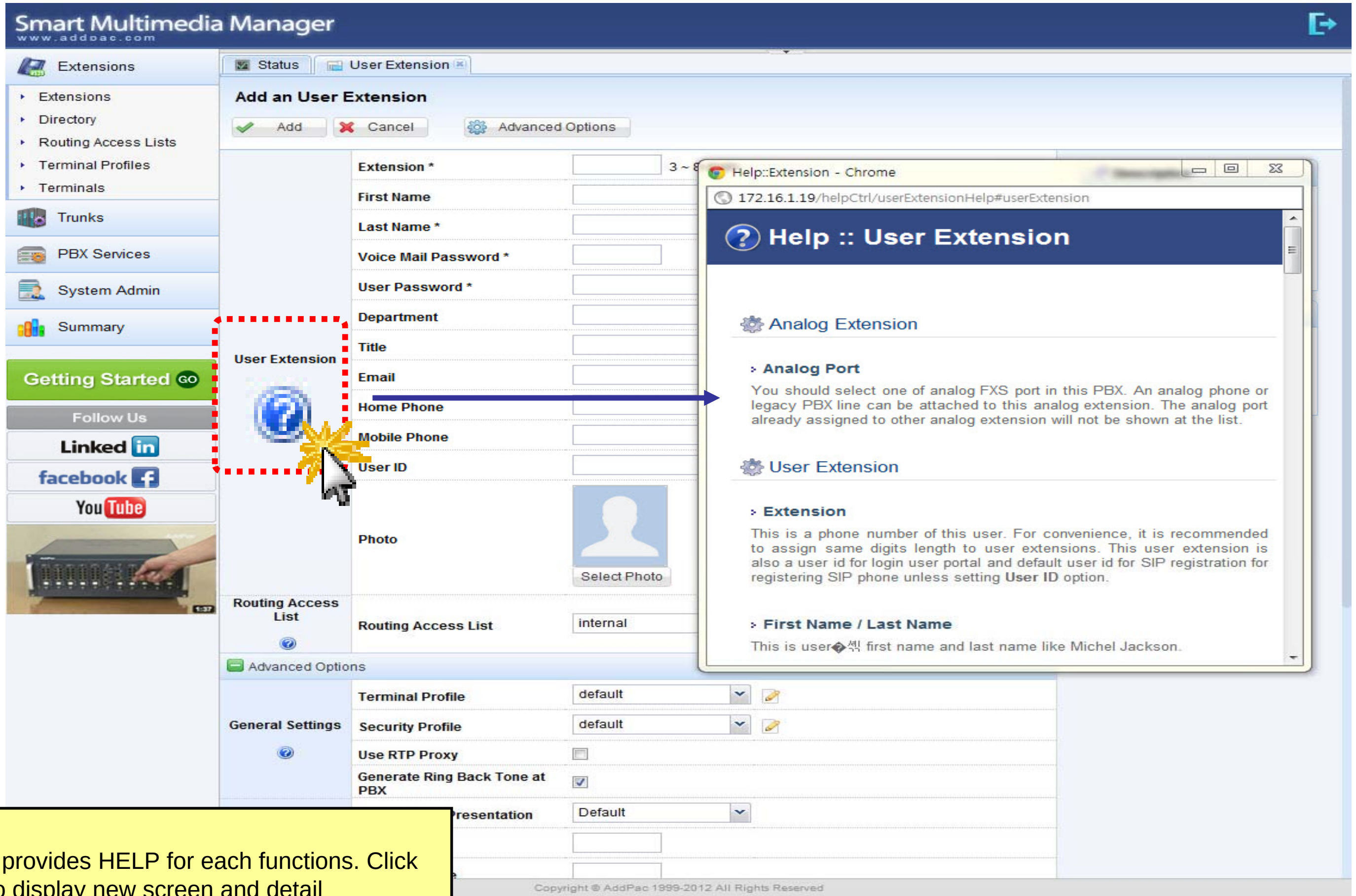
Login



WSMM Login
Execute web browser to enter the IP address of IP-PBX then WSMM accessible login screen will de displayed.

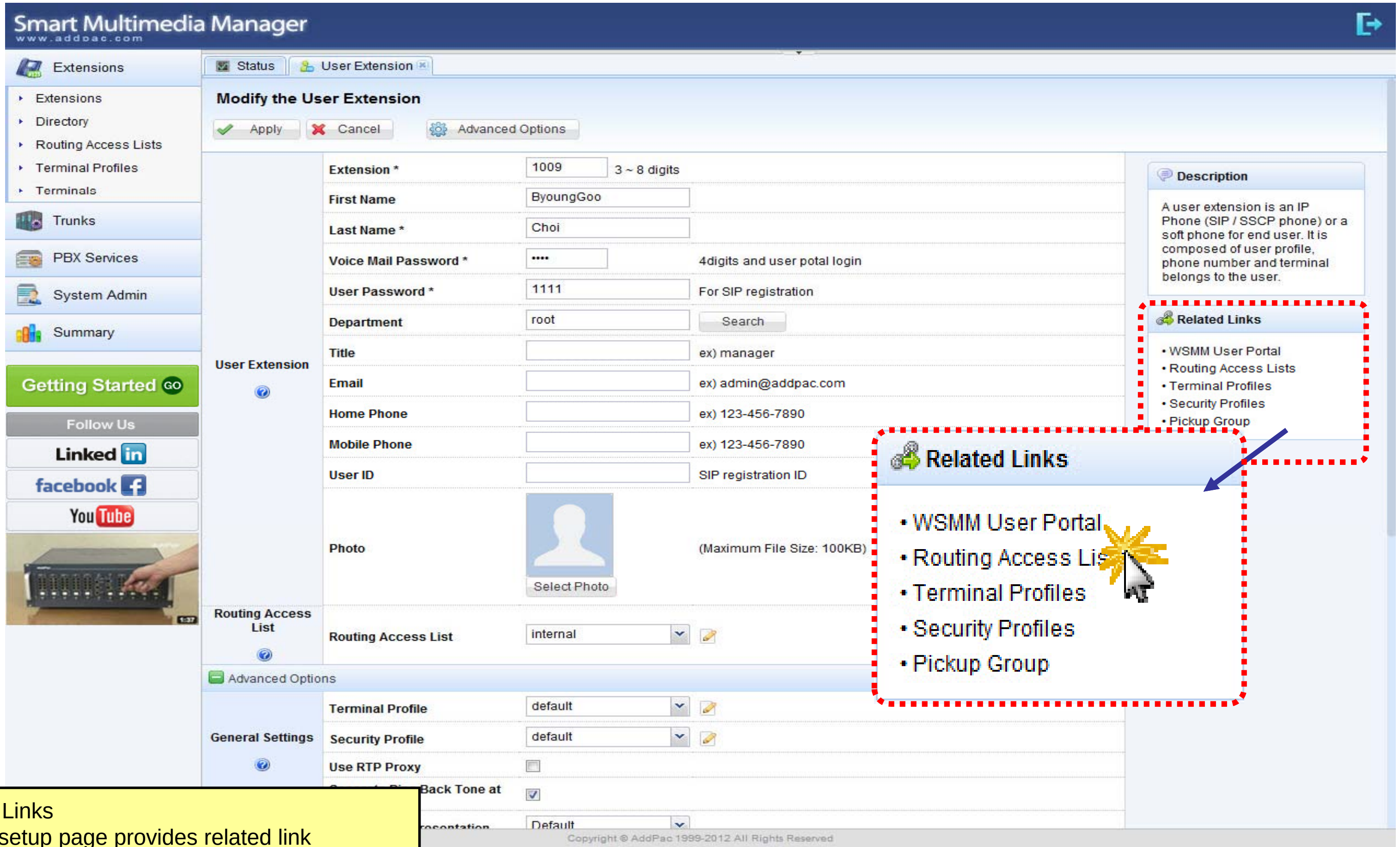
Administrator Authentication
Enter administrator ID and password to complete authentication by clicking login Smart Multimedia Manager.

Help



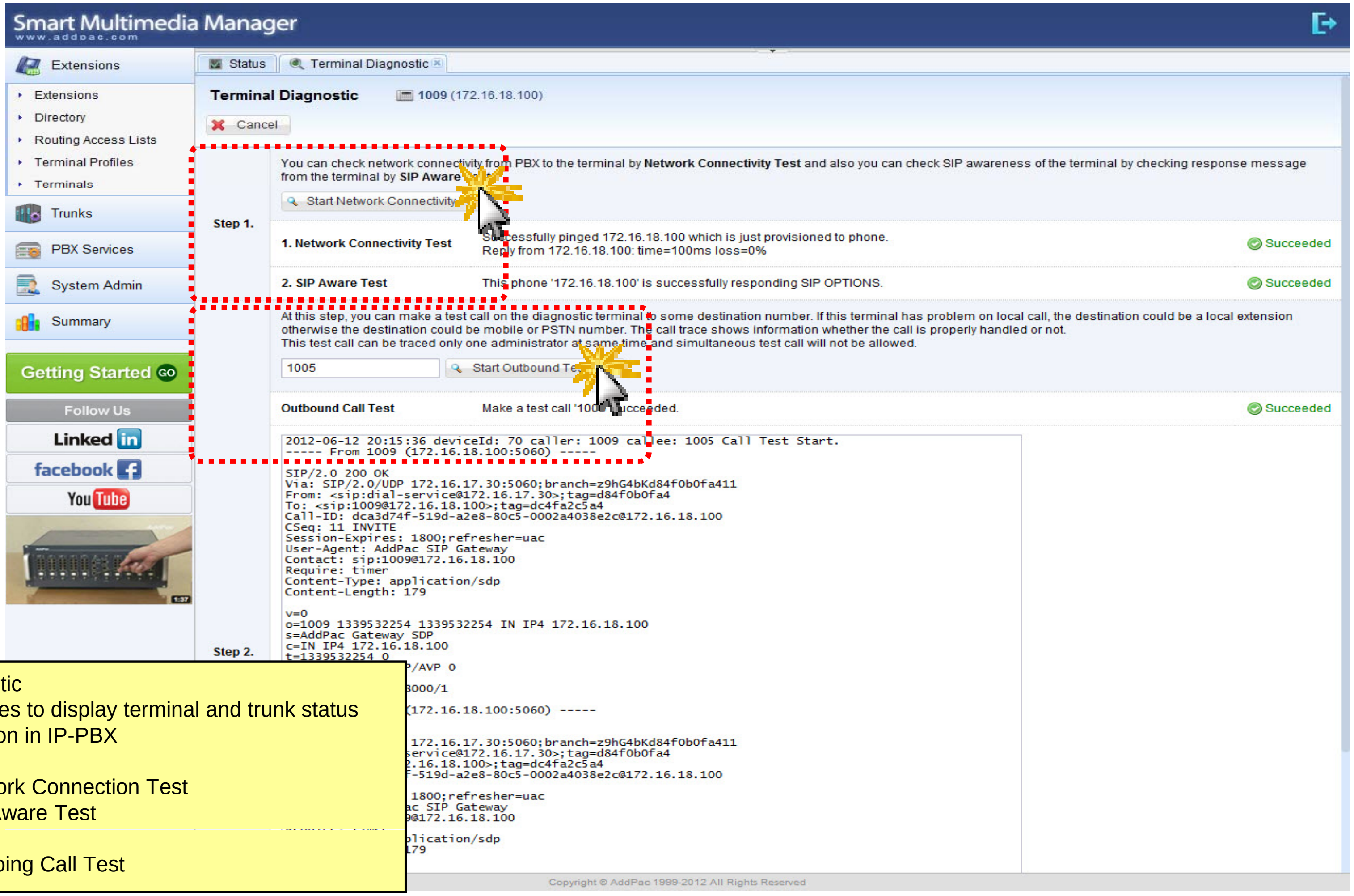
HELP
WSMM provides HELP for each functions. Click HELP to display new screen and detail description of setup is clearly explained in homepage.

Related Links



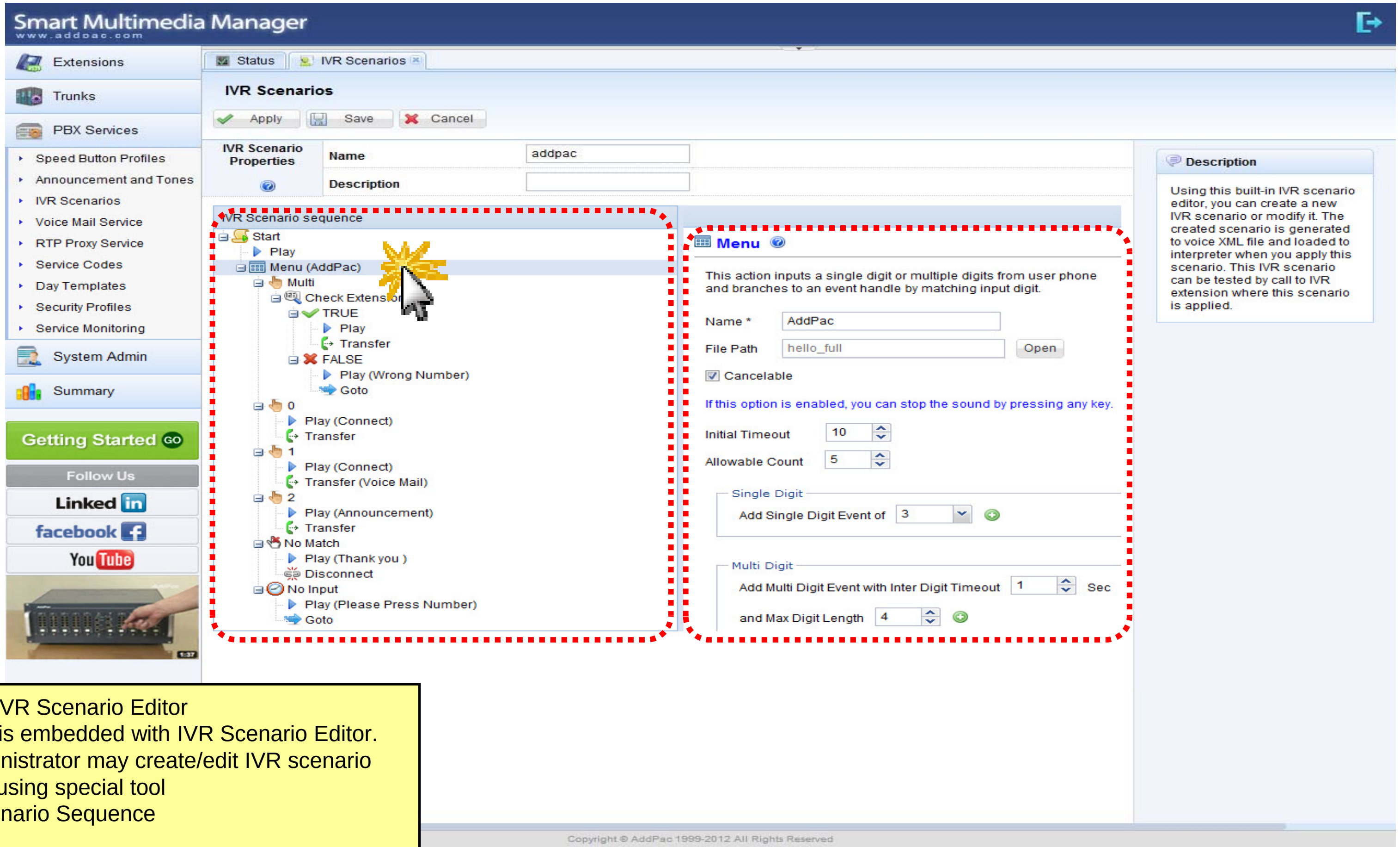
Related Links
WSMM setup page provides related link functions. Related links helps easy operation of IP-PBX by providing link.

