WEATHERFORD ENTERPRISE SOFTWARE CONFERENCE | 2017

CYGNET SCADA
V8.5 RELEASE AND ROADMAP

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May 2017

Weatherford®

CYGNET 8.5 ENHANCEMENTS

- Redundancy
- Replication
- EIE improvements
- Logging changes
- UIS Changes
- Generic Grid Control

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REDUNDANCY

IMPROVED
SYSTEM UPTIME

MANUAL FAILOVER
(WITH AUTOMATIC FAILOVER IN 8.5.1)

Productized redundancy

- Replaces script-based solutions
- Defined redundancy relationships

Tools to define and monitor redundancy

- Redundancy Relationship Editor
- Redundancy Dashboard
- RSM Diagnostic Tool

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REPLICATION ENHANCEMENTS

IMPROVED
REPLICATION SYNCHRONIZATION

ALLOWS FOR
BETTER REPORTING OF REPLICATION STATUS

New Synchronization Configuration File Keywords

- Replication Check Interval
  - Interval (in seconds) to check before performing the next replication synchronization.
- Replication Max Delay
  - Time (in seconds) a service is allowed to be behind in replication before it is considered lagging.

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REPLICATION ENHANCEMENTS

IMPROVED
REPLICATION SYNCHRONIZATION

ALLOWS FOR
BETTER REPORTING OF REPLICATION STATUS

New Info Items

- Change Queue GUID
- Replication Delay
- Max Replication Delay
- Replication Validation State
- Replication Source Change GUID
- Replication Status
- Replication Summary State

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EQUIPMENT INTERFACE ENGINE (EIE) ENHANCEMENTS

ENHANCEMENTS AND MODIFICATIONS
ALWAYS UNDERWAY

- Audit History button for all EIEs
- devRevDeid for Modbus-based EIEs
- TotalFlow support for Liquid App rev81
- Emerson ROC supports FMS data groups for FloBoss 107 devices running the V-Cone Flow Calc user program
- Emerson ROCPlus support for 800 firmware on Series 2 hardware
- “Migrate Data Groups” option for Emerson devices in FMS Toolbox (for history point mapping to FMS process variables)
- Realflo support for firmware v6.93.2

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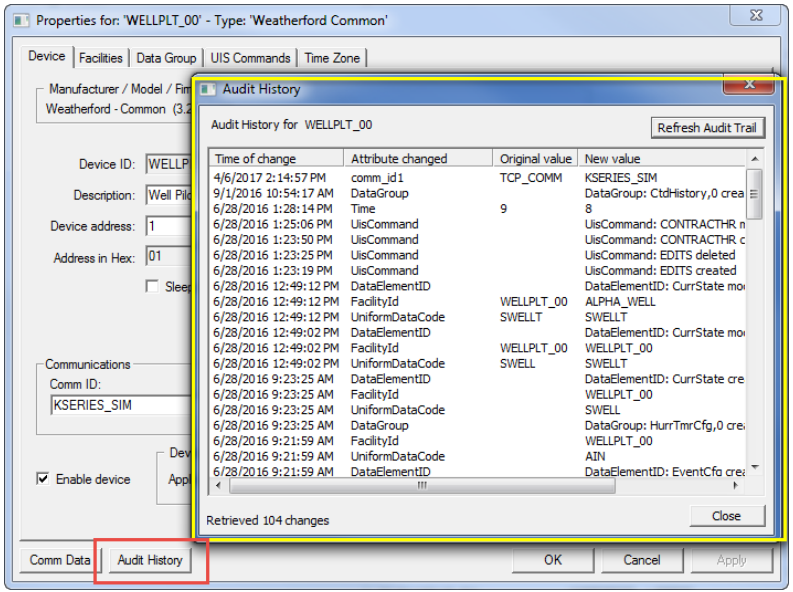
AUDIT HISTORY

