

## DAVID H. CROCKER

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[www.bbiw.net](http://www.bbiw.net)

Extensive management, marketing, design and development experience for Internet-related businesses. Emphasis on innovative opportunities and aggressive delivery schedules. Orientation towards program and project management, business and marketing analysis, and operations and customer support. Primary contributions in design and development of large-scale distributed architectures, communication protocol standards, electronic mail systems and human usability.

### Experience

#### Principal, [Brandenburg InternetWorking](#), 1991 - Present

- ❖ Consultancy specialized in guiding the design of distributed information technologies, products and businesses, from planning and design through development and evolution; emphasis on inter-working with existing and competitive services, and focusing on using intranets and the Internet
- ❖ Participate in planning, funding and development of Internet startup businesses and products
- ❖ Founded:
  - Portola Communications, producing email server technology; purchased by Netscape
  - Boldfish, producing software and service for subscription bulk mail sending and tracking
  - [TribalWise](#), producing knowledge management software for escalated product support
  - [Internet Mail Consortium](#), an industry trade association
- ❖ Assist in development of intellectual property claims and serve as expert witness
- ❖ Recent projects
  - Assisted specification of [DMARC](#) and [DKIM](#) email authentication standards.
  - Lead email anti-abuse (spam, phishing) efforts based on authenticated trust services
  - Created specification to support of multi-homed or mobile Internet hosts
  - Led standards effort for facsimile and EDI over the Internet
  - Planned administrative enhancements to Internet domain name system
  - Created business and functional analysis of mass-market advanced electronic mail service
  - Specified extensions to Internet email and information services
  - Designed transport-independent deferred-attachment API
  - Designed TCP/IP network over ATM-based interactive cable television service
- ❖ Current advisory roles
  - [Messaging, Malware and Mobile Anti-Abuse Working Group \(M<sup>3</sup>AAWG\)](#)
  - [Trusted Domain Project](#), board member

#### Manager, Network Systems Lab, Digital Equipment Corp., 1989 - 1991

- ❖ Created strategic technology-transfer group to assist corporate efforts with TCP/IP. Developed early internetworking firewall, router and network management products

#### Vice President, Engineering, The Wollongong Group, Inc., 1987 - 1989

- ❖ Led product development across 9 product lines – end-user and OEM software, including complete TCP/IP stack, ISO-OSI stack, SNMP-based network management station and TCP/OSI transition
- ❖ Managed team of 50 for engineering, configuration management, project support, and IT services
- ❖ Created pattern of meeting delivery schedules, with individual accountability and reward

### **Development Manager, Ungermann-Bass, Inc., 1985 - 1987**

- ❖ Delivered initial suite of TCP/IP hardware products
- ❖ Project managed LAN/X.25 gateway; re-oriented program to make on-schedule delivery

### **Director, System Development, MCI Digital Information Services Corp., 1983 - 1985**

- ❖ Created application, directory and data processing components for MCI Mail, a national email service. Developed interactive, remote-batch and Telex access for 140,000 users, as well as hardcopy output with letterhead and signature graphics, and access for communicating word processors
- ❖ Led design activities, integrating range of platforms. Interfaced with departments and major sales contacts

### **Co-Principal Investigator, Electrical Engineering, Univ. of Delaware, 1978 - 1982**

- ❖ Developed Unix-based distributed facility for relaying mail among architecturally heterogeneous networks, which served as an exemplar for now-classic email UA/MTA architecture
- ❖ Operated mail relay service for the Army Materiel Command and NSF's CSNet, precursor to NSFNet

### **Researcher, The RAND Corporation, 1975 - 1978**

- ❖ Developed early Unix-based email user and transport software system

## **Professional**

- ❖ Member, [IETF Administrative Oversight Committee \(IAOC\)](#) and IETF Trust (2011-2013)
- ❖ [IEEE Internet Award - 2004](#), co-recipient, for contributions to email
- ❖ Participant in Internet standards efforts, including electronic mail, domain name system and transport standards. Led effort to standardize facsimile over Internet and electronic data interchange (EDI) over the Internet. Area director for [Internet Engineering Task Force](#) (1989-1993) providing long-term technical management for TCP/IP Internet network management, standards process management and service applications (middleware)
- ❖ Program committee chair/member for [Conference on Email and Anti-Spam; Interop](#)
- ❖ Session chair and presenter at conferences, including [M3AAWG](#), [IFIP Itrust](#), [N+I Interop](#), [Electronic Messaging Association](#), [APRICOT](#), [RIPE](#), EMail World and Unix Expo
- ❖ Presenter of numerous classes on the Internet, TCP/IP and open systems networking
- ❖ Author of [book chapters, magazine articles, presentations and specifications](#) on open systems networking, standards, electronic mail and electronic commerce
- ❖ Chaired Silicon Valley–Public Access Link, a non-profit ISP for the under-served
- ❖ Area Director, [IETF](#), for Network Management, Middleware, and Standards Process (1989-1995)

## **Personal**

### **Education**

- ❖ Doctoral Program, Univ. of Delaware, Computer Science, Sept. 78–Dec. 82.
- ❖ M.A., Annenberg School, USC; Communication. 1977
- ❖ B.A., UCLA; Psychology. 1975.

### **Publications and Presentations**

- ❖ See: [bbiw.net/musings.html](http://bbiw.net/musings.html)

### **Member**

- ❖ [Association of Computing Machinery](#)
- ❖ [Institute of Electrical & Electronic Engineers](#), Senior Member
- ❖ [Internet Society](#)