David Watson

Infrastructure/systems Architect and Developer

Phone:	(650) 888-2069
Address:	Half Moon Bay, CA USA
Website:	https://locateinc.com
Email:	david@locateinc.com

Back-end and Infrastructure architect and builder. Deep hands-on experience with selecting and tailoring resources for applications in AWS and GCP. Implemented successful development environments and processes. Created automated EOSIO-based blockchains, including interconnected block production nodes. Passion: articulating and optimizing the usability of infrastructural and decentralized tech to deliver best value to all participants.

EXPERIENCE

AIKON
Jul 2017 to Present

Senior Systems Architect

Built and currently operates a leading EOSIO blockchain: the ORE Chain, which benefits from the participation of many of the world's leading EOS mainnet block producers.

Coordinated the community of these block producers. Architected and developed tools to build out, automate, and operate multiple cloud-hosted EOS blockchains as the foundation for AIKON's leading-edge protocols and services, starting before the launch of the EOS Mainnet in June, 2018.

Also, implemented rights-management protocols and APIs that influenced AIKON's innovative technology.

Locate, Inc.
Jan 1997 to Present

Principal; architect; contract designer/developer

Currently providing infrastructure architecture and software services.

Previously conceived and managed the development and release of the Locate app, an innovative Enterprise handheld directory and voice call-steering application as a cost-reduction flagship app for PalmOS devices within Enterprises.

Gbox by Oncircle
Jun 2010 to Aug 2017

Chief Architect

Prior to incorporation: developed from scratch the complete initial implementation of a online transaction/asset protection system called Rights Over IP (RoIP) (ruby/JavaScript/Backbone). Substantially contributed and named as an inventor on a key patent (Appl. US13558238).

After incorporation: participated in the port of the first system to JavaScript (node.js/Angular). Initiated, co-implemented and managed a full software development environment and collaborative toolset for a highly agile software engineering team to deliver a successful state-of-the-art video CMS/monetization/OTT platform built atop RoIP.

The Platform consists of many loosely coupled back-end microservices supporting richly featured front-end user interfaces for video creators; organizations coordinating creators; and consumers, on web browsers, iOS, Android, and Apple TV.

Architected, designed, configured, supported, and managed operational costs for the AWS-based infrastructure underlying the Platform back end that scaled in operation to >200,000 users (concurrency >1000) scalable to potentially serve a full order of magnitude more.

AWS tools supporting the Platform include: - EC2 including autoscaling - ECS - VPC - CloudFront - CodeDeploy - Lambda - S3 - ElastiCache - Route 53 - CloudWatch - CloudFormation - IAM - Certificate Manager - Kinesis -> lambda - mongo/rds for twitter firehose 100k tweets per minute - SNS - Elastic Transcoder.

Configured and operated a MongoDB sharded cluster fronted by redis caching.

Designed operations processes including on-call scheduling and customer relationship management.

Numerous Clients
May 2001 to Jun 2010

Technology Infrastructure Consultant

Served numerous organizations, mostly in the Bay Area high technology industry.

Designed, created, operated and managed highly available physical and cloud-based server and network infrastructure. Extensive experience in management and individual roles, from architecture to troubleshooting.

Navio Systems
Feb 2007 to May 2009

Consulting Engineer

A wide range of technical contributions in network and systems engineering, including:

Introduced, architected and implement internal routing via OSPF throughout gBox (3 data centers, 110 vlans).

Optimized external BGP routing.

Introduced network/server naming and numbering management standards.

Responsible for network traffic management and reliability, including 5 F5 load balancers, involving highly complex configurations supporting hundreds of VIPs, port groups, certificate management for SSL termination, BGP customizations, etc. etc.

Engineering services: modernized engineering and operations infrastructural tools. Introduced and transitioned to OpenVPN, SVN, Twiki, etc.

Designed and implemented complete automated ingestion process in Perl for the six major music labels' full catalog uploads and daily update processing.

Designed and implemented production process for these coordinated systems.

Migrated release and provisioning process for all production environments from bash scripts to Capistrano (Ruby).

Managed all internal and public DNS (thousands of records).

Prepared detailed RFP responses in network infrastructure section for major contract for State of Michigan.

Drove substantial cost reductions by managing the downsizing of gBox/Navio infrastructurei, reducing server count from about 250 to about 110, VLAN count from 110 to 30, and closing down our presence at one datacenter.

5Bridge Open Solutions, Inc.
Mar 2004 to May 2007

VP, Engineering

Led the technical staff; set, communicated and achieved financial and operational goals as member of senior management team for this globally distributed online transaction processing system.

Palm, Inc.
Jan 2000 to May 2001

Sr. Director

Originally conceived and designed the Palm@Palm program of handheld application software and back-end infrastructure. This program elucidated a roadmap for the adoption of Palm handheld devices within customer Enterprises.

Palm@Palm was cited by CIO magazine when awarding Palm the prestigous CIO 100 award in 2001.

SGI (Silicon Graphics)
Aug 1988 to Dec 1997

Mgr., Network Services

Built a team of senior engineers designing and building networks and information security capabilities for this 14,000 employee computer manufacturer.

Cognition, Inc.
1985 to 1988

System/Network Administrator

Ran all aspects of internal networks and server systems, supporting development of a leading-edge graphical engineering system; corrected specific issues with a major vendor's Unix kernel; operated a regional usenet hub; registered the world's 12th commercial DNS name.

PATENTS

Rights-Based System

Filed Jul 25, 2012

US13,558,238

Secure Authentication Proxy Architecture for a Web-Based Wireless Intranet Application

May 4, 2004

US6,732,105

CERTIFICATIONS

CISSP 2003-2006

AWS Certified Solutions Architect - Associate

Feb 2017 to Feb 2019

Amazon Web Services

AWS Certified Sysops Administrator - Associate

Mar 2017 to Mar 2019

Amazon Web Services

EDUCATION

Boston University School of Public Communication

Concentrations in Broadcasting, Film, and Journalism

SKILLS

EOS, Architecture, Blockchains, Cloud Computing, Consulting, Start-ups, Agile Methodologies, Software Development, Product Management, Distributed Systems, High Availability, Continuous Integration, Domain Name System (DNS), MongoDB, Docker, Git, Linux, JavaScript, Node.js, Bash, Ruby, Enterprise Software, Unix, Software as a Service (SaaS), Blockchains, Google Cloud Platform (GCP), Engineering Management, Ansible, RESTful architecture, CoffeeScript, Blues Guitar, Travis CI, Kubernetes, Network Infrastructure Architecture, Networking, Python, C++, Information Security, Microservices, RoIP, DevOps, Scalability, Representational State Transfer (REST), GraphQL, Amazon Web Services (AWS), Technical Architecture, System Architecture