REMOTE DEVICE
AN EASIER WAY TO TRACK AUDITS PER DEVICE

- Audit Button added to Remote Device editor
  - Track device audits easily



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SERVICE LOGGING

CONFIGURABLE
NUMBER OF FILES

CONFIGURABLE
LIMIT

New service configuration file keywords for log files

- LOGFILE_MODE (Legacy or Extended)
- LOGFILE_LIMIT_MODE (Line or Size)
- LOGFILE_LINE_COUNT
- LOGFILE_FILE_SIZE
- LOGFILE_FILE_COUNT

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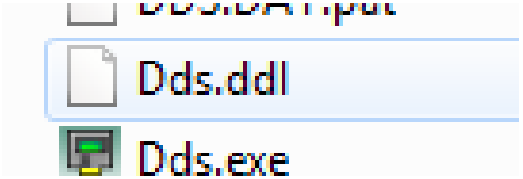
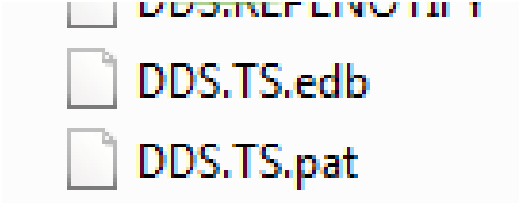
SERVICE LOGGING

CONFIGURABLE
NUMBER OF FILES

CONFIGURABLE
LIMIT




```
4/17/2017 10:08:08.748 | 444740 | Free of data dict took 0.33 ms | DbsService.cpp | 4
4/17/2017 10:08:08.748 | 444740 | SHUTDOWN | DbsService.cpp | 472 | nLOG_CONTROL
4/17/2017 10:08:08.761 | 444740 | Overall CPU usage for service was 8.89% (89.83 CPU s
4/17/2017 10:08:08.762 | 444740 | Log file closed
********************************************************************************
TimeStamp               | Thrd   | Text | File | Line number | Category
4/17/2017 10:16:19.518 | 429936 | Log file opened for C:\CygNet\Services\DDS\Dds.exe
4/17/2017 10:16:19.518 | 429936 | LogManager max number of log file lines set to 1000
```



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UIS ADVANCED CONFIGURATION SETTINGS

INFORMATION
NO LONGER STORED IN REGISTRY

DEPRECATES
"UIS ADVANCED CONFIGURATION SETTINGS" UTILITY

```
#------------------------Override Keywords--------
#TCPIP_DRIVER_THREAD_STACKRESERVE_KB
#IPTHROTTLE_ADDRESS_LIST
#IPTHROTTLE_WILDCARD_MASK_LIST
#IPTHROTTLE_CONCURRENT_IO_LIST
#IPTHROTTLE_RELEASE_RATE_MS_LIST
#TOTALFLOW_ALLOW_API_VERSION
#TOTALFLOW_NO_EXTRA_DATA
#
#
```

