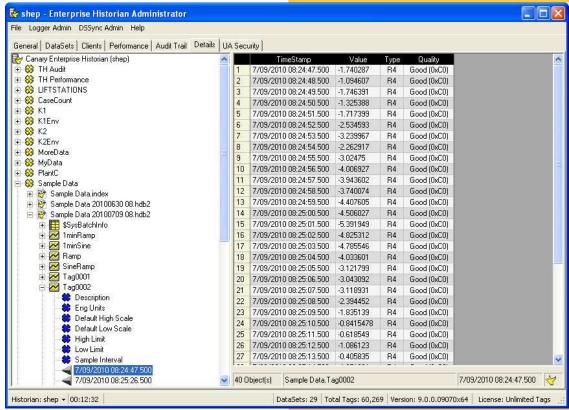


Canary Enterprise Historian Specification



Application Deployment

- ✓ Logger Service
- ✓ Historian Service
- ✓ Logger Administrator
- ✓ Historian Administrator
- ✓ DataSet Synchronization
 - Bandwidth Configurable
 - File Zipping
- ✓ Quick & Easy Installation
- ✓ Software license
 - License Administrator
 - License by tag count

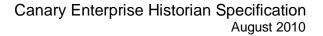
Communication

- ✓ Communicates through TCP
- Well defined security model using software certificates
 - Eliminates DCOM security hassles
 - Easier access through firewalls

Historian

- ✓ Stores & Retrieves Trend Data
- √ Timestamp (100ns Resolution)
- ✓ OPC UA (Unified Architecture) Server
- ✓ Dynamic tag properties

- ✓ Variants: Boolean, Integers, (I1,I2,I4), Floating point real numbers (R4,R8) and Strings (1 and 2 byte encoding)
- ✓ Data storage compression
- ✓ Multi-Threaded
- √ 32 bit version capacity 100,000 tags
- √ 64 bit version capacity 1 Million tags
- ✓ Historical Data Base (.hdb2) files
- User readable .hdb2 file naming (DataSet and creation time)
- ✓ File Management
 - Rollover: Time of day, File size, Time interval
 - RollUp: Daily, Weekly, Monthly, Quarterly
 - Move older files into Archive directory
 - Delete outdated data files
 - Hot-Swap (Automatically bring historical data from CD on-line)
- ✓ OPCHDA compliant
- √ Tag Indexing
- ✓ Background validation





Historian Administrator

- ✓ Administrator Email notification on problem
- Historian Status: Up time and Total Run
- ✓ Disk Space Warning Thresholds
- ✓ Remote Historian Administration
- ✓ System Tray Icon
 - Status & Quick Launch
- ✓ Historian Status Overview Table
 - DataSets
 - Status & Number of Files
 - Viewer Client Activity
 - Logger Client Activity & Performance
 - Disk Space available
- ✓ Client Activity Table
 - Logger Clients
 - Viewer Clients
- ✓ Performance Monitoring Trend Chart:
 - % CPU, Tag Readers, Tags being Logged, Historical TVQs/sec, Live TVQs/sec & Updates/sec
- ✓ Audit Trail of Historian activity
- ✓ Background file validation✓ Drill down and view data values
- ✓ Perform validation checks
 - Auto Recovery of available data
- ✓ License Status
- ✓ Version Information
- ✓ OnLine Helps
 - Contents, Index & Search
- Error Log Viewer
- **Importing**

Performance

Performance parameters are dependent on hardware platform, with 2-2.5Ghz quad core processors and 16GB of memory:

- ✓ Peak Logging: 3.8Million updates/sec
- ✓ Sustained Logging: 1Million updates/sec
- ✓ Retrieval rate: 12 clients, 13.0M TVQs/sec
- ✓ Historian Tag capacity: 1 Million
- ✓ Tag capacity per single Dataset: 10,000 recommended

Logger

- ✓ Acquires data from OPC Data Access standard
- ✓ Sends trend data to Historian (on local or remote computer)
- ✓ Handles multiple Log Sessions
- ✓ Handles multiple groups per Log session
- ✓ Store and Forward Technology

- Memory cache
- Disk cache (Local Historian)
- Logger Automation interface (scripting)
 - 33 methods
 - 48 properties
- ✓ Command Line Driven
- ✓ Auto start on system boot

Logger Administrator

- Access Logger services on either local or remote computer
- Administrator Email notification when problem occurs
- ✓ System Tray Icon
 - Current status
 - Quick Launch
- ✓ Logger Configuration File (.lcf) (stores a) single Log Session)
- ✓ Create, Open, Save and Close Log Sessions
- ✓ Session Configuration
 - Historian computer
- ✓ Add / Remove Groups
- ✓ Group Configuration
 - Name
 - **Update Rate**
 - OPC-DA Server (browse and select)
 - OPC Deadband (percentage)
 - Normalization
 - Batch Dataset & Item ID
 - Trigger Item ID and Expression
- Browse OPC-DA Server
 - Tag Filtering
 - Attribute Branching
- Add / Remove Logging Tags
 - Cut, Copy / Paste from Tag Configuration
 - Find and Replace
- Tag Configuration
 - Name
 - Dynamic property syntax
 - Item ID
 - Access Path
 - Type
 - Description
 - **Engineering Units**
 - Log Rate
 - High / Low Scale
 - High / Low Limits
 - Deadband (absolute)
 - Data Transform
- Real-time display and update of current value, timestamp and quality



Exporting

- ✓ Export of data to CSV file through Trend Link
 - Export Object (usable from VB)
 - Command-line driven export
- Trend Export program available for stand alone exporting

Helps

- ✓ On-line helps
 - Contents
 - Index
 - Search facilities
- ✓ Context sensitive helps (F1 key)
- ✓ Dialog box helps
- ✓ Error Log Facilities
- ✓ Automation Interfaces Documentation

Version Information

- ✓ Current version is 9.0.0
- New updated releases of the product have occurred at least once a year incorporating improvements and technology upgrades

Operating Systems Requirements

- ✓ Windows XP, 2003 server or higher
- ✓ Dot Net Framework 3.5 SP1

Systems Recommendations

- ✓ 2 Ghz CPU or greater
- √ 2 GB memory
- ✓ UPS (highly recommended)

Logger Session

