

CONTROLLERS & SOFTWARE

for Enhanced Control & Security





CONTROLLERS

INCLUDED SOFTWARE: MEETING DIVERSE REQUIREMENTS

OUR SOFTWARE MODULES ARE DESIGNED TO MEET MARKET-DRIVEN NEEDS AND SUIT A VARIETY OF APPLICATIONS AND SYSTEM REQUIREMENTS.

JCCP

The Jacques Call Control Protocol (JCCP) software serves as the central hub for the IP Communications System, facilitating control, audio, and video communication between intercom and public address devices.

JELinux

Our Linux-based operating system, JELinux, powers the Jacques IP Communications System, providing users with monitoring, viewing, filtering, and event recording capabilities.

Optional Software: Extending Functionality

To enhance the capabilities of our IP communication systems, Jacques offers a range of optional software modules.

Central to Jacques intercom system design is the controller. Controllers combined with software modules, manage all system functionality.

Empowering Communication Systems with Advanced Controllers & Software

At the heart of any Jacques IP communication solution is a system controller engineered for seamless control and efficient management. Our robust controller(s), complemented by a range of included and optional software provide the endless opportunities for our customers and their security communication requirements. Our in-house team designs and engineers all Jacques software modules, enabling us to deliver cutting-edge IP communication solutions that cater to unique market requirements.

—

Introducing Jacques next generation of software!

- SOFTWARE DESIGNED FOR YOU
- SOFTWARE DESIGNED FOR NEW FEATURES & DEVELOPMENT
- SOFTWARE DESIGNED FOR SECURITY

Version 8 (V8) software introduces improvements to security, user experience, responsiveness, and simplified configuration of features across a suite of applications. As part of our commitment to continual innovation, Jacques develops features based on industry requirements as well as direct requests from end users.

—

Security

SECURITY AT THE FOREFRONT

Improvements to security includes:

- Restricted access via new Roles & Permissions application
 - LDAP authorisation integration
- Removed vulnerabilities
- IPtables support
- HTTPS webpage access
- Plus more!

—

User roles & permissions application

RESTRICTING UNAUTHORISED ACCESS

A new application used within web configuration to provide security and password protected access to applications; and feature sets within applications. Users may be defined with a role; with either full access as administrators, or limited access in the system.





CONTROLLER COMPARISON GUIDE

	TCH-2MXH	JSC-5L	JSC-VM
ENDPOINT LIMITATION	< 80	2000*	2000*
INCLUDED SOFTWARE			
Jelinux	✓	✓	✓
JCCPs	✓	✓	✓
DAR	–	–	–
OPTIONAL SOFTWARE			
DAR AEC	✓	✓	✓
DAR RECORDING	✓*	✓*	✓*
DAR BGM	✓	✓	–
DAR ATM	–	✓	✓
DAR SIP VPN	–	–	✓
DAR CCTV	–	✓	✓
INTERCOM REPORT SERVER	✓	✓	✓
HIGH LEVEL INTERFACE	✓	✓	✓
EVENT CONTROLLER	✓	✓	✓
HA PACKAGE	✓	✓	✓
SIPPROXY	✓*	✓*	✓*
JAS	✓	✓	✓
VIVI	✓	✓	✓
MNS	✓	✓	✓
OPTIONAL HARDWARE			
NO. OF SOUND CARDS (BGM)	–	2	–
RAID UPGRADE KIT	–	✓	–
REDUNDANT PSU UPGRADE KIT	–	✓	–
FEATURES			
NO. OF FULL DUPLEX CHANNELS (MASTER TO ENDPOINTS)	10*	90*	120*
NON-CONTACT VISITS	–	✓	✓
CELL TO CELL COMMUNICATION	–	✓	✓
NO. OF AUDIO THRESHOLD MONITORING DEVICES	–	250*	250*
NO. OF RECORD OUTPUT STREAMS	10*	90*	120*
NO. OF BGM STREAMING CHANNELS	1	Dependent on no. of sound cards	–
NO. OF 3RD PARTY CCTV CAMERAS	–	Dependent on resources availability	Dependent on resources availability

* Dependent on server configuration, resources
*Additional server required for system needing audio recording and integration to SIP phones

HIGH AVAILABILITY

Ensuring system redundancy, this package, in conjunction with multiple controllers, facilitates seamless failover safeguarding against the complete loss of one of the system controllers. Operating in an active/standby configuration, the primary system controller hosts all services while the backup server remains idle under normal conditions. If the primary system controller fails, the High Availability software package ensures the backup system controller takes over all services. The backup system controller remains active until a switchover or failover occurs. This allows the primary controller to be inspected and any faults diagnosed with minimum disruption to services. Additionally, the software module ensures the primary and backup controllers monitor each other's state.

[LEARN MORE](#)

Managing System Functionality

Jacques offers controllers in various capacities, tailored to accommodate a predetermined number of endpoints and key communication and reporting functionalities. Controllers, in conjunction with included software, serve as the backbone of the system, overseeing critical functions such as audio communication between endpoints, system & device reporting, and integration with leading third-party systems such as CCTV, access control & building management.