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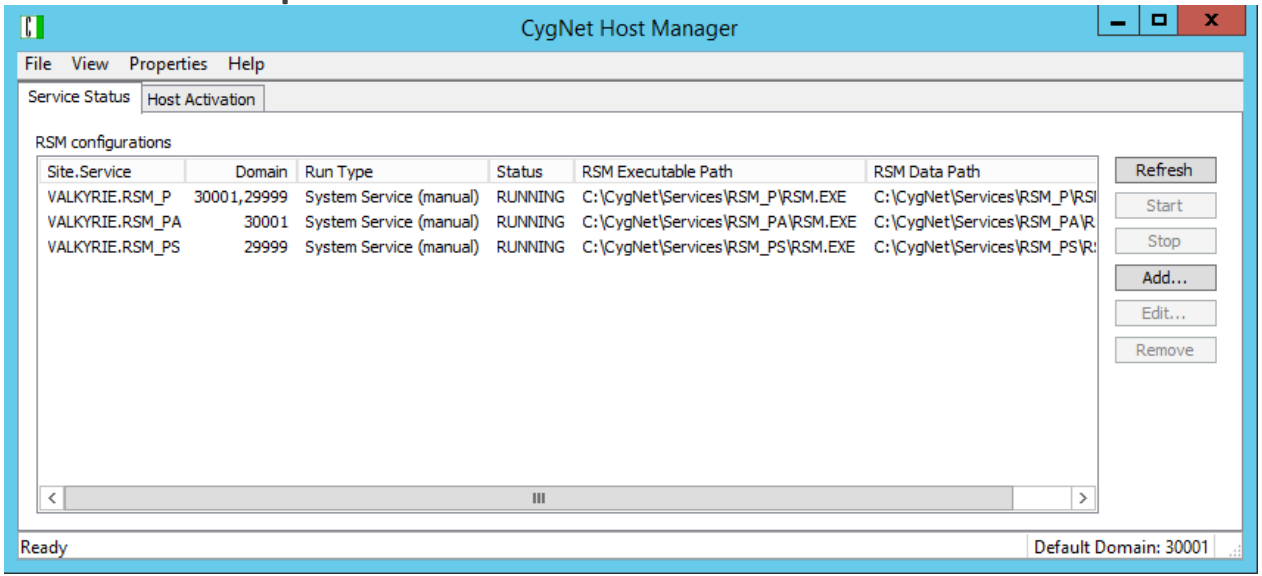
CYGNET HOST MANAGER ENHANCEMENTS

SERVER
UTILIZATION

NETWORK
DOMAIN IDS

- Multi-domain support
  - Multiple domains on the same machine



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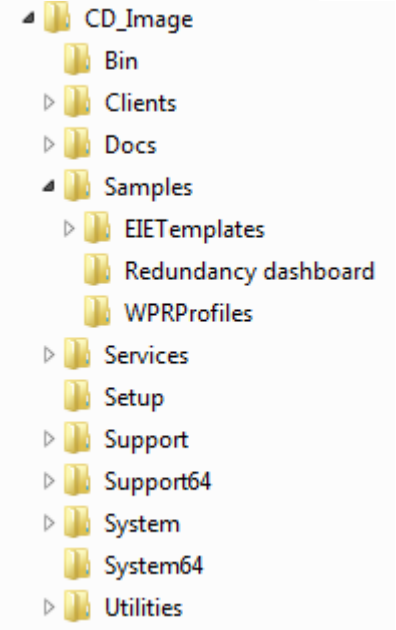
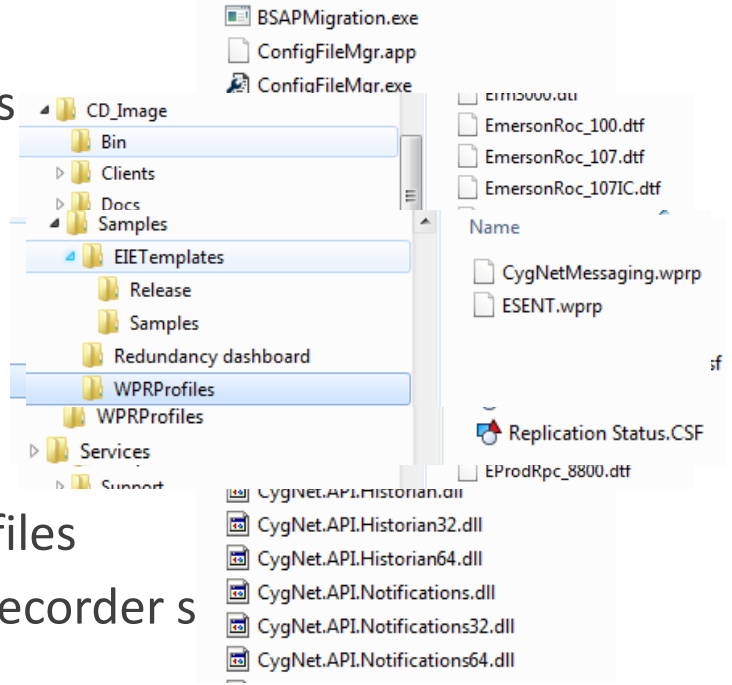
NEW PRODUCT IMAGE FOLDERS

