



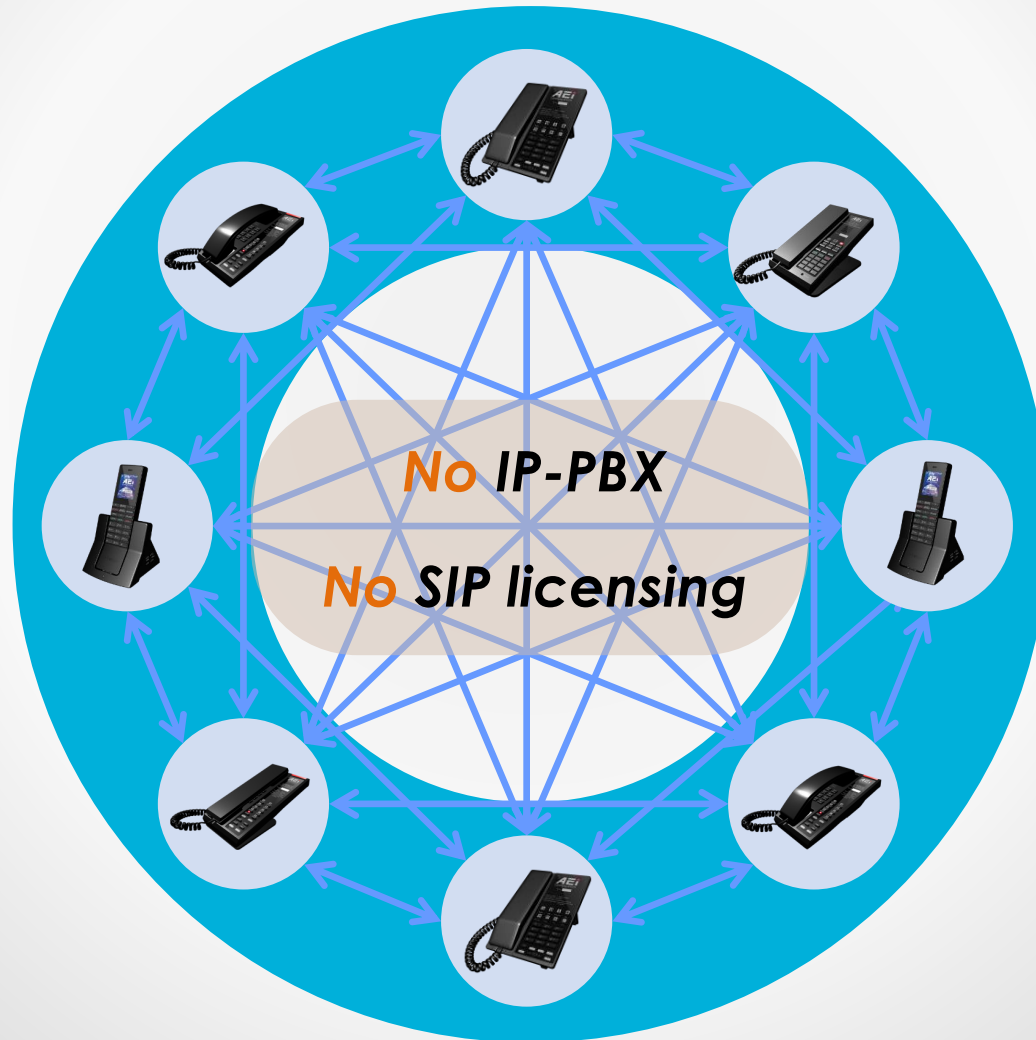
Decentralized Communication System

The DCS solution

OVERVIEW :

- ***Intelligent communication system*** - A smart, IP-PBX-independent communication solution, ideal for both budget and premium hospitality environments.
- ***No need for SIP licensing***
- ***Resilient system*** the failure of one DCS unit doesn't disrupt overall functionality. Unlike centralized system, if the central IP-PBX goes down, everything stops.
- ***Easy & Seamless installation*** Smart setup, smarter conversations, featuring up to 250 phones.
- ***Simple & Comprehensive maintenance*** One team, complete support for PBX and phone systems.

Decentralized **C**ommunication **S**ystem *Revolutionizing the Way IP-Phones Communicate*



DCS VS. centralized system

No need for IP-PBX.

