

OpenHRS

Historical Recording System

OpenHRS™, Historical Recording System, is a highly efficient data warehousing application suite, designed specifically to handle data collection and archiving of massive real-time data sets associated with large scale real-time supervisory and data acquisition environments.

Through the use of advanced algorithms, including data exception processing, high performance coding techniques and the latest compression algorithms, **OpenHRS** is readily capable of performing (two (2) second) point sampling for thousands of variables, while producing a data archive footprint small enough to be handled by standard low-cost hardware.

In keeping with the OSI doctrine of platform independence, **OpenHRS** operates uniformly on multiple platforms including Linux® and Microsoft® Windows®.

While competing functionally with similar high capacity historians, **OpenHRS** excels technically through platform independence and data access through standard SQL interfaces.

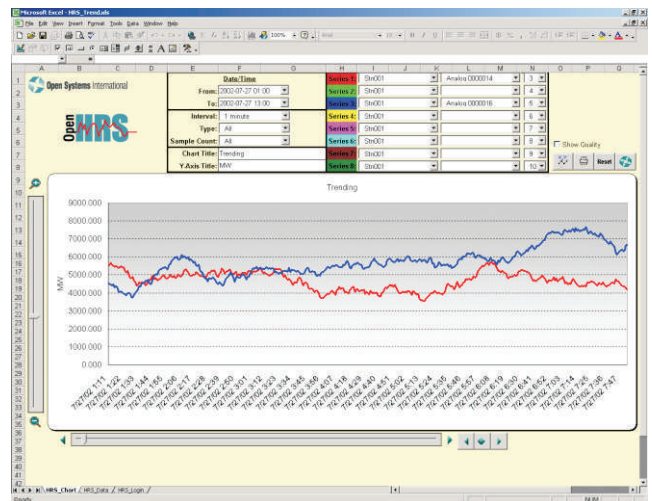
The historical database supports a real-time SQL relational interface for general data access and reporting. Data retrieval from the **OpenHRS** archive is accomplished via Open Database Connectivity (ODBC) or JDBC (JAVA Database Connectivity) interfaces. User definable and controllable variable sets and sampling period data determine the breadth and frequency at which the real-time data sets are archived.

Standard data viewing and analysis tools such as Microsoft Excel® and Microsoft Access®, as well as Web-enabled query tools are supported for data extraction, data viewing, charting, and graphing. Coupled with other OSI standard interfaces such as OSI ICCP communications or DNP 3.0 communications, **OpenHRS** can be interfaced with external systems to gather and archive real-time data.

For secure operations, server redundancy and failover is supported with automatic data synchronization across a Local or Wide Area Network.

OpenHRS is licensed for various collection capacities as well as sampling periods and can range from capacities handling 1,000 points to up to several hundred thousand points, based on a tiered pricing methodology.

Key **OpenHRS** features include:



Group Name	Group Permissions	1	2	3	4	5	6	7	8
GROUP_1	Read and write	X	X	X	X	X	X	X	X
GROUP_2	Read and write	X	X	X	X	X	X	X	X
GROUP_3	Read and write	X	X	X	X	X	X	X	X
GROUP_4	Read and write	X	X	X	X	X	X	X	X
GROUP_5	Read and write	X	X	X	X	X	X	X	X
GROUP_6	Read and write	X	X	X	X	X	X	X	X
GROUP_7	Read and write	X	X	X	X	X	X	X	X
GROUP_8	Read and write	X	X	X	X	X	X	X	X
GROUP_9	Read and write	X	X	X	X	X	X	X	X
GROUP_10	Read and write	X	X	X	X	X	X	X	X
GROUP_11	Read and write	X	X	X	X	X	X	X	X
GROUP_12	Read and write	X	X	X	X	X	X	X	X
GROUP_13	Read and write	X	X	X	X	X	X	X	X
GROUP_14	Read and write	X	X	X	X	X	X	X	X
GROUP_15	Read and write	X	X	X	X	X	X	X	X
GROUP_16	Read and write	X	X	X	X	X	X	X	X
GROUP_17	Read and write	X	X	X	X	X	X	X	X

- ODBC access to archived data through standard applications such as Microsoft Excel, Microsoft Access, Seagate Crystal Reports, etc.
- Internet/Intranet access through standard Web interfaces including Active Server Pages (ASP), JAVA Server Pages (JSP), etc.
- Data set maximums, minimums, averages, and integrated values are automatically maintained within the historical archives, complementing the data servers ability to quickly respond to complex historical queries.

Continued...

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- Capability to add multiple synchronized data servers to provide secure access to corporate users throughout the enterprise
- An Application Program Interface (‘C’ API) library allows programmatic control of the HRS database while adding unlimited data access flexibility for serious developers.
- Supports import of past historical data through a comma-separated value (CSV) file format.
- A bridge to various commercial relational databases, including Microsoft® SQL Server and MySQL would provide data export capability.

