WAIS™
Wide Area Interoperability System

JPS Interoperability Solutions

A wide area interoperability system (WAIS) interconnects communications systems over existing network infrastructure - allowing users of disparate radios, telephones, satellite phones, and dispatch centers to communicate with each other locally, regionally, or in systems that span entire states.

WAIS Overview

The WAIS scalable interoperability solution links multiple communication devices via any IP network: LAN, WAN, or the Internet. Many have been deployed in the US and around the world, ranging from a few sites to entire statewide systems and larger, incorporating both fixed sites and mobile platforms. Operators stationed at control points anywhere on the network easily form and disband multiple-user talk groups.

WAIS Architecture

Communications devices such as radios, telephones, VoIP phones, satellite phones, etc. interface via JPS's industry-standard ACU family. Any number of local ACU-based systems, along with operator stations and other communications assets, are linked to create a WAIS. Single, independent users or radio systems not part of a local ACU can join the WAIS using the NXU-2A radio interface unit. The WAIS distributed architecture has no single failure point, so local systems continue to operate independently during network outages or following failure of infrastructure during a disaster.

WAIS Controller

Operators use the WAIS Controller to manage system resources via its intuitive Graphical User Interface. Its Overview screen manages connections among all or any subset of sites, and an operator can switch to the Local View when it's advantageous to focus on a single site. Every site and communications end point has its own graphical icon, making each easy to identify at a glance. The WAIS Controller monitors the system and its network connections, keeping operators apprised of real-time system status. Password-protected permission sets covering individual sites or specific endpoints allow operators to monitor and control the entire system or restrict them to limited portions of it.

Dispatch Features

The WAIS Controller's dispatch features, available with the Enhanced and Enterprise versions, allow operators to monitor or communicate directly with end users. Flexibility is maximized by making use of the sound-card of the operator's PC. The WAIS Controller Dispatch View gives an intuitive and customizable view of all dispatch assets. Operators monitor multiple end points and chose to communicate with individual end points or the entire interoperability net that the an end point is a member of. The Enterprise version fans out endpoint audio to multiple dispatchers, allowing simultaneous monitoring.

Benefits

- Operators monitor system users or communicate directly with them via WAIS Dispatch capabilities
- User-friendly interface clearly presents the state of the system, allowing operators to swiftly manage talk groups
- Disparate radio systems can be connected locally, regionally, or statewide
- Password-protected remote access available from anywhere on the network
- Distributed Architecture eliminates single-points-of-failure
- Scalable interoperability communications platform for critical incident command and control
- The WAIS Controller's user-friendly interface clearly presents the state of the system and allows operators to swiftly build or disband interoperability talk groups

WAIS™

Wide Area Interoperability System
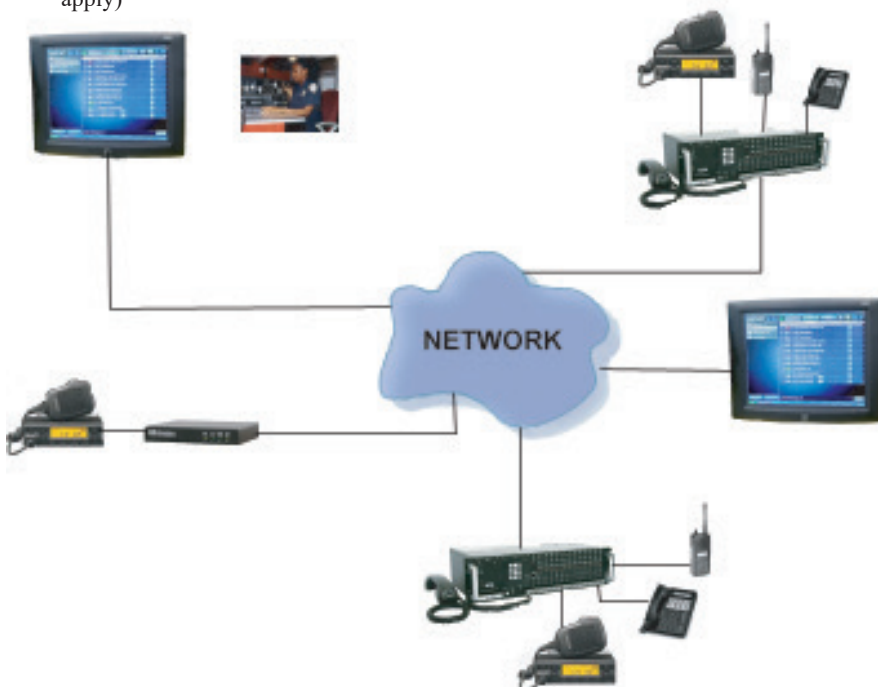

Solution Summary

- All ACU gateways are WAIS-compatible: ACU-T, ACU-M, ACU-1000, ACU-2000IP, and ACU-5000. NXU-2A compatible for single end-device sites.
- LAN, WAN, or the Internet can be used to link sites.
- Dispatch capabilities allows monitoring of end users or direct two way communication links, as desired.
- Multiple vocoder choices allow bandwidth optimization.
- Distributed design approach eliminates single points of failure and ensures reliable communications.
- Local Interoperability Systems remain operational in the event of network failure or loss of other system infrastructure during a disaster.
- New control points or system users can easily be added at any time to any point in the network.
- Operators can easily customize their software interface using the large and expandable icon library.
- Access is password-protected. Administrators can also use passwords to limit operator access to specific system assets.

Applications

- Mobile
- Fixed
- Tactical

Mission Support

- Extended warranty and system support 24/7 help desk (additional charges will apply)
- Professional and Engineering services (additional charges will apply)

Upper: A WAIS local interoperability site featuring the ACU-2000IP radio interoperability gateway. Middle: A WAIS Controller Overview screen. Bottom: Sample WAIS block diagram.

JPS Interoperability Solutions
5800 Departure Drive
Raleigh, NC 27616
919.790.1011
919.865.1400 fax
24/7 Support Provided
www.jpsinterop.com

Sales Inquiries:
Sales@jpsinterop.com

Support Inquiries:
Support@jpsinterop.com

Media Inquiries:
media@jpsinterop.com

Facebook:
www.facebook.com/jpsinterop

LinkedIn:
https://www.linkedin.com/company/jps-interoperability-solutions-inc./

Twitter:
https://twitter.com/jpsinterop?lang=en

YouTube:
https://www.youtube.com/channel/UCxB5lqo35Gt1t6Jc6vHFtLA

JPS Interoperability Solutions