



MISSION CRITICAL COMMUNICATION

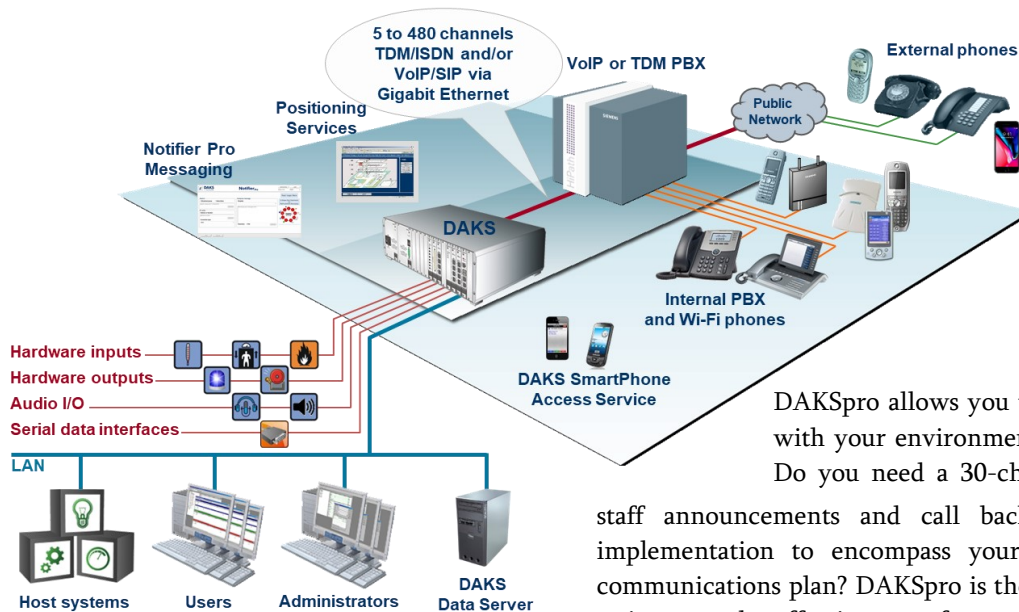
Organizations are challenged 24x365 to provide advanced communications to streamline day-to-day operations while also assuring they are prepared to respond to safety and security threats. Whether it's providing notifications of building evacuations or alerting staff of inclement weather, or something as dramatic as locking down a campus due to a mass casualty event, DAKspro is your vital communications link. DAKspro will:

- ▶ Improve mobility and enhance the productivity of your staff
- ▶ Enhance safety and security of staff, patients, visitors, buildings and equipment
- ▶ Mitigate crisis events and their impact
- ▶ Effectively communicate with internal staff and outside agencies
- ▶ Dispatch resources to address errors and failures of equipment, facilities and systems



DAKspro intelligently extends the use and value of your existing communications infrastructure via a wide range of complementary application modules that may be deployed individually or in combination. The single platform offers common resource administration to support simple or comprehensive communication strategies. The core application modules include:

- ▶ **Broadcasts & Alert Notifications** – Voice and text messages with optional recipient confirmation capabilities
- ▶ **Conferences** – Meet-me, preset and progressive conferences that can be scheduled or ad hoc, along with emergency conferences to dial out to response team members for immediate collaboration
- ▶ **Announcement Services** – Multi-channel, high availability dial-in service for delivering up-to-date information to callers
- ▶ **Personal & Group Calling Services** – One-number dialing for enhanced accessibility to mobile individuals and team members
- ▶ **Notifier-Pro** – Multi-platform messaging via a user friendly browser interface.



With this variety of high performance options, DAKspro supports the unique communication and collaboration needs of small or large corporate businesses, educational institutions, healthcare providers, utilities, government organizations and more.

DAKspro allows you to tailor a solution that aligns with your environment and business requirements. Do you need a 30-channel notification option for

staff announcements and call backs? Or, a multi-application implementation to encompass your complete disaster response communications plan? DAKspro is the answer! Leverage DAKspro to improve the effectiveness of your information flow – in day-to-day communications and as the cornerstone to your crisis preparedness strategies.



