CPC Updates

CPC is the core application used on thousands of ASC control systems every day. On a weekly or monthly basis, ASC updates the CPC executables to address certain user identified bugs, user requested options, and general enhancements to the product.

This document identifies the changes made to CPC on each revision update. This information is useful in order to determine whether you, a CPC user, can benefit from a newer version of the software.

If you have a CPC system still under warranty or if you have subscribed to one of ASC's customer support plans, then you will be given access to download the latest installation from our website. If not, then please contact ASC to discuss pricing for upgrading your system.

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Wednesday, August 23, 2000

Description

Added SSIO24 capability to the object server. Two new objects were created, IO_Out_SSIO24 and IO_In_SSIO24. Both of these new objects can use the CPCMULT file SSIO24.g which is used to identify the Input-Output configuration of the SSIO24 board. This change was requested by Ken Cowan for the upgrade to the Kirtland AFB job.

FilesUpdated on Server

InstallClient
InstallServer
Classes

Sunday, August 27, 2000

Description

Added recipe variable capability (it. _SOAK1 will look in the variables for the value SOAK1\Value. Also modified security and part database usage to open/close on every usage.

FilesUpdated on Server

InstallClient
InstallServer
Classes

Monday, August 28, 2000

Description

Added variable capability to the RecipeWatch group criterion. For example, you can now put “>_CRIT1” and it will correctly recognize that.

FilesUpdated on Server

InstallClient
InstallServer

Monday, September 19, 2000

Description

Added tons of stuff – post Boeing Frederickson.
Added multi-icon move, delete, load, and save (Screen Design)
Added startup intervention button (Go Local)
Added float-limit stuff in RampSoak and Cascade recipe groups.
Added new CheckFields integrity check object.
Added new CheckAttachments integrity check object.
Added new CheckHeaders integrity check object.
Added new CheckDrawdown integrity check object.
Added new CheckLeak integrity check object.
Added new CheckProbeConnect integrity check object.
Added pre-run ServerReport data saving via ServerReport and datasaving
Added new visual icon control (SensorGrid) which displays multiple inputs
Added RateMode to Recipe_RampSoak and Recipe_Cascade groups.
Fixed the ScreenPrint
Fixed the LastPoint not being Trended issue on screen trending.
Added Quality Card storing and retrieval from server location.
Added Quality Card selection by Part Field and Part Field value.
Added automatic Quality Card refresh from server if date is newer on server.

FilesUpdated on Server

InstallClient
InstallServer
Classes

Thursday, September 21, 2000

Description

Fixed watch group so that it could use ON/OFF, TRUE/FALSE, etc.
Removed MsgBox error checking from Server (bug)
Added new ClientDefault property = LogoutMethod which allows you to launch a screen (ie. .Autoclave.Screens.MainScreen\Show) whenever the user logs out. This was requested by Lockheed Skunk Works.

FilesUpdated on Server

InstallClient
InstallServer
Classes

Saturday, September 23, 2000

Description

Fixed mult-select icons on screen design.
Added shift-select for icon multiselect
Change icon load/save to use *.icn files.
Changed icon load to load at current position of mouse-down.
Added TDCPartTransfer object (used for Boeing Frederickson)
Added highlight around selected icons in screen design.\
Added I/O capability – IO_In_Das800 – used to read Metrabyte Das800/Exp16 assemblies (first reqd. for Northrop – El Segundo).
Changed startup up intervention to bypass the 5 secs after clicking the go local button.

FilesUpdated on Server

InstallClient
InstallServer
Classes

Monday, September 25, 2000

Description

Changed PassFail report to ExceptionsAll report.
Added list of exceptions to the Exception report.
Added EXCEPTIONSALL to report to print property.
Fixed the extra page print bug on the exceptions report.
Added property “FailText” that lets you change the word that’s used for failures in the Exception report and in the database QA notes.
Corrected the real-time trending so it always shows the last record (note: the report trending had already been fixed, but the realtime trending used a different function.)

FilesUpdated on Server

InstallClient
InstallServer
Classes

Monday, October 02, 2000

Description

Changed security system so that it automatically creates an encrypted and password-protected security file if a file doesn’t exist.
The security file creation will automatically add Operator,Engineer,Supervisor,Calibration, and Maintenance groups and will also add a single Operator user with an Operator group.

FilesUpdated on Server

InstallClient
InstallServer

Friday, October 06, 2000

Description

Fixed value-list control bug.

Fixed ParentPartIndex on new integrity checks report
Fixed object editor Name editing so that it filters out .,\, and spaces.

FilesUpdated on Server
InstallClient
InstallServer
Classes

Thursday, November 02, 2000

Description
Added value-list enable password.
Added “ClientUser” and “ClientMachine” in the script engine. These identify the source of the script operation (ie. During a StartRun, the ClientUser will be the user on the machine that started the run.
Fixed script intellisense issue.

FilesUpdated on Server
InstallClient
InstallServer
Classes

Thursday, November 02, 2000

Description

Added “RecycleInterval” to the Alarm object. This causes alarms to reactivate at a predetermined interval if they stay in an alarm condition.

Added a SaveToStorage capability to Recipes and Recipe objects. This saves individual Recipe files to a StoragePath designated in the Recipes object.

Added a “AutoLoad” property to the recipes object which causes the RecipeEditor to automatically refresh the recipe objects with the stored files upon entry into the screen.

Changed the blink interval on the Alarm screen (2 secs on, 250ms off)

On the alarm screen the Acknowl button will now run the quickscript even if the alarm is not active (ie. Shuts the horn off).

On the alarm screen the system will jump to the ViewAll tab whenever the acknowledge button is pressed… it used to go to the ActiveAlarms tab.

FilesUpdated on Server
InstallClient
InstallServer
Classes *(Note: you don’t have to download this… it’s included in the InstallServer)*

Sunday, December 03, 2000

Description:

Checks now use Probe and Source values.
Checks now correctly use parent part.
Fixed Loren Niemi problem with Vacuum Hold on Quality Analysis.
Fixed LinkAttachment problem when backing out of Batch screen.

FilesUpdated on Server:

InstallClient (Version 2.1.0100)
InstallServer (Version 2.1.0100)
Classes *(Note: you don't have to download this… it's included in the InstallServer now)*

Tuesday, December 12, 2000

Description

Changed group select in screens to correctly lasso (with or without shift key). You can also re-lasso other objects (w shift) to select more.

Added the Bump property to the Recipe_RampSoak and Recipe_Cascade objects. The Bump property can be set to True on startup, causing the groups to automatically bump their setpoints to a state that provides bumpless operation for pressure, vacuum, and air temperature. In the case of Cascade, the system calculates what the part setpoint should be to give the current air temperature setting.

Fixed the Certification resume feature so that it works after you press "Reset All" button. This was a bug.

Changed attachment form to position and set the row/col at the mouse down event. This fixes the right-click problem identified by Ken Cowan via Frederickson on 12/4/00.

Repaired the variablehighlimit and fixedhighlimit functions in the Recipe_RampSoak and Recipe_Cascade. They were failing when the targeted property was blank or non-numeric.

FilesUpdated on Server

InstallClient (Version 2.1.0101)
InstallServer (Version 2.1.0101)
Classes *(Note: you don't have to download this… it's included in the InstallServer now)*

Friday, December 15, 2000

Description

Complete, Dmason, 12/14/00
In order to insure that objects are no longer corrupt, the following scheme has been implemented.
- Objects.g are saved.
- After save operation is complete, then Objects.g are copied to Objects.g2.

If the system is turned off during the Objects.g save, then the previous Objects.g2 file will still be there. On load, the system will see whether the entire objects.g file is there, if it isn't it automatically loads the objects.g2 file.

Hi Air Temp simulation in cure preview. Complete, 12/15/00, Added VarHighLimitRow to recipe group. Put the name of the row (ie. Max Air Temp) and it will use it to limit the group (Temperature or pressure).

Recipe SaveToStorage now works properly. When you change the name of the Recipe, the original Saved file will be deleted and the new file will be saved automatically.

Added Security Sentry to recipes. Right-click on a recipe (in tree view) and you will be able to secure it. Blank the group list and you can remove the security sentry.

Fixed double-click on StorageFilename on Recipe object. Dmason, 12/15/00

FilesUpdated on Server

InstallClient (Version 2.1.0103)
InstallServer (Version 2.1.0103)
Classes *(Note: you don't have to download this… it's included in the InstallServer now)*

Friday, December 15, 2000

Description

Version 2.1.0104
Fixed object saving screwup that caused datafiles to lock up reporting engine.

FilesUpdated on Server

InstallClient (Version 2.1.0104)
InstallServer (Version 2.1.0104)

Wednesday, December 20, 2000

Description

Version 2.1.0106
Repairs made when Mason was at Cardinal Glass – Amery, WI

- Fixed multiple watch groups in preview… this has never worked properly.
- Added Visibility property to ComboBox in screen design.
- Fixed the TransferRecipe method of RecipeProcessor. This problem could cause the removal of RecipeSegments object if the RecipeToTransfer property was filled-in wrong.
- Fixed the ReportInterval on the DataAnalyze object. This property had no affect on the report interval in the reporting engine, nor did the reporting engine's ReportInterval change the object's property.
- Fixed the Pass-thru bug in the RecipePreview. The recipe preview has previously been passing-thru all parameters.
- Changed the slow-down algorithm in the preview to never allow a slow-down of more than 1 unit/min. This is more like reality

- Fixed the problem which caused erroneous “Run Placed in Wait Mode” and “Run Released from Wait Mode” messages during a watch group operaton in an automatic run.

FilesUpdated on Server

InstallClient (Version 2.1.0106)
InstallServer (Version 2.1.0106)
Classes

Thursday, December 21, 2000

Description

2.1.0107
Repairs made when Mason was at Cardinal Glass – Amery, WI. All changes deal with the SPC reporting features.

- Changed Bar-Graph reporting to include Month, day, and day-of-week on time scale.
- Fixed Query error bug which caused an infinite loop on certain query errors.
- Added Plot reporting.
- Added SettingTime property to Recipe_SegmentTime object. This indicates the time in seconds of the soak time.

FilesUpdated on Server

InstallServer (Version 2.1.0107)
InstallClient (Version 2.1.0107)
Classes

Thursday, January 11, 2001

Description

Version 2.1.0108
- Added Run Recipe and Equipment to autoclave export file. Requested by CFAN.
- Added Print button to database search window. This formats a report for printing.
- Added Recipe_Looping to the classes.g file. This is used for looping within a recipe.
- Added recipe looping to recipe operations. Add Recipe_Looping object under RecipeSegments object. Name two children parameters as "Loop Back To" and "Number of Repeats". Make sure that these children have pass-thru turned OFF.

FilesUpdated on Server

InstallServer (Version 2.1.0108)
InstallClient (Version 2.1.0108)
Classes

Wednesday, February 7, 2001

Description

Version 2.1.0109

- Fixed icon editor (screen builder) so that it stays on same property when jumping from one icon to the other.
- Added Copy and Paste on the screen viewer. Select icons, right-click, copy, and then move to another screen or same screen and paste. You can continue to paste as long as the screen viewer is still active.
- Added Output_Process object with capabilities including ProcessAbove, Process Below, DeviationAbove, DeviationBelow, DeviationIn, DeviationOut. This object is mainlty used in on/off control of receivers and vessels.
- Fixed bug in the RunRecipe editor which caused the system to retain a change if that change included an add/delete/insert of a segment.

FilesUpdated on Server

InstallServer (Version 2.1.0109)
InstallClient (Version 2.1.0109)
Classes

Thursday, February 15, 2001

Description

Version 2.1.0110

- Fixed bug in the RunRecipe that allowed transfer of an X'd recipe to a piece of equipment. All the buttons are now eliminated when you click the X'd recipe.
- Fixed the Message Manager bug that displayed messages improperly on multiple equipment configurations.
- Added Marquee screen saver object which lets you design a customer screen saver which displays multiple properties in a horizontal sweeping or bouncing marquee. This object gets placed under the ClientDefault object and then individual ScreenSaverField objects are placed below the ScreenSaver object.
- Added ScreenSaverInterval property to the ClientDefault object .
- Fixed Header2 value display bug on the BoeingIntegrityCheck object.
- Added Header1name and header2Name property to the Checks object. This lets you rename the "Header #1" and "Header #2" text displayed on the checks reports.
- Changed the Checks object to allow a single header. Just leave the Header2Setpoint and Header2Value blank to force the objects to use on header.
- Changed the Checks objects (Drawdown and Probecheck) so that they correctly use the Header2SubType property which causes the system to compare the probes to their specific header. This wasn't working.
- Added SourceChildSubType on the IO_Special object. This lets you get the High/Low/Avg value of a set of inputs with matching Types and SubTypes. This was requested by Gami for Loral Tables.

FilesUpdated on Server

InstallServer (Version 2.1.0110)
InstallClient (Version 2.1.0110)
Classes

Thursday, February 22, 2001

Description

Version 2.1.0111
- Changed trend window to show yellow labels indicating ElapsedTime, Date/Time, and Value (right-side). This was based on conversations with Gami regarding Loral project.
- Changed Trend Setup window to update and display the Count=0 immediately after you clear the trend.
- Modified the Trend Setup with new capability to save trend setups into Sensor Groups (similar to CPCMULT's trendfiles). All trend groups are stored in an array in a property (ViewingGroups) of the specific Logging Object you are using.

FilesUpdated on Server

InstallServer (Version 2.1.0111)
InstallClient (Version 2.1.0111)
Classes

Monday, March 05, 2001

Description

Version 2.1.0112
- Fixed screen "Back" button to work when you jump to a previous screen using a non-Back button command.
- Added RecentIndex property on the Screen object to force the screen to be placed at a specific history index for Back button operation.
- Fixed the DataAnalyze card combo index to allow a card to be used independently from its required link.

FilesUpdated on Server

InstallServer (Version 2.1.0112)
InstallClient (Version 2.1.0112)
Classes

Thursday, March 15, 2001

Description

- Added Recipe saving to the startrun system. Added Recipe viewing on Reporting.
- Fixed Checks objects to correctly work on systems that don't have sources.
- Fixed cure preview to increase resolution (.5mins vs 2mins)
- Changed cure preview coefficients to correctly calculate when resolution is changed.
- Changed cure preview to use 50/50 on cascades when A is selected.

- Added “by User” to all the manual intervention messages.
- Fixed bug in BoeingIntegrity object which caused it to error on TC and Probe qty checks on parts on tools.
- Fixed bug that allowed a blank operator message to be added to the alarm screen.
- Fixed bug that caused the screen saver to come up when you power up the system.
- Added RunStatus information on Recipe Screen.

Sunday, March 25, 2001

Description

- Added detailed error trapping and failure count and response to the IO_In_OptoEthernet object. This includes multiple new properties including LastError, FailCount, FailCountLimit, and FailValue. LastError is automatically filled-in by the system whenever a communication error occurs. FailCount is incremented by the system ever consecutive error and reset when a good read occurs. FailCountLimit is the number of consecutive errors which will force the FailValue to be used. FailValue is the default failure value – if left blank, no default occurs and the input will retain its old IO value.
- Added MaxIntegral and MinIntegral properties to the Output_PID object. These provide limits to the integral action. Needed for ACT oven.

Monday, March 26, 2001

Description

- Added PartFieldAbbreviation property on DataAnalyze. This field holds a list of abbreviations to use in lieu of the PartFieldsOnReport. The quantity of abbreviations must be equal to the quantity of part fields on report
- Added a “VacuumUnits” property on the BoeingIntegrity object, which replaces the InchHg with whatever you want.
- Fixed the CurePreview so that a high coefficient won’t create an ugly razor-like plot.
- Changed the Batch and Part display Reports so that the field names are listed on each row (not at the top). The system also automatically reduces the fontsize of the part information in each field to fit if the field information is too large for the space provided.
- Changed the Index and Parent properties on the reports to # and WITH, indicating that the part is WITH another.
- Added descriptions of WITH and index on some of the reports.
- Changed the BatchPrintout on the batch screen to have the same report style as the data analyze engine.
- Added units display to all numeric reports.
- Added units on all trend reports.
- Changed numeric report to trim the long tagnames to 6 characters (ie. SEGTIME, RUNTIME, etc.) These were always bunching up.

Tuesday, March 27, 2001

Description

- Added PartFieldAbbreviation property on Checks object. This field holds a list of abbreviations to use in lieu of the PartFieldsToDisplay. The quantity of abbreviations must be equal to the quantity of part fields on report
- Realigned the Checks part report to provide more room for part information.

Wednesday, March 28, 2001

Description

- Corrected more unit issues with Attachment Check object.
- Repaired the part database bug that locked the database whenever you entered and exited the PartDatabase Editing screen.
- Fixed the AttachmentCheck object function which used a database field to indicate the minimum number of thermocouples, probes, or sources.

Thursday, March 29, 2001

Description

- Updated the TrendSetup form to allow changes to trend groups (not just delete and save). You can also type the existing group and it will recognize that it's an existing group and will request confirmation on actions.
- Added H:M:S format option to the ScreenSaverField object.
- Fixed editing bugs on Security screen, including the Password box and some new dialog boxes for confirmation of deleting user and groups.
- Added new client capability to change the splash screen's picture image. Place a text file in the Client directory called SPLASHPICTURE.TXT and put the full path and filename of the alternate image in the file. Remember to type the carriage return after the path-filename so that the system can properly load the name.

Thursday, April 4, 2001

Author:

Dave Mason

Description

- Added feature that allows rate alarm settings in the Recipe to be entered as positive values and the Alarm object will now identify whether to use a positive or negative value for the alarm. A new property (Direction) was added to the Recipe_Cascade object – this automatically states whether the group is heating or cooling (True = rising, False = falling). A new property on the Recipe_Alarm object (DirectionPath) should point to the new cascade property. (Requested by Rob Cathcart at CFAN)

Saturday, April 7, 2001

Description

Version 2.1.0115

- Added feature that allows a user to permanently change the part information and variables in a datafile. If you have DataAnalyze QA authority, then you can select a file while simultaneously holding the CTRL and ALT keys down. This will then allow you to change part fields or variables (ie. LoadNumber). The system will either create a new .DAT2 file or copy over the original file after confirmation. The date of the file will be changed to the current date, so if you want the date to be the same as the original file, you'll need to backup your PC clock to the date/time of the file.

FilesUpdated on Server

InstallServer (Version 2.1.0115)
InstallClient (Version 2.1.0115)
Classes

Monday, April 23, 2001

Description

- Added SecureByClient capability on the security sentrys. This lets you identify a group of client computers for permissive security on buttons and forms. This was first requested by Ron Bach at Boeing-Dev.Center for a remote PC. The new capability can be permissive or restrictive. The toggle-box titled "Secure By Client" must be clicked to invoke this capability.

Thursday, April 26, 2001

Description

- Modified the OptoEthernet routines to minimize the Closing and Opening of Ethernet sessions. Opto (Rick) suggested that some of the errors we've been seeing are related to sessions which don't close quickly enough. Will be testing this on Monday at ASC for proper operation.
- Fixed the ChecksAttachments object so that it didn't incorrectly report a High/Low value when there were no part TCs on the part.
- Added some MaxCount checks for probes on the ProbeConnect check. No major fixes/enhancements.

Friday, April 27, 2001

Description

- Fixed small object bug in the CURR setting for Recipe_Cascade object. This bug would cause problems when the requested inputobject was not a good name or valid input.
- Modified the Trend icon to change units from M to S to H to D to W for long and short trends. New time scaling is also implemented to conver to hours/days/weeks rather than decades of minutes.
-

Monday, April 30, 2001

Description

- Fixed bug in new OptoEnet functions. Tested out OK in shop.
- Fixed "Unique" property in PartTemplate object. It was incorrectly identifying blank entries as non-unique.
- Fixed Tool cycle number updates.

Tuesday, May 01, 2001

Description

Version 2.1.0117
- Changed run database saving so that it creates a minimal tool record (Tools table) for tools that may not be in the Tool Table in the PartDatabase.
- Added HP3852 capability. Added IO_In_HP3852 and IO_Out_HP3852 objects. Requested by Gasso in Ankara, Turkey (TAI).
- Added LastError property to the GPIB object. This identifies the time of the last communications error with the Iotech card (HP IEEE systems).

FilesUpdated on Server

InstallServer (Version 2.1.0117)
InstallClient (Version 2.1.0117)
Classes

Wednesday, May 02, 2001

Description

Version 2.1.0118
- Added AfterStop quick-scripts to the ChecksDrawdown, ChecksHeader, ChecksLeak, and ChecksProbeConnect objects.
- Fixed the minor screen glitch which caused the time/date to be cutoff on the main screen.
- Changed all grids (ie. Recipe, editors, etc.) to automatically scroll the contents when the scroll-bar is moved.
- Changed the applications icons for CPCServer and CPCClient.

Thursday, May 03, 2001

Description

- Enhanced the dual-IO capability and added the ability to have backup I/O objects under the main IO objects – requested by Cowan at Boeing-Philly. This is similar to the backup calibration used on the Beoing Dev. Center system. Use the SetPrimaryIO and SetBackupIO method to toggle between the IO and Cal objects.
- Fixed a bug which occurred when adding a child-part (Part on Tool) with an incompatible Recipe selection (from PartDatabase). The bug caused the system to add an empty node to the tree, but without any associated part. When the operator tried to remove this part/node, the system would lock.

- Added a check on single-part removal to insure that the object being deleted is a part (not a batch). Boeing-Frederickson reports occasional issues with removing one part and inadvertently removing the entire batch of parts.
- Fixed the anamoly which incorrectly displayed the part attachment window after the operator cancels the addition of a database part with an incompatible recipe.
- Fixed quality analysis bug which incorrectly used Part TCs for the Time-In-Soak report when the quality card selected ControlBy = AirTemp. *Identified by M.Goodwin @ Boeing-Philly.*
- Changed the SPC screen so that it doesn't automatically query when the screen is displayed.
- Changed the SQL combo box on the SPC screen so that it doesn't automatically query when a new selection is chosen. Instead, it clears the results grid.
- Added a Rec# column on the SQL result grid.

Friday, May 04, 2001

Description

Ver 2.1.0119

- Fixed Database search bug originally identified by Mike Goodwin @ Boeing. He was not able to search DCN numbers. The code was incorrectly searching when the search criteria was a number (not alpha characters.)
- Fixed database search Date combo boxes. These would not be in the correct order if the date is changed on the PC after the database is written to.
- Fixed the Attachment Check Probe validation bug. This bug was injected into the system during a recent fix of the TC attachment problem. Identified by Boeing – Fred.
- Fixed a new bug in the OptoEnet routines. This bug was injected when the recent OptoEnet modifications were performed.

FilesUpdated on Server

InstallServer (Version 2.1.0119)
InstallClient (Version 2.1.0119)
Classes

Tuesday, May 08, 2001

Description

Ver 2.1.0120

- Added the ability to vary the DCOM timeout and timeoutcount by creating a file in the client directory named nonresponse.txt. The first line indicates the maximum time between successive DCOM errors and the next line indicates the maximum count before a client reload will occur. Typical numbers are 120 for time and 2-3 for count. For systems which display a long lockup/timeout, you can set the count to 1 which would cause a reload on any DCOM error. Requested by Cowan.

FilesUpdated on Server

InstallServer (Version 2.1.0120)
InstallClient (Version 2.1.0120)

Classes

Monday, May 14, 2001

Description

Ver 2.1.0121
- Removed CheckListener function on the HP/IEEE communications. This was a result of problems identified by Gasso in Ankara,Turkey.

FilesUpdated on Server/WebSite

InstallServer (Version 2.1.0121)
InstallClient (Version 2.1.0121)
Classes

Thursday, May 17, 2001

Description

Ver 2.1.0122
- Modified Iotech IEEE488 communication routines to maintain static handles to each IEEE488 device. This was required due to problems with HP 75000 VXI systems.
- Enhanced the FileCopy object so that it displays the files that are being copied.
- On the Recipe screen, changed the SegmentMessage entry so that it automatically enters “CureMessage” type with a message is entered. This saves time.
- Added LinkAttachment method to the Batches object. This was done to avoid the problem associated with using the linkattachment method on the Batch object and having the operator delete the Batch object (Boeing Fred)
- Enhanced the CPCServer for (larger) and included button controls and status information on the ServerBackup object. You can now disable the ServerBackup object from the form. Also added a Save Object button.
- Added the ability to auto-print one or all of the ServerReports (ie. LeakTest, AttachmentTest, etc.) saved to the datafile. Each server report can be selected in the “ReportsToPrint” property by using their sequential names (Report1, Report2, Report3, etc.). Requested by Hill AFB.
- Fixed the shaky display of the HelpControl
- Enhanced the Copies function on reporting so that it now prints a set of reports, not just multiple copies of each report in the set.
- Fixed a batch report formatting issue by moving the leaktest values to the right .5”
- Fixed a problem which occurs when you try to engage a manual hold in a segment that is programmed for TSTOP. Identified by Boeing – Fred.
- Changed the quick-view window to disable the Calibration and DeCert button during a run. The Faulty button was already disabled. Identified by Mohd. In ACT, Malaysia.

FilesUpdated on Server

InstallServer (Version 2.1.0122)
InstallClient (Version 2.1.0122)

Wednesday, June 06, 2001

Description

Ver 2.1.0123

- Added Watch Alarm capability. Tested with multi-logic (ie. AND, OR). Requested by Loral.
- Changed spread-limiting so that it reduces the heating rate to .01 Deg/min (was .5 Deg/min). Requested by Loral.
- Modified the DCOM client/server failure modes so that the following conditions occur:
    - If primary server fails, the backup server will become active and will immediately check the primary server PC. If the primary PC is failed, a timeout will occur after 30-90 seconds. After this timeout, the backup PC will check the primary PC again after a time period identified in the new property CheckDelayTime in the ServerBackup object. If you don't want frequent hang-ups, you can increase this property to a large number (seconds) ; that way the PC won't check the remote PC after a timeout error.
    - A new property, DontCheckRemote, is provided in the ServerBackup object to eliminate the remote PC checking (Recommended to leave this False).
    - A new property, SaveBackupToPrimary, is provided in the ServerBackup object to force the BackupPC never to save or transfer files back to the PrimaryPC (when Backup is in control). This is useful to eliminate the HangUps that could occur upon network writing and reading.
    - Changed the CPCClient "Connect Locally" button on the splash screen so that it stays connected locally. It will not switch to another PC, even if that PC is in control.
    - Changed the CPCClient so that if it has a DCOM failure talking to a server (ie. PrimaryPC), it will reconnect to the Backup and will not check for the Primary again. To reconnect to the primary, the operator will need to use the "Reload Client" feature.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0123)
InstallClient (Version 2.1.0123)

Saturday, July 07, 2001

Description

Ver 2.1.0124

- Modified the IOTECH driver routines to address the HP3497 error message popup (re: Cowan at Philadelphia)
- Added the ability to change the RecipeName field in the datafile. Ctrl-Alt-Click the file, follow the instructions. This was needed by Boeing – Phil. In order to reassign quality cards on runs that didn't save recipe names.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0124)
InstallClient (Version 2.1.0124)

Thursday, August 02, 2001

Description

Ver 2.1.0125

- Added Watch group alarms on exceed of Time setting.
- Added GOGO action to force the segment to change after the alarm time has exceeded (similar to CPCMULT). Requested by Loral.
- Changed HP3852 driver to use CHWRITE rather than CLOSE for relay actuator card controls. (re: Hill AFB)
- Added TCDisabledMessage property on the DataAnalyze object. This lets users change the TC disabled message that is displayed on all reports. Allows custom QA instructions. (Req: BFG Riverside).

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0125)
InstallClient (Version 2.1.0125)

Saturday, August 11, 2001

Description

Ver 2.1.0126

- Fixed the LastRun property on the Recipes. The property is now correctly updated at the start of each run. (Loral)
- Fixed the AfterAbortRun quick-script in the RecipeProcessor object. This quick-script was never implemented. (Boeing-Fred)
- Fixed the screen saver. This occasionally didn't launch due to a mouse-move event upon startup.
- Added Modbus communications capability (partial) for comm. With PLC-Direct and other instruments that use serial Modbus-RTU.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0126)

InstallClient (Version 2.1.0126)

Friday, August 17, 2001

Description

Ver 2.1.0127

- Added new IO_Special type = PartSpread. This type automatically calculates the highest spread on any one part. This is used to duplicate the DOS system's SPRED function. The TagName property will display the part # that had the highest spread. Requested by TAI-Turkey.
- Added new IO_Special type = LoadSpread. This type automatically calculates the maximum spread for the selected sensors (ie. PTC) The TagName property is not used in this type.
- Fixed the LastRunDate property on start run. This was added to the SW last update, but a bug caused the date to be placed in the wrong property.
- Fixed the LinkAttachments method on the Batches object. This method was not able to be run from the client (ie. Object Editor), but worked fine from the server (ie. Via scripting).
- Multiple improvements in the Recipe Editor
  - New Recipes are now inserted (not added) to the list. The recipe will be inserted directly before the current Recipe node selection. If you add a new recipe while a folder is selected, than the recipe will be created at the end of the folder's recipes.
  - Added an Import pull-down selection which allows loading of recipes in either .RCP (CPC-NT format) or .CUR (CPC DOS format) types. The new file will be inserted (same as Add New), and will automatically change the name if there is a conflict with an existing recipe. (CFAN request)
  - An "Update from Storage" pull-down selection is provided to load and overwrite a folder (including all sub-folders/sub-files) or a single file from the storage location. This is useful if your recipes are not using the AutoLoad feature.
  - An AutoLoad pull-down listing is provided to enable the AutoLoad option for a folder. The autoload feature automatically synchronizes the Recipe objects according to the storage files.
  - Changed the file and folder deleting so that the system asks whether you want the stored file/folder also deleted.
- Added the Dielectric object, which automates the multiplexing and operations of the Micromet OEM-ICAM dielectrometer. There is a special Build method that creates the underlying object structure, including the multiplex outputs, parameters, and inputs. The class of IO child objects created will be Metrabus (default). (TAI-Turkey)
- Added GuaranteedTimeSlice property to the tasker object. This property is entered in seconds (ie. .05) and will force the tasker to keep its operation thread for the minimum time period specified. This is a convenient way of speeding up a single tasker independent of all other taskers.
- Added MinimumTaskFrequency to the Tasker object. This property regulates a tasker and causes it to perform tasks (ie. Input read) at

the desired frequency. This is useful in order to slow down taskers and provide more free-time between tasks rather than time at the end of the tasks (ie. DelayTime property)

- Changed the Frequency property name on the Tasker object to TotalTime. Note: This name change will cause incompatability problems on any system that uses the older “Frequency” property name in scripting. Fortunately, it is highly unlikely that any systems use this property in scripting.
- Added a EquipmentField property to the DataAnalyze object. This property lets you define which field is used for the EquipmentName on all reports. The default property has been Equipment\Name, but this creates problems when the equipment object is generic (ie. Autoclave). I suggest that this property be set to “Description” for all applications. (TAI-Turkey)
- Changed the RecipeScreen so that it makes the TransferToEquipment button invisible during a run. The previous version left it visible, but disabled the feature.
- Removed the SaveRecipe button on the RecipeScreen. This button has not been implemented and was a hold-over from older versions of the system.
- Changed the Filter object by adding two types: PositiveValues and AllValues. These types allow restrictions on the range of values that are filtered, providing a differentiation between temperature filtering (don’t filter 0 or negative readings) and vacuum/pressure filtering (full range). See help information on the object for more information.
- Changed the VersionInfo screen to show ASC Process Systems, the new Chatsworth,CA address, the new phone #, and the full version information including revision.
- Changed the LinkAttachments method to NOT set the unused attachments (ie. Source valves). This method was being called during part entry and was shutting off the lines inadvertently whenever the Group property *UnusedAction* was set.. Now, a new method is incorporated (LinkAttachmentsAndUnused) which will link the used attachments and set the unused attachments to the UnusedState. Note: The system automatically runs the LinkAttachmentsAndUnused method at the start of a run.
- Due to popular demand the Batch Editor’s “Remove Parts” button and subsequent message boxes have been changed. Now, a request form pops up with a warning message (in red), and three buttons “Remove this part”, “Remove all parts”, and “Cancel”. This is much more intuitive than the old method.
- Modified the PartPicture display on the BatchEditor and the DatabaseEditor to use the correct aspect ratio on display. (Lockheed Missiles request)
- Modified the PartDatbaseEditor so that if you click on a field that has picture extension (ie. .jpg, .gif, .bmp), the picture will automatically be displayed. When you click any other field or record, the picture box will be cleared.
- Modified the PartEntryScreen so that the attachment window will be moved down (on launch or on subsequent parts) if a picture is present. It will stay down until moved by the operator. If there are no parts with pictures, then the attachment window will launch at the top (normal).
- Modified the OtherServers pull-down box so that it displays only the servers that are used (ie. It won’t display a blank selection for the backupserver if there is none.)

