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Charles G. Woods

Summary:

Technical leader with nearly thirty years of experience with increasing responsibilities in large-scale application and data design, development and implementation. Strong focus on general systems architecture, infrastructure, LDAP directory services, security, PKI, application and database design, and identity management. Skills include program management, project management, technical management and architecture as well as hands-on design, development, and operations. A reputation for exceeding expectations in leading efforts to define, develop and implement new products, services and technologies.

Experience:

AOL Inc.

System Architect, 09/12 – 04/14

- Chief Architect for AIM Enterprise services. Responsible for the design and construction of services
 to enable federated communications as well as building a SIP and XMPP clearinghouse for
 customers.
- Provided both technical program management and project management services to the AIM Enterprise team. Responsible for planning and coordination of projects as well as development and maintenance of a long-term technical roadmap.
- Designed and wrote code for provisioning services and several web sites to fill in resource gaps.
- Provided technical guidance, architectural advice and assistance to partners implementing AOL's communications services.
- Managed business team's CRM systems.
- Migrated legacy Netscape support ticketing system to more current cloud solution.
- Developed overall architecture for integration of federation provisioning systems with AOL billing systems.
- Participated in customer briefings and presentations.

Federal Reserve Bank of Richmond

Senior Enterprise Design Engineer, 07/12 to 09/12

- Responsible for working with contractor staff to identify and resolve technical issues.
- Worked with contracting and Federal Reserve staff on preliminary design for cloud services.
- Provided guidance and assistance with RFPs and proposal reviews.

AOL Inc.

System Architect, 1/02 to 3/12

- Led a team responsible for design and development of a wide variety of tools, applications and services to support AOL's mobile messaging and advertising initiatives.
- Filled the role of technical program manager for AIM Identity Services. Responsible for coordination of projects to ensure consistency of direction and purpose.
- Worked with the product management, mobile engineering, and advertising teams to define services and requirements, and translated requirements into technical specifications. Managed numerous projects through completion.
- Developed and maintained several applications, web sites and services for partner support, mobile system configuration and management, CRM, and mobile advertising provisioning. Built custom services and tools using Perl, PHP, JavaScript, shell scripts, and Java Servlets.

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- Responsible for day-to-day partner relationship management for multiple partners using mobile and mail services.
- Provided guidance, advice and technical assistance to a variety of partners implementing AOL's
 Mobile, Open AIM and Open Auth services. Frequently involved in high-level pre- and post- sales
 discussions, and provide architecture and design advice as well as third-level support to partners as
 needed.
- Heavily involved in the design and development of multiple partner applications relying on identity
 federation and delegated authentication, using both SAML 2.0 protocols and proprietary solutions.
 Activities ranged from providing high-level executive briefings to writing sample code to illustrate
 various features to partners and to AOL management.
- Served as System Architect responsible for design and development of AIM Identity Services. Responsible for planning, analysis, design, testing, implementation and operations as well as overall architecture. Managed technical development tasks performed by other team members. Served as technical expert in a number of client briefings and in coordination with other AOL organizations.
- Responsible for the design, development and implementation of the infrastructure to support a number of joint efforts between AOL's Mail and AIM teams. Designed and built a large-scale (up to 100 million entry) LDAP directory service that served as the master source of domain-related data across AOL, and managed the development of a set of web services designed to provide access to the data. Also filled the role of primary LDAP expert with the AOL operations team, and was frequently called on to provide guidance and assistance to other teams using LDAP within and external to AOL.
- Senior Architect responsible for the design, development, and implementation of a PKI to support 1-click certificate enrollment via the AIM client. Integrated PKI with delegated identity services, allowing for both remote certificate authentication and Hosted Federated Authentication.
 Responsible for overall system analysis, design, development, and implementation, operations support, and oversight of the development team.

Netscape Communications Corporation/ iPlanet e-commerce Solutions

Architect, Professional Services, 1/99 to 1/02

- Served as Senior Architect responsible for the design and development for the corporate LDAP Directory Services for AOL Time Warner Corporation. Responsible for overall planning, analysis, design and development effort, and for coordinating efforts of junior implementation staff.
- Was Senior Architect for a corporate LDAP design and recovery effort for a large financial services company rebuilding after 9/11. Responsible for providing advice and guidance on numerous data and operations recovery issues, as well as advice on strategy for long-term LDAP operations.
- Developed preliminary directory architecture for a large motion picture studio, managing identities and access controls for a widely disparate group of employees, contractors, and loosely affiliated entities.
- Designed core directory architecture and implemented directory and provisioning services for a large South American banking portal. Conducted business analysis, developed associated documentation, implemented base portal framework, designed core architecture, and installed, configured and tested directory services.
- Acted as Security Architect for large-scale extranet development effort within a major US
 commercial bank. Conducted business and security requirements analysis, developed associated
 documentation, developed core architecture, and constructed development PKI facilities.
- Developed architecture for a LDAP directory failover effort for a large telecommunications customer. Solution designed to provide redundancy and high levels of availability for extranet applications.
- Provided guidance and expertise in the development of an object signing solution in support of an

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- executive information system at large shipping company. Diagnosed problems, recovered legacy capabilities, analyzed options, provided recommendations, and implemented solution.
- Developed core architecture, CPS and Certificate Policies for a US Government Agency to support their internal directory and PKI implementation. Conducted business analysis, constructed directory and provided relevant PKI and architecture documentation.
- Developed directory architecture for a large multinational satellite communications firm. Design required extensive customization for integration with a wide variety of legacy systems.
- Participated in numerous technical briefings and presentations for customers and potential customers.
- Served as a second-level reviewer of work performed by more junior consultants. Reviews focused on ensuring appropriate capacity planning, throughput and performance as well as reasonableness of overall design.

U.S. Securities and Exchange Commission

Branch Chief, 10/84 to 1/99

- Managed a staff responsible for software design, development and maintenance activities.
 Responsible for multiple mission critical, including operations and security of the SEC Internet site, development of an Agency-wide Intranet, redevelopment of a electronic commerce system to track SEC filing entities, filings, and associated fees, integration of other SEC systems with the EDGAR electronic filing system, and a variety of systems designed to track and report on market trading data.
- Responsible for all SEC efforts to design and implement a public key infrastructure for purposes of X.509 certificate-based authentication. Represented the agency in technical and policy-related PKI discussions with securities industry organizations and with other Federal agencies. Developed internal SEC certificate policies and Certification Practice Statement. Implemented internal CA services.
- Responsible for oversight of a team responsible for all tasks related to Internet server security, including design and implementation of tools and ongoing processes required to maintain a high level of security.
- Managed the design, development and implementation of internal directory services, including customized HTML gateways and customized data synchronization between ADABAS and LDAP directory services.
- Led an emergency task force charged with resolving critical problems inherent in the design of the SEC filing fee system. Highly visible project, directly under the supervision of the Executive Director. Stabilized the system and accomplished goals weeks ahead of schedule.
- Charged with porting legacy mainframe-based applications to client/server technology.
- Served as Contracting Officer's Technical Representative for multiple development and maintenance contracts. Served as lead technical reviewer during EDGAR competition.

Patents:

West, Robert; Woods, Charles; Warner, Andrew; and Le, Donald. 2013. *Systems And Methods For Managing Electronic Communications*. U.S. Patent application 13,959,454, filed August 5, 2013. Patent Pending. (Covers certain methods and systems for handling communications in a cross-platform UC environment.)

Education: University of Tennessee

B.S., Operations Management M.B.A., Management and Finance