BROADCASTS & ALERT NOTIFICATIONS

One button touch to notify security of a personal safety incident. An emergency situation requiring additional staff at a hospital. Advisory to seek shelter due to approaching severe weather. Notification of facility lockdowns due to hazardous conditions or security breaches. These and many other scenarios are situations where Broadcasts and Alert Notifications are key to rapid response.



Alert Notifications also facilitate handling everyday events such as:

- ◆ system failures to automatically dispatch service technicians with response acknowledgement,
- ◆ IT Department notifications of virus infection, and
- ◆ notification of schedule changes or cancellations for work shifts, classes or special events.

FLEXIBLE CONFIGURATION

DAKSpro supports a wide variety of scenarios and requirements with flexible definition and configuration parameters. Each broadcast definition includes options for the following:

- ◆ Internal and external phone, e-mail, pager and/or text message contact methods
- ◆ Up to five voice announcements to support multiple languages or message content
- ◆ One to four phone numbers called per subscriber
- ◆ Multiple call attempts when busy or not answered
- ◆ Parallel or sequential dialing of subscribers
- ◆ Subscriber priority level dialing
- ◆ High priority designation to assure channel availability
- ◆ Activation of enhanced features such as distinctive ringing, intrusion, automatic speaker activation and more (dependent on switch type)
- ◆ Day of week and time of day dependent calling per subscriber's contact number
- ◆ Receipt acknowledgement via answer, phone key press, positive or negative confirmation, two-stage acceptance or smartphone client
- ◆ Secure message delivery requiring PIN entry
- ◆ Numerous success criteria including designated number of acknowledgements received, specific number of contacts completed and functional group response quota met

- ◆ Escalated broadcast based on success or failure of initial broadcast criteria

INITIATION & OPERATION

Broadcasts and Alert Notifications may be triggered with or without human intervention via:

- ◆ Any internal or external phone with interactive user guidance (including option to record an announcement with real-time information) or speed dial numbers
- ◆ DAKSpro Operator Tool on PC
- ◆ Contact inputs
- ◆ Data interface to third party system
- ◆ E-mail message with option to convert text to speech for voice announcement
- ◆ One time or recurring schedule



The DAKSpro Operator Tool includes real-time monitoring of the status of a broadcast, including which subscribers have been successfully reached, which have failed, which calls are in progress and more. Historical reports are also available with details of call activity for each event.

BROADCASTS BY THE NUMBERS

- ◆ Define up to 5,000 Broadcasts
- ◆ Assign up to 8,000 people to a Broadcast
- ◆ Launch up to 20 simultaneous Broadcasts

PERSONAL SECURITY

DAKSpro supports proactively monitoring the safety and security of workers in potentially dangerous work environments. A worker registers with DAKSpro Personal Security application or a supervisor activates monitoring for a selected staff member. DAKSpro dials the worker at regular, specified intervals. The worker may be asked to:

- ◆ simply answer the call and disconnect after listening to a short announcement,
- ◆ answer the call and acknowledge with a "*" key press, or
- ◆ answer the call and provide a current status/location.

If worker fails to respond to multiple call attempts, DAKSpro will automatically launch a broadcast to notify staff of potential problem.

EMERGENCY & ROUTINE CONFERENCES

DAKSpro provides a flexible, reliable platform for both mission critical and routine teleconferences, enabling collaboration and facilitating real-time response for:

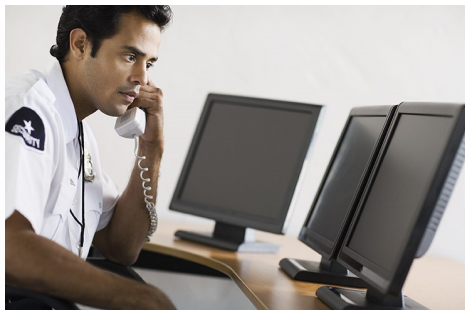
- ◆ Assisted emergency calls
- ◆ First responders to crisis events
- ◆ Silent “panic button” monitoring
- ◆ Recurring project team meetings
- ◆ Physicians and other expert consultants



DEFINING CONFERENCES

Several types of conferences are supported, including:

