

Nature of Project

VAX OpenVMS to UNIX

Basic: 800,000 lines

DCL: 224,000 lines

RMS: 350 files

SMG: 620 screens

Headquartered just south of San Francisco in Burlingame, California, McCue Systems Inc. (MSI) has been the leading developer of software solutions for leasing companies for more than a quarter of a century. Simply stated, McCue Systems improves the operational productivity of leading leasing companies throughout the world through innovative use of technology. Until 1991 these solutions were only available on Digital Equipment Corporation (DEC) VAX platforms running the OpenVMS operating system.

In 1991, MSI faced a marketplace that was less than accepting of proprietary systems such as DEC's VAX/Alpha OpenVMS. MSI asked Sector7 to provide consulting services to evaluate the feasibility and cost of migrating MSI's core application, LeasePak, to UNIX technology that would provide market acceptance.

Sector7 has a five-step blueprint process for moving applications from OpenVMS to AIX. The first step was an assessment. During the assessment Sector7 performed a situational analysis. The POS application was developed using DCL, FMS, RMS, and BASIC. DEC Command Language (DCL) is the control language for OpenVMS. DCL is very powerful and users can write simple programs in it. Forms Management System (FMS) allows the programmer to create forms on a VT terminal and display and accept data from the user program. Record Management System (RMS) is a file system manager integrated with the VMS operating system. RMS handles indexed, relative, and sequential files. Indexed and sequential can have fixed and variable length records.

Subsequent to the situational analysis Sector7 worked with MSI to develop a migration approach to reduce TCO. Sector7 can provide solutions ranging from low-risk migration to completely reengineered applications using Business Logic Extraction (BLE) methodologies. Migration requires making the minimum changes necessary to make the code function on the new system. This is usually the fastest way to get the code up and running on the new system. Issues such as text translation, non-portable code, and hardware differences are addressed. This type of port is very low risk and it is possible to have follow-on work to improve design and performance efficiencies. It is low risk as long as adequate time is spent planning the changes. Reengineering using BLE requires extracting the business logic from the code to take full advantage of the features of the new system, reusing code where possible, and rewriting it where necessary. This process makes better use of the system features and usually results in better code. Often BLE is selected when organizations have set specific product standards.

(more)

Sector7

McCue Systems, Inc. (continued)



The solution selected by MSI was a migration. BASIC was ported to C using Sector7's VX/BASIC product. VX/BASIC can analyze and convert VAX BASIC to the C language. For RMS, MSI selected the Sector7 product VX/RMS. VX/RMS is an implementation of DEC's VMS RMS system for UNIX. VX/RMS allows VMS programs which access RMS directly to function without change. All VMS file types and access modes are supported. Support for relative, sequential and block mode files is supplied by direct access to the UNIX or NT file system. For DCL MSI selected the Sector7 VX/DCL product. VX/DCL is an implementation of DEC's VMS Digital Command Language for UNIX. VX/DCL allows applications to use all of the VMS commands, which are so familiar on Windows NT or UNIX systems. All of the existing command scripts (.COM files) will run on the new platform. For FMS MSI selected the Sector7 VX/FMS product. VX/FMS is a faithful replacement for the VMS FMS library. It provides the same APIs to applications and uses the forms definition files used by FMS. The project was completed in six months.

The successful project allowed MSI to retain its valuable software investment on corporate standard hardware and software technologies while improving its market acceptance. MSI continues to be a Sector7 customer.

BUSINESS OVERVIEW

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