Virtual Controllers: Unleashing Flexibility

Our IP communication system software can be deployed in virtual environments, running on client-supplied hosts. Virtual controllers offer full system functionality, coupled with enhanced flexibility and usability. They seamlessly integrate into existing networks and infrastructure, making them a versatile solution for any setup.

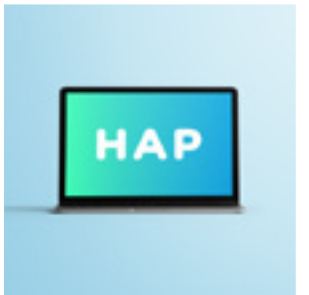
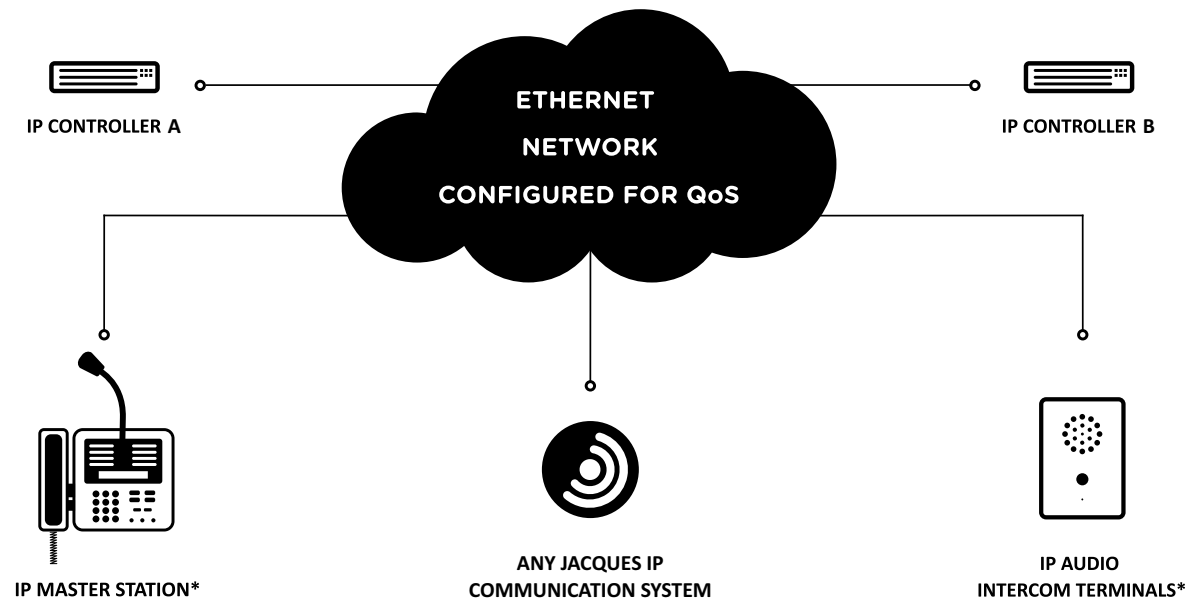
Redundant Controllers: Ensuring Uninterrupted Communication

In mission-critical environments where uninterrupted communication is paramount, Jacques provides redundant controller solutions. Featuring (at least) a primary and secondary controller, in a redundant setup, this safeguards against system failures caused by hardware or software issues. In the event of a failure, the secondary controller automatically takes over, ensuring continuous system operation. Our rigorous testing procedures guarantee that the failover process occurs in less than a minute, minimising disruptions. Our redundancy solution significantly reduces the risk of system failure, making it ideal for environments such as corrections, defence establishments, and hospitals.

