

### Nature of Project

Defense System  
DEC VAX VMS to IBM Netfinity Windows NT  
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Founded in Cambridge, Massachusetts in 1922 as the American Appliance Company, the name “Raytheon” was adopted in 1925. Raytheon’s early expertise was in the field of radio tubes. During WWII, Raytheon was the leading producer of radar tubes and complete radar systems. Notable achievements since that time include the invention of the Radarange, microwave oven, NASA communication systems, Patriot missiles, and Terminal Doppler Weather Radar — just to name a few. Today Raytheon is one of the top industrial companies in the United States and serves customers in more than 80 foreign countries.

Raytheon is a major provider of defense electronics to the United States. Currently, Raytheon is working on a project to migrate an expert system application from a MicroVAX/VMS to the Windows NT (Intel) platform. The primary reason for this migration is increased performance. This application is a missile-tracking program composed of 10,815 lines of C code in 44 modules, along with substantial RMS data files. This custom application was written approximately 10 years ago. The original designers of this program are not available for consultation.

The Raytheon project migrates an OpenVMS Patriot missile system from a VAX to a Netfinity running Windows NT. The application was VAX C language code. The VAX C was converted to Visual C++ for NT with a Sector7 language conversion tool. The file structure was DEC’s RMS file system. One of Sector7’s migration products is an implementation of RMS, which was used on this project.

IBM and Sector7 were selected over many other qualified candidates. In dealing with issues of national defense, it was imperative that Raytheon work with companies that had a solid knowledge of the software and companies that could provide service to back up future problems. Sector7 has more than 15 years experience in porting VAX applications. IBM has more than twice those years of experience in dealing with companies similar in caliber to Raytheon. Sector7’s knowledge of the applications, in conjunction with IBM’s unparalleled service and reliability gave Raytheon the perfect team.