

# NEC UNIVERGE SV9100 Introduction

UNIVERGE SV9100



# Our History in Telephony

- 1899** NEC was founded by Western Electric
- Early 1900's Started as a major supplier of telephone systems to NTT
- 1927 Installed the first PBX in Japan
- 1970 Installed the first PBX in U.S.
- 1974 First NEAX PABX was released
- 2002 First IP Enabled PABX was released
- 2006 Full IP PABX was released
- 2009 UNIVERGE SV8000 Series released**



Kunihiko Iwadare, cofounder of Nippon Electric  
Founder  
Kunihiko Iwadare



Cross bar

Electronic Switch

Analog

Digital

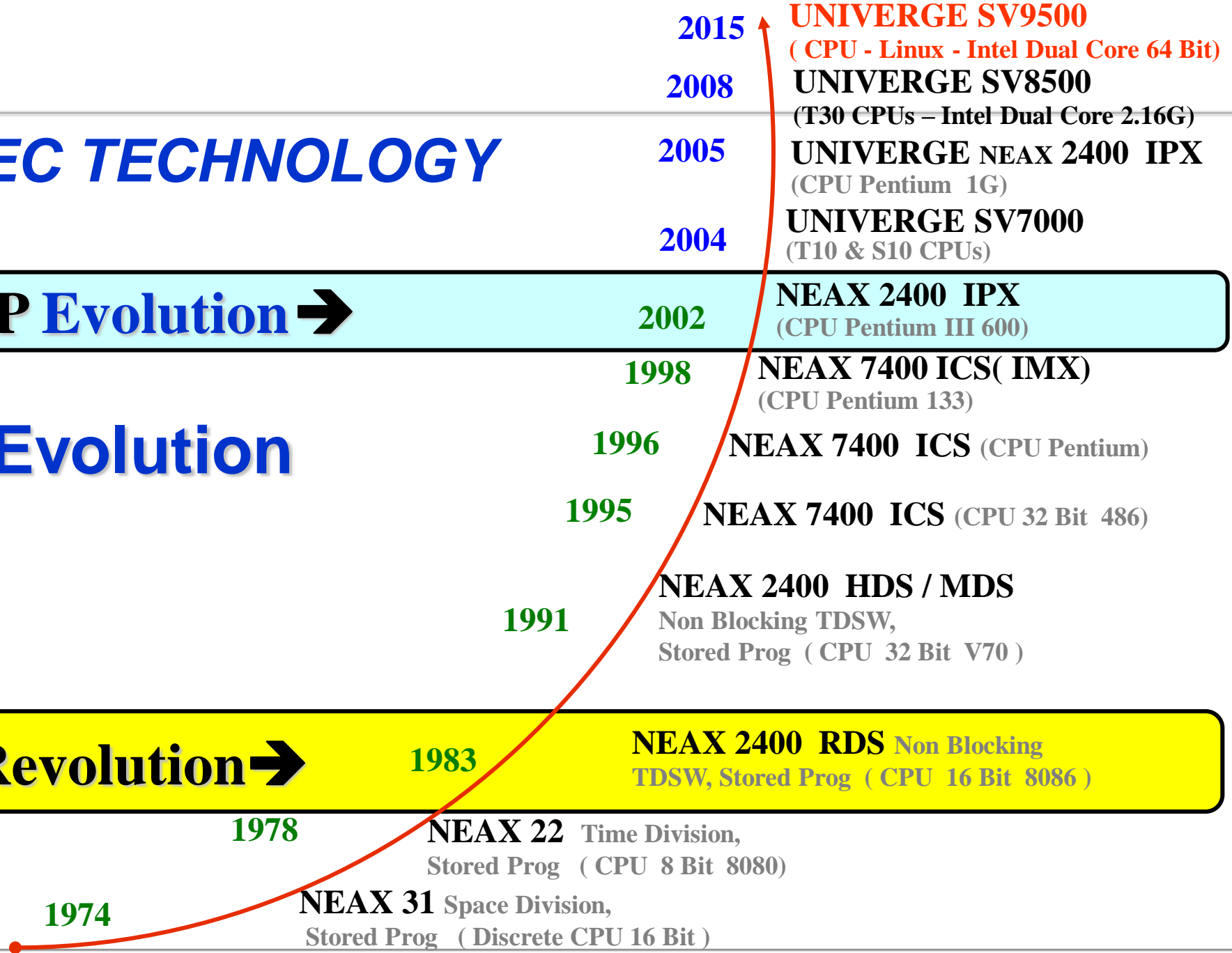
IP

# NEC TECHNOLOGY

## IP Evolution →

## Evolution

## Revolution →



# SV9000 Series Definition

SV9000 Series takes a responsibility to accelerate the current Enterprise Network business toward the ICT business (3C is core component)

(SV9000 Series is part of UNIVERGE 3<sup>rd</sup> Generation)

ICT : Information and Communication Technology

## New Platform that enables to meet the Market Demands

- Review the architecture : “Open” (SIP Terminals, API), UI/User Experience Improvement, BYOD support, Security Support, etc...
- Proceed the Service Business : Global SWA, etc...
- Profitability Improvement : Utilize the cost-effective assets (ie : SMB hardware) to the entire UNIVERGE 3<sup>rd</sup> Generation, and reduce the number of items by “common use” concept.

## Provide Gateway Solution

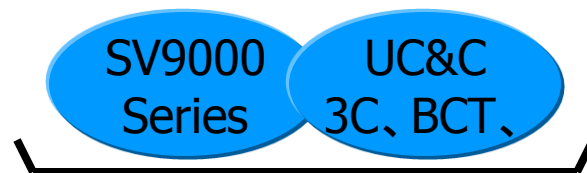
- On-premises Gateway for 3C and/or Cloud services by using SV9000 Series PF.

## Business Expansion by Continuous Development

- Provide the migration-path for current products.

## Advanced Hardware

- Green IT (Low Power Consumption, Space-saving design)
- Common Hardware, High reliability for all PF



Total business

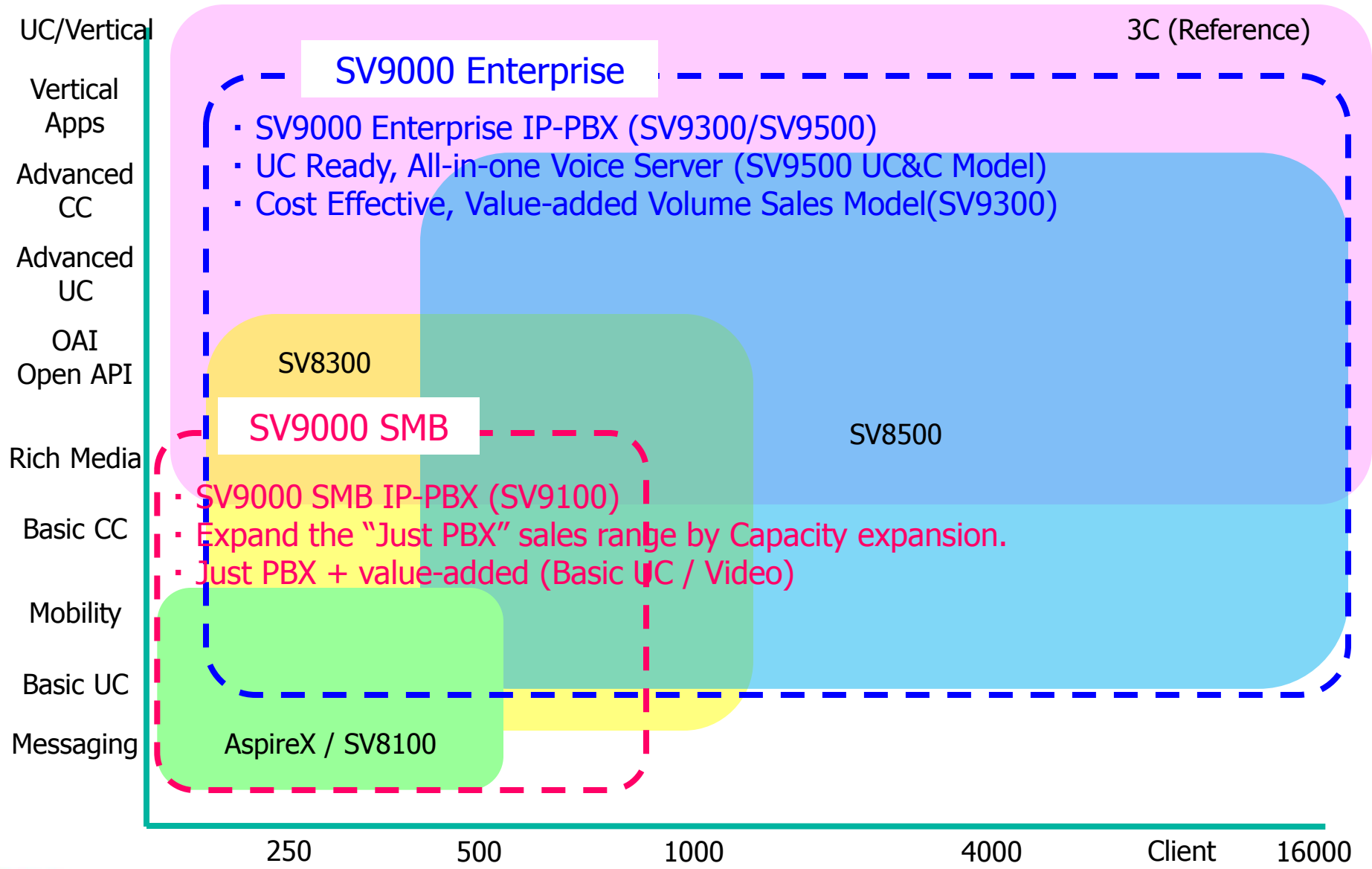
# Sales Guideline for SV9100 and SV9300

## Sales guideline how to differentiate SV9100 from SV9300

This guideline is just proposal from NEC Japan, so the suitable product must be selected by End Users in accordance with their requirement and/or Dealer's recommendation based on their sales strategy.

- SV9100 recommended in case ...
  - Basic voice features, simple UC and/or simple Networking are required.
  - System price is highest priority to select a product.
- SV9300 is recommended in case ...
  - Redundancy, Hotel features, and/or high traffic Contact Center solutions are required.
  - Full UC by 3C and/or BCT is required.

# SV9000 Series Positioning



# UNIVERGE 3<sup>rd</sup> Generation Positioning (Product Functionality Point of View)

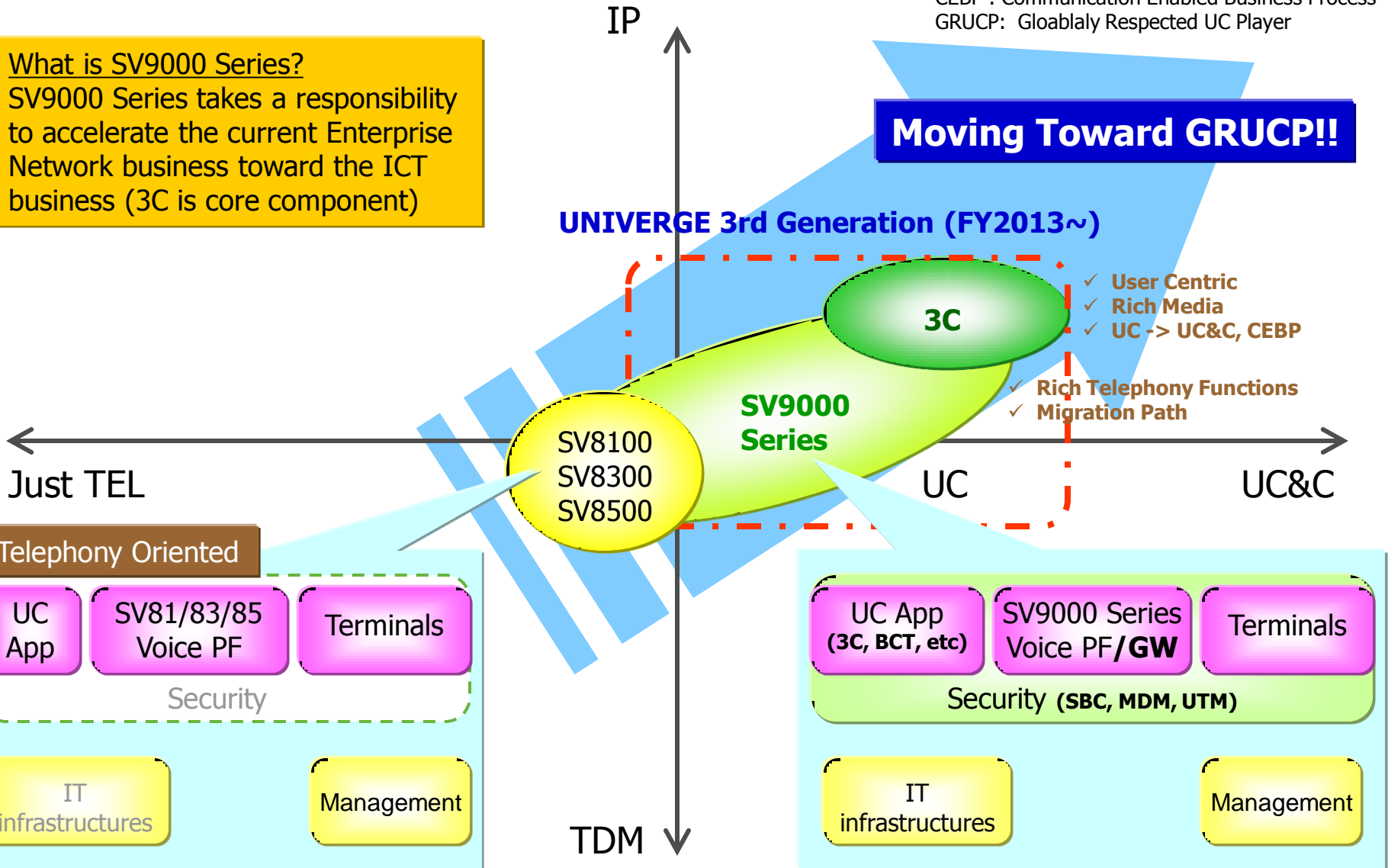
## What is SV9000 Series?

SV9000 Series takes a responsibility to accelerate the current Enterprise Network business toward the ICT business (3C is core component)

CEBP : Communication Enabled Business Process  
GRUCP: Globally Respected UC Player

**Moving Toward GRUCP!!**

## UNIVERGE 3<sup>rd</sup> Generation (FY2013~)



# The Big Picture, Platform

Scalable

NEW Platform is familiar but expanded

Capacity

9100 capacity = 1,296



**SV9100 400 TRK + 896 EXT**



# UNIVERGE SV9100 – deployable in and out of a rack

Rack Mount



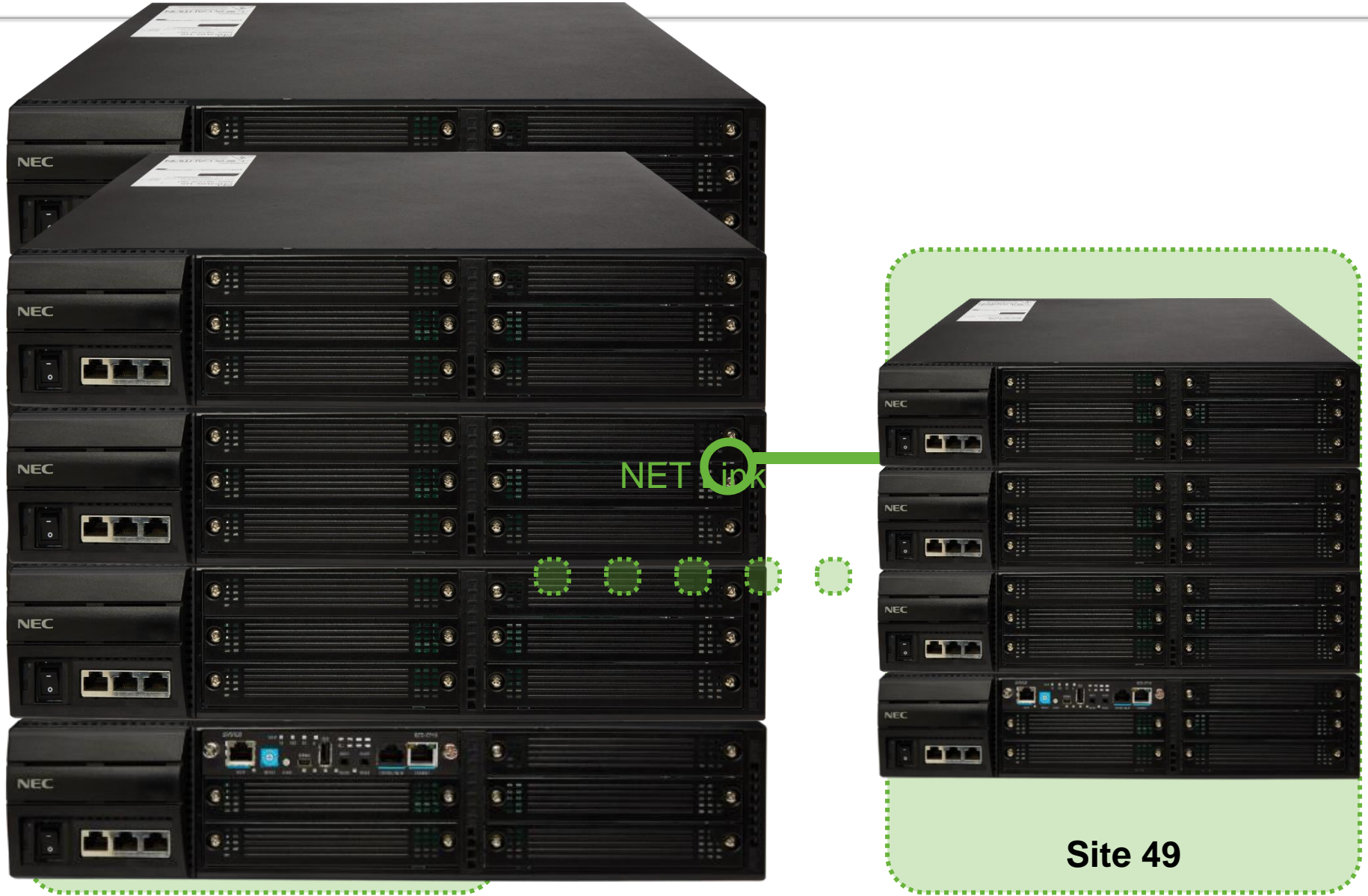
SV9100

Floor / Wall mount



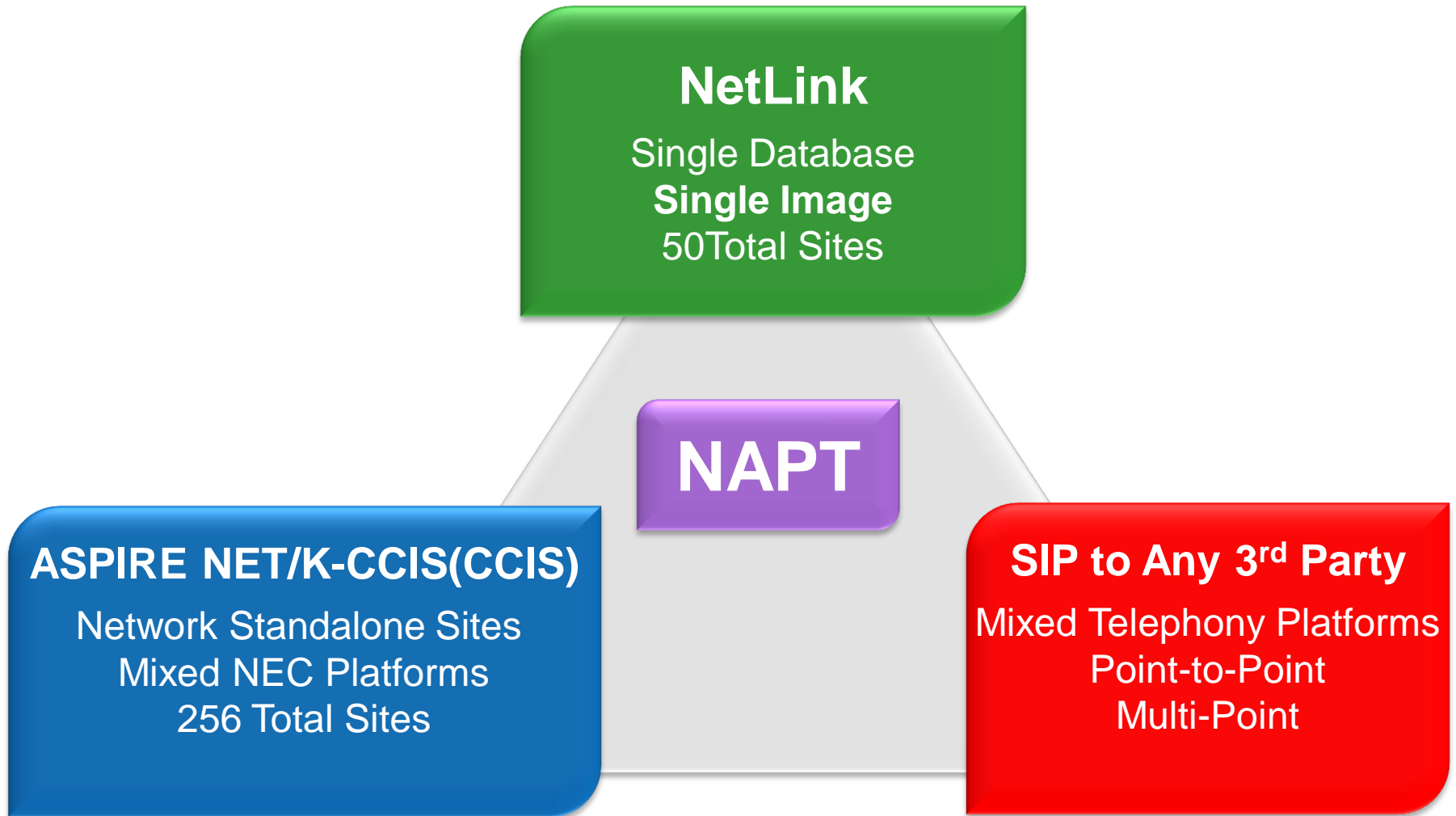
SV9100

# UNIVERGE SV9100 – Scales to fit any organisation



# Networking Option

# SV9100 Networking Solutions



# UNIVERGE SV9100 – Enables video

- Video phones (Desk phones and softphones)
- Video trunks (Video bridges)
- Multi-party video conferencing in-built
- Becomes the video gateway for the entire SV9000 series