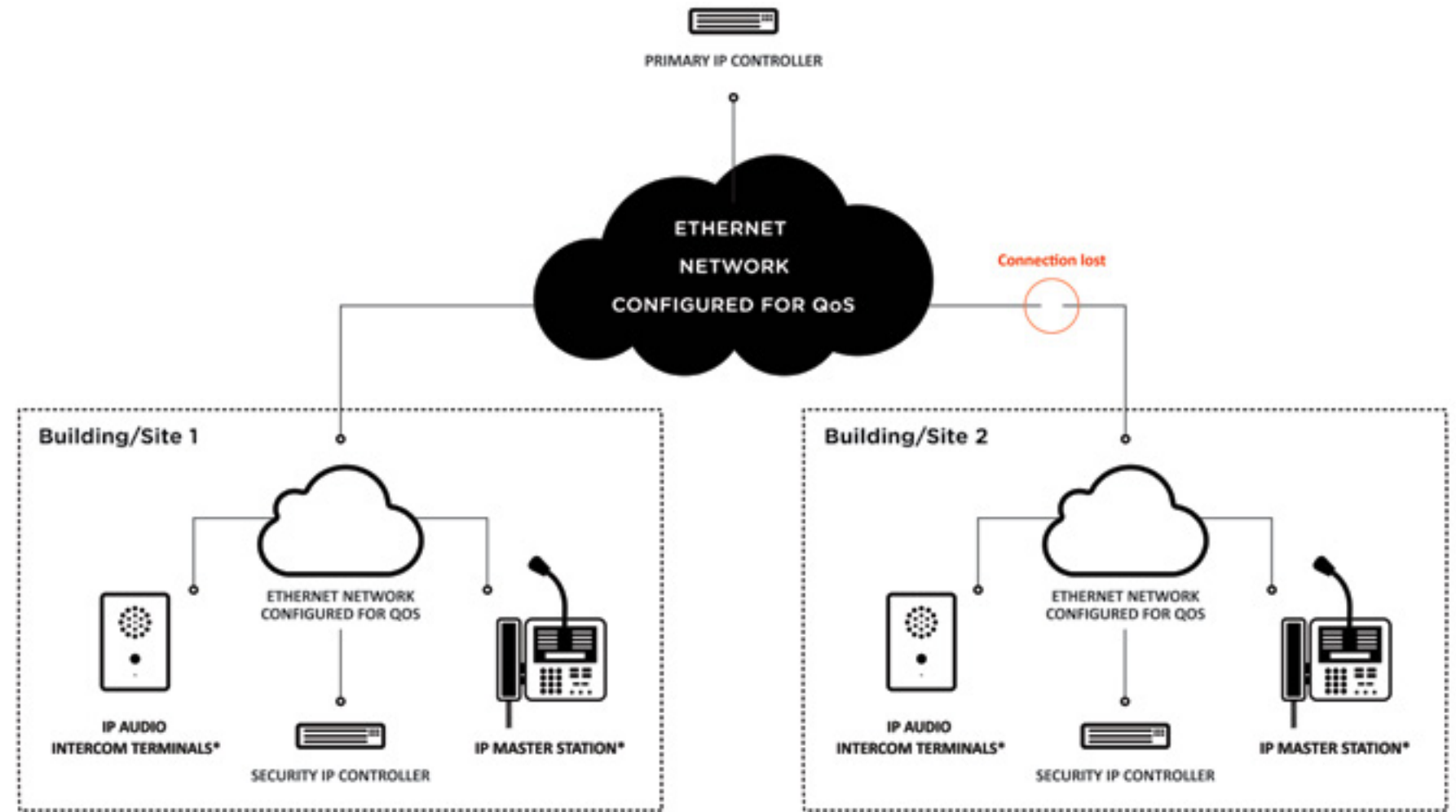
Distributed Networks: Seamless Integration Across Sites

The Jacques IP Communications System seamlessly supports distributed networks across multiple locations. With hot standby redundant controllers at the primary site and multiple transmission links for alternate routing, the system ensures continuous operation even in the event of link failures. Each remote site is equipped with a local controller, enabling independent operation if all transmission links fail. In cases where a master station fails or remains unanswered, calls can be routed to alternate sites on the wide area network (WAN). This distributed network capability is a valuable asset for organisations operating across multiple locations utilising multiple controllers.

Redundant controllers diagram



Distributed networks diagram



SECURITY IP CONTROLLER

Under normal operation, all secondary controllers, master stations and intercom terminals communicate directly with the primary controller. During normal operation any master station or intercom terminal that attempts to connect to its secondary controller will be rejected.

CONNECTION LOST - DISRUPTED OPERATION

The Secondary IP Controller at building/site 2 detects a lost network connection to the Primary IP Controller
The Secondary IP Controller at building/site 2 will now accept connections from master stations and intercom terminals within it's network
The master stations and intercom terminals at building/site 2 will detect the lost connection to the primary IP Controller and automatically connect to their Secondary IP Controller
Building/site 1 continues to operate as normal with connection to the Primary IP Controller

DAR

DAR is a multi-functional software module responsible for handling recording, interfacing with third-party recording devices, streaming background music through intercom & public address endpoints, echo cancellation for full duplex communication, Visual Audio Monitoring (VAM) (in conjunction with J650UI application) and threshold alarm monitoring & display. Multiple instances of DAR can be utilised in a system to achieve the capacity and functionality requirements of this powerful module.

[LEARN MORE](#)

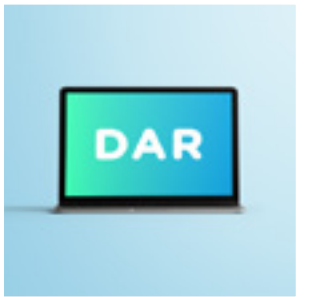
Features

- Echo cancellation for full duplex communication
- Interface call audio to third party recording devices (digital, SIP or analogue)
- Stream background music/entertainment through intercom devices & PA speakers
- Identify & display threshold alarms – monitors intercom devices for ambient noise. Should a predetermined audio level be reached or exceeded, an alarm will be activated within the system
- Supports both digital & analogue audio recording (requires additional hardware)
- Interface to standard SIP recorder
- Third party CCTV Cameras RSTP Integration e.g. Panasonic WV-SP305E, Axis 210, Axis P3354 etc. to Jacques VMS