- Fixed the OtherServers.txt reading bug which caused it not to be properly loaded if the computer's current directory (Windows explorer) was changed from CPCClient directory.
- Changed the PartEntryScreen so that the NewBatch button is disabled when the CurrenBatches folder is selected and there is already a contained Batch.
- Changed the PartEntryScreen so that the BatchReport button is only active if a non-empty Batch is selected.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0127)
InstallClient (Version 2.1.0127)

Tuesday, August 21, 2001

Description

Ver 2.1.0128

- Added a Performance property to Task objects so that you can view the amount of time each task takes to complete.
- Added a ConnectToNext property on the Task object which causes the Task to pass its operating thread to the next Task object in the same time-slice. This is useful in eliminating alias problems on screens and when you use multiple taskers to set the same outputs. For example, you can connect the CalcOutputs task to the PLC_Logic task to eliminate screen aliasing.
- Added a AllTasksInSlice property to the Tasker object which forces it to perform all children tasks in the same time-slice. This is useful for fast taskers when you want their performance to increase.
- Added a AllSubMethodsInSlice property to the Task object. This forces the Task object not to release its thread until all sub-methods (ie. All outputs during a Output\Do_Calc operation) have completed. This can be used to eliminate aliasing problems and speed up fast taskers that must do multiple Output calculations and such.
- Added a TaskerForRead property on the Input object that can be used to restrict the input to a specific tasker, even if another tasker is also tasking through the inputs. This is useful if you want to perform fast reads (via fast tasker) but you don't want to put those inputs in a separate Inputs object. You can assign those fast inputs to only work with the fast tasker.
- Added a TaskerForCalc and TaskerForSend properties to all Output objects. These properties can be used to restrict the output's method to operation by a specific tasker only, even if another tasker is also tasking through the outputs. This is useful if you want to perform fast control (via fast tasker) but you don't want to put those outputs in a separate FastOutputs object.

Monday, November 5, 2001

Description

Ver 2.1.0129

- Added Gerber Table controls to Client and Server (Bell). Completed in Oct.15.

- Added “Lead” and “Lag” capability to IO_Special objects. Added new properties and help information to configure this option.
- Added a secondary reference to the Variable Reference certification feature. This adds a dual-reference certification capability for variable probe certifications on systems with two headers. (Requestor: Boeing-Auburn)
- Added RecipeConversions, RecipeConversion, and RecipeConversioRow objects which are collectively used to define how an older CPCMULT curefile is imported into the new CPCNT recipe format. (Requestor: Lockheed Aero)

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0129)
InstallClient (Version 2.1.0129)

Monday, November 6, 2001

Description

Ver 2.1.0130

- Added enhancement to trend windows. A rate quick-view is now available when you click and drag the mouse on the trend view window. The system will automatically calculate the rate (ie. Units/min) from the point of the down click to the current position of the mouse - the Rate will be displayed below the current Value display. Note: Units will not be displayed and the format for the rate will be “##.# R”.
- Added new messages at start of run. Now the system will identify the recipe name, description, revision, specification, and last modification date. Only the ones that are entered will be issued as messages. (Requestor: Lockheed Aero)

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0130)
InstallClient (Version 2.1.0130)

Tuesday, December 11, 2001

Description

Ver 2.1.0131

- Added new Form object to BatchEditor "PartListSizeChange" which allows you to resize the part database list on the part entry screen. Requestor: Strother, Lockheed
- Changed the EditRunRecipe security object in the recipe editor so that it allows Insert/delete segments. Requestor: Bach, Boeing Seattle
- Added "PasswordForEnable" property to the SensorGrid icon. If a password is entered then the system will request the password when the operator tries to enable a sensor during a run. Requestor: Goodwyn Boeing Philly
- Added rate indication on trend screens when you click and drag the mouse. The display shows an “R” indicating the rate.

- Fixed the CPC-DOS curefile converter to properly import the cure description. Requestor: Strothers, Lockheed.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0131)
InstallClient (Version 2.1.0131)

Monday, February 11, 2002

Description

Ver 2.1.0136

- Reworked IO_Modbus objects to utilize RTU or ASCII communications.
- Added new movement properties for Image icons (ie. screen editing).
- Fixed Modbus digital input bug.
- Added One-shot and LastSent property to IO_Out_Modbus to facilitate one-shot outputs. Requestor: Craig Pierce
- Fixed “AfterEdit” script capability on Textbox icon.
- Fixed the file search bug in the Gerber (cutting table) control object. The bug caused the system to corrupt the objects file when a filename was entered that didn’t exist. The new version issues a “File not found” message if the file doesn’t exist. Requestor: Bell Helicopter
-

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0136)
InstallClient (Version 2.1.0136)

Sunday, February 17, 2002

Description

Ver 2.1.0137

- Modified Database, Table, and Field objects to provide greater database functionality.
- Databaseobject: Added Compact method which automatically compacts and repairs databases. The database must be closed in order for compact to work properly.
- Tableobject: Added FindFirst,FindLast,FindPrevious,FindNext methods with a FindCriterion property.
- Tableobject: Added SQLString property that provides a means of creating a SQL recordset (not a table recordset)
- Table object: Added a Build method which provides a way of adding new fields to an existing database table.
- Field object: Added SourcePath and TargetPath properties which allows a pull-link (for AddNew) and push-link (for Move and Find methods) between the Value property and external properties. If the SourcePath is entered and the TargetPath is empty, then the system will automatically utilize the SourcePath for the TargetPath.
- Field object: Added Size and Default properties.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0137)
InstallClient (Version 2.1.0137)

Thursday, March 2, 2002

Description

Ver 2.1.0138

- Screen object: Added PopUp property which forces the screen to be displayed as a floating pop-up window. The popup window can be sized and moved while in design-mode and those properties will be retained. The popup screen does not have any help control. A property AllowMultiples is provided to allow multiple versions of the same popup screen.
- Screen object: Added Width, Height, StartLeft, and StartTop properties to record the position and size of PopUp and Anchor forms. The StartLeft and StartTop can be set to "Center" to instruct the system to center the forms on the screen.
- Screen object: Added Anchor property which can be set to blank (none), "Top" or "Bottom" in order to instruct the system to display an anchored form. The anchored form will stay visible as the main screen is changed. Typical usage of this type of screen form would be navigation buttons and the like. This property cannot be used with PopUp property enabled.
- Screen object: Added AnchorClose property which sets whether the anchored form will have a close button (X).
- Note that when you Show an anchored form, it will replace the currently anchored form (either on top or bottom). You can have two anchored forms visible at any one time.
- MessageManager object: Added a MaxCount property which will cause the system to maintain a maximum number of records as specified. When the actual count exceeds the MaxCount the system will discard the oldest 5 messages.
- Added color sensing on Object and Icon editors. This feature displays the background color of the color property on the browser.
- Added multiple forms for ProcessLine capabilities including RecipeEditor, Optimizer, and Graphic Intermix Designer.
- Enhanced ProcessLinePositions object and added SetMoveMatrix and ShowMoveMatrix
- Added TimeToPick and TimeToPlace on the ProcessLinePositions object.
- Added colors to object editor
- Added bitmap icons for object editor (partial)
- Enhanced GID for process crane operations
- Fixed double-form on task bar bug
- Changed timer-update on Object editor so that it is disabled during grid scrolling operations. This corrected the jerky feeling of the scrolling.
- Added "RecipeListBy" variable under the Forms\RecipeManager object. This variable can be set to "Name" or "Description", and will change the recipe listing in the recipe editor screen. (Strother request)

- Added PCTransferCount property to ServerBackup object. This property lets you define the number of consecutive SelectedReadMethod operations that must be read prior to changing controlling PCs. This is used to filter bad I/O readings. See additional property help for more information.
- Added more bitmap icons to object editor.
- Added ClearOnAutoLoad property in the Recipes object. This causes the system to clear the existing recipes folder before loading the recipes from storage.
- Added confirmation messagebox when you try to delete an object in the ObjectEditor. Note: You can depress the "Ctrl" key concurrently in order to suppress the message confirmation.
- Modified crane scheduler to accomodate crane zone positionlist.
- Added load and unload to schedule solvin g.
- Added graphic of pick and place to the ProcessLineGID form.
- Fixed the pick and place time bug in the ProcessLineGID form.
- Added the ViewByTank tab on the ProcessLineGID form.
- Added the ViewByCrane tab on the ProcessLineGID form.
- Changed the GID scheduling to use a new BackColor property of the position object (not from the MasterRecipe)

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0138)
InstallClient (Version 2.1.0138)

Tuesday, May 14, 2002

Description

Ver 2.1.0139

- Added an automatic reset of Tasker object Count property on server startup. This reset eliminates the errant single interval save that could occur.
- Fixed SPC plotting and barcharting issues.
- Added feature that checks that the data directory exists, and if it doesn't the directory is automatically created. Strother,LMAC.
- Fixed bug with the Reset method of the integrity checks. Strother,LMAC.
- Fixed bug that could cause client to lock when a recipe folder didn't have a recipe in it.
- Fixed bug that caused the "NEXT" selection for segment change not to properly reset prior to an automatic segment change.
- Fixed bug that allows someone to change the name of the transferred equipment recipe.
- Added a 5 second delay to the CPCServer startup which allows a user to stop the tasker (Server form) after initial launch. Requested by Gasso.
- The MaxRecords property on the MessageManager object will automatically be set to 500 if blank.
- DataAnalyze Reporting section was modified to allow printing of the datafile's recipe (and modified recipes). Requested by Gasso.

- Modified the reporting section to only request the selected-sensor-form on initial selection of that report type - not when printing or refreshing the screen. Requested by Franz, LMAC.
- Modified the trend printing to use the same colors as the screen trend report.
- Increased the thickness of the trend lines for better visibility. Requested by Goodwin,Boeing.
- Fixed the "AcknowledgeAll" and "AcknowledgeEquipment" methods on the MessageManager object so that they will correctly invoke the OnAcknowledge script. Requested by Gasso.
- Fixed the RecipeEditor so that you can properly rename a folder when viewing the recipes in "ByDescription" mode.
- Fixed the bug that caused the attachment grid (Part Entry) not to show the correct Faulty and Decertified sensors colors (Part Entry). Requested by Northrop.
- Enhanced the report trend to use larger scaling for longer runs (ie. over 1 day).
- Added a range feature to the reporting engine which allows the operator to enter a range of time (From and To in minutes) for selecting a smaller range of data values for numeric and trend reporting. Requested by Franz,LMAC.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0139)
InstallClient (Version 2.1.0139)

Monday, August 19, 2002

Description

Ver 2.1.0140

- Added CNVLOWORD command to Script engine. This strips the low word integer from a long integer (dblword) value. Used for ICS communications.
- Added CNVHIWORD command to Script engine. This strips the high word integer from a long integer (dblword) value. Used for ICS communications.
- Added CNVDBLWORD command to Script engine. This merges a HIWORD and LOWORD variable and returns the DBLWORD (long integer). Used for ICS communications.
- Added OPCDevice, OPCGroup, and OPCTag objects to CPC. These objects are used for communications to an OPC Server (ie. INGEAR or equivalent) using the Object for Process Control standards.
- Enhanced the Script compilation engine to report compilation errors to the ServerLog file. Error reporting will include Script and QuickScript information, error type, and error line #.
- Corrected typo on Recipe Screen. Segment Message was spelled "Mesage"
- Created Recordset object for viewing specific queries on databases (does not require a database object).
- Enhanced the database grid viewing icon to utilize Recordset objects as the source. This new grid icon allows click-filtering of any column.

- Created EventLog, EventLogGroup, and EventLogPoint objects for database messaging capability. These objects allow for a flexible system of messaging when database storage is required.
- Created DataLog, DataLogGroup, and DataLogPoint objects for database data logging capability.
- Added fixed-timeway cranes, crane, shuttles, shuttle, stations, station, tanks, and tank object improvements for Lafrance Plating Line implementation (Lafrance).
- Improved the Grid icon to include editing fields and color markers for specific values.
- Modified scripting engine to maintain pre-compiled quick-scripts in memory for faster performance. Now, quickscripts are as fast as compiled scripts. (Boeing)
- Improved the object grid icon to allow recursive operations with regard to viewing child and sub-child object properties. (Lafrance)
- Added a combobox capability to the ObjectGrid icon. This feature allows one column entry to support combobox with list contents (Lafrance)
- Fixed the bug that didn't allow security sentrys to be applied to checkbox icons.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0140)
InstallClient (Version 2.1.0140)

Monday, September 25, 2002

Description

Ver 2.1.0141

- Added client-switching notification screen. Screen allows operator to switch or cancel switching on different conditions.
- Added feature which causes auto-client-switching if Server tasking is disabled.
- Added new property SwitchingDelay in the ServerBackup object. This delay (secs) will be the amount of time that the switching notification screen is displayed prior to activating the switchover.
- Enhanced Allen Bradley PLC5 driver to allow configurable timeout, naklimit, enqlimit, and failuretime delays. New properties are located in PLC_AB object.
- Increased software communication timeouts for PLC_AB operations – specifically for PLC5 communication operations.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0141)
InstallClient (Version 2.1.0141)

Monday, October 21, 2002

Description

Ver 2.1.0142

- Fixed QualityCard Editor printout – Max Probe and Rate Calc Interval values weren't printing properly.
- Added new "Advance" value to the quality card Part Rate analysis function. The advance value represents the number of intervals that will be advanced in a phase until rate calculations are performed. If the Advance value equals the Rate Calc Interval value, than this insures that only intervals within the phase are used for rate calculations. (Req: Boeing Philly)
- A new statistics feature has been added to the Reporting Numeric View screen (displayed on the right-side of the Numeric View screen). You can now click and highlight a specific range of data values in the numeric grid and the system will automatically display the high/low rate and high/low value of the data range, indicating the specific tag name and time of the statistic. This duplicates a useful feature of the older MS-DOS analysis program called CPCVIEW.
- Added a Rate Interval entry in the Report Numeric View screen. This setting represents the number of intervals between which a rate will be calculated. The lowest number is 1.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0142)
InstallClient (Version 2.1.0142)

Wednesday, November 14, 2002

Description

Ver 2.1.0143

- Fixed a bug in the Recipe_ActionOnValue object that caused multiple alarms to be created if power happens to fail after the ActionOnValue has been initiated during a run (ie. vent on vacuum bag failure). The fix uses a new property "LineActionArray" in the Recipe_Segment object. This property is used to retain the current state of parts which have been acted upon by the Recipe_ActionOnValue object. Upon power restart the object now can recall which parts had been acted on.
- Added new capability to track alarms in the RunDatabase. The new system provide a means of assigning a DatabaseGroup and an DatabaseCode to each alarm object (Recipe_Alarm and Alarm classes). If the DatabaseGroup and/or DatabaseCode is entered, then the system will automatically append a new Alarm record to the database on actuation of the alarm. Once stored in the database the records can be easily searched by group and/or code. This is also useful for SPC functionality. Certain alarms that are not specifically associated with an Alarm or Recipe_Alarm object are assigned a predefined group and code by the system - these include Watch Alarms, and LineOnAction alarms. RunStart, RunEnd, and RunAbort are also logged, even though they are not actually alarms.

- Enhanced the ObjectFind form so that it can be used to search for specific object classes. A new check box "Class Find" is provided for the object-by-class search. Note: This new mode is a full text search, not a partial search.
- Modifed the quality system to display only the quality analysis fields being performed. The system was still reporting some un-used analysis settings.
- Added pressure rate analysis to the quality system. Before, the quality system only used value at start and end of phase.
    - MaxPressureRate and MinPressureRate fields are now provided on the quality card. The existing analysis only checked min/max pressure values at the beginning and ending of the phase.
- Added SEGMENT as a selection for PhaseChangeOn in the Quality Card. This provides a way to identify a specific segment to trigger a phase change.
- Corrected the bug that caused the “=” criteria not to work in the PhaseChangeOn feature of the quality card.
- Modified the Exceptions Report so that it doesn't report Probe exceptions at the beginning of the report (as it does with QualityBatch and QualityParts report.) Instead, probe exceptions are reported per phase based on probe analysis settings.
- Modified the Quality Card Printing function so that it only prints the quality analysis settings that are entered, instead of printing all settings.
- Fixed QualityCard Editor printout – Max Probe and Rate Calc Interval values weren’t printing properly.
- Added input statistic tracking to the run database.
    - Added “Highest” and “Lowest” properties in Input object. The input object automatically calculates its highest and lowest values during normal operation. These properties are then used to store statistics of each input to the database at the end of a run.
    - New ResetStatistics method in the Inputs object. This method should be run at the beginning of the run (in the RecipeProcessor\BeforeStartRun script). This effectively clears the statistics in each Input object.
    - Added SaveStatistics method in the Inputs object. This method should be run at the end of the run (in the RecipeProcessor\AfterEndRun script). This saves all input statistics to the run database. The function saves the information to the Statistics table, and writes one record for each input used during the run. Part Thermocouples and Vacuum Probe inputs that are not attached to a part are not saved.
    - The Statistics table in the database includes fields for RunID, EquipmentID, RunTime (mins), Segment, Tag (input name), HighValue, and LowValue.
    - If you want statistics to be saved at the end of each segment, you can run the Inputs\SaveStatistics method in the RecipeProcessor\BeforeSegmentChange script.

FilesUpdated on Server and Web-Site
InstallServer (Version 2.1.0143)
InstallClient (Version 2.1.0143)

Wednesday, November 27, 2002

Description

Ver 2.1.0144

- Added a new feature to CPC-NT that automatically creates a tab-delimited logging file and updates the file with current input values on a predefined timed interval. A new file is created each day, providing automatic backup data irregardless of run status.
  This feature is useful in providing backup data for instances where the run's data is either corrupted, lost, or if it wasn't saved.
  The feature uses a number of new Inputs object properties, including BackupEnable, BackupInterval, BackupFolder, and LastBackup. BackupEnable is a True/False entry. Backup interval is entered in time (ie. 5M). BackupFolder is the path used to store the daily files (ie. C:\BackupData) – this should not include a filename. LastBackup is maintained by the system to indicate the last timed save.

FilesUpdated on Server and Web-Site
InstallServer (Version 2.1.0144)
InstallClient (Version 2.1.0144)

Tuesday, December 10, 2002

Description

Ver 2.1.0145

- Enhanced the individual part venting capability (ie. Vent parts at differing pressures) so that an operator can select from a range of sensor options that will be used to trigger the vent action. The Recipe_LineControl object has two new properties, SensorSelectField and PartTCType. The SensorSelectField indicates the part field that will include the sensor name. This part field should have a pull-down listing including PRESS, AIRTC, HITCOnPart, LOTCOnPart, HITC, LOTC, and AIRTC.
  The HiTCOnPart and LoTCOnPart selection will cause the action to occur when the highest or lowest part temperature reaches the value – the remaining options are input names that can be used for triggering.
  The PartTCType indicates the AttachmentType for the thermocouple attachments. This is required by the object so that it can properly find the hi/low of the attached thermocouples.
  When the SensorSelectField is utilized, the AtPressureField will still be the actual comparison value (ie. 50). The PressureTarget property is not used in this case. Note: Criterion is always > (greater than) for the action.
  Requested by Coryer-ATK.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0145)
InstallClient (Version 2.1.0145)

Tuesday, April 29, 2003

Description

Ver 2.1.0148

- Corrected bug that allowed the Run-Recipe object's name to be changed via the Recipe Information grid.
- Added new feature to disable Recipe Information grid when the RunRecipe is selected.
- Changed the editing style for the Equipment field in the Recipe Information grid. Now, instead of a pull-down for listing all available equipment, the user can enter a comma-delimited list of equipment names that can use the recipe.
- Added feature to Equipment field in Recipes. Now you can use the keyword LIKE in the equipment field to indicate a group of equipment. For example, if a recipe can be used for all autoclave (ie. Autoclave2, Autoclave34, etc.), you can enter: LIKE CLAVE and the system will look for an upper-case wildcard match of CLAVE with the equipment name. This provides a global grouping for the recipe. You can also enter ALL and any equipment will be able to edit and run the recipe.
- Added audit capability which tracks a permanent record of changes made to the Executable program, Object properties (via Object Editor), and screens. These audits are maintained in the Server object of a system and may be viewed using the Object Editor. An "AuditClear" method is provided to clear the audits, but that can only be done by ASC (password protected).
- Enhanced the Script Editor so that there is confirmation about closing the editor when a script has failed to compile (ie. script has errors). Now, the system will ask a series of questions relating to the error, whether you want to close the script editor, and whether you want to revert to the previous version.
- Added Audit capability for Recipes. This new feature provides a means of tracking all changes to a recipe once the recipe is switched to "Audit Tracking" mode. By right-clicking on the recipe in the treeview, you can select "Audit Tracking" from the pulldown menu. Once tracking is enabled, it cannot be disabled.
- When the Recipe is audit tracking, the system will display Confirmation Boxes on each change of the recipe, including other modifications like segment add, segment delete, change segment message, and message types. If a change is made, the specifics about the change will be saved to the audit log, including identification of the logged-in user.
- When a recipe is audit tracked, a button "Audit Tracking" will be displayed, allowing view of the audit log. The Audit Tracking viewer includes the ability to add user-comments to the audit log.
- Added an Audit Tracking # property (AuditTrackingNumber) to the Recipe object which will be incremented with each change to the recipe.

- Modified the recipe tree browsing so that pushing keys Up-Arrow, Down-Arrow, Home, and End now properly display the selected recipe. Before, a mouse click was required.
- Modified the DataAnalyze reporting printout capability to include Audit information on the report header. This includes Specification, Revision, and Audit Tracking #.
- Modified the DataAnalyze recipe reporting capability so that it prints the audit log with the recipe.
- Incorporated a new DataManager.DataSaving object called "RecipeAudit". This data saving object to save the correct property information to the datafile. The Do_Save Method must be included in the RecipeProcessor_StartRun script. The RecipeAudit DataSave object should target the RecipeProcess.Recipe object with SourceProperties = "AuditEnable,AuditLog,AuditTrackingNumber"
- Added a new property to the PartTemplateManager called "DisableRecipeMatch". This can be turned TRUE in order to disable part-recipe matching in the Batch screen. This suppression of the feature is useful for systems that utilize the new recipe/part check and part/database check in the CheckFields object. In these configurations, the Check object will indicate mismatched recipes and parts that aren't in the database.
- Added a RecipeMatch check in the CheckFields object. This specialized check is configured by entering a field name in the property "FieldForRecipeCheck". Normally, this entry should be "Recipe". Once entered, the CheckFields will automatically verify that the selected recipe matches one the recipe(s) in the part field.
- Added a DatabaseMatch check in the CheckFields object. This specialized check is configured by entering a field name in the property "FieldForDatabaseCheck". This field entry indicates the field that should be checked in the database (ie. PartNumber). The check will search the Parts table in the database for the first matching occurrence.
- Added new method "CheckOverrideMessage" to all Checks objects. The new method should be initiated during the StartRun script in order to have the check object issue a manual message indicating whether it was overridden prior to run-start.
- Enhanced Flextime crane scheduling routines for Frederickson tank-line system.

FilesUpdated on Server and Web-Site

InstallServer (Version 2.1.0148)
InstallClient (Version 2.1.0148)

Wednesday, January 28, 2004

Description

Ver 3.0.4

5/15/2003 Added new properties to the ActiveClient object. They are:

- LastAction - Indicates last security action (ie. Login or Logout)
- LastUser - Indicates last user that logged in or out of system
- LastTime - Indicates when the action occured.
- AfterLogin (quickscript) - fires after a user logs in.
- AfterLogout (quickscript) - fires after a user logs out.

9/10/2003
- - Added new object for Bosch conveyor elements, including LPU, LTU, and StopGates
- Added new 3-axis Gantry Robot object
- Added new GantryRobotAxis object
- Added new GantryRobotProgram(s) object

9/25/2003
- - Added new mouse-over highlighting of buttons, checkboxes, and textboxes. Now when you pass the mouse over any of these elements, they will be highlighted with a border.
- - Added flow-direction animation to shape icon
- - Added queuing functionality to automated tankline ProcessLineScheduler object
- - Added enhanced collision avoidance functions to the ProcessLineCraneSimple, ProcessLineCraneAxis objects

9/30/2003
- - Added ScratchpadRead capability to the IO_Inp_OptoEnet object.

11/2/2003
- - Added TabIndex property to Textbox, Button, Checkbox, or Image screen icons. Also changed system to allow Space bar to duplicate a click event on those icons.

11/26/2003
- - Added security to image properties (ie. click event).

11/26/2003
- - Added feature that allows a screen button to target a QuickScript property. This provides a convenient way to edit and maintain quick-scripts without using the object editor.

11/26/2003
- - Fixed bug that caused Notification objects to not display the RTF fonts properly on some systems.

11/30/2003
- - FLEXTIME - Modified and corrected flight-bar shuffling routines for dynamic scheduling engine.

12/04/2003
- - FLEXTIME - Modified flight-bar shuffling routines to eliminate repetetive shuffle.

12/05/2003
- - FLEXTIME - Modified ForcedMove and Queue moves so that they retain Part and LoadID information during scheduled moves.
- - FLEXTIME - Modified ReturnFromAlternate routine to properly retain LoadID information when returning load from an alternate station.
- - FLEXTIME - Implemented function to print the ProcessRecipe.

12/06/2003
- - FLEXTIME - Modified the ShuffleStations personality:
- If ReturnFromAlternate is True for the station, than the system will use the AlternateStations instead of the ShuffleStations property.
- If the load is scheduled and not running (ie. Queued or started from station), the system will shuffle using the QueueStations (Scheduler Object). If QueueStations property is empty, it will default to ShuffleStations..
- All other scenarios will use the ShuffleStations property.

- - FLEXTIME - Added SlipRecovery functionality to engine:
- To enable the slip recovery function, set the “SlipRecovery” property to True in Scheduler object.
- System will recover slip constantly based on the following conditions:
- Time will be recovered from stations down to 1 second over the MinTime. There is also a “SlipRecoveryMinTimeOffset” property in the Station object which allows you to recover more or less than the MinTime value. If the value is non-zero, the system will recover time until the station time is (MinTime + Offset). So, if you want to allow reduction in time below MinTime, than enter a negative time value.
- Time will also be recovered whenever a crane action completes before its schedule completes. This means that if you increase the estimated times (ie. crane lift time, drop time, starttime, endtime, etc.) in the scheduler object you will be creating spare time that can be used for slip recovery.
- Time will also be recovered from Drips, but only down to the time defined in the Station object. The “SlipRecoveryMinDrip” property indicates the shortest drip time (ie. 5). A value of 0 or blank will indicate that drips cannot be used for slip recovery.
- To test SlipRecovery, you can start the scheduler and then type and enter a slip time in the “SlipTime” property of the ScheduleRunner. You can continue to type in a simulated slip time and you will see how the system recovers the time.

12-8-03
- - Added "ReportHeaderComment" property to the DataAnalyze object. This entry is used to display a single-line comment directly below the report headers. This comment can be used to display engineering units or other information on each report. (Req: K.Andersen - CSS)

12-14-03
- - FLEXTIME - Implimented offline-queue capability.

12-17-03
- - FLEXTIME - Modified offline queue objects to meet requirements of Raytheon A & B process lines.

1-14-04
- - FLEXTIME - Modified offline queue objects and partial lift/drop action at start of tank process.

1-15-04
- - Enhanced the Security system by adding a login/logout database. This database is updated every time a user logs in our logsout of the system. Two new properties are added to the SecurityManager object - "LogDatabase" and "ViewLog". The "LogDatabase" property should be set to the path and filename for the logfile. The "ViewLog" method is used to access the form for viewing the database entries.

1-16-04
- - Added Parker6000 object and capabilities. This object is used to communicate serial RS-232 to Parker drives that talk the 6000-series language. Object has help documentation on properties.

1-28-04
- - Added DelaySend property to the Output_Multistate object. This property creates a delay in the sending of outputs to vacuum valves.
- - FLEXTIME - Modified OfflineQueue to use the QuickTime timing.
- - FLEXTIME - Modified OfflineQueue function so that more reservation time is used when scheduling a return of empty payloads from queue back to the line.
- - FLEXTIME - Modified OfflineQueue so that it does not bring empty payloads to the queue station when there is a pending AltRecoveryrecipe.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.0.4)
InstallClient (Version 3.0.4)

Wednesday, February 4, 2004

Description

Version 3.0.5
- Flextime – Enhanced the PayloadRemoval capability of the OfflineQueue object. You can now enter a comma-delimited list into the TargetForQueueRemoval property and the system will determine the target station based on which tank is either empty or the latest used in a schedule.
- Flextime – enhanced the AddToQueue method on the Queue object so that the MasterPayload's child variables are automatically transferred under the QueuePayload object. The value of these variables will than be automatically transferred to the actual payload upon schedule operations.