NEW FOLDERS
ON PRODUCT IMAGE



- \Bin
  - .NET applications/utilities
    - BSAP Migration Utility
    - Config File Manager
  - .NET API files
- \Samples
  - EIE Templates
  - Redundancy Dashboard files
  - Windows Performance Recorder s



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CONFIG FILE MANAGER

NEW UTILITY FOR
MODIFYING SERVICE CONFIGURATION FILES

CONFIGFILEMGR.EXE
LOCATED IN THE "CYGNET\BIN" FOLDER

Config file management has changed in a big way

April 21, 2017 / 0 Comments / in General / by Jon Brausch

With the 8.5 release came the birth of a brand-new tool: Config File Manager. Designed to improve upon Config File Updater, this utility makes everything relating to configuration files simpler and more manageable. It allows you to edit any configuration file, validate values in the files and update the file version all from one interface. Let me show you what I mean.

Read more →

- **Local file edits and Remote file edits**
  (for any running service)
- **Compare settings between services**
- **Dropdowns for consistent data entry**
  (where applicable)

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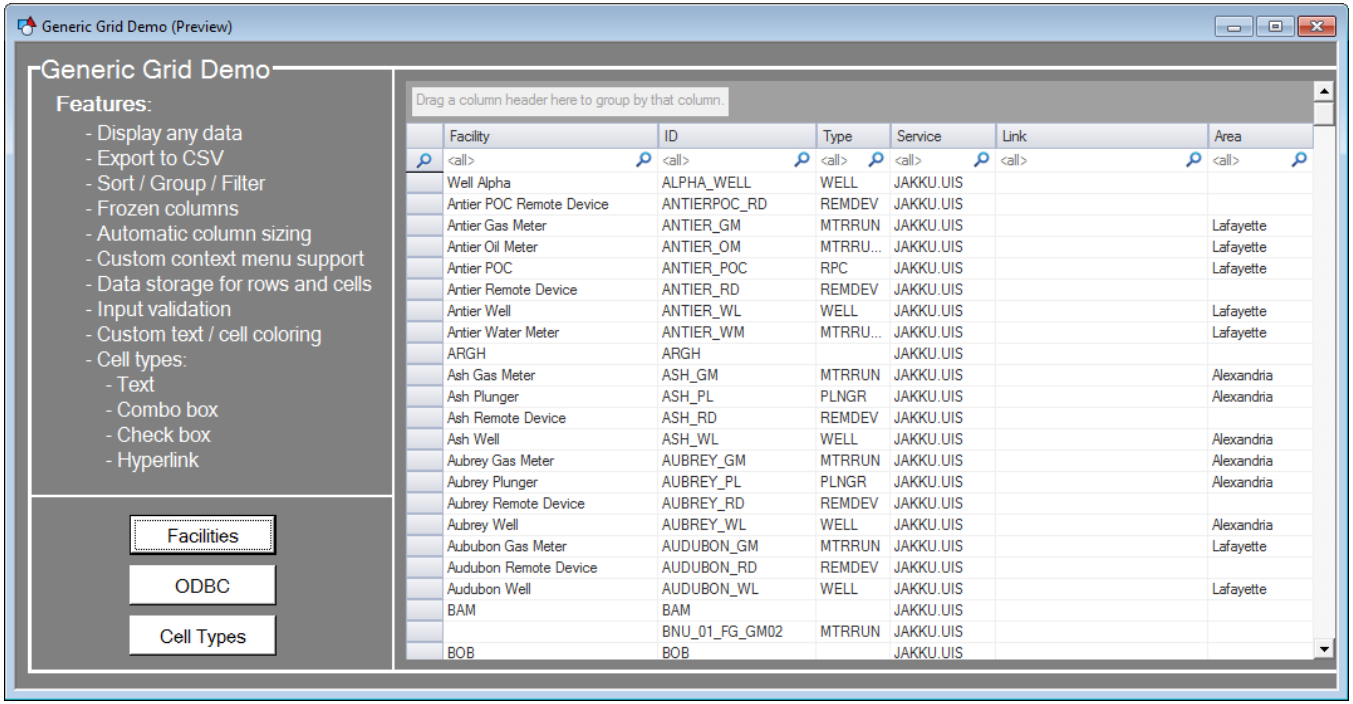
STUDIO TOOL ENHANCEMENTS