No need for SIP licensing

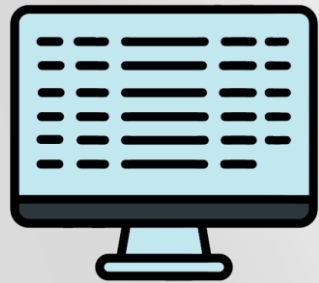


Centralized system

- Phones are registered to IP-PBX

DCS integrates with DCS Desktop, Admin phone and SIP Trunk Service

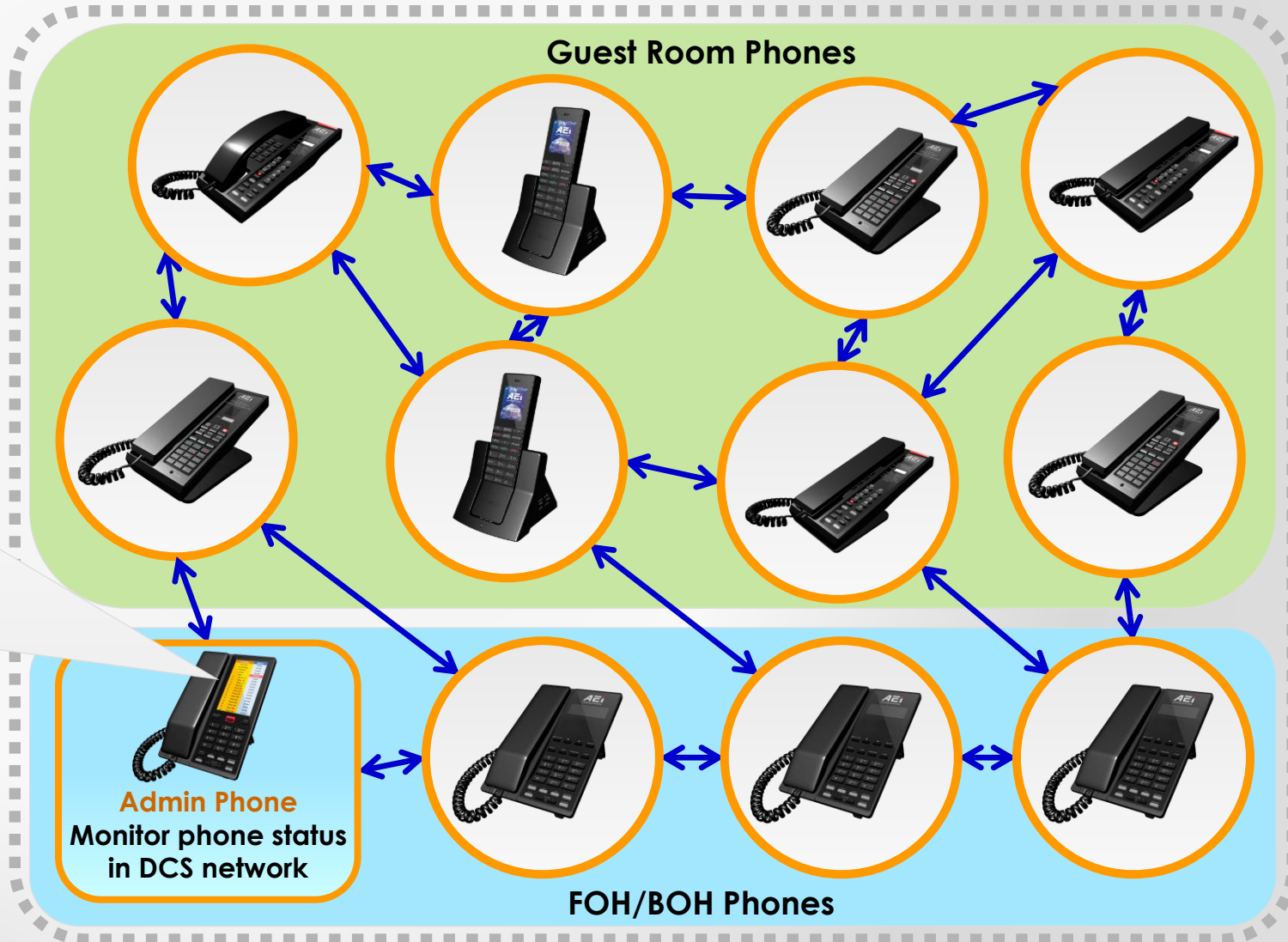
2nd SIP account is registered to VoIP SIP trunk service



DCS desktop (optional)