Watch Call Recording video



vimeo.com/874666033



EVENT CONTROLLER

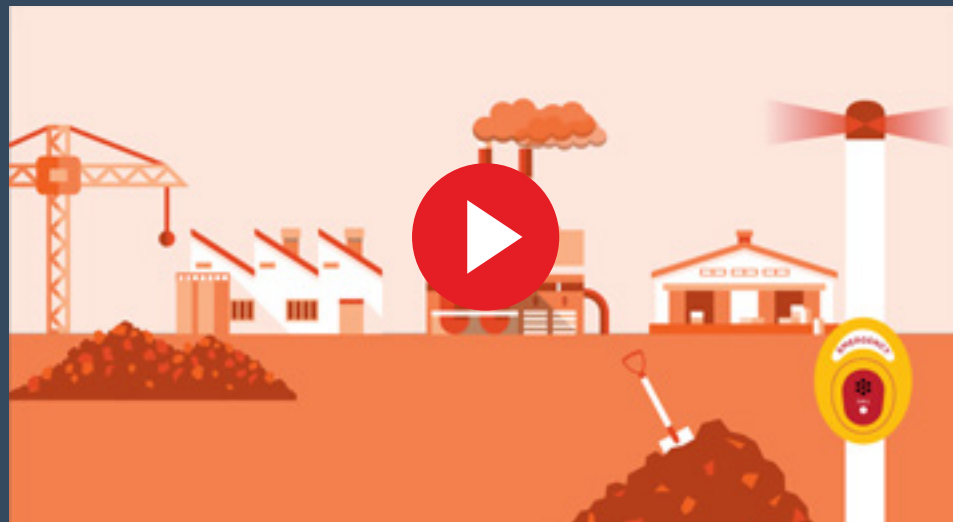
Simplifying integration with external systems, this software enables configurable event triggers, simultaneous event handling, and alarms. Event Controller is a powerful “if-this-then-that” logic allowing for the configuration of highly configurable rules to match system events and triggers to produce user-defined & site-specific outcomes.

[LEARN MORE](#)

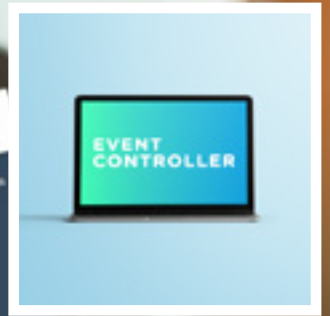
Features

- Standard handling of CCTV function
- Interface to external third party equipment including (but not limited to)
 - Standard Modbus/TCP server and client
 - Inner Range Concept 4000 Equipment
 - ADAM relay module
 - Threshold Alarm Monitor

Watch Configurable Event Trigger video



vimeo.com/876952104



IRS

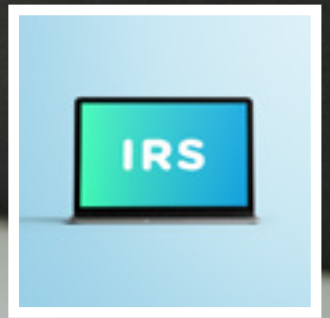
INTERCOM REPORTING SOFTWARE (IRS)

IRS is a reporting software module that generates detailed reports on system operation, fault events, and call activity, aiding fault diagnosis, network management, and system maintenance. Detailed reporting of system operation and traffic aids in accurate and efficient fault diagnosis, preventative system maintenance, network management via traffic monitoring and automatic report generation, document creation and report distribution.

[LEARN MORE](#)

Features

- Live event search improvements
- Customised report creation
- Schedule reports via calendar
- Graphical analysis reports of master & intercom usage
- Add notes to call or event
- Archive emailing of reports based on schedule
- Options for report storage.



REPORT FILTERS

Default: Creates reports containing tag, status (online or offline), resets, number of answered/held/connected calls, failed calls, total ringing/calling/connected time and elapsed triggered alarm duration.

Call Activity: Creates reports containing tag, call timestamp, intercom descriptors, and call handling information.

Faults: Creates reports containing tag, fault timestamp, and fault description.

System Diagnostic Functionality (SDF): Creates reports containing tag, acoustic test, status test, and button test information.



PACOM



Honeywell



Luxriot®

Genetec



HIGH LEVEL INTERFACE (HLI)

Jacques offers many High Level Interfaces (HLI's) to industry leading, third-party systems, enabling the functions of our system to integrate with many building and security management, telephony, CCTV and access control systems. Our HLI development kit permits third-parties to enhance their own products/software to interact, control and respond to events within the Jacques system without having to implement network communications or low-level protocol message handling.