STUDIO/VISION
SUPPORT CONTINUES

NO EOL
DATE SET



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ENHANCEMENTS WITH .NET

.NET
ASSEMBLIES

VERSION
MANAGED

NEW .NET Assemblies

- CygNet.API.ServiceManager
- CygNet.API.ServiceManager.COM
- CygNet.Data.ServiceManager
- CygNet.Data.ServiceManager.COM
- CygNet.Data.ServiceManager.Redundancy

CygNet Version Manager

- Added support for .NET assemblies assembly registration utility (applicable to C# and .NET)

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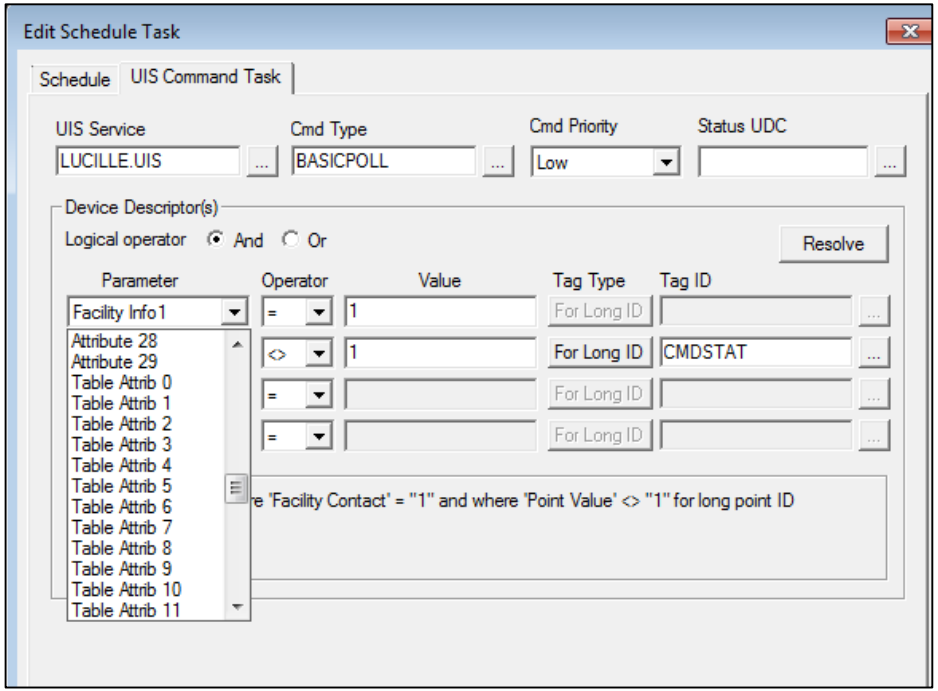
MASTER SCHEDULING SERVICE COMMAND TASK PARAMETERS

