

Certicom

Certicom was founded in 1985 by a team of world-class cryptographers at the University of Waterloo in Ontario, Canada. In those early days, the researchers were intent on making elliptic curve cryptography (ECC) an inherently more efficient method of encryption than previous approaches commercially viable. After more than a decade of research, the Certicom (then MOBIUS Encryption) team discovered how to implement ECC in a highly efficient, secure and cost-effective manner that was appropriate for the commercial marketplace.

Today, Certicom continues as the innovation leader in applied cryptography, offering a complete range of products and services that meet OEMs' diverse security requirements.

Building on their heritage of innovation, Certicom introduced the ECC-based SSL Plus for Embedded Systems™ in 1999. This groundbreaking product enables enterprise applications to securely connect to Palm Computing and Windows CE-based handheld devices from the desktop or corporate server, helping to boost productivity for global companies' increasingly mobile workers.



The Environment

Certicom had a system of distributed storage across approximately 30 servers, each with 10 - 20 gigabytes of native disk storage. Certicom develops products for a number of platforms and operating systems and that is reflected in their environment. Their servers were running NT and all flavours of UNIX including HP-UX, Solaris, AIX, Linux and BSD.

The Requirements

Certicom had a demand for a central file depository accessible over the network. They wanted to be able to manage the storage centrally as well as add storage when it was needed, *on the fly*. They also wanted the ability to virtualize the storage, that is, allocate storage to specific servers as the demands changed. Fault-tolerance and Redundancy were also on the wish list as was a high-performance Oracle development server with its own data storage requirements, and the capability to scale the whole thing into a Storage Area Network (SAN) in the future. In addition to that, it had to be fast.

The Solution

The open nature of Open Storage Solutions® products allowed them to get everything they needed without compromise.

The Oracle development server is an Open Storage Solutions Star 450+ Ultra SPARC server.

The centralized file storage was accomplished with the Open Storage Solutions Essay™ Storage Appliance. The Essay is a network attached storage device that enabled all the storage to be brought to and managed at a central location in a type of *storage pool*. It supports all of their heterogeneous OS storage clients with performance of 5 - 10% higher than the competition. The storage component was an Open Storage Solutions Infinity™ FC², a dual host, dual controller fibre-channel RAID system. The dual controllers gave the redundancy and fault-tolerance that was required, and the dual host capability allowed them to share the storage, in this case 300GB for the Essay and 200GB for the development server.