[LEARN MORE](#)

HLI PARTNER MATRIX - BMS



MULTISITE

Multisite operation	•	•		•	•						•	
---------------------	---	---	--	---	---	--	--	--	--	--	---	--

INTERCOM FUNCTIONS

Make intercom calls	•	•	•	•	•	•	•	•	•		•	•
Receive intercom calls	•	•	•	•	•	•	•	•	•	•	•	•
Terminate intercom calls	•	•	•	•	•	•	•	•	•		•	•
Forward intercom calls			•	•	•	•	•	•			•	•
Place intercom calls on hold			•	•	•	•	•				•	•
Pending intercom call notification (call queue)	•	•	•	•	•	•	•	•			•	
Adjust intercom call volume	•	•		•	•						•	
Control music streaming function of intercoms	•	•		•			•				•	
Covertly monitor intercoms	•	•		•							•	
Remote or isolate intercoms	•	•	•	•	•		•	•			•	•
View CCTV footage from Jacques video intercom device		•		•	•						•	

PA FUNCTIONS

Select PA zones for broadcast	•	•		•							•	
Make/terminate PA calls	•	•		•				•			•	
Group PA zone calling	•	•		•				•			•	
Soft button intercom Push-to-Talk	•	•		•							•	
Soft button PA system Push-to-Talk	•	•		•							•	

RELAYS & EVENTS

Trigger alarm - intercom event	•	•		•	•		•	•			•	•
Trigger alarm - activate CCTV	•	•		•	•		•	•			•	
Activate door/gate relay	•	•	•	•	•		•		•	•	•	•

DIAGNOSTICS AND REPORTING

System controller connection status	•	•		•	•	•	•	•	•	•	•	•
Monitor endpoint status changes (online/offline/alarm)	•	•	•	•	•	•	•	•	•	•	•	•
Site specific information distribution	•		•		•						•	•
Alerts & alarms interface	•	•		•	•		•	•		•	•	•
Event logging interface	•	•		•	•		•			•	•	•

GRAPHICAL MAPS

Display Jacques intercom on graphical maps	•	•	•	•	•		•	•		•	•	•
Dynamically change the display of Jacques intercoms based on their current status	•	•	•	•	•		•	•			•	•
Control Jacques intercoms from graphical maps	•	•	•	•	•		•	•		•	•	•
Automatically zoom in on intercoms based on alarm trigger events	•	•	•	•	•		•	•			•	•

ALARM MANAGEMENT

Automatically control intercoms based on alarms received from 3rd party systems	•	•	•	•	•		•				•	•
Automatically control objects (doors, areas, relays etc) based on events from Jacques	•	•	•	•	•		•	•		•	•	•
Automatically control compatible 3rd party systems (e.g. CCTV) based on events from Jacques	•	•	•	•	•		•	•			•	•

RECORDING

Records 3rd party CCTV in conjunction with intercom audio					•						•	
---	--	--	--	--	---	--	--	--	--	--	---	--

HLI PARTNER MATRIX - CCTV



MULTISITE

Multisite operation

INTERCOM FUNCTIONS

- Make intercom calls
- Receive intercom calls
- Terminate intercom calls
- Forward intercom calls
- Place intercom calls on hold
- Pending intercom call notification (call queue)
- Adjust intercom call volume
- Control music streaming function of intercoms
- Covertly monitor intercoms
- Remote or isolate intercoms
- View CCTV footage from Jacques video intercom device

PA FUNCTIONS

- Select PA zones for broadcast
- Make/terminate PA calls
- Group PA zone calling
- Soft button intercom Push-to-Talk
- Soft button PA system Push-to-Talk

RELAYS & EVENTS

Trigger alarm - intercom event	•	•		•	•
Trigger alarm - activate CCTV	•	•	•	•	•
Activate door/gate relay					

DIAGNOSTICS AND REPORTING

System controller connection status					•
Monitor endpoint status changes (online/offline/alarm)					•
Site specific information distribution					
Alerts & alarms interface	•			•	•
Event logging interface	•				•

GRAPHICAL MAPS

- Display Jacques intercom on graphical maps
- Dynamically change the display of Jacques intercoms based on their current status
- Control Jacques intercoms from graphical maps
- Automatically zoom in on intercoms based on alarm trigger events

ALARM MANAGEMENT

Automatically control intercoms based on alarms received from 3rd party systems				•
Automatically control objects (doors, areas, relays etc) based on events from Jacques	•			•
Automatically control compatible 3rd party systems (e.g. CCTV) based on events from Jacques	•			•

RECORDING

Records 3rd party CCTV in conjunction with intercom audio	•			•	•
---	---	--	--	---	---



JAS

JACQUES ANNOUNCEMENT SCHEDULER (JAS)