Diagnostic



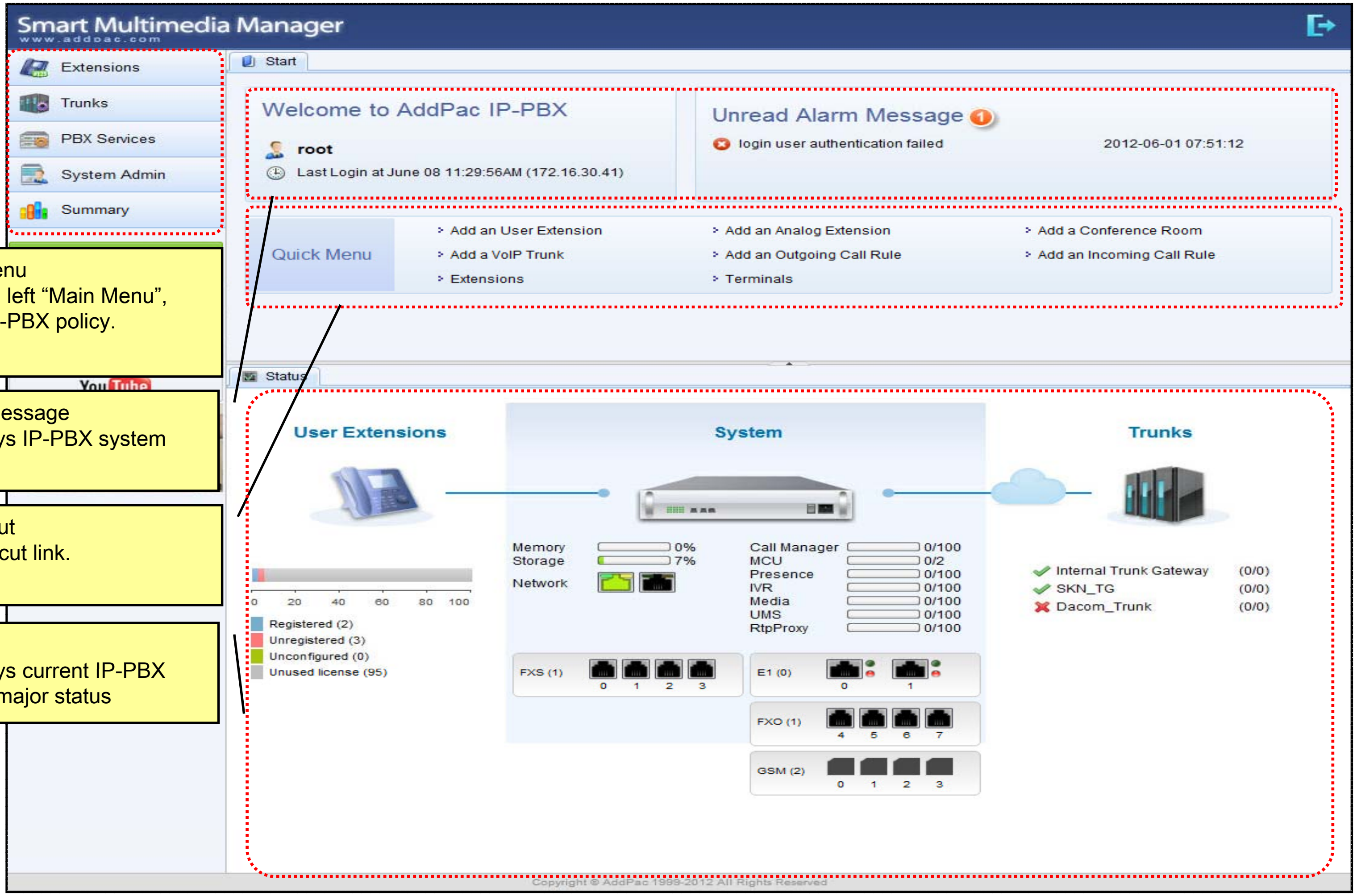
Diagnostic
It provides to display terminal and trunk status inspection in IP-PBX
Step 1.
- Network Connection Test
- SIP Aware Test
Step 2.
- Outgoing Call Test

Built-in IVR Scenario Editor



Built-in IVR Scenario Editor
WSMM is embedded with IVR Scenario Editor.
An administrator may create/edit IVR scenario without using special tool
IVR Scenario Sequence
- Start
- Menu / Play / Transfer / Check Extension / Goto / Disconnect

Main



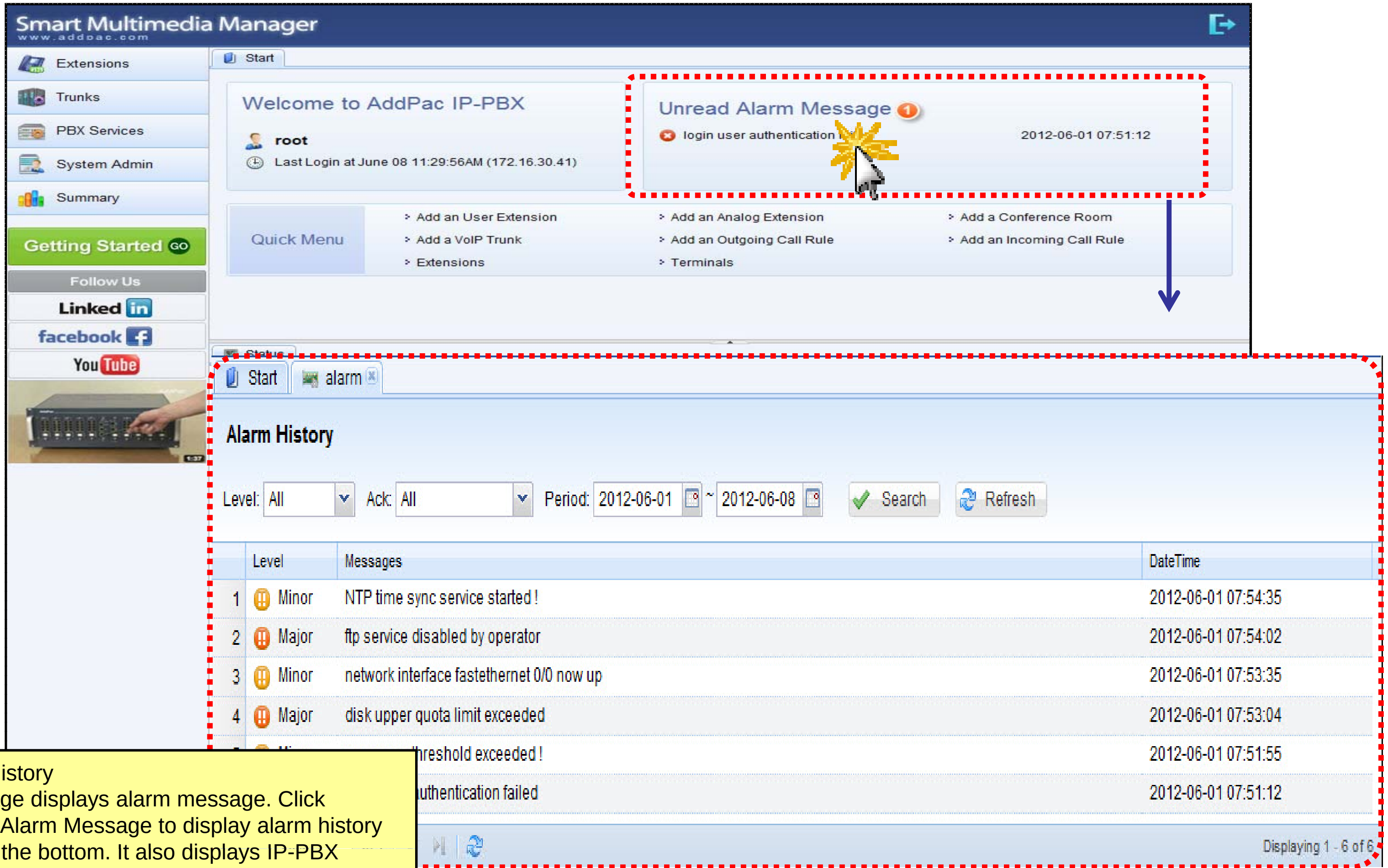
Main Menu
Through left “Main Menu”, setup IP-PBX policy.

Alarm Message
It displays IP-PBX system errors

Short Cut
A short cut link.

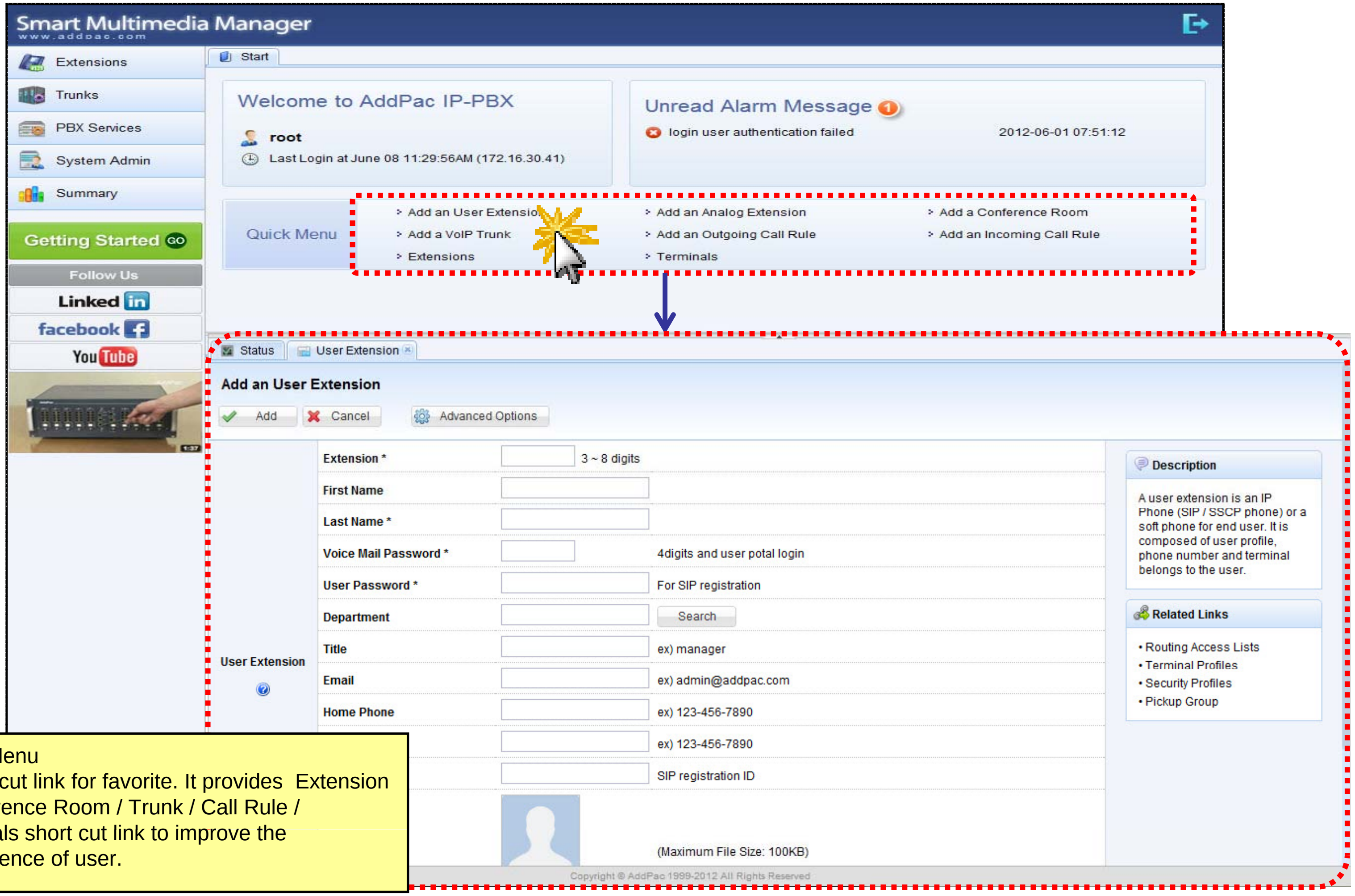
Status
It displays current IP-PBX system major status

Main - Alarm History



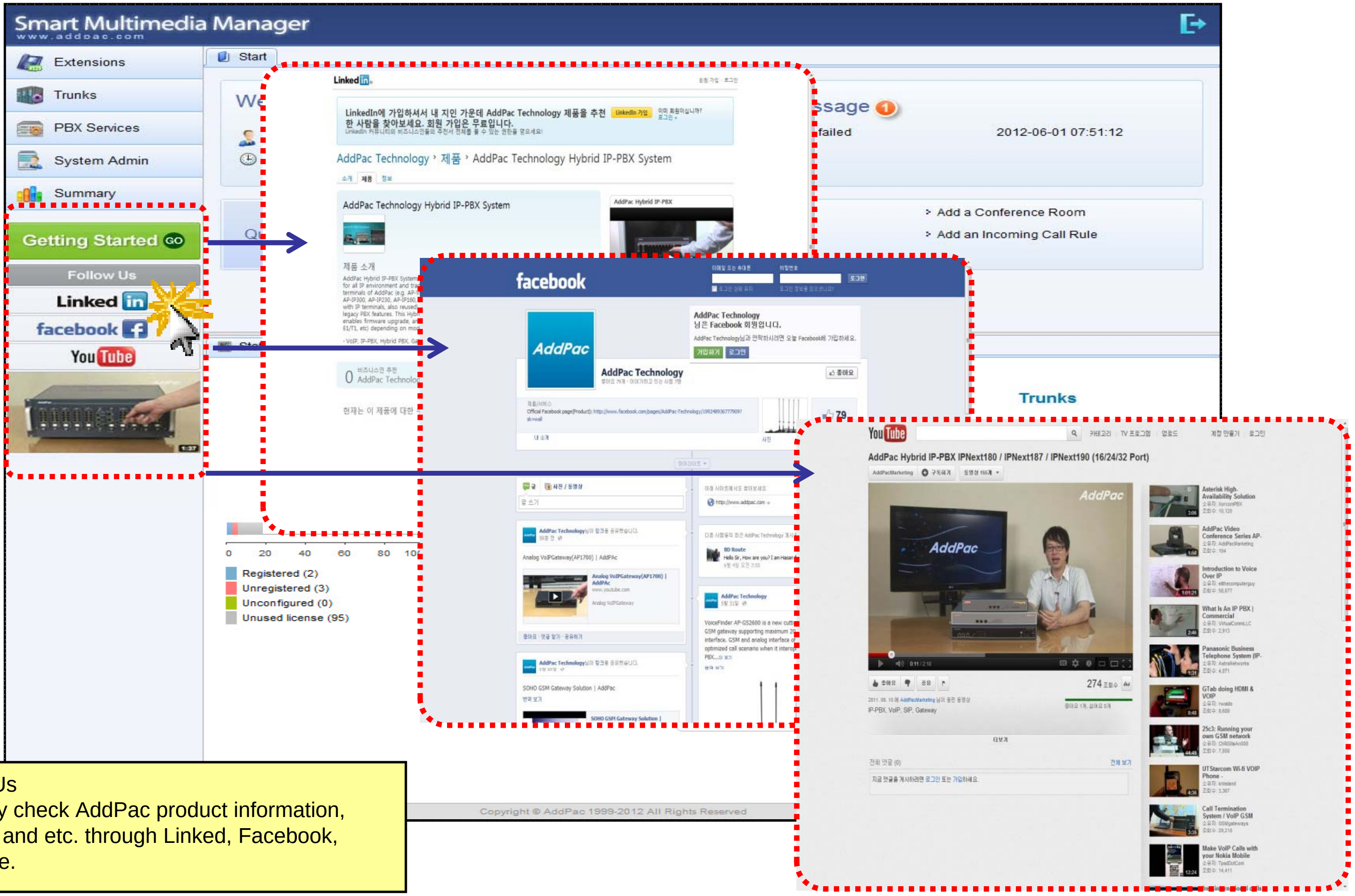
Alarm History
Main page displays alarm message. Click Unread Alarm Message to display alarm history page at the bottom. It also displays IP-PBX system errors.

Main – Quick Menu



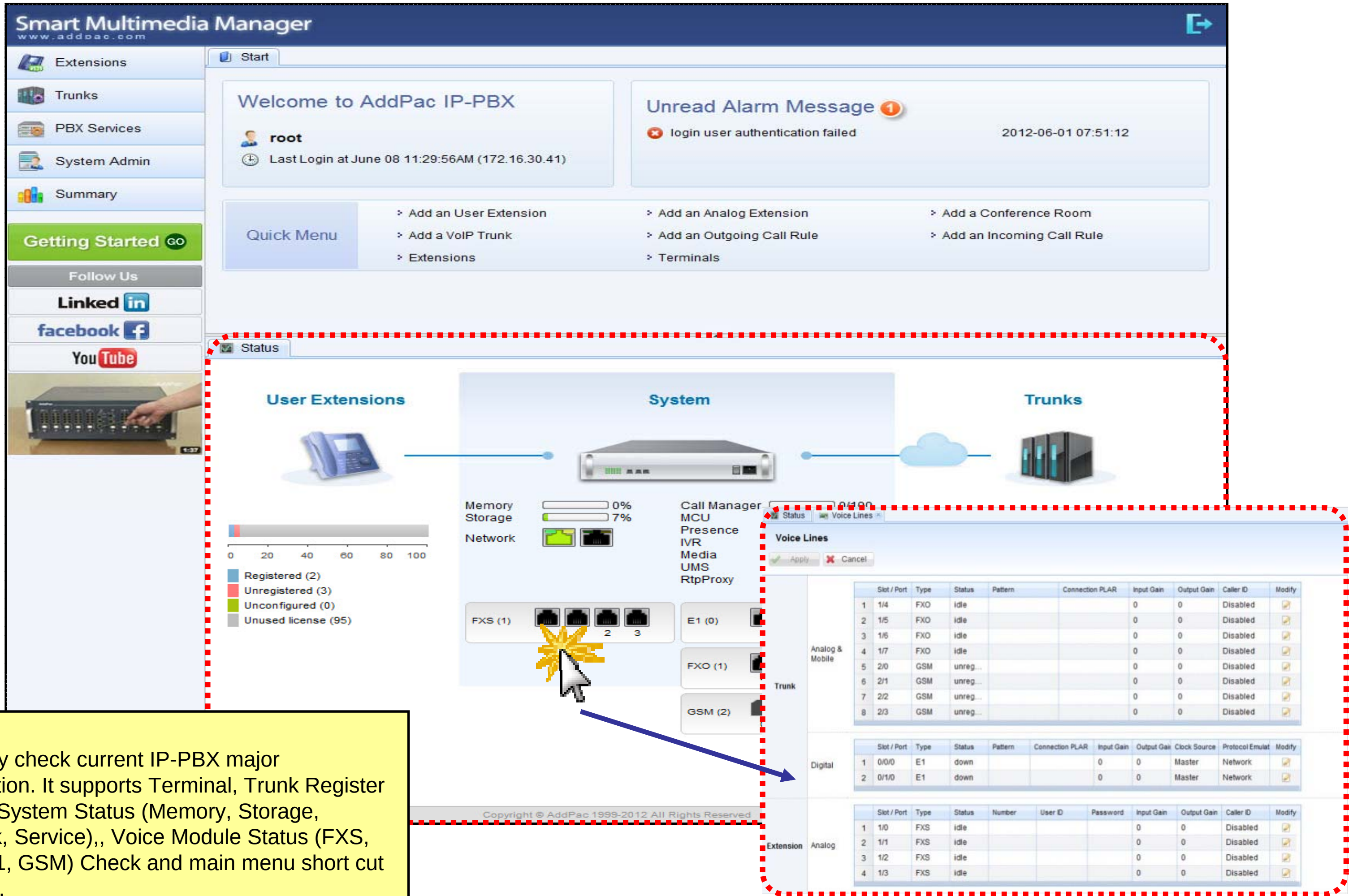
Quick Menu
A short cut link for favorite. It provides Extension / Conference Room / Trunk / Call Rule / Terminals short cut link to improve the convenience of user.