- Flextime – Fixed a glitch that caused the OfflineQueue to use the previous fit time for a Queue position even after the line schedule is cleared.
- Flextime – Added quick-scripts to the Queue object, including AfterAddToQueue, BeforeAddToQueue, AfterQueueSchedule, BeforeQueueSchedule.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.0.5)
InstallClient (Version 3.0.5)

Thursday, April 1, 2004

Description

Version 3.0.6

- Flextime - Modified the shuffle function to schedule loads prior to conflicts. Changed future-shuffle routine so that it only scheduled conflicted bars to empty and un-scheduled stations.
- Flextime - Added property to Station object "EmptyPayloadDestination". This property is used to automatically force-move an empty flight bar from station to station (ie. from chemical tank to clean tank).
- Added "ParseToNext" property in the Part Template - Part Field object. This property instructs the system to parse the part field entry into two fields. The entry is the number of characters that should be parsed into the first field ... the remaining characters will be placed into the second. This feature was added for bar-code entry that includes two fields.
- Modified the reporting portion of the IntegrityChecks so that it responds quicker when part quantities are high (eg. >70).
- Flextime - Added ScheduleLog property to the ProcessLineScheduler object.
- Flextime - Modified the ProcessLineQueue capability so that it transfers the QueuePart information to the Scheduler part at the time of QueueSchedule.
- Flextime - Added ScheduleLog property, LogText property, and AddTextToLog method to the BoeingScheduler object. These properties and methods are used to display scheduler messages. The AddTextToLog method is used to add scripted messages.
- Added StatusLog to the OPCDevice object. This status log keeps a historical audit trail of OPC communications activities, including disconnect, connect, initialization, and quality changes.
- Modified OPCGroup object so that it properly applies "AllTagsInSlice" property.
- Enhanced the OPCTag object so that it indicates status information for quality changes.
- Added a security sentry to the Edit Part Database button on the Part Entry screen. This button now correctly looks for PartDatabaseEditor/Edit security clearance in the Forms.
- Changed the database search function in an ObjectEditor field so that when you cancel the search, the currently database filename will remain.

- Flextime - Modified slip compensation to properly deal with blank MinTime and MaxTime entries in the recipe. Now, it will treat a blank value as equivalent to the NomTime entry, allowing no compensation in those stations.
- Flextime- Fixed the bug that had the slip compensation function improperly calculating the slip recovery allowable amount in a situation where the hoist arrives ahead of schedule.
- Added "EaglePanTilt" object. This object controls an Eagle/Hitachi pan-tilt mechanism via RS232 or RS485 port.
- Added "ImageManipulate" object. This object is targeted by any Screen_Image icon in order to provide zooming, panning, and defect analysis on the image.
- Added an ImageManipulatePath property on the Screen_Image object in order to target the new ImageManipulate object.
- Added multiple objects for defect analysis routines, including ImageDefects, ImageDefect, and ImageDefectLasso objects. All of these are created automatically by the ImageManipulate object during defect creation and manipulation.
- Added a VideoGrabber object which is used to interface to video grabber cards (ie. Matrox) for image grabbing, image tiling, and other image functions. System supports continuous and one-shot grabs.
- Added a "Paste Revision" menu selection on the CPC Recipe Editor screen. This menu option allows you to only paste (following a copy) a specific revision and not the entire recipe. Upon selecting this option, the system will request that you enter the revision you wish to paste. (Ty @ ATK request)
- Added a "DisallowTransfer" property on the RecipeData object. This property is set to either True (disallow) or False (allow) in order to control whether the system allows the operator to select a specific recipe revision to transfer and run. (Ty @ ATK request)
- Modified the Screen_Button object so that it properly displayed down-and-then-up when jumping screens. The button occasionally showed depressed after leaving and then returning to a screen.

Friday, June 04, 2004

Description

Version 3.1.0

- Added "RemovePartsFromBatch" method to the Batches object (ie. CurrentBatch). This method is useful in programatically deleting the parts from the underlying Batch. For example, you could use this method at the end of the run to clear the previous run's parts. Requested by D.Laverty-Northrop.
- Added PDF viewing capability. See new topic sheet.
- Added multi-lingual operations. See new topic sheet.
- Fixed BoeingScheduler so that the scheduler properly scheduled recipes that use alternate stations.
- Fixed the StandardScheduler and BoeingScheduler to properly order the alternate stations (bottom to top) during selection. It was originally using top-to-bottom ordering.
- Modified BoeingScheduler to properly deal with InService variable and deactivated batch tanks. The scheduler has always allows a recipe to be scheduled if there are batch tanks deactivated or out-of-service, because it assumes one will be available when that station

step occurs in the future. Now, it will only add the active stations to the list of alternates - that way it won't schedule to the problem tank.

- Modified BoeingScheduler so that it properly deals with a situation where the final step in a wet-process recipe forces an alternate move because the station is occupied. If the occupying load is currently scheduled to start, than there was a problem created due to the exclusion of a pre-move. This has been corrected.
- Flextime: Fixed Shuttle AfterCalculate
- Flextime: Added Pretrigger capabilities to the Station object. Includes properties PreTriggerTime, PreTriggered, and OnPreTrigger quick-script. This feature is used to pre-open doors or other items prior to Drop.
- Flextime: corrected Shuttle's TransferLoad function to properly assign the station# to the payload object.
- Added a new security capability to Button icons. You can now identify a list of user groups allowed to access the button. The groups are set in PermittedGroups property. This propery will also cause the system to request a temporary login for the purpose of accessing the button. This temporary security login will not affect the currently logged-in operator.
- Added AfterTempLogin script to ActiveClient object. This script can be used to write database information based on the entry of TempLogin (see above.)
- Added LastPC property to ActiveClient object. This displays the PCName of the last person to Login or Logout of the system.
- Added LastCode property to the ActiveClient object. This property is set to SCREENNAME-ICONNAME whenever a temporary login occurs. It is primarily used to identify and record temporary logins at specific screen icons.
- Added LegendWidth to the Trend icon. This lets you size the left-most legend area for longer tags.
- Added Title property to Trend icon.
- Enhanced the trend view icon so that when you click on it it highlights the values of all plotted points at or near the vertical click region.
- Added a BuildLogGroup method to the Recordset object. This method operates on a child LogGroup object and allows the standard Trend icon to referenced and view datalog tables.
- Flextime: Added new objects, ScheduleTriggers and ScheduleTrigger. The Trigger object is used to provide custom triggering before start or before end of a scheduled step. This feature is useful when trying to pre-open or pre-close drip trays or tank doors.
- Flextime: Added QueueRouting property to the ProcessLineScheduler object. This provides a means to define a routing station that is used for out-bound queues on lines where the load station is actually on a shuttle.
- Flextime: Added a number of Tray properties to the ProcessLineCraneSimple object. These properties function similar to the door properties on the station object and provide functionality for drip trays.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.1.0)
InstallClient (Version 3.1.0)

Friday, July 2, 2004

Description

Version 3.1.2

- Enhanced the trend view icons. Now, you can click the trend and it will target the nearest data-point and identify the time and all values of data in the currently viewed series. On dragging the mouse cursor the system will display a rate (xx/min) leader-line between the nearest datapoint and the original datapoint.
- Modified the Reporting Screen so that once you select a report type it will now be retained upon successive file loads. For example, if TrendReport is selected, than on successive loads of new data files, the TrendReport will still be the current default report.
- Modified the Input object so that it auto-calculates EventLogPoint and DataLogPoint objects.
- FlexTime - Modified the RecipeEditing screen so that you can display details of each row's FitAdjustment settings. You can now right-click on the row and select "Show Details". A floating form will be displayed, which will show FitStyle, MinAdjustment, MaxAdjustment, and KeepCrane properties for all recipe rows. You can modify the settings on this form as well.
- Fixed TrendScreen bug that created client hang when selecting trend elements that weren't in the original trend element list. This problem only occured when trending in reports or during recipe preview.
- Flextime: Fixed bug with Shuttle's not transferring properties of the Payload object properly. Added PayloadsPath property to the Shuttle class.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.1.2)
InstallClient (Version 3.1.2)

Friday, July 6, 2004

Description

Version 3.1.3

- Added Alignment tools to screen builder. You can now automatically align any lasso'd screen elements using right-click Align selection and choice of top, bottom, left, right, width, and height. Procedure is to lasso the elements, right-click on the element you want as the source, and then select Align → Left... all icons will align to the source.

- Added ArrayCopy to the screen designer. You can now array copy selected elements in any Column and Row configuration. The system provides a default spacing, but you can change that. Any Value or Caption entries will automatically be incremented, including object paths.
- Added group change capability to the screen designer. You can now lasso screen elements and change the properties of all elements by changing the property on one. This works nicely with color, font, and other attributes.
-

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.3)
InstallClient (Version 3.1.3)

Thursday, July 08, 2004

Description

Version 3.1.4

- Added icon spacing alignment capability to screen builder. You can now automatically space multiple icons horizontally or vertically by first selecting them (individual select using shift key / left-click), right-clicking top/left most icon, and then selecting Align→ HorizSpacing or VertSpacing. *Note: you must select the icons left-to-right or top-to-bottom for alignment to work properly.*
-

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.4)
InstallClient (Version 3.1.4)

Saturday, July 17, 2004

Description

Version 3.1.5

- Fixed bug in screen design that created a ghost lasso box when right-clicking an icon while a menu is exposed.
- Modified the screen-design coordinate view (numbers at bottom of screen) so that it properly reflects the DeltaX and DeltaY movement of an icon or group of icons. Note: The coordinates also reflect delta position changes when during click-hold-drag lasso operations.
- OPC tag object now properly uses the "Invert" calibration option for digital outputs stored in an array.
- Output object's Do_Send method now automatically calculates EventLogGroup and EventLogPoint child objects.
- Added new screen alignment option "Center". This aligns all icons to the selected icon's center (vertical orientation only).

Wednesday, July 28, 2004

Description

Version 3.1.6

- Modified the OPCTag object to allow parsing of long integers. You can now parse child bit tags from Bit0 to Bit31 for Input or Outputs.
- Enhanced the EventLogPoint object and added the ability to save a Reset message when an event's criteria becomes false. Properties "SaveOnReset", "SaveText" and "SaveColor" have been added. To have the event object save a record for the reset, set the SaveOnReset=True, enter SaveText, and then select a neutral SaveColor. Note: When the reset event is saved, the Criteria field will be set to "Reset".
- Implimented the BeforeChange and AfterChange quickscripts in the ComboBox control (screen design).

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.6)
InstallClient (Version 3.1.6)

Monday, August 02, 2004

Description

Version 3.1.8

- Modified OPC so that it can utilize long integers for bit processing. *Note: when using long-integers and double-words, use LBitx rather than Bitx in the configuration.*
- Added DatabaseReport object. This object provides a means of querying a database and formatting a tabulated or list report (list recommended) of the data. *Note: ReportHeader and ReportField objects are included but not implimented.*
- Flextime: Enhanced the ProcessLineStation object so that it now contains an interval timer and an OnInterval script. The new properties are IntervalTime, IntervalTimerLast, and OnInterval (script). The main purpose of this interval capability is to trigger database saves of process data for tanks and such.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.8)
InstallClient (Version 3.1.8)

Wednesday, September 01, 2004

Description

Version 3.1.10

- Flextime: Enhanced the Recipe Editing Screen. The station details section is now a docked section at the bottom of the screen which can be displayed or hidden. To view the section, press the "Show Details" button. To hide it, press the "Hide" button. Also added mouse-over tool-tips for all detail entries.
- Flextime: Added SlipRecovery options to the ProcessLineRecipeRow object. Properties SlipRecoverMinDripTime and SlipRecoverMinTimeOffset were added. These new properties are available in the Details section and are used to customize how slip is recovered in each recipe step. MinDripTime indicates the minimum drip time down to which slip time can be recovered. MinTimeOffset is added to the minimum time to result in the lowest time down to which slip can be recovered.
- Flextime: Modified the crane's "TransferLoadToCrane" and "TransferLoadToStation" methods so that they first guarantee that the station's MinTime has been reached. If the TimeRemaining is less than 2 seconds, than the method will cause the system to wait the remaining time until transferring the load. This eliminates the occasional sub-second premature removal of the load which had occurred in recipe steps where scheduled-time = MinTime.
- Flextime: Modified the SchedulerStandard object so that it utilizes the new by-reciperow slip recovery settings.
- Fixed the OPCTag object calibration bug. OPCTag outputs that were configured as stand-alone tags (ie. not part of an array) were not correctly sending the RawValue (post-calibration). The tag now properly applies the calibration type and then sends the RawValue property to the OPC server.
- Added "Y=MX+B" calibration type to the OPCTag object. This can be used on input and output tags.
- Modified the tabindex property on the screen designer so that it properly reacts on entering new data into a text field (Carriage-return). It will now work both on standard screens and pop-up screens.
- Flextime: Repaired the QueueRouting function. It was failing when the routing property was left blank. Now fixed.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.10)
InstallClient (Version 3.1.10)

Friday, October 08, 2004

Description

Version 3.1.15

- Added DynapowerRectifier object. This object provides half-duplex RS485 communications to multi-dropped rectifiers by Dynapower (previously RapidPower).
- Enhanced the ComPort object to allow send, receive, and clear methods for bi-directional communications from the comport. Additional properties and method have been added, including on-line help info.
- Enhanced the Trend icon to allow multiple scales (Normal, x10, and x100). You can now select trend items to be displayed at 10x or 100x.
- Added "MemoFile" property to the server object. This property is used to identify the path and filename for the memo database (ie. \\pca\c\databases\memo.mdb).
- Added multiple vertical scaling for Trend icons. You can now assign x10 and x100 scales to trend points so that points that differ by orders-of-magnitude can be displayed on the same trend.
- Added Trend Reporting capabilities for databases. The object DatabaseReport now has a Trend style, which also supports alternate scaling.
- Added a new DataSyncronize object. This object automatically syncronizes two folders to insure that all files are the same. It is primarily used to provide automatic hot-backup of files such as databases and other files that are updated regularly.
- Flextime: Fixed AssetInAuto function so that it properly blocks the completion of the current step (ScheduleStep object)when the Done = True statement is used in the WhileActive script.
- Flextime: Fixed scheduling function so that it properly accounts for the initial premove in situations where the recipe is scheduled to start immediately, and there are existing scheduled recipes in the future. The old version scheduled those recipes in a way that placed the first drop at Time=0 and the premove before that.
- Enhanced DataReport object by adding a NumericFormats property. This property is a comma-delimited list that applies formatting to the data printed in a "List" style report.
- Flextime: Modified SchedulerStandard so that it cancels a load's schedule when the load is about to be moved to 1.) a station that has not alternates assigned, or 2.) a station where all the alternates are already occupied. The older version allowed the hoist to pickup and move the load over the station, causing a possible lockup.
- EventLogPoint was modified. The point now properly resets the Starttime property when the point object is disabled. This way, on enabling the point will time through the graceperiod properly.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.15)
InstallClient (Version 3.1.15)

Sunday, October 17, 2004

Description

Version 3.1.16

-
- CPC: SCR / PRB reporting
  - A new property “ReportMultistateSources” has been added to the DataAnalyze object. Make this property True and the system will consider the values of sources and probes in reports and in the quality cards.
- Large Data file access enhancements:
  - CPC’s data reporting now works with large files larger than 32768 intervals.
- Server object now has a “MemoFile” property which indicates where the memo database is located. If you want multiple systems to use the same memo file, than use a network path (ie. \\PCA\C\Data\Memo.mdb)
- There are now new warning messages in the Calibration form that occurs if the Hi and Lo setting or value are the same (Cal fail).
  - Also, If the new calibration creates a gain value that changes more than 5% from the last gain, than a warning message is displayed which shows the old and new value and requests that the user check the results. 5% gain change should be enough to find all problems with bad sensors and such.
- There is now alarm messaging when multistate probes are changed between SRC and PRB during a run.
- Attachment linking is now fixed with regard to sensors that have been Faulted or DeCertified.
- When you DeCert or Faulty a sensor, the part attachment is now properly changed to 0.
  - The system will now remove attachments from the parts if DeCert or Faulty occurs while an attachment assigned.
- The bug that improperly allowed attachment linking when the system was in Abort mode is now fixed.
- New “HideStatusBar” property in the screen object can be configured to hide the status bar. If you do choose to use this, than you should create a separate CLOSE button (button with PostMethod= “CLOSE”)
- Screen background color now immediately changes after changing in the icon editor.
- Screen changes of non-gray screens no longer create flash.
- New “Drive” object has been created to get information on harddrives and other drives. This object lets you point to a specific drive (fixed, removable, network, or share) and it will give you statistics on the drive. This can be used for harddrives, network drives, or removeable media. During integrity checks you can run the “GetInformation” method and then query the FreeSpace property to determine if you’re going to have enough drive space.
- A new “Test” button has been added to the input pop-up viewer. This Test mode allows maintenance to view the sensor, but still be disabled for use by operators.
  - Test status does not let input attachments assignment.
  - Test status is enabled for security access to ObjectEditor-Calibrate and ObjectEditor-TestInputs security sentries (Forms object).

        - Once in Test mode, no other status can be selected, unless you have calibration security access.
        - Test mode adds a “T:” to the start of the input display. Color stays black but foreground color changes to white.
    - In the Certification object, you can now put a comma-delimited list of tolerances that will match with the specific certification value levels.
    - You can now have different screen savers for each client attached to a server.
        - Change the name of the screen saver object to “ScreenSaver_XXXX” where XXX=PCName. The system will search for it’s own name in the screen saver and then default to the default ScreenSaver object.
    - Added “SavePath” to certification object. Also fixed a bug that caused the report to clear if you cancel the “Load” procedure.
    - Verification Text can now be properly formatted (ie. Color, Font size)
    - The Check box now correctly allows “blink” operations.
    - Modified Certification Form so that the StartSensor and EndSensor combo boxes properly redimension the sensors on the form.
    - Fixed the Certification report so that when you load an old report the proper pages will be displayed.
    - Added ScreenSaver “AlternateInterval” property to allow multiple screen savers to have multiple time intervals.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.16)
InstallClient (Version 3.1.16)

Sunday, December 11, 2004

Description

Version 3.1.21

- 10/23/2004
- Flextime - Changed Scheduler alternate-station functionality so that if an alternate move is required, the system will now use the payload's current station as the selected alternate if the current station is in the alternate list of the recipe targeted station. So as to keep to the existing schedule (ie. crane transfers), the crane will still move to the station, lift the payload, then drop it back into its own station.
- Changed the FileList icon so that it refreshes its filelist every 5 seconds.
- Changed the FileList icon so that it syncronizes the icon's height with the constrained height of the filelist object.
- Fixed TrendingFromRecordset file reset functionality. This bug only occurred when a new Recordset was created and the current default filesystem path was different than the CPCObjServer directory. In this case, the log file was not being deleted and reset.
- Flextime - Added vehicle-viability check at start of new recipe schedule to insure that there is a viable vehicle (ie. crane or shuttle) that can service every required transfer in the recipe. If you assign a wrong crane to a specific recipe step, or a transfer that cannot be

achieved within the crane boundaries, then the system will signal FAILed schedule with the appropriate status message.
- Flextime - changed the GID time-scale so that it displays seconds (lower duration) and minutes/hours (larger duration). Also changed the minor intervals to 15S, 30S, and 60S for time range.
- Flextime - improved the GID display so that it doesn't hang when it is first displayed.
- 10/27/2004
- Flextime - Added new station object property "CancelOnNoAlternate" which will cancel the load in the station if the next move is going to a station which is occupied with no available alternates.
- Flextime - Changed GID screen so that it displays the LoadID (if not nullstring) along with the rack.
- Changed the DBGrid icon so that all elements are left-justified.
- 10/29/2004
- Added "AllowAction" property to icons Screen_Icon, Screen_Grid, Screen_DBGrid, Screen_Checkbox.
- Added "ContainsDate" property to DatabaseReport object. This changes the header of the report to include time and duration information.
- Modified the MatroxVideoGrabber object to include cameralock functionality and 50msec delay after each grab to allow full grab prior to transfer to image.
- 11/3/04
- Modified the Label icon so that it does not apply a Format function when the Format property is blank. Applying the function to a blank format caused a date format to be applied on specific text entries. For example, entry of "1A100" would result in a date. Now, the label will only apply a format when there is a non-blank format property.
- 11/4/04
- Flextime - Changed BoeingScheduler functionality by eliminating the MoveInitialization steps in the schedule. These moves conflicted with the grapple step for the crane.
- Flextime - BoeingScheduler: Added a check on PostMove (Recipe step property) to insure that post moves will not be applied to recipe steps where the nominal time for the tank is less than 2 x postmovetime.
- Flextime - Modified the recipe editor so that Add Recipe places a recipe in the list after the currently selected recipe and not at the end.
- Flextime - Modified the recipe editor so that Paste Recipe places a the recipe after the currently selected recipe in the list - not at the end.
- 11/11/04
- Flextime: added 3rd-position functionality to ProcessLineCraneAxis2Point object. This now supports a 3-position movement.
- Flextime: Fixed the station-crane-check routine to account for shuttles.
- 11/12/04
- Flextime: added adjust station capability to ProcessLineStationAxis objects (underneath Horizontal object). This now supports automatic vertical hoist adjustments at different stations. This capability was also added to the scheduler.
- Flextime: added fixed-cycle processing capabilities to Scheduler object. New properties include CycleTimeTarget.

- 11/13/04
- Added error checking in scripting for IF-ENDIF resolution. The older version of the scripting engine did not properly check for errors related to unresolved If or Endif clauses. Note: on upgrades of an existing systems, after update check the CPCNT_ServerLog.txt file to see if the new error checking has identified any existing errors that were previously undiscovered.
- Fixed the scripting editor bug that improperly highlighted green the section of text that was encased in quotation marks. For example, if a line included A = "Test = '234'" , the editor was displaying the '234'" as a comment. It now properly differentiates apostrophes within quotation marks.
- Flextime - added more fixed-cycle operations, including auto-charging of process line based on cycle operations.
- 12/9/04
- Flextime-Added BatchID and BatchAltPosition to the ProcessLineAxisStation object. These properties are used to normalize batch move times during optimized, fixed cycle operations.
- 12/11/04
- Flextime-Corrected CyleTarget operations so that if the scheduler can't schedule to a cycle-time target, it will move to the next cycle and reattempt a fit. This capability also includes support for future loads being scheduled in the middle of existing schedule (on same interval).
- Flextime-Added the feature to save the current schedule to a file. This saves all timeway information. Properties SaveCurrentSchedule, LoadCurrentSchedule, and ScheduleFilename have been added. We reecommend saving the schedule at the same time that you save the objects.g file. This can be done at the end of each drop (HoistVertical object) or on a timed interval with verification that the hoists are down during save.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.1.21)
InstallClient (Version 3.1.21)

Monday, February 07, 2005

Description

Version 3.2.2

- 12/11/04
- Flextime: fixed bug that caused the slip-recovery function to recover the entire NomTime recipe steps where the MinTime was zero or blank.
- 12/15/04
- Flextime: Modified CycleTargeting so that it is based on the recipe being scheduled. If recipe does not have a defined cycletime, than it will be scheduled as normal (ie. not on cycle boundaries).
- Flextime: Fixed premove bug that caused short premove reservation when schedule fits new recipe immediately after a postmove

- Flextime: Modified ScheduleStretch routine so that it modifies the cycle boundary by the stretch amount. This is only used on systems that use CycleTargeting (ie. fixed-timeway solutions).
- Modified the FileList icon so that it scrolls smoother. Also modified filelist box so that it properly sizes itself on first access to screen.
- Added alarm message box on DBGrid icon which is displayed on invalid database, invalid recordset source, or any other error with the source database.
- Added alarm message box on Trend icon which is displayed on invalid trendfile, invalid database, or invalid recordset source.
- Added a new FileInfo object which can monitor a file and provide information such as Exists, Size, DateCreated, DateModified, and TimeSinceModify in seconds. This is used when you need to monitor a file a insure that it is changing (ie. datafiles, databases, etc.)
- Added properties DatabaseFail and SourceFail on Recordset objects. These are used by the DBGrid and Trend icons, but can also be used for alarming purposes.
- 12/16/04
- Fixed bug in the script editor's that caused comments to be displayed black rather than green in some situations.
- Improved the script editor's display so that it updates quicker.
- Improved the Object Editor display so that it doesn't attempt to display large quickscripts in the grid. If a property has an imbedded carriage-return, than only the first line of the property will be displayed in the object editors grid.
- Added new GlobalLockout mode which allows a client machine to lockout all other client machines connected to the server. New properties were added to the ClientDefault object: GlobalLockout and LockoutExceptions. The GlobalLockout property is a true/false setting which causes the global log-out of all clients except those identified in LockoutExceptions. LockoutExceptions holds a single client name or a comma-delimited list of name (ie. PCA,PCB). Requested by P.Verdecchia/Cessna.
- 12/19/04
- Flextime: Fixed schedule fit bug which caused a new recipe to occasionally be scheduled out 1,000,000 secs in the future. This was caused by a ScheduleFitTime of .01 seconds for a forcead move. This fit time was not enough to find a successful fit and therefore the default fit position (1,000,000secs) was used. The fit algorithm will now continue to calculate past the ScheduleFitTime until if finds at least one successful fit solution.
- Flextime: Increased the default FitTime for ForcedMoves and QueueMoves to .5secs.
- Changed the Color grabber in the ObjectEditor so that when you cancel the color command, the original color will be retained.
- 12/28/04
- Flextime: fixed bug that caused the wrong part to be scheduled after a queue-move completed. This problem only occurred if a different part had been loaded from the database immediately before the queue move completes.
- Flextime: Added new ProcessLineScheduler method "LoadPartFromDatabase" which can be used to immediately load a part without having to call the Calculate method of the scheduler.
- 1-10-05

- CPC/Flextime: Implemented wireless capability to system. Wireless objects allow system to support wireless monitoring and HMI control. PDA, PocketPCs, are supported via additional software and license for PDA support. Note: wireless capabilities are priced optionally - not a part of standard CPC/Flextime license.
- 1-26-05
- Added capability to read Solartron linear encoders via the Orbit communications card. Object=LinearEncoder.
- 1-27-05
- Flextime: changed schedule so that it could utilize non-integer NomTime, MinTime, and MaxTime settings.
- Flextime: modified ScheduleLoad so that IsScheduled and NothingScheduled is set on load and on clear schedule methods. Before, it was only being set in the Calculate method.
- Added Visibility, BeforeClick and AfterClick to the Screen_CheckBox icon
- 1-28-05
- Implemented error-trap routine on GlobalLockout function
- 1-30-05
- Modified the VideoGrabber object and added DrawBorder methods to show divider line between tiled images (Cessna request)
- Modified the DatabaseGrid icon so that it shows alert messages on "Object not there" and "object not a recordset).
- Modified the DatabaseGrid so that it retains column widths entered in design-time environment. Before, the system was changing the colwidths based on operator input, but that was creating a width issue on alert messages.
- 2-1-05
- Flextime: Fixed the Occupied Acceleration/Velocity on scheduler object. It was erroneously using Occupied accel/velociy for Non-Occupied applications.
- Flextime: Added LateralPosition in StationAxis object. Also added LateralVelocity and Acceleration in Scheduler. Lateral positioning is used for XY movement cranes.
- Fixed the image icon's VertPosition animation property so that it functions properly.
- Added Event_TimeOfDay object, which can be used to create events that occur at a specific day (ie. Monday, Saturday, Weekend) and at a specific time during that day.
- 2-5-05
- Added a "SortClasses" menu option to the MainScreen. This provided a method of sorting all classes and resaving them for future loads.
- Enhanced the LinearEncoder object.
- 2-6-05
- Flextime: Increased the available memory buffer in the CheckFit algorithm to accommodate more than 50 stations in a recipe.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.2)
InstallClient (Version 3.2.2)

Saturday, March 26, 2005

Description

Version 3.2.5

- Inputs Backup function (comma-delimited file) has been modified to parse into multiple files when the total number of inputs exceeds 250. It will now
- InputViewer "Test" button has been modified:
  - Now, when Test button is pushed down, the DeCertification button is enabled. This provides a means to switch from Test back to DeCert.
  - Validation is now disabled on inputs that are in Test mode.
- Maintenance leak-test form has been modified to allow proper scrolling of sensor quantities greater than 200.
- Certification form has been modified to allow proper scrolling of sensor quantities greater than 200.
- IO_In_Enet object class has been modified to provide a default address of 169.254.129
- On the Calibration form, added some verifications to the Accept button so that the calibration person has to confirm.
- Modified the Object backup function so that it saves one backup file for each day of the month (ie. DayXX_ObjectBackup.g)
- Fixed the array-copy function so that it properly works with check-box icons.
- On the Attachments form, added a ComboBox that includes all tab selections. This provides another way of selecting a tab, and is useful when there are more than 3-4 tab groupings.
- Enhanced the Bar-graph icon
  - Added Method property
  - Aded Increment property for grid and number increments.
  - Grid will now span entire bar
  - Fixed horizontal bar numbering.
- Modified the View/Print function in the Memo-log so that it properly wraps and prints memo fields.
- Added vibration system objects that communicates to the Spintelligent system via TCPIP.
- Flextime: fixed the GID bug that caused the schedule to show scrunched on the screen when selecting the "realtime" mode.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.5)
InstallClient (Version 3.2.4)

Thursday, June 16, 2005

Description

Version 3.2.15

OPTO22 ETHERNET IO OBJECT

- Updated the ScratchpadBit read function so that it properly reads scratchpad bits above 16. It now reads 0-63 scratch pad bits.

