

## Keynote Talk

# What's Different about Security in a Public Cloud?

Charlie Kaufman  
Security Architect, Windows Azure  
Microsoft  
charliek@microsoft.com

### Abstract

Most of the problems facing the designers of a public cloud are extensions of what we face in any data center: detecting and preventing intrusions, coping with DoS attacks, and keeping the various services largely isolated from one another. There are some new challenges: how to control the behavior of customers when your privacy guarantees prevent you from looking too closely at what they are doing, how to protect them from network based attacks when you don't know what kind of traffic is normal, and how to guarantee them resources when the behavior of others sharing the hardware is unpredictable. There are also some new advantages: centrally managing software maintenance can assure that patches are installed promptly, and scale permits a permanent staff of experienced trouble shooters to handle what would be rare problems for any individual customer.

**Categories & Subject Descriptors:** C.2.4 [Distributed Systems]---Cloud computing

**General Terms:** Security

### Bio

Charlie Kaufman is security architect for Windows Azure, Microsoft's public cloud service. Previously, he was a member of the Windows Core Architecture Group, and before that was security architect for Lotus Notes and Domino at IBM. He's an active member of the Internet Engineering Task Force and was the lead designer of IKEv2, the key management protocol for IPsec. He is author of the popular textbook: "Network Security: Private Communication in a Public World".