

Bringing Skill, Knowledge & Experience to Network Core Solutions

As a whole product solution provider, WireIE's proficiency in radio frequency network engineering is complemented by our extensive, in-depth expertise in core network technology. Regardless of network size or complexity, WireIE has the skill and experience to develop and implement core network solutions of the utmost quality.

Whether it's evolving a Brownfield network environment, or building out a Greenfield network, WireIE will ensure your project exceeds your expectations.

WireIE: Delivering Expert Solutions in Migrating Legacy Telephony to an IP Based Core

The WireIE team is proficient in circuit switched voice network technology including SS7, ANSI-41, GSM-MAP, WIN and AIN. With a solid footing in both circuit switched telephony and IP based environments, WireIE is fully equipped to design and manage an operator's migration to an all IP core environment, regardless of whether the network is fixed or wireless, simple or complex. WireIE has the know-how to design next generation core control systems and service delivery environments for all IP based networks.

Comprehensive VoIP & Multimedia Solutions from WireIE

WireIE's engineering team possesses in-depth knowledge of prevalent VoIP protocols including SIP, SKINNY and DIAMETER. With an eye to the future, WireIE's engineers also hold a significant depth of knowledge in next generation technologies such as IMS and MMD. Our expertise encompasses advanced level IMS based systems and horizontal design.

WireIE's AAA Expertise

Our Authentication, Authorization & Accounting design team has enjoyed significant success in implementing billing collection functionality, subscriber data management functions and policy system architectures. Enhancements have included developing converged subscriber databases, adding real-time billing and charging functions, along with adding IP network QoS functions to the overall architecture of Tier One networks.

WireIE's network architecture expertise includes authentication, user database and billing systems for 3G based PCS data networks. This includes the design and deployment of several highly available national systems including AAA systems for wireless data delivery and national LDAP subscriber databases. In addition, our team has developed 2.5G data network subscriber database schema and LDAP architecture.

OSS Solutions from WireIE

WireIE has the expertise and experience in designing and integrating OSS & BSS platforms for provisioning, billing, as well as fault and performance management/monitoring functions. We will work with the operator to establish Key Performance Indicators to trigger critical business and engineering decisions regarding the network.

Roaming Solutions from WireIE

WireIE's experience in building roaming solutions includes the development of data roaming, in the absence of standards, for a four carrier national Wi-Fi Network. We have also developed and implemented international 2.5G data roaming functionality between two national networks.

WireIE's IP Core Competence

WireIE's engineers are experienced with numerous IETF (Internet Engineering Task Force) based protocols including, HTTP, FTP, SSH, DHCP, DNS, RADIUS, BGP, OSPF, ICMP and NTP, amongst others. Included is service layer systems based upon Web Services, SOA based design principles & Web 2.0 concepts. We also offer back end application layer solutions in PHP/MySQL.

Certifications

WireIE strongly supports the principle of continuous improvement in all aspects of our business. With that in mind, here are but a few of the technical designations held by our team of network core engineers and technologists.

- CWNA - Certified Wireless Network Administrator
- CCNA - Cisco Certified Network Associate
- ICND – Interconnecting Cisco Network Devices
- Cisco Wireless LAN
- Cisco Optical Networks
- Cisco SONET Networks
- Redline Certified Support Professional (RCSP)
- RCDD - Registered Communications Distribution Designer – BICSI
- P.Eng.

About WireIE

As an international wireless professional services company, WireIE specializes in the cradle-to-grave deployment of wireless networks including: Site Acquisition, RF Design, IP Core Network Design, Furnish and Installation of network infrastructure, along with Network Monitoring services and Billing solutions. These comprehensive services are supported by leasing options for the operator. In addition, WireIE offers extensive consulting expertise in enterprise wireless solutions.

Our company prides itself on being vendor agnostic and is completely focused on our client needs in offering a whole product solution.



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Acronyms Used In this Brochure

TERM	EXPLANATION
2.5G	A marketing term to describe the bridge capabilities between traditional circuit switched wireless networks and 3G networks supporting packet switched data capabilities.
3G	3 rd Generation mobile telephony standard
AAA	Authentication, Authorization & Accounting
AIN	Advanced Intelligent Network
ANSI-41	A network standard allowing inter-switch exchange of subscriber information
BGP	Border Gateway Protocol
BSS	Base Station Subsystem
DHCP	Dynamic Host Configuration Protocol
DIAMETER	AAA protocol. Direct upgrade from RADIUS (see below)
DNS	Domain Name Service
FTP	File Transfer Protocol
GSM-MAP	Global System for Mobile communications Mobile Application Part
HTTP	Hypertext Transfer Protocol
ICMP	Internet Control Message Protocol
IMS	IP Multimedia Subsystem
IP	Internet Protocol
LDAP	Lightweight Directory Access Protocol
MMD	Multiple dispatch
MySQL	My Structured Query Language
NTP	Network Time Protocol
OSPF	Open Shortest Path First
OSS	Operations Support System
PCS	Personal Communications Service
PHP	Hypertext Preprocessor.
QoS	Quality of Service
RADIUS	AAA protocol Remote Authentication Dial In User Service
SIP	Session Initiation Protocol
SKINNY (SCCP)	Skinny Client Control Protocol
SOA	Search Oriented Architecture
SSH	Secure Shell
SS7	Signaling System 7
VoIP	Voice Over Internet Protocol
Wi-Fi	Wireless fidelity. Used generically when referring to any type of 802.11 network
WiMAX	Worldwide Interoperability for Microwave Access
WIN	Wireless Intelligent Network