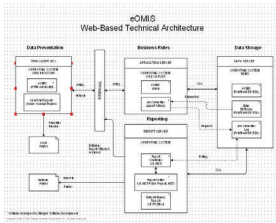


Application Technology Overview



Web Based Technical Architecture

The electronic Offender Management Information System (eDMIS™) is designed to support comprehensive, agency-wide operations of offender management. This includes offenders who are on probation, in prison, on parole, or any other supervision/incarceration status. Electronic Medical Records (EMR) is an integrated component of the overall offender management solution.

√ eDMIS™ is a web-enabled application using an “open systems” approach. This technology is the same as applications developed for use on the World Wide Web.

√ The basic logic for business rules is written in the JAVA Language. The graphical user interface (GUI) is developed completely using

Java Server Pages (JSP). A “Ultra Thin-Client” approach is followed so that any device that supports a web browser can be used to access the eDMIS™ database.

√ eDMIS™ can be implemented on any of the system platforms that support Open Systems Architecture. The recommended architecture for a production environment is a four-tier cluster with load balancing and failover implemented.

√ Over five hundred parameter driven batch reports are included. These reports were developed using Active Reports, a product from Data Dynamics. The reports can be generated

on any of the platforms currently supported by Microsoft Windows.

√ Due to this overall technology approach, eDMIS™ can be implemented on an agency wide basis using either the Internet and/or a dedicated Intranet, with or without encryption.

√ The Thin Client executes HTML pages only. The Application Server executes the Java objects under the control of a web server, such as IBM’s WebSphere or Oracle’s Application Server. The database server executes the relational database product of choice on any of the supported platforms.

“eDMIS™ is a web-enabled application using an “open systems approach.”

eDMIS™ “Ultra Thin Client” Architecture

eDMIS™ uses only Open Database Connectivity compliant Structured Query Language calls to store and retrieve data.

Information about an offender that applies to both periods of incarceration and periods of supervision is stored in the central portion of the eDMIS.

This is a database architecture that has proven to work extremely well in eight states for

over twenty-five years. Because of this design, eDMIS™ can track an offender through multiple periods of incarceration or supervision sequentially or simultaneously over a criminal history lifetime.

Because eDMIS™ is ODBC compliant, any of the popular relational database management systems (RDBMS) products can be used to implement eDMIS™. Marquis recommends the IBM

DB2 products and the Oracle database Server products.

eDMIS can be implemented with any of the more robust web application server products. Marquis recommends either IBM WebSphere or the Oracle Application Server products.

eDMIS Ultra Thin Client Architecture