MORE
OPTIONS

ADDS
FLEXIBILITY

All Facility Service attributes available



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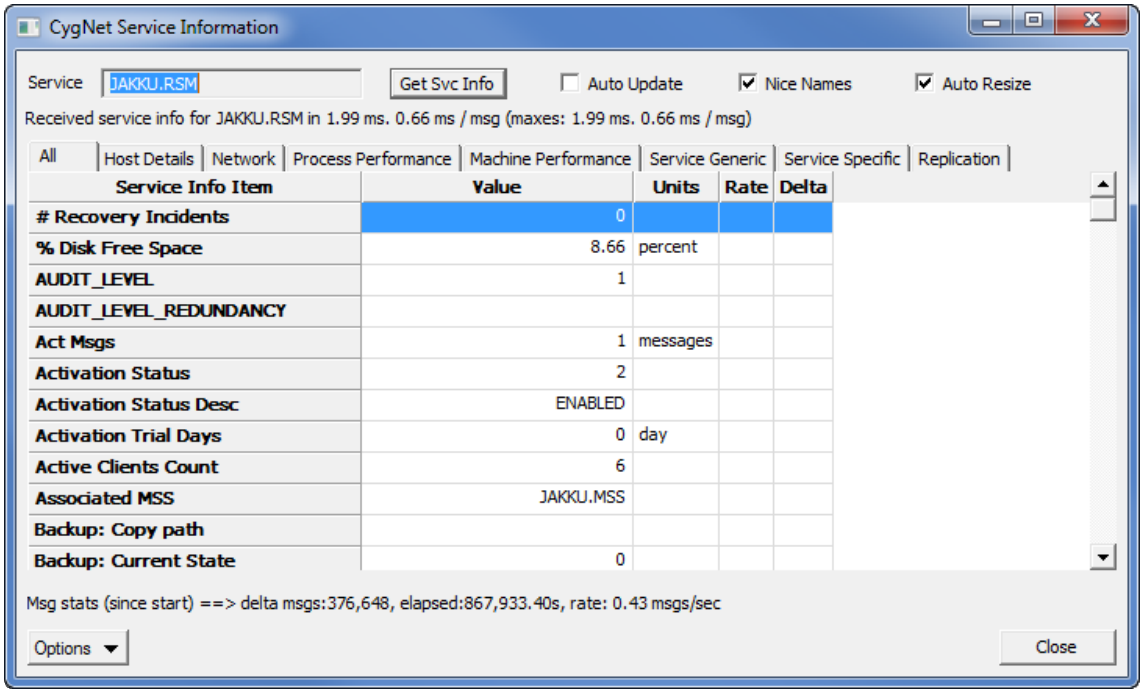
CXDIALOGS SCRIPTING LIBRARY

CYGNET DIALOGS
WITHOUT IMPORTING THE LIBRARY

ALL METHODS
INTEGRATED WITH CYGNET STUDIO

- Allows access to dialog boxes from a common location



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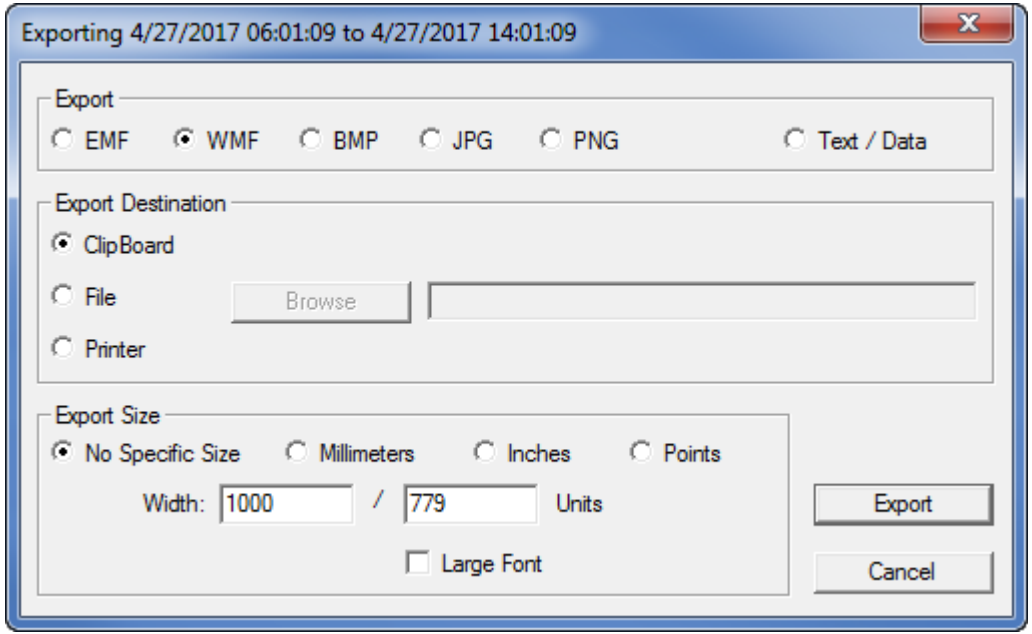
EXPORTING TRENDS

