WAVE®
An Introduction to WAVE® Critical Communications Software and Its Capabilities

Twisted Pair’s WAVE® software simplifies communications for enterprises of all sizes by removing technology barriers to seamless interoperability. Unique for its software-only approach and compelling for its unmatched functionality, flexibility and performance, WAVE connects and extends the IP-centric enterprise and the mobile workforce using two-way radio systems, smartphones, desktop IP phones, PCs and industry-standard unified communication and collaboration applications.

The De Facto VoIP Platform
WAVE is widely regarded as the de facto Voice-over-IP (VoIP) platform for delivering Radio-over-IP (RoIP) for two-way radio integration and interoperability. As a distributed, peer-to-peer architecture, WAVE provides a highly secure and scalable platform, optimized for integrating and transporting voice, video and other vital business information. WAVE has no single points of failure and provides robust, real-time unified communications across IP and non-IP networks and devices. WAVE's unique architecture, game-changing functionality and SDK-enabled developer environment sets it apart from yesterday's hardware-based proprietary alternatives.

Rich Functionality Yields Higher Performance
WAVE has achieved its market-leading position by delivering more performance and greater functionality than any other solution, and its battle-tested core communications platform provides unmatched system availability and failover capability. Our innovative Push-to-Talk (PTT) over 3G/4G LTE for smartphones and tablets redefines the value of PTT for teams of users regardless of device or network. And native support for IP telephony platforms and radio systems, such as MPT-1327, Motorola's MOTOTRBO™ and Kenwood's NEXEDGE™, ensure rapid, seamless integration in mission-critical communications environments.

Cost-Effective, Software-Only Technology
WAVE is the industry's only pure software solution dedicated to providing unified voice communications across both office-based and mobile workforces. Whereas other technologies require proprietary, vendor-supplied server and data-network components, WAVE operates on off-the-shelf, industry standard hardware. This approach enables greater deployment flexibility, lowers acquisition costs and preserves prior investments in network, server and desktop infrastructure.
Multiple Ways to Access and Consume Critical Communications

WAVE has numerous clients for PCs, desktop IP phones, enterprise applications and smartphones to meet the needs of all types of user. WAVE server components are installed on standard off-the-shelf PC hardware and become an integral part of your IP infrastructure. And since you may likely have specific deployment specifications, or require programming interfaces unique to how your organization operates, we offer a WAVE SDK to support custom client development and integration.

Extending Microsoft Unified Communications and Collaboration

WAVE software can extend the capabilities of Microsoft unified communication and collaboration applications with client components that enable real-time enterprise-wide communications. We can add mobile voice to Microsoft® Lync™ and Microsoft® SharePoint™, removing the requirement for separate communication applications or handsets to contact and collaborate with mobile workers using two-way radios, smartphones, tablets and other push-to-talk devices.

Flexible, Adaptable, Customizable

The WAVE Software Development Kit (SDK) gives OEM partners, major systems integrators and software development companies the opportunity to develop new solutions and extend the capability, flexibility and value of their existing communications systems. Custom WAVE-powered applications deliver advanced capabilities to the defense, public sector and commercial markets around the world.

WAVE COMPATIBILITY

Operating Systems & Browsers
- Windows Server 2003 Release 2, Service Pack 2, 32-bit
- Internet Explorer 7
- Internet Explorer 8

IP PBX
- Avaya Communications Manager 4.0.1
  (H.323 support only)
- Cisco Call Manager 4.2 (H.323 support only)
- Cisco Unified Communications Manager 6.0
  (H.323 and SIP support)
- Cisco Unified Communications Manager 7.0
  (SIP support only)
- Nortel Business Communication Manager 50
  (H.323 only)
- SIPx 3.10 (SIP only)
- Free PBX (Asterisk) 2.8.0 (SIP only)
- 3CX version 8 (SIP only)

IP Phone Endpoints
- Nortel 1160e
- Cisco 7941
- Cisco 7961

Radio Systems
- Motorola MOTOTRBO
- Kenwood NEXEDGE™
- MPT-1327
- PassPort 3.0

Audio Codecs
- G.711 ALaw 64K
- G.711 uLaw 64K
- G.721
- G.726 @ 16 kbps
- G.726 @ 24 kbps
- G.726 @ 32 kbps
- RED (RFC 2198)
- GSM Fullrate
- PCM 16-bit 128 kbps
- RGL Alaw
- RGL uLaw
- Speex (all)
- G.729a
- MELP

SDK APIs
- .NET 2.0 / 3.5 SP1
- Java JRE 1.6.0

UC and Collaboration
- Microsoft Lync Server 2010
- Microsoft SharePoint Server 2007 & 2010

ABOUT TWISTED PAIR

Twisted Pair Solutions is the recognized leader in mobile workforce communications solutions for secure, real-time collaboration on any device over any network in any location. We are the only company that integrates instant voice communications with text messaging, location, presence and other data so that essentially any devices - smartphones, tablets, desktop PCs and two-way radios - can talk to each other seamlessly. Our software is the standard communications platform used in business and mission critical situations by military, government and commercial organizations worldwide where serious, secure communications truly matter. Our integrated communication and collaboration capabilities can deployed as an on-premise enterprise solution or as a private managed cloud solution providing choice to our customers and partners.