Main – Follow Us



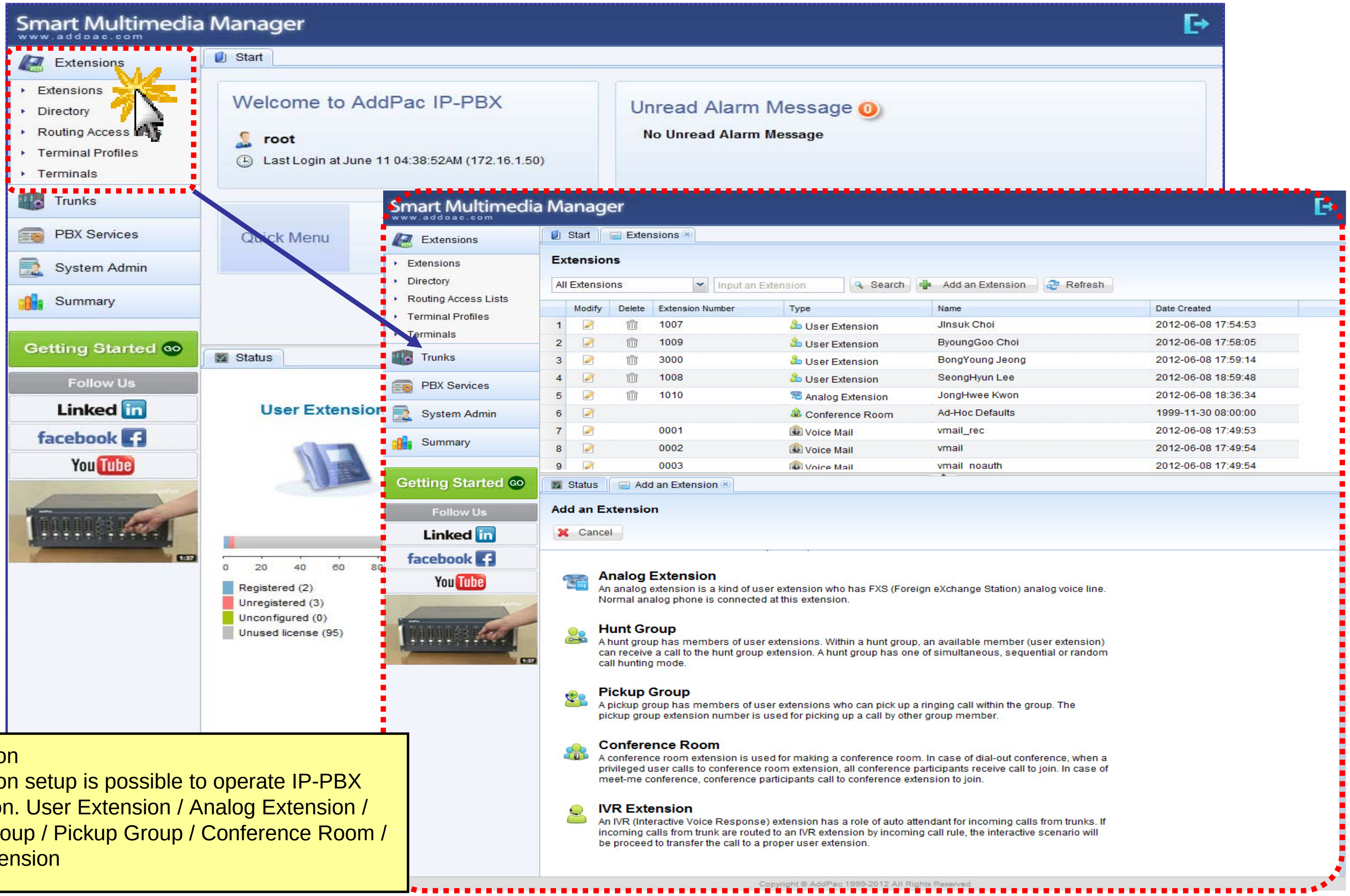
Follow Us
You may check AddPac product information, solution and etc. through Linked, Facebook, YouTube.

Main – Status Monitoring



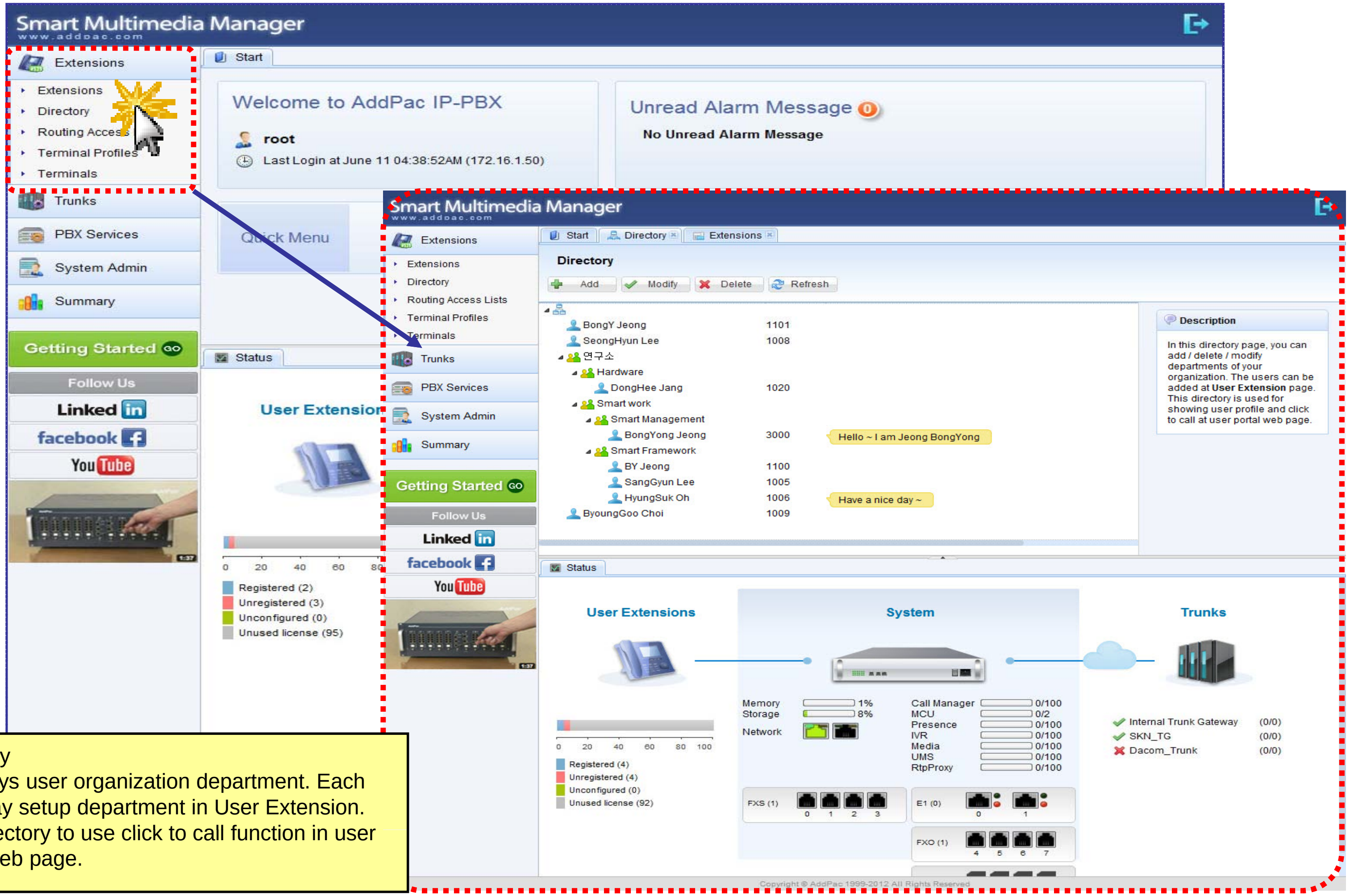
Status
You may check current IP-PBX major information. It supports Terminal, Trunk Register Status, System Status (Memory, Storage, Network, Service),, Voice Module Status (FXS, FXO, E1, GSM) Check and main menu short cut function.

Extension - Extensions



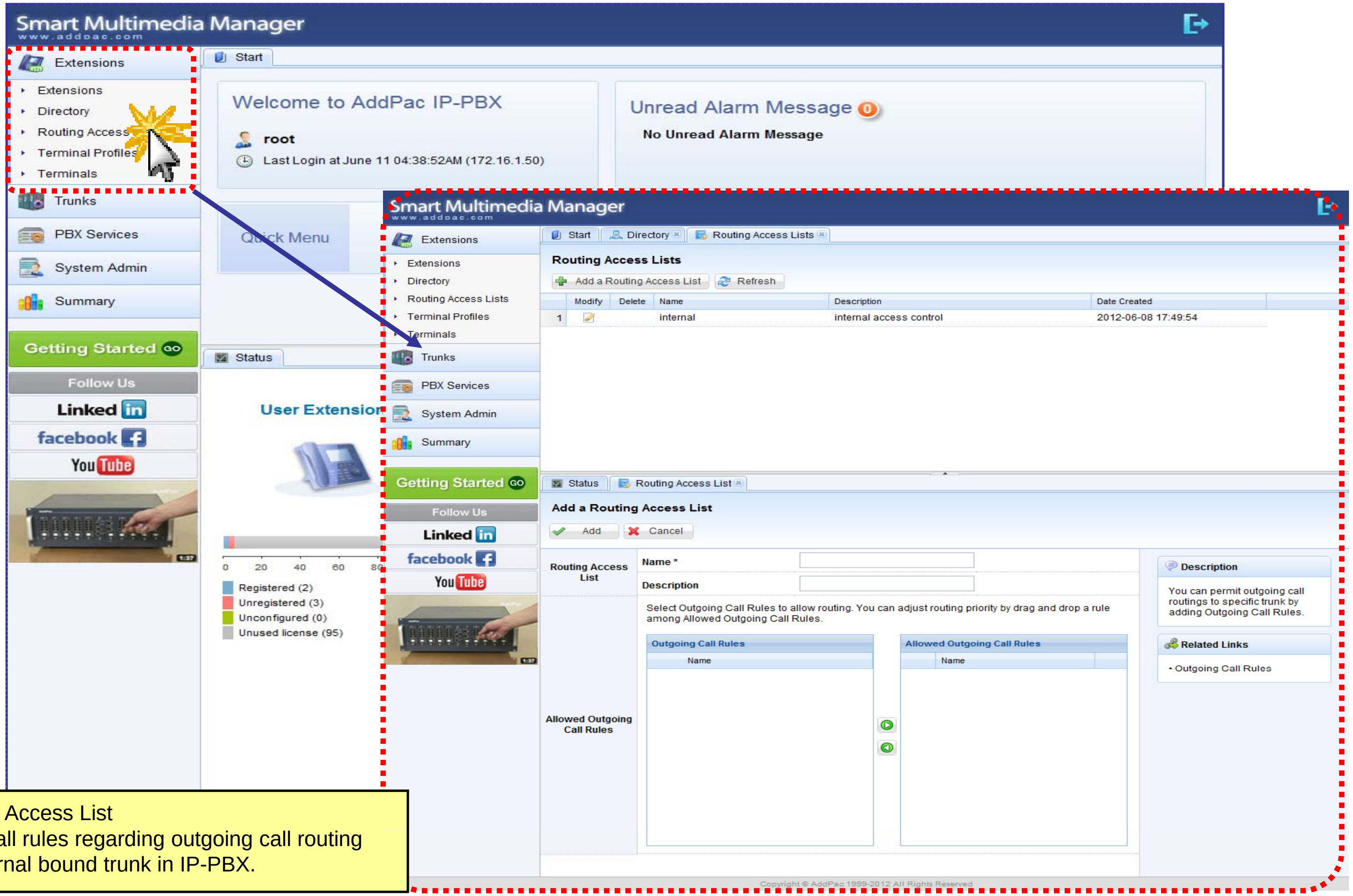
Extension
Extension setup is possible to operate IP-PBX operation. User Extension / Analog Extension / Hunt Group / Pickup Group / Conference Room / IVR Extension

Extension - Directory



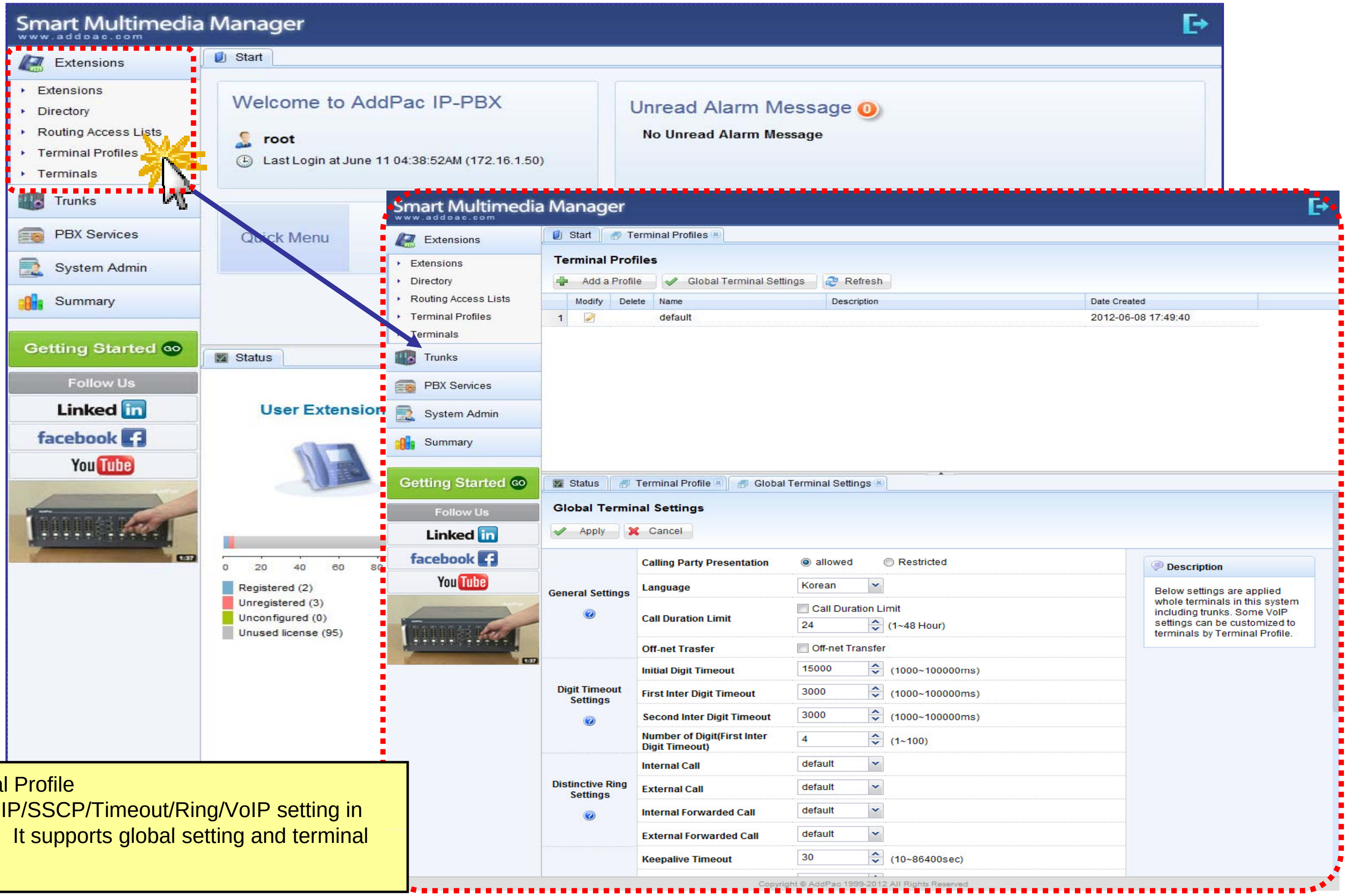
Directory
It displays user organization department. Each user may setup department in User Extension. Use directory to use click to call function in user portal web page.