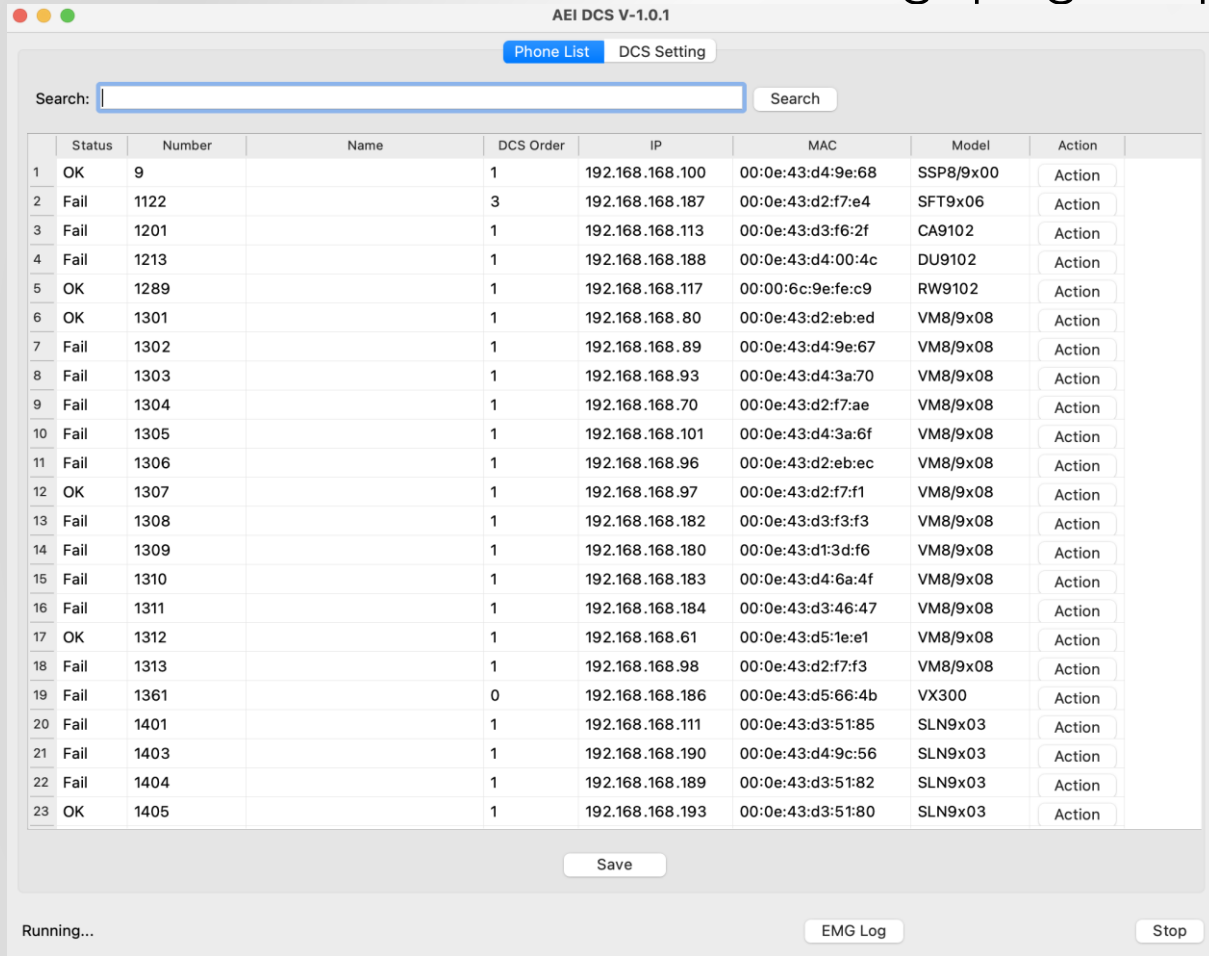
- Document SIP trunk calls
- Phone On/Off-line status
- Voice messaging
- IVR

Location	Status
Front Desk	On line
Housekeeping	On line
Restaurant	On line
Laundry	On line
Office	Off line
1F Room 101	On line
1F Room 102	On line
1F Room 103	On line
2F Room 201	On line
2F Room 202	On line
2F Room 203	On line
2F Room 204	On line
2F Room 205	On line
3F Room 301	On line
3F Room 302	On line
3F Room 303	On line
3F Room 304	On line
3F Room 305	On line



DCS Desktop (optional)

The logs page displays a record of all SIP trunk calls.