# Networking Solutions

- ✓ Single database/single image
- ✓ 50 total sites
- ✓ Suitable for a small organization in a multi-floor, multi-building campus or geographically dispersed office environment

NetLink

- ✓ Networked standalone offices
  - SV9100 to SV9100, SV9300, SV9500 SV8100, SV8300, SV8500.
- ✓ 256 total sites
- ✓ Suitable for larger organizations in a multi-building campus or geographically dispersed office environment

K-CCIS  
AspireNet

- ✓ DT700 IP terminals can be installed to support remote worker
- ✓ Remote DT800/ DT700 IP terminals retain functionality
- ✓ Supports VPN-less Plug and Play connectivity

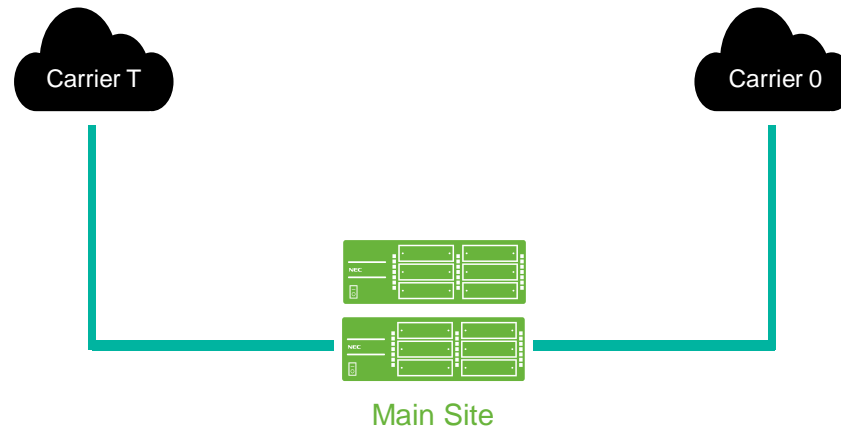
NAPT

- ✓ SIP to Any PBX or 3<sup>rd</sup> Party Telephony System
- ✓ SV9100 to any manufacturer
- ✓ Supports NAPT
- ✓ Suitable for organizations with disparate systems

SIP to Any

# UNIVERGE SV9100 – Integrates well with others

- SIP trunking now supports two simultaneous carriers (R2)
- Expanding to 6 in the future



# Migration Option



# Migration Options

## Migration

### Easy Migration from 8100/8300

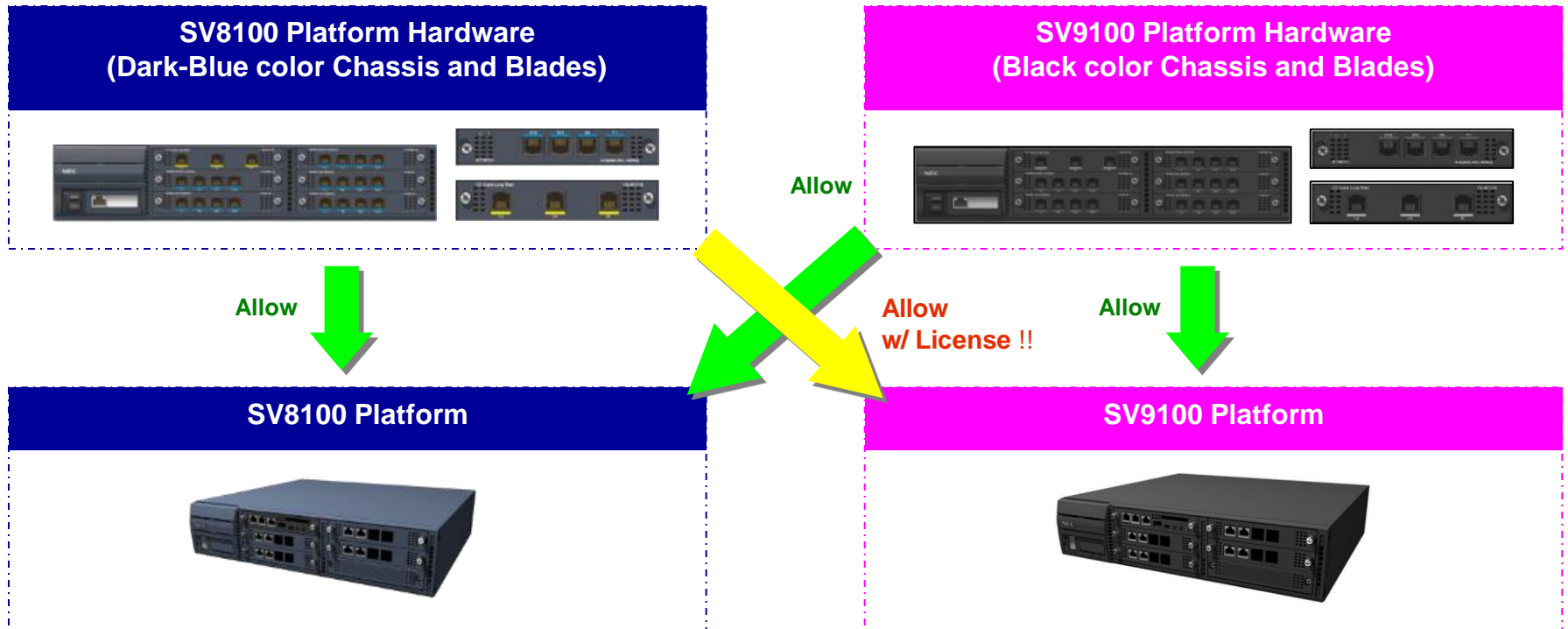
- ✓ Two aspects to migration; Hardware and License
- ✓ Hardware migration
  - ✓ Platform items migrate
  - ✓ End points migrate
  - ✓ Migration license required
- ✓ Hardware upgrade
  - ✓ CPU/SD
  - ✓ IPLE/D



# Migration Options – Blades/Cards

## Hardware Migration

- 1) Current SV8100 **ALLOWS** to accommodate SV9100 platform hardware for system expansion
- 2) SV9100 **ALLOWS** to accommodate current SV8100 platform hardware with New **“Hardware migration license”**.



# Migration – Terminals & Licenses

## Terminal Migration

- 1) SV9100 **ALLOWS** to accommodate current DT3xx/7xx terminals
- 2) Current SV8100 **ALLOWS** to accommodate new designed DT terminals with condition.  
(Retro-Mode : new features on terminals do not work)
- 3) SV9100 does **NOT ALLOW** to accommodate old generation terminals such as Dterm85 / Aspila EX terminals and before.

## License Migration

- 1) Current SV8100 licenses can **NOT** be installed to SV9100.
- 2) SV9100 licenses can **NOT** be installed to current SV8100.
- 3) SV9100 does **NOT** provide any license migration path from SV8100. (LMS does not support to transfer the installed licenses on current SV8100 to SV9100.)

# Overview

# New UNIVERGE SV9100: Smart communications for small medium businesses

## System Scalability

Number of Max Port is expanded to 1,296. (400 Trunks + 896 Extensions)

Easy to configure the system capacity by adding Chassis and Blades and licenses.

Majority of small and medium customers ,single or multi-location can be covered by SV9100.



**400 TRK + 896 EXT**

Items	SV8100	SV9100
Max Ports	712	1,296
Max Trunks (Total)	200	400
Analog	200	400
ISDN	200	400
IP	200	400
Max Extensions (Total)	512	896
Digital	512	896
Analog	512	896
IP	512	896

Items	SV8100	SV9100
Virtual Extension	256	512
Max VoIP Channels	128	256
Remote Node (Netlink)	15	49
Tone Detection	32	64
Max VRS Channels	16	16
Max VM Channels	16	16
Analog Modem	1 (PZ-VM21)	1 (CPU)
1 <sup>st</sup> Party CTI	128	256
3 <sup>rd</sup> Party CTI	512	512

# New UNIVERGE SV9100: Smart communications for small medium businesses

## General overview

The UNIVERGE SV9100 Communication server is robust , feature-rich , Unified communications enabled system that are ideal for small and medium sized businesses. As the All-in-one UC ready , UC element has been included as basic function.

The SV9100 offers:

- Scalable coverage up to 1,296 ports by enhanced new CPU
- All-in-one UC platform ( UC Suite /In Mail)
- Rich UC functionality
- Wide choice of Desktop terminals
- Multi location network by Net-link
- Easy installation , operation & maintenance
- Smartphone collaboration
- ECO friendly minimizing power consumption

## UC Application : UC Suite



## Desktop terminals



## Communication Server



# New UNIVERGE SV9100: Smart communications for small medium businesses

## Specifications

Items	SV9100 9.5 inch chassis 	SV9100 19 inch chassis 
Ports capacity	Max. 1,296ports /system (400 trunk ports+896 extension ports)	
System Dimension	W: 369mm (14.5inch) x D: 111mm ( 4.4inch) x H: 215mm (8.5inch )	W: 430mm (16.9inch) x D: 400mm (15.7inch) x H: 88mm (3.5inch)
Weight	4.5 Kg	7.9 Kg
System Voltage	AC100V-240V (50/60Hz)	
Environment	Temperature: 0°C-40°C /Humidity 20%-90%	
Regulatory Compliance	Safety EN60950-1 EMC Emission    EN55022 Immunity   EN55024 Powering    EN61000 Transmission TBR3 TBR4 ES203-021	





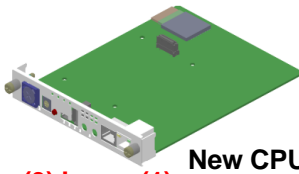


# New SV9100 CPU Package

## New Hardware : Enhanced CPU “GCD-CP10 (PKG)”

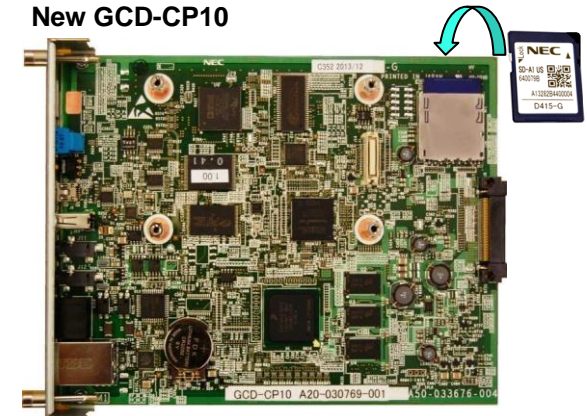
Higher cost performance and easy handling , new CPU engine has following enhancement.

- a) higher processing performance
- 2) larger memory on board
- 3) InMail / Modem built-in

New CPU realize UC ready platform UNIVERGE SV9100.

	SV8100 (CD-CP00-xx)	New SV9100 (GCD-CP10)
Configuratin	<p>CPU -including Main software</p>  <p>Main Software</p> <p>PZ-ME50</p>  <p>PZ-VM21</p>  <p>AKSxxx CF Card</p> 	<p><b>New CPU</b></p> <p><b>Three(3) in one(1)</b></p>  <p>SD-cards (SD-A1) Main software &amp; VRS/VM Storage(1GB)</p>  <p>SD-cards (SD-B1) Main software &amp; VRS/VM Storage(4GB)</p> 
CPU performance		
Device	MPC8248 266MHz	QorIQ P1015 533MHz
MIPS	505.4DMIPS	1332.5DMIPS
System BUS	66MHz 64bits 0.5GB/s	266MHz 128bits 5.7GB/s
Cache Memory	16K I/D	L1:32K I/D L2:256K
Main Memory	SDRAM 66MHz 32bits Data Rate 0.26GB/s	DDR3 SDRAM 333MHz 32bits Data Rate 2.7GB/s

New GCD-CP10



New GCD-CP10 with IPLE





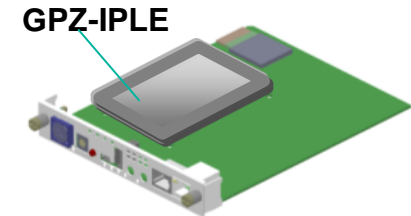
# New UNIVERGE SV9100: Smart communications for small medium businesses

## New Hardware : Enhanced Media Gateway “GPZ-IPLE”

To realize IP/UC solution , new Media Gateway card has been released for SV9100.

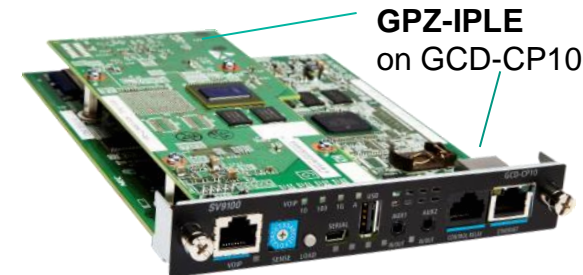
- To be mounted on new CPU.
- Max 256ch can be supported

	SV8100 (PZ-xxIPLB)	SV9100 (GPZ-IPLE)
DSP	OCT1010	OCT2224M
Number of DSP core	6 each core operates at 1.2GHz	24 each core operates at 1.0GHz
Memory & Data Rate	Mobile DDR SDRAM 166MHz 64bits 1.33MB/s	DDR3 SDRAM 900MHz 32bits 3.6GB/s
Storage area of program	Flash Memory (On board)	SD Card on CPU card (download)
Voice channels	128ch	<b>256ch</b>
Video support	Not supported	<b>supported</b>



### Usage of GPZ-IPLE

- Networking (K-CCIS / AspireNet / Netlink)
- IP Trunk ( SIP trunk )
- IP Terminal
- IP related (Video MCU)



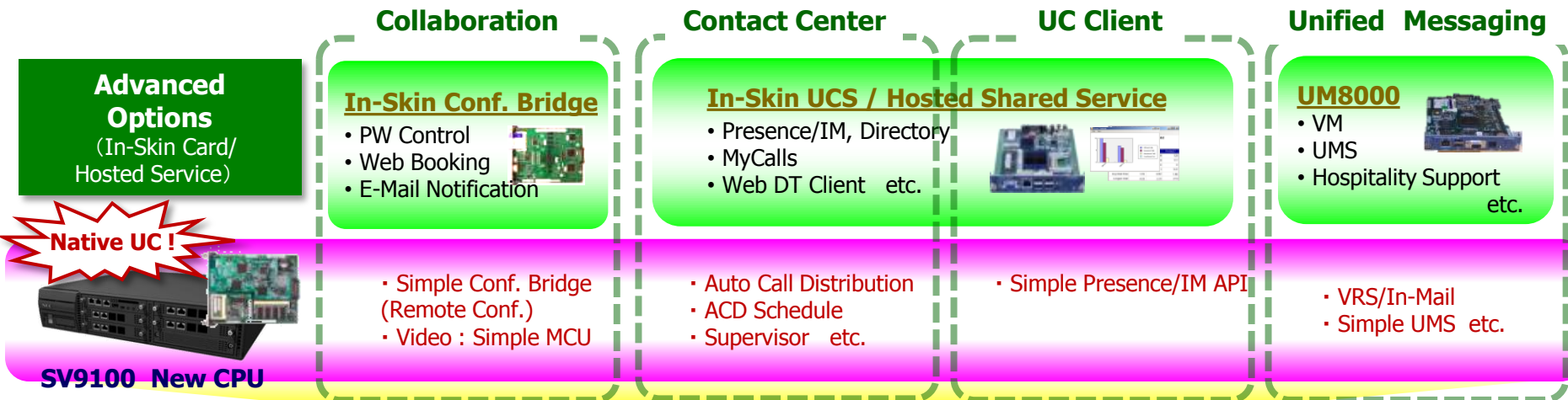
# New UNIVERGE SV9100: Application overview toward Entry UC

## "Solution in the Box" by embedded/In-Skin UC Features

- Provide embedded simple UC features from SV9100 CPU, and value-add UC features can be provided as an "Option" by adding In-Skin blades / Hosted Services accordingly.

## "DT Client (FAT/Web)" is the portal to access all services from various type of End Point

- Easy installation, operation & maintenance by DT Client. Enable to use it on various types of End Point by Web DT Client.



### Access all services from DT Client (FAT/Web)

- Telephony services (Desktop/Softphone/FMC)
- In-Mail services
- Simple Presence/IM (FAT), Full Presence/IM (FAT/Web)
- Conf. Bridge services, Web Booking
- ACD Agent services (work w/ ACD-MIS) etc.



**Easy-Config for FAT DT Client**

# New UNIVERGE SV9100: Smart communications for small medium businesses

## UC Application for SV9100 : UC Suite

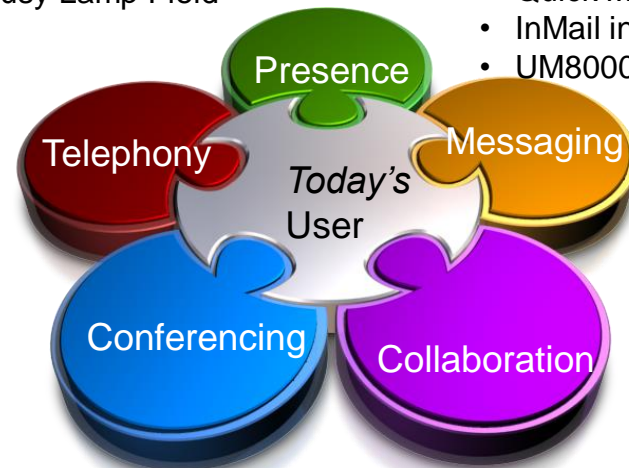
NEC's "UC Suite" is one of the core UC application for new SV9100, providing practical UC functionality. This will realize improvement of business efficiency and productivity and also contribute customer satisfaction.