Extension - Routing Access List



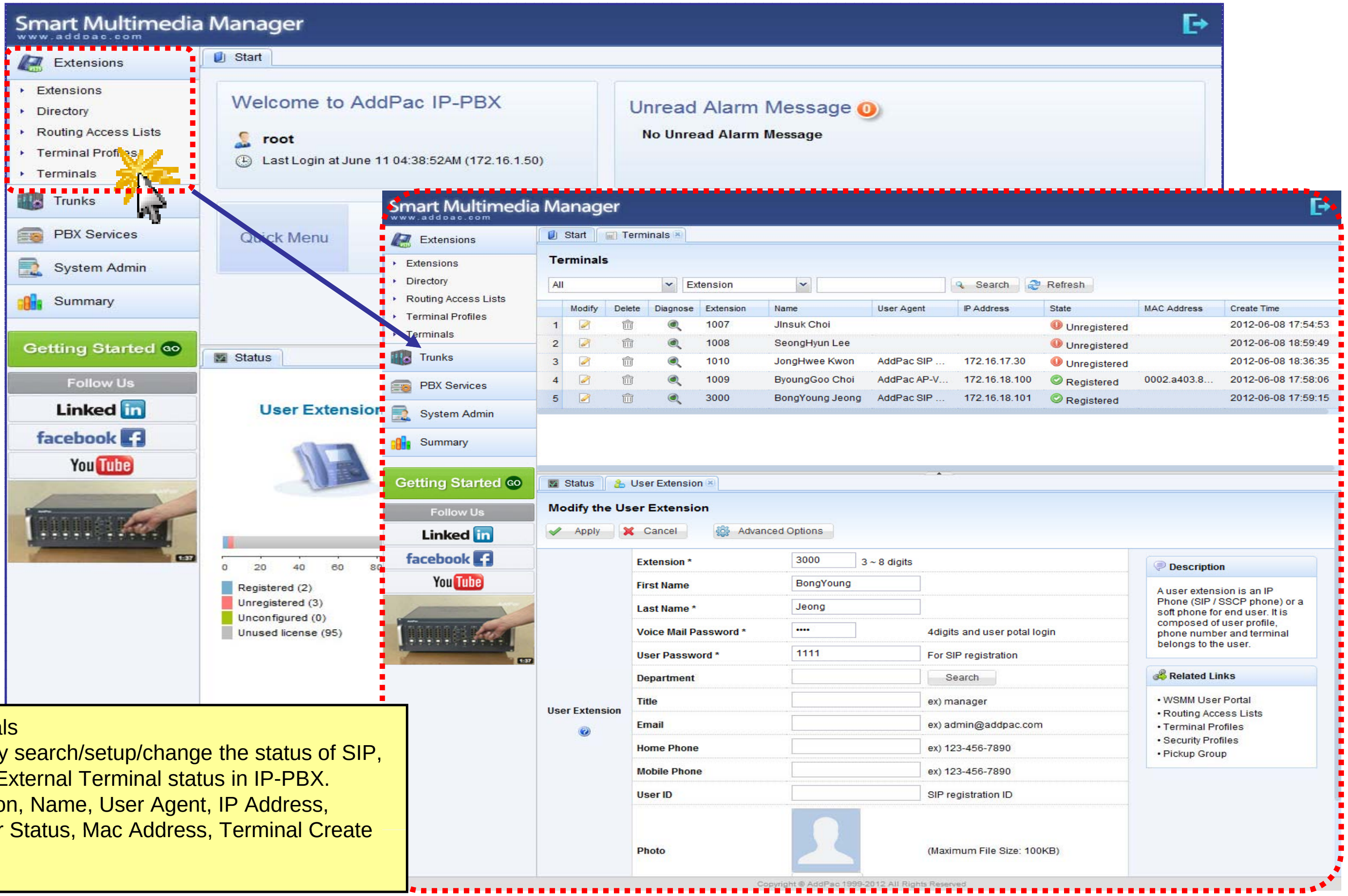
Routing Access List
Apply call rules regarding outgoing call routing for external bound trunk in IP-PBX.

Extension - Terminal Profile



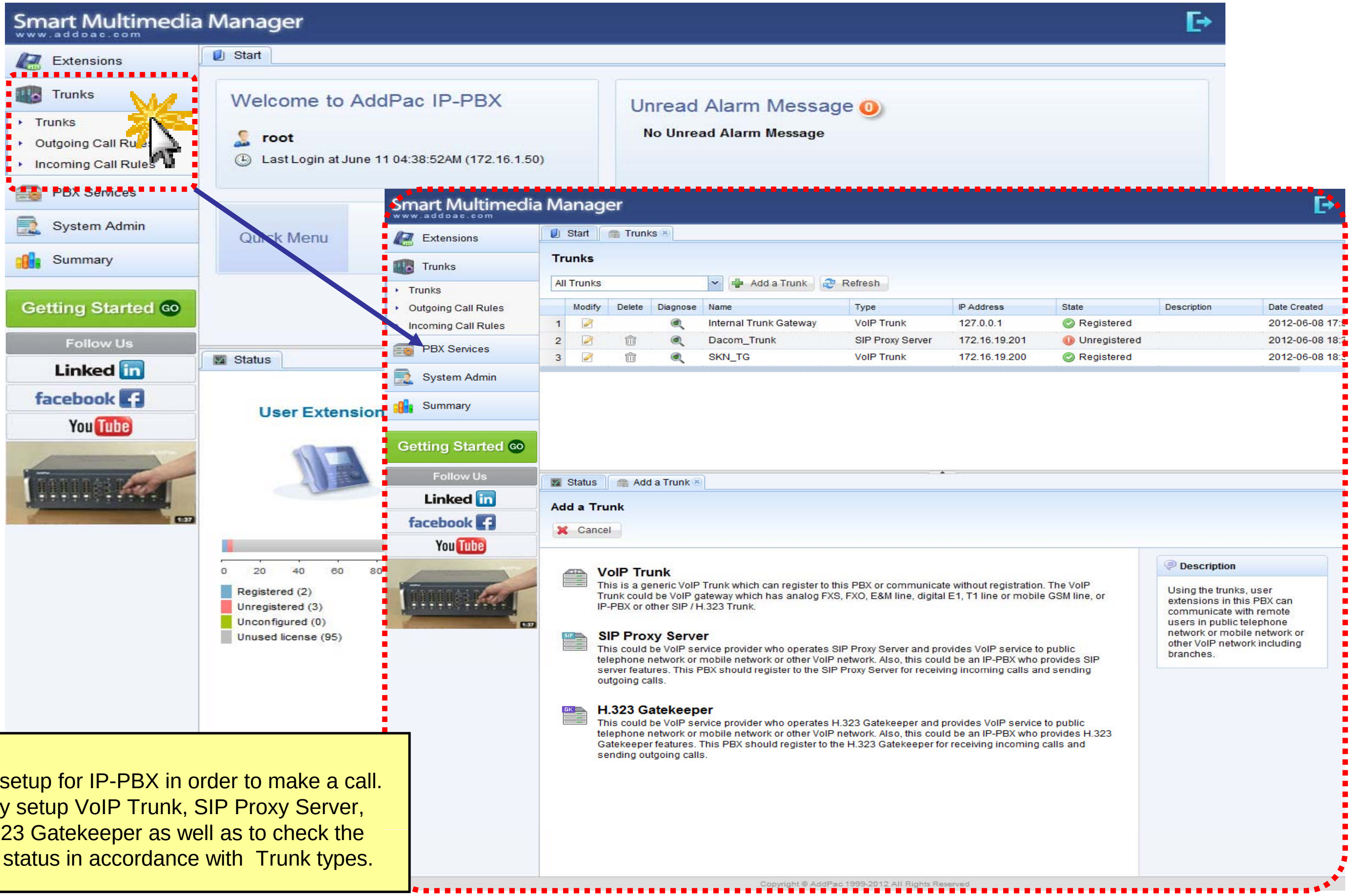
Terminal Profile
Setup SIP/SSCP/Timeout/Ring/VoIP setting in IP-PBX. It supports global setting and terminal profile.

Extension - Terminals



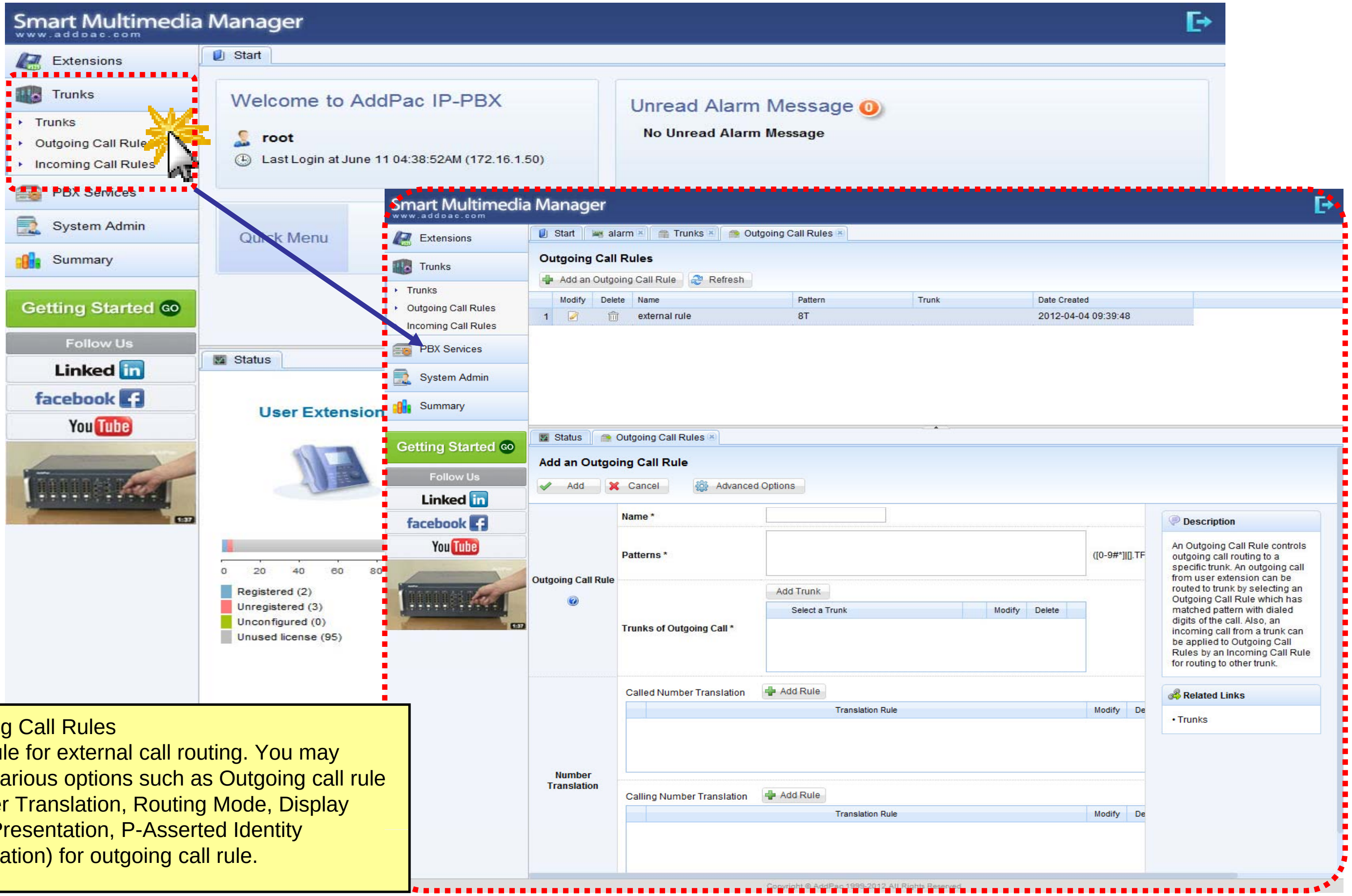
Terminals
You may search/setup/change the status of SIP, SSCP, External Terminal status in IP-PBX.
Extension, Name, User Agent, IP Address, Register Status, Mac Address, Terminal Create Time

Trunk - Trunks



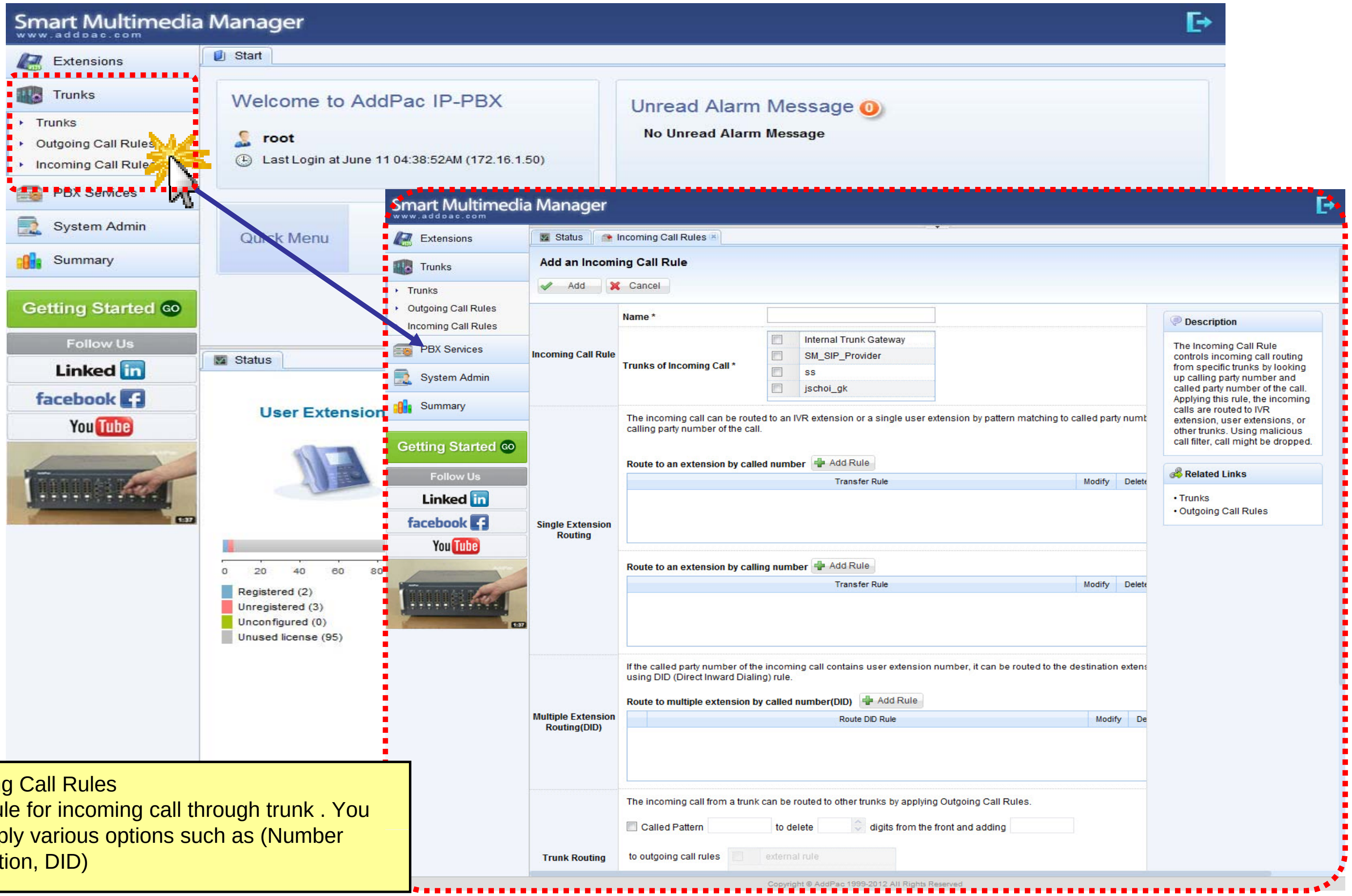
Trunk
A trunk setup for IP-PBX in order to make a call. You may setup VoIP Trunk, SIP Proxy Server, and H.323 Gatekeeper as well as to check the register status in accordance with Trunk types.