AEI DCS V-1.0.1

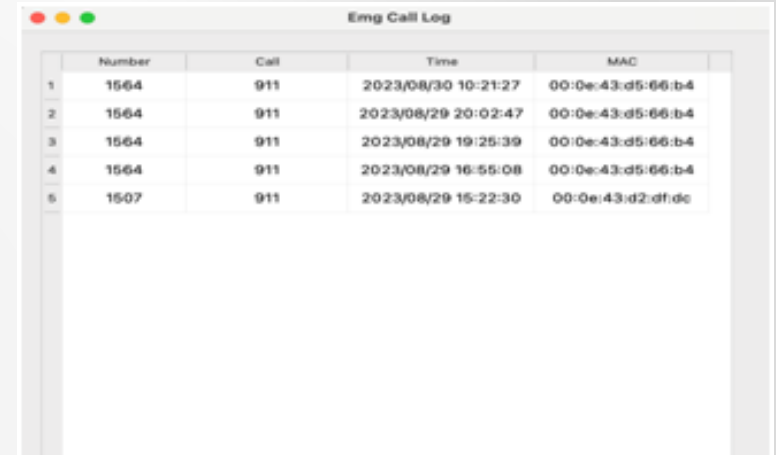
Phone List DCS Setting

Search: Search

	Status	Number	Name	DCS Order	IP	MAC	Model	Action
1	OK	9		1	192.168.168.100	00:0e:43:d4:9e:68	SSP8/9x00	Action
2	Fail	1122		3	192.168.168.187	00:0e:43:d2:f7:e4	SFT9x06	Action
3	Fail	1201		1	192.168.168.113	00:0e:43:d3:f6:2f	CA9102	Action
4	Fail	1213		1	192.168.168.188	00:0e:43:d4:00:4c	DU9102	Action
5	OK	1289		1	192.168.168.117	00:00:6c:9e:fe:c9	RW9102	Action
6	OK	1301		1	192.168.168.80	00:0e:43:d2:eb:ed	VM8/9x08	Action
7	Fail	1302		1	192.168.168.89	00:0e:43:d4:9e:67	VM8/9x08	Action
8	Fail	1303		1	192.168.168.93	00:0e:43:d4:3a:70	VM8/9x08	Action
9	Fail	1304		1	192.168.168.70	00:0e:43:d2:f7:ae	VM8/9x08	Action
10	Fail	1305		1	192.168.168.101	00:0e:43:d4:3a:6f	VM8/9x08	Action
11	Fail	1306		1	192.168.168.96	00:0e:43:d2:eb:ec	VM8/9x08	Action
12	OK	1307		1	192.168.168.97	00:0e:43:d2:f7:f1	VM8/9x08	Action
13	Fail	1308		1	192.168.168.182	00:0e:43:d3:f3:f3	VM8/9x08	Action
14	Fail	1309		1	192.168.168.180	00:0e:43:d1:3d:f6	VM8/9x08	Action
15	Fail	1310		1	192.168.168.183	00:0e:43:d4:6a:4f	VM8/9x08	Action
16	Fail	1311		1	192.168.168.184	00:0e:43:d3:46:47	VM8/9x08	Action
17	OK	1312		1	192.168.168.61	00:0e:43:d5:1e:e1	VM8/9x08	Action
18	Fail	1313		1	192.168.168.98	00:0e:43:d2:f7:f3	VM8/9x08	Action
19	Fail	1361		0	192.168.168.186	00:0e:43:d5:66:4b	VX300	Action
20	Fail	1401		1	192.168.168.111	00:0e:43:d3:51:85	SLN9x03	Action
21	Fail	1403		1	192.168.168.190	00:0e:43:d4:9c:56	SLN9x03	Action
22	Fail	1404		1	192.168.168.189	00:0e:43:d3:51:82	SLN9x03	Action
23	OK	1405		1	192.168.168.193	00:0e:43:d3:51:80	SLN9x03	Action