### The UC Suite overview

- Innovative desktop application that increases efficiency and productivity
- Simplified call management through easy to use graphical user interfaces
- Real-time Presence and availability of colleagues
- Quick messaging to one or multiple colleagues
- Provides Microsoft® Outlook® calendar integration
- Enables simplified call handling for Attendant
- Data conference including video
- Seamless integration with the SV9100 simple ACD for contact center functionality

### The UC Suite provides wide range of services

- Real-time Presence
- Busy Lamp Field
- IM / Chat
- Quick Message
- InMail integration
- UM8000 integration



- Click to dial
- Drag & Drop call handling
- Pop-up on ringing
- Attendant
- Soft Phone
- Call log/recording
- Data conference
- App sharing
- White board
- File Transfer
- Video conference
- CRM integration
- Microsoft Outlook
- Salesforce.com

# New UNIVERGE SV9100: Smart communications for small medium businesses

## UC Application for SV9100: InMail



- No specific hardware is required for VRS/InMail (CPU with SD-A1/B1 only)
- License Control : Channel base (VRS), Mail Box base (InMail)
- Up to 2 VRS Channels are initially bundled on CPU
- Enable to choose either SD-A1 or B1 in accordance with required storage size
- Exactly same functionality with SV8100
- Enable to operate the Mail Box (Replay, Delete, etc) from DT Client (InMail Integration)

New GCD-CP10



Use SD Card as "Storage" purpose as well

- |                            |                                |
|----------------------------|--------------------------------|
| 01...US English            | 14...Japanese                  |
| 02...UK English            | 15...Mandarin Chinese          |
| 03...Australian English    | 16...Korean                    |
| 04...French Canadian       | 17...Iberian Portuguese        |
| 05...Dutch                 | 18...Greek                     |
| 06...Mexican Spanish       | 19...Danish                    |
| 07...Latin America Spanish | 20...Swedish                   |
| 08...Italian               | 21...Thai                      |
| 09...German                | 22...Mandarin Chinese (Taiwan) |
| 10...Madrid Spanish        | 23...Flemish                   |
| 11...Norwegian             | 24...Turkish                   |
| 12...Parisian French       | 25...Arabic                    |
| 13...Brazilian Portuguese  | 26...Russian                   |

Product name	InMail Embedded VMS	
Hardware	None	
Software	SD-A1 OT/CH 1GB 	SD-B1 OT/CH 4GB 
License	Per VRS Channel Qty 3-16 Per VM BOX license Qty 1-896 Per InMail Email client Qty 1-896	
Storage hour	12 hours	115 hours
Concurrent voice path	16ch	
Mailbox capacity	896 Mail boxes	
Language supported	Up to 26 languages stored to SD Card	
Functionality	Same with SV8100	

# New UNIVERGE SV9100: Smart communications for small medium businesses

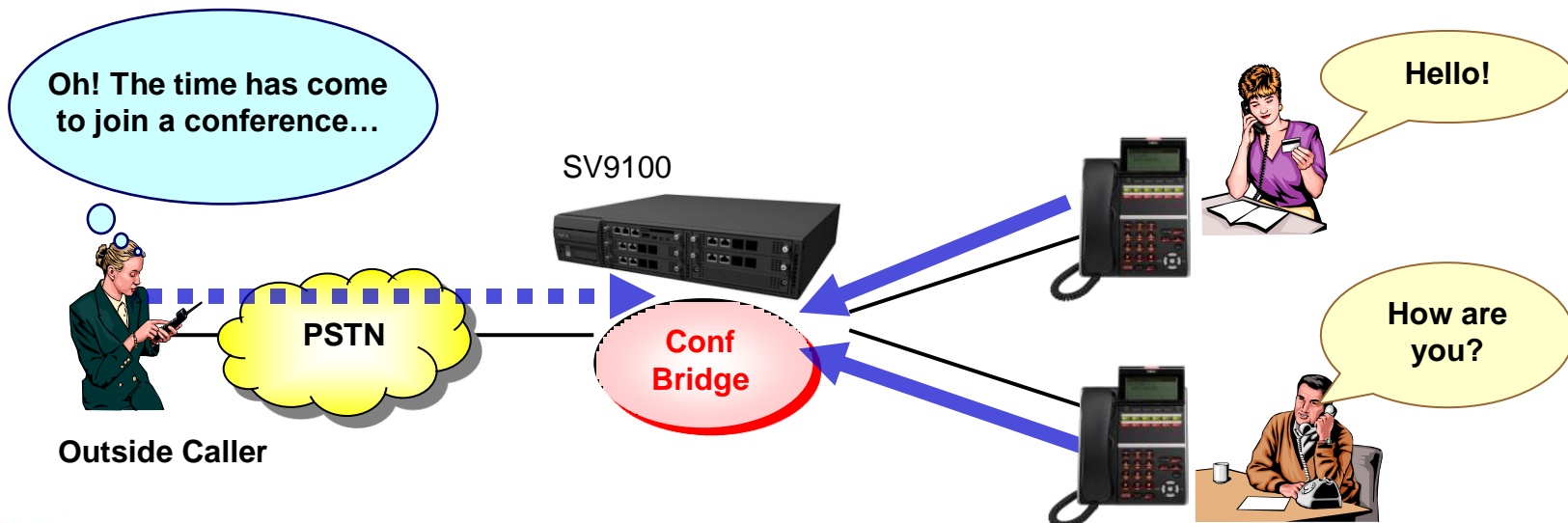
## UC Application for SV9100: Conference bridge

SV9100 provides two choice of conference bridge

- 1) License controlled
- 2) Future rich In-skin Conf. bridge

### 1. License controlled (Simple Conf. bridge)

- Enjoy the simple Conference Bridge by option license ; SV9100 REMOTE CONF-01 LIC  
No additional hardware option required
- Call to the specified number of Conference Bridge and enter the PW to log-on.
- Up to 4 Bridges, and up to 8 participants per Bridge

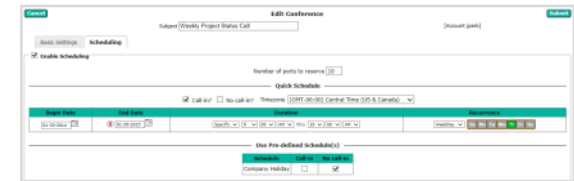


# New UNIVERGE SV9100: Smart communications for small medium businesses

## 2. Future rich In-skin Conf. bridge

- Conference up to 32 internal and external participants
- Simple GUI Setup via Browser
- Schedule conferences up to a year in advance
- PW control
- E-mail Notification
- Voice recording to the CF
- Record conferences, playback on PC's media player
- Mute or disconnect noisy participant on real view page

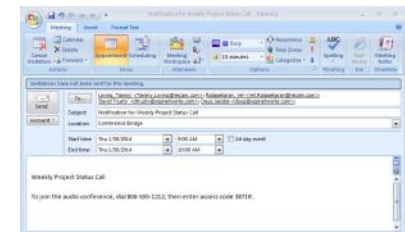
Setup Menu GUI



Real View Page

Real View						
Conferences	1 active (3 ports)	10 listed			ACCESS: N: 0121	P: 2071
Weekly Project Status Call (3 ports)						
3   0%   202	(202)	in conference	Tuesday, January 28, 2014 1:05:23 PM			
2   0%   201	(201)	in conference	Tuesday, January 28, 2014 1:05:07 PM			
1   0%   211	(211)	in conference	Tuesday, January 28, 2014 1:05:09 PM			
Test Voice Conf	inactive			ACCESS: N: 2121	P: 1212	
Conference for admin	inactive			ACCESS: N: 9131	P: 2036	
Conference for lance	inactive			ACCESS: N: 7706	P: 9352	

Using iCal for distributing Conference Invitations



## Necessary option items

- Option hardware
  - GCD-RGA with
  - AKS-RGA-AOO-GATEWAY-CF
- License
  - RGA Conference PORT-08-LIC x 1,2,3,4,



SV9100



GCD-RGA w/  
Conf. Bridge CF

# New UNIVERGE SV9100: Smart communications for small medium businesses

## UC Application for SV9100: Video

Enable to use IPLE channels not only for Voice (VoIP) but also video communications. (CODEC : H264, Size : CIF / VGA)

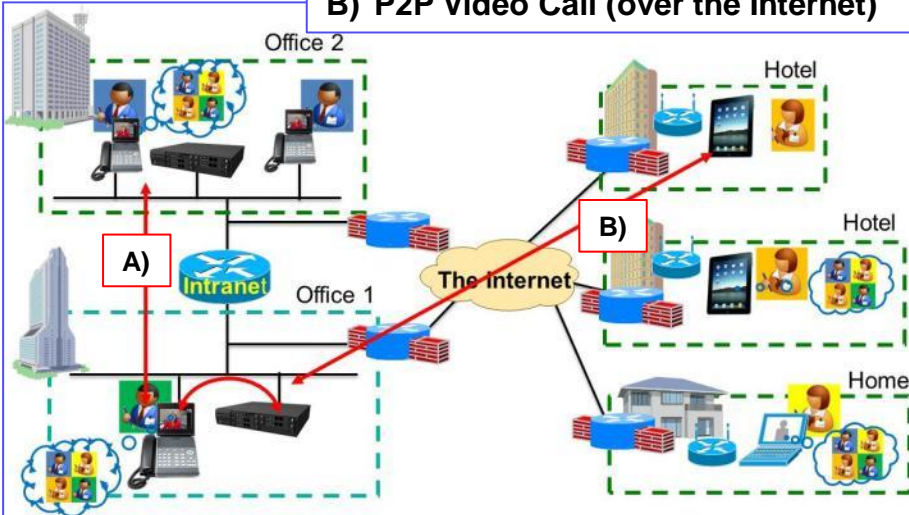
- A) Enable to make a Video Call (P2P) under same Network (LAN / Intranet <Netlink>)
- B) Enable to make a Video Call over the Internet (NAT traversal)
- C) Enable to establish a Video Conference on the IPLE

-> **“SV9100 VIDEO MCU LIC” is required for above B) and C) cases.**

### Tested Video Terminals

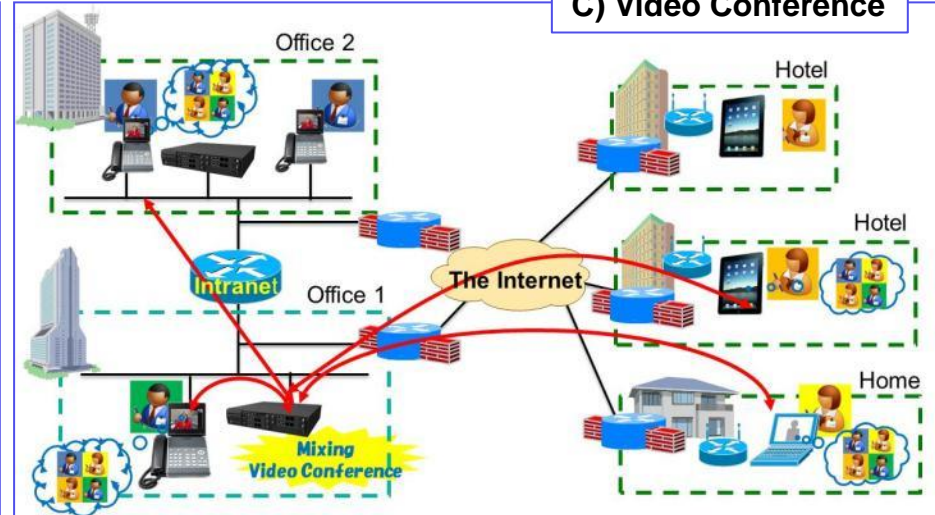
Polycom VVX1500, Polycom VVX500, Polycom VVX600  
 Polycom RealPresence Mobile(iOS) <Softphone>  
 Polycom RealPresence Mobile(Android) <Softphone>

**A) P2P Video Call (Same NW)**  
**B) P2P Video Call (over the Internet)**



**B) P2P Video Call (over the Internet)**  
 - Max number of call at the same time  
 CIF : 4 (96ch required)  
 VGA : 3 (192ch required)

**C) Video Conference**



**C) Video Conference**  
 - Max 4 parties  
 - Required Resources  
 CIF : 64ch, VGA : 160ch

# New UNIVERGE SV9100: Smart communications for small medium businesses

## UC Application for SV9100: Contact Center

SV9100 provides 1) In ACD function as license control basis , further option  
2) ACD -MIS Reporting as license control basis with In-Server or external server

### 1. In ACD function

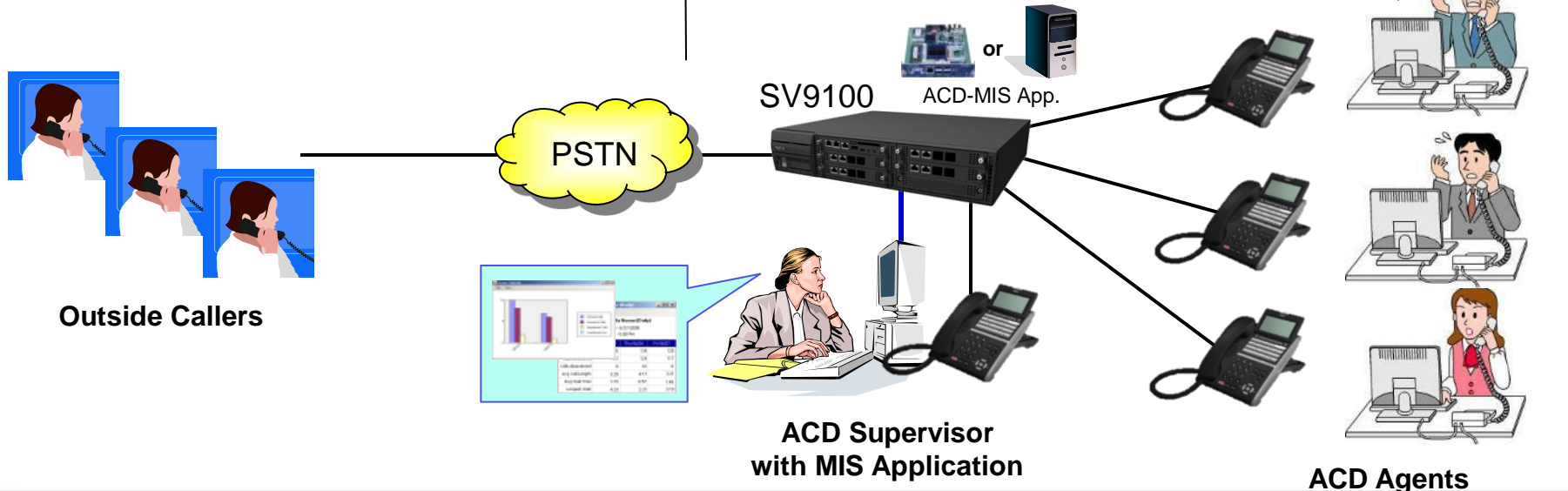
For SV9100, ACD ( call routing ) is standard function with license control.

- SV9100 ACD AGENT-01 LIC
- SV9100 ACD SKILL/CID BASE LIC

### 2. ACD-MIS Reporting

If MIS report is necessary., this will be hardware & license option.

- Optional In-server / external Server
- SV9100 ACD P-EVENT LIC
- SV9100 ACD MIS LIC
- SV9100 ACD-MIS MONITOR-01 LIC
- SV9100 ACD MIS AGENT-01 LIC
- Web DT Client





# New UNIVERGE SV9100: Smart communications for small medium businesses

## UC Application fro SV9100 : UC Suite “Data conference”

By simple operation , user can set up “Data conference” , up to eight (8) party can work together. by most suitable media Telephony /Chat / Application sharing , Whiteboard / Video.

### Function to be provided

- Audio/Videoconferencing
- Real time Presence
- Application sharing
- Whiteboard
- Instant Message/Chat
- File transfer

### By utilizing this feature, user can enjoy

- ✓ Improve Efficiency
- ✓ Increase productivity
- ✓ Reduce travel cost



**Invitation participants**

**Video**

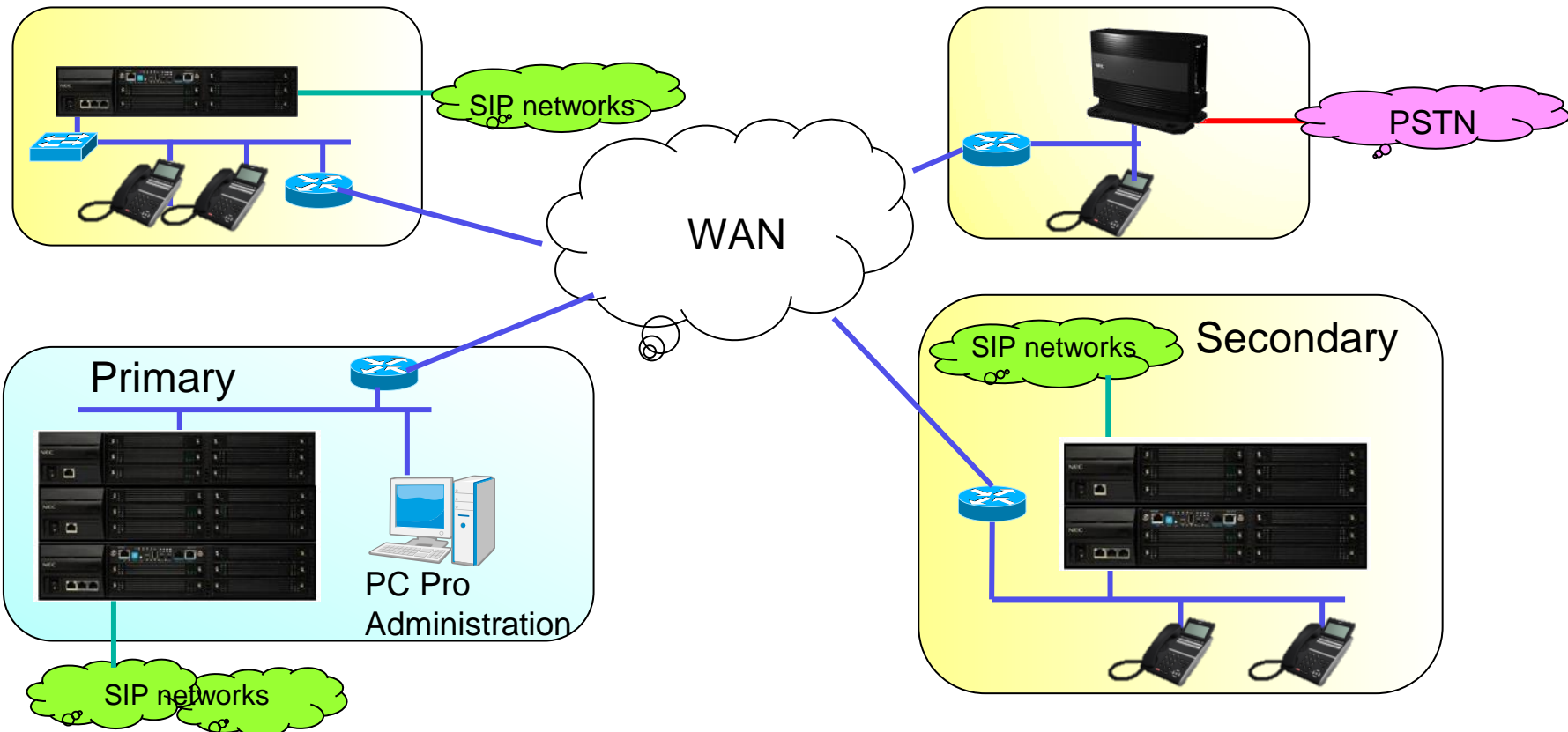
**Application sharing , whiteboard**

**Chat**

# New UNIVERGE SV9100: Smart communications for small medium businesses

## Enhanced Network function: Netlink

SV9100 provides Network function, enhanced "Netlink" will provide 50 Locations / 896 users / 400 trunks as one system with Failover functionality. Suitable for a small organization in a multi-floor, multi-building campus or geographically dispersed office environment



# Terminals

# New UNIVERGE New terminals DT400/800

UNIVERGE SV9000series enhancement, new series enhanced DT400/800 has been released.  
 -New cosmetic design , Line Key & Lamp visibility improvement.  
 Considering smartphone usage in office , Smartphone integration will be available.