PROCESS LINE RECIPE EDITING

- You can now highlight a range of cells and enter data into all at one time.
- You can now highlight a range of cells and clear multiple cells at one time, either by pressing Del key or using the right-click Clear menu.
- You can now highlight, copy, and paste a range of cell values to other cells. Use either the right-click menu or Alt-C for copy and Alt-V for paste. This also works between recipes.
- You can clear all cells via the Right-click menu.
- The Details settings can now be applied to a range of highlighted stations.
- You can now add "Crane" to the MasterRecipe ColumnTitles property so that the "CraneToUse" can be displayed for each recipe row. Viewing only.
- You can now add "PostMove" to the MasterRecipe ColumnTitles property so that the "PostMove" can be displayed for each recipe row. Viewing only.
- The MinTime,NomTime, and MaxTime cells are now highlighted depending on the current FitStyle. For example, if FitStyle = "UseNominal", than the MinTime and MaxTime cells will be shaded to indicate that they are not used for scheduling.
- Changed font size on the screen to 9-point in order to fit more stations.
- Widened the recipe listing on the left side of the processline recipe so that longer recipe names can be displayed.
- Added "CycleTime" and "Offset" entries to the processline recipe screen.
- Added new right-click menu on the processline recipe editing screen. You can now select FitStyle by right-clicking on the row.
- Added FixedCycleOffset property to the ProcessLineRecipe object. If this is entered (0 or positive number) than the system will use this offset, overriding the offset that was entered in the Scheduler object. It will NOT however replace the Scheduler object's Offset value.
- On the Processline Recipe screen has been enhanced with multiple editing features:

FLEXTIME SCHEDULING

- added a check for deactivated stations when selecting a shuffle station.
- Fixed RecipePostMove bug that caused it to schedule improperly.

PROCESS LINE PART EDITING

- Add and copy/paste operations enhanced to change the name using an ADD or COPY followed by an incrementing number.
- Screen will now disallow parts with the same PARTNAME
- Screen will now check that a RECIPE name exists upon entry.
- Screen will now automatically fill in the RECIPEID number if it exists. If not, it will default to "" or 0.
- Screen now has a recipe listing for double-click selection for the current part. The RECIPE field in the record grid must be highlighted.

You can also select the recipe by pressing the <Enter> key on the desired recipe.
- When typing in a recipe, the system will check and change the case of the letter automatically.
- ADD operation now will use the currently selected record as the source record for the addition. This acts like a copy/paste based on the currently selected record.

SCREEN BUILDER ENHANCEMENTS
- Screen configurations now scale properly to other graphic resolutions.
- Added AutoScreenScaling property to the ClientDefault object. This will default to True and will cause the system to rescale all screens when using a different graphic resolution. For example, if you design the screens in one resolution (ie. 1024x768), than the screen will now display properly on a 1400x1200 display. If autoscaling is disabled, the screen will show smaller on the higher resolution displays.
- Added ScreenResolutionWidth and ScreenResolutionHeight properties to the ClientDefault object. These are used to indicate the base screen resolution for the screen configurations. The base resolution should be the same screen resolution that was used during configuration of the screens. The base resolution is then used to increase/reduce font sizes for alternate resolution screens.
- Added ScreenFontScaling property to the ClientDefault object. When this is true, the screen fonts will be scale up and down depending on the current screen resolution, attempting to have the screens look the same on any resolution of screen. The scaling multiplier will be based on the original ScreenResolutionWidth and ScreenResolutionHeight in the ClientDefault object.
- Added Visibility property to DBGrid, Frame, and Grid icons.
- Added Continuous property to TextBox icon. This changes the textbox operation so that it updates the Value property continuously as you type the entry. This is useful in applications where you want to repond to the entered word as each character is typed.

OBJECT AND ICON EDITOR
- Property Title column will now resize to display the full property name.
- Changed delete button so that if you delete the last child in a list, it will select the previous sibling node and not the parent node.
- Fixed the INCRPATH OnCopy function so that it properly works when copying the last object in a list.

GID SCREEN
- When scheduling from the GID screen, you can now hold down the Ctrl key to schedule multiple racks.
- The CRANE and STATIONS view now properly works with real-time mode.

INPUT CALIBRATION FORM
- When the HIGH and LOW settings are the same, the system will now disallow the last setting and will issue a warning.
- When the HIGH and LOW readings result in a change of gain more than 5%, the system will warn the operator and ask whether the New or Old offset-gain settings should be used.
- When the reading does not change, the system will automatically revert to the old values.

INTERNETTRANSFER

- Added new InternetTransfer object that can be used to communicate HTTP, HTTPS, Gopher, and FTP with web-servers

TEXTPARSER
- Added a new TextParser object that can be used to search, replace, and extract information from a text file.

SCREEN
- Fixed screen bug that sometimes caused buttons to remain disabled momentarily when switching screens.

SCREEN BUILDER
- Added "DisableClose" property to the Screen object. This property can be set to True to disable the close button on pop-up screens.
- Added "OnClose" quickscript to the screen object.
- Fixed PopUp resizing bug that caused PopUp screens to display wrong size after resizing in design mode.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.15)
InstallClient (Version 3.2.15)

Friday, July 8, 2005

Description

Version 3.2.20

Database TABLE object
- Added Run method to the Table object. This lets you set SQLText and run a Delete query or Update query.

CPC Recipe Editor
- Modified the CPC Recipe Editor so that it displays the disabled recipes (ie. assigned to another equipment) as read-only when Equipment is not compatible. This allows the operator/programmer to see what the recipe is and what the equipment property is set to.
- Added a new pull-down menu option to the CPC Recipe Editor for recipes that are disabled (ie. assigned to another equipment.) With proper access, you can now change the recipe's equipment property by right-clicking on the disabled recipe (in the tree-view) and select "Change Equipment". This provides a means of reactivating a recipe that has been improperly set for a piece of equipment.

CPC Batch/Parts Editor
- Fixed the CPC Batch/Part Editing bug that caused a lock-up when the Part Database did not have an entry. Now the system will properly allow the screen to be displayed with no parts in the database.

Flextime Adjust-Station Capability
- Enhanced the adjust-station capability to allow multiple adjust stations in a single tankline. The StationAxis object now includes AdjustTransition properties and support both Occupied and Unoccupied adjust station capabilities.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.2.20)
InstallClient (Version 3.2.20)

Tuesday, September 13, 2005

Description

Version 3.2.26

Flextime
- Fixed the FixedCycleOffset so that it properly schedules when the Runner timer has already passed the cycle-start point.
- Changed scheduler so that it defaults to the Station Postmove ahead of the Recipe postmove.

CPC Recipe Editor
- Fixed bug that caused recipe revision button to add multiple children.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.2.26)
InstallClient (Version 3.2.26)

Friday, January 14, 2006

Description

Version 3.2.28

OPCTAG OBJECT
- Added MinimumClamp and MaximumClamp property. These properties serve to clamp the output's RawValue to a fixed upper or lower limit.

HELPTEXT EDITING (ClassEditor)
- Added quick-keys for formatting selected text in the Help Editing Form.
  Ctrl-b = bold
  Ctrl-u = underline
  Ctrl-Alt-b - Switch between black and blue
  Ctrl-Alt-g - green
  Ctrl-Alt-r - red
  Ctrl-Alt-y - yellow

REPORTING SELECTED TEXT LISTBOX
- You can now multiselect the list items from either the left listbox or right listbox (ie. use Shft or Ctrl for multiselect) Cessna request.

REPORTING - NUMERIC GRID
- You can now select a section of the grid, right-click, and select "CopyToClipboard". Once copied, you can paste into excel.

I/O IN OPTOENET
- Added two properties that let you scan all analogs at one time (ie. one communications packet). One property is READALL

BATCH ENTRY
- Fixed bug that caused the client to lock whenever a thermocouple attachment was made faulty and the operator opened and closed the attachment window in the Batch editing screen.

FLEXTIME
- added TimeUntilNextDrop and TimeUntilNextLift to station objects. Properties will show 999999 when nothing is scheduled.
- Changed the GID to show shuttles on a different line.
- Modified the FitInformation to show more information, including premove, postmove, and other statistics
- Added PremoveGap to shuttle object. This replaces the PremoveAdder in the scheduler

FLEXTIME STATIONS OBJECT
- Flextime: added Count property to Stations object.

FLEXTIME STATION OBJECT
- added DontScanChildren to station object. Turn to True to improve speed, but won't scan for children objects (ie. alarm, etc.)
- improved speed of Station calculations by 66%.

FLEXTIME - PROCESSLINE RECIPE EDITOR
- Enhanced to allow 100s of stations. A new vertical slider is used to scan down a list of stations.

FLEXTIME - PROCESSLINE RECIPES
- Added a CranesPath property so that the Recipe editor can build the CraneToUse combobox on systems that have multiple schedulers. The default is still ".???.Cranes".

OBJECT EDITOR
- added capability to add multiple objects at one time. Hold CTRL key down and press Add. Pop-up box will request number of objects to add. Works with add and Copy-add.
- added Stat: display on object editor to show performance of any method that gets clicked.
- when clicking an object in object editor, the Stat bar will show the # of children
- Value display in status bar now updates on the interval. Before it would only update on clicking a new tree node.
- Object editor now remembers its location, size, and tree listing so that when you reopen it it will be at the same place it was when it was closed.

ICON VIEWER
- Icon Viewers now remembers their location and size so that when you reopen it it will be at the same place it was when it was closed.

TASK OBJECT
- changed performance property to show formatted time 00.000000

- added StartTime property to be used for more accurate performance calculation.

CRANE AXIS OBJECT
- Added AfterCalculate capability to the CraneAxis object.
- Added child object scanning (ie. event, alarm, etc.) on axis object.

SCREEN object
- You can now set the blink interval on a screen by screen basis. The interval defaults to 500 ms, but can be decreased to provide a faster blink. There is also no problem with blinking on a screen that updates normally at an interval less than 1 sec.
- "MemoryRetentionTime" property has been added to the screen object. This property defines the amount of time that the screen should be retained in memory for quick-view operations. The system will purge the screen after a specific amount of time if not active. If this property is left blank, the screen will be maintained in memory indefinitely. For this reason, only set this property on screens that will not be accessed regularly.

SCREEN - SHAPE OBJECT
- added Method, BeforeClick, and AfterClick properties. Method can be used to run a message on click event. BeforeClick and AfterClick are quickscripts.
- added capability to have property path in the BackColor property.

SCREEN – TANKLINE ICON
- Added Tankline screen icon. This icon draws the entire tankline from a scan of Stations, Payloads, and Cranes objects.
- Screen_tankline now uses the Station object's "ScreenColor" property as an override on the station color. This means that the color will override any deactivated, part, or payload color assigned in the icon.
- Screen_tankline icon now shows a loaded station using the BackColorPart property.

SCREEN - DBGRID ICON
- DBGrid icon. Fixed the filter select function so that it works properly on DB views that are using a recordset with an existing Where clause.
- When clicking the column name for filtering, the system will now invert the text and background color to indicate what field is being filtered. Also, a hourglass pointer shows while the new query is performed.
- You can now select a section of the grid, right-click, and select "CopyToClipboard". Once copied, you can paste into excel.

SCREEN – BUTTON ICON
- New property "UpdateScreenOnClick" is used to instruct the system to update all icons immediately after a click occurs on the button. This is useful in applications where a button acts on a setpoint or other value and you want to see an immediate response to the click. It is also useful to provide updates when buttons are changing recordset queries in Database applications.

SCREEN - PDF ICON

- Added new PDF icon to the screen designer. The PDF icon allows single or multiple PDFs to be displayed and viewed on a screen. Properties include filename, page, and a search string allowing the PDF to be displayed and searched dynamically using scripting. This feature provides a means of targeting specific information in a PDF document based on operator or system query.

SCRIPTING

- LastTime and IntervalTime properties added. IntervalTime is number of seconds since last run of the script. LastTime is used to calculate the IntervalTime. IntervalTime can be used for integration calculations within scripting.
- Script editor has been refined so that the help information at the bottom of the form displays properly. It had previously been cutoff.
- Script editor now includes SETCHILD2PROP function, allowing a set of a grandchild object's property.
- Scripting now supports function SETPROPOFCHILDREN which accepts a ParentOBj, PropName, and SetValue. The result is that you can set a single property of multiple children objects using this function.
- Script editor now includes an EXITSUB function. This function can be used on large scripts to bail-out early, thus improving overall script performance.
- Script objects have two new properties: IsRunError and RunErrorMessage. These properties are used to indicate a script run error. The trapped errors are the ones not caught by the compiler and are typically related to object functions (ie. GETCHILD, GETCHILDPROP, PROPERTYBYPATH, etc.)
- New function GetPropByPath and SetPropByPath have been added. Both of these functions require that an property path be identified (ie. .Autoclave.Inputs.PTC\Value). Note: GetPropByPath is equivalent to older function PropertyByPath.

TRENDSETUP FORM

- You can now type and enter an interval directly into the interval combobox. That typed value will become the interval for the trend collection.

SCREENTREND

- Changed the warning message so that it doesn't display on lack of trend file.

DBGRID object

- Added editing capabilities. New EditingFields property can be set to a comma-delimited list. Editing also allows group changes via a group of highlighted cells.

CRANESIMPLE object

- Added "StationAfterDrop" property. This is set by the scheduler during the time when a crane has lifted, but has not completed the drop. This property is set to the station that the next lift will occur at. After the drop is complete, this property will be blank

until the next lift has completed. This property is used for determining script-initiated postmoves.

SCREEN_TANKLINE
- Added TanklineLeft and TanklineTop properties. These are used to define the position of the left and top most reference point on the icon in real-world units.

SCREEN
- Added QuickKey property. If you set this to a quick-key combination, the screen will automatically create and set the appropriate Form.ScreenViewer object for a quick key. Available options are F1-F12, AltF1-AltF12, CtrlF1-CtrlF12, and ShiftF1-ShiftF12.

SCREEN VIEWER
- Modified screen viewer and made all screens separate forms. This improved the screen load times by orders of magnitude.

QUICKKEYS
- Enhanced the quick-key function to include Alt, Ctrl, and Shift versions of the F keys.

SCREENS
- Redesigned screen viewer functions to improve update and screen change speeds. New system retains each screen in memory, allowing quicker redraws of each screen.

VIDEO OBJECT
- Video object now can use Morphis hardware.

WIFI OBJECT
- Improved the WIFI object so that it properly manages multiple PDA devices talking to CPC/FLEXTIME.

WIFI DEVICE
- Added IPAddress so that the system can confirm and relate the incoming packets to a specific device object. The IPAddress must be the same as the PDA device that is communicating to the system.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.28)
InstallClient (Version 3.2.28)

Sunday, June 11, 2006

Description

Version 3.2.36

SCREENVIEWER
- Fixed timer update bug that caused occasional non-updating of screen values.

SCREENVIEWER - TANKLINE SCREEN ICON
- Enhanced the EditViews section on the Tankline object.
- Added Part display on station mouse-click and mouse-move
- Added NextLift and NextDrop times on mouse-click and mouse-move

FLEXTIME - TANKLINE GID SCREEN
- Fixed bug that caused the Shuttle GID to show wrong backcolor.
- Added ShuttleLift, ShuttleDrop, ShuttleHold, and ShuttleDrip reservations.
- Added ability to inspect each station and crane move by clicking on the move. Only functional on Load tab.

FLEXTIME - TANKLINE RECIPE EDITOR
- Fixed bug that caused buttons to remain disabled after recipe is accessed directly from the GID screen.
- Fixed bug that occasionally allowed screen to close without saving last edit.
- Added feature that allows group deletion of recipe steps. You can now drag and select multiple steps and delete them at one time.

FLEXTIME - STATION OBJECT
- Added "BlockedStations" property. This property defines a list of stations that should be blocked from schedule-reservations while the current station is scheduled. This is used for stations on a shuttle as well as when stations share a rectifier.
- Modified LastLiftDrop property. This now shows as True or False indicating whether a vertical move has been requested (ie. setpoint change). Used for EndOfLift, EndOfDrop scripts.

FLEXTIME - SCHEDULER
- Schedule fit algorithm now checks blocked stations and does not allow a fit that would allow both stations to have an overlapping reservation.
- Drip times are now used to recover individual asset slip time
- Fixed the Alternate station capability so that it properly accounts for handoff stations between two cranes. Now the system will correctly reschedule both cranes moves when the 1st crane selects an alternate and the 2nd crane has to pick that bar up.
- Fixed bug that caused first schedule to occassionaly start one cyle out.
- Fixed bug that caused alternate station to occasionally not be selected.

- Added ShuttleLift, ShuttleDrop, ShuttleHold, and ShuttleDrip reservations. This fixes the reservation overlap that occurred on shuttle premoves.
- Changed shuttle premovegap so that it is used to increase the shuttle premove length rather than offset the shuttle premove reservation.

SCRIPTING
- Added properties DebugMode and DebugMemo
- Added menu pulldown DebugMode and Show Debug Memo
- Added debugging capability that traces all operations through a script. After running a script in the editing form, you can select File-ShowDebugResults and it will show the trace, including any errors that occurred.
- Added database functions to the scripting engine. This allows database operations without the need of having a database, table, and field object residing in CPC/Flextime:
  - DBOpen
  - DBClose
  - DBAction
  - RSAction
  - RSGetField
  - RSSetField

FLEXTIME - PROCESSLINECRANESIMPLE
- Modified the EndofLift, EndOfDrop, StartOfLift, and StartOfDrop scripting so that they properly work on stations that have delayed bar transfers.

FLEXTIME - PROCESSLINECRANEAXIS2POINT
- Modified the simulation function so that it properly allocates a shorter lift/drop time when a lift or drop is reversed half way up or down.

FLEXTIME CHANGES
- Modified the shuttle object so that it properly clears the stationlast property if the shuttle is in a different position after manual.
- Modified the shuttle object so that it clears the stationlast property if AtPositionHigh, Low or Mid are conficting (ie. more than one on at one time)

SERVER OBJECT
- Added property VariablePath which defines the external variable file. The variable file is used to import variables and values from an external text file. The Variable file (ie. Variables.txt) define variables using the name of the variable and an equivalence sign. For example:
  Simulation=True
  Quantity=1.25
- On software initiation the server will load the variables and create them under the Server object.

SCRIPTING
- Added SaveObject function. This allows you to script the saving of a specific object to a file.
- Added Trim function. This trims strings of leading and trailing spaces.

FLEXTIME TRIGGER OBJECT
- Added StationName property to define which station the event happens at.

SCREEN FILELIST ICON
- Modified the file list icon so that it updates the list every 5 seconds.

FILECLEANUP OBJECT
- Added new object that is used to either delete or move old files from a folder.

FLEXTIME RECIPES OBJECT
- Added SaveToDatabase method. This will save all recipes (MinTime, MaxTime, NomTime, DripTime, etc.) to a single database file. This is primarily used for remote updating of recipes from server drive (ie. MSAccess editing).
- Added UpdateFromDatabase method. This will search the database file and update the recipe objects based on changed values in the database. If audittracking is enabled for the recipes, a message will be applied on each change. Note: updating expects equivalent steps in database as objects - steps cannot be deleted or added in database.
- Added BackupPath property in the Recipes object. If this is entered, than the system will save an OBF Recipe file prior to any change to the recipe. This works for database changes as well as Recipe Screen changes.

FLEXTIME RECIPE OBJECT
- Added a Backup method to Recipe object. This method will perform the same backup as listed above.

SERVER_LOG UPDATING
- Changed the server log so that it updates to the main application path, rather than the retargeted Apppath.txt path.

RECTIFIER PROFILING
- Fixed bug in profiling operation that caused Steps property to not be updated
- Enhanced functionality to properly deal with Profiles that don't exist
- Enhanced so that the Start method automatically runs the Calculate method prior to starting. This is required when changing the profile name at the same time that you Start the profile.

FLEXTIME - TRIGGER OBJECT
- Added Payload property to indicate which payload is triggered.

FLEXTIME - STATION OBJECT
- Added PayloadAtNextLift and PayloadAtNextDrop which shows blank (no pending lift/drop) or the name of the payload that will be lifted/dropped from/to the station.

FLEXTIME - SCHEDULER
- Added StationStartOffset and StationFinishOffset properties. These properties are used to invoke a shift and resizing of the station hold reservation used for lines where the payload remains submerged well after the Lift operation starts and/or is fully submerged well before the end of the drop reservation completes. By using these properties, the programmer can force the system to account for the extra immersion time and remain true to the Min, Nom, and Max time constraints.

FLEXTIME - PREMOVE ADJUSTING
- Fixed bug that occasionally caused a vertical premove adjust to be eliminated from the current schedule when a new recipe is scheduled. This only occurred if a mult-step premove was in progress during the scheduling of the new recipe.

FLEXTIME - SHUTTLE OPERATIONS
- Enhanced the shuttle stations so that you can now set a dynamic (ie. MinToMax) time for immersion in either shuttle station. All lift, drip, etc. reservations will properly align when dynamic times are utilized.

SCRIPTING
- Fixed scripting so that it can accept a script with length greater than 32768 characters
- Added script-debug check on objects\property references where the property name doesn't exist. This will now draw a run error in debug-mode.

FLEXTIME - CRANE AXIS OBJECT
- Added LastControlMode and OnControlModeChange quick-script

FLEXTIME RECIPE EDITING
- Modified recipe screen to disallow menu functions when recipe is viewed from GID screen.

FLEXTIME SCHEDULER
- Added ScheduleWithAdvance method to allow scheduling from a mid-recipe station. This function can be used on a running payload or a non running payload. If already scheduled and running, the advance function will kill the schedule and reschedule. Current station elapsed time will be compared with MinTime to determine what LaunchTimeShift is used when scheduling.
- Fixed the SaveCurrentSchedule and LoadCurrentSchedule function. Programmer should create a script which runs Server\SaveObjects, then disable Server\TaskingEnabled, and then saves the schedule(s). On powerup, the programmer then LoadCurrentSchedule.

FLEXTIME RUNNER
- Changed object so that OnTimeout script will not get run if WhileActive sets the Done bit.

FLEXTIME GID SCREEN
- Removed TEST button.
- Recipe from GID now properly locks the Details and all controls.
- New property "VehicleOverride" in Scheduler will let you enter a vehicle name that will cause the scheduler to override to that Crane exclusively. The future will include the capability of replacing crane(s) using the "Crane1=Crane2" format. Currently, you can only enter one name.

FLEXTIME STATION OBJECT
- Fixed TimeUntilDrop property so that it only reports the first drop on special condition where there are back-to-back drops without any lifts at the station (ie. end station)

FLEXTIME RECIPE SCREEN
- Rearranged Details section and converted it to a tabbed popup. Added controls for AlternateLift, AlternateDrop, StationStartOffset and StationFinishOffset.

- Changed help information on screen to show the ObjectHelp for specific options.

CHECKCOMPONENT OBJECT
- Added new object used to validate valving by cycling the valves and checking feedback values (ie. LS) to assure proper operation.

AGILENTACTION OBJECT
- Added quickscripts BeforeAction and AfterAction

FLEXTIME COLLISION CONTROL
- Modified to correct issue where Suggested value was not being set in certain cirumstances.

SERVER FORM
- Widened the PCInControl label so that it would show longer names

SCRIPT EDITOR
- Widened the intellisense drop-down to show longer names

SCREEN EDITOR
- Fixed bug that caused icons to shift whenever multiple frame or shape objects are group-moved.
- Added feature that allows icons to be pasted onto other icons (ie. frames, shapes)

CERTIFICATION FORM
- Fixed the bug that caused Attachment to be set to 0 (zero) for inputs that had blank attachments.

OBJECT SAVE
- Fixed bug that caused property object references to be erased during object saves.

PROCESSLINE_SRABG OBJECT
- Modified DatabasePath so it can accept a property path reference as well as a database name without a folder designator.
- Added SetBarBeforeLoad, SetBarAfterLoad, an SetBarAfterUnload methods

SCRIPTING
- Modified scripting engine to allow referencing and storing database, recordset, and other objects in Object properties.

IO_INPUT_SPECIAL
- Fixed bug that caused PartSpread not to work for negative input values.

CHECKS_ATTACHMENTS
- Fixed Status so that it displays STOP and not STOPPED

OPCTAG OBJECT
- Fixed array read/writes so they properly display Value and LastValue properties.
- Fixed status log so that it updates only when ErrorCode changes

OBJECT EDITOR
- Added a new pull-down feature that allows you to sort child objects. This is useful for sorting OPC and variables.

FIND PROPERTY FORM
- Added new checkbox option called "Find Path Errors". This function will find all paths that don't resolve to a property. Note: This function only searches properties - not script contents.
- Widened the default form size.

OBJECT EDITOR

- Enhanced the Find (Ctrl-F) function. Now when you press Ctrl-F while a property is selected in the grid, the Find form will automatically be displayed with the property's text filled in for the search text and the SearchAll checkbox selected. The form will automatically search for the text and show the results on the form.
- Added Ctrl-S (Set bookmark) to set an object as a bookmark. Once the bookmark is set, you can return to it by pressing Ctrl-R (return to bookmark). Multiple bookmarks can be set and you can toggle to each one using successive Ctrl-R key presses.
- Added Ctrl-R (Return to bookmark).
- Added Ctrl-C (Clear all bookmarks). This button will remove all current bookmarks, allowing you to set new ones.
- Added Ctrl-G (Go to path). When a path reference is highlighted in the grid, you can press Ctrl-G and the object editor will display the targeted object. You can press Ctrl-R (return) to return back to the original object.
- Enhanced Ctrl-F so it will automatically search for an objects path. Click on the name of the object in the object editor grid and than press Ctrl-F. The system will place the path of the object in the searchfor text and perform a find.

SCRIPT EDITOR

- Added Ctrl-F find to scripting. You can also select some text and press Ctrl-F. The selected text will be inserted as the search text.
- Implemented the DisableClose property on screens. This property is used to eliminate the standard Back button in favor of a large self-designed Back button. This property is usually used on touch-screens.

CHECKSCOMPONENTS OBJECT

- Add GroupsOverride property so that you can check only one or two groups at a time.

CHECKSCOMPONENT OBJECT

- Add Stage1InputName and Stage2InputName to allow specific identification of the input in reporting.
- Changed the formatting of the reported inputs so that it will show True, False, and 0.0 formated numeric values.

SCREEN_BUTTON OBJECT

- Enhanced the VerifyText property so that you can define a different message on On and Off. By using a comma you can delimit which portion of the text is used. For example: If button is DownValue=True and UpValue=False, than you can use verifytext = "Are you sure you want to turn this ON?,Are you sure you want to turn this OFF?". You can also eliminate one verify or the other by starting or ending the text with a comma. For example, if DownValue=Auto and UpValue=SemiAuto, you can write the verifytext as ",Are you sure you want to change to SemiAuto?"

SCREEN_CHECKBOX OBJECT

- Enhanced the VerifyText property so that you can define a different message on OnValue and OffValue (see explanation
- above). When using a double-check (Style=2), the first text (preceding comma) applies to the 1st check and the second text (after comma) applies to the 2nd check. Note: At this time triple-check (Style=3) does not support the comma delimited

VerifyText. In this case, check2 and check3 will use the same portion of the verifytext.

INPUTS OBJECT
- Added ForcedObjects property to identify the path of each object that is forced. This property is updated on CountForces method.

OUTPUTS OBJECT
- Added ForcedObjects property to identify the path of each object that is forced. This property is updated on CountForces method.

OPCDEVICE, OPCTAG, OPCGROUP OBJECT
- Added ForcedObjects property to identify the path of each child object that is forced. These properties are updated on CheckForces method of the OPCDevice object.

SCREEN_GRID
- Changed editing so that the grid is updated immediately upon entering new values. Before, the value would shown only once normal screen update occurred.
- Added PartialUpdateLimit property which serves to define the object quantity above which the system will only update and display the viewed rows of the grid. If blank, than the system will continuously update all rows in the grid. This feature is useful in speeding up screens that are viewing multiple grids with many hundreds of objects.
- Added ObjectQty and StartObject to allow partial viewing of an object's children. The StartObject is the name of the first object in the sequence. The ObjectQty is the number of objects to view. Note: At this time StartObject and ObjectQty are not supported when using the PartialUpdateLimit feature.

ALL SCREEN ICONS
- You can now reference colors by the color name. For example, orange, org, ltorg, dkorg, yel, y, blk, ltgry, etc. This change only applies to icons at this time.

SCREEN_LABEL
- BackColor property now accepts dynamic path links allowing scripts and other dynamics to change label colors.
- Method property has been added. This property can be used to target an external method or screen show when someone clicks the label.

SECURITYSENTRY
- When adding a sentry in screen design, the system will as a default enter Operator as the permissible membership for the sentry.

SCREEN_GRID
- Added editing feature that allows you to directly type Del on the cell without entering edit mode.
- Added editing feature which causes the cursor to automatically increment to the next cell upon single-cell edit completion.
- Added multi-parameter editing which allows multiple property editing or deletion by first dragging and highlighting multiple rows for the selected edited column and then start editing.
- Enhanced RowMarkParameters, RowMarkValue, and RowMarkColor so that you can now insert a comma delimited list of parameters to color, values to color, and colors. For example, RowMarkValue = True,False and RowMarkColor = Grn,Red would show all True values in green and all False values in Red. You can also have a value as a Space to show blank entries as a specific color.

- Enhanced the RowMarkValue property so that you can now use comparisons. For example, if you want all entries greater than 5 to show as red and all entries less than 2 to show as green than RowMarkValue= ">5,<2" and RowMarkColor= Red,Grn. Supported comparison operators are <, >, >=, <=, <>.

SCHEDULEASSET
- Added StepValues property to show current step information
- Implemented CurrentStep property to show the current step name (ie. Move).
- Modified Runner operations so that steps are maintained persistently under the asset object. This simplifies the scheduling, speeds up runner operations, and maintains constant objects and scripts for each step.

SCHEDULER
- Modified scheduler to accomodate the new runner configuration (above).

SERVER
- Eliminated the 2 second ClearRefCollection command which served to clear the path reference list in case runner objects were deleted. This is no longer needed due to the changes in the Asset above.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.36)
InstallClient (Version 3.2.36)

Tuesday, June 13, 2006

Description

Version 3.2.37

SCHEDULERUNNER OBJECT
- Corrected calculation of Elapsed time property.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.37)
InstallClient (Version 3.2.37)

Monday, September 11, 2006

Description

Version 3.2.41

RECIPE object
- Added CRCChecking capability. New property includes CRCChecking. Contact ASC for document describing this feature.

RECIPE EDITING SCREEN (CPC)
- Added pull-down menu including ShowCRCCode and CRCChecking properties.
- Fixed bug that caused a mis-load of a recipe when the operator clicks down on one recipe in the list and clicks-up on another in the same action.

RECIPEPROCESSOR object
- Added CRCEnable, CRCMatch, and CRCCode properties..

BATCH/PART EDITING SCREEN
- Added feature that allows the Part Template's barcode prefix to automatically jump a part field entry to the correct row. This allows random barcoding of fields.

BACKUP OBJECT
- Modified the Backup object to properly save and restore object contents. The object now reloads object contents without first deleting the existing objects.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.41)
InstallClient (Version 3.2.41)

Wednesday, September 13, 2006

Description

Version 3.2.42

RECIPE EDITING SCREEN object
- Fixed bug that caused right-click menu not to be displayed.

