

Interoperability as a Service (IaaS)

An Opportunity to Quickly and Cost-Effectively Achieve Inter-Agency Communications Using WAVE® Software Technology and the Best of Cloud Computing

WAVE®90

A 90-Day FREE Trial of IaaS with Hosted WAVE® Services
Provided by Fpweb.net



NOTICE

© 2009 Twisted Pair Solutions, Inc. All intellectual property rights in this publication are owned by Twisted Pair Solutions, Inc. and are protected by United States copyright laws, other applicable copyright laws and international treaty provisions. Twisted Pair Solutions, Inc retains all rights not expressly granted.

No part of this publication may be reproduced in any form whatsoever or used to make any derivative work without prior written approval by Twisted Pair Solutions, Inc.

No representation of warranties for fitness for any purpose other than what is specifically mentioned in this document is made either by Twisted Pair Solutions, Inc or its agents.

Twisted Pair Solutions, Inc. reserves the right to revise this publication and make changes without obligation to notify any person of such revisions or changes. Twisted Pair Solutions, Inc. may make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time.

Unless otherwise indicated, Twisted Pair Solutions Inc.'s registered trademarks are registered in the United States and other territories. All other trademarks and copyrights are the property of their respective owners.

For further information contact Twisted Pair Solutions, Inc.

Corporate Headquarters

3131 Elliott Avenue, Suite 200
Seattle, WA 98121
USA

Tel: +1 .206.442.2101

Fax: +1 .206.812.0737

Email: support@twistpair.com

Web: <http://www.twistpair.com>

EMEA

Davidson House
Forbury Square
Reading, RG1 3EU
United Kingdom

Tel: +44.(0).118 900 1110

Fax: +44.(0).118 900 1111

APAC Pty, Ltd

2 St. Peters Street
Glenelg East
South Australia

Tel: +61.(08).8376.5905

Fax: +61.(08).8125.6570

Interoperability as a Service (IaaS)

Many communications interoperability projects built around proprietary hardware solutions fail to get off the ground because they are limited in scope, take too long to realize and are expensive to fund, even with grant assistance. A technically superior and far less expensive solution is achieved with *Interoperability as a Service (IaaS)*.

IaaS extends to its customers a familiar model used for providing telephony and internet access services. Organizations commonly deploy private communication systems for their internal voice communications and similarly operate and control their own local area IP networks. In order to be broadly interoperable with others, however, each of these organizations draw access and interconnection services from a broad variety of service providers.

In this very same way, IaaS is intended to provide the service for organizations to connect their private push-to-talk radio systems, extending their access not only to others within their agency, but also – where appropriate and authorized – to neighboring constituent agencies.

Just as voice is now predominantly carried over IP networks, IaaS provides inter-agency interoperability via Radio over IP (RoIP) technologies.

IaaS is a compelling alternative to large capital funded projects because it presents a low risk approach of achieving the desired level of interoperability, while offering an affordable and attractive pay-as-you-need-it managed service. In addition, interoperability can be expanded beyond the immediate localized requirement by having access to other subscribers of the managed service. This service can be utilized by organizations of any size, regardless of the technology used by them for their intra-agency communications.

Rather than investing in costly and proprietary hardware-only equipment upgrades (that account for the bulk of most project budgets and yet consistency fail to deliver on the promise of widespread interoperability) project managers can instead subscribe to an interoperability service that uses software to enable connectivity between older, but perfectly capable communication technologies and newer systems that might be deployed for improved operability. Further more, subscribers can choose from a number of flexible plans that deliver flat rates for provisioned services, tiered rates based on system usage, and even access to additional capacity for emergency situations.

Either way, full interoperability services are available immediately to all subscribers in the network with a much lower initial and recurring cost structure.

In addition to the obvious cost-driven benefits of IaaS for larger projects, there is also a need for smaller organizations to affordably acquire solutions that employ software and networking technologies with which they may not be familiar. Many of these smaller organizations simply do not have the personnel resources necessary to develop and manage an effective interoperability solution and simply put the idea to the bottom of their list of projects.

WAVE® Software Technology

Twisted Pair Solution's WAVE software solves the unified group communications challenges facing enterprises of all sizes. From life-dependent voice communications in the military, government agencies and public safety groups... from state-of-the-art emergency response systems at major international airports, to mission-critical trading operations for global financial institutions,

WAVE technology leverages the power of software to enable customers to meet their most demanding communications challenges.

WAVE is a distributed and highly reliable VoIP software application which connects users together regardless of device type. WAVE can support hundreds of groups of simultaneous users with a single commercial off the shelf Windows- based server and by enabling an extensive range of disparate communications devices to work together, WAVE customers can achieve complete systems interoperability at a fraction of the cost of proprietary hardware alternatives.

WAVE allows previously incompatible systems to work together seamlessly: Push-to-Talk Radio – all types, including P25 and TETRA PCs and PDAs Analog and Digital PBX Phones IP Phones Mobile Phones Intercoms Broadcast Systems. WAVE software addresses a critical need for secure and reliable unified communications between networks of differing capability and performance. Network managers can quickly configure WAVE to support any network type, enabling full communications interoperability across multicast, unicast and mixed-mode networks.

Only solutions based on standards-based software can provide the breadth of options and flexibility necessary to operate in the world's most challenging environments.

WAVE performs channel mixing on standard PCs, using a distributed mixing architecture to spread mixing resources out across the network, ensuring higher reliability with no single point of failure. Proprietary hardware-based solutions use dedicated Digital Signal Processor (DSP) resources which increase system cost and risk of failure.

