

California Department of Motor Vehicles - DISC Libraries Retrieve Historical Data for the DMV



California's Department of Motor Vehicles needed a system that could retrieve a large archived photo database within a crucial period of time. To address their storage needs Polaroid, who was awarded with the project, worked with Computer Deductions, Inc. (CDI) of Sacramento, California to find a solution. CDI, a systems integrator which specializes in government and public safety markets, chose Disc's Optical Library (Orion Series) as the best way to address their customer's requirements.

Tom Calabro, Senior Technical Consultant for CDI explained, "We had a very stringent response time requirement from the state of California. After researching the storage industry, we determined that an optical solution was much more cost-effective when talking about terabytes of data. The information needed to be available to the DMV within a reasonable amount of time and a tape solution was just not viable in this situation. The random access capabilities of optical allow us, within a time period of 15 seconds, to retrieve data quickly and efficiently. "

To meet the needs of the DMV, Computer Deductions installed an NCR UNIX-based system running 24/7 with 1 TB of RAID in conjunction with Disc's large D1050 library, capable of holding up to 5 TBs of nearline storage space. The D1050 can hold up to 1,054 optical disks and can be configured to hold up to 32 drives. Installation at DMV headquarters was designed to take the department through a 5-year growth period, has 8 drives and is double-sided with 500 slots on either side. One side functions as the principal unit which is currently half populated with 250 5.2 GB disks, while the other side of the library serves as a backup. To date, the database has stored over 65 million records which consist of biographical data (fingerprints) and JPEG photos. It has been sized to house 120 million records while Tom Calabro stated, "We anticipate our client growing to that and beyond." Currently, Polaroid processes in excess of 1 million driver licenses for the DMV per month. The D1050 Orion Series jukebox also features a dual-cartridge picker and is a key component in the DMV's ability to access sensitive data in a timely manner. Tom states, "The picker on the robotic arm can hold 2 disks at a time, cutting the mounting time in half."

The system installed in the DMV has the RAID array holding current information while the DISC optical library functions as both an archival and backup system. This dual feature of the DISC device was a crucial selling point for the DMV as the system was designed to be fault-tolerant with 2 processors running in tandem in a hot standby configuration. If one processor goes down, the other automatically kicks in. To further insure continuous service, Calabro has indicated that an additional DISC library will be installed in a second California location to mirror the existing system.



Tom Calabro explained, "Before the present system was operational, the California DMV only had immediate access to current data. Any access to historical data took anywhere from a number of hours, if not days, to satisfy. Once the DISC library was installed, what took the DMV hours literally became available within seconds." Calabro went on to say, "We had a contractual obligation to provide the DMV with approximately 2,500 retrievals per day and occasionally they are actually processing in excess of 7,500 per day. The California DMV has been extremely satisfied with the response time and are pleased to see that their expectations were more than adequately met."

DISC's optical libraries solved the California DMV's need for speed by enabling them with access to crucial archived information at a moment's notice, while guaranteeing stability and continuous operation for their increasing storage needs.