PROCESSLINETIMEWAY
- Added fixed timeway objects and screens.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.42)
InstallClient (Version 3.2.42)

Friday, September 29, 2006

Description

Version 3.2.43

FLEXTIME-SCHEDULER

- New CraneCharacteristicsPath property in Scheduler object provides a means to have different velocity and accelerations for each crane in a multi-crane system. See help information for the object for more details.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.43)
InstallClient (Version 3.2.43)

Tuesday, October 10, 2006

Description

Version 3.2.44

CHECKS OBJECTS

- Fixed a bug that caused the Leak Test and other reports to show results for parts that didn't have probes attached. The report would show results for the previous part. This has been corrected.

PARTTEMPLATEMANAGER OBJECT and BATCH/PART ENTRY

- Added new function that disallows any part entry if that part is not in the part database. This function is enabled by setting the RequireAllPartsInDatabase property of the PartTemplateManager object. The function also disallows renaming the part that has already been added if the renamed part is not also in the database.
- Added new function that disallows any part that doesn't have a recipe match. When you set the DisallowPartsWithDifferentRecipes property to True, the system will not allow any part from the database that doesn't have a compatible recipe.

BATCH/PART ENTRY

- Screen now shows the auto-selected recipe (ie. from database) in a yellow label below the current batch parts listing.

RECIPEPROCESSOR

- Fixed a bug that caused LinkAttachment and LinkAttachmentsAndUnused methods to not operate properly when called from the BeforeStartRun quick-script. Because LinkAttachments is interlocked to not function when RunStatus=True, the system will now change RunStatus to False prior to issuing the BeforeStartRun script and then will set it back to True on exit.
- Added AutoSelectedRecipesOnly property. When True, this will cause the system to limit Recipe Transfer operations in the case where the system has already auto-selected a recipe in the parts screen.

RECIPESCREEN

- Screen will now limit Recipe Transfer operations in the case where the system has already auto-selected a recipe in the parts screen. You will be able to Transfer the same recipe, but any other non-compatible recipe will not transer.

SCREENVIEWER

- Enhanced the AllowAction property of screen icons. You can now enter a "not" before the path to indicate a reverse criteria. For example, "not .autoclave.recipeprocessor\runstatus" will allow the action when the run is not active.
- Enhanced the Visibility property of screen icons. You can now enter a "not" before the path to indicate a reverse criteria. For example, "not .autoclave.recipeprocessor\runstatus" will make the icon visible when the run is not active.

TCPTALKER and TCPLISTENER

- New objects used for communications between two systems via TCPIP. Now two separate CPC/Flextime systems can transfer information to and from other separated systems for viewing or other reasons.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.44)
InstallClient (Version 3.2.44)

Saturday, December 09, 2006

Description

Version 3.2.50

SERVER OBJECT

- Added TotalPhysicalMemory, AvailablePhysicalMemory, TotalVirtualMemory, and AvailableVirtualMemory properties to the server object. These properties are updated every 1-2 seconds.

TCP VARIABLE

- Added Get and Set methods to be able to read specific property values from a targeted system.
- Added Performance, LastTimeGet, and Received property to the variable object. This tracks times when Get or Set methods are utilized.

RECORDSET

- Added DisableUpdate property. This property is used to disconnect all DBGrid icons from the recordset and stop updating from the database. It is useful in insuring that no references are active to a database.

SCHEDULER
- Added SaveSchedule functions to Lift, Drop, and other actions.

SCHEDULERUNNER
- Added Filepath, Save, and Load

SCHEDULEASSET
- Added AssetShiftTime to be used to resyncronize the asset timer with the RunTimer.
- Fixed problem where Shuffles caused the Start and End reservations to not be stretched.

CLIENTDEFAULT
- Added a feature that lets you maintain multiple ClientDefaults categorized to each client computer. Put a ClientDefault object named for the client computer name below the main ClientDefault object and

AGILENT34980
- Enhanced the failure and error checking for the Action and main object
- Increased the fail-timer from .2sec to 1sec to avoid issues with timing.
- Changed the personality so that the unit is automatically closed when there is an error or timeout. This will require scripted Opening.
- System will hang for 10sec and then Close if cable is pulled or unit is turned off. Subsequent Open commands will cause another 10sec hang, so it is recommended to only retry the Open command in scripting once every 30 seconds or so.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.50)
InstallClient (Version 3.2.50)

Saturday, Febrary 3, 2006

Description

Version 3.3.1

FLEXTIME SCHEDULER
- Modified scheduler to properly deal with PremoveShuttle operations that are required at the beginning of the schedule. This condition occurs when you use a shuttle station as a load station.

OBJECT GRID
- Enhanced the grid so that you can display children properties in the object grid. By using a colon (:) in the parameter name property you can indicate that the property comes from a specific sub-child. For example, if you want to view all Inputs with a grid and display the Value of each input and the TypeName and GroupName from the Type and Group sub-children, than you can enter "Value,Type:Typename, Group:Groupname" for parameters. The editing capability also works for this.

SCRIPT OBJECTS and QUICKSCRIPTS
- Fixed a bug that did not allow the IsObject function to work properly with object property assignments.

EXCEL OBJECT
- Added a new object for creating, reading and writing to Excel files. The object incorporates help information for each property and method. This object can be used to store real-time data to Excel during a run.

FLEXTIME GID
- Added an Optimizer tab to the GID screen that allows on-line optimization of fixed-cycle recipes.

RECIPE LOOPING
- Added option that allows recipe looping to be based on # of cycles rather than # of repeats.

REPORTING - NUMERIC
- Fixed a reporting bug that caused the system to display and/or print overlapping tag names when the tag name length exceeded 7 characters. The system will now reduce the font of the longer tag names in order to fit them within the fixed column.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.2.51)
InstallClient (Version 3.2.51)

Wednesday, May 30, 2007

Description

Version 3.3.2

SCREEN VIEWER
- Added BackgroundImage property to form.
- Dial icon now has more styles. Dial, Meter, LED, Dial2, LED2
- Added ability to use a MethodRedirector to have a single button run a method from different objects.

PROCESSLINECRANES
- BeforeCalculate script
- AfterCalculate script
- CheckCollisions method

PROCESSLINECRANESIMPLE
- SafePosition property

PROCESSLINECRANEAXIS
- StationChangeTime property

CLOCK TIMING

- Upgraded the clock subroutine used for Flextime scheduling and other tasks so that it accomodates time changes without adverse affects.

BOEINGINTEGRITY OBJECT
- Added WriteMemo method and Memo property. These are used to provide ascii-text version of the BoeingIntegrity check status for upload to PDA or other text-based display.

CLIENTCONNECTION object
- Added ForceClientUpdate and LastComm to ClientConnection object. The LastComm will indicate the time of last communication with client. The ForceClientUpdate is used to force the client to update screens that are using DBGrid with DisableUpdate property set.

METHODREDIRECTOR object
- This new object is used to retarget a client screen's icon to different methods and/or objects. The client button would be pointed to the Redirect method of this object, and then you can programatically change the MethodPath to retarget or redirect the call.

PLC_IngearAB
- Added communications drivers that allow bidirectional communications with all Allen Bradley PLC products without the need of an OPC server. The driver is an Ingear product.

PLC_Transfers and PLC_Transfer
- Added this object to transfer information from software to Allen Bradley PLC via the PLC_IngearAB object.

IO_Input_PLC
- Added this object to communicate with PLC_IngearAB

IO_Output_PLC
- Added this object to communicate with PLC_IngearAB

GRID ICON
- Changed "ChildName" property to "DynamicSource". This property lets you target the grid dynamically using a path in a variable.

PROCESSLINE_SRABG
- Modified production list to implement new prioritization

SCRIPT ENGINE
- Enhanced error checking to trap for mathematical or comparisons between values and objects that are missing the property designator. Before these were not properly identified as an error. For example, "Value = .autoclave.inputs.PTC + 5" would not generate an error even though the object was missing the "\Value" portion.
- Added a check for recursive calling of the same script object.
- Added a check on quickscripts to make sure that they are not accidentally recursively called from their parent object. This is

possible if using, for example, the BeforeCalculate script and accidentally call the Calculate method of the object.

DATABASE AND RECORDSETS
- Added DSN-less connection to databases including MSSQL, MYSQL, and ORACLE.

DATA ANALYZE REPORTING
- Changed the numeric reporting so that when reporting more than 10 sensors, the first report section will be separated from the second (11-20) by a page-break. Before it was not page breaking.

CERTIFICATIONS
- You can now leave the certification screen, and the certification process will continue. On leaving the screen, the system will ask whether you want to continue the process. The actual certification continues even if the screen is not active.

EVENT LOG POINT
- Fixed bug that utilized the wrong deviation reference property.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.3.2)
InstallClient (Version 3.3.2)

Saturday, Setpember 8, 2007

Description

Version 3.3.11

SCREEN COMBOBOX
- You can now use a path-property assignment for Contents property. This allows you to dynamically change the list via another property.

SCREEN LISTBOX Object
- - Added BeforeClick
- - Added AfterClick
- - Added Visibility
- - Added AllowAction
- - Added TabIndex
- - Added UpdateOnClick

COMBOBOX
- Enhanced the database recordset viewing capability. When configuring the combobox for recordset field display, you can now place two fields in ContentProperties (ie. Finish,FinishID) and the system will display the first field in the combo but use the second field as the Value selection.

SCHEDULER

- Added property "LoadRecipeFromPart" which forces the scheduler to load the recipe from under the part. This is useful if you want the operator to be able to change values on the running recipe before the run begins.

PROCESSLINESHUTTLE
- Added new 4-position shuttle style. Type = "HighMid2MidLow". New position MID2 is between MID and HIGH.

TANKLINE ICON
- Added LabelsPath property which allows labels to be shown on the tankline. Create a Folders object and point the LabelsPath to it. Inside this Folder you can place ProcessLineLabel objects which each define one line of text.
- Added PayloadIndexOnly property which causes the system to only print the bar index instead of the entire payload name.

SCRIPT ENGINE
- Added "MyGrandParent" alias. This represents the parent object of MyParent.

PROCESSLINETIMEWAY OBJECT
- Modified timeway object to allow single timeway and runner.
- Added feature to show list of commands in timeway editor.
- Added feature to show list of command properties in the timeway editor.

PROCESSLINESHUTTLE OBJECT
- Added new Tankline icon screen properties for the Mid2 position, including MidPosition and Mid2Position for positioning the screen box in the correct location.

PROCESSLINEPAYLOAD OBJECT
- Fixed the bug that caused the system to incorrectly report "NextAvailablePayload" when a payload was on a crane or a shuttle.

SCRIPT ENGINE
- Added many Collection, GetCollection, and SetCollection functions. These are used to assemble objects into a collection and filter and parse them.

OBJECT EDITOR
- Changed the personality of Ctrl-F (find) so that it will search by the property path for the property that is being highlighted in the object editor grid. If the grid cell content is a path, than it will search for that path string.

CPC RECIPES OBJECT
- Changed CRCValue to show whenever recipe is transferred to the equipment. Before it would only function if CRCChecking was enabled in the Recipe object.
- AutoLoad function. There is now a property WasErrorDuringLoad that turns True when there was an error

during the recipe download procedure. There is also an ErrorLog object that shows what errors occurred.

PROCESSLINETIMEWAYRUNNER OBJECT
- Added OnStop and OnStart to runner.

SCRIPT ENGINE
- Added Shell command. This lets you run an executable or batch file from script. Syntax is: Junk = Shell("C:\Windows\System32\Dcomcnfg.exe", 1). Note: options entry 0=hide, 1=normalfocus, 2=minimized focus, 3=maximized focus, 4=normal nofocus, 6=minimized nofocus.

TREND CONTROL
- Fixed the lock-up problem on trend screen after trend was reset.

SCRIPT VIEWING
- Fixed bug that caused a quickscript to be partially deleted when a user with ViewOnly access opened the quickscript via the objecteditor.

GROUP object
- Added ActionChangedBy property to indicate which process changed the group's ActionValue. The system will set this when the action value changes. The possible entries are LinkAttachments, LeakTestStart, LeakTestEnd, ActionOnValue, LineControl, and Manual (although this must be set via custom scripting).

RECIPE_ACTIONONVALUE object
- Added PartIndexToSet, DeactivatePart, and ActivatePart property and methods. These are used to deactivate or reactivate the ActionOnvalue operations for a specific part. This was first required for Customer:Minco who needed to re-enable this AutoBagBreak feature after the operator had taken corrective action.

INGEARPLC
- Added DoEvents to looping function for SerialDF1 communications with AB. This was required for normal operations using this driver.

SCREEN_CALENDAR
- Added calendar function on the screen builder. You can add Calendar icon and set to either "DatePicker" or "MonthView" mode. Use this when selecting a data for database reporting and other event operations.

SCREEN_GRID
- Added ability to have variable settings for colors. Rather than say ">100" for Red, you can program .Tankline.variables.AlarmSetting\Value. In this case, all rows will use the same variable setting.
- Added ability to have child variable settings for colors. This is used to have different settings for each row. Instead of saying ">100", you can enter

"child(.Tankline.Variables.TempAlarmSettings)" which indicates the parent of variable objects used for the alarm setting. In this case, each variable object below the parent represents a specific row setting for the grid, numbered 1-max rows.

VAULT OBJECT
- Added the CPCVault capability. This object allows you to store values and object properties to a remote vault storage (CPCVault). See Topic Sheet

BACKUP OBJECT
- Added VaultPath and changed operation so that it can use the Vault. See Topic Sheet.

PROCESSLINECRANESIMPLE OBJECT
- Added AfterTransferToStation and AfterTransferToCrane quickscripts.

PROCESSLINESCHEDULER OBJECT
- Changed ClearSchedule method so that it turns off the TimerEnable and zeros the TimeElapsed in stations that are unoccupied.

PROCESSLINESTATIONS OBJECt
- Added ChangedStation property and AfterStationChange script. This script runs after any station's Occupied status changes. It can be used to run a script for saving and/or backing up station properties.

PROCESSLINESTATIONS OBJECT
- Added ChangedStation property and AfterStationChange script. This script runs after any station's Occupied status changes. It can be used to run a script for saving and/or backing up station properties.

OBJECT EDITOR
- Further enhanced the Ctrl-F operation. If you click on an object in the Tree, you can now press Ctrl-F and the system will automatically search for that object (ie. .Autoclave.Inputs.PTC1). This will also happen if you click on the Name property in the object grid. For any other properties, the system will search for that specific property (ie. .Autoclave.Inputs.AIRTC\Value).

FilesUpdated on Server and Web-Site

InstallServer (Version 3.3.11)
InstallClient (Version 3.3.11)

Tuesday, October 31, 2007

Description

Version 3.4.14

SCREEN COMBOBOX
- You can now use a path-property assignment for Contents property. This allows you to dynamically change the list via another property.

OBJECTEDITOR
- Changed the object editor so that if it displays an object with no name, it will rename that object "Name_1" or "Name_2" depending on its child position. This feature will allow reuse of objects.g that have a single corrupted object.
- Added menu item "ForceClose". This closes the object editor and returns it to its normal startup state.

SCHEDULEREGROUPING
- Enhanced operations of schedule regrouping

PROCESSLINESTATION
- Added RegroupStations property to define the stations in the group. Used for rescheduling operations.

POPUP SCREENS
- Changed the minimize feature so that it closes the form rather than minimize. This allows it to reestablish itself when being shown in the future.
- Disabled mimimize if DisableClose property is set to true.

SCHEDULEREGROUPING
- Added feature of rename-only during regrouping. New comma list is provided in Stations object's RegroupStationsForRenaming property. This causes the regrouping to do a name replacement regroup rather than a duration shift.

STATIONS OBJECT
- Added RegroupStationsForRenaming property for rename operations.
- Added Regrouped property to indicate that a regroup has occurred for this station.

ICS5000SERIAL
- Modified object to properly queue methods during an ASYNC event. Added QueuedMethods property to retain methods due for operation.

CLIENTSHELL
- New object created to launch programs from the client computer.

CPC RECIPEPROCESSOR
- Added a check that disallows a run if the RecipePath property is blank. This can be an easy way of forcing the operator to choose a recipe before allowing a run to start.

CPC PARTDATABASE
- Modified the AddPart button so that it creates a part and fills in the PartNumber (or whatever is currently in the Template for SelectionField to "NewItem" (same as in the list)

CPC BATCH ENTRY
- Fixed bug that caused system to disallow alternate part fields that weren't in the database.

CHECKSLEAK
- Modified leak check so that each childpart reports the sensors on the ParentPartIndex part.

QUALITYREPORTS
- Fixed bug that caused the Global MaxAir and Global MaxPress to not report properly.

SCREEN_TEXTBOX
- Added PasswordCharacter property which lets you hide the textbox entry with a password character (ie. *).

DATASAVING
- Added new DateFormat property that lets you define how the date is formatted in the auto-naming function.

CHECKSLEAK
- Added StartTime and EndTime to the leak test report.
- Added new feature which checks whether the settings were changed during the test. If they change, the test will fail.

OBJECTEDITOR
- Copy of Group object now properly increments ActionTarget property when original target is equal to the parent object.

SCREEN EDITING
- Array copy now properly increments Caption property of Frame icons.

RECIPE EDITING SCREEN
- Added warning messages if SaveToStorage operations fails (ie. network inaccessible) on Recipes and Recipe folders .

PARTTEMPLATEMANAGER
- Added MultipleRecipeSupport property to allow multiple recipes to be applied to a single part in the database.

BATCH ENTRY SCREEN
- Added features for multiple recipe selection per part. See topic sheet Word document for more information on this new feature.

RECIPE EDITING SCREEN
- Added "Show Parts" right-click menu option which shows all parts that use the specific recipe.

SCHEDULER

- Added DripTimeForFirstLift property to create a drip reservation on the first drip of a schedule.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.4.14)
InstallClient (Version 3.4.14)

Tuesday, November 13, 2007

Description

Version 3.4.15

DATAANALYZE
- Screen format changed for proper operation on low-resolution screens (ie. 1024x768)

FilesUpdated on Server and Web-Site
InstallServer (Version 3.4.15)
InstallClient (Version 3.4.15)

Tuesday, November 26, 2007

Description

Version 3.4.16

DATAANALYZE/QUALITY CARDS
- Fixed bug that improperly accounted for readings of disabled thermocouples during RampTime calculations in quality cards.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.4.16)
InstallClient (Version 3.4.16)

Tuesday, November 28, 2007

Description

Version 3.4.17

RECIPE EDITING SCREEN
- Fixed bug that caused new recipe revisions to be limited to A only.

DATAANALYZE
- Fixed bug that caused recipe print preview in the data analyze screen to occasionally not show certain rows.

FilesUpdated on Server and Web-Site
InstallServer (Version 3.4.17)
InstallClient (Version 3.4.17)

Monday, December 3, 2007

Description

Version 3.4.18

SCRIPTING MEMO PAD
- Added Memo Pad feature to scripting. This provides an easy way of viewing real-time values and other information generated in scripts. Request a CPC Topic Sheet for more information.

QUALITY CARDS
- Changed card naming so that the object name will be renamed to the title. This also affects how cards are loaded. When a card is loaded, the system will rename the object to the Title of the card being loaded.
- When you change the title in the editor, the system now asks whether you want the stored card file changed as well. If you answer yes, the stored file is deleted and saved with the new name.
- You are now not allowed to have duplicate Titles in cards. The system will override this operation.
- You are now not allowed to blank the Title property. The system will override this operation.
- The name of a pasted card will be the copied card plus an index number
- Phase object names are now changed to their Title. Note that duplicate Phase titles are allowed.
- Fixed a bug that caused the quality card temperature rate analysis to fail and lock when RateCalcInterval was <= 1 and no readings were available within the selected rate range.
- Changed card logic to use the default DataAnalyze RateCalcInterval when the card's RateCalcInterval is blank.

DATAANALYZE OBJECT

- Added new method "RenameQualityCards" which serves to rename all quality and phase objects to their titles. This is a one-time method used to rename quality objects from older systems.

OBJECTEDITOR - OBJECT LOADING
- Changed the filter on loading dialog box so that you can load in .QCD files (quality cards) directly from the Object Editor.
- If an .obf or .dat file does not have a parent object, the system now creates a Folder object to store the loaded contents during load operations.

OBJECTNAMING
- Changed the ObjectName function so that it properly increments object names. This affects object names in screens and also object editor. Before, the system would choose a random number when entering new objects. The result was screen icons such as: Button28379. This has now been changed to create indexed objects with indexes starting at 1.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.4.18)
InstallClient (Version 3.4.18)

Sunday, December 16, 2007

Description

Version 3.4.19

MESSAGE SCREEN
- The message screen has been modified to require that a specific equipment tab be selected before the “Add Message” button and textbox are enabled.

DATAANALYZE SCREEN – MESSAGES
- The message font has been reduced to 9-point. This allows more to fit on one page.
- The Columns have been repositioned to maximize the Message field.
- The “Operator” type field has been bolded to make operator messages stand-out more.
- The message reporting text now wraps if the message is too long for the field column (see below).

QUALITY REPORT – ALL PARTS
- Changed thermocouple Ramp-Time analysis so that it pre-qualifies thermocouples by requiring them to be enabled at the beginning and ending of the phase before performing the analysis. *The system previously was issuing an “Incomplete analysis” message on thermocouples that were disabled within the phase.*

FilesUpdated on Server and Web-Site

InstallServer (Version 3.4.19)
InstallClient (Version 3.4.19)

Tuesday, January 22, 2008

Description

Version 3.4.23

SERVER OBJECT
- Changed the way OnStart script for the Server object runs. Normally, OnStart does not start if the TaskingEnabled property is False. When you finally enable the Server object (TaskingEnabled = true), the system would start tasking but would not rerun the OnStart script. Now, OnStart will run when TaskingEnabled = true, but will not rerun if you toggle TaskingEnabled False and then True again.

PROCESSLINE_SRABG
- Changed the CheckDatabase function to show the time of the test.
- Added a new check to the CheckDatabase function. The system will now scan all PartNumber entries (LoadPartAll, LoadPartLH, LoadPartRH, LoadPartBot, etc.) in the Rack table and confirm that those parts are in fact real parts in the Parts table.

POPUP SCREEN EDITING
- Changed the object editor, screen icon editor, and script editor so that they properly show "on top" of the pop-up screen during editing sessions. Because the Popup screen is a "OnTop" style of screen, the other editors were being placed behind the popup form.
- Fixed the image bug that caused an icon on the main screen to change whenever a popup screen image was changed.

SCRIPTING ENGINE
- Added "WeekDay" function. This returns the day of the week for the date operand. Sunday=1,Monday=2...Saturday=7.

BUTTON ICON
- Fixed the bug that caused multi-state screen icons to not inherit visible and allow-action attributes properly.

PROCESSLINESHUTTLE
- Fixed bug that caused the Part property to not transfer properly during TransferPayload method of the shuttle.

COMBO BOX
- Added new DynamicPath True/False property. When True, the combo-box ContentsObject property can be pointed to a variable value that has a dynamic path. With this function, you can dynamically change the contents of the combo box.

TANKLINE ICON

- Shortened the height of the buttons to 1.5x font size (9pt)
- Changed zoom button color to same as background
- Added Font and FontSize properties. This adjusts the font used for buttons, button height, and also the mouse-over payload information.
- Added "Recipe" to the payload mouse-over information.

PROCESSLINEMETERINGPUMP
- Changed the object operations so that if the VolumeToPump is zero than it turns the PumpSetpoint and PumpOutput OFF.

PROCESSLINECRANEAXIS
- Enhanced the object so that if an operator types a wrongly-cased setpoint entry (ie. "11_etch"), the system will convert it to the correct case (ie. "11_ETCH") based on the available stations.

SCRIPT OBJECT
- Added TimeIntervalSet property which is used to regulate the operation of a script object. By entering a time in seconds, you can define how often the script runs even though it's method is called at a much higher rate.

QUALITY CARD ANALYSIS
- Added Global Analysis (air temp, press, and vac probes) analysis to the "Quality All Parts" report. Prior to this Global analysis was only occurring on Batch Quality reports.

FilesUpdated on Server and Web-Site

InstallServer (Version 3.4.23)
InstallClient (Version 3.4.23)

Tuesday, January 29, 2008

Description

Version 3.4.26

PLCTRANSFER OBJECT
- Modified the Address property so that it accomodates SLC500 and PLC5 addressing. Now you can enter N7:1 or N7 with a startindex and it will start the read table from the correct index.
- Added feature that allows a blank PLCObjectPath. If the PLCObjectPath is blank, than the system will use the parent (or grandparent) PLC object. This feature is useful when communicating to multipe PLCs (ie. rectifier PLCs) so that you can copy each PLC object and don't have to change all of the PLCObjectPaths.

SCREEN OBJECTGRID
- Fixed bug that disallowed a cell from being deleted with the Del key for cells that had ParametersToEdit set.

QUALITY CARD ANALYSIS
- Fixed bug that caused phase changing "OnPhaseTime" to fail.

Sunday, August 03, 2008

Description

Version 3.5.0

SCREEN DESIGNER

- Added new feature that allows a single Alias to be applied to dynamic object paths. This allows a single screen to be designed to show multiple views of a specific type of object. For example, you can now design a single screen that shows aspects of a Station object (ie. Alias = 1_LOAD) and then dynamically change the alias to other stations without having to duplicate the screens. See new Topic Sheet for capababilities.

SCREEN_COMBOBOX

- Added property LinkToScreenAlias which instructs the system to change the current screen's alias to the value displayed in the combobox. This is useful if you want the screen to change to another topic using a combobox.

SCREEN_LISTBOX

- Added property LinkToScreenAlias which instructs the system to change the current screen's alias to the value selected in the listbox. This is useful if you want the screen to change to another topic using a listbox (ie. list of ICS5000 objects).
- Added FontSize property to the icon so that it would properly address font sizing.

SCREEN_BUTTON

- Added PresetScreenAlias property. This property is used for two purposes. If the button is targeting the Show method of a screen object, than the button can preset the alias for that screen. In this case you enter the alias value into the property. If you want the button to set the alias property of the current screen, than you must use ME= prior to the alias assignment. For example, ME=23_Anodize will set the current alias to 23_Anodize.

SCREEN_CHECKBOX

- Added PresetScreenAlias property. This property is used for two purposes. If the button is targeting the Show method of a screen object, than the button can preset the alias for that screen. In this case you enter the alias value into the property. If you want the button to set the alias property of the current screen, than you must use ME= prior to the alias assignment. For example, ME=23_Anodize will set the current alias to 23_Anodize.

2/18/08

SCRIPTING

- Fixed the bug in function CommaListValue and CommaListCount so that they work properly with non-unique values.

CERTIFICATION OBJECTS

- Added SavePath to certification objects. This allows you to target the certification save to a specific folder (ie. C:\Certifications).

DATAANALYZE OBJECT
- Added ExportFilePath property to the object. This property is updated automatically to the targeted export path so that future exports will use the same folder.

SCHEDULER STANDARD
- Added Payload name to all status messages.

SCRIPT OBJECT
- Changed interval timer so that it resets properly if lasttime is greater than the current time or if the difference between current time and lasttime is greater than 100 seconds.

OBJECT EDITOR
- Added the MultiSelect pulldown menu item. This displays the multiselect form that is used to group-edit or group-copy multiple objects. See topic sheet for more details.
- - Fixed the copy bug that occasionally caused a copied object to disappear.
- Changed the child copy function so that it automatically exposes the children and copied child after the copy operation is completed.

SCREEN_IMAGE ICON
- Added the PresetScreenAlias property so that the image can set the screen alias for subsequent screen.

RECIPE_RAMPSOAK
- Added a FloatAlarmDeviation and FloatStartValue property to track when a float operation goes the wrong way. This will now cause an alarm and will disable float for the remainder of the segment. This is used primarily in cases where the pressure inlet valve is leaking on an autoclave and the float function tracks pressure up instead of down.

SNMP COMMUNICATIONS
- CPC now includes the ability to communicate to SNMP devices (ie. printers, ups unit, etc.). There are two new objects. If you want to impliment, then request the new topic sheet instructions on this feature.

DATAANALYZE REPORTING - PDF CREATION
- You can now specify the printer to be used for reporting in the reporting screen. A new property in DataAnalyze object will allow you to programmatically set the printer target as well.
- Implemented a new feature that will allow CPC to create PDF reports (individual or combined) and route those PDFs to an alternate programmatic destination (ie. server folder). If you want to impliment, then request the new topic sheet instructions on this feature.

MESSAGE VIEWER HELP FEATURE
- You can now assign specific help information to each Alarm object and then that help information will be displayed in the message viewer when an operator clicks the message. This only works for alarm messages that are activated by Alarm

objects. Any message that is self-generated during operation (ie. recipe messages) will not have help information.

SCREEN_VALUELIST ICON - QUICKVIEW SCROLL BUTTONS
- You can now add UP and DOWN scroll buttons to the quickview form when using the ValueList icon. A new property in ValueList called "ScrollBar" can be set to the top and bottom input name that can be scrolled to (ie. PTC1,PTC40) The entries must be separated by a comma.

Saturday, September 6, 2008

Description

Version 3.5.1

INPUTVIEWER FORM
- Added CLOSE button for touchscreen access
- Increased size of Tag field
- Increased size of Up and Down buttons

SENSORGRID ICON
- Added the Up and Down scroll bars
- Added property "ScrollBar"

VALUELIST ICON
- Added HDRA, HDRB, and DRN prefixes for Group actions.
- Changed color of input to Yellow for HDRA and HDRB
- Changed color of input to Blue for DRN

OBJECTGRID ICON
- Added the ability to edit memo-style properties (ie. AlarmHelp, HelpText, etc.)
- Added property "MemoParameters". This property indicates which edited parameter will use the Memo form for RTF editing.

Saturday, September 30, 2008

Description

Version 3.5.3

SCREEN VIEWER
- Fixed the background image bug that caused the background of the image to occasionally not display properly.

DATALOGGROUP OBJECT
- For SQL database calls, the system now updates the RecordCount when Open method is called.

SCRIPTING
- Added MKI, MKS, and MKL functions. These functions convert integers, single real numbers, and long integers to binary ascii equivalents. This is useful if you need to join integers in order to make a floating-point result.
- Added CVI, CVS, and CVL functions. These functions convert ascii character strings to integer numbers, single real numbers, and long integer numbers..

- Added PRINTERS function. This returns a comma-list of all printers on the CPCServer computer. You can use this list to populate a combo box or listbox.

Wednesday, December 10, 2008

Description

Version 3.6.0

SCREEN GRID
- Fixed an editing bug that was caused when Del key was pressed on an edited parameter concurrent with StartObject property being set.
- Fixed an editing bug that caused the Combo Editing to malfunction when StartObject property was being set.