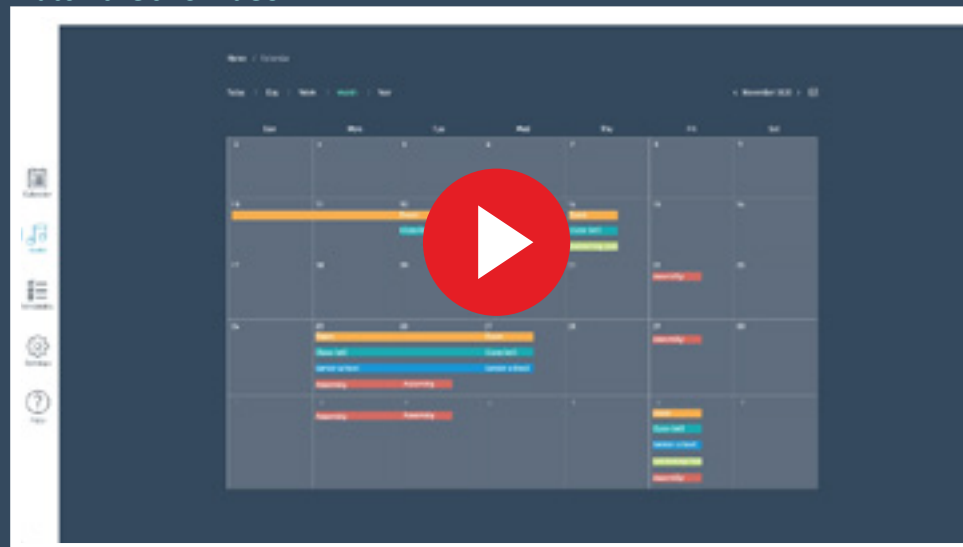
Advanced audio scheduling interface for public address. JAS allows users to easily upload audio files such as tones, bells, chimes, songs, and pre-recorded audio to create detailed announcements for seamless broadcast throughout the Jacques IP Communications System. The scheduling functionality of JAS allows users to create timetables for broadcasting audio files at specific times across all zones or selected zones. Schedules can be assigned to daily, weekly, or monthly intervals based on the audio broadcast requirements of the site. Managing the system on a daily basis is made convenient through the calendar interface, where users can easily assign, view, and remove schedules for a particular day or date range. Qbuttons (Quick Buttons) allows for the fast broadcast of a predefined audio announcement (eg. Lockdown tone) across a PA system at the touch of a button.

[LEARN MORE](#)

Features

- Facilitate pre-recorded PA announcements, bells, tones & warning alarms across a Jacques IP PA system
- Allows for the uploading of audio files for broadcast (mp3 or wav)
- Create audio via text-to-speech or Record Audio - directly into the interface
- Build timetables of announcements, bells & tones for broadcast at allocated times to select or all PA zones
- Apply schedules to days, weeks or months according to a sites broadcast requirements
- Management of the scheduler via a user-friendly calendar view Device reponsive design. Use on mobile
- Introduction of QButton for quick triggering of emergency messages, tones or alerts
- Shuffle music feature

Watch the JAS video



vimeo.com/912098752



VANN



VOICE ANNUNCIATOR (VANN)

The Voice Annunciator software package is a digital message store used to manage pre-recorded announcement audio files, which can be directed to any individual or group of endpoints within the Jacques IP Communications System. Announcements can be created from any master station, PC workstation or from professional sound recordings and stored as sound files on the network.

These announcements can be broadcast throughout the system using rule based permissions and system hierarchy. The Voice Annunciator software can also be used in conjunction with the Event Controller software to provide scheduled announcements – ideal for transport, public safety and education applications.

[LEARN MORE](#)

Features

- Announcements can be created from any master station, PC workstation or from professional sound recordings and stored as conventional wave files on the network
- Rule based permissions control access to announcement playback and recording
- Concurrent playback and recording of multiple announcements
- Announcements may be shared or distinct to each originating intercom station
- Priority queuing of announcements
- Automatic muting of background music during a public address announcement or intercom call
- Standard Microsoft Windows wave files are used for announcements
- Directory support on master stations
- Supports audio streaming in RTP protocol, support for multicast, IGMPv2 and Diffserv standard for Quality-of-Service (QoS)
- Online addition, deletion and update of audio files in the digital message store at any time from the intercom system TCP/IP network

A digital message store used to manage pre-recorded audio files, for use across the system. Audio files can be broadcast throughout the system using rule-based permissions and system hierarchy.

VIVI



The Jacques - Vivi integration allows for event triggers in the Jacques system, such as emergency push button panel button press or J650UI Emergency Message button activation, to display Vivi configured images on screens based on screen locations. Vivi offers wireless screen mirroring and digital signage devices designed for the education market. The integration allows a Jacques system trigger (such as a lockdown) to display Vivi graphics (lockdown screens) and the alarm is heard across the public address system.

[LEARN MORE](#)

Features

- Trigger simultaneous visual and audio emergency messages
- Dynamic selection of school zones
- Suitable with Jacques physical and GUI-based emergency buttons (including JAS QButtons).

Watch the Vivi integration video



vimeo.com/844072920

SIP

SIP Proxy Software

Jacques SIP Proxy Software module allows Jacques devices to connect to SIP telephony systems. The interface implements RFC 3261 – Core Session Initiation Protocol to transfer, convert and filter the communication (e.g. calls, streaming media) from the Jacques communication system devices and make it available to third party SIP systems and devices.