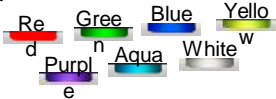
Visibility of Line Key Improvement

Change material to transparent and light whole surface of line key



Visibility of MWI Improvement

Locate it to the center of LCD, enlarge the shape



<Note>  
 Digital is 2 color only (Red/Green)

Make Accent by Line

Add one line between 10 key and line key, it makes Accent from current DT design

Luxury Looking

Black is Piano Black  
 White is White Porcelains

Skinny Design

By adding a shadow to Side Panel and use new skinny handset, it looks thinner than current model.







Cursor Key Improvement




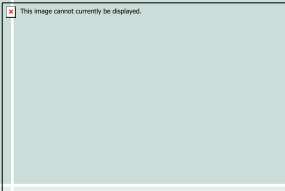
By separating each button of the Cursor key, prevent from wrong operation



# UNIVERGE *New* terminals DT400

Item	DTZ-2E	DTZ-6DE	DTZ-12D/24D	DTZ-8LD
				
<b>LCD</b>	N/A	24x3 line, 92x35mm (w/o Backlit)	Gray Scale 165x58 dot, 92x56.5mm	Main + Sub: Same as left
<b>Incoming Lamp</b>	3 colors (Red, Green, Yellow)			
<b>Line Key</b>	2 /6/12/24 buttons with LED (LED: Red, Green)			8 with LED (x4=32) (LED: Red, Green)
<b>Soft Key</b>	N/A	6 buttons (Exit, Help and 4 button)		
<b>10 Key Backlit</b>	N/A		Yes (Orange)	
<b>Handset</b>	Narrow band, supporting HAC			
<b>Hands free</b>	Full Duplex			
<b>Consumed Power</b>	1.0W	1.1W	2.0W w/o option	2.2W w/o option
<b>Power Feeding</b>			Local Feeding: AC Adapter (27V 1A) (Option)	
<b>Bottom Option</b>	N/A		ADA, APR, BHA, BCA	
<b>Side Option</b>	N/A		8LK, EHS Cable (Plantronics)	
<b>Dimension (WxDxH)</b>	182x225x109mm		182x258x109mm	182x272x109mm
<b>Weight</b>	1.1kg	1.1kg	1.2kg	1.3kg
<b>Color</b>	Black	Black	Black / White	Black / White

# UNIVERGE *New* terminals DT800

Item	ITZ-12D/24D	ITZ-12DG/24DG	ITZ-8LD/8LDG	ITZ-12CG/24CG
				 
<b>LCD</b>	Gray Scale 224x96 dot, 92x56.5mm		Main + Sub: Same as left	Color 480x272 pixel, 105.5x67.2mm
<b>Incoming Lamp</b>	7 colors (Red, Green, Blue, Yellow, Purple, Aqua, White)			
<b>Line Key</b>	12/24 buttons with LED (LED: Red, Green)		8 with LED (x4=32) (LED: Red, Green)	12/24 with LED (LED: Red, Green)
<b>Soft Key</b>	6 buttons (Exit, Help and 4 button)			
<b>10 Key Backlit</b>	Yes (Orange)			
<b>Handset</b>	Wide band, supporting HAC			
<b>Hands free</b>	Full Duplex			
<b>Consumed Power</b>	IEEE802.3at Type1 Class2(below 6.49W)	IEEE802.3at Type1 Class3 (below 12.95W) IEEE802.3at Type1 Class2(below 6.49W) (*ITZ-8LD)		
<b>Power Feeding</b>	Local Feeding: AC Adapter (27V 1A) (Option) / PoE: IEEE802.3at Type1			
<b>LAN I/F</b>	10/100 BASE	10/100/1G BASE (8LD is 10/100 BASE)		
<b>USB I/F</b>	N/A	1 Port (USB 2.0)	N/A	1 Port (USB 2.0)
<b>Bottom Option</b>	ADA, BCA			
<b>Side Option</b>	60 DSS Console, 8LK, EHS Cable (Plantronics)			
<b>Dimension (WxDxH)</b>	182x258x109mm		182x272x109mm	182x278x109mm
<b>Weight</b>	1.2kg	1.2kg	1.3kg	1.3kg
<b>Color</b>	Black / White	Black / White	Black / White	Black /White

# DT830 (Gig/IP) Terminals (Value Line)



12 Button with GIG  
*ITZ-12CG-3*  
Black Model Only



24 Button with GIG  
*ITZ-24CG-3*  
Black Model Only



32 Button with GIG  
*ITZ-32CG-3*  
Black Model Only



Color Display



8 Button Gray scale  
With GIG  
*ITZ-8LDG-3*  
White/Black Models

### Value Line

- USB port (excludes 8LDG)
- NO upgrade from Desi to Desiless and Grayscale to Color



12 Button with GIG  
*ITZ-12DG-3*  
Black Model Only



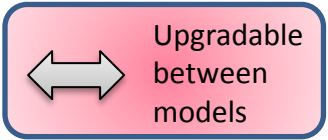
24 Button with GIG  
*ITZ-24DG-3*  
Black Model Only



32 Button with GIG  
*ITZ-32DG-3*  
Black Model Only



Gray scale Display



Upgradable  
between  
models

# DT410 & DT430 (Digital) Terminals



2 Button no display  
DTZ-2DE-1  
Black Model ONLY



6 Button Gray Scale Display  
DTZ-6DE-1  
Black Model Only

↔ Upgradable between models

□ Fixed


Fixed Units

**Economy Based DT410**

## Value Based (DT430)



12 Button Display (DTZ-12D-3)  
White /Black Models



24 Button Display (DTZ-24D-3)  
White /Black Models



32 Button Display (DTZ-32D-3)  
White /Black Models



8 Button Desiless Display (DTZ-8LD-3)  
White /Black Models

Gray Scale Display

↔ Gray Scale Display

Gray Scale Display



# New UNIVERGE New terminals DT400/800

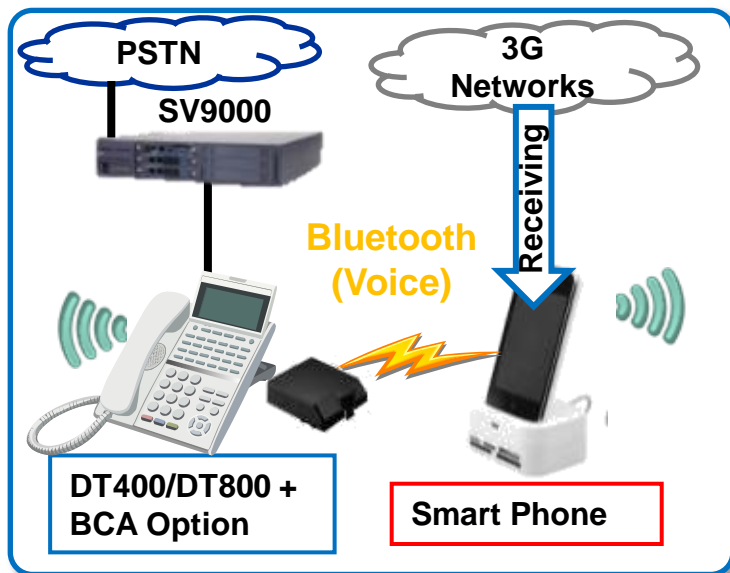
Smartphone is becoming essential communication tools for the daily business. New DT400/800 will provide integration function with smart phone by Bluetooth technology. In addition to basic Receive /Place call from smartphone and Application SDK has been prepared for further customization.

## Receive Call

- When call is coming to Smart Device, DT Terminal is also ringing.
- Answer and End the call by Handset or Speaker on DT terminal.  
(Hands free call can be available)
- Volume can be controlled from DT terminal.

## Place Call

- DT Terminal can dial through PBX systems from an operation by Smart Device.
- Dial from Phone book in Smart Device is available.
- This solution requires an application, SDK is prepared. Refer to the next page for details of the SDK.



# UT880 - One Desk phone to rule them all



# A phone that will support your growing business

Android - Jelly bean



7" 600 x 1024 LCD  
Capacitive multi-touch



Cortex-A9 Dual Core



1 GB Memory  
4 GB Storage



Wideband speaker phone  
Headset Jack



2 X 10 / 100 / 1000  
POE (802.3af)



2.1+EDR / 3 / 4



1.3 M (CMOS)



USB 2



3 Colour Message Wait  
Indicator



Specifications not final and subject to change

# UT880 - UC Touch Screen Deskphone



## Specifications

Features	UT880 Desktop Telephone
<b>LCD Display</b>	7 inch TFT LCD WVGA(1024 x 600) with Backlight, 16.7M Colors
<b>Touch Screen</b>	Capacitive 4 Finger Multi-Touch Window
<b>Camera</b>	Built-in Camera, 1.3M CMOS Image Sensor, Auto Exposure, Auto White Balance, Fix IRIS
<b>Incoming Call Lamp</b>	3 Colors (Red, Green, Blue)
<b>Bluetooth</b>	Bluetooth V2.1
<b>Bluetooth Profiles Supported</b>	+EDR, V3.0 (HS not supported), V4.0 HSP Profile (Headset) & PBAP Profile (Phone Book Access)
<b>Audio</b>	Hands-free Microphone: Omni-Directional
	Wideband Speaker: Wideband:G722HD; Narrow Band:G711ulaw/alaw,G729A
	Handset: RJ-9 Single Jack
	Headset: RJ-9 Single Jack
<b>Hook Switch</b>	Operating Force 50gf (max.)
<b>Ethernet Port</b>	2 Switched 10/100/1000 Mbps
<b>LAN Port</b>	10/100/1000Base-T
<b>PC Port</b>	10/100/1000Base-T
<b>Power over Ethernet (PoE)</b>	IEEE 802.3af Compliant, No AC Jack
<b>SD Card I/F</b>	Micro SD Card Connector supports spec version 1.01 & 2.00
<b>USB I/F</b>	Host - USB 2.0 Type A connector, Device - USB 3.0 Micro B Type
<b>Flash Memory</b>	4GB MLC NAND Flash
<b>SDRAM Memory</b>	1GB

# License & Enhancement

# New UNIVERGE SV9100: Smart communications for small medium businesses

Basic license structure will be as categorized below.

1. Version license
2. Capacity license
3. Optional license
- and **New** 4. User license

## 1. Version license

- Version license is required to enjoy all system
- Without version license ,  
Basic and bundled feature will work  
no additional licenses ( capacity + option )  
can be installed

==Basic and bundled feature ==

Default Capacity on CPU x 64 ports  
Built-In VRS x 2  
Mobile Extension clients x 4  
IP Trunks( SIP/H323) x 4  
IP Terminals ( SIP-MLT/SIP-SLT/3<sup>rd</sup> party ) x 4

## 2. Capacity license

Default Capacity on CPU x 64 ports  
Additional port license ( 1 port )

## 3. Optional license

- 3. 1 Networking
- 3. 2 VoIP channel IPLE
- 3. 3 IP Trunk IPLE
- 3. 4 IP terminal IPLE / DT800
- 3. 5 IP related IPLE
- 3. 6 CTI
- 3. 7 In-ACD
- 3. 8 System Feature
- 3. 9 InMail
- 3.10 UM8000
- 3.11 PVA
- 3.12 UC suite
- 3.13 MyCalls

# New UNIVERGE SV9100: Smart communications for small medium businesses

## User License

- Provide the “User” based bundled license to lead SV9100 users toward IP/UC world.
- Enable to provide the value-added IP/UC features by single license with competitive price.
- Up to 3 kinds of User Licenses are ready.

Category	License (a-la-carte)		User License		
	BE Code	Name (a-la-carte)	STANDARD	STANDARD PLUS	PREMIUM
IP Station	BE114054	SV9100 IP PHONE-01 LIC	X	X	X (2 pcs)
InMail	BE114083	SV9100 INMAIL VM BOX-01 LIC		X	X
	BE114084	SV9100 INMAIL EMAIL CLT-01 LIC			X
UC Suite	BE114056	SV9100 DT CLIENT-01 LIC	X	X	X
	BE114057	SV9100 WEB DT CLIENT-01 LIC		X	X
	BE114063	SV9100 INMAIL INT-01 LIC		X	X
	BE114061	SV9100 BASIC SHARED SVC-01 LIC		X	
	BE114060	SV9100 SHARED SVC-01 LIC			X
	BE114062	SV9100 CRM INTEGRATION-01 LIC			X
System Features	BE114055	SV9100 MOBILE EXT-01 LIC	X	X	X
	BE114151	SV9100 MULTI DEVICE-01 LIC			X

# 1. Version License (1/3)

X	: Released
---	: Not released
ON	: Available in default w/o license

## ◆ Current SV8100

Item Code				Item Name	Description	US	OT			AU	EMEA	
BE	US Stock	LASC	Aust				LASC	Asia	China			
BE112431	TBD	TBD	TBD	LK-SYS-V9000 Enhancements-LIC	Version license for R9	ON/OFF	X	X	X	X	X	X



## ◆ Proposal for SV9100 ▲

Item Code				Item Name	Description	US	OT			AU	EMEA	
BE	US Stock	LASC	Aust				LASC	Asia	China			
BE114043	640772	TBD	---	SV9100 VERSION LIC (R1)	Version license for R1	ON/OFF	X	X	X	X	X	X

- Version license is required in order to ready the system to enjoy all system features.
- The system without version license shall provide basic and bundled features, and can not install any specified feature licenses (including capacity license).
- Latest version license will be released every enhancement timing.
- Feature enhancement (except bug-fix) will be contained in the version license and/or specified feature license.
- R2-LIC or upwards will contain the previous version licenses. (same as current SV8100 version license concept. When the new version license is released, previous version license shall automatically be EOL.)

<Note>

- Version license will be provided by FOC for SWA customers in order to guarantee the software upgrading. Refer to SWA guideline for more details of SWA role.



# 1. Version License (2/3)

	<b>Non-SWA Customer</b>	<b>SWA Customer</b>
<b>When New Sales</b>		
Main S/W Level	Latest version	Latest version
Version License	<b>FOC</b>	<b>FOC</b>
<b>When Enhanced</b>		
Main S/W Upgrading	MUST ask Dealer (Maybe charged service by Dealer)	FOC (inc. SWA contract)
Version License	MUST Purchase	FOC (inc. SWA contract)

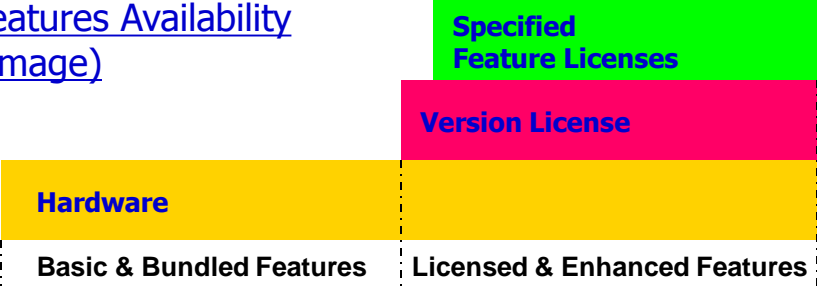
NEC guarantees to provide the "Latest Quality" software to all new customers regardless SWA contract. (Version Lic shall be supplied by each market)

# 1. Version License (3/3)

SV9100 features are categorized as below.

- **Basic & Bundled Features**  
Enable to use with necessary hardware only.
- **Licensed & Enhanced Features**  
Value-Add features (such as ACD, Hotel, IP Trunk, etc. and more than 64 ports) and enhanced features on each Software Enhancement. Enable to activate by version license and appropriate feature licenses.

Features Availability (Image)

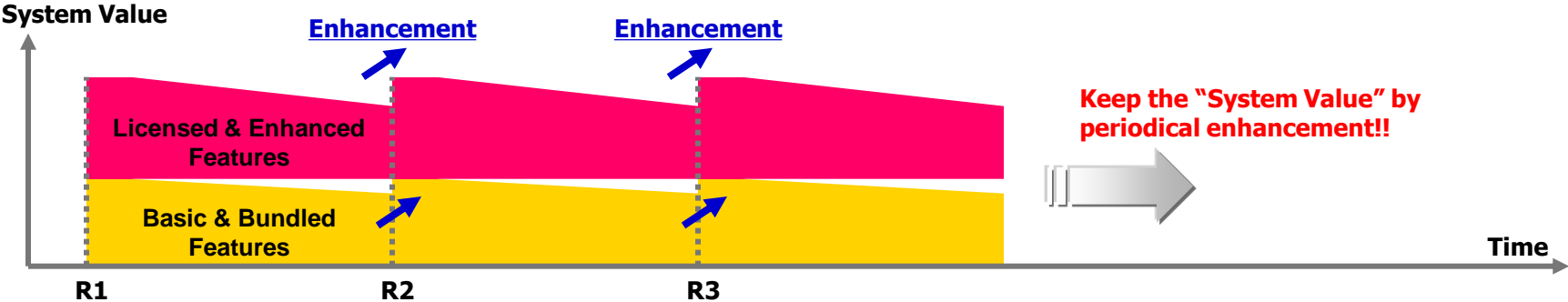


**<Example>**  
**In case the customer installed only necessary hardware :**

- Enable to enjoy **Basic & Bundled features** on "R1" level
- Feature level shall be stayed on "R1" even if main software is upgraded.
- Can not install any **specified feature licenses** without version license.

Main Software Enhancement (Image)

"System Value" is going down day by day. SWA shall guarantee to keep the system value therefore Version License will be supplied by FOC for SWA customers.



# Major New / Enhanced Features on R1

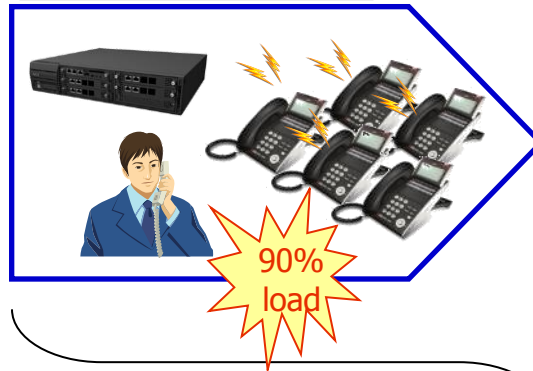
## Line Load Control

- Enable to supervise the CPU load status, and if the value of CPU load factor exceeds threshold, the system intentionally restrict several extensions and trunks in order to stabilize entire system.