QUALITY CARD
- Fixed bug that occasionally inverted the ramp rates during Pressure "Ramp" analysis.

EXCEL OBJECT
- Added a file dialog box when you click on Filename property.

WEBSERVER
- Added a web-serving capability allowing CPC information to be displayed to web-browsers. The capabilities include read-only and read/control.

WEBFIELD
- This is a web field used for the web-server.

WEBGRID
- This is a web grid used for the web-server.

WEBFILES
- This is a filelist web element used for the web-server.

CERTIFICATIONS
- Fixed bug that caused settings to change when pressing the "Reset" button. This only happened when settings were changed in form and reset was pressed.
- Changed certification screen so that input readings are still updated when PAUSE is selected.

SCREEEN_SHAPE ICON
- Added Transparent, TransparentStyle, and TransparentColor properties. Shape icons can now be used as screen hot-spots.

Thursday, December 11, 2008

Description

Version 3.6.1

SCREEN_SHAPE ICON
- Added "Invisible" to the TransparentStyle property.

RECIPE EDITOR
- System now disallows recipe transfer when the recipe has no segments. Issues an alert message.

RECIPE_CASCADE OBJECT
- Added "DefaultSetpoint" property. This is the default value that will be used in segment #1 if the recipe writer enters a blank Value for TemperatureValue. If the default setpoint is blank, than the starting setpoint will be zero (0).

CERTIFICATION OBJECT
- Fixed a bug that caused an additional sheet to printout for a certification report if the report included more than one full page of log entries.

DATAANALYZE OBJECT
- Added "SuppressDisabledTCChar" which can be set to True in order to suppress any indication of disabled thermocouples. Requested by AIDC.

Wednesday, December 31, 2008

Description

Version 3.6.2

OBJECT EDITOR
- Added the ability to save to OBF file a multiselection. Click “Multiselect” in the editor, Ctrl-select the objects that you want to save, and then press the “Save to OBF” button. This will store all child objects into one OBF file.

OUTPUT_PID
- Added an output ramping feature that allows you regulate how fast the PID output changes in the up or down. The feature utilizes three new properties: RampUpTime, RampDownTime, and OutputGoal.

Friday, January 9, 2009

Description

Version 3.6.3

DBGRID ICON
- Fixed the bug that occasionally allowed a delete key operation to erase a database field.

MESSAGEMANAGER
- Fixed bug that allowed the screen to scroll up one line when viewing the last line in the alarm listing.

ATTACHMENT GRID
- Added a feature that defaults the action buttons (ie. VAC, OFF, HDRA, etc.) to the last action selected when selecting multiple attachments for a specific part. This is reset to the original default when selecting a new part.

Saturday, January 17, 2009

Description

Version 3.6.4

TREND SETUP
- Widened the form to show longer input filenames

IO_IN_SPECIAL
- Changed “Median” type to be more consistent with true median definition. System will now choose the middle sensor of an odd set or the average of the 2 middle sensors for an even set. Tagname is updated to the appropriate tag or two tags (ie. AIRTC1-AIRTC5) for even sets.
- Added type “MedianHigh” which works similar to Median, however when it chooses the median of an even set, instead of averaging the two middle points, it will select the highest of those two.
- Added type “MedianLow” which works similar to Median, however when it chooses the median of an even set, instead of averaging the two middle points, it will select the lowest of those two.

VALUELIST ICON
- Changed colors for HDRB and DRN types according to Boeing request.

SCREEN PRINTING
- Fixed the bug that caused the screen background image to clear when using the print-screen feature.

BUTTON ICON
- Added a “PRINT” option for the PostMethod property. If you enter “PRINT” into the PostMethod property of a button, the

button will act like a print-screen button, allowing a print-screen of popup screens.

OUTPUT_PID
- Added “RampRegion” property which defines what region of the PID output ramping occurs. The options are “All” (or blank) indicating region 0-100%, “AboveOffset” indicating BandOffset%-100%, and “BelowOffsett” indicating 0%-BandOffset%.
- Also changed RampUpTime and RampDownTime properties so that the time is based on the region’s percentage range and not just 0-100%. For example, if region is “BelowOffset” and BandOffset is 50%, than a RampDownTime of 10 seconds indicates that it will take 10 seconds to ramp from 50% to 0%.

Saturday, April 5, 2009

Description

Version 3.6.11

ObjectEditor
- Added Multiselect saving of objects so that you can save multiple object siblings and load them in at one time.

Output_PID
- Added RampUpTime, RampDownTime, and OutputGoal. These work together to provide a ramping function for output changes allowing you to regulate how fast the output changes.

Trend Setup
- Widened the form to show longer input filenames

IO_Input_Special
- Changed Median to be more consistent with true median definition. Now chooses the middle sensor of an odd set or the average of the 2 middle sensors for an even set. Tagname is also updated accordingly.

ValueList icon
- Changed colors for HDRB and DRN types.

ScreenPrinting
- Fixed the bug that caused the screen background image to clear when using the printscreen feature.

Button Icon
- Added PRINT option for PostMethod to trigger a screen print of the current screen or popup.

Output_PID
- Added RampRegion property defining what region of the PID ramping occurs. Also changed RampUpTime and RampDownTime so that the time is based on the region and not 0-100%.

Database object

- Added Password property to allow database object to connect to a password-protected file.

Scripting - DBOpen function
- Add the ability to open a password-protected file.

Usage: DB = DBOpen(.Database\Filepath,"password=xyz")

Recordset object
- Added Password property to allow Recordset and DBGrid icons to open password-protected files.

DatabaseReport
- Added password property to support password-protected databases.

ServerReport
- Added a Print method to the ServerReport object so that you can now configure auto-reporting via Notifications objects.

Security Login Form
- Modified so that the system closes the database link when the login form closes.

Checks object
- Added capability for multi-state sources from dual headers. New property SourceMultiStateB.
- Added ability to show the subtype (ie. A or B) on the probe printout.
- Added property Headere2SubType which indicates which SubType denotes a probe is connected to the 2nd header.

CheckAttachments object
- Added property DisallowMultipleHeaderOnPart which creates a check on source lines which indicate a failure when soures are connected (multistate) to two different headers for a single part.
- Added properties ProbeBHigh and ProbeBLow which are used for checking probes that are attached to parts connected to 2nd header.

PartTemplateManager
- Added property SetSubTypeForMultipleHeaders used to trigger the setting of a probe's (PRB) SubType property to A or B depending on whether a dual-use vacuum line is configured for HDRA or HDRB on the same part. This is only used for specific Boeing autoclave configurations.

ValueList icon
- Changed colors for HDRB types.

DataAnalyze
- Added SourceMultiStateB property to indicate multistate sources that use the 2nd or B header.
- Added QualityDualHeaders to allow a second header setting to be programmed for Vacuum analysis.

DataManager

- System now saves Type:SubType property in the InputNames group.

Recipe_Cascade object
- New Rate-Control algorithm and properties are included. See ASC Topic Sheet for more details.

Tuesday, December 1, 2009

Description

Version 3.6.13

PartTemplateManager
- Added new property RetainPartToAdd which instructs the system to retain the Part To Add textbox contents on part entry.

Tuesday, January 10 , 2010

Description

Version 3.7.0

Screen Viewer
- Added ScreenAlias capability to DBGrid, Grid, and Trend icons.

DataAnalyze Reporting
- Enhanced and changed the "Printer" property so that you can enter "Default" and the system will revert to the Windows Default printer whenever entering the screen. Also, this property only affects manual printing and not automatic printing of reports.

- Added "PrinterForAutoReport" property which is used to select a printer during auto-reporting. The property also accepts "Default" setting to select the Windows default printer or "Manual" which will cause the AutoPrinter selection to mirror the Printer property.

Custom Classes
- Implemented new classes called CLASS and CLASS ELEMENT that collectively allow a configuration engineer to create custom classes which can include properties, methods, and quickscripts. Custom classes are registered via ObjectEditor's menu "RegisterAsClass" option and are saved in the application path sub-folder called "CustomClasses"

SCRIPTING
- Added new function "RunQuickScript" that allows a script to execute another object's quickscript. For example: Junk = RunQuickScript(.Autoclave.Inputs, "BeforeRead")

Thursday, January 14, 2010

Description

Version 3.7.1

Screen Trend Icon
- Modified ScreenTrend Setup Form so that Viewed Points would work with aliasing.
- Changed “Title” property so that it works with Screen Alias functions and dynamic path property.

Modbus object
- Fixed issue that caused object to not allow multiple comports in the modbus object.

Monday, January 18, 2010

Description

Version 3.7.2

CUSTOM CLASS CHILDREN
- Added new class type called "ClassChildren" which is used to define children of the custom class. Children are required if the object created from the custom class needs to access child objects (ie. in quickscripts). This Children object also allows you to test scripting prior to registering the CustomClass.

SCREEN_BUTTON
- Added a new property called "Momentary". This property changes the button from standard maintained operation to "momentary" operation. With momentary operation, the button will issue a "Click" event on mouse-down as well as mouse-up actions.

  When in momentary mode, the BeforeClick and AfterClick scripts will fire for the mousedown action as well as the mouseup action. For best visual results in the case with screen lighes or other icons are targeting the same Value as the button, set the button's UpdateIconsOnClick property to true.

CLASS OBJECT
- Added "AfterAdd" quickscript to the CLASS object. This script runs whenever a new object is created for the custom class. This script is useful if you want to automatically propogate children or set specific properties when you create the custom class objects.

CLASS ELEMENT
- Added "ScreenChildName" property to define a screen used to edit the resultant object created from the custom class. The property is the name of the screen child object.
- Added "ParentPath" property which is set by the system to the base object used for class registration.

Saturday, January 23, 2010

Description

Version 3.8.0

MESSAGE TYPE
- Added EventLogPath property that instructs the MessageManager to store duplicate records to a specific EventLog database.

ALARM OBJECT
- Added Group1 and Group2 property so that the alarm object can set the Group1 and Group2 event log field. Used only if the specific AlarmType has an EventLogPath set.

SCREENSAVER
- You can now program a default screen saver for cases where the Client is attached to a server that is currently not running and is the backup server. Generically you can name the screen saver "Backup" and the system will automatically switch to this saver in cases where the ServerBackup's "RunningServer" property does not equal the currently connected server machine's name. If you are using dedicated screen savers for each client, you can create a specific backup saver for each client by naming the saver object "ScreenSaver_CLIENTNAME_Backup".

REPORT NUMERIC TAG SELECTION
- Widened the tag selection form on the Numeric Report screen so that long tagnames can be displayed. Also changed the grid so that it automatically sizes the column to the tagname's length.

RECIPE_RAMPSOAK GROUP
- Added FloatDirectionLink property that defines a path pointing to a True/False property or variable that will automatically switch the FloatDirection to Rising (True) or Falling (False). For autoclave pressure float purposes, this path should point to the "Direction" property of the Temp Control Cascade group.

ALARM MESSAGE SCREEN
- When you acknowledge the alarm, the screen will properly show the AllTags tab and display the last full screen of messages.
- When you enter an operator message, the screen will properly jump to the AllTags tab and display the last full screen of messages.
- Alarm screens now refreshes automatically in multi-client systems when one client acknowledges an alarm.

MESSAGEMANAGER OBJECT
- New "LastChange" property used by system to determine whether alarm messages need to be refreshed on each client.

MEMO LOG
- Fixed bug that caused a memo view report to show multiple blank pages in the rare case where the memo text was greater

than 100 characters long and there were no spaces after the 100th character.

DATA EXPORT
- Fixed bug that caused the Filepath and Filename field in the export to show the previous run's file attributes.

Tuesday, March 02, 2010

Description

Version 3.8.1

SCREEN BUTTON
- Fixed the bug that caused a button icon that was configured as "momentary" to respond to the right mouse-button and also occasionally latch on when clicking quickly.

QUALITY CARD
- Added revision date to Quality Card printout.

Tuesday, May 11, 2010

Description

Version 3.8.2

QUALITY CARD ANALYSIS
- Fixed a bug that caused the Ramp Temp by Time calculation to fail if a data point included the exact value of the lower range value.
- Added new feature to Quality Analysis. A new checkbox is incorporated to instruct the system to use the average temperature of all readings throughout the range for Soak temperature determination. This feature was requested by a specific aerospace user based on fluctuations in an oven and may not be applicable to all users. The function only works if SOAK is selected in Temperature Style combobox.

Tuesday, Sept 29, 2010

Description

Version 3.8.4

PART SCREEN
- Added new feature that is used to pair inputs and outputs so that they cannot be selected concurrently in the batch. This is most often used with VPRB and VSRC attachments that are dual-use lines.

REPORTING
- Added feature to provide automatic unit changes so that reporting is using alternate units for temperature, pressure, and vacuum readings.

QUALITY CARD ANALYSIS
- Added feature to analyze rates of the average of all thermocouples (either in run or on part)

- Added feature to analyze part tc spread and load tc spread (ie max gradient).

Thursday, Sept 30, 2010

Description

Version 3.8.5

INPUT OBJECT
- Changed the input functionality so that it doesn't automatically convert "Hg to Psi for positive values when the I/O object is an "IO_In_Special" class. *Note: This allows the HIPRB and LOPRB inputs to properly be set to "Hg units.*

REPORT SCREEN
- Fixed bug that caused the conversion combo boxes to be displayed when ConversionVisible property was false.
- Added a feature that includes the HIPRB and LOPRB inputs into the conversion set even though they don't have "Hg units defined.
- Fixed the bug that caused the file listing to target the root directory when clicking "Reload Data" button before first selecting a file on the list.
- Added new "ShowDisabledTCOnExport" property to the DataAnalyze object that instructs the system during a text file export function to print a "?" symbol after any disabled thermocouple reading.

Thursday, Oct 11, 2010

Description

Version 3.8.6

QUALITY CARDS
- Fixed bug that caused rates to show IND# when analyzing average rates with a upper and lower range selections.

REPORT SCREEN
- Added new distance conversion for Inch-mm and Inch-cm.

SKIN THEME
- Removed the Vista.cjstyles skin file from the installation of the CPCClient. This particular skin did not work properly on Windows 7 systems.

Thursday, Dec 16, 2010

Description

Version 3.9.0

SPLASH SCREEN
- Fixed the splash screen so that it properly displays the AlternatName and AlternateImage.

QUALITY REPORTING
- Created a new quality database system. This quality database holds run information and all quality phase findings so that the user can query historical quality pass/fail information and finding details. Contact ASC for a special topic sheet describing this new feature.

Friday, Jan 14, 2011

Description

Version 3.9.1

VERSION INFO FORM
- Fixed bug that caused the form to display with a black background.

QUALITY REPORT
- Added a new property to DataAnalyze object which can be used to suppress the quality stamp on the quality reports.

QUALITY DATABASE
- Fixed the query so that Equipment and Date queries work concurrently.
- Added a new property in the DataAnalyze object that switches the Excel export feature from XLS style file to Excel 2007 XLSX style.

Monday, Jan 24, 2011

Description

Version 3.9.2

QUALITY CARD ANALYSIS
- Added a new feature in Quality Card phase called “Change Delay”. This entry defines a minimum time period in minutes that the phase change will be delayed by. This is useful in cases where you want to wait a certain time period before checking for phase change criteria in order to avoid faulty phase changes due to noisy readings.

Monday, May 25, 2011

Description

Version 3.9.13

FINK OBJECT
- Added multiple objects and capabilities for control of Fink Engineering’s hyperbaric chambers. This set of objects is not applicable to any insallations except those of Fink Engineering Corp.

ON-SCREEN KEYBOARD

- Added alphanumeric and numeric keyboards for use on touchscreen applications. Ask for ASC's Topic Sheet on this feature for instruction on setup and use.

AUTO EXPORT OF TEXT FILES

- Added a new feature that allows datafiles to be automatically exported to tab-delimited text files. Request ASC's Topic Sheet on this subject for instructions on setup.

Sunday, June 05, 2011

Description

Version 3.10.1

SERVERREPORT OBJECT

- Added Orientation property which can be set to Landscape or Portrait.
- Added Printer property which can be set to any system printer. Combo-box in Object editor will display all current printers. Blank will select default printer.

DATAANALYZE OBJECT AND REPORTING

- The system will not blank out the Quality Card combo selector when the datafile loads and there is no matching quality card. In this case, you will have to manually select a card in order for the system to allow you to see a quality or exceptions report. If you attempt to view a quality report with the combo listbox blank, the system will issue a message and default the view to the Numeric Report.

- Modified the PRINT method (used for Auto-print functions) so that it checks whether a matching Quality Card exists. If there isn't an auto-selected quality card, the print function will not execute the quality or exceptions report.

- A new property QualityCardSelectedOnPrint is provided in the DataAnalyze object to indicate whether a QC card match has occurred during an auto-print operation. This can be used to display a light or indication on the Run Operations screen, or can be used to trigger an alarm.

- The reporting engine will now use the Recipe's QCCard property to select a matching Quality Card. This matching operation will take precedent over the QC Card recipe matching field, but only if the recipe's QCCard field is entered. If the recipe's QCCard field is blank, then the system will choose the quality card based on the RecipeMatch property in the loaded quality cards. *** Note that this new feature allows multiple recipes to use a single quality card.

DATASAVING OBJECT

- The CPC system will now store the QCCard property of the recipe to the datafile for automatic selection of a quality card during reporting. This property was not implemented prior to this change.

Saturday, June 18

Description

Version 3.10.4

FINK object
- Added properties for AlarmText, AlarmFont, AlarmFontSize, AlarmForeColor, AlarmBackColor, AlarmAlignment, and AlarmTitle.

FINK Load Profile Screen
- Fixed Delete button action

FINK Runner Screen
- Moved display tags 1/2" down
- Removed the Press/Depress text from top of form
- Modified system to allow Semi-Auto in Auto hold
- Modified Increment & Decrement to use .5 when in kPa mode
- Modified screen to show actual target setpoint instead of current setpoint.
- Added a dynamic alarm panel that is controlled by the new alarm-related properties in the Fink object.

LogIn Form
- When using touchscreen, login window will launch the touchscreen keyboard when the login starts.
- When loging out, the system will erase the current username

DataAnalyze Object & Reporting
- Added checkbox "Show Disabled TCs on Trend" on the reporting form. This will toggle the system to show or not show disabled thermocouples on part reports.
- New property "AddStampToReports" is used to add the qualiy stamp to all other reports (ie. trend, numeric, etc.)
- New property "AddStampVariable" is used to define the variable (from Variables object) that will be used to set the "AddStampToReports" property during reporting. This feature is used if the customer wants the stamp to only show when specific run alarm conditions have occurred.

Input object
- The input object will not calculate up to 2 rate object children. The first Rate child will be used to feed the input's ”Rate" property.

Rate object
- Added "Change" property which displays the maxixmum change of values in the rate analysis dataset.

Validation object

- Added "InRange" and "InRangeTime" properties. InRange is true when the value is inside the min/max range and there is no noise. InRangeTime is the number of seconds that the input has been in-range.
- Added the capability for the object to automatically re-enable thermocouples after a noise condition. The new properties are
  - AutoReEnable - True or false
  - ReEnableCount - Actual number of reenables that have occurred
  - ReEnableCountLimit - A limit on the number of reenables that will be attempted.
  - ReEnableStableTime - The number of seconds that the input must be InRange before allowing an auto-reenable
  - ReEnableHITCRange - By entering a degrees value here, you will instruct the system to only reenable if the input's value is less than HITC + HITCRange. For example, if HITCRange = 10 and HITC = 250, then the system will only enable the thermocouple if it's less than 260.
  - ReEnableLOTCRange - By entering a degrees value here, you will instruct the system to only reenable if the input's value is greater than LOTC - LOTCRange. For example, if LOTCRange = 10 and LOTC = 238, then the system will only enable the thermocouple if greater than 228.

Inputs object

- Added method "ResetReenableCounts" which resets the ReEnableCount property to zero for all validation objects.

Recipe_DisableTCs

- Added new recipe segment object “Recipe_DisableTCs” that is used to generate an automatic disabling of lagging thermocouples after segment time has reached a specific limit. The object is added under the RecipeSegment object and provides two new recipe row parameters: DisableTCOnTime and TCCriteria. The following properties are provided:
  - InputParentTarget - path to Inputs object
  - InputType - Typename of part thermocouple input
  - TimeLimit - System copies and sets this to the contents of the 1st recipe parameter (ie. 90m)
  - TCCriteria - System copies and sets this to the contents of the 2nd recipe parameter (ie. <340)
  - Disabled - System sets to True or False once disabling has occurred.
  - ShowAsAlarm - If True, then messages will be alarms. If false, messages are blue system alerts.

Screen object

- Fixed the bug that caused the AllowMultiple function to not allow multiple popups of the same screen.
- Changed the popup screen so that if it's a multiple instance, it won't be retained in memory.

- Added a new property "PopupAutoCloseTime" to the Screen object which is used to force a close of a popup screen after a specific amount of time.

Friday, July 15, 2011

Description

Version 3.10.5

DATABASEINTERACTION OBJECT

- Created this new object to manage the bi-directional communications for CPC systems and a customer's SQL database. Developed for ATK-Utah.

Friday, August 23, 2011

Description

Version 3.10.7

WATCH GROUPS
- Added >=, =>, <=, and =< criteria to the watch group functionality.

VALIDATION_INPUT
- Changed the AutoReenable function so that it only operates during an automatic run on thermocouples that are attached to parts.
- Changed the OnDisable script so that it only operates during a run and only on thermocouples that are attached to parts.

Friday, September, 12, 2011

Description

Version 3.10.8

FINK HYPERBARIC CHAMBER object
- New property called "SemiOnly". When you set this, the runner will start immediately upon opening and will be in a Semi-Auto mode. You might want to place a Fink\SemiOnly = True in the BeforeClick property of each button (ie. Auto or SemiAuto) to trigger this.
- In Semi-Auto popup, the Decrease will subtract 10 kpa from the setpoint and the Increase button will add 10 kpa.
- Semi-auto screen will now not let values to rise if "Depressurize" is selected and won't let values drop if "Pressurize" is selected.
- Date format in Day-Month-year or Day/Month/year
- Touch screen logs in correctly but does not activate the icons that are secured by a security group
- Touchscreen keyboard now properly unlocks icons on main screen.
- Print button on the runner screen now properly prints the screen.
- Changed all analyzer properties (note: your existing scripts will fail due to change of names). Now analyzers are 1-5 with custom titles.

- There is a new property “StatusDisplayOverride”. This will give you the option to change the status. If the property is blank, then the default display will be shown. If the property is entered, then it will be displayed.

Wednesday, October 12, 2011

Description

Version 3.10.10

LANGUAGE SUPPORT

- Menu for “Chinese” added to screen language selection. When selected, the system will show buttons and labels as images based on the LanguageImage file property of the button and label.

SCREEN_BUTTON

- New property called “LanguageImage”. This image file identifies the replacement image that will be displayed instead of the button caption when Chinese language is selected.

SCREEN_LABEL

- New property called “LanguageImage”. This image file identifies the replacement image that will be displayed instead of the label when Chinese language is selected.

Friday, November 11, 2011

Description

Version 3.10.11

PDF PRINTING

- When manually printing to PDF995 printer, the system now displays a SaveAs box with a default filename = datafile name + “ManualPrint”. After selected a file, if the file exists, the system will ask whether you want the report added to the existing file. If you choose No, then the existing file will be replaced.

CHECKS

- Added a “ProbeSubType” property which limits the check actions to only probe inputs that have that specific sub-type.

RECIPE_LINECONTROL

- Added a “ChildSubType” property which limits the line controls to sources that have Type objects configured for the specified SubType.

RECIPE_LEAKCHECK

- Added a “ChildSubTypeRead” and “ChildSubTypeSet” properties which serve to limit the leak check to only probes and sources that match the specified subtypes.

Wednesday, December 21, 2011

Description

Version 3.10.12

DATABASE INTERACTION

- Fixed bug that caused the Group and Type information to not be imported properly from database.

Wednesday, January 11, 2012

Description

Version 3.11.0

NEW FEATURE: DISABLE SENSOR AT START OF RUN

- A new feature is provided that allows the operator to assign thermocouples and vacuum probes to the part that will be monitored and data-recorded, but won't be used for control during the turn. The feature lets the operator tag specific sensors with an instruction to the system to automatically disable the sensors once a run has begun. The feature can be enabled in the PartTemplateManager object (see below). Requested by ATK

PARTTEMPLATEMANAGER object

- Added property called "DisableAtStartEnable" which is used to enable a feature that allows assigned thermocouples and vacuum probes to be automatically disabled once a run begins, thus removing them from control decisions while still allowing their values to be collected in data. Requested by ATK.

PARTATTACHMENT OBJECT

- Added property called "DisableAtStart" which is set to True or False when an operator selects the "DisableAtStart" checkbox on the part attachments grid/form. The checkbox will only be visible if the PartTemplateManager's property called "DisableAtStartEnable" is set to true. This feature allows assigned thermocouples and vacuum probes to be automatically disabled once a run begins, thus removing them from control decisions while still allowing their values to be collected in data. Requested by ATK.

GROUP OBJECT

- Added property called "DisableAtStart" which is set to True or False by the system whenever a "LinkAttachments" action occurs. The property is used by the RecipeProcessor object to automatically disable the specific input sensor once a run begins, thus removing them from control decisions while still allowing their values to be collected in data. Requested by ATK.

RECIPEPROCESSOR OBJECT

- The recipe processor now performs a disabling of input sensors based on the settings discussed above. Immediately after the run begins, the system will scan all attached inputs and disable the input if the Group object has a True value for the new property "DisableAtStart".

Friday, January 13, 2012

Description

Version 3.11.1

DATA ANALYZE / REPORTING

- Added new property “QualityCardToUse” which forces the system to use a specific quality card for method-initiated printing or generating of a report.
- Added a new method “GenerateReport” which allows the system to generate a report with no output. This is only useful if you want to generate a Quality-All Parts report and have the database Notes pre-populate for the operator.

OBJECT EDITOR

- Resizing the grid. Changed the resizing so that the grid columns would resize when the form is resized.

Monday, January 30, 2012

Description

Version 3.11.2

DATABASEINTERACTION OBJECT

- Added a method “SaveLeakTest” that is used to store the LeakRequirement and LeakValue properties to the Parts table in the database. This method is automatically run by the ChecksLeakTest object using the new “DatabaseInteractionPath” property.
- Fixed the bug that caused the DisableOnStart to not work properly

CHECKSLEAKTEST OBJECT

- Added a new property, “DatabaseInteractionPath”, which directs the leak test object to automatically store the leak information to the database when stopped or completed. The path should be the object path to the DatabaseInteraction object.

Monday, Feb 7, 2012

Description

Version 3.11.3

DATABASEINTERACTION OBJECT

- Fixed bug that caused the vacuum sources to not show VAC for attachments.

Monday, April 14, 2012

Description

Version 4.1.1

BATCH ENTRY

- Fixed bug that caused the OnExit script to not initiate when leaving the parts screen. Note: This would error only occurred if the current batch object was selected in the tree view..

LEAK TEST

- Fixed bug that caused the leak test to FAIL the parts when the leak criteria was less than 1"hg.

RECIPE PREVIEW

- Increased the simulated preview limit to 96 hours.
- Implemented a popup form that shows the current simulated preview runtime. The popup form also includes a "Halt Preview" button that can be used to bail out of a preview.

CERTIFICATIONS

- A bug in the certification form has been fixed that caused the certification grid not to display the correct value columns when the Cert Values textbox was changed. It now properly updates and clears the data as you change the cert values.

- A new property "DateFirst" can be set to True and will cause the Certification system to save the cert report with Date+Title instead of the default Title+Date. This is useful if you want all certifications for a specific date to be sorted together in the file folder.

REPORTING

- On numeric reporting screen, you can now select "Active Sensors" from the pulldown. This will show primary sensors along with all vacuum probes and part thermocouples.

- On trend screen, you can now create and store Trend Groups of sensors to be selected on future reporting.

SCREEN TRENDING

- The trend screen scroll bars have been redesigned with a new look.
- The trend screen now incorporates mouse-wheel interactive zooming.
- The trend screen now allows trend groups to be switched from a drop-down menu displayed at the top of the trend.
- The trend screen now has a drop-down menu which allows selection of the trend items by clicking on a specific part. When selected, the system will show all sensors on the part as well as primary sensors (ie. AIRTC, PRESS, etc.).
- The trend screen setup form now includes the ability of auto-selecting colors and line types.

DATABASEINTERACTION OBJECT

- Added the functionality to build the entire SQL database with all tables and fields. This new function is managed by the method “BuildDatabase”. This method utilizes two additional properties: DatabaseName and MasterConnectionString.
- Added the functionality to parse an entire datafile and store the information to the SQL database.

SERVER SWITCHING CAPABILITY

- The PCA/PCB switching functionality has been reconfigured to accommodate the personality of Windows 7. In the new configuration, when the server recognizes that a switch should occur, the server sends a signal to each attached client so that the clients can disconnect. After the clients disconnect, the server launches a new application ServerLaunch.exe which will start a new server after 5 seconds. This new capability eliminates the possibility that two servers might be launched simultaneously in Windows 7 environments.

CLIENT SWITCHING CAPABILITY

- Modified the client switching system so that it now utilizes a new program called ClientSwitch.exe. This new application launches whenever the client is asked to switch by the server.
- The client now will shut itself down when its attached server is shutdown.

Sunday, May 13, 2012

Description

Version 4.1.2

NEW EMAIL OBJECT
- New object has been implemented for sending SMTP emails. Requests topic sheet for configuration and setup.

NEW INTEGRALSCRUBBING OBJECT
- New object designed to perform integral scrubbing operation to correct overshoot issues with air-controlled ramping cycles. Request topic sheet for configuration and setup.

NEW BIAS OBJECT
- New bias object designed to perform multi-point proportional input biasing. Object can be used to correct thermocouple wire error and correct equipment temperature uniformity issues.

TREND SETUP
- Fixed bug that caused combo drop-down to not show correct group after a trend group was deleted.

SCREEN MINIMIZING
- Fixed bug that caused the client screen to resize when jumping to the desktop from the windows taskbar.

Sunday, May 20, 2012

Description

Version 4.1.3

EMAIL OBJECT
- Added capability to download and read POP3 emails.

TREND ICON
- Fixed bug that caused the trend to hang the application when RetentionTime was set on the screen.

Saturday, May 26, 2012

Description

Version 4.1.4

TREND ICON
- Fixed bug that caused trend to show an incorrect initial view when viewing report trends.
- Fixed bug that allowed the horizontal manual sizer to overlap on itself.