Trunk - Outgoing Call Rules



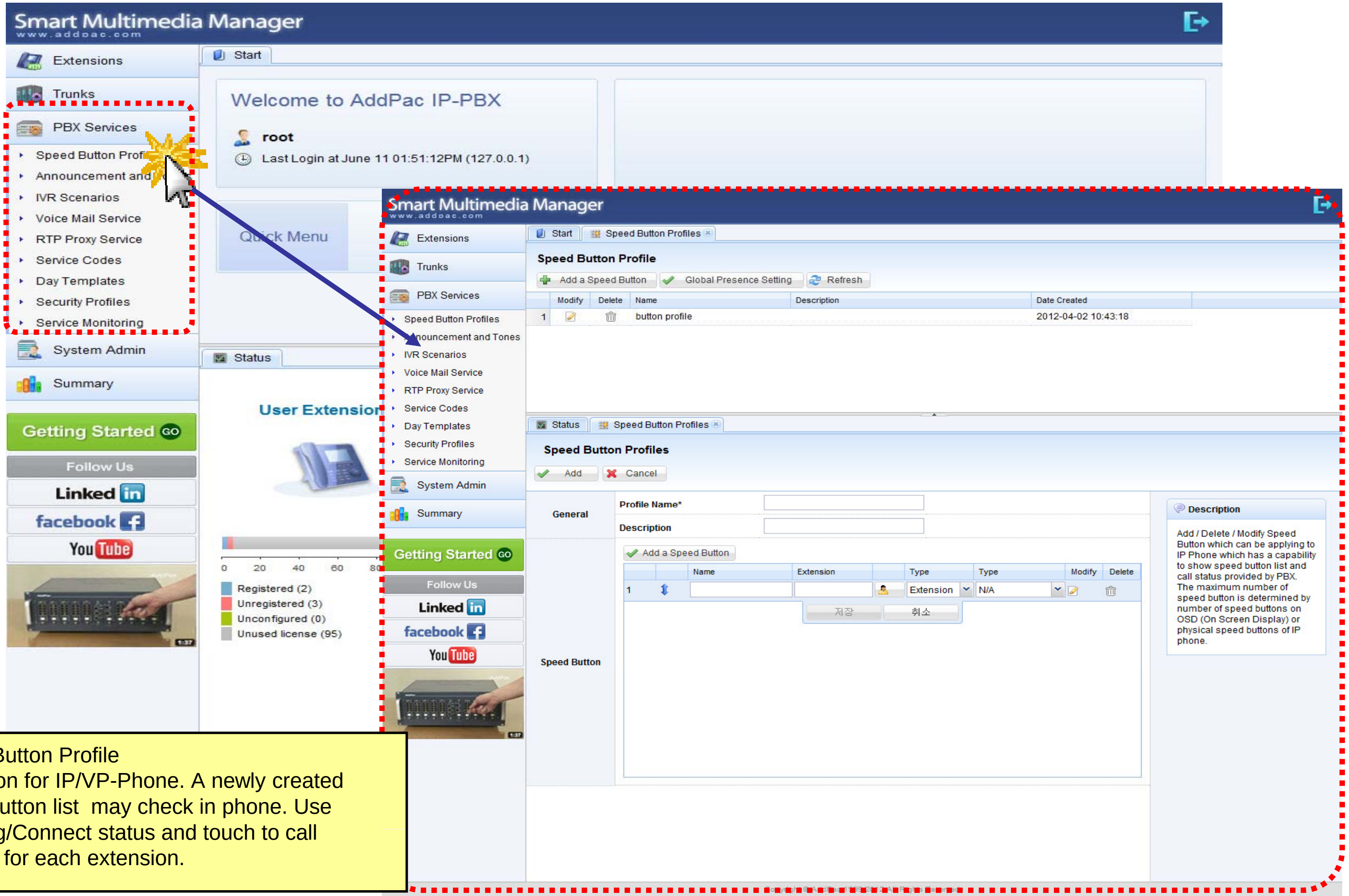
Outgoing Call Rules
A call rule for external call routing. You may apply various options such as Outgoing call rule (Number Translation, Routing Mode, Display Name Presentation, P-Asserted Identity Presentation) for outgoing call rule.

Trunk - Incoming Call Rules



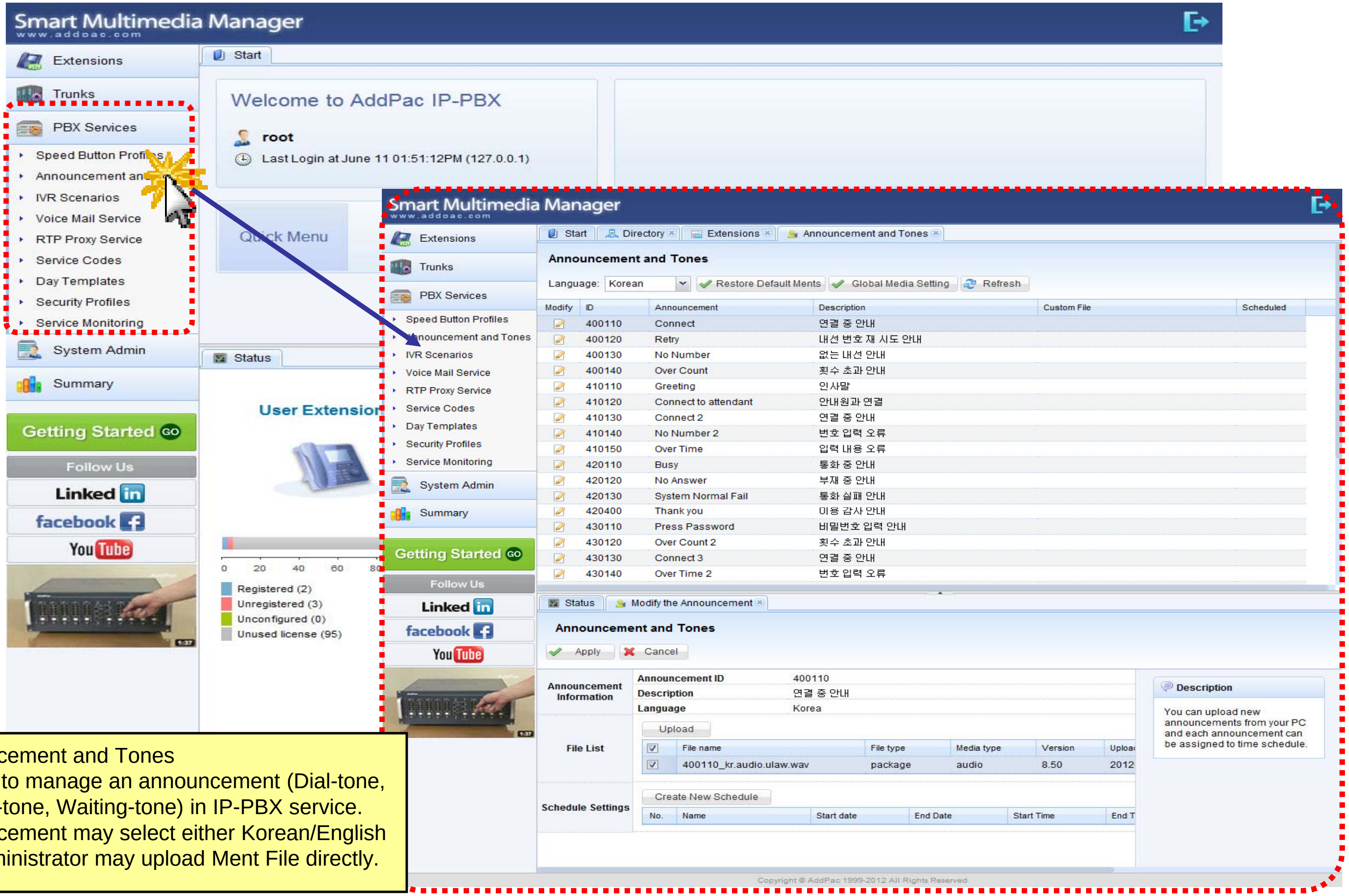
Incoming Call Rules
A call rule for incoming call through trunk . You may apply various options such as (Number Translation, DID)

PBX Service - Speed Button Profiles



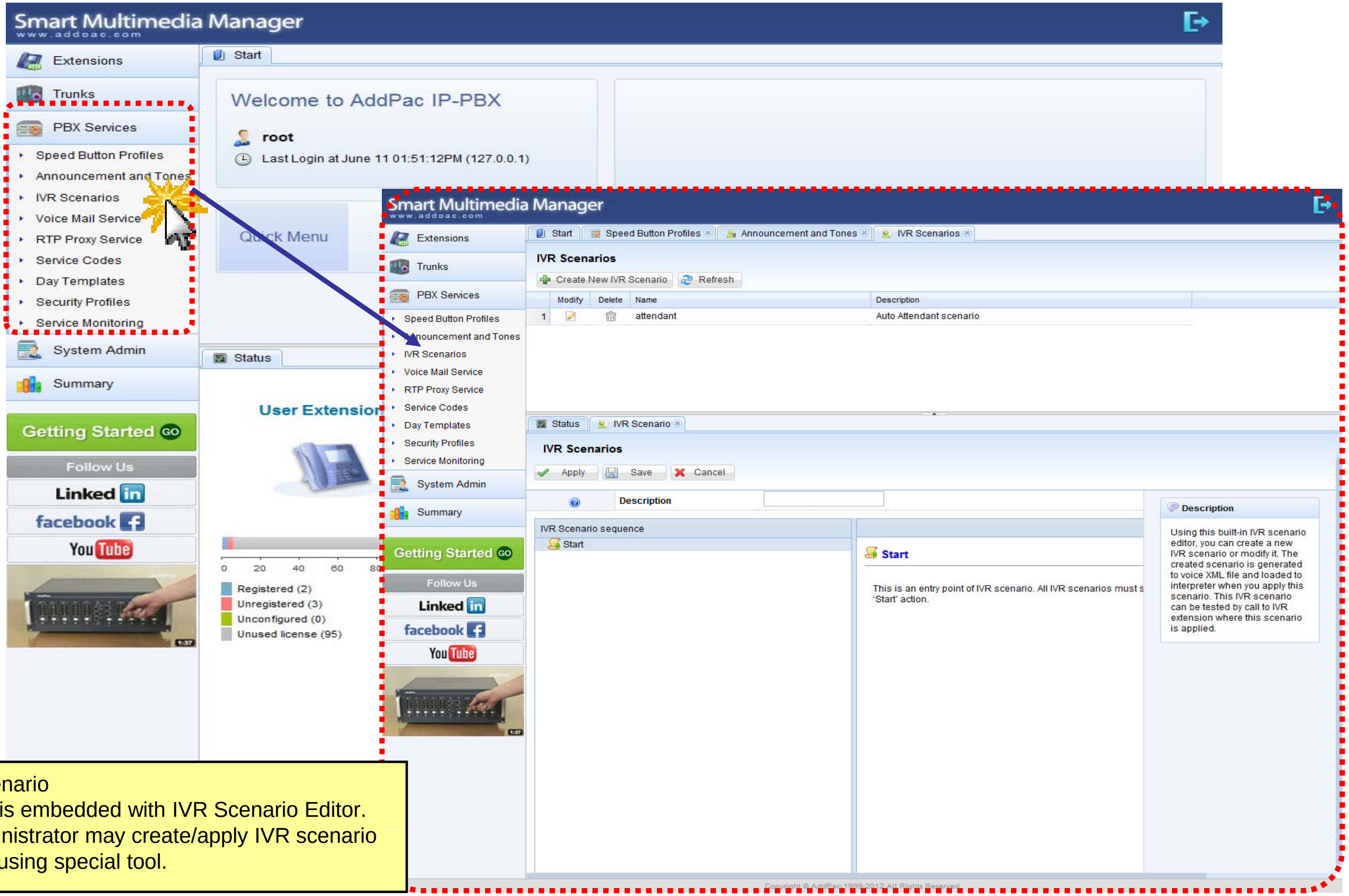
Speed Button Profile
A function for IP/VP-Phone. A newly created speed button list may check in phone. Use idle/Ring/Connect status and touch to call function for each extension.

PBX Service - Announcement and Tones



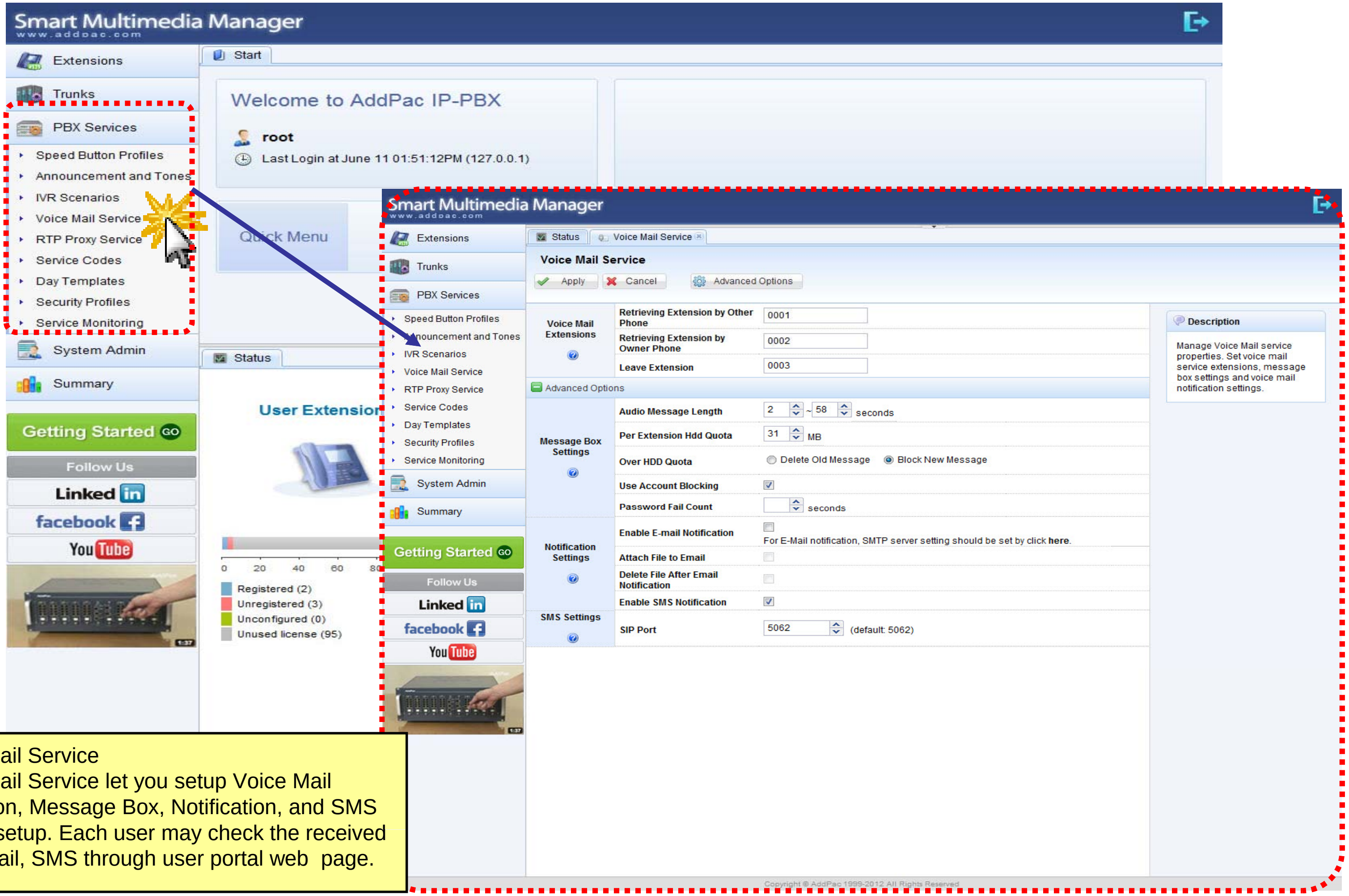
Announcement and Tones
A setup to manage an announcement (Dial-tone, Consult-tone, Waiting-tone) in IP-PBX service.
Announcement may select either Korean/English and administrator may upload Ment File directly.