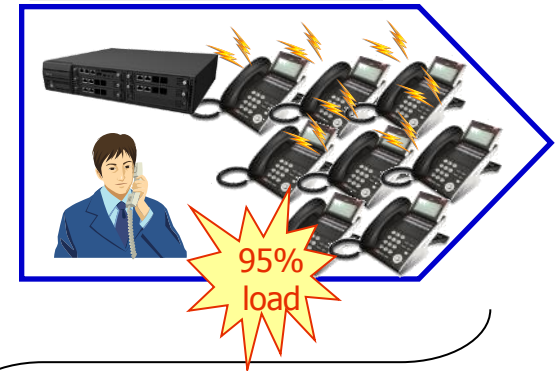
Normal Condition



Busy Level1



Busy Level2



**Restrict incoming/outgoing calls**

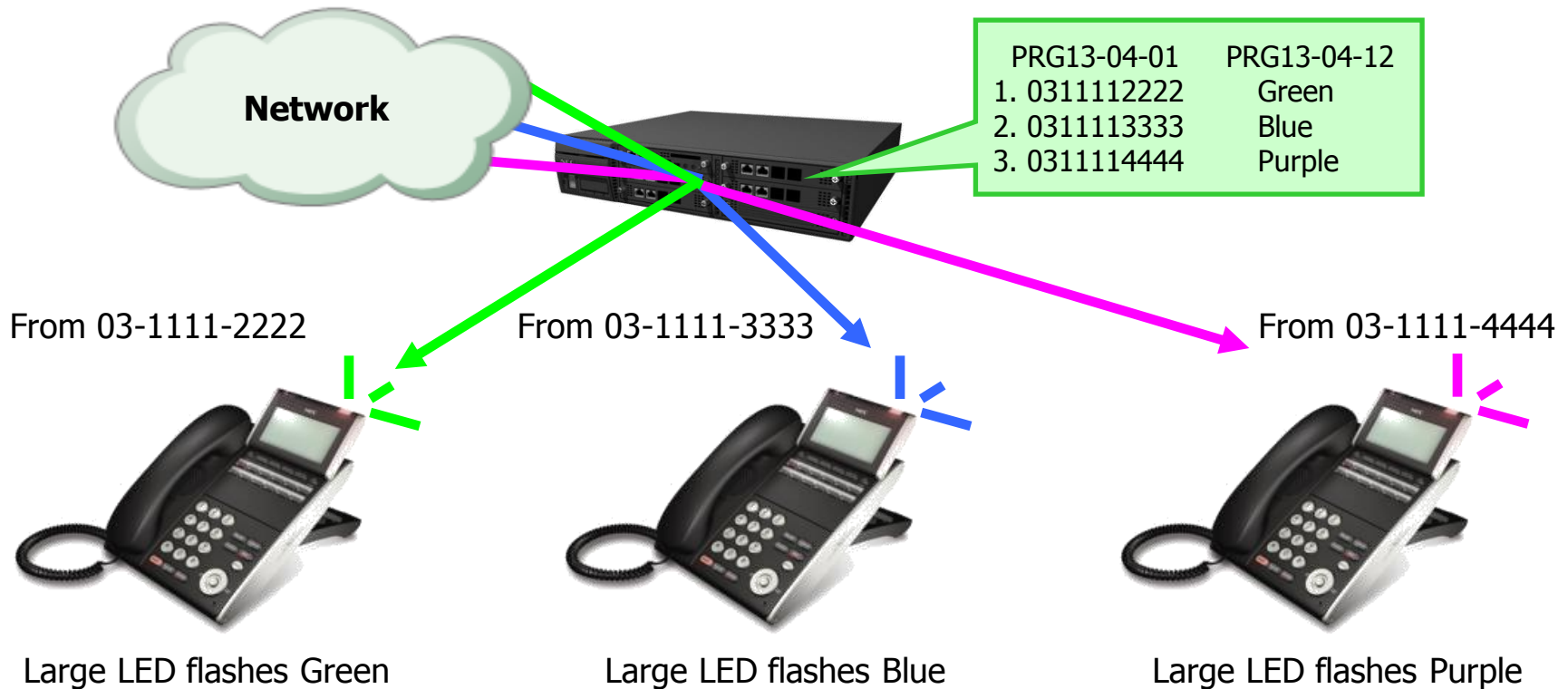


**System safe and high availability**

# Major New / Enhanced Features on R1

## 7 colors LED display by Caller ID

- Enable to identify who is calling by LED color.
- Assign one of LED colors (7 colors) for pre-registered CID in PRG13-04.
- Applicable for DT7xx terminals (IP) and new DT terminals (IP).



# Major New / Enhanced Features on R1

## System Incoming Call Log

- Enable to check the all incoming calls Log on the system by pressing the function key.



Press the soft key to check the incoming call log on his terminal.

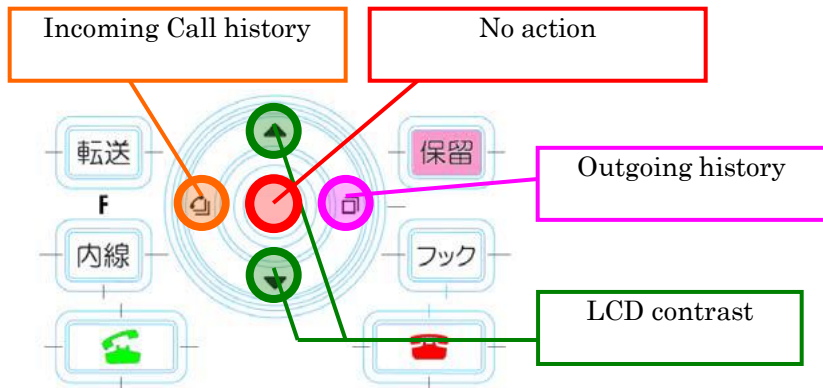
Press the "System Caller Log" key (Programmable Function Key) to check the **all incoming calls log on the system.**

# Major New / Enhanced Features on R1

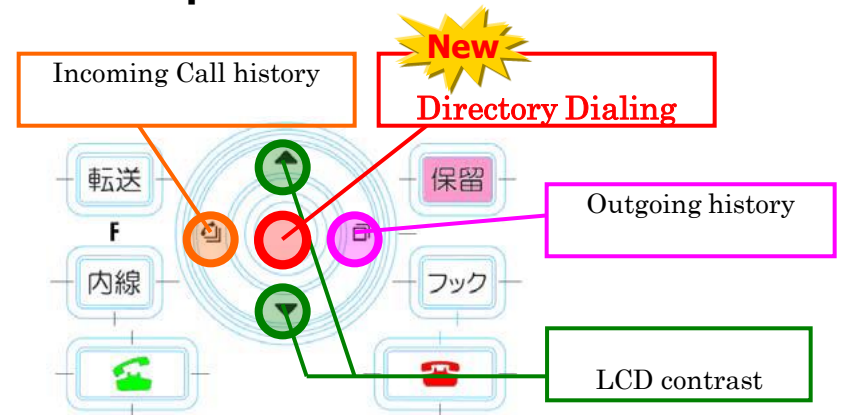
## Directory Dialing Operation Enhancement on 12BT Terminal

- Enable to operate the Directory Dialing by Cursor Keys on Bluetooth Handset.

### Current Operation



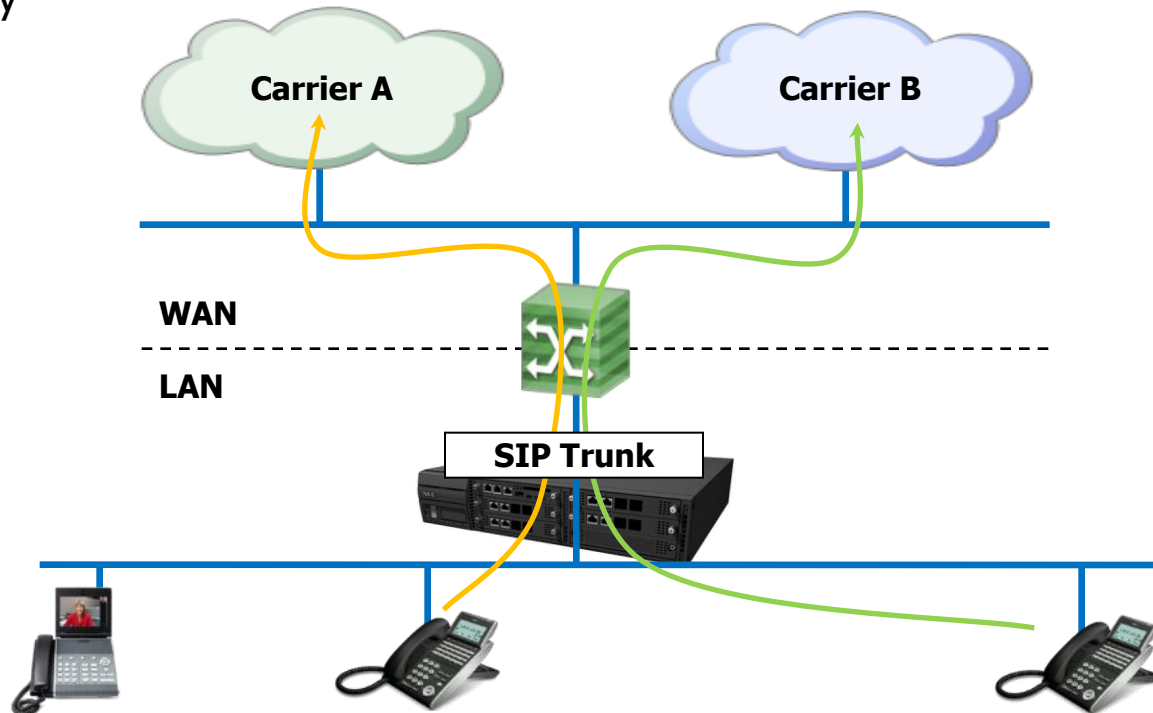
### New Operation



# Major New / Enhanced Features on R1

## Multi SIP Profile Support

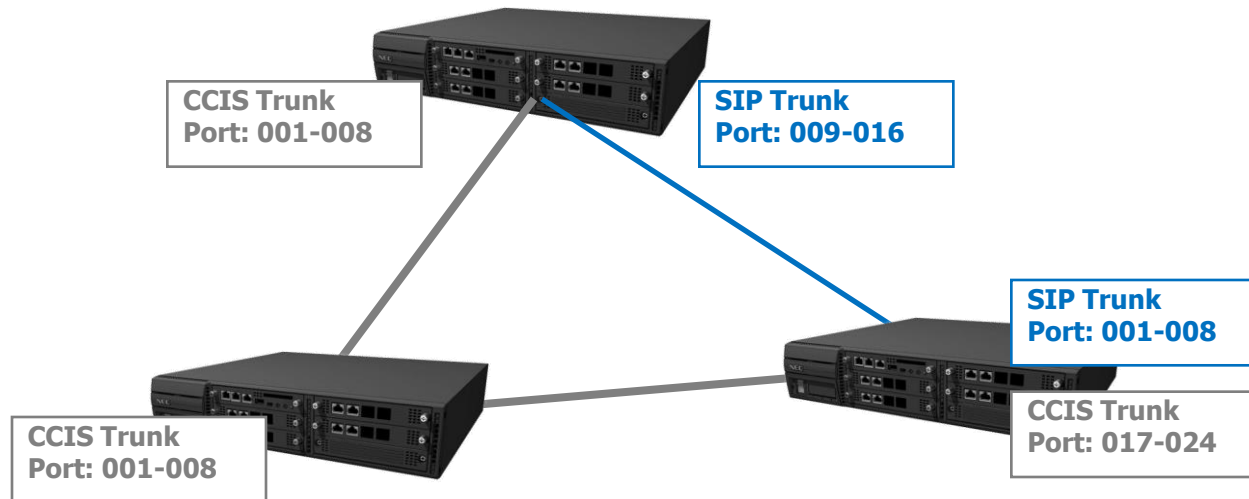
- Enable to use two SIP Profiles for SIP trunk accommodation.  
(ex : System Interconnection and Carrier or Two Carriers)
- Limitations
  - Separate SIP Port each SIP Profile
  - One Gateway



# Major New / Enhanced Features on R1

## IP Trunk Assignment Algorithm Improvement

- IP CCIS port and SIP trunk port can be assigned more flexibly.
  - Enable to assign IP CCIS and SIP Trunk port without IPLE installation.
  - Enable to select start port and number of ports with each CCIS and SIP
  - Enable to assign separate area with each CCIS and SIP

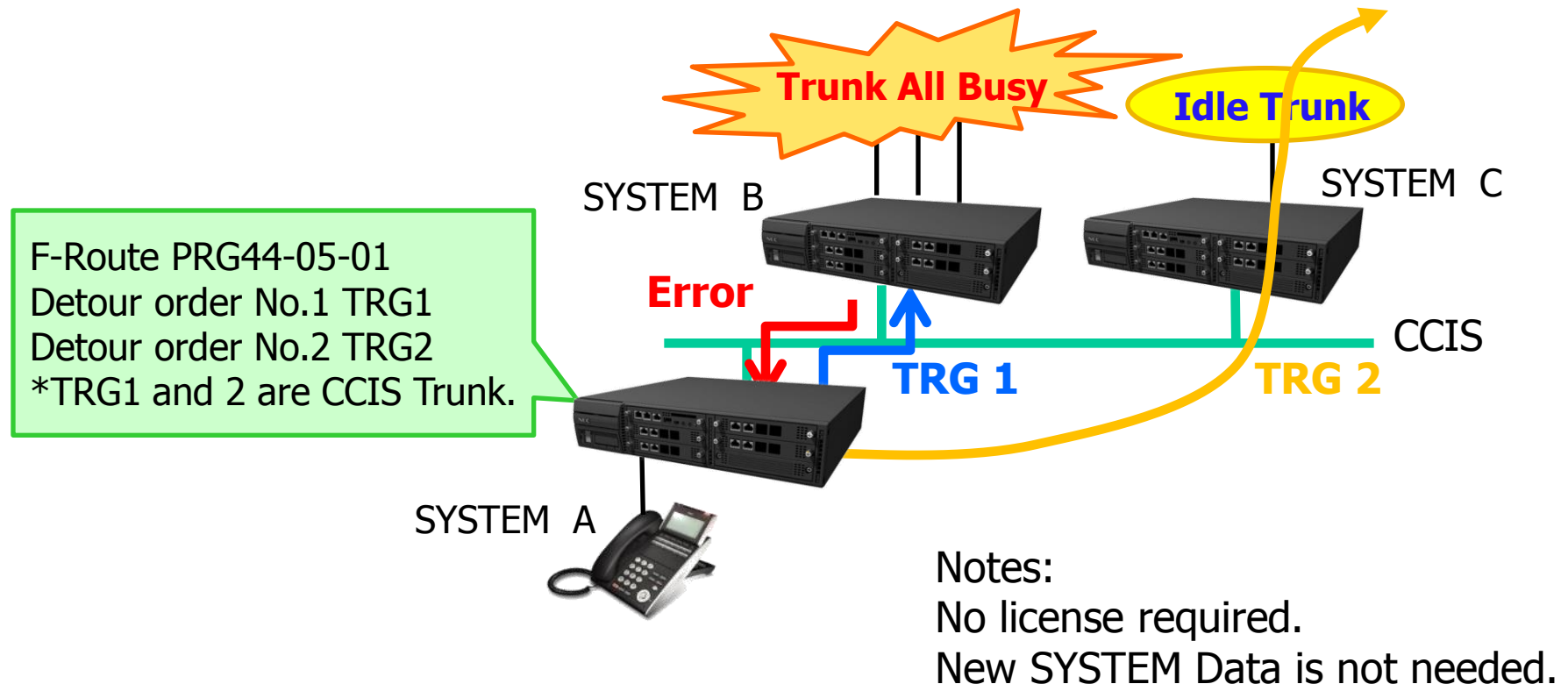




# Major New / Enhanced Features on R1

## Call rerouting on busy CCIS route

- The Trunk can be rerouted according to Detour order of PRG44-05-01 in SYSTEM A when all trunks in SYSTEM B are busy and cannot be seizure and return an error code to SYSTEM A from SYSTEM B.



# Major New / Enhanced Features on R1

## SIP Fax Path Through

- Enable to relay the fax if SIP Carrier do not support the T.38 Fax relay.

### Fail the fax call



Fax Detect. Change the codec of RTP to G.711

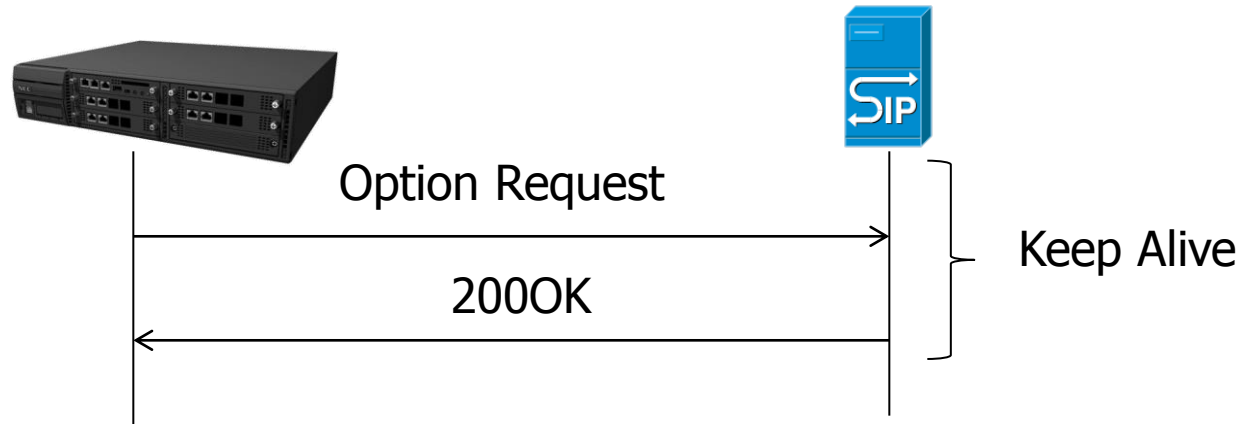
### Success the fax call



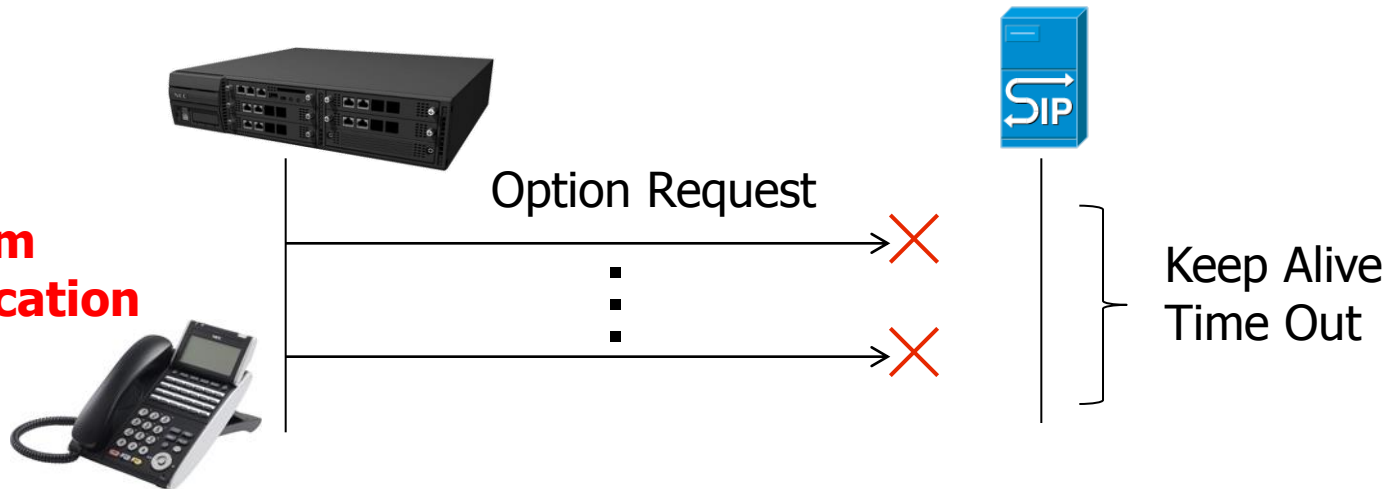
# Major New / Enhanced Features on R1

## SIP Option Keep Alive

- To check alive of SIP server, the system sends the SIP Option message to the SIP server.