- ◆ **Meet-me Conferences** with dial-in by subscribers from outside but with access restriction, activated and controlled by the conference owner
- ◆ **Ad-hoc Conferences** in which subscribers are called on the fly as needed
- ◆ **Preset Conferences**, especially Emergency Conferences, in which predefined conferees are dialled automatically by the system
- ◆ **Progressive Conferences** with the option to dial in additional conferees while the conference is in progress, via the telephone keypad or an operator’s computer



Individual conferences have a variety of configurable parameters including:

- ◆ Conference name to be displayed on internal phones
- ◆ Maximum conference duration
- ◆ Announcements for initiator, dial-out conferees and dial-in conferees
- ◆ Security options including PIN and security code
- ◆ Access codes for active or muted participation
- ◆ One to four phone numbers called per conferee with option of parallel or sequential dialing
- ◆ High priority designation to assure channel availability
- ◆ Activation of enhanced features such as distinctive ringing, intrusion, automatic speaker activation and more (dependent on switch type)
- ◆ Restriction of valid conferees to add to conference
- ◆ Option to monitor conference via PC

CONFERENCES BY THE NUMBERS

- ◆ Define up to 1,000 Conferences
- ◆ Include to 150 conferees in single Conference
- ◆ Convene up to 20 simultaneous Conferences

CONVENING CONFERENCES

Conferences may be initiated via:

- ◆ Any internal or external phone with interactive user guidance or speed dial numbers
- ◆ DAKSpro Operator Tool on PC
- ◆ Contact inputs
- ◆ One time or recurring schedule

ANNOUNCEMENT SERVICES

The DAKSpro Announcement Services application provides a high availability, multi-channel dial-in announcement service capability, providing an automated means to communicate key information to callers without burdening company operators or staff. DAKSpro processes up to 480 calls at once and plays back to all callers a recorded announcement or live audio transmissions.

**ALLOW PEOPLE TO ACCESS THE INFORMATION YOU WANT THEM TO HAVE...
...WHEN THEY WANT IT
...FROM WHEREVER THEY ARE**

Typical scenarios for the Announcement Services application include:

- ◆ Up-to-date messages in the event of emergency situations
- ◆ Status updates on service outages (e.g. power, cable TV, Internet, etc.)

- ◆ School closings, event cancellations, theater programs, sporting event schedules and results
- ◆ Call in to hear the last announcements sent by the Alert Notifications application

DEFINING PROFILES & ACTIVITIES

DAKSpro supports up to nine profiles that can be assigned based on the current circumstances. For instance, one profile may represent “business as usual” while profile 2 may be for inclement weather instructions and profile 3 reserved for emergency situations. Activating the applicable profile can be by the DAKSpro Operator Tool, digital input, via phone or on a time-controlled basis.

An Activity package defines the attributes of an announcement and specifies:

- ◆ An access number
- ◆ The access scope - internal only, external only or any caller
- ◆ An announcement or audio source with greeting message and variable time limit
- ◆ Number of announcement cycles

CALLING SERVICES

With DAKSpro, you don't have to waste time calling individuals one at a time until someone is able to help you. **Group Calling Services** allows a caller to dial a single number and ring a group of people simultaneously or consecutively, connecting the caller to the first person to answer the call. Group Calling examples to efficiently connect a caller needing assistance with the appropriate corporate resource include:

- ◆ After hours customer support
- ◆ On-call maintenance engineers
- ◆ Dispatching security personnel
- ◆ Contacting medical resource such as radiologist

Personal Calling Services accelerates and simplifies the accessibility of specific key resources by allowing a caller to dial a single number and call an individual at multiple numbers (e.g. office, cell phone, home).