PBX Service - IVR Scenarios



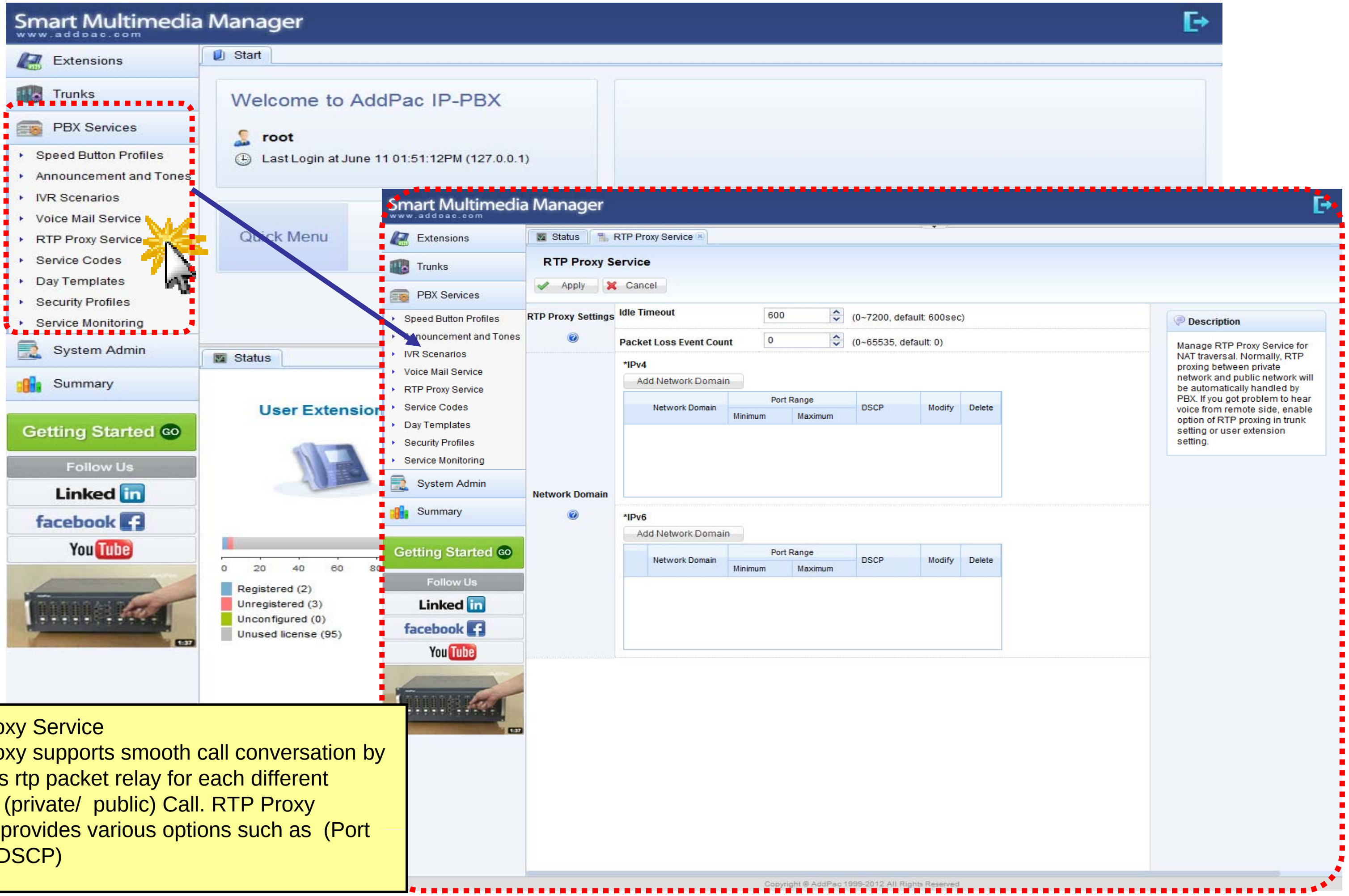
IVR Scenario
WSMM is embedded with IVR Scenario Editor.
An administrator may create/apply IVR scenario without using special tool.

PBX Service - Voice Mail Services



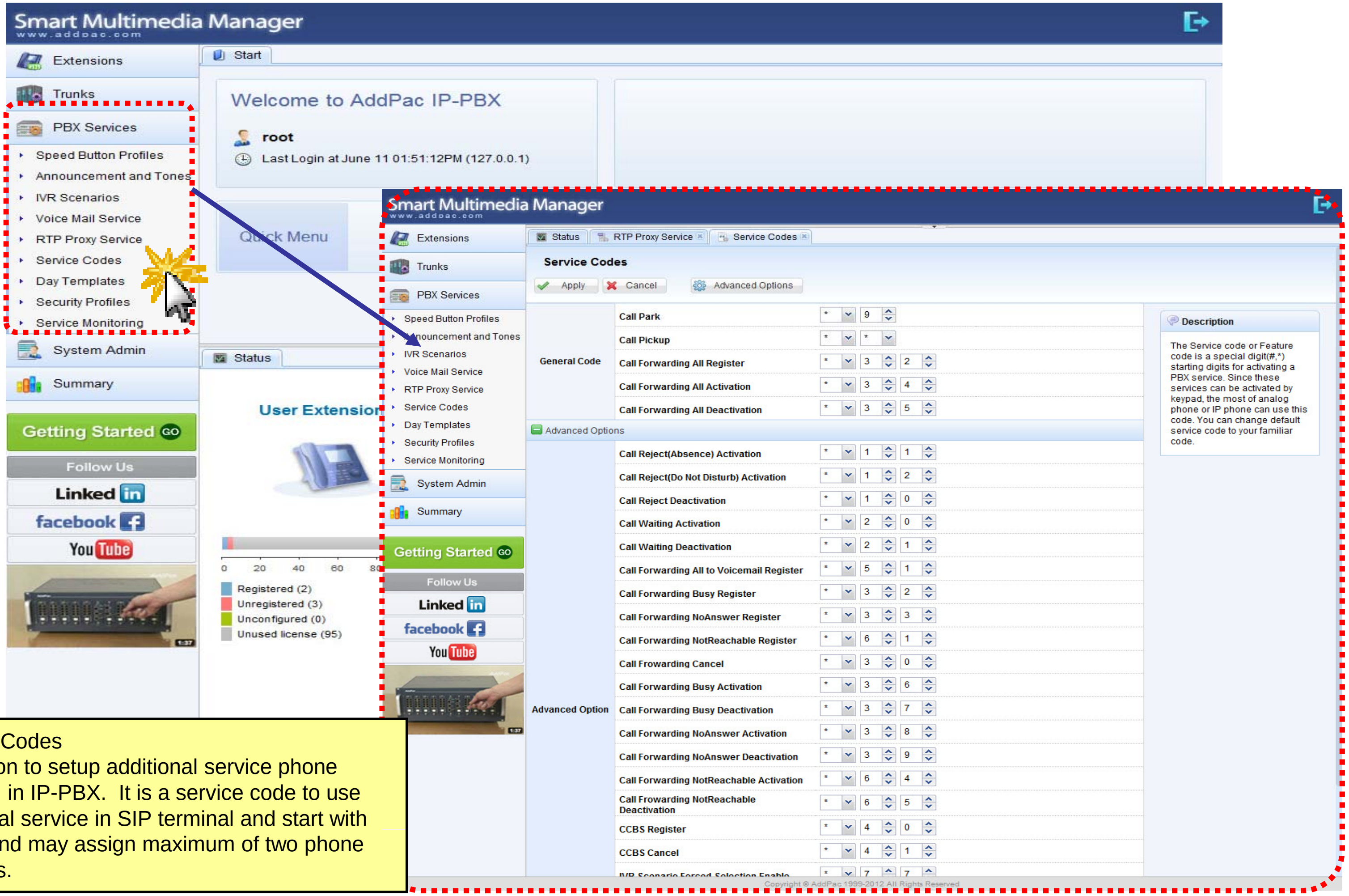
Voice Mail Service
Voice Mail Service let you setup Voice Mail Extension, Message Box, Notification, and SMS related setup. Each user may check the received voice-mail, SMS through user portal web page.

PBX Service - RTP Proxy Service



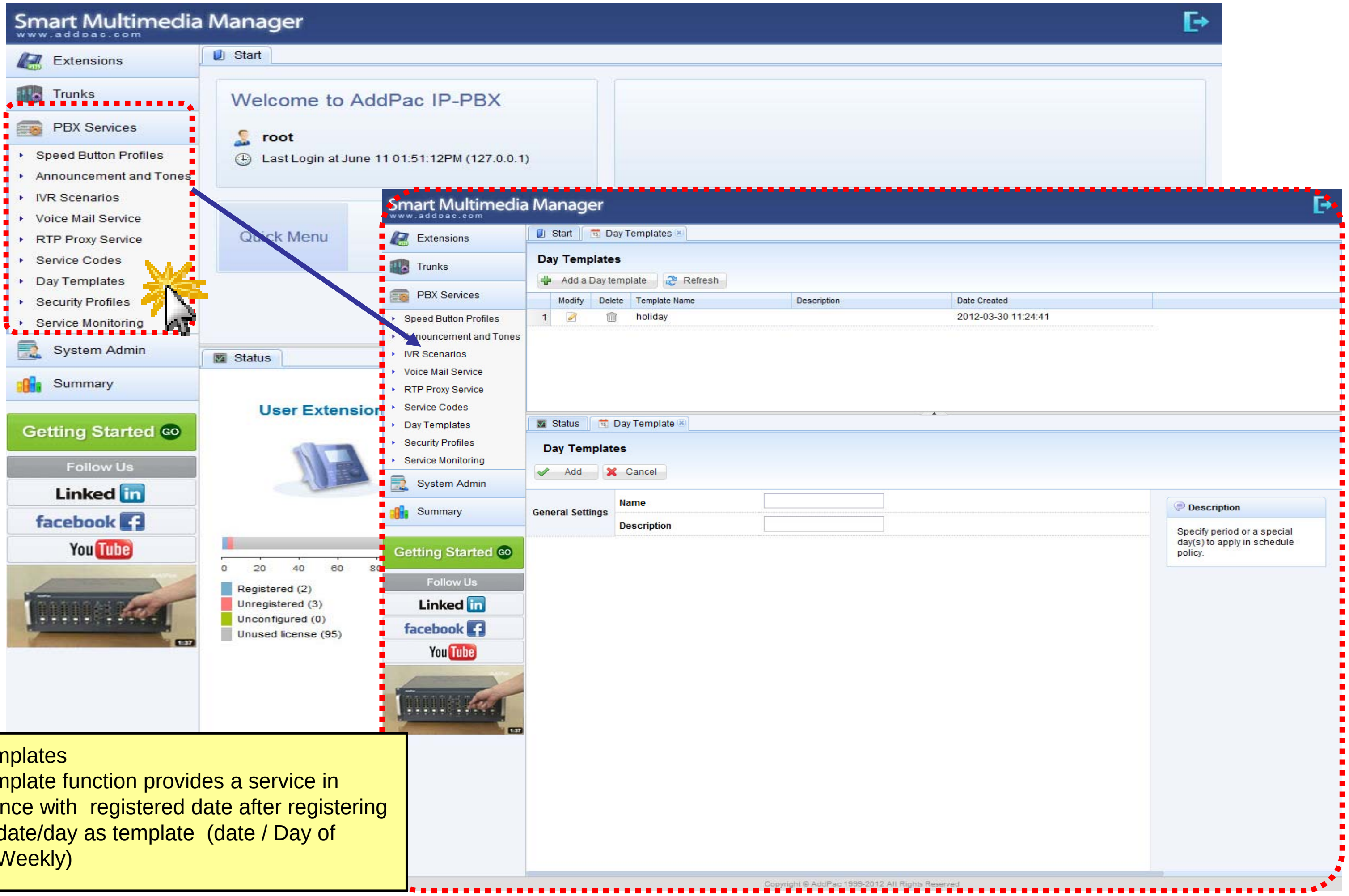
RTP Proxy Service
RTP Proxy supports smooth call conversation by acting as rtp packet relay for each different network (private/ public) Call. RTP Proxy Service provides various options such as (Port range / DSCP)

PBX Service - Service Codes



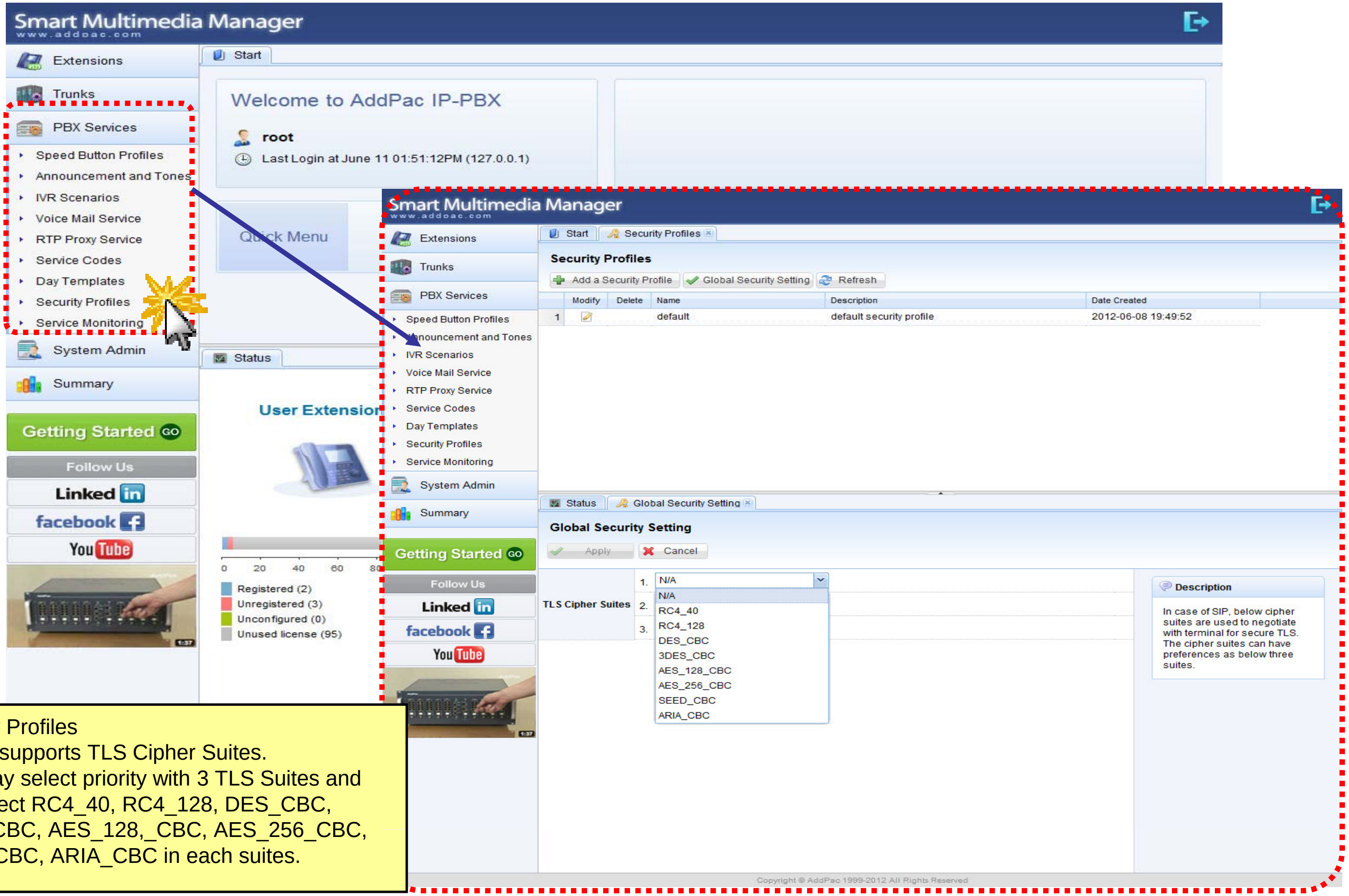
Service Codes
A function to setup additional service phone number in IP-PBX. It is a service code to use additional service in SIP terminal and start with # or * and may assign maximum of two phone numbers.