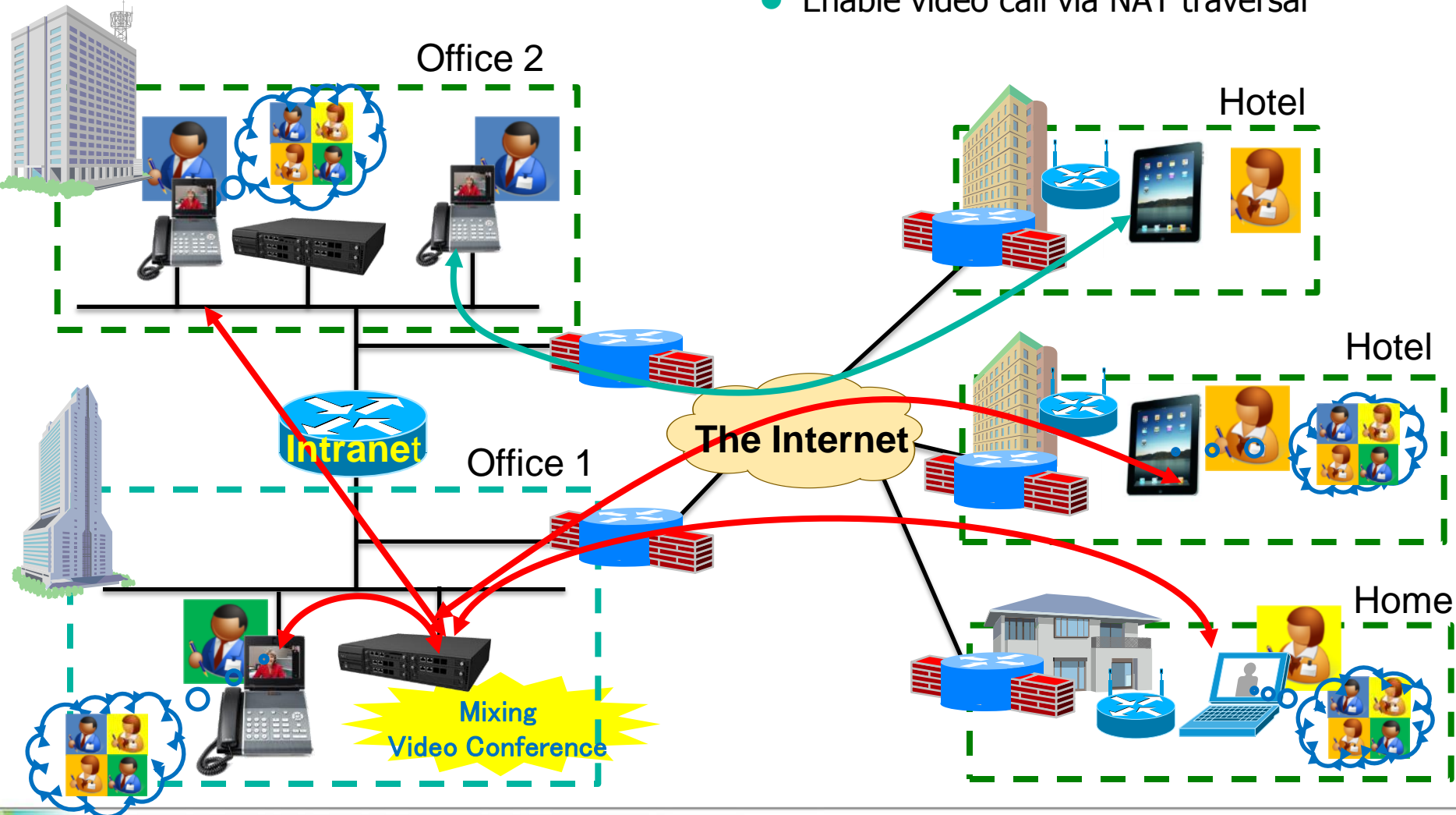
**Alarm  
Indication**



# Major New / Enhanced Features on R1

## Video / NAT Functions for Std SIP

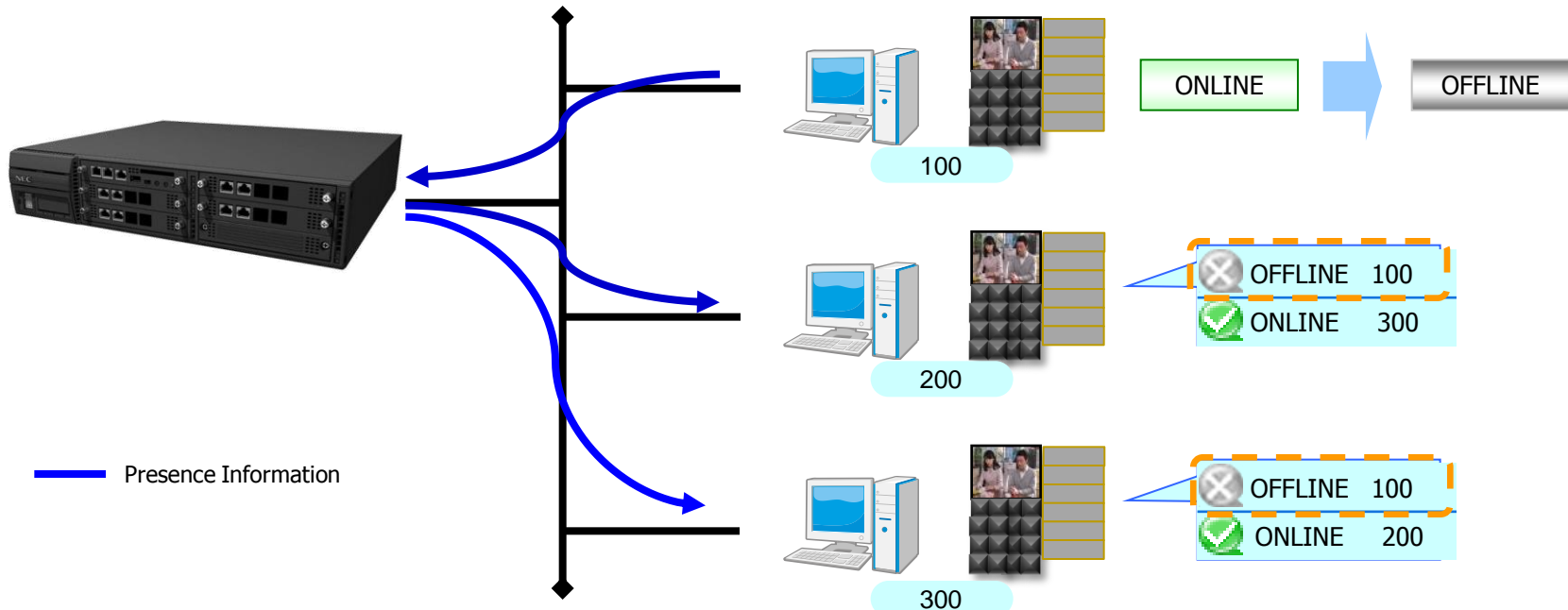
- Support the participatory video conference (4 party per 1 conference)
- Enable video call via NAT traversal



# Major New / Enhanced Features on R1

## Simple Presence / IM API

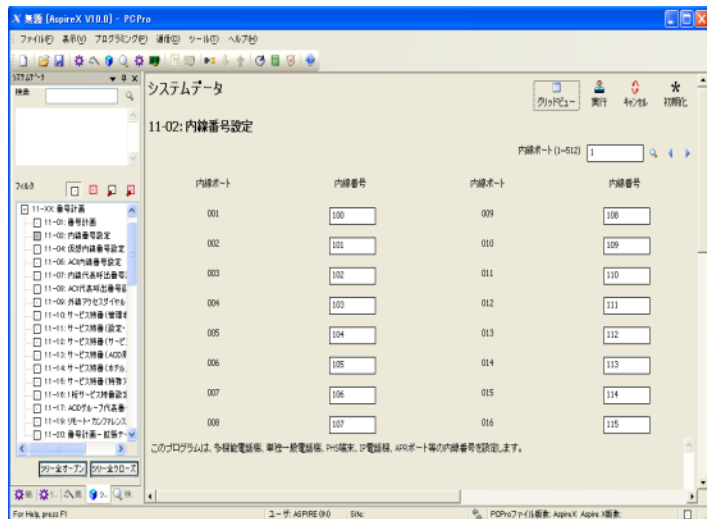
- Newly equip the API on the system to provide simple Presence / IM functions for appropriate client applications.
- Output the following information from this new API.
  - Simple Presence
  - Incoming / Outgoing History notification
  - Profile information management



# Major New / Enhanced Features on R1

## New PCPRO (Global Version)

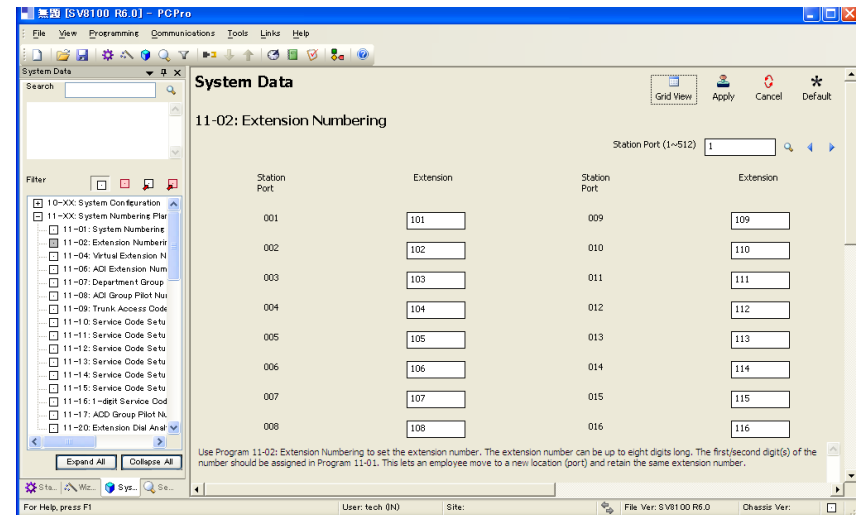
- Only one type (Global Version) PCPRO is released, and enable to access any market type of SV9100 by new PCPRO.
- Enable to change the market with menu on PCPRO. (ex. US<->General Export, US<->EMEA)



Japan version screen



Enable to  
change  
screen



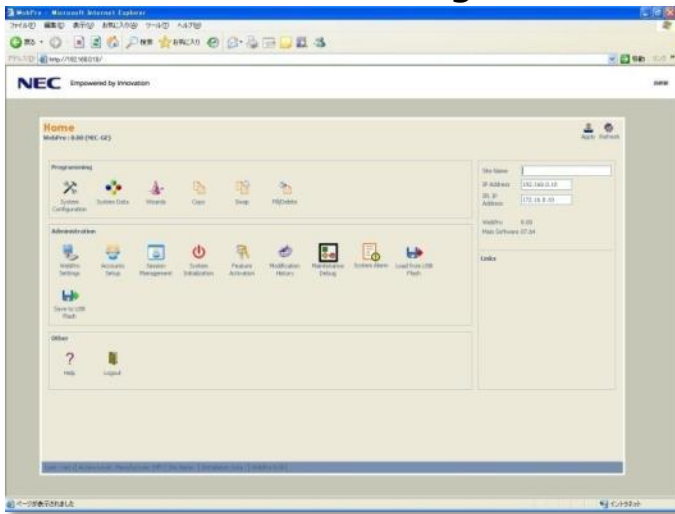
US version screen

# Major New / Enhanced Features on R1

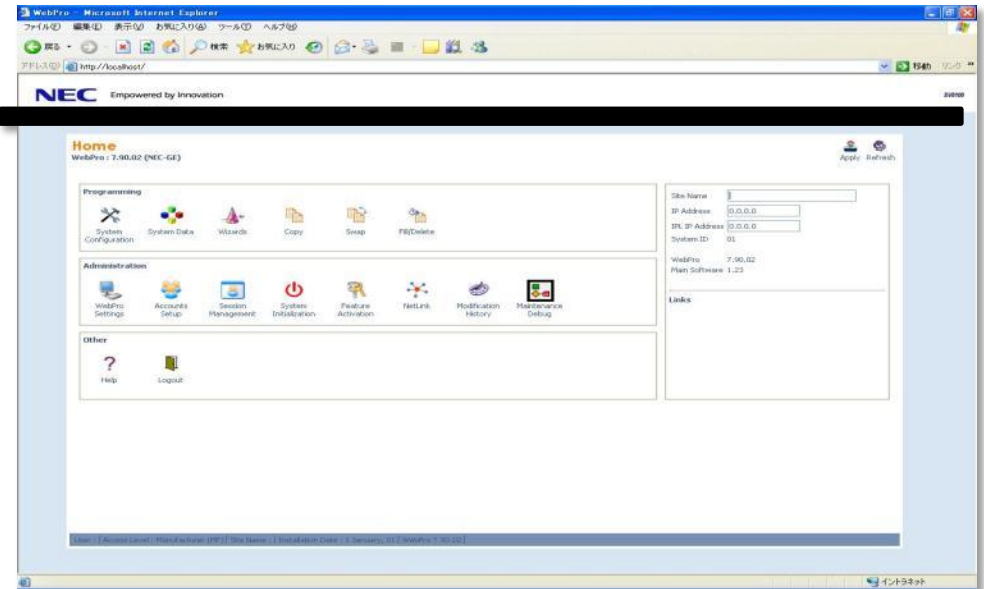
## New WebPRO (GUI Color/Design)

- Change the GUI color and design. (like a MA4000)

### SV8100 WebPRO Design



### SV9100 WebPRO Design

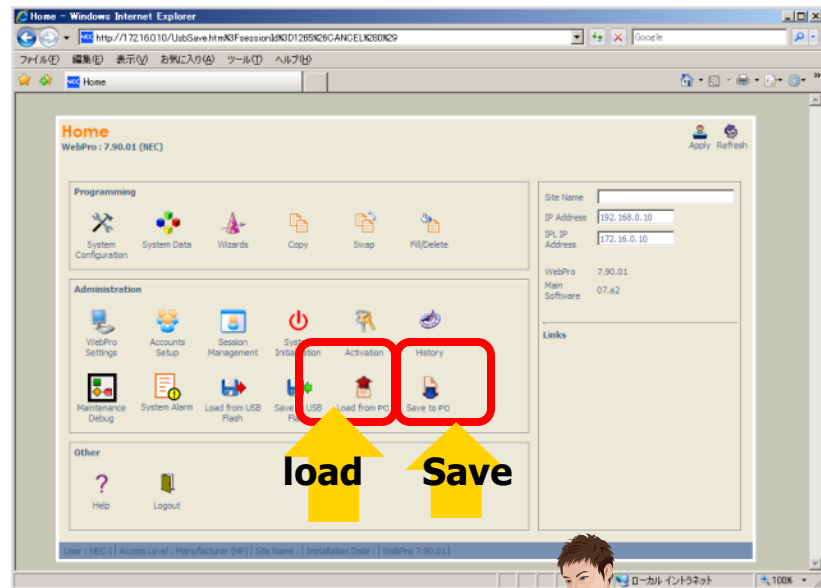


Change Color usage like MA4000

# Major New / Enhanced Features on R1

## New WebPRO Enhancement (File Save/Load)

- Enable to save/load the system data as PCPRO format to/from PC by WebPRO.
- Enable to handle (review/edit) the saved system data by PCPRO, if necessary. (Off-line programming)





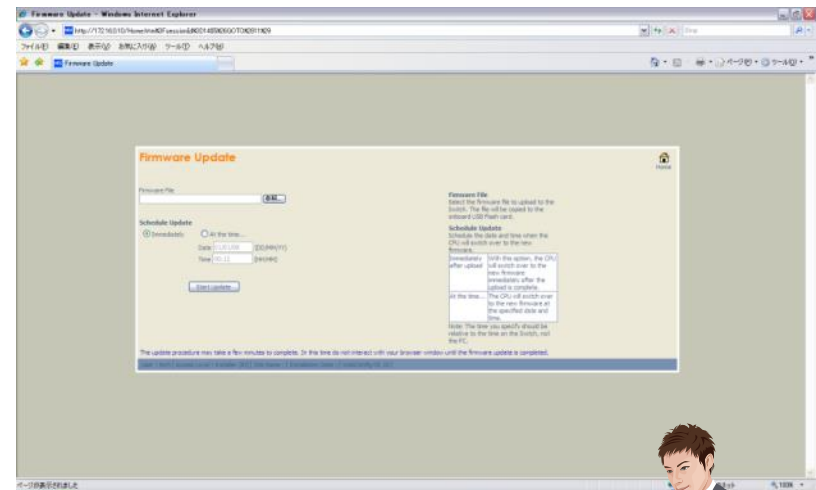
# Major New / Enhanced Features on R1

## New WebPRO Enhancement (Remote Upgrade)

- Enable upgrade the main software from PC by WebPRO.