RECIPE PREVIEW TREND
- Fixed bug that caused the initial view to show incorrectly when viewing trend of Recipe preview simulation.

Sunday, July 22, 2012

Description

Version 4.1.5

FILEINFOS object
- This parent object has been created so that multiple child FileInfo operations can be performed at one time

FILEINFO object
- Version property has been added. This will display the program version of an executable file.

FILECLEANUPS object
- This parent object has been created so that multiple child FileCleanup operations can be performed at one time

FILECLEANUP object
- CopyFiles method has been added so that you can copy specific sets of files that have aged a specified number of days.

DATAANALYZE and Reporting
- A new capability to program a custom button on the data-analysis screen. This button can be associated with any server-based or client-based method. It can also run a notification or verification for custom reporting.
- New properties added to DataAnalyze object. CustomButtonCaption and CustomButtonMethod.

VERIFICATION
- The 3-button verification form has been fixed. The 2nd button now properly shows the correct caption.

Saturday, March 9, 2013

Description

Version 4.2.0

Note: Search for "shutdown" in knowledge engine for detailed topic sheet manual on these changes.

SERVERBACKUP object
- Added new method SaveToBackup which forces a save of the current objects file to the backup PC.
- Added a new property LastSave which shows the date and time of the last save.

SERVER object
- Added a new method called ShutdownServer. This method can be used in scripting to force a shutdown of the CPCServer application and all connected CPCClients.
- Added a new method called ShutdownComputer. This method is used in conjunction with two new properties,

ComputerToShutdown and DelayOnShutdown, in order to force a Windows shutdown of a specific computer.

Sunday, April 15, 2013

Description

Version 4.2.1

DATAFILE REPORTING

- Changed printout of trending reports to widen the plotted lines for the first 13 sensors plotted. Also changed the background grid from black to gray. This was requested to address readability of the lines during a PDF995 report.
- Added a new report type which can be printed from the “Print” method of the DataAnalyze object. The “TrendPartsIndividual” report is in landscape orientation and is meant to print to a PDF995 printer. It will generate a separate PDF file for each part in the run. Each file will be named according to the new DataAnalyze property “PartFieldsForIndivReport” . This is meant to name the file by PartNumber_SerialNumber. The TrendPartsIndividual report uses an asynchronous timer to generate a new part report every 2 seconds. A 2 seconds delay is required by the PDF995 driver to separate printouts..

RECIPE, BATCH, CERTIFICATION, and SERVER REPORT PRINTING

- Added “Printers” combo pull-down on all individual printing functions in CPC. This applies to printing batches, recipes, server reports, and certifications. You can now select a specific printer. Note that the default printer will always be selected when viewing the report form.
- When printing to a PDF995 printer, the system will now store the individual PDF files according to the new location properties in the ClientDefault object. (see below)
- When printing to a PDF995 printer, the system will name the file with a description plus date-code. For example, a recipe printout executed at 9:15 am on 4/15/2013 will be named “CPC Recipe Printout_2013_4_15_9_15_01.pdf”. Also, when you initiate a printout, the system will open the Save dialog box to allow you to change the PDF name and location.

CLIENTDEFAULT object

- Added property PDFConfigFile to the client default. This property should target the PDF995.ini file and is used by all non-reporting printing functions such as recipe, batch, certification, and server reports. Note that if this is left blank, the system will automatically set it to the folder C:\Program Files\PDF995\Res
- Added properties to reflect the folders used for storing the PDF995 printouts. These properties are PDFLocationRecipes, PDFLocationBatches, PDFLocationCertifications, PDFLocationServerReports, and PDFLocationGeneric. If left blank, the system will automatically default these to C:\CPC Prinouts\Recipes, C:\CPC Prinouts\Batches, etc.

Sunday, April 21, 2013

Description

Version 4.2.2

TREND SCREEN
- Fixed bug that caused erroneous trend values when trending Boolean (ie. True or False) input values.

REPORTING TREND SCREEN
- Fixed bug that caused erroneous trend values when trending saved Boolean (ie. True or False) data.

Sunday, May 12, 2013

Description

Version 4.2.3

DATAANALYZE/REPORTING
- Fixed bug that caused older CPC configurations to not export the recipe name during a server export operation. These older systems saved Recipe Description to the datafile instead of Recipe Name.

Monday, July 29, 2013

Description

Version 4.2.4

DATAANALYZE/REPORTING
- Added vacuum sources to the part information exported during the ExportDataFromServer function.

Sunday, August 18, 2013

Description

Version 4.2.5

CALIBRATION_3POINT
- Added 3-point calibration object. This object provides the ability to calibrate vacuum transducer using three points instead of two. For more information on this, search the website knowledgebase for “3point” or “calibration” to view the topic sheet manual.

Wednesday, October 16, 2013

Description

Version 4.2.6

OUTPUT_PID object

- Added control-offset capability to Output_PID object. This provides the means to shift or offset the control from the current setpoint selected. This function is useful in centering HITC/LOTC spread during uniformity. The functionality includes direct offsetting (value) or offsetting based on a temperature-vs-offset table.

OUTPUT_CASCADE object

- Changed the Output_cascade object to disable cascade when the controlling thermocouple is an AIR thermocouple.
- Fixed the bug that improperly stored the wrong AmountAdded property.
- Changed the operation so that it zeros the AddPerTime outside of the CascadeOUT band.

RECIPE_CASCADE

- Added property AtGoalElapsedTime to keep track of the amount of time that the setpoint has been at it's goal. This time can be used for applying specific offsets after the ramped setpoint has reached its goal.

DataAnalyze Reporting

- Darkened the grid lines for trend printouts.

Thursday, November 14, 2013

Description

Version 4.2.7

CHECKS OBJECT

- Added property VacuumFormat which provides a means of changing the significant digits in the vacuum leak values.

TREND SCREENS

- Changed highlight feature to show three significant digits on all values between -1 and +1. This is mainly used to show better significance on Bar units.

Monday, December 23, 2013

Description

Version 4.2.8

DATA ANALYZE REPORTING

- Added new method-only reports, including NumericTrendIndividual, NumericPartsIndividual and QualityPartsIndividual. These reports will print a separate PDF for each part in the run and will name them according to configurations.

ALARM OBJECT

- Fixed bug that caused True and False alarm values to show in the message screen as -1 and 0.
- Changed EventLog saving so that the Critieria and the Setting are stored to the event log. Used only if EventLogObject is entered in the Alarm object.

Thursday, December 26, 2013

Description

Version 4.2.9

REGISTRYKEY OBJECT

- Created a new object called a RegistryKey. This object can be used to store and view system registry keys and their values. See new document called “CPC - How to use the RegistryKey object”

Monday, February 10, 2014

Description

Version 4.2.10

DATAANALYZE/REPORTING

- Fixed bug that caused quality cards to not show proper units when using kPa for pressure and vacuum readings.

Tuesday, February 18, 2014

Description

Version 4.2.10

TREND ICON

- Added the group selection called “Active Sensors”. When selecting Active Sensors, a list of primary inputs will be displayed as well as active part thermocouples and active part vacuum probes.
- Added property “ActivePrimarySensors” property to the trend icon. This property holds a comma-delimited list of primary input names that you want displayed when making the “Active Sensors” selection on the Groups pull-down menu. Normally, these would include AIRTC, PRESS, TSET_PART,….
- Added property “ActiveSensorsProbeType” property to the trend icon. This property is set to the name of the Type object which defines the vacuum probes. In most CPC systems, this typename is “Probe”. This property is used by the Active Sensors group function.
- Added property “ActiveSensorsPartTCType” property to the trend icon. This property holds the name of the Type object which defines the part thermocouples. In most CPC systems, this typename is “PartTC”. This property is used by the Active Sensors group function.

Sunday, May 18, 2014

Description

Version 4.3.1

DATA ANALYZE / REPORTING

- On the Numeric Reporting screen, fixed bug that caused the export function to not properly report on an individual part selection. This now works and renames the export file to show which part index is being exported.
- On the main reporting screen, changed the information from File Date/Time to Run Date/Time. This information was previously showing the file modification date which might be changed. It will now display the start of the run.
- On the export function, the information now shows the Run Start and Run End dates and times instead of File Date and File Time. This information now matches the information shown in the hard-copy reports.

Sunday, May 25, 2014

Description

Version 4.3.2

SCREEN DESIGN

- When you click or lasso icons, you can now immediately press the Del key to delete the icons. Focus will not be passed to the icon tool window.
- When you click of lasso icons, you can now press Ctrl-C to copy the icons to the clipboard. This duplicates the “Copy” function from the right-click dropdown menu.
- After you’ve copied icons to the clipboard, you can now paste them with the Ctrl-V key sequence. This duplicates the “Paste” function from the right-click dropdown menu.
- You can now select icons, copy them with the Ctrl-C key sequence, and then immediately paste them without clicking on a new position. The system will paste the new icon(s) immediately below the currently selected icons spaced according to the current snap property setting.
- You can now select an icon or icons and then use the arrow keys to nudge them up, down, left, or right. Each movement will be equal to the snap setting.

Friday, August 15, 2014

Description

Version 4.3.3

DATABASEINTERACTION OBJECT

- A new property called “EquipmentPath” has been added to allow the SQL data save operation to include the correct equipment name in the Runs table of the database. If blank, the system will utilize the equipment name in the actual datafile. If an object path, the system will use the name targeted by the path. You can also enter the actual equipment name (ie. Autoclave 15) and it will use that. The recommended setting is blank.

Thursday, September 11, 2014

Description

Version 4.3.4

DATABASEINTERACTION OBJECT

- Fixed bug that caused EquipmentPath to not store properly when using “SaveAllData” method.

Monday, September 22, 2014

Description

Version 4.3.5

QUALITY CARDS

- Added a new property QualityCardPrintoutUnits to the DataAnalyze object to allow the user to change the units description in the Quality Card printout.

REPORTING

- Fixed bug that caused the RunDate and RunTime to improperly update in the file information grid when clicking on a new datafile.

Monday, October 27, 2014

Description

Version 4.3.6

REPORTING SCREEN

- Expanded the file information grid to allow longer recipe names to be displayed.

RECIPEPROCESSOR

- Fixed a bug in the TransferRecipe method of the RecipeProcessor object. This rarely-used method was not properly storing the row titles to the datafile which caused the reporting engine to not display the recipe information.

Monday, November 12, 2014

Description

Version 4.3.7

DATAANALYZE OBJECT

- ReportToPrint property can now include instructions to generate and not print the report. Use the ":Generate" keyword after any report.
- A new property ExportGeneratedReport will instruct the system to convert to ASCII and generate any report that is generated.
- A new property DatafileAfterPartFields is provided to instruct the system to append the datafile after the part fields when creating the exported or PDF printed report file.

Tuesday, February 17, 2015

Description

Version 4.4.0

DATAANALYZE OBJECT
- Fixed bug in DataExportFromServer method that caused a lockup when exporting data that didn't have any part information.

QUALITY CARD ANALYSIS
- Fixed bug that displayed the MaxTime instead of MinTime when analyzing global MinProbe analysis

RECIPE_RAMPSOAK OBJECT
- Fixed bug in Float algorithm that allowed the setpoint to track a rising feedback when the float direction was "falling".

LEAK TEST REPORT
- Fixed bug that caused the leak values to be reported with wrong decimal place format on parts that were children of a parent-part configuration.

REPORTING MANUAL EXPORT
- The manual export path selection will now be saved for future targeting. This will also not change the ExportFilePath property in the DataAnalyze object.

REPORTING SCREEN
- Added the ability to size the file list box. A horizontal left-right sizer is provided to the right of the listbox.

BATCH/PART EDITING SCREEN
- There are now three resizers on this screen. One horizontal resizer will adjust the width of the batch treeview, another horizontal resizer will set the width of the part list and database list, and another will adjust the vertical position of the batch and part listings. All of these settings will be stored to the windows registry for retention on next CPC session.

SCRIPT EDITOR
- When using the Find & Replace popup form, pressing the Enter key will now trigger an immediate Find action.

CERTIFICATION OBJECT
- Changed the certification system so that it doesn't disable PRESS and AIRTC objects when the "Set Sensor status based on Results" button is pushed.

PROCESSLINERECIPES
- Added capability to save and load recipes from MS SQL database. For this, new properties were added: DatabaseConnectionString is the OLE connection string. ChangedDuringEdit is a True/False property set during editing to indicate that a recipe was modified. BeforeEdit and AfterExit are

scripts that are triggered before and after the operator accesses the recipe screen.

Tuesday, March 17, 2015

Description

Version 4.4.1

PROCESSLINERECIPES
- Fixed bug that caused the UpdateFromDatabase to not delete internal recipe objects when the recipe record had already been deleted in external database. This only applies to ADO-style database connections such as MS SQL.

SCRIPT RUNNER
- Fixed bug that caused a false Error to be displayed when running scripts that included RSGETFIELD and RSSETFIELD when using ADO database connections (ie. MS SQL)..

Sunday, April 5, 2015

Description

Version 4.4.2

SPC DATABASE VIEWING
- Fixed formating issue that caused two columns to overlap on printout

CERTIFICATION FORM
- Fixed bug that caused Sensor Reset button to not work when selecting the sensor from the grid.
- Added a new button "Reset single point for sensor" that allows a reset of a single certification point
- Reformatted screen to show a longer Cert Values textbox.
- Fixed bug that caused the "Select Sensor" combo list to include all inputs rather than the inputs that are selected for certification

INTEGRALSCRUBBING OBJECT
- Added capability to select an AlternateSource for the scrubbing. Instead of using the current ramped setpoint as the trigger, you can select another sensor. New properties were added: UseAlternateSource, AlternateSourcePath, and AlternateSourceValue.
- Added a new property called “Scrubbed” which is set to True when a scrubbing event occurs and is set to False when the setpoint goal changes or the run ends. This is useful in determining if the scrubbing event occurred.
- Added a new property called ScrubTime that shows the date and time of the most recent scrub event. It is used for trouble-shooting.

Sunday, May 10, 2015

Description

Version 2015.5.10

UPDATE DOCUMENT
- See document “CPC Update 2015.5.5” on website support system for details about this update.

VERSION FORMAT CHANGE
- CPC executables have been changed to reflect the date of the version. The new version format will be yyyy.mm.dd

SCRIPTING IMPROVEMENTS
- Added a new script warnings and a new warnings form to the editor to identify problems during compilation.
- Fixed miscellaneous warnings.
- Provided better description of warnings and errors.
- The editor how shows the resolved path and object values when you click on variables, aliases, or object paths in the script editor.

OPCDEVICE OBJECT
- Added ability to browse for OPCServers on local PC or remote PC
- Added property for ServerPCName and ServerClassID. OPC capability now extends to using remote OPCServers.
- Changed OPC errors to use hexadecimal and also enhanced the help information on OPCDevice object.

OPCDEVICE OBJECT
- Added ability to browse for OPCServers on local PC or remote PC
- Added property for ServerPCName and ServerClassID. OPC capability now extends to using remote OPCServers.

CHECKS OBJECT
- Added a feature that remembers and path used for Report saving actions for CheckFields, CheckDrawdown, CheckLeak, CheckHeaders, CheckProbeConnect, and CheckComponents integrity checks.

RECIPE SCREEN
- Added a feature that remembers and path used when you save a Recipe report.

BATCH SCREEN
- Added a feature that remembers and path used when you save a Recipe report.

INPUT OBJECT
- Added more items to the ObjectEditor list for Units property.

Saturday, May 16, 2015

Description

Version 2015.5.16

UPDATE DOCUMENT
- See document “CPC Update 2015.5.16” on website support system for details about this update. Search for “2015.5.16” on Support -> Documents & Downloads screen.

SCRIPT EDITOR
- Fixed bug that caused client to lock when adding new comments
- Fixed bug that caused link information not to display when cursor caret was position immediately before a path or keyword
- Added new feature to comment multiple lines of code at one time

SERVER OBJECT
- Added new feature to save backup files to alternate PC on dual-PC systems.
- Enhanced help information on Server object properties.

Saturday, June 16, 2015

Description

Version 2015.6.19

CALIBRATION FORM
- Due to a report of an intermittent bug where the form would sporadically close, the form has now been changed so that it will display on top of all other forms and will not be tied to the original parent form from which it was launched.

REPORT OBJECT
- New Report object has been created to allow for fully customized reports. This object is much more capable then the semi-customized ServerReports object.

REPORT FORM
- On forms used for Integrity Checks, Reports, and other similar objects, you can now increase the scale of the report on-screen.

OBJECT EDITOR
- When right-clicking on an object in the object tree, you can now select “AuditChildren” which will scan all children and display a form that shows the usage of each of the children within the CPC configuration. This is useful in determining which objects are used and unused, especially for Variables, Timers, and Alarms objects.

DATABUYOFF SYSTEM
- A series of new objects have been created for a new data buyoff system. The databuyoff system includes a DataBuyoff object as well as new objects for parsing, analysis, and reporting. The

new objects include DataBuyoff, DataBuyoffGroups, DataBuyoffGroup, DataBuyoffAnalysis, DataBuyoffParsers, DataBuyoffParser, and DataBuyoffReports.

Sunday, July 12, 2015

Description Version 2015.7.12

SCREEN ICONS
- AllowAction and Visibiltity can now include a comparison character (ie. =, >, <, <>) after the property.

Monday, August 10, 2015

Description Version 2015.8.10

CALIBRATION FORM
- Changed the Form to be always on top of other active forms.

MESSAGEVIEWER HELP POPUP
When you resize or move the Help information popup form, the system will now remember that location and size the next time you enter the Message screen. This information is now retained in the Windows Registry.

QUALITY CARD EDITOR
- Removed the "psig/min" unit display on the Pressure Rate entry.

SENSORVIEW QUICKVIEW POPUP
- Added a 4th action button for cases where the multi-use vacuum probes can be switched between OFF, HDRA, HDRB, and VENT.

CLIENT HANG CHECK
- The CPCServer will now send a popup message box to each connected client alerting the operator if it appears that a specific client application has locked or is hanging for more than 1 minute. .

SCRIPTING ENGINE
- The compiler will now raise a fatal error when a nested subroutine is attempted inside a script.
- The compiler will now raise a fatal error when a SelectCase does not have a closing EndSelect statement
- The compiler will now raise a fatal error when an EndSelect is not preceded by a SelectCase statement.

QUALITY CARD ENGINE
- There is a change to how the analysis will default when a phase change condition is never met. Now, instead of showing an analysis of zero data points, the system will analyze from the start of the specific phase to the last data interval in the run data. Also, the system will show an error and indicate the exact phase that caused the error.

ATTACHMENT FORM

- The attachment form has been expanded to show 13 columns and 10 rows (total 130 attachments per group)
- You can now move the attachment form and CPC will remember the location during the next session. The Top and Left position are now stored to the Windows registry.

RECIPEPROCESSOR
- Added new properties RecipeName, RecipeDescription, and RecipeRevision. These are set by CPC whenever a new recipe is loaded for the specific equipment. These properties were added to make it easier to display the name, description, and revision on screens.

Monday, August 29, 2015

Description Version 2015.8.29

OBJECT EDITOR
- Changed the "SaveObject" function so that it includes the classname as a prefix.

SECURITY SYSTEM
- Changed database configuration. Removed Password2 field which was unused. Added new field AutoLogoutTime which now allows individual log-out inactivity logout times per user.

REPORT object
- Fixed some printing bugs that caused the new custom reporting object to not print the same content as it was generating to screen.

Wednesday, September 02, 2015

Description Version 2015.9.2

Screen_Combo and Screen_Textbox icons
- Added VirtualKeyboardStyle property to define whether it's a numeric or alphanumeric keyboard.

VirtualKeyboard
- Increased font size on the keyboard

Popup screens
- Changed the display of popup forms to accommodate virtual keyboard.
- Fixed bug that caused database combo-list to clear the combo on first show
- Fixed bug that caused a screen anomaly when the script editor is used to edit a screen icon's event script

Sunday, September 13, 2015

Description Version 2015.9.13

CLIENT MESSAGE NOTIFICATION
- Disabled the client message that reports an idle client. This message was false-alarming in certain instances.

CONNECT-TO CAPABILITY
- Fixed the bug that caused the "Connect To" option to not work when connecting to any PC that was not Primary or Backup.

OBJECT EDITOR AND SCRIPT EDITOR
- Fixed some behavioral issues with how the two forms are displayed and which takes priority.

SCREEN DESIGN
- Improved the screen design for large-format screens. See new Update document for more information on this update.

Tuesday, September 15, 2015

Description Version 2015.9.15

ALARM OBJECT
- Added a new property DontIgnoreDisabledInputs which allows the alarm to function on input properties when the input is disabled. The normal behavior of the alarm object is to ignore properties on disabled inputs.

MESSAGE SCREEN

- Rescaled the columns on the Message screen to show larger tagnames, values, and settings.
- Increased height of buttons on Message screen.

SCRIPT EDITOR

- Fixed bug that causeed script editor dialog to be displayed asking “Save script changes?” when shutting down the client.

Tuesday, September 22, 2015

Description Version 2015.9.22

TREND ICON

- Fixed the behavior that caused the trend to not update immediately on showing the screen.

SCREEN DESIGN

- Improved the Snap capability to ensure that position and width and height of icons are maintained as an integer.
- Changed the behavior during resizing. Now, you can select an icon and the resize it even if it's near another icon that was added after it. \
- Added the ability to select multiple icons and search and replace multiple properties of the selected icons.

DATABUYOFFPARSER OBJECT

- Added "RateCalcInterval" property for parsing of rates.
- Modified the FilterList property to allow use of a Rate function (ie. Rate(AIRTC)).
- Fixed a bug that allowed the parser to operate if the databuyoff hadn't yet loaded the datafile.

DATABUYOFFANALYSIS OBJECT

- Modified WhileCriteria, StartCriteria, and EndCriteria to accommodate the use of the Rate function. For example, now you can use Rate(AirTC)>2 as a criteria.
- Added "DurationFilterCount" which is used for analyzing Duration to eliminate sporadic readings from being being calculated for duration.
- Fixed a bug that allowed the analysis to operate if the databuyoff hadn't yet loaded the datafile.

Tuesday, September 24, 2015

Description Version 2015.9.24

SCREEN DESIGN

- Added a nice feature that lets you size multiple icons at the same time. Select multiple icons and then adjust the left, right, top, or bottom of one of the icons and all other selected icons will change the same amount.

RECIPEPROCESSOR

- Changed behavior of RecipeTransfer so that it will set Segment to "0" and SegmentMessage to "Idle" after load. Prior to this it would set the segment to 1 and show the first segment's message.
- Changed the behavior of SegmentTransfer (ie. Segment Change) so that it does an immediate calculation of all segment

rows and then performs a Do_Read of all the specific inputs that have “SEG” or “RUN” at the start of their names. This fixes the issue where the input values had not been updated prior to the segment change data save and would cause the SEG, SEGTIME, and SEGNAME to be stored with improper values.

DATABUYOFFANALYSIS OBJECT

- Added new properties “FirstRecord” and “LastRecord” to record the record indexes of the current analysis region defined by StartCriteria, EndCriteria, and WhileCriteria. These new properties are useful if you want to parse the individual record region after an analysis.
- Modified the behavior of the analysis so that it properly works with boolean input values (ie. True, False) in analysis region criteria properties.
- Enhanced the StartCriteria, EndCriteria, and WhileCriteria so that you can use a set of inputs based on type for the evaluation. You can now, for example, including High(PartTC)>110 or Low(Probe)>20 to define an evaluation region.

SCREEN DESIGN

- Fixed bug that occurred when an icon is selected and you attempt to resize a non-selected icon.
- Fixed a bug that caused the Search/Replace feature to hang when the Replace text happens to include the Search text as a part of it.

Sunday, September 27, 2015

Description Version 2015.9.27

DATABASE OBJECT

- Enhanced the “Open” method for database connections to non-MSAccess databases (ie. OLE DB connection strings) so that if there are no children table objects, the Open method will now build all underlying child table and field objects to match the currently connected database. Note that this build function was always provided for attached MS Access databases, but was not implemented for databases that were connected using an OLE DB connection string.
- Enhanced the “Create” method so that it can now create an OLE DB connected database (ie. SQL SERVER). Note that previous versions only created MS Access databases.
- Added new help information for properties of the Database, Table, and Field objects.

TABLE OBJECT

- Enhanced the data type conversion for OLE DB edits and additions.

GRID ICON

- Fixed the bug that caused the object grid to display blank when the StartObject + ObjectQty spanned more child objects than

existed in the source object. Now, the grid will reconfigure itself to show rows for only the available children objects.

OBJECT EDITOR

- Added the ability to move objects using drag-and-drop. You can now click on an object, hold down the left button, drag the object, and release the left button to move the object.

Tuesday, September 29, 2015

Description Version 2015.9.29

DATABUYOFFPARSER OBJECT

- Added a feature to parse the High and Low of a specific input type. For example, you can parse High(PartTC). This can be further grouped by specific part index.

Sunday, October 04, 2015

Description Version 2015.10.4

SCREEN DESIGN POPUP

- Added all recent icon editing features to the Popup designer.

Sunday, October 28, 2015

Description Version 2015.10.28

SCREEN TRENDS

- Added new capability to show rate-vs-time and rate-vs-value plots for screen trends and report view trends. Please see document “CPC Update - 2015.10.28.pdf” in the download page on the website.

Thursday, November 05, 2015

Description Version 2015.11.5

SCREEN COMBO LIST

- Fixed the sizing bug that caused larger combo-list icons to show smaller than they should.

DATABUYOFF OBJECT

- Added check during Load method that will clear all properties when the datafile doesn’t exist (ie. RecordQty=0)

Monday, November 16, 2015

Description Version 2015.11.16

CERTIFICATION FORM

- Fixed bug that caused the buttons "Reset All Points for This Sensor" and "Reset This Point for This Sensor" to not work when inputs were not starting from index #1

VALUELIST ICON

- Added VN: designation to VENT action and added Cyan color to that state. This is used for Boeing configurations where the Probe input is used to control the state of the output Source line.

Tuesday, November 17, 2015

Description Version 2015.11.17

Documentation: See document “CPC Update - 2015.11.17.pdf” on website.

PART DATABASE EDITING

- The RecordID field is now displayed for each part record.

BATCH/PART SCREEN

- There is now a check for when a part has no fields. A warning message will be displayed to the operator when this rare and random event occurs.

Sunday, November 22, 2015

Description Version 2015.11.22

Documentation: See document “CPC Update - 2015.11.22.pdf” on website.

DATABUYOFFANALYSIS OBJECT

- Added a new property “StartDelay” which serves to delay the start of an analysis by the number of intervals entered.

SCRIPT COMPILER

- The script compiler will now recognize VariableMemo object children the same as Variable child objects. It will load these into the script and treat them as passed variables.

GRID OBJECT

- A new object class called “Grid” has been added. This object can be setup to hold a 2-dimensional array. The object provides the ability to create and edit the array.

TREND DISPLAY

- A newer Rate-vs-Value display mode has been enhanced to include min and max rate limits for different temperature ranges. This new feature utilizes a connected Grid object which holds the relevant values.

DATAANALYZE REPORTING

- A newer Rate-vs-Value display mode has been enhanced to include min and max rate limits for different temperature ranges. This new feature utilizes a connected Grid object which holds the relevant values.

Monday, November 23, 2015

Description Version 2015.11.23

VALUE LIST ICON

- The ValueList has been enhanced. The list will now expand the height of the values to span the available space. Before the height of each value would be according to its font size.
- A new Spacing property has also been added to control the spacing between each successive value. The default spacing is set to 30 twips.
- A new property called “SourceListing” has been added. This property lets you enter non-contiguous inputs to the list. The property holds a comma-delimited list of input names. Once you select the first input, you can then add a list of all inputs names that you want included. Note that the Source property is only used to determine the location of input objects. It is not used in the list. Also, note that the Count property will not be used and the actual count will be determined by the comma-delimited list.

CERTIFICATION SCREEN

- Expanded screen to show longer input names. Also modified the grid to auto-size the first column for longer input names.

Monday, November 26, 2015

Description Version 2015.11.26

CALIBRATION FORM

- Expanded size to accommodate longer input names.

INPUT VIEWER FORM

- Expanded size to accommodate longer input names.

CERTIFICATION FORM

- Expanded size of input text boxes to accommodate longer input names

Monday, November 29, 2015

Description Version 2015.11.29

Documentation: See document “CPC Update - 2015.11.29.pdf” on website for more details.

TREND SCREENS

- Added a new traceline feature which allows snapshots of trend data.

Sunday, December 06, 2015

Description Version 2015.12.6

Documentation: See document “CPC Update - 2015.12.6.pdf” on website for more details.

TREND REPORT

- Enhanced the legend listing to allow scrolling when inputs exceed page width

DATABUYOFF OBJECT

- Added “GetLoadStatus” method
- Added “IsLoaded” and “LoadedFile” properties

DATABUYOFFANALYSIS OBJECT

- Fixed bug that caused an error when analyzing an input that was the last input in the dataset.

REPORTING SCREEN

- Added ability to access custom reports (Report object) from the standard Reports tab. This uses a new property to target the DataBuyoffReports object.
- Added ability to view and edit Variables that are stored as a child of each custom report.

REPORT OBJECT

- Added PDFFilename and PDFFolder properties.
- Added PDF targeted printing for the Print method.

BATCH REPORT

- Fixed the batch report so that it can properly paginate when the part has more attachments then can fit on one page.

TREND ICON AND REPORT TREND DISPLAY

- Added the ability to show sloped limit lines for Rate-vs-Value “Leaf” trend display. This includes a new configuration for the Grid object.

Sunday, December 13, 2015

Description Version 2015.12.13

Documentation: See document “CPC Update - 2015.12.13.pdf” on website for more details.

RECIPE SCREEN

- Recipes can now include all characters. There are no restricted characters.

OBJECT EDITOR

- The object editor will no longer replace characters in the name of Recipe objects when editing the name.

RECIPEPROCESS OBJECT

- The TransferRecipe method will now support the transfer of RecipeToTransfer entries that include periods and back-slashes.

DATAANALYSIS OBJECT

- New property DontReportOnLeaks. When this is set to True, the reports will remove the Leak Amt and Leak Req from the batch information.
- New property Use24HourTimeFormat. When this is set to True, the reporting will use a 24-hour time format rather than 12-hour format.
- New property UseCsvForExport. When set to True, the system will export using comma-delimited .csv files and not the default tab-delimited .txt files.
- New property ExportComment. This is used to add a multi-line comment to the exported files.
- ExportDataFromServer method has been changed to use an automatic filename when the ExportDestinationFile is blank.
- Export function now includes a new field Run Duration.
- Export function from the Numeric tab on the reporting screen now includes the vacuum sources. Note: This was always the default for the ExportFromServer method.