PBX Service - Day Templates



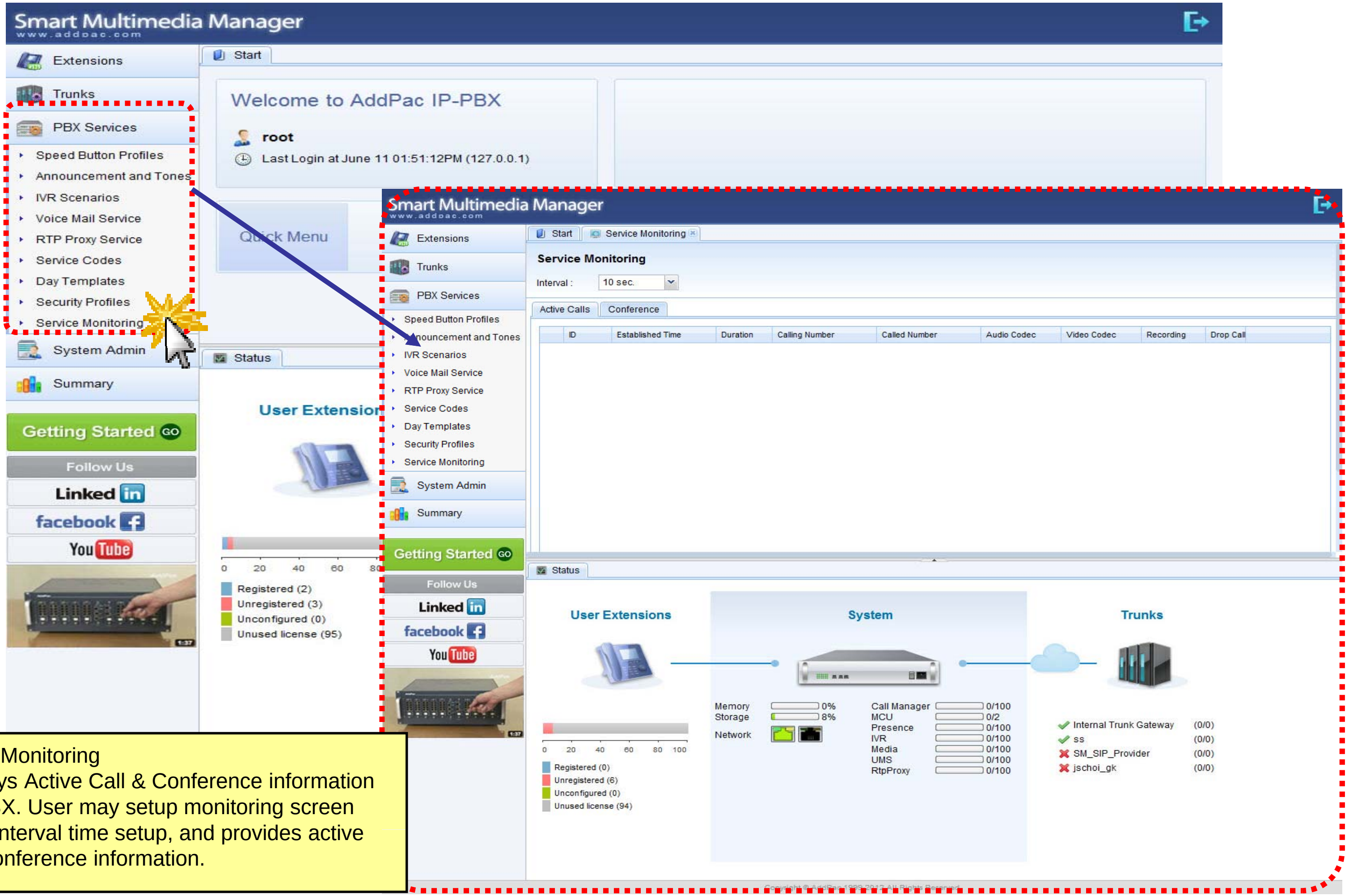
Day Templates
Day Template function provides a service in accordance with registered date after registering special date/day as template (date / Day of Week / Weekly)

PBX Service - Security Profiles



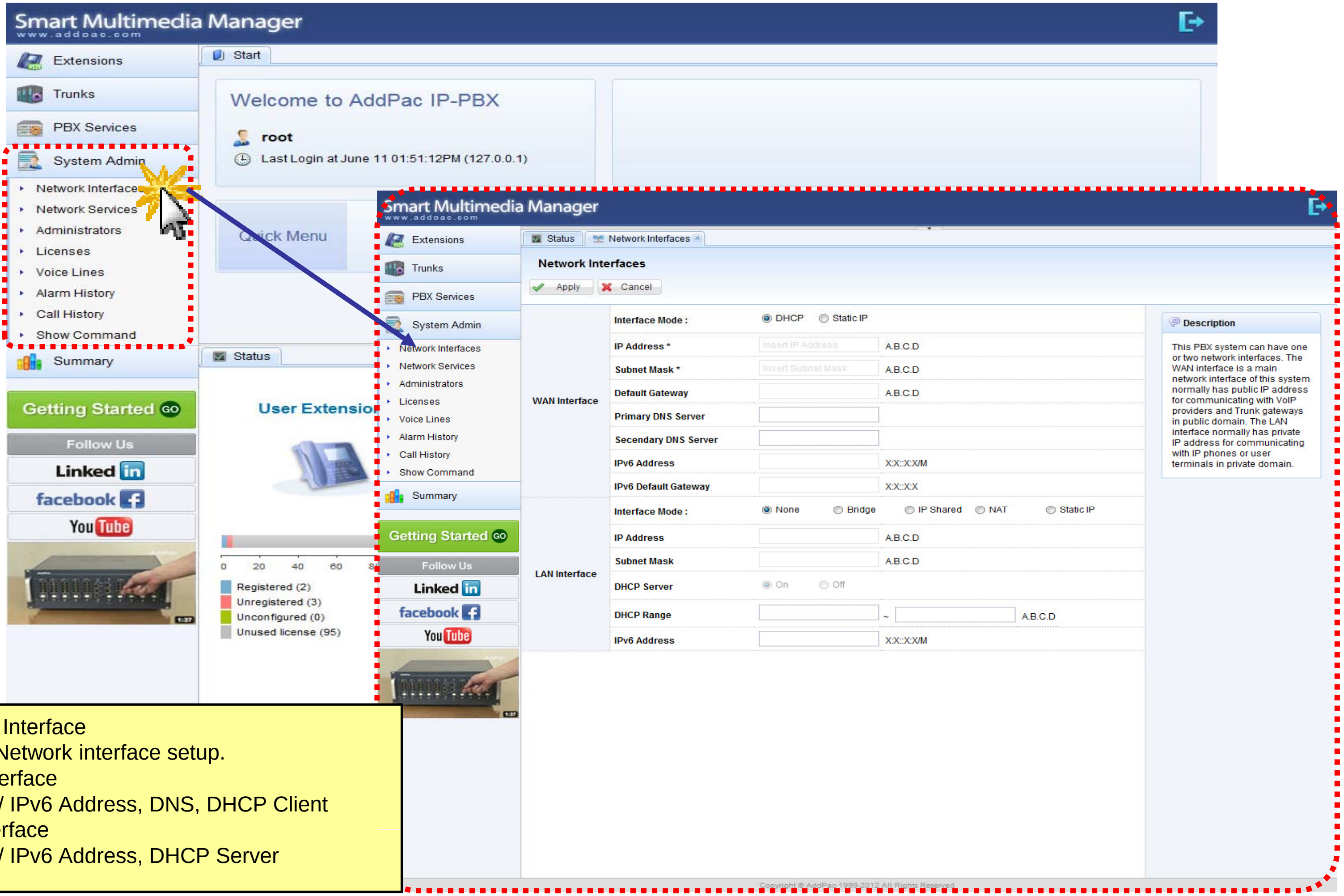
Security Profiles
IP-PBX supports TLS Cipher Suites.
User may select priority with 3 TLS Suites and may select RC4_40, RC4_128, DES_CBC, 3DES_CBC, AES_128,_CBC, AES_256_CBC, SEED_CBC, ARIA_CBC in each suites.

PBX Service - Service Monitoring



Service Monitoring
It displays Active Call & Conference information in IP-PBX. User may setup monitoring screen renew, interval time setup, and provides active call & conference information.

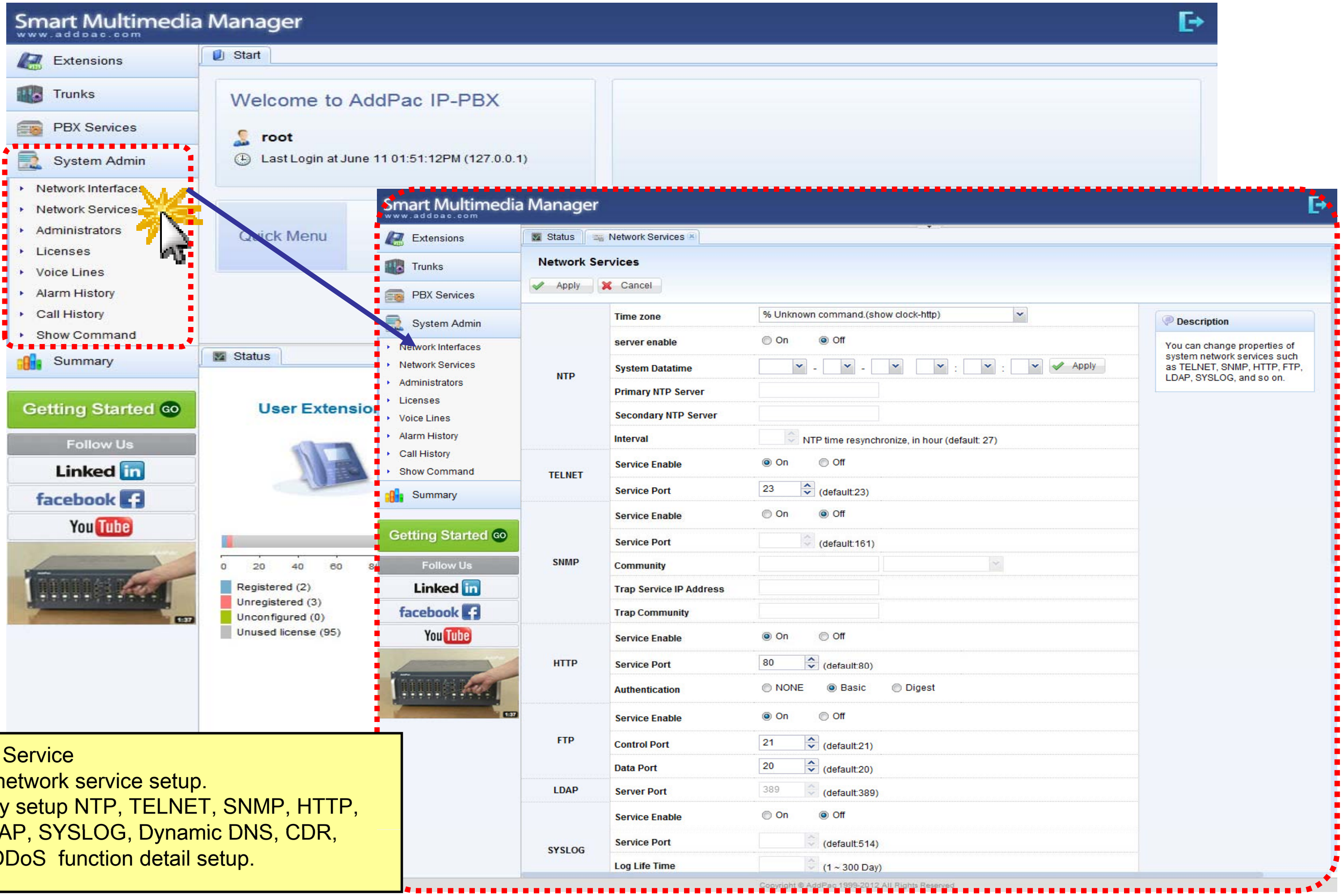
System Admin - Network Interface



Network Interface
IP-PBX Network interface setup.
WAN Interface
- IPv4 / IPv6 Address, DNS, DHCP Client

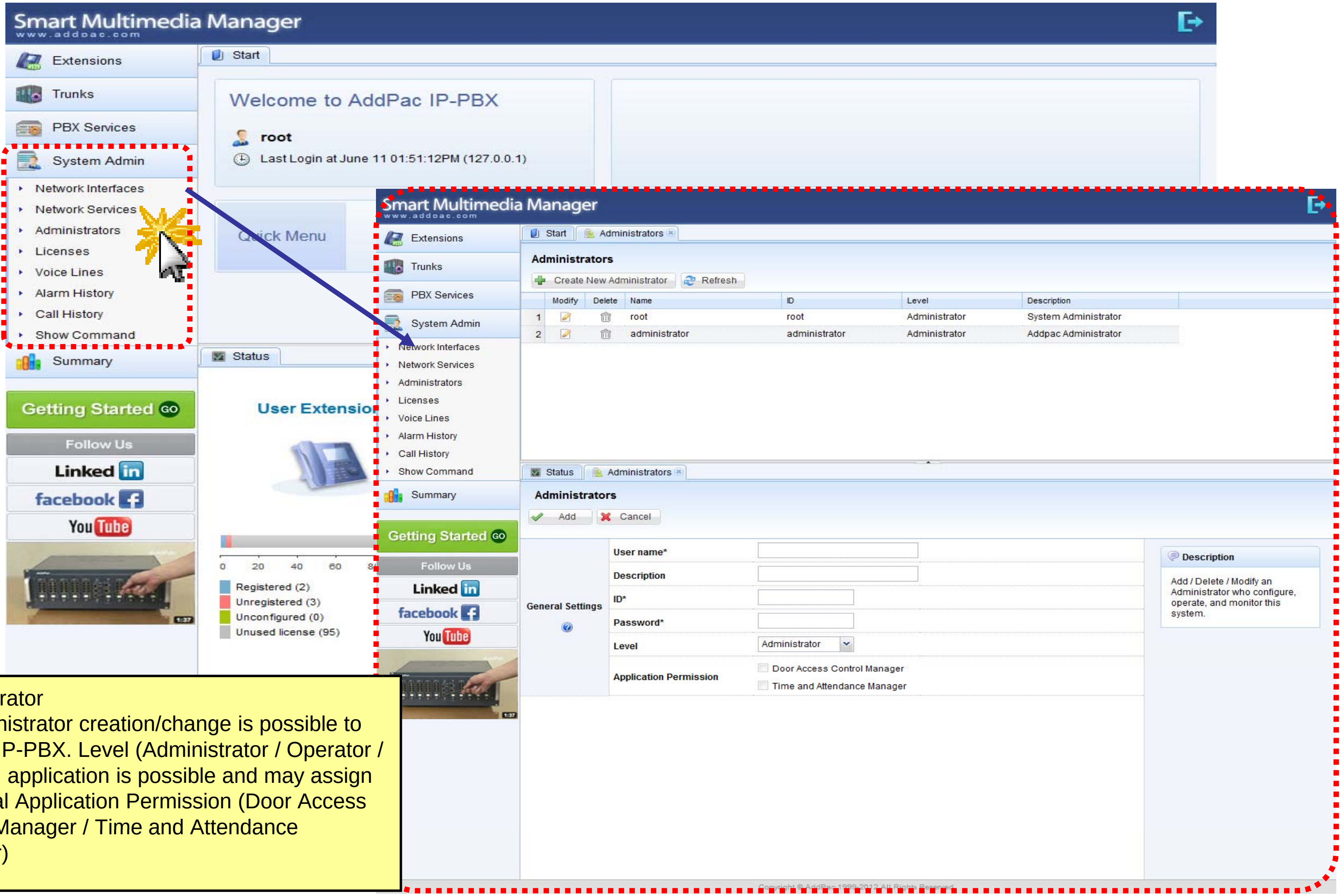
LAN Interface
- IPv4 / IPv6 Address, DHCP Server

System Admin - Network Services



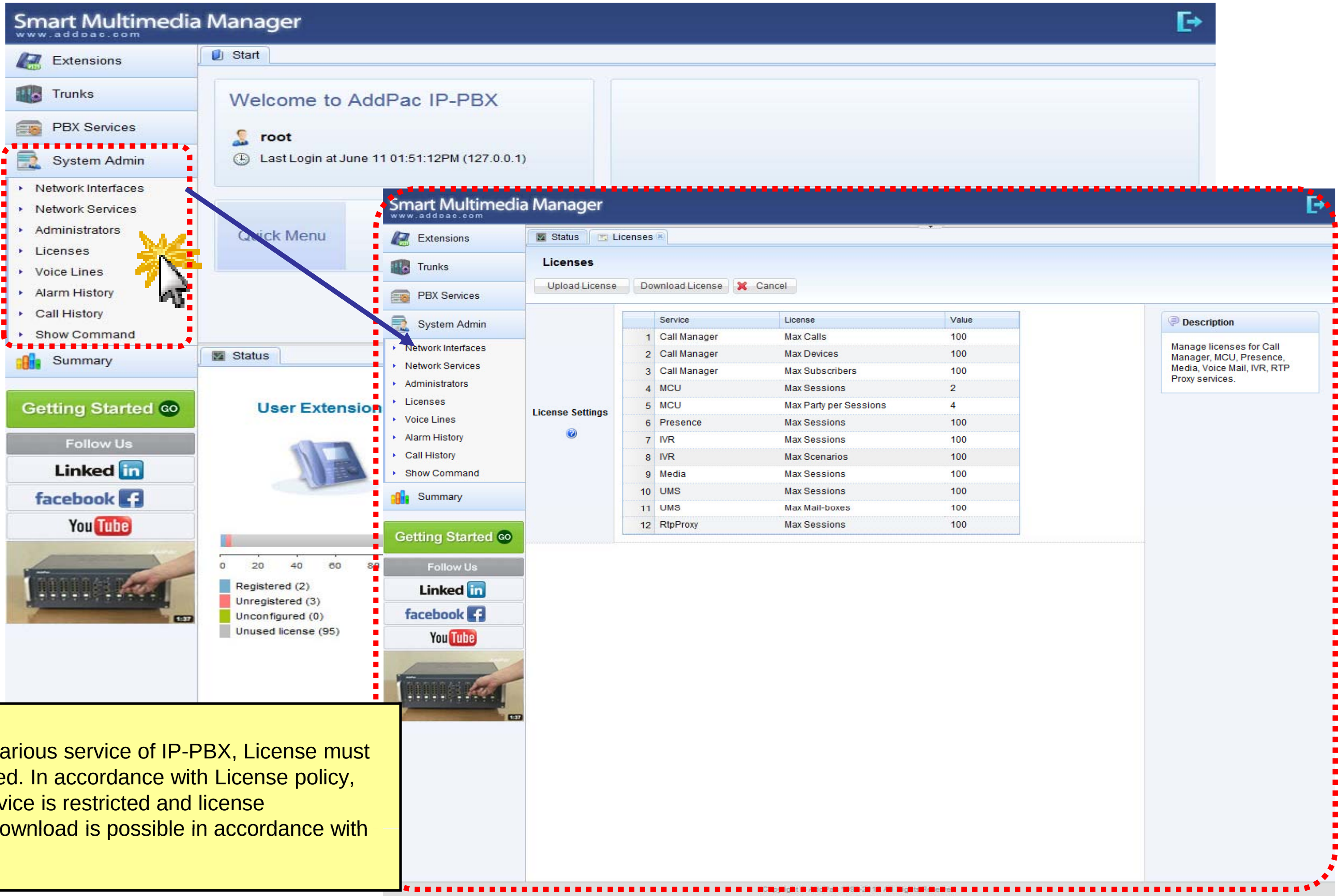
Network Service
IP-PBX network service setup.
User may setup NTP, TELNET, SNMP, HTTP, FTP, LDAP, SYSLOG, Dynamic DNS, CDR, SMTP, DDoS function detail setup.