STUDIO
TREND TOOL

EXPORTS
SUPPORTED IN THE UI AND VBSCRIPT



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EARLY PREVIEW
A LOOK AT 8.5.1

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8.5.1 Preview

- Redundancy Auto Failover
- BSAP FMS support
- CygNet Broadcast
- Enhanced UIS Command Comm Stats
- Service Startup Groups
- Import data to a replicating VHS

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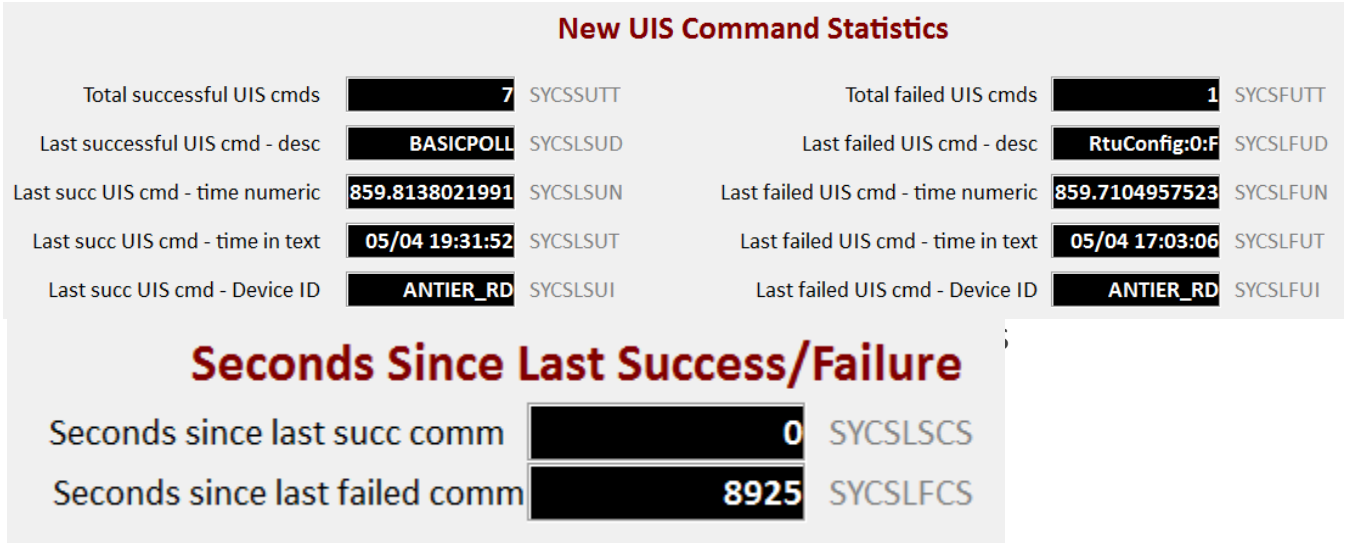
NEW UIS COMMAND SUCCESS/FAILURE MONITORING