CONFIGURATION OPTIONS

Whether calling groups or a single person, DAKSpro offers many flexible configuration options to align the calling with your requirements:

- ◆ Calls may all be placed simultaneously or one after the other
- ◆ Notification announcement (“You have a Customer Support call”) and call acceptance code
- ◆ Call screening options
- ◆ Combined with DAKSpro Performance Package, delivery of the calls is controlled based on resources logging in/out of the application and/or by time of day and day of week
- ◆ If several active calls, callers placed in queue with corresponding announcement
- ◆ High and low priority profiles
- ◆ Activation of enhanced features, such as intrusion



CALLING SERVICES BY THE NUMBERS

- ◆ Create up to 2,000 call profiles
- ◆ Define up to 20 authorized callers in up to nine different priority levels
- ◆ Assign up to 20 target numbers
- ◆ Leverage two to four dialing phases

NOTIFIER-PRO

Notification has never been this easy! Notifier-Pro is a convenient and intuitive messaging user interface that can distribute your messages reliably along different communications channels and media. Via the web browser, you can now easily reach many individual subscribers as well as entire groups of users on various media – with one single message.

Notifier-Pro supports a growing catalog of endpoints, protocols and media, including:

- ◆ SMS
- ◆ e-Mail
- ◆ Cisco Messaging
- ◆ Unify OpenScape
- ◆ Unify WL3 / OAP
- ◆ Mitel (OM AXI)
- ◆ Spectralink
- ◆ DAKS Mobile Client
- ◆ DAKS Desktop Client



INTERFACES FOR TIGHTLY INTEGRATED SOLUTIONS

DAKSpro is the basis for tightly integrated enterprise communication solutions that leverage your organization's existing infrastructure and systems. DAKSpro interfaces with a variety of third party systems via a wide range of interfaces and protocols.



TELEPHONY CONNECTIVITY

DAKSpro connects to almost any switch platform using either TDM/ISDN (NI2, QSIG, DSS1, CorNet-NQ, MLPP) or VoIP (SIP, SIPQ, MLPP) protocols, or a mix of both.

DATA INTERFACES

DAKSpro applications may be activated and/or controlled remotely via automated interfaces, including:

- ◆ TCP-based interfaces with XML protocols including ESPA-X and xLink-100
- ◆ Up to eight serial asynchronous data interfaces (RS232/RS422) with protocols such as ESPA 4.4.4
- ◆ TR500, a UDP-based LAN interface

MOBILE MESSAGING

Two options are available to support messaging to mobile devices:

- ◆ OAP to Ascom Wi-Fi devices
- ◆ DSAS to iPhone, Android, BlackBerry and Windows devices

ELECTRICAL CONTACTS

Electrical interfaces are typically used to integrate with physical plant and facilities.

- ◆ 32 inputs to activate applications or to toggle between different system states
- ◆ 16 outputs to alert other systems, such as activate a fire alarm or turn on a light

DATABASE IMPORT

To avoid manual input, the LDAP interface may be used to import and update subscriber data from up to 20 meta directories such as:

- ◆ Active Directory by Microsoft
- ◆ Domino Server by Lotus
- ◆ DirX
- ◆ OpenScape User Management by Unify

DAKS SMARTPHONE ACCESS SERVICE

DAKSpro leverages smartphone technology as a tool to collaborate in critical communication workflows. The DAKSpro Smartphone Access Service allows you to:

- ◆ Receive voice notifications, alarms, text messages and e-mails on a single device
- ◆ Handle alarm notifications immediately – even if you are already on a call
- ◆ Respond to alarms and alerts with one of several

presented response options

- ◆ Maintain and review logs of all alarms and associated responses
- ◆ Leverage customized application extensions to initiate and monitor complex incident response scenarios from your handheld device



MISSION CRITICAL COMMUNICATIONS SOLUTIONS

Today's institutions are relying on DAKSpro as the foundation for practical applications to improve mission critical communications. From hospitals responding to hurricanes or optimizing stroke team response times to colleges improving personal safety, DAKSpro is at the core.

Protect Your People & Assets



Silent Alarm — With the push of a button or press of a phone key, alert Security of a potential problem without bells and alarms sounding to make a situation more dangerous.



Panic Button — Discretely open a “one way” conference channel with Security to allow them to hear what's happening at a crisis location.



Personal Security — Proactively monitor staff members and security personnel who work in potentially hazardous operating environments.



Emergency Alert — Protect the wellbeing of staff and visitors with timely delivery of pertinent and accurate instructions to evacuate or seek shelter in emergency situations.

Streamline Operations



Automated Dispatch — If a server room becomes too warm, an elevator fails or a system malfunction alarm arises, automatically notify a maintenance engineer without human intervention.