System Admin - Administrators



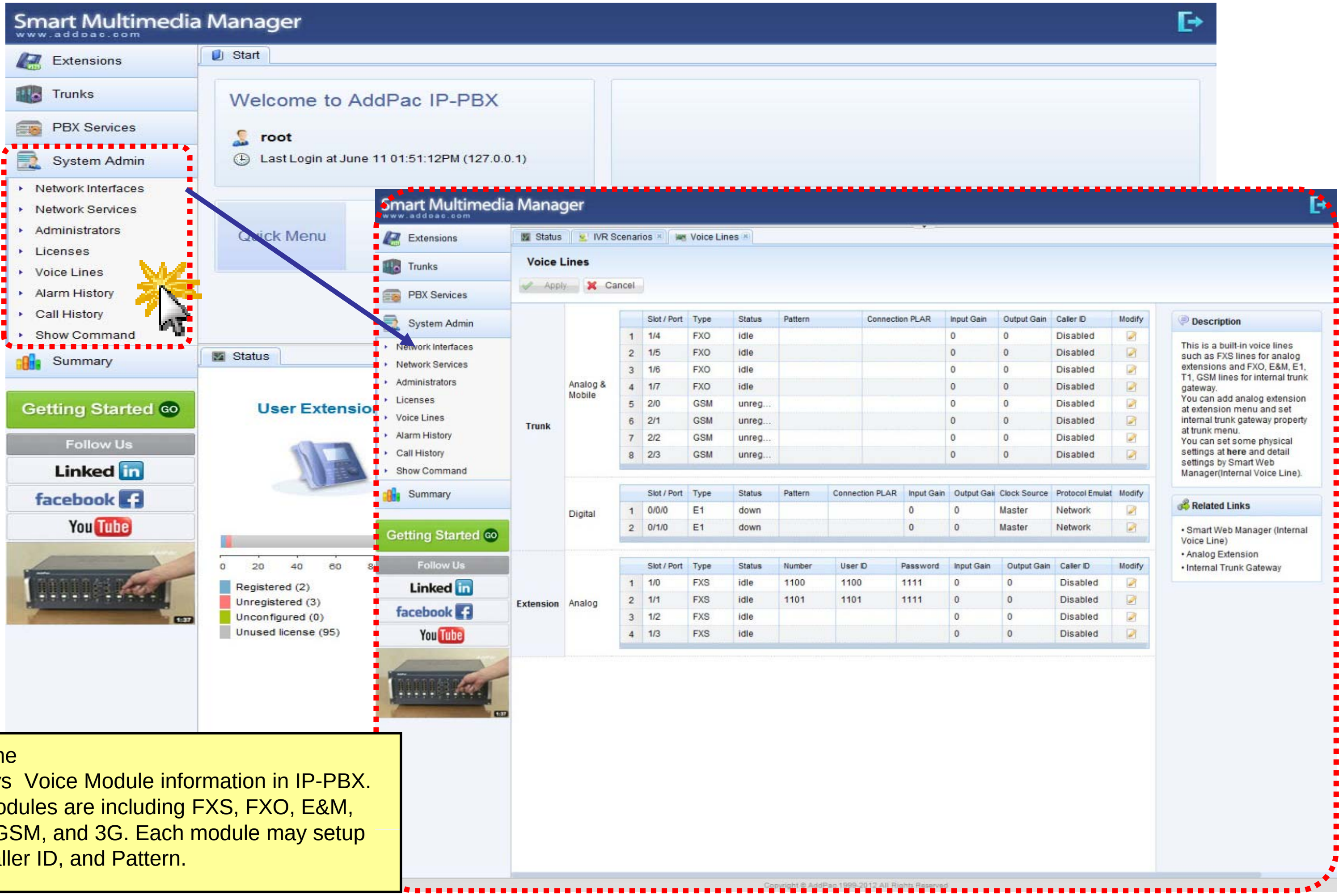
Administrator
An administrator creation/change is possible to operate IP-PBX. Level (Administrator / Operator / Monitor) application is possible and may assign additional Application Permission (Door Access Control Manager / Time and Attendance Manager)

System Admin - Licenses



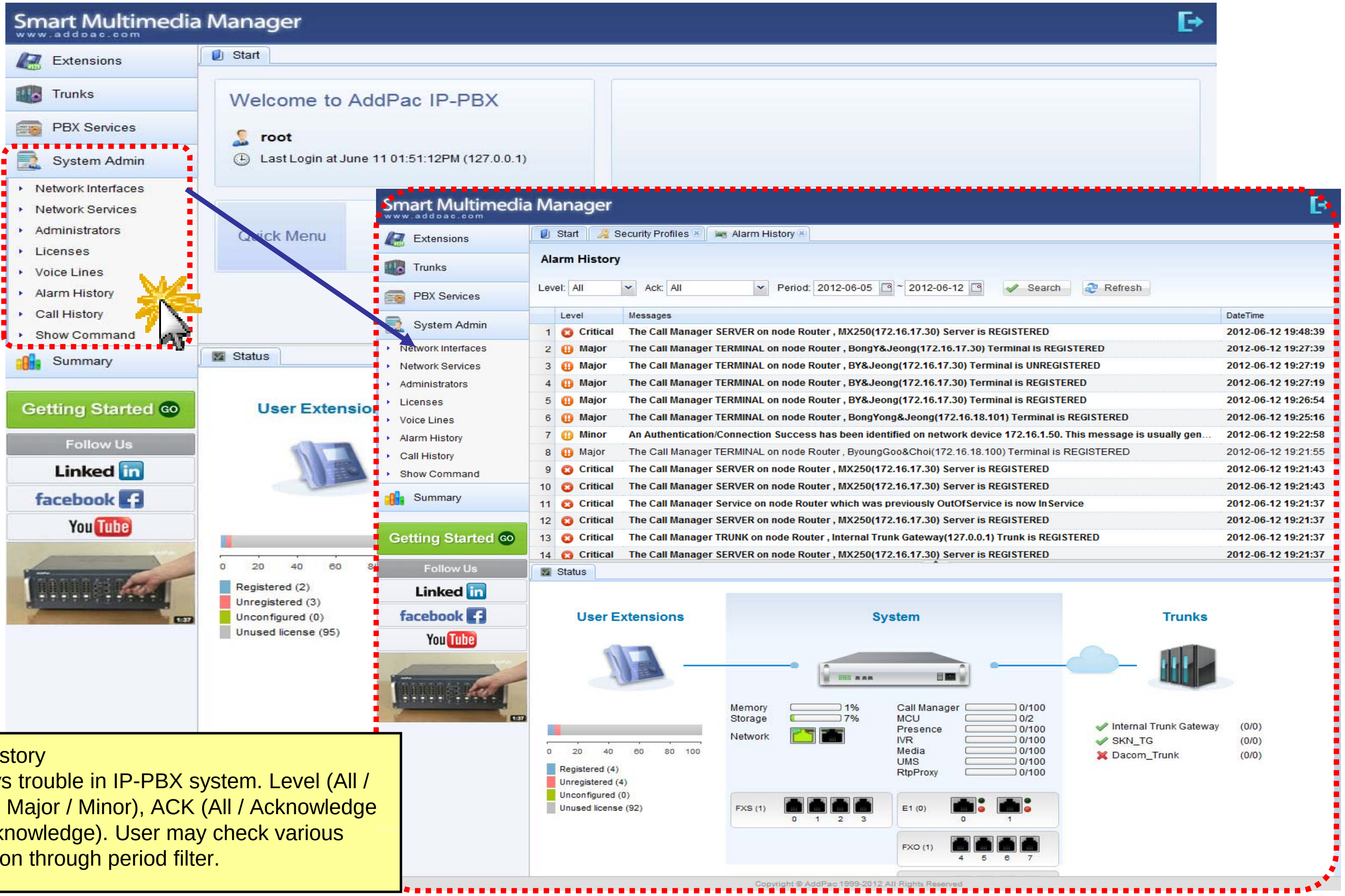
License
To use various service of IP-PBX, License must be created. In accordance with License policy, Max Service is restricted and license upload/download is possible in accordance with policy.

System Admin - Voice Lines



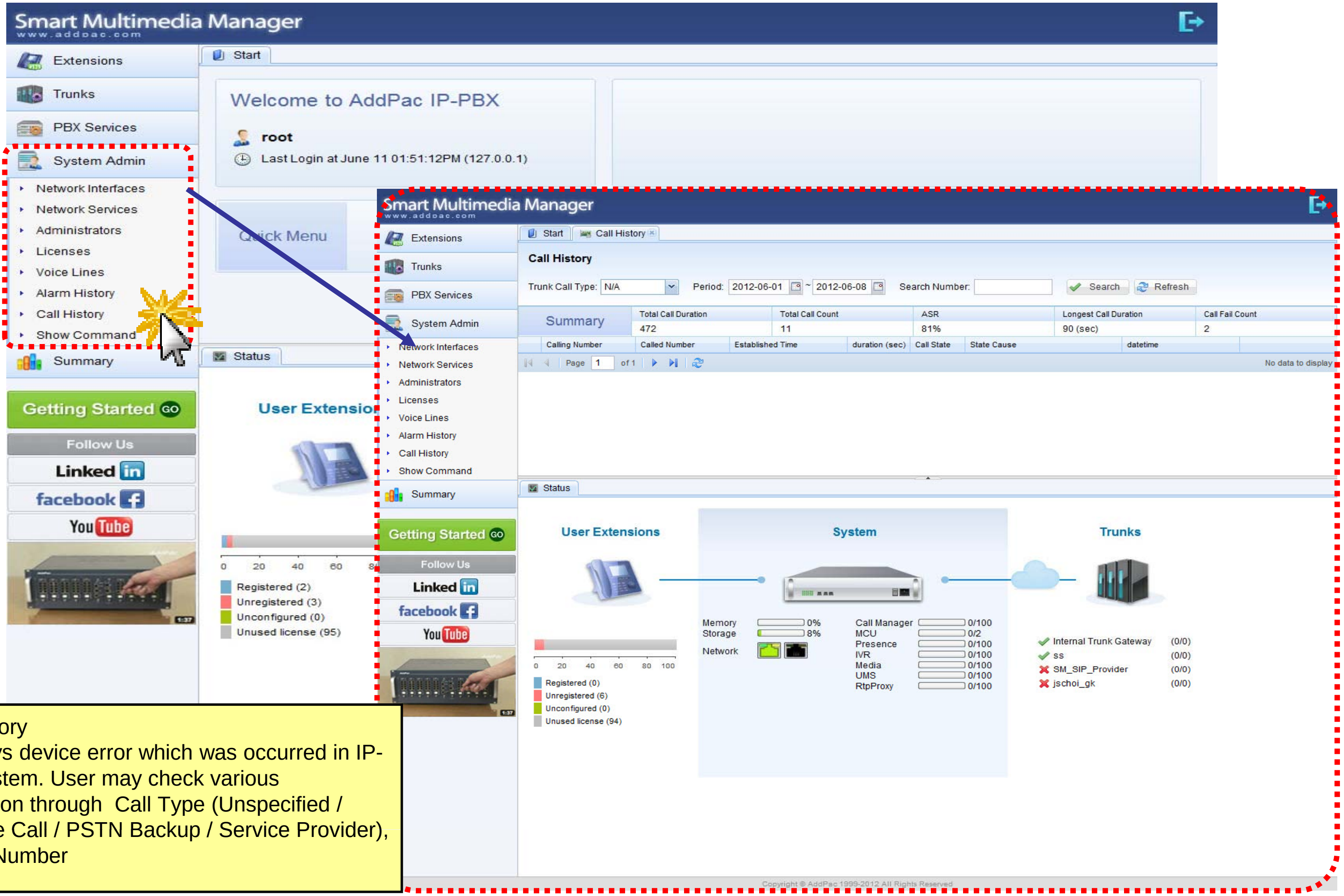
Voice Line
It displays Voice Module information in IP-PBX. Voice modules are including FXS, FXO, E&M, E1, T1, GSM, and 3G. Each module may setup Gain, Caller ID, and Pattern.

System Admin - Alarm History



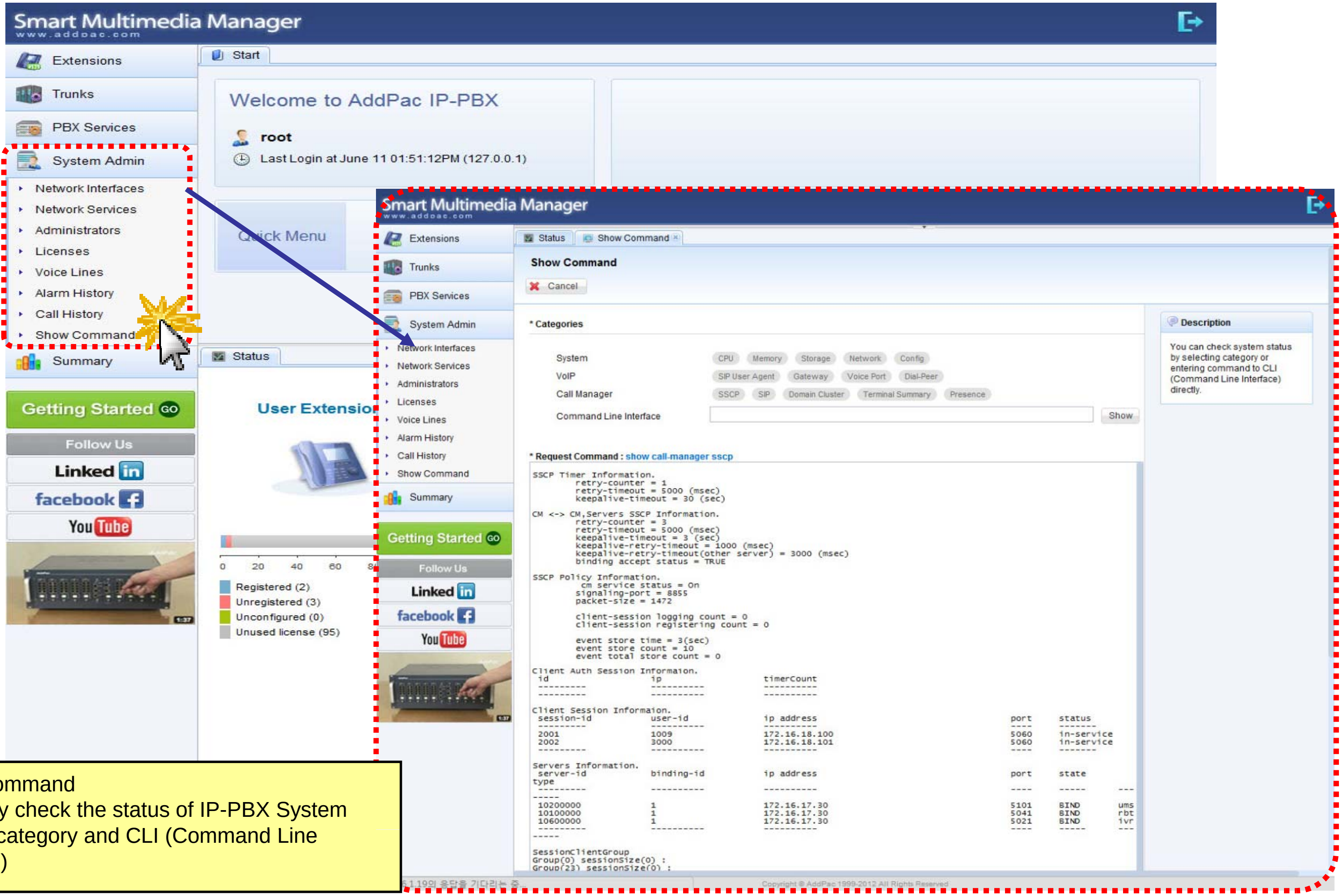
Alarm History
It displays trouble in IP-PBX system. Level (All / Critical / Major / Minor), ACK (All / Acknowledge / Not Acknowledge). User may check various information through period filter.

System Admin - Call History



Call History
It displays device error which was occurred in IP-PBX System. User may check various information through Call Type (Unspecified / Inter-Site Call / PSTN Backup / Service Provider), Period, Number

System Admin - Show Command



Show Command
User may check the status of IP-PBX System through category and CLI (Command Line Interface)

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

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