OPT TAG OBJECT

- Added “WordTo2Char” conversion for Tag reads. This converts a number to two text characters.
- Added TestConversion method to test conversions. Also added two new properties ConversionIn and ConversionOut for use during the test.

TREND SCREEN TRACERS

- Time format on tracers has been changed from decimal minutes (ie. 130.5) to a format that shows mins and seconds (ie. 130M 30S)

Thursday, February 04, 2016

Description Version 2016.2.4

Documentation: See document “CPC Update - 2016.2.4.pdf” on website for more details.

PART ATTACHMENT FORM

- Changed grid size from 13x10 to 10x10.

RECIPE PREVIEW

- Fixed bug that required operator to click screen to show trend.

CERTIFICATION SCREEN

- Added touch-screen buttons to select sensors

CERTIFICATION REPORT

- Changed name column to auto-size.

Monday, February 15, 2016

Description Version 2016.2.15

Documentation: See document “CPC Update - 2016.2.15.pdf” on website for more details.

SCRIPTING ENGINE

- Changed to functions GetChild, PropertyByPath, SetChildProp.
- New “SortChildren” function

EXCEL OBJECT

- Fixed bug with ReadCell method

OUTPUT_ OBJECTS

- Added “SortName” property to all Output_ objects. Used to provide alternative name for sorting activities.

INPUT OBJECT

- Added “SortName” property. Used to provide alternative name for sorting activities.

SCREEN_DBGRID ICON

- Added “HighlightedField” property to select which colum is highlighted green when operator selects a row.

SCREEN_GRID ICON

- New “SingleObjectMode” property which will switch the grid to view a single object.
- New “LastEditedObject” and “LastEditedProperty” properties. These are set when editing a row and column.
- New “AfterEdit” quick-script. Executes after editing an object’s properties.

Saturday, February 27, 2016

Description Version 2016.2.27

Documentation: See document “CPC Update - 2016.2.27.pdf” on website for more details.

TREND VIEW

- Tracer grid resizing bug has been fixed.
- New tracer grid Offset feature

PART ATTACHMENT FORM

- DisableSensor display bug fixed.

CHECKFIELDS OBJECT

- Multi-recipe validation bug fixed.
- New QuantityOfParts check added.

Sundary, March 13, 2016

Description Version 2016.3.13

Documentation: See document “CPC Update - 2016.3.13.pdf” on website for more details.

REPORTING

- Fixed a bug in the Generate method.

QUALITY CARD SCREEN

- Redesign of quality card screen

SCREEN_GRID OBJECT

- Changed StartObject so that it uses an index.

TIMERS OBJECT

- Calculate method will propogate to child Timers objects.

Monday, March 21, 2016

Description Version 2016.3.21

Documentation: See document “CPC Update - 2016.3.21.pdf” on website for more details.

BAR GRAPH

- Enhanced bar graph icon so that it can have inverted scales.

Sunday, April 10, 2016

Description Version 2016.4.10

EXPORT FUNCTION

- A bug in the Export function from Reporting screen is fixed. The bug caused the client to lock when reporting on a datafile with no parts.

Sunday, April 17, 2016

Description Version 2016.4.17

LABEL, BUTTON, CHECKBOX BLINK FUNCTION

- The Blink properties have been enhanced on the Label, Button, and Checkbox functions. The Blink property can now include a comparison (ie. .Autoclave.Inputs.AIRTC\Value > 100) to indicate a blinking condition.
- Also, a recent change to the Blink property was reversed due to compatibility issues. Now, instead of entering “True” to force a continuous blink to occur, you must enter “blink” in the property.

DBGRID

- Fixed the grid to properly maintain the Highlighted cell when the screen updates.
- Implemented the “All” entry for the HighlightedField entry.

NOTIFICATION OBJECT

- Added new Style = “MessageBox”. This new style uses the standard MessageBox function of windows. There are two other properties that can be used to define the message box. MessageBoxText is the text that will be displayed. MessageBoxStyle is either Information, Exclamation, or Critical and will cause a different sound and icon to be displayed on the messagebox form.

Tuesday, April 19, 2016

Description Version 2016.4.19

COMBO LIST ICON

- Changed the combo-list icon so that it can work properly when referencing an ADODB (ie. SQL) Recordset that is setup with CursorLocation=Server. The previous version of combo-list only worked with Recordsets that were opened with Client-side cursors.

EQUIPMENT OBJECT

- Added ModelNumber and SerialNumber properties. These can be used to identify the specific equipment.

REPORT OBJECT

- Added new property LastBuild which is set to date and time of last Build method call.

Sunday, April 24, 2016

Description Version 2016.4.24

GRID ICON

- Changed the AllowAction property to not disable the entire grid. It will only disable editing and scripting.
- Added HighlightedField property to show the active cursor/cell in a specific background color.
- Added HighlightedColor property which is used to define the color used for the HighlightedField property. The default is green.
- Added UpdateIconsOnClick property to force a screen update immediately when a cell is clicked or the cursor enters a new cell.

DBGRID ICON

- Added HighlightedColor property which is used to define the color used for the HighlightedField property. The default is green.

Monday, April 25, 2016

Description Version 2016.4.25

DATABUYOFFANALYSIS OBJECT

- Changed the analysis function to disregard disabled thermocouples.

Thursday, April 28, 2016

Description Version 2016.4.28

GRID ICON

- Fixed bug that caused a delete action during editing to not properly execute the AfterEdit script.

SCRIPTING

- Added a new “Null” function. This can be used to set a variable to a Null value.
- Added a new “IsNull” function. This can be used to check for a null value. This is useful in database programming.
- Added a new “FolderExists” function. This function is used to check if a specific file folder exists.
- Added a new “MessageBox” function. This function is used to create a popup message without having to generate a notification object. The usage is: Junk = MessageBox(MessageText, Caption, ClientPCName,

MessageStyle). The MessageStyle can be Information, Exclamation, or Critical and will show a different form.

Sunday, May 1, 2016

Description Version 2016.5.1

CERTIFICATION SCREEN

- Fixed a bug that caused the CPCClient to remain in the Window Processes after closing down the application. This would only happen after accessing the Certifications screen.

CLIENTCONNECTION OBJECT

- Added “LoadedScreens” property. This property identifies the screens currently loaded into the specific client.

SCREEN OBJECT

- Added “LastLoaded” property. This property identifies the client and time/date that the screen was last loaded.
- Added “LastAccessed” property. This property identifies the client and time/date that the screen was last accessed and viewed.

Saturday, May 7, 2016

Description Version 2016.5.7

See document “CPC Update 2016.5.7” on website for more information.

PARTTEMPLATEMANAGER OBJECT

- Added the ability of sizing the part attachment form grid. A new property called “AttachmentEditorRows” lets you define the number of rows shown on the grid. The default is 10 (10 columns x 10 rows = 100 sensors).

Sunday, May 15, 2016

Description Version 2016.5.15

ATTACHMENT FORM

- Fixed the bug that caused the form to have zero rows if the new property “AttachmentEditorRows” was left blank. It will now properly use the default value of 10 rows.

CERTIFICATION FORM

- Fixed the bug that caused the certification form to move to the background after the operator Saved or Loaded a new certification report.
- Widened the “Tolerance” textbox to allow comma-delimited entries.
- Fixed the bug that caused the form to not retain its values when the operator leaves the certification screen after pausing the certifications.

- Added new properties “InProcess”, “Paused”, and “ClientMachine”. InProcess is set to True when a certification is running or paused. Paused is set to True when a certification is paused. ClientMachine is set to the name of the PC currently carrying out the certification. These new properties can now be used to blink the certification buttons and show which client PC is certifying.
- Added a new popup notification warning the operator if the same certification is opened on two different client PCs. This will now disallow another client machine from accessing the certification that is in-process on another client.
- Added a new “Silent” property to avoid the bell sound whenever a new set of values are read during certification.

CALIBRATION FORM

- Fixed a bug that caused some notification popups to display behind the calibration form.
- Fixed a bug that caused the form to not load properly if you previously closed the form while in the middle of the calibration process.
- Added a new notification popup that warns against switching inputs in the middle of calibration.
- CPC now remembers the last position of the calibration form and will restore that position when you reopen the form

INPUTVIEWER FORM

- CPC now remembers the last position of the input viewer form and will restore that position when you reopen the form

BATCH SCREEN

- Enhanced the batch entry so that it checks for compatible recipes and auto-load of recipes when the part is entered by typing in the specific part field in the table. The prior version of CPC only checked for recipe compatibility when the operator selected from the database list when creating a new part. Now, even if you change the part in the table, a recipe compatibility check will occur.

FILE OBJECT

- Enhanced the File object. This object is used to write and read from Ascii files. New methods for ReadBytes, ReadLine, ReadAll have been added. New additional properties for Position, LineNumber, BytesToRead, and IsError have also been added to the object.

Monday, May 16, 2016

Description Version 2016.5.16

MESSAGEMANAGER OBJECT

- Added new property for Alarmed and RequiresAcknowledge. The Alarmed property is set by the Calculate message to True or False depending on if any alarm-related message in the list is

still active. The RequiresAcknowledge is set to True or False depending on if any alarm has not been acknowledged. The RequiresAcknowledge property is useful if you want to blink the Messages button on the screens to notify the operator of unacknowledged alarms.

GRID ICON

- Added a feature useful to the AfterClick scripting where the LastEditedObject and LastEditedProperty are now set whenever you click the grid. This lets you associate specific actions to the operator clicking a cell.

NOTIFICATION OBJECT

- Added a new MessageHelp style. This type of notification will send a sizeable message form to the client screen and will subsequently allow different messages to be displayed on the active message form without it closing. This is particularly useful for displaying information to an operator from a Grid icon that is displaying alarm information. Using the AfterClick script of the icon, you can send the Alarm's AlarmText to the notification and display that as message help.

Tuesday, May 24, 2016

Description Version 2016.5.24

SCREEN GRID ICON

- Fixed a small bug that caused the grid to fire its OnClick event when the mouse was positioned on the grid on first entry into the screen.

SCREEN BUTTON ICON

- Fixed a small bug that caused the button to fire it's MouseUp event when the mouse was positioned on the button immediately after entry into a screen. This event only fired if the button was configured as Momentary = True.

Sunday, June 19, 2016

Description Version 2016.6.19

SCRIPTING

- Fixed FileExists function so that it doesn't throw a runtime error in the script editor when a file doesn't exist.
- The script editor has always shown some help information when you click on a function or operator, however this system has not always identified the function's name when it is bracketed by either a parenthesis or comma. This bug has now been fixed

RECIPE_CASCADE OBJECT

- Added property "ApproachZone" and "ApproachZoneRate" which are used to instruct the system to use a lower ramp rate when the ramped setpoint approaches final setpoint. These two properties can reduce the HITC overshoot on systems during TUS runs.

- Added script “AtRampEnd” which executes one time when the ramped setpoint reaches its final goal.
- Added script “BeforeRampEnd” which triggers when the ramped setpoint crosses a specific deviation value from final setpoint or when the ramp is within a specific time of completion. The actual point of trigger can be time or value based and is set by the “TimeTriggerForBeforeRampEnd” property or the “ValueTriggerForBeforeRampEnd” property.

BATCH SCREEN

- When selecting the first part of a batch, and that part that has two or more valid recipes associated with it in the database, the system displays a popup form that requests the operator to select one of the recipes. If the operator closes the form without making the selection, the system will now remove disallow the part entry and will remove the currently selected recipe from the equipment. The prior version would leave the existing recipe selected.

RECIPEPROCESSOR OBJECT

- A new method called “RemoveRecipe” has been added to remove the currently selected recipe from the equipment. This can be used at the end of a run to clear the current recipe selection, thus forcing the operator to select a new one. The RemoveRecipe method will clear the properties RecipePath, RecipeName, RecipeDescription, and RecipeRevision. It will also set the new RecipeTransferred property to False.
- A new property called “RecipeTransferred” has been added. This True/False property is set by the system when a new recipe has been selected and transferred to the equipment. It is set to False when an invalid recipe is transferred or after the new method RemoveRecipe has been executed.

RECIPE SCREEN

- When you click on the run recipe node under the equipment node, you can now Remove it from the equipment with new “Remove” button.
- When the run recipe has been removed via RecipeProcessor or invalid recipe transfer, the system will show a blank recipe in its place called “No Recipe Transferred”

Sunday, July 10, 2016

Description Version 2016.7.10

NUMERIC REPORTING SCREEN

- The original numeric viewing screen was able to show a maximum of 350,000 cells due to the limits of the MSFlexGrid control. While this can adequately view most datafiles, large datafiles were not loading into the grid properly. The new update will split the data into sensor groups so that all data can be viewed on the screen. Buttons will be provided at the bottom of the grid to allow you to select a different sensor set.

SCRIPT COMPILING AND EDITING

- The script compiler will not show a warning when a For/Next loop is not properly resolved. This will show an alarm if there is a missing Next or if the variables associated with the For or Next statement has no match. These warnings are not fatal.

DATAANALYZE OBJECT

- New property “ExportTimeDateFormat” which defines a custom time and date format for the report numeric screen and the export function. This new property lets you export or view the date and time rather than just the time (prev versions). *Note: that this property overrides the 24HourTimeFormat property.*

Wednesday, July 13, 2016

Description Version 2016.7.13

BATCH AND QUALITY BATCH REPORTING

- A bug has been fixed that caused the report to create empty spaces when the number of part fields being included in the report exceeded 8.

Sunday, July 17, 2016

Description Version 2016.7.17

EQUIPMENT OBJECT

- You can now set the primary and backup IO by changing a new property called “IOSelected”. This indicates “Primary” or “Backup”. You can still set primary or backup using the existing methods as well.

CALIBRATION FORM

- When using BackupIO, there was a bug in the calibration form that caused it to not use the correct IOObject. This has been fixed. Additionally, the calibration form will display “Backup IO” if it is using the backup IO.

Wednesday, July 20, 2016

Description Version 2016.7.20

DATABUYOFFANALYSIS OBJECT

- Added a new property “StartDelayForEachPoint” which allows you to delay the analysis on each point within a group (ie. PartTC) once its in the valid range.

Sunday, July 31, 2016

Description Version 2016.7.31

PLC_TRANSFER OBJECT

- Added the ability to parse bits on Tags that are configured for “Single” type. The prior version only parsed bits from “Int” and “Long” tag types.

CHECKCOMPONENT OBJECT

- Modified to clear the CurrentGroup after the check has completed. Modified so the setpoint is routed to the SetpointTarget property if the property does not have a valid path.
- Modified the report and widened the columns to allow longer component names.

RECIPEPROCESSOR OBJECT

- Fixed a bug that caused the CPCserver to lockup when the newer method RemoveRecipe was run.
- Added a new script AfterRecipeRemoval that triggers after the recipe is removed from inside the recipe screen or via the RemoveRecipe method.

Sunday, August 8, 2016

Description Version 2016.8.14

RECIPE_CASCADE OBJECT

- Fixed a bug that would allow a negative rate to be entered in the recipe. This would reverse the normal and expected direction of the ramp. The rate calculations now ensures that the absolute value of the recipe entry will be used.

RECIPE_RAMPSOAK OBJECT

- Fixed a bug that would allow a negative rate to be entered and used in the recipe. This would reverse the normal and expected direction of the ramp. The rate calculations now ensures that the absolute value of the recipe entry will be used.
- Added property “ApproachZone” and “ApproachZoneRate” which are used to instruct the system to use a lower ramp rate when the ramped setpoint approaches final setpoint. These two properties can reduce overshoot during ramp approach.
- Added script “AtRampEnd” which executes one time when the ramped setpoint reaches its final goal.
- Added script “BeforeRampEnd” which triggers when the ramped setpoint crosses a specific deviation value from final setpoint or when the ramp is within a specific time of completion. The actual point of trigger can be time or value based and is set by the “TimeTriggerForBeforeRampEnd” property or the “ValueTriggerForBeforeRampEnd” property.

OUTPUT_PID OBJECT

- Added Deadband capability. New properties DeadbandPosition, DeadbandUpper, DeadbandLower, and OutputUsingDeadband are used to define a % region (ie. 48-52%) in the PID that will result in a fixed % output value (ie. 50%). The resultant output is stored in the OutputUsingDeadband property.
- Added new Kickstart feature with two properties, KickStartUp and KickstartDown that is used with the new deadband feature. These properties are used to create an immediate output offset when the output is outside of the deadband. This feature can be used to counteract the mechanical deadband in some

proportional valves where they require a specific minimum output % to begin to operate.

REPORTING

- Changed the PrimaryTags reports and numeric/trend views so that they are not case-sensitive.

Sunday, August 28, 2016

Description Version 2016.8.28

BATCHTOOLS, BATCHTOOL, BATCHTOOLCONNECTION OBJECTS

- New objects used to define a tool and tool connection. These connections can be then paired with autoclave sensor attachments. The new feature provides multiple tooling images and location-specific sensor viewing as well. The BatchTool object includes information on associated images. The BatchToolConnection defines each connection, the type of connection, the associated image (from BatchTool), and the Xlocation, Ylocation, and backcolor of the connection when associated with the image.

PARTTEMPLATEMANAGER OBJECT

- Added BatchToolAssociation, BatchToolPath, and BatchToolSelectionField properties. The BatchToolAssociation is a True/False for enabling BatchTool use. The BatchToolPath points to the BatchTools object. The BatchToolSelectionField identifies the database field that will identify the batch tool name used for matching Part to BatchTool.
- Added BatchToolEditing property to enable editing of the connections on the picture displayed in the Batch screen.

GROUP OBJECT

- Added BatchTool and BatchToolConnection properties to identify the specific tool connection for the specific input or output sensor.

BATCHES OBJECT

- Added ViewBatchTools method for viewing tools in the run pictorially.
- Changed LinkAttachments and LinkAttachmentsAndUnused to properly associate input and output groups with the attached BatchTools

BATCH SCREEN

- Changed screen to show batch tool pictorials for each matched part. The pictorial includes connection location information and matching input/output information.
- Attachment form has been modified to allow the operator to match attachments with the specific connection point on the tool. This one-to-one match occurs with two grids. Also, when you hover your mouse over each attachment or connection, the

system will show the match and the active real-time sensor value.

- You can now resize the pictorial image by clicking on the vertical divider between the image and the field entry section.
- Added a new Print button to print full-size image of each part.

PART OBJECT

- Added BatchTool property to track the matching of part to BatchTool.
- Attachment form has been modified to allow the operator to match attachments with the specific connection point on the tool. This one-to-one match occurs with two grids.

PARTATTACHMENT OBJECT

- Added BatchToolConnection property to track the matching BatchToolConnection for the sensor attachment.

GROUPLINK OBJECT

- New object that is used to link an input to another Group object for purposes of using the QuickView window. This is particularly useful when you have non-attached inputs that are monitoring attached outputs (ie. VSRC1).

ACTIVECLIENTS OBJECT

- Fixed a bug that caused Notifications to stackup as children of the client object.

NOTIFICATIONS OBJECT

- Fixed a bug that caused the BeforeNotify to occur after the Notification reads the DestinationClient property.

Tuesday, August 30, 2016

Description Version 2016.8.30

LEAKDETECTION OBJECT

- New objects that provides a visual leak-detection capability for composite parts and tools. The feature provides the ability to visually target leak sources and determine where a leak is located on complex tooling. This feature is priced optionally on CPC installations.

Thursday, September 01, 2016

Description Version 2016.9.1

LEAKDETECTION OBJECT

- Fixed some bugs in the object that caused CPC to lock when there were no parts or no attachments on a part.

Saturday, September 10, 2016

Description Version 2016.9.10

DATAANALYZE OBJECT

- CPC has a feature that converts the printed report to an ASCII equivalent file. This feature does not create a CSV file, but rather a close duplicate of the printed report. A bug was uncovered where horizontal lines in the printed report would result in missing lines of information in the generated file, especially on quality report generations. This bug has now been fixed.

LEAKDETECTION OBJECT

- FlowLowThreshold and FlowHighThreshold properties have been added. These provide the color gradient display for Flow volume changes.
- FlowUnits property has been added. This will be used for display of Flow volumes on the leak-detection screen.
- The BagName, ImageForPosition, and InlineIndex properties has been removed. These were not utilized.

LEAKDETECTION SCREEN

- The leak sensors and tool connections will now highlight with a green border when clicked.
- When you click a sensor on the tool graphic (ie. FrontSide image), the image selection buttons will highlight if that sensor is also included on another tool image (ie. LeftSide image).
- When you click on the sensor grid, the matching sensor on the image will highlight.
- The LeakLow and LeakHigh threshold settings can now be changed on the screen.
- The new FlowLow and FlowHigh threshold settings can now changed on the screen.
- A new feature and checkbox “Show Flow” has been added in order to show the leak amount and color based on the volume of the leak (ie. cu.inch) and not the vacuum leak deviation (ie. “Hg). This

GROUP OBJECT

- Added a Volume property to hold the volume of the vacuum source line and resin trap for vacuum source and probe attachments. This is used by the LeakDetection object for calculating the amount of actual flow that has occurred during a leak test. For accuracy, this should be the volume of the feed-through pipe, external tubing, and resin trap. *The hose and internal tubing on the tool is set on the Volume property of the BatchToolConnection object.*

PARTATTACHMENT OBJECT

- Added a Volume property to track the volume of the vacuum source lines and resin trap. This is used by the LeakDetection

object for calculating the amount of actual flow that has occurred during a leak test. This property is automatically set to the Group object's volume depending on the attachment link.

Wednesday, September 14, 2016

Description Version 2016.9.14

LEAKDETECTION OBJECT

- Changed the name or property FlowLowThreshold and FlowHighThreshold to VolumeLowThreshold and VolumeHighThreshold.
- Added a "Save" method.
- Added property "SavePath" and "Filename" which are used for the new Save method. If the filename is blank, then the system will name the file with a date/time default (ie. "Leak Detection 20160913 12 24 13.lkd")
- Added property "TimeOfTest" which records the date and time when the last test started.

LEAKDETECTION SCREEN

- Changed organization of controls on the screen.
- Changed Flow Low and Flow High threshold settings to Volume Low and Volume High.
- Changed the grid to not display Volume if the value has not exceeded the Volume Low setting.
- Added Time column to the grid. This is the elapsed time when the Volume exceeded the low threshold. In this way, the Time shows how soon the leak affects different ports.
- Added the ability to Load a previously saved Leak Detection data set. This will let you perform playback on all previous detection tests.
- Modified and improved the triangulation algorithm.
- Changed the leak display from a label to a circle with the text "LEAK" in the middle of it.
- Added "Step" information.
- Added "Name" which shows either "Last test" for real-time display or the filename for loaded data.

DATASAVING OBJECT

- Added a new property called "FilenameNoExtension" which will be set by the auto-naming method. This property is the file name without the file extension and without the path. This is useful in situations where you want to use the name for other purposes.

Thursday, September 15, 2016

Description Version 2016.9.15

DATAANALYZE OBJECT

- Fixed bug in Generate routine that caused a line to be written over the 2nd part information field.
- Added property “NoAsteriskOnGeneratedReports”. This can be set to True to suppress the “***” out-of-tolerance display on quality reports that are generated to a file. This was a request by a specific customer.

Tuesday, September 20, 2016

Description Version 2016.9.20

QUALITY CARD SYSTEM

- Added the ability to have sequential phases (legacy operation) and parallel operation. In parallel operation, phases can start and end anywhere in the run based on Start and End criteria. Phases can also overlap in Parallel mode.
- Added PhaseStyle property. This can be used to change the phase from Sequential (default) to Parallel. When in parallel, multiple phases can overlap.
- Added check-box to disable the Alarm Messages at the end of the quality report.
- Added check-box to disable the Bag Pressure Analysis on the quality report.
- Redesigned the Quality Card Management screen.
- For PartTemperature analysis, added a HITC and LOTC in the “Control By” drop-down list. Having selected HITC, the system will only analyze the HITC input. When selecting LOTC, the system will only analyze the LOTC input.
- Added a new feature for custom calculation analysis. Now, you can instruct the system to analyze a specific input or a calculation of multiple inputs. You can analyze min/max values, min/max rates, and also Pass/Fail criteria.
- Added a new feature that allows analysis to include custom scripting. This includes custom variables that can be used to expose data points (ie. AIRTC) or merely custom variables that can be analyzed. Once the script sets the specific custom variables, the new calculation feature can utilize those variable values for analysis. This provides the maximum level of flexibility for more complex analysis.

REPORTING SCREEN

- When you select a quality card from the drop-down menu, the Quality Batch Report will be automatically selected. When exiting the Quality Card Management Screen, the currently edited card will be applied to the current data and the quality batch report will be displayed.

DATAANALYZECALCULATION

- New object used for quality card calculations. See above.

Sunday, September 25, 2016

Description Version 2016.9.25

SCREEN LABEL ICON

- The screen label icon has had a capability to switch between units “inchHG” and “Psig” at a zero-transition. The label has now been enhanced to include units “Hg and ‘’Hg (using double-apostrophe).

QUALITY CARD MANAGEMENT SCREEN

- Changed the screen to disable the card’s controls when a card is not selected or there are no cards programmed.
- Exposed the Storage Filename and AutoLoadFromStorage property for editing on the screen.
- Added a check-box for “Include End Interval in Analysis” used for Sequential phases.
- Changed the way cards and phases are copied. Now, instead of adding an index number at the end of the name, the word “ Copy” is added.

QUALITY REPORTS

- For Sequential card analysis, when a card does not end properly the system will continue to show analysis for remaining cards, however the Start and End intervals will be at the end of the datafile. This behavior differs from prior versions where the system would only show the failed phase and then stop the report. The new behavior is required in order to show parallel phases that might be included after the sequential ones..

DATAANALYZEPHASE OBJECT

- Added properties StartInterval, StartTime, EndInterval, and EndTime. These are used for Parallel phases and are updated by the phase calculation and can be used in scripting to change the Start or End of the phase.
- Added scripts BeforePhase and AfterPhase.
- Added property DontAnalyzeLastInterval which can be set to true.

DATASAVING OBJECT

- On a previous update (2016.9.14), a new property was added to the DataSaving object. During addition of this property, the “Filename” property was erroneously removed from the object. This property has been re-added on this update.

Tuesday, October 6, 2016

Description Version 2016.10.6

OBJECT EDITOR

- Fixed a bug that allowed the horizontal resizer bar to be moved below the bottom combo control. When this happened, this erroneous position was saved to the Windows registry and then caused the help text to float after CPC reload instead of being anchored.

RECIPE_DIRECT OBJECT

- Added a new property “DefaultValue” that is used to define a default in case the recipe row is blank. This should be set to ON or False for typical enables (ie. FanEnable, HeatEnable, etc.)

SERVERBACKUP

- Fixed a bug that caused the CheckRemotePC feature to stop all future checking if the backup PC was temporarily disabled for a period of time. On registering a failure, the checking system is supposed to wait a prescribed time (set in CheckDelayTime property) before trying again. The bug added a large delay time instead of using the CheckDelayTime.

REPORTING SCREEN – NUMERIC VIEW

- When loading a new file, the numeric view will now default to “Active Sensors”.
- After running a quality report, the numeric view will switch to Active Sensors and will show red (value) and blue (rate) highlights of non-conforming data according to the card’s findings. This lets you see where the actual data points are.
- When you click on a cell that is non-conforming, the system will now show the quality card phase title, analysis section title, and the finding (ie. AIRTC: 361.1 > 360).
- When a quality report runs, the rate-calc-interval used for the card will be set on the numeric view’s “Rate Calc” field so that the numeric screen rate calculations match the quality card’s rates.
- When entering the reporting screen, the numeric view’s rate-calc field will be set to the rate calculation property of the DataAnalyze object (row 52).
- On the numeric view, selecting cells with the keyboard will now update the statistical values and rates on the right-side of the screen. Prior to this update, only a mouse click would update the information.

QUALITY CARD MANAGEMENT SCREEN

- Changed the phase list to show the index of the phase. Series phases are listed with an index (ie. 2) while parallel phases show a P followed by the index (ie. P1)
- Changed the function which saves storage files so that it removes all invalid filename characters. Those invalid

characters are: \ / : * ? " < > |. Prior to this there were some characters that would be allowed in the field, and that would disallow proper saving.

- Added Revision field (ie. A, B, C). This is manually set by the Quality Card programmer.
- Added a “QC Comment” text box. This can be used to explain the quality-card as well as provide information about the certification and validation of the card.
- Added the ability to track changes. A “Track Changes” check-box and a scrolling change-log is included. Once change-tracking is enabled, all changes to the card are recorded.
- Added ApprovedForProduction check-box. This will put the card into a mode where all future changes must be confirmed with an “are you sure” dialog box.
- Added the ability to copy and paste calculations from one phase to the other.
- Reorganized the screen to fit the new features

DATAANALYZECALCULATION

- Added property “ResultDisplay” which can be used to display a specific result message when using a Quality Card custom calculation. The ResultDisplay property is most often used in “Pass” type calculations. See quality card manual for more information.

DATASAVING OBJECT

- Added ability to parse the RecipeRows record. This will parse each row name into a separate child variable object. This information had previously not been included in the datafile.

RECIPEPROCESSOR OBJECT

- Added RecipeRows property to hold an array of the names of all recipe rows. This array property can now be saved to the Datafile. This information had previously not been transferred to the Datafile. The RecipeRows property is updated at the start of each run..
- The Recipeprocessor object will now search the DataSaving object for a RecipeRows DataSavingRecord. If none exists, it will create it.
- If the BeforeStartRun script is not calling the RecipeRows data save method, the RecipeProcessor object will automatically save the RecipeRows data-saving object anyway. *ASC Control Engineers: Even though this will occur automatically, it’s still good practice to add RecipeRows\DoSave to your “BeforeRunScript”.*

DATABUYOFFPARSER

- Added ability to parse the RecipeRows record. This will parse each row name into a separate child variable object.

DATAANALYZE OBJECT

- The FormatForTime property will now be checked and updated automatically to 0.00 if it's currently set at 0 or 0.0. The setting 0 and 0.0 does not provide enough time accuracy for rate determination on the numeric view in the reporting screen.

EDITING WIZARD

- Added the ability to search for blank properties in the wizard. A checkbox for "Search for blank" is added to the form.
- Removed the "Replace" textbox and button. This was previously not implemented.

Sunday, October 16, 2016

Description Version 2016.10.16

DATABUYOFFPARSER OBJECT

- When parsing the Batch data record, the parser will now create a BatchToolConnection child if saved. Also, it will expose the BatchToolConnection of each attachment.

DATABUYOFFATTACHMENT OBJECT

- New object used by the DataBuyoffParser to store batch part attachment information. This object includes