Hotline Assistance — Quickly and efficiently connect a caller needing assistance with the appropriate resource, such as IT support, after hours customer service or on-call specialist.

Rapid Response for Healthcare



Stroke Team Alert — When a stroke patient is inbound to the hospital, minimize the response time to notify the appropriate staff and assemble a response team.



Staff Call Back — Replace a manual phone tree with automated call outs to fill staff vacancies, with escalations if quotas are not successfully



Incident Response — Leverage automated advanced communications to mobilize resources, delegate responsibilities and meet regulatory compliance standards for critical incident response (e.g., Joint Commission,



Care Giver Mobility — Improve clinical staff availability and productivity with automated alerting and communication to mobile devices, including call outs and call backs through nurse call systems.



Text-the-Teenager Immunization Reminder — Automated reminders for follow-up vaccination appointments in multi-dose protocols, e.g. HPV immunization programs. Reminders sent via SMS text messaging or voice announcements to teens and/or siblings (in addition to parent) can significantly increase the numbers of those completing the sequence.





Remote Healthcare Worker “Man Down” — Proactively safeguard healthcare workers dispatched to homes and off-site locations.

SYSTEM TOPOLOGY & AVAILABILITY

DAKSPRO SERVER

DAKSpro is available in two powerful product versions:

- ◆ **DAKSpro 200** is  based on a mid-sized platform. DAKSpro 200 is a 1U 19" rack mountable unit with capacity of 5 to 30 channels.
- ◆ **DAKSpro 300** is a 3U 19" rack mountable unit with capacity options from 5 to 480 channels. It offers more optional add-ons and expansion options than DAKSpro 200. 

DAKS DATA SERVER

The DAKS Data Server is connected to the DAKSpro server via LAN connection. Three key components run on the DAKS Data Server:

- ◆ DAKS database server
- ◆ DAKS process server
- ◆ VCON, used for the setup and the maintenance of the DAKSpro server

ADMINISTRATOR & OPERATOR TOOLS

The DAKSpro Administrator and Operator Tools are either connected to the DAKS Data Server via LAN connection or installed on the same server. The tools run on Windows 7, Windows 10, Windows Server 2008 R2, Windows Server 2012 R2 and Windows Server 2016. Up to 20 Administrators and Operators each can be connected at the same time. The following tasks are supported in the Administrator Tool:

- ◆ Create and administer subscribers
- ◆ Create and administer announcements
- ◆ Create and administer applications (broadcasts, conferences, etc.)
- ◆ Administer basic settings and parameters

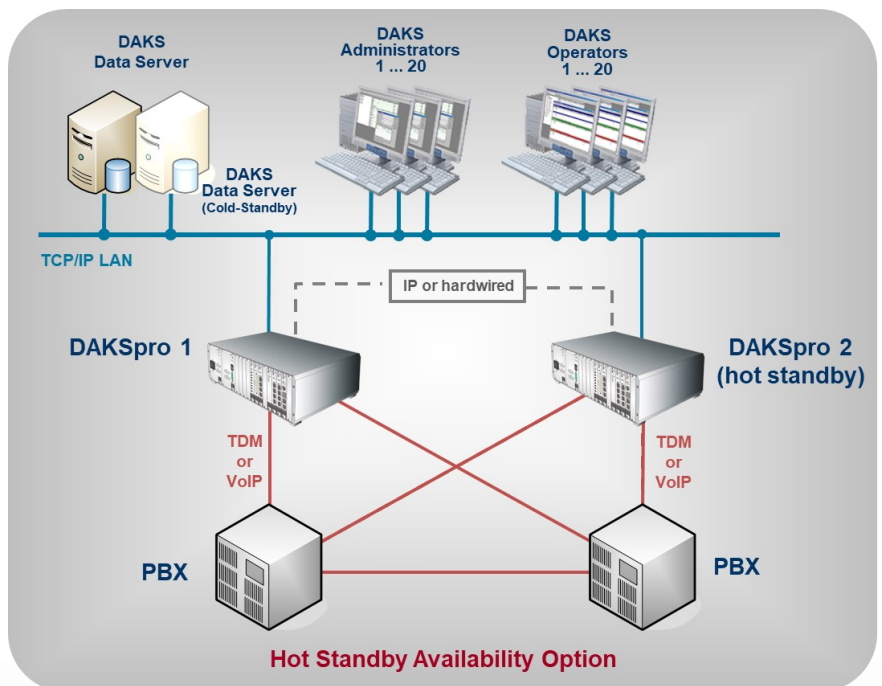
The following tasks can be carried out with the Operator Tool:

- ◆ Launch and monitor broadcasts
- ◆ Convene and moderate conferences
- ◆ Activate, deactivate and switch Announcement Services
- ◆ View and print reports

ENHANCED AVAILABILITY OPTIONS

In addition to the inherent high availability and reliability of DAKSpro, multiple optional redundancy options are supported.

- ◆ **Duplicate Boards** – If a board fails, such as control computer board or ISDN interface board, simply swap the boards with on-site duplicate.
- ◆ **Cold Standby with or without CompactFlash Card** – All interfaces and server parameters of the standby server are preconfigured and the server itself is powered down.
- ◆ **Hot Standby** – Identical DAKSpro server with CompactFlash card available at the customer site, powered on, and connected to the DAKS operation and administration system, but not active (telephone interfaces inactive). In the event of failure, the hot standby can be activated automatically via IP or hardwired contact.
- ◆ **Parallel Operation** – Same as hot standby but the second server is powered up and active.



- ◆ **Parallel Operation with Redundancy Servers** – Each operational DAKSpro server has an assigned hot standby. This topology offers the highest availability through load sharing and balancing, and through the use of hot standby servers.



Feature/Function	DAKspro 200	DAKspro 300
Housing/Dimensions	Server in 19" housing (1U) as rack installation	Server in 19" housing (3U) with cPCI-board for table top or rack installation
Number of Parallel Channels	5 to 30	5 to 480
PBX Connectivity Technology	VoIP trunking, E1/T1 trunking	
Signaling Protocols	SIP, SIP-Q, CorNet-NQ, MLPP, NI2, QSIG, DSS1 (optional)	
Speech Codecs	G.711 A-law or μ -law	
Processor / Operating System	Dual-processor system: <ul style="list-style-type: none"> ◆ Core 1 with Linux™ operating system ◆ Core 2 with μCLinux™ operating system 	Multi-processor system: <ul style="list-style-type: none"> ◆ Main computer with Linux™ operating system
Mass Storage Device	Pluggable 2 GB CompactFlash card	
Ethernet LAN Ports	2x 10/100Base-T <ul style="list-style-type: none"> ◆ 2 IP addresses (VoIP separately) 	2x 10/100/1000Base-T in channel-bonding mode for redundancy <ul style="list-style-type: none"> ◆ 1 IP address
ESPA-X Based LAN Interfaces	Up to 5	Up to 40
Digital Inputs & Outputs	<ul style="list-style-type: none"> ◆ Up to 32/64 contact inputs (with/without short circuit and line break detection) ◆ 1 built in special relay output with make and break contact plus up to 16 more 	<ul style="list-style-type: none"> ◆ Up to 32 contact inputs, galvanically separated from the system ◆ Up to 16+2 gate outputs, separated from each other and the system
Audio Inputs & Outputs	Not available	Up to 8x IN and 8x OUT
Serial Ports	Two (2): RS232 or RS422, electrically isolated	Up to 8: RS232, RS422 or RS485, electrically isolated
Voice Memory	1 hour of announcements	4 hours of announcements
Power Source	<ul style="list-style-type: none"> ◆ Two internal power supply units usable in parallel: PSU 1 for 115/230 VAC, PSU 2 for 24/48 VDC ◆ External professional AC/DC converter for power supply from 2x 115/230 VAC optional 	<ul style="list-style-type: none"> ◆ Either from 48 VDC or from 115/230 VAC ◆ Two power supplies optional (DC+DC, AC+AC or DC+AC)
Power Consumption	<ul style="list-style-type: none"> ◆ AC power supply: approximately 25 Watts ◆ DC power supply: approximately 20 Watts 	Typically less than 30 Watts
Certifications	UL, FCC and CE	