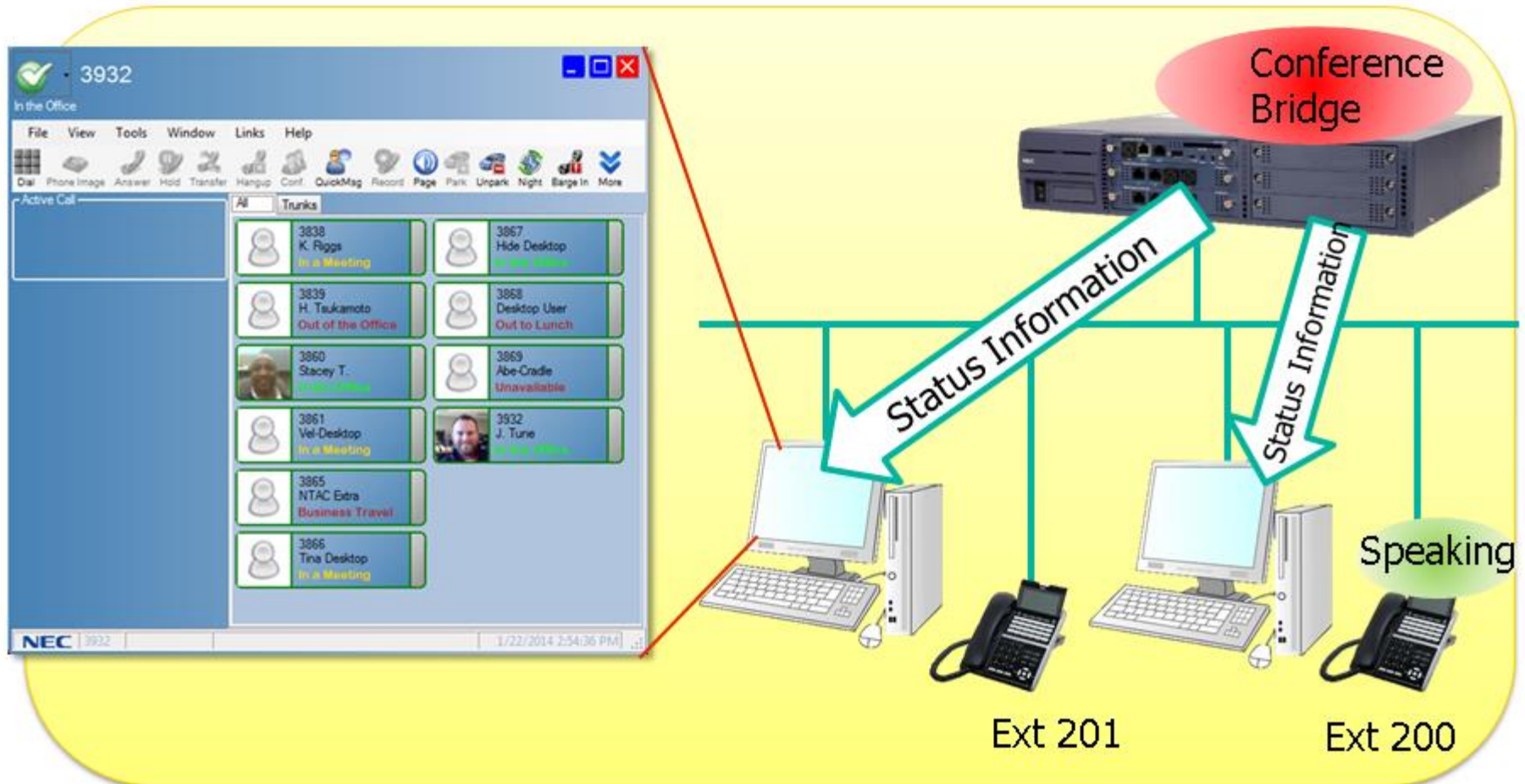
Upgrade  
new main  
software



# Major New / Enhanced Features on R2

## Simple Presence/IM API (TEL/Conf. Bridge status)

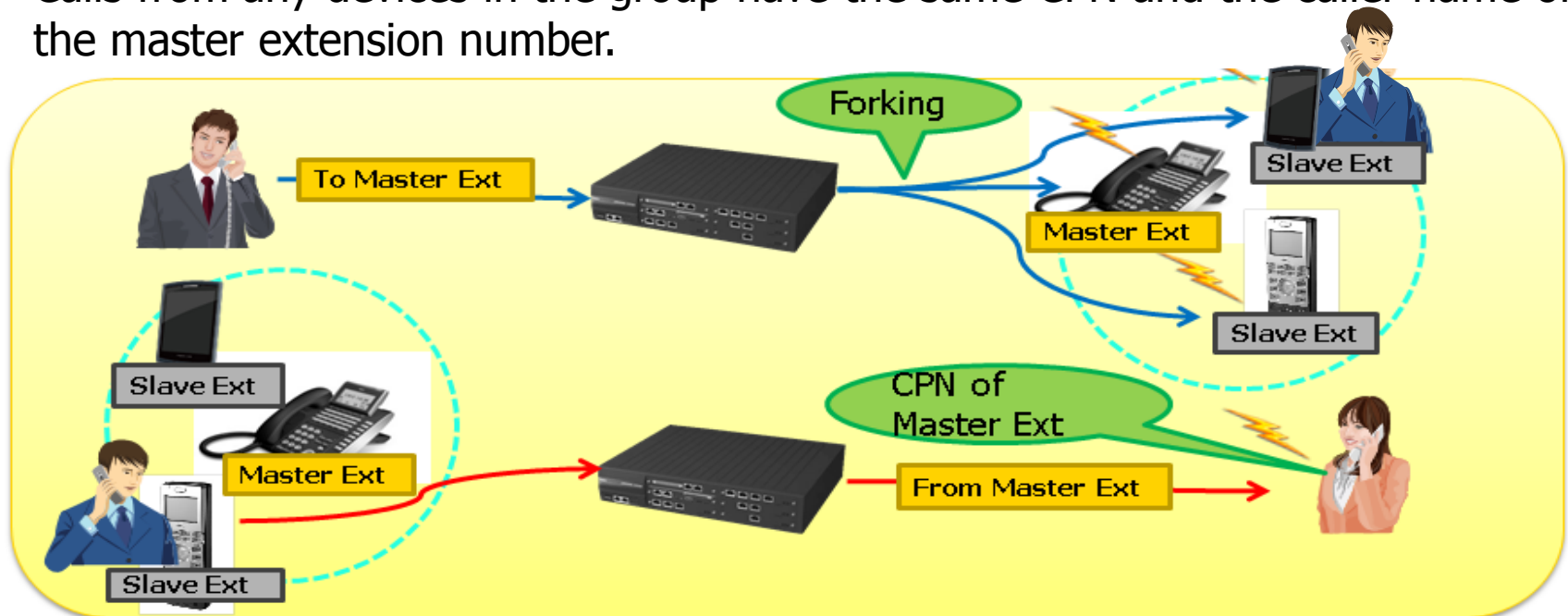
- Improve the Presence API to support TEL status (BLF, Call Forwarding and DND) and Conf. Bridge (Remote Conference) status for UC Suite.



# Major New / Enhanced Features on R2

## Multi Device Support

- This feature enables up to 6 devices can be assigned to one user, one extension, and those multiple devices can behave as if it were a single device.
- The devices need to be assigned in a dedicated group. And one of the extension numbers become the master extension number which can call all the extensions in the group by "forking".
- Calls from any devices in the group have the same CPN and the caller name of the master extension number.

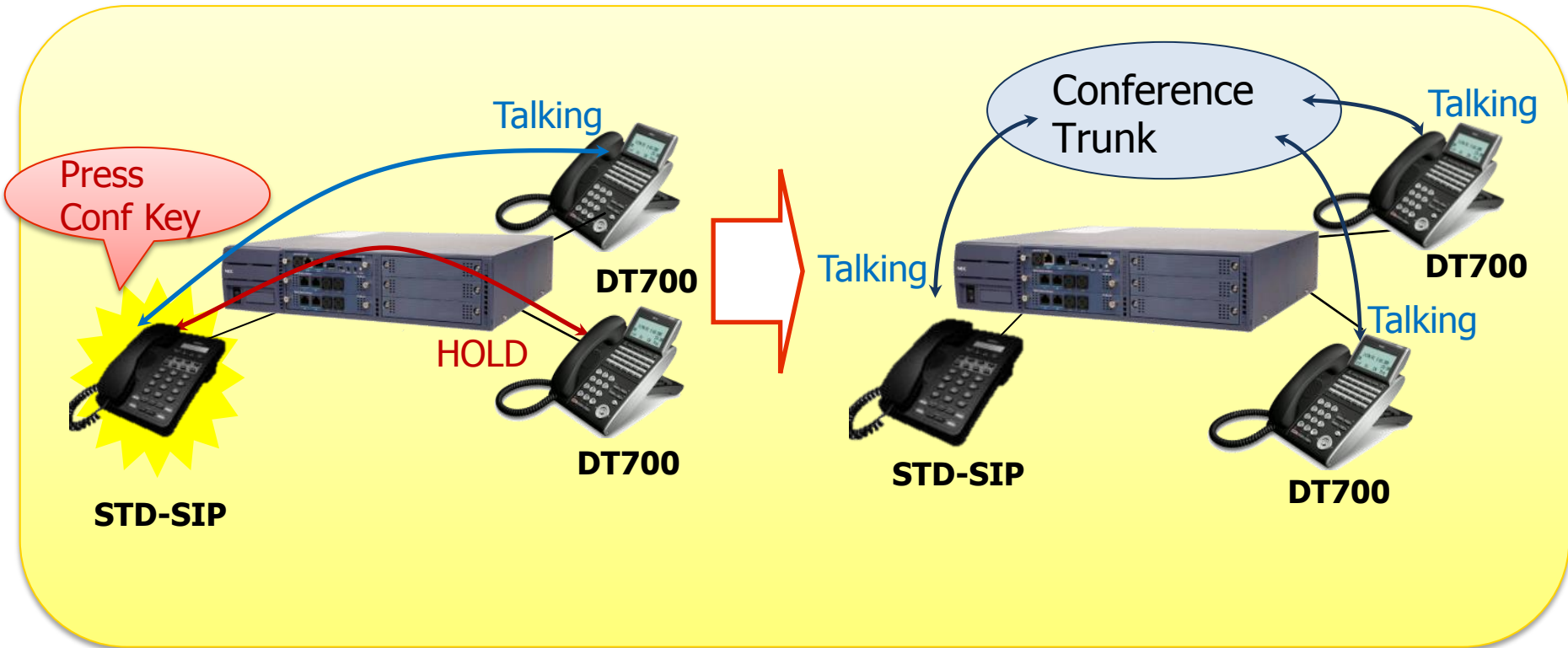


# Major New / Enhanced Features on R2

## CONF Key on Std SIP

Conference Call by Standard SIP Terminal

- Support conference key of STD-SIP by using system conference resource.



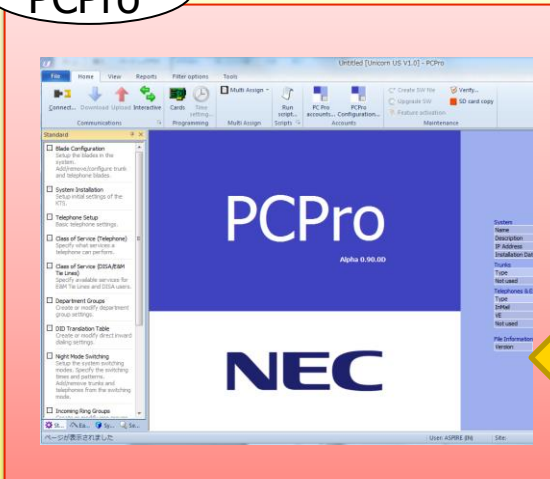
# Major New / Enhanced Features on R2

## License Name External File Support

Control license information by external file

- Define common license format as external file for Tel/Web/PCPro, so that it becomes easy to set license information by just changing this external file.
- And overseas office member can control license information by changing this file directly.

PCPro



external license file

```
<?xml version="1.0" encoding="utf-8" ?>  
<cygFeatureCodeInfoTable>  
  <cygFeatureCodeInfo code="0001"  
    group="System_Capacity">  
    <name>Max Port</name>  
    <nameTEL>Max Port</nameTEL>
```

WebPro



TelPro

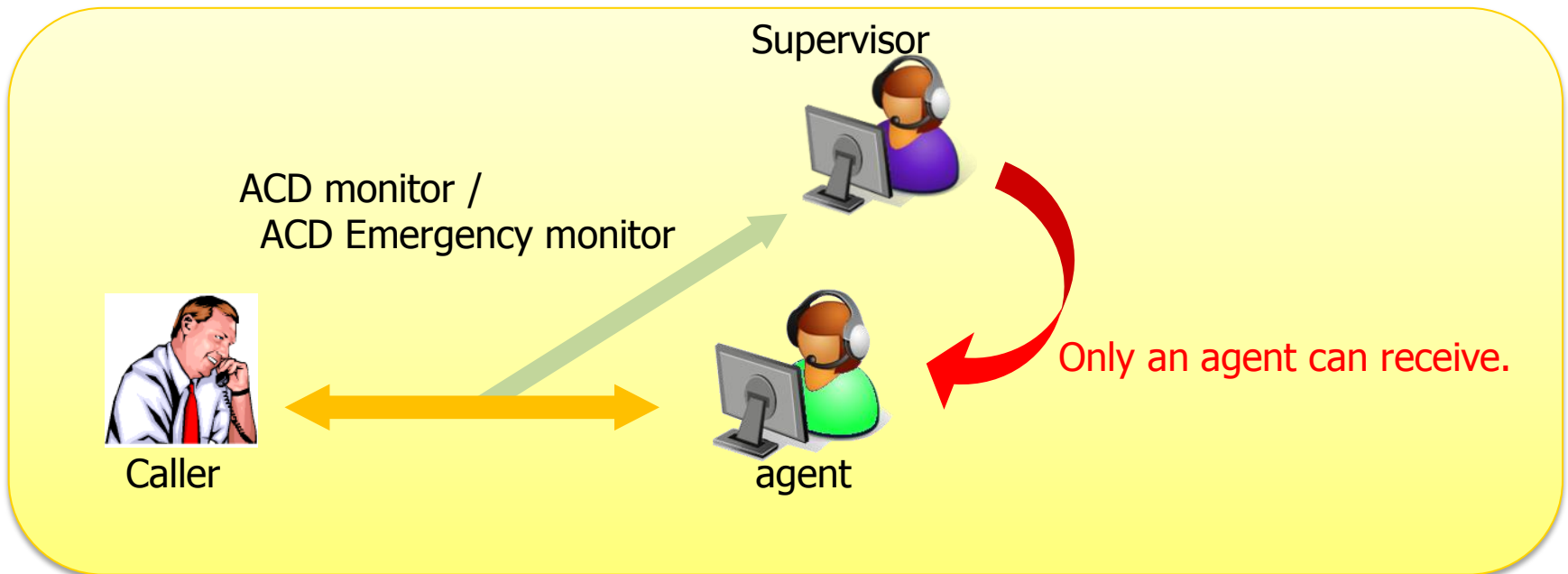


# Major New / Enhanced Features on R2

## ACD Whispering

This function allows supervisor to advise an agent in ACD monitor.

- The agent can hear voice of the supervisor, but the caller cannot.
- This function is activated by the supervisor pressing ACD Whispering Key, when the supervisor is using ACD Monitor or ACD Emergency monitor, or ACD Emergency call is ringing.

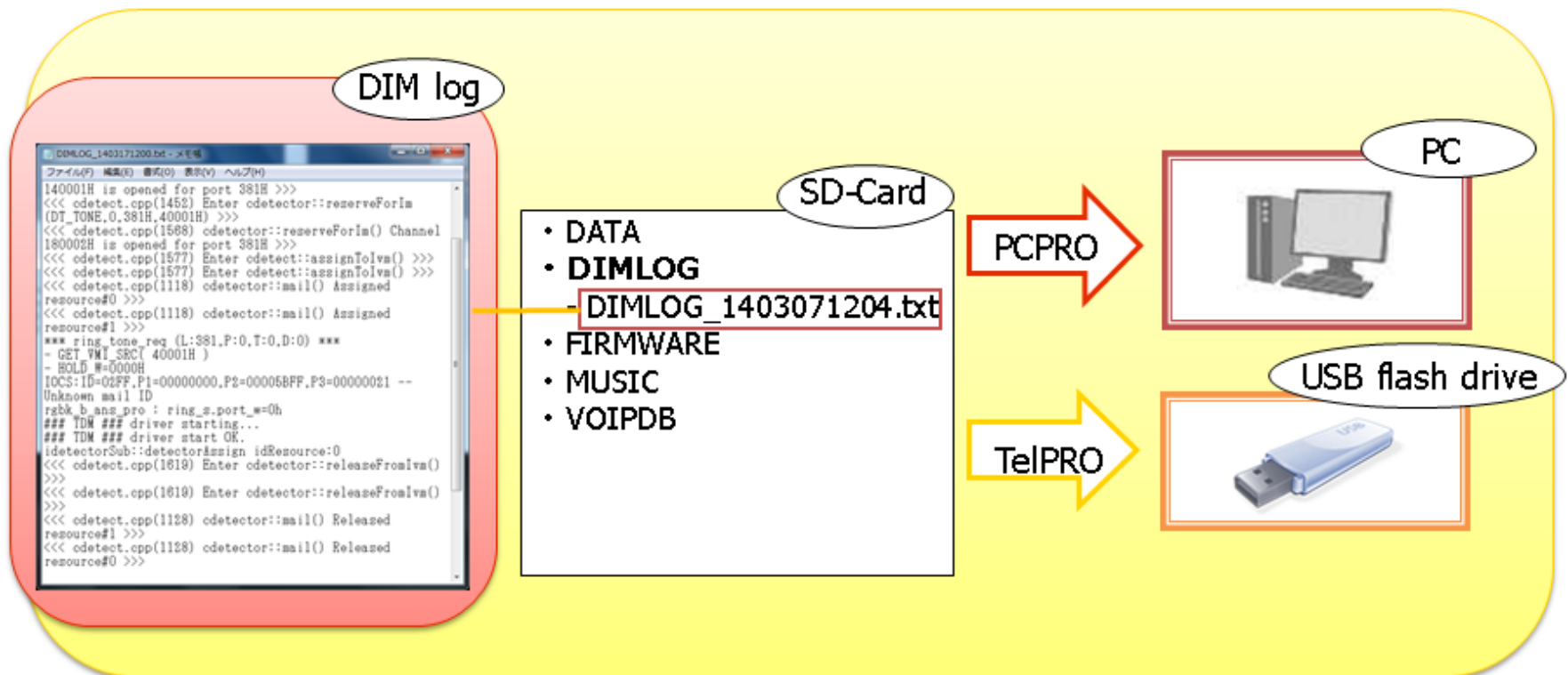


# Major New / Enhanced Features on R2

## Saving DIM to SD-Card

DIM log is saved as a text data to SD-Card on CPU.

- Saved DIM log can be extracted to USB flash drive by PRG90-03 ,and can be saved to PC via PC programming.
- Debug commands can be switched to ON/OFF via Web programming.

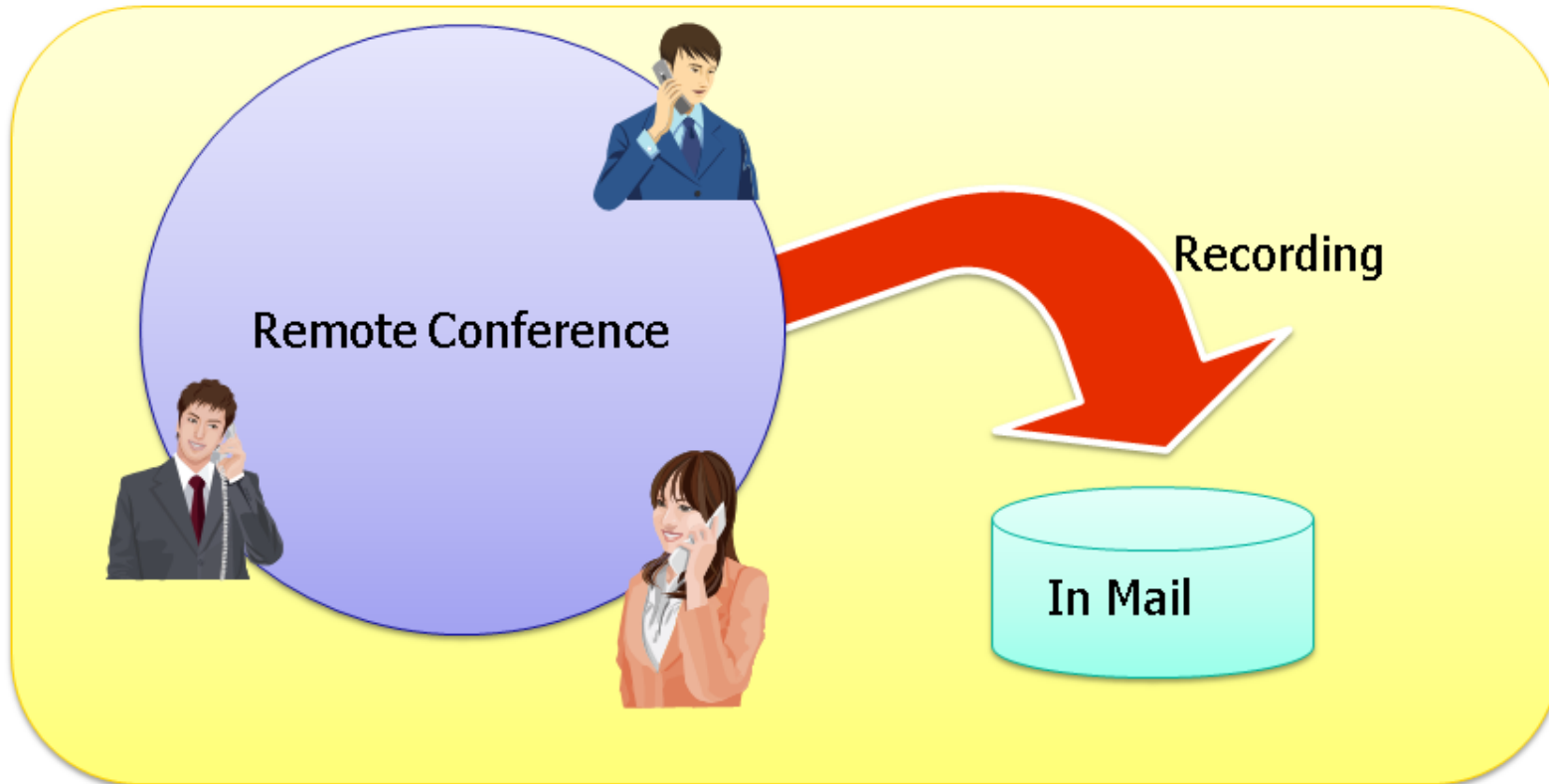


# Major New / Enhanced Features on R2

## Remote Conference Recording DIM to SD-Card

Support Recording for Remote conference.

- Support auto recording and manual recording.
- Conversation is recorded to specified mail box as new message.