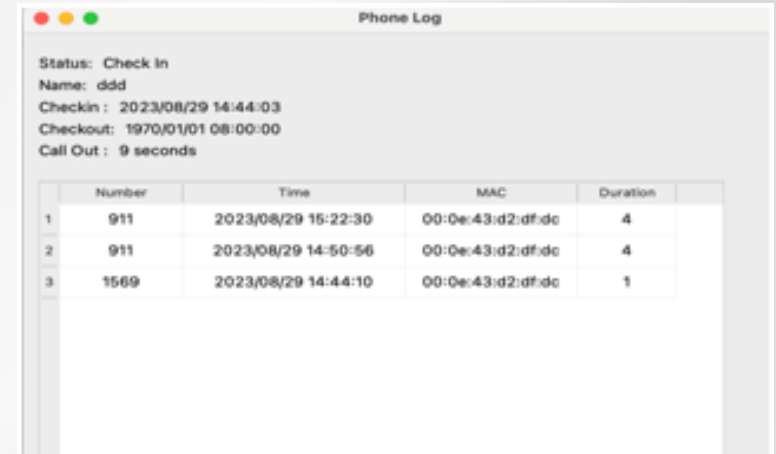
Save

Running... EMG Log Stop



Emg Call Log

	Number	Call	Time	MAC
1	1564	911	2023/08/30 10:21:27	00:0e:43:d5:66:b4
2	1564	911	2023/08/29 20:02:47	00:0e:43:d5:66:b4
3	1564	911	2023/08/29 19:25:39	00:0e:43:d5:66:b4
4	1564	911	2023/08/29 16:55:08	00:0e:43:d5:66:b4
5	1507	911	2023/08/29 15:22:30	00:0e:43:d2:df:dc



Phone Log

Status: Check in
Name: ddd
Checkin: 2023/08/29 14:44:03
Checkout: 1970/01/01 08:00:00
Call Out: 9 seconds

	Number	Time	MAC	Duration
1	911	2023/08/29 15:22:30	00:0e:43:d2:df:dc	4
2	911	2023/08/29 14:50:56	00:0e:43:d2:df:dc	4
3	1569	2023/08/29 14:44:10	00:0e:43:d2:df:dc	1

List of DCS phone status within the same subnet.

**DCS desktop is an optional desktop software, sold separately.*

Smart Features for Median or Small Hotel



NO NEED of PBX :

- Cost effective IP phone system, An intelligent communication system that functions independently of IP-PBX, without the need for SIP licensing.



High Availability :

- All phones sync information. Failed phone can be rapidly recovered from other phones in the DCS network.



Easy and Simple :

- DCS provides the easy and simple features for hotel needs. Just hookup the Ethernet cable, DCS system will be configured. And phones are ready to use.



One-Stop Technical Support :

- AEi provide the overall communication system technical aid. No complicated PBX installation, no long term maintenances, no interoperability fine tuning between PBX and phones. AEi provides **One-stop support** for voice communication solution.

Benefit and Cost Comparison

	AEi DCS	Regular PBX & Phone System
No PBX hardware equipment		X
No SIP Licensing		X
Easier installation - Remote configuration support by AEi		X
Hassle-Free Setup - No complicated PBX configuration - Phones ready, System ready		X
Comprehensive maintenance - One Team, Complete Support for PBX and Phone systems		X

DCS Features

Standard features

- Call Monitoring – phone status
- Outbound Call Logs
- Caller ID
- Speed Dials
- Dialing rules
- Call Forward
- Call Transfer
- DND
- Music on hold
- Wake-up calls

Advanced features

- Automatic Call Distribution
- Interactive Voice Response system
- Voice Messaging
- Emergency call alert

PMS Integrated features

- Room Status (Check-in/Check-out)
- Room Availability
- *Further enhanced features to integrate with the hotel's selected PMS (To be implemented)*

Criteria for DCS system integrator

Experience with:

1. IP Phone Systems

- Provisioning and configuring IP phones
- DHCP options (e.g., Option 66), TFTP/FTP/STFTP/SFTP provisioning, and firmware management
- Ability to deploy auto-provisioning servers
- Integration with 3rd party IP-PBX

2. Network and Infrastructure

- VLAN configuration for voice traffic
- PoE switch and power planning
- Firewall and NAT rule configuration for SIP traffic

3. Deployment and Configuration Capabilities

- Configure dial plans and call routing logic
- Set up inbound and outbound rules with fallback and time-of-day routing
- Integrate voicemail, IVRs, hunt groups, ring groups
- Testing & Reporting: Packet capture and SIP trace tools (Wireshark)

Criteria for DCS system integrator

4. SIP Trunk Service

Offers their own SIP trunking service

or

Partnerships with reputable SIP trunk providers

Provides:

- DID number provisioning
- Porting services
- Call rate (local, long-distance, international)
- Regulatory compliance (E911, lawful intercept, number portability)

SIP Trunk Configuration

- SIP registration and trunk security (TLS, SRTP)
- SIP trunk authentication, codec negotiation (G.711, G.729)
- Redundancy and failover routing

To perform the SIP trunking interoperability evaluation, two SIP accounts are required from the SIP trunk service provider.