WAVE provides extensive web-based management capabilities, real-time and historical reporting, system-wide status and presence monitoring, profile-based user management with Active Directory integration, and full support for your existing communications infrastructure. WAVE includes a sophisticated software console for dispatch and command and control operators, with user status, presence, radio tone injection, recordings, instant replay, and text messaging available.

WAVE's unique architecture, game-changing functionality and SDK-enabled developer environment sets it apart from yesterday's hardware-based proprietary alternatives.

Designed for secure and reliable operation, WAVE supports advanced AES and custom encryption, with full failover and headless peer-to-peer operation, regardless of device, network or operator failures. WAVE is designed to instantly recognize system failures and to self-heal so communications can continue uninterrupted.

Renowned for its ability to allow scaling to thousands of real-time voice users without creating adverse network load, WAVE operates with a highly scalable data distribution infrastructure that enables text messaging, status and presence monitoring that facilitates custom applications that may require additional data streams.

WAVE stands alone as a platform with the capabilities needed for Interoperability as a Service. With unlimited scalability across networks of any kind, WAVE software delivers the flexibility and cost advantages that hardware alone cannot.

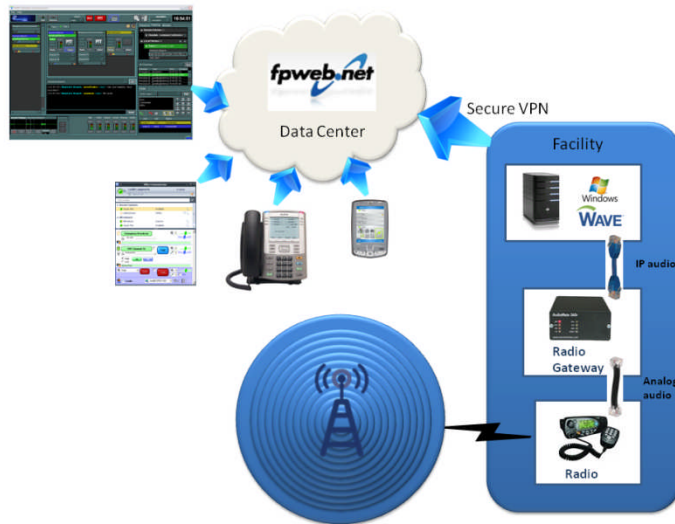
Hosted WAVE® with Fpweb.net

Twisted Pair Solutions and Fpweb.net have formed a partnership to provide Interoperability as a Service (IaaS) solutions powered by WAVE software technology to offers clients the opportunity to quickly and cost-effectively achieve their inter-agency communications goals using the best of cloud computing and mission-critical voice systems.

Founded in 1996, Fpweb.net provides managed hosting services for SharePoint, MOSS, Hosted Exchange and Project Server. Their worry-free solutions offer clients the ability to focus on their core business, while cutting IT costs 60%. With more than 1 million SharePoint users around the world, Fpweb.net strives to become the leading customer service organization in the hosting industry. As a Microsoft Gold Certified Partner with 24/7 US support, they've earned the trust of over 5,000 enterprise clients including the NY Yankees, U.S. Air Force, IBM and DOW Chemical.

WAVE®90 – the Hosted WAVE Trial Offer

Twisted Pair and Fpweb.net are currently offering a 90-day FREE proof-of-concept *IaaS* trial for potential users to explore the functionality of WAVE and the benefits of cloud computing as a solution for inter-agency communications interoperability. WAVE®90 provides connectivity for radios, telephones and a full range of client applications allowing customers to explore a different communication paradigm that can enhance productivity, provide greater reliability and save money.



During the trial period Twisted Pair and Fpweb.net will provide software, hardware, hosting facilities, installation and training to support the offering.

Technical Requirements

WAVE®90 requires the following components:

- Radio base station – Customer will provide radio base stations for each frequency included in the trial offer
- Radio gateway – Twisted Pair will provide a radio gateway to connect the radio base station to the WAVE® service
- Internet connectivity – Customer will provide Internet connectivity from a location in close proximity to the radio base station and radio gateway.
- WAVE® services – Twisted Pair will provide the PC and software to securely transmit audio from the radio gateway to the fpweb.net data center
- Fpweb.net will provide the hosting services, telephony access points and VPN connections customers can use to securely access audio streams
- Client accessibility – Twisted Pair will provide PC client applications to access audio streams.

Installation

Twisted Pair will provide free of charge and for the duration of the trial, onsite evaluation, installation and support services. After the trial Twisted Pair will remove all supplied equipment and provide procedures to uninstall all software and services.

Customer will provide a radio base station with access to the desired radio frequency(ies) and an Internet connection in close proximity to one another.

Customer will include a list of user names, radio frequencies, access policies and other details required to configure a *WAVE^{®90}* trial.

Training

Twisted Pair will provide training at its Seattle HQ location for all *WAVE^{®90}* trial participants. Customers will provide test cases and planned exercises and coordinate activities with Twisted Pair personnel to ensure the greatest overall experience.

Restrictions

WAVE^{®90} is only available for conventional analog radio systems. Trunked or digital radio networks are not included in this trial offering.

Disclaimer

The *WAVE^{®90}* offer is only available for a limited time and to a limited number of participants. Not all applicants will be accepted into the trial. Customers will be required to sign a trial agreement.

To Request a *WAVE^{®90}* FREE Trial of IaaS with Hosted
WAVE[®] Visit:

www.twistpair.com/WAVE90

Submit the Web Form and a Twisted Pair Representative
will Contact You Within 48 Hours.