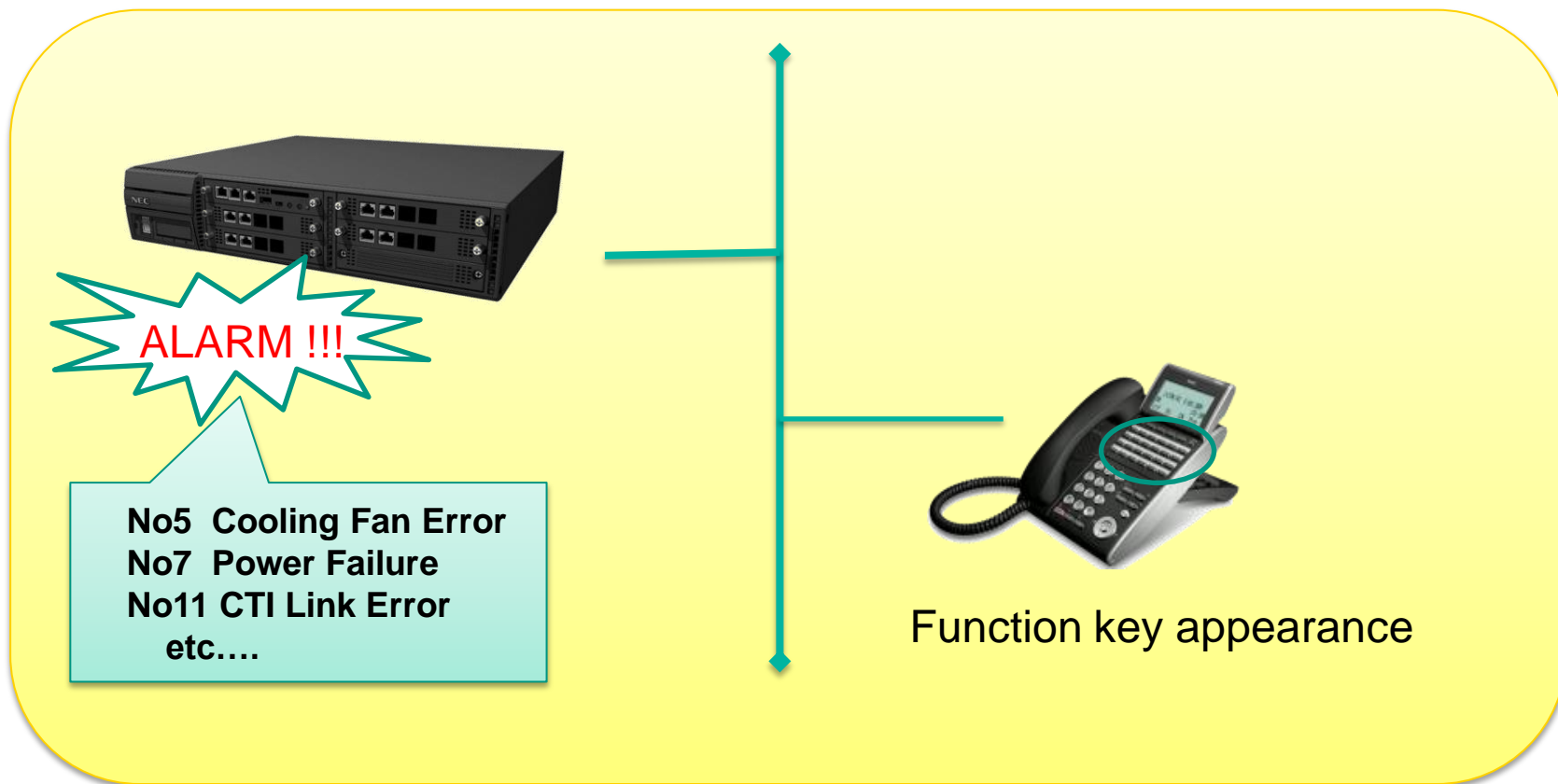


# Major New / Enhanced Features on R2

## Alarm Improvement

This feature provides two new methods of alarm indication.

- Function key appearance



# UC Suites

# Basic Policy of SV9100 UC Solution

## Objective

- Transform from “Just Voice System” to “Appliance UC System”
- Provide a clear message to the market that SV9100 is a “Appliance UC System”

## Target

- Increase the product attractiveness and feature advantage by “UC” against competitors, and achieve the **Global No.1 position at the SMB segment**

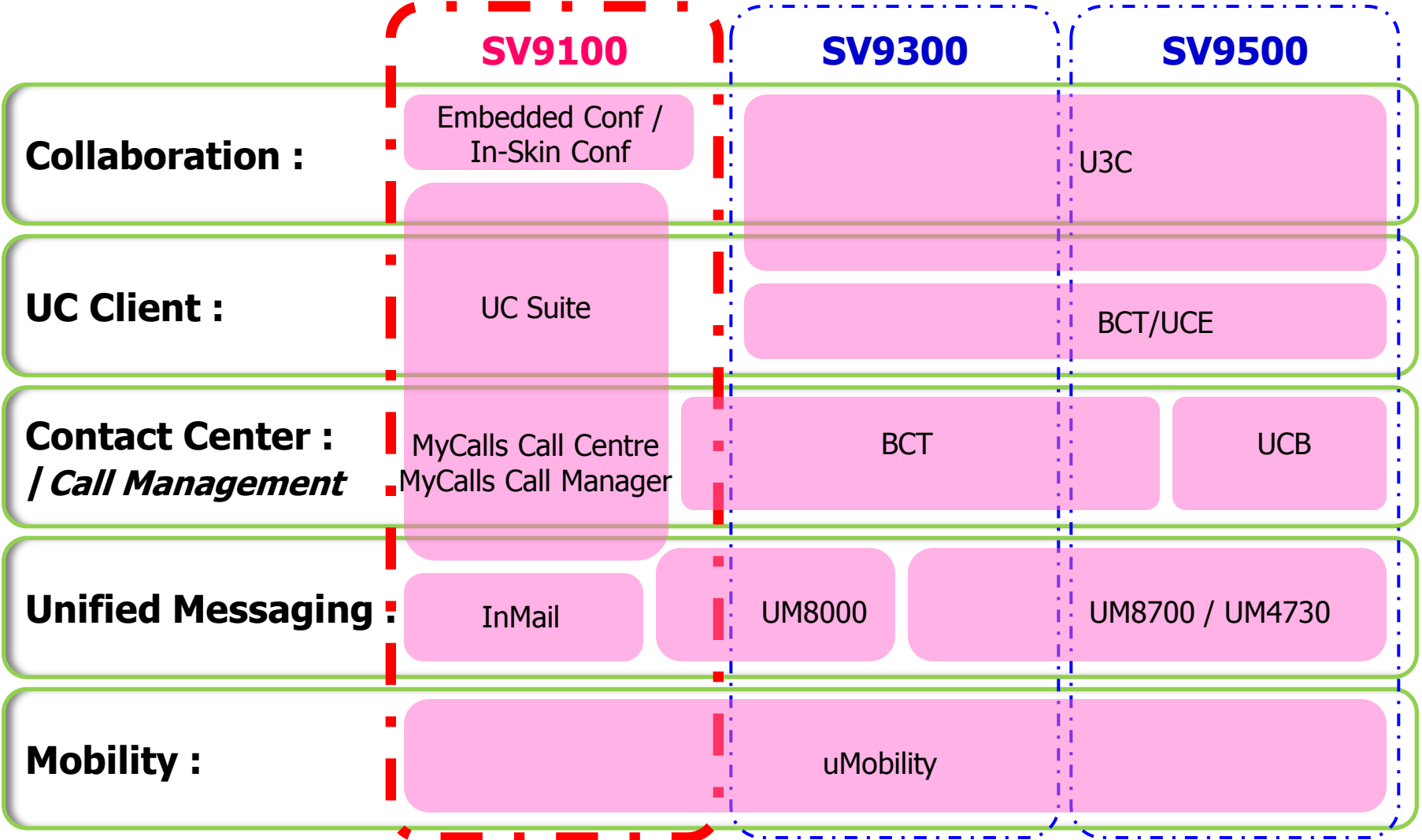
## Concept

- Easy Installation, Operation and maintenance
- Provide the UC Solution with competitive cost

## Positioning

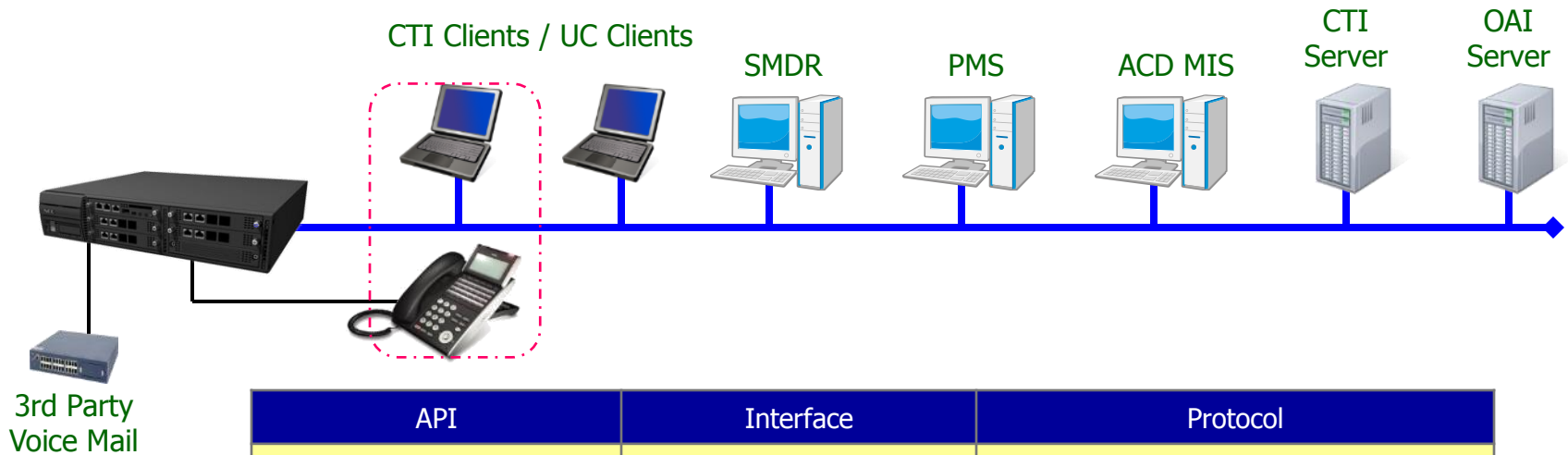
- Define that the SV9100 UC Solution is called “Entry UC” (Solution in the Box)
- Offer the other PF (SV9300 / SV9500 / 3C / Cloud, etc.) if “Formal UC (more rich features, high performance, etc.)” is requested

# Applications Mapping



# Application Interface

- SV9100 has following various interface for 3<sup>rd</sup> Party Applications.
- Ready to collaborate with applications for value-added solutions.



API	Interface	Protocol
3rd Party Voice Mail	Analog Ext Port	Unique In-Band Signal (DTMF)
SMDR	Ethernet Port (CPU)	Text Data
1st Party CTI	Ethernet Port (CPU)	TAPI1.4
3rd Party CTI	Ethernet Port (CPU)	TAPI2.1
ACD MIS	Ethernet Port (CPU)	Proprietary (P-Command)
PMS	Ethernet Port (CPU)	Proprietary
OAI (Subset)	Ethernet Port (CPU)	Proprietary
Simple Presence/IM	Ethernet Port (CPU)	Proprietary
XMLPro (Web Server)	Ethernet Port (CPU)	Proprietary

# Enhanced User Experience

UC e



Toolbar View

## Manage terminals from desktop computer

- Access features - speed dialing, call management & contact lookup

## Simple interface with flexible directories

- Simple Icons for Hold, Transfer, Conference, Park, Barge-in, etc.
- Click-to-dial from directories or contact lists

## Customer Relationship Management Integration (CRM)

- Outlook integration
- Browser based CRMs, Goldmine, Salesforce.com, Tigerpaw, Time Matters, or ACT!



Full View

# Enhanced User Experience

## UC e included

- ✓ Works like Smartphone but from your desktop
- ✓ Highlight any phone number with your mouse
  - ✓ Email signature, website, word doc, Outlook contacts, etc
- ✓ Right click and your SV phone will dial the number
- ✓ Everyone benefits from Highlight Dial



# Enhanced User Experience

## UC Suite included

- ✓ Web Client Provides:
  - ✓ Click to Answer/Transfer
    - ✓ Outlook calendar integration
    - ✓ Presence
    - ✓ VM Greeting
    - ✓ Call Forward
- ✓ Compatible across multiple platforms
  - ✓ Windows, Linux and Mac.





# UNIVERGE SV9100 – A true UC Solution

Desktop Suite now called UC Suite (UCS)

Optional Web-based Client

Improved look and feel

Same features you love

Increased TAPI

- 512 users - 3<sup>rd</sup> party



# Enhanced User Experience: Attendant

## UC Attendant included

- Change Presence status for other users
- Monitor details of a user's active call
- Monitor Park Orbit bins
- Create multiple customizable BLF tabs
- Change Night Mode status
- Barge In
- Voice over
- Send phone messages to other users



UC Attendant

# UC Suite (UCS) : Enhancement List from DTS

## Candidates

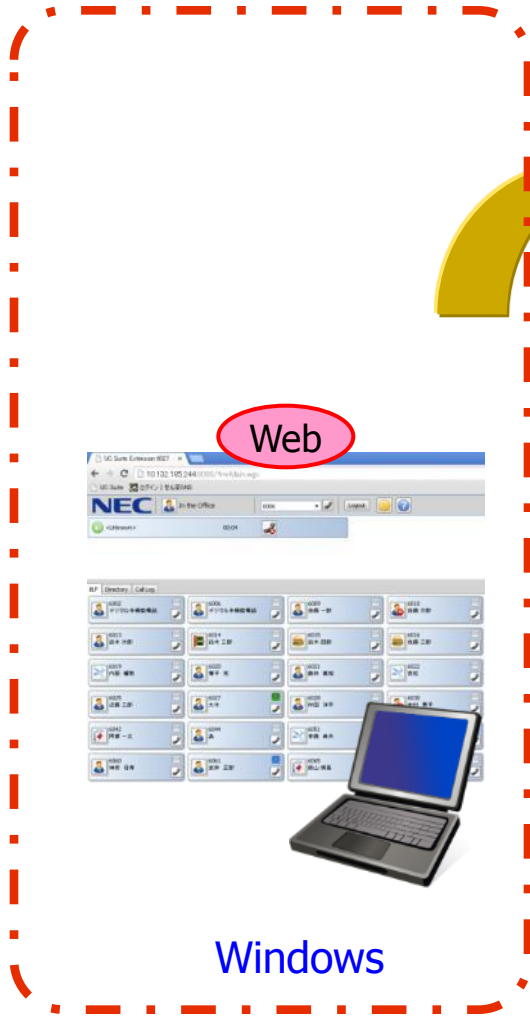
1. SV9100 Support
2. Windows8.1 Support
3. Mobile device support in Web Client
4. DT Client (FAT) (Presence/IM/Contact) on SV9100
5. Improve easy configuration on SV9100
6. Brushing up Web Client (Easy launch by icon / Outlook add-in / New icons with text)
7. Others (Office2013 / New Presence Icons / Color Selection / Photo Uploads / UI Improvement)

# UCS Enhancement : Mobile Device Support by Web

DTS R6.1

UCS R1

- Size adjusting
- Support "Touch" operation
- Softphone support by uMobility



# UCS Enhancement : DT Client

	External server	Option board	CPU Built-in
Type	<p>SV8100 External server</p> <p>Desktop Suite</p>	<p>SV8100 Option board</p> <p>In-Skin DTS</p> <p>Desktop Suite</p>	<p>SV9100 CPU Built-in</p> <p>UC Suite</p>
Price	High(Need external server)	Middle (Need option board)	Low (No additional H/W)
Install/Maintenance	Difficult (Need external server maintenance)	Middle (Need board installation and maintenance)	Middle (Need FAT Client installation)
Max client	512	512	128
Features	Full features	Full features	Limited features
Web Client	Support	Support	In the future

# UCS Enhancement : Easy Configuration

## DTS R6.1 Settings

NEC Desktop Suite

This wizard guides you through configuring the NEC Desktop Suite

Telephone System Info

Network Name/IP Address: 143.101.120.180

CTI Port Number: 8082 MB 10-20-09

SIP Port: 5080 MB 10-46-06

License Port: 6080 MB 10-47-01

OBM Port: 8010 MB 10-20-11

OBM User ID: USER1

OBM Password: 1111 MB 90-02 (JJA)

Shared Services

Enable Shared Services

Network Name/IP Address: 143.101.120.185

Port Number: 8088

Network Interface

Select card to use:

Intel(R) Centano(R) Advanced-N 6200 AGN

Advanced Settings

SIP Receive Port: 5070 to 5197

RTP Port: 60000 to 60254

< Back Next > Cancel

NEC Desktop Suite

License Level

Desktop Client + Softphone

SP310 - Softphone Only

Desktop Client (Deskset Only)

Options

Trial Mode

Enhancement Bundle  
(Chat, Application Sharing, Whiteboard, File Transfer)

Integration with iMail

Login Information

System Mode

Plug and Play  Manual MB 10-46-01

Automatic

User ID: \_\_\_\_\_

Password: \_\_\_\_\_

Enable SIP/Audio RTP Encryption

\* To enable SIP/Audio RTP Encryption, the encryption setting in the system should be also set to "ON".

< Back Next > Cancel

## UCS R1 Settings

NEC Desktop Suite

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Enable Shared Services

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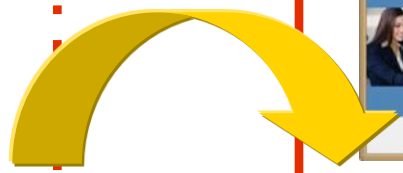
Integration with iMail

< Back Next > Cancel

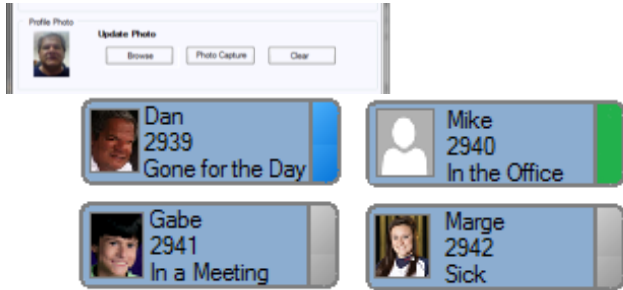


SV9100

New I/F



# UCS Enhancement : New Icon / Photo Uploads



**In The Office**



**Out of the Office**



**Unavailable**

Associate a photo image with a user profile

Display BLF layout with photos instead of Presence icons

Include photo in IM window layout

Supported in both FAT client and Web Client

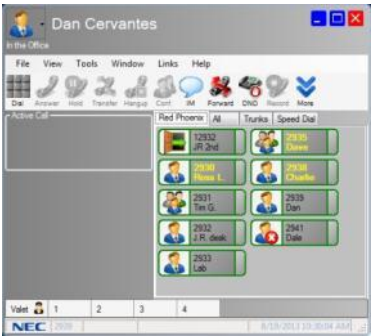
Icons

- Addresses the issue of only showing Male images
- Applies to Presence states for In the Office, Out of the Office, and Unavailable

# UCS Enhancement : Color Selection



- Each user can customize the color scheme of the application
- Color selection applies to Window mode main form and IM window
- Supported in FAT Client





# **Orchestrating** a brighter world

**NEC brings together and integrates technology and expertise to create the ICT-enabled society of tomorrow.**

**We collaborate closely with partners and customers around the world, orchestrating each project to ensure all its parts are fine-tuned to local needs.**

**Every day, our innovative solutions for society contribute to greater safety, security, efficiency and equality, and enable people to live brighter lives.**



Empowered by Innovation

**NEC**