CORPORATE - ESTIMATED DCS SOLUTION PRICING - MSRP

Package 1 - AEi HOSPITALITY DCS PACKAGE (Essential) - BOH, FOH, Intercom: Suggested Cost: USD 0.0

- Internal voice communication only
- Voice Mail – manually clear voicemail
- Extension to extension (room-to-room) calling report

Package 2 - AEi HOSPITALITY DCS PACKAGE (Basic) - Cost-effective hotels: Suggested Cost: USD 1,800

- Emergency calls
- Voice mail to each room – manually clear voicemail after check-out.
- Wake-up Call – manually set by front desk.
- Notifies if no one answers wake-up Call
- Room-to-room and outside calling report
- 911 notification and call report
- Telephone management on attendant console

Package 3 - AEi HOSPITALITY DCS and Software Package (Advanced) - Corporate hotels: Suggested Cost: USD 3,350

- All features of basic AEi hospitality DCS package
- Auto attendant and IVR
- Houskeeper codes – manually or supported by Jazzware, Tiger, or FCS
- Plugins to support Jazzware, Tiger, FCS, etc. connecting to PMS for automatic check-in check-out of guest, voicemail/wakeup and Guest name

CORPORATE - ESTIMATED DCS SOLUTION PRICING - MSRP

Remote Technical Support:

- **With annual subscription: \$900 per year (includes 10 hours remote technical support)**
- **Additional remote technical support: \$150 per hour**
- **Without subscription: \$150 per hour, minimum 2 hours**

Please note: Additional changes or advanced support will be quoted time and material.

Models available for DCS

- **VX-3108-BU(\$)** / **VX-3208-BU(\$)**, (Cordless guestroom phone)
- **SKD-9110-S** / **SKD-9210-S**, (Corded guestroom phone)
- **SLN-9110-S** / **SLN-9210-S**, (Corded guestroom phone)
- **SGR-9106-S** / **SGR-9206-S**, (Corded guestroom phone)
- **VM-9108-S(\$)** / **VM-9208-S(\$)**, (Corded guestroom phone/office phone/admin phone)
- **VM-9200-SLT(\$)** (Corded office phone/admin phone)
- **Maximum combined quantity will be 250 phones (Guestroom + office + admin)**
- **Number of admin phone will depend on the number of concurrent DID required**

Please note: Price of goods and services do vary significantly across different countries.

Q & A

- **Q1 : How many phones can be connected in DCS ?**

A : Currently, at most 250 phones can be connected in a DCS network.

- **Q2 : Will it be difficult to install the DCS?**

A : To setup the DCS would be as easy as installing a group of phones. Just connect the Ethernet cables and provisioning the phones settings, all phones are ready to make calls.

- **Q3 : Will it be able to upgrade to 3rd party IP-PBX after installing DCS?**

A : DCS is flexible that hotel can integrate existing DCS phones with 3rd party IP-PBX.

- **Q4 : How is maintenance for the DCS?**

A : AEi provides one-stop comprehensive technical service to the system. No more trouble shootings between PBX and terminals. Each phone in DCS can be update and well configured remotely. AEi provides the resolution for communication at a time.

- **Q5 : Will it be difficult to setup a new phone while one phone is down in a DCS network?**

A : The DCS is a high availability system. Just replace a new phone while one phone is down. The new phone will be recovered all information and configuration from other phones in the network.

Q & A

- **Q6: How does DCS handle the external calls?**

A : *If the external calls are required, the second SIP account of DCS phones could be registered to (VoIP) SIP trunk service. And the outbound trunk call history will be logged in DCS desktop software.*

- **Q7: What is DCS desktop?**

A : *DCS desktop is an optional maintenance software to monitor DCS phone status. For trunk call billing, DCS desktop would document the duration of trunk calls made by DCS phones. Additionally, It also provides the voice messaging and interactive voice response capability for phones within DCS network.*

- **Q8: What is a DCS admin phone?**

A : *Within the DCS network, the DCS admin phone serves as one of the connected phones tasked with monitoring the real-time online/offline status of all phones.*

- **Q9: Who is the target audience of DCS?**

A : *The DCS solution is designed to meet the needs of small to medium-sized hotels, inns, motels, and boutique accommodations, appealing to both corporate (hotel management) and franchise-owned properties. Apart from guestroom applications, the DCS solution is well-suited for both front-of-house and back-of-house operations in hotels.*

Remark

While DCS may not drive high turnover, it enhances AEi brand value and offers practical advantages such as easy installation and low labor maintenance - making it suitable for a wide range of hotel types, from economy hotels to compact luxury ones.



THANK YOU