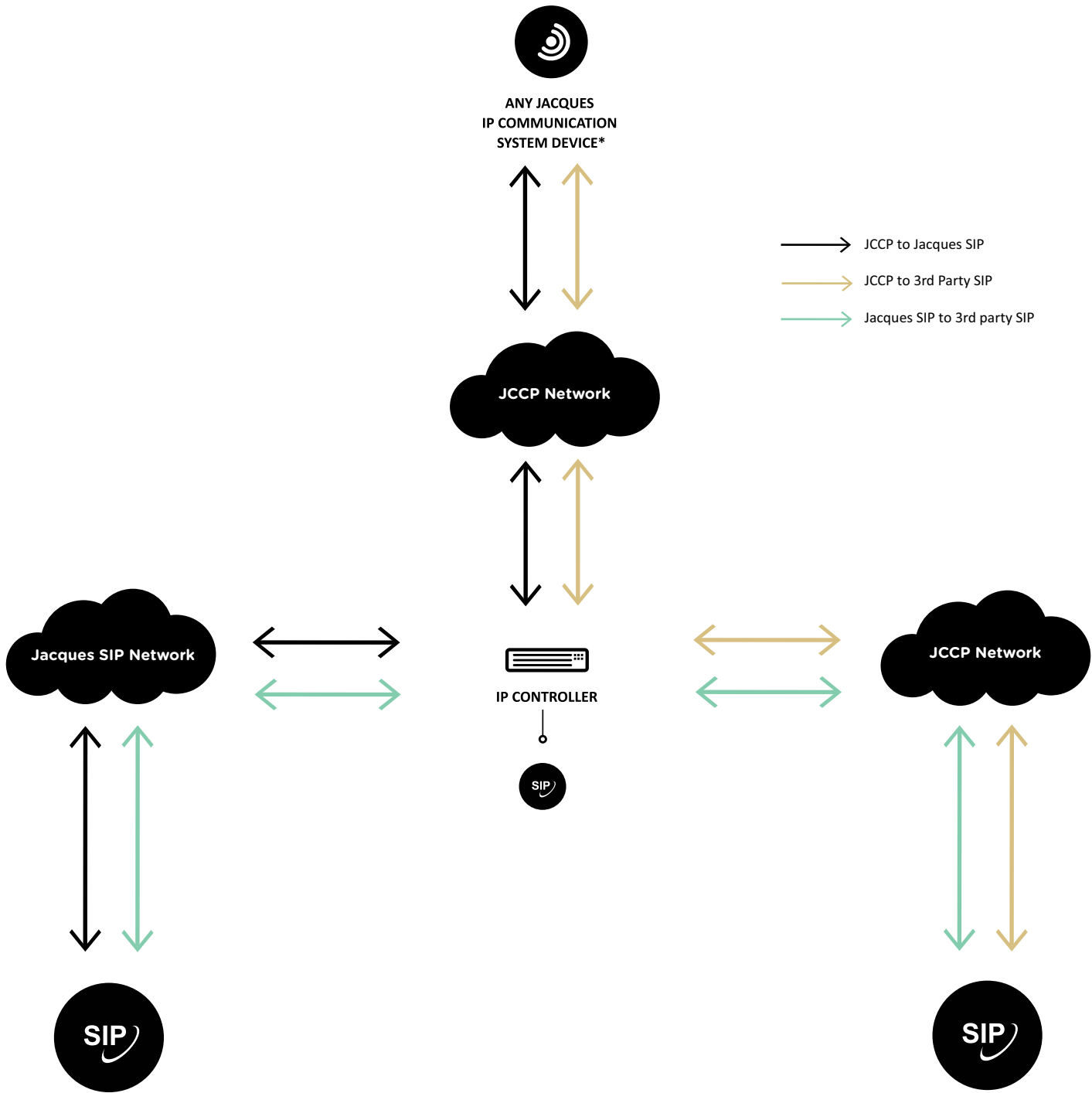
[LEARN MORE](#)

Features

- Physical and soft SIP devices can be directly registered to the Jacques system without the need of a third party SIP PBX
- A user at a Jacques IP intercom may establish, conduct and terminate an audio call to a SIP telephony device directly connected to the Jacques system running our SIP software or connected via an external SIP server/PBX
- A user at a SIP telephony device either connected directly to the Jacques system running our SIP software or connected via an external SIP server/PBX may establish, conduct and terminate an audio call to Jacques’ IP endpoints
- A SIP IP telephone can initiate the operation of relays onboard Jacques intercoms via DTMF, during a connected call
- Switch Jacques IP master station to night mode whereby calls are diverted to a SIP phone after hours (may also require Jacques Event Controller software)
- Support for bridge calling allowing a Jacques device to dial multiple SIP devices however only allowing one to answer and perform a call
- SIP trunking to external SIP PBX/servers (with or without digest authentication)
- Support for numerical prefix and remote ID details when defining a SIP trunk
- Support codecs G711 U-law and G711 A-law



Jacques SIP Proxy diagram



*Virtually unlimited. Dependent on server configuration and network bandwidth **Multiple controllers available for redundancy or distributed options



MASS NOTIFICATION SYSTEM (MNS)

In today's fast-paced world, it is crucial to ensure that you inform people quickly and efficiently during critical events. Our Mass Notification System (MNS) is designed to keep you informed and connected through various communication channels, providing a comprehensive solution to safeguard people, assets and businesses.