ADDITIONAL
COMMUNICATION DEVICE FEEDBACK

NEW
COMMUNICATION STATISTICS FOR UIS COMMANDS

- UIS Statistics for entire UIS Command



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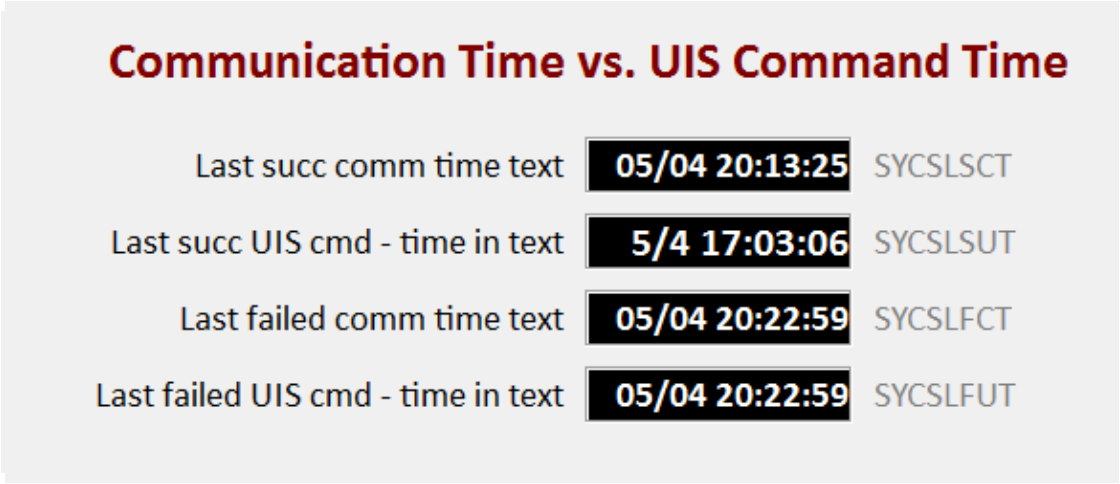
NEW UIS COMMAND SUCCESS/FAILURE MONITORING

ADDITIONAL COMMUNICATION DEVICE FEEDBACK

DIFFERENTIATE BETWEEN COMMUNICATION TIME AND UIS COMMAND TIME

- Drain Device
  - Better monitoring of communication devices/infrastructure
- Communication Time
  - Elapsed time (in seconds) since the last failed/successful communication.



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PRODUCT LIFECYCLE EVENTS - VERSION

VERSION	LIFECYCLE PHASE
CYGNET V8.2.0	Limited Support begins November 25, 2017
CYGNET V8.1.3	Limited Support as of February 20, 2017
CYGNET V8.1.2	Retired as of August 22, 2017
GAS MEASUREMENT REPOSITORY (GMR)	Retired March 31, 2016. Not supported in v8.5.0+
VALUE HISTORY SERVICE LEGACY DATASTORE	Retired with v8.1.3 (February 20, 2018). Currently in Limited Support.

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DEMO
V8.5 AND V8.5.1

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FALL PREVIEW
COMING LATER THIS YEAR

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FALL PREVIEW

- DNP3 EIE – support of the DNP3 protocol
- IPv6 Communication Device support
- Canvas

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FALL PREVIEW - IPV6 SUPPORT

IPV6

VERIZON WILL STOP ISSUING STATIC IPV4 ADDRESSES AS OF JUNE 30, 2017

- Device communication
  - TCP/IP
  - TCP/IP MultiPoint
  - TCP Modem
  - UDP

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FALL PREVIEW - CANVAS

NEW
CYGNET HMI

ADDRESSING
HIGHLY REQUESTED FEATURES AND SUPPORT IN OUR NEXT HMI

- Updated HMI Development Environment
- Full support for C# and VB.NET
- Some of the most important controls (i.e. data grid, trend, etc.)
- Integrated debugging and assembly linking
- Support for user created controls to support internal business logic

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QUESTIONS & ANSWERS

THANK YOU FOR ATTENDING WESC 2017

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