[LEARN MORE](#)

MNS facilitates the distribution of written notifications via SMS, desktop app, Telegram, email, and more, so that you can get the word out when it's needed

COMMUNICATION TO SAFEGUARD, PROTECT & IMPROVE

• Safeguard your people

Communicate fast & efficiently during critical events
Inform people when they need to know
Provide updates as the event progresses or changes

• Protect your business

Notify those onsite when events happen
Ensure equipment faults or issues are known instantly
Support workplace health & safety process & procedures

• Improve asset maintenance & management

Monitor system status & instantly report issues
Improve site efficiency by ensuring maintenance issues are resolved in a timely manner

DYNAMIC EVENT TRIGGERS

Automate alerts based on system events, to inform of critical updates in real-time. Distribute mass notifications to contacts based on system events or triggers. There are many system events & triggers including:

- 300+ system events
- Offline (endpoint, device, system controller)
- Tamper (device has been tampered with)
- Button press events (physical & soft buttons)
- Qbutton activation (JAS Qbutton for emergency PA tone broadcast)
- Call to a specific tag number
- Noise threshold exceeded
- Button failure on intercom
- ATSM failure on intercom

MNS CHANNELS OF COMMUNICATION

- Send to an unlimited number of recipients
- One, some or all the below methods are available to disseminate information quickly
 - SMS
 - Email
 - Desktop alert application (push notifications)
 - Messaging app (Telegram)

CUSTOMISABLE MESSAGE CONTENT

Personalisation of templates with dynamic and static content. Write body content and fill in dynamic content to provide specific detail relating to the device.

Dynamic content includes:

- Date & time
- Recipient number
- Recipient Name
- Device tag number
- Device descriptor

CONTACT LIST MANAGEMENT

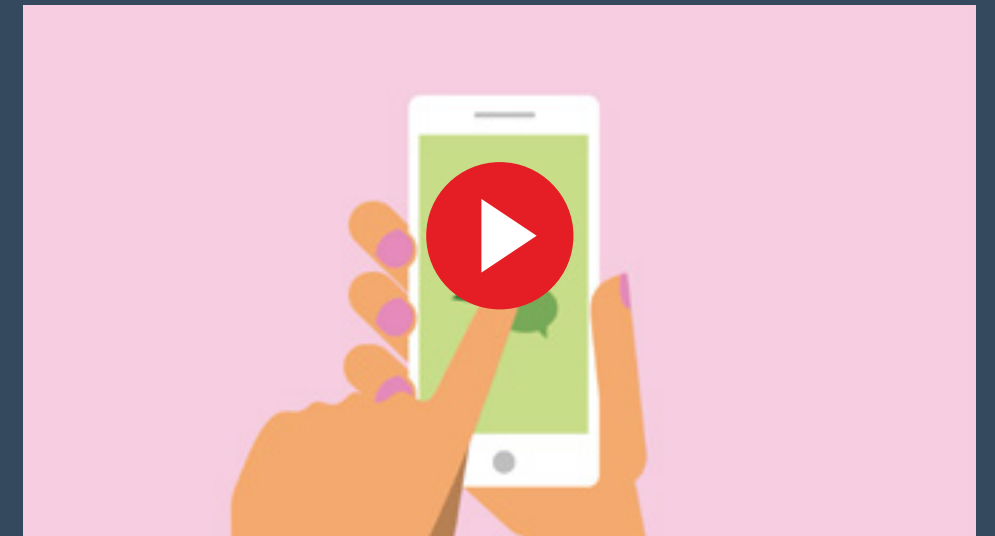
- Bulk upload contacts
- Email &/or phone number required for each contact
- Segments and epithets for tailored contact lists

REPORTING

- History of notifications with send data

Automated alerts based on system events, ensuring that you are informed of critical updates in real-time

Watch MNS video



vimeo.com/903194576



REQUEST A DEMO

Contact us or your local distributor for a product demonstration today. We can provide virtual demonstrations tailored to your project or target market verticals.

RELATED DOCUMENTATION

[JSD-0016 \(HLI BROCHURE\)](#)

[JSD-0219 \(DAR SOFTWARE SPEC\)](#)

[JSD-0220 \(EVENT CONTROLLER SOFTWARE SPEC\)](#)

[JSD-0221 \(HAP SOFTWARE SPEC\)](#)

[JSD-0222 \(IRS SOFTWARE SPEC\)](#)

[JSD-0223 \(JAS SOFTWARE SPEC\)](#)

[JSD-0252 \(SIP SOFTWARE SPEC\)](#)

[JSD-0253 \(VANN SOFTWARE SPEC\)](#)

[JSD-0262 \(VIVI INTEGRATION SPEC\)](#)

[JSD-0265 \(MNS APPLICATION SPEC\)](#)

DISCOVER CONTROLLERS & SOFTWARE PRODUCT RANGE

[SYSTEM OVERVIEW](#)

[SYSTEM CONTROLLERS](#)

[SOFTWARE](#)

[INTEGRATION](#)

p | +61 7 3846 8400
e | sales@jacques.com.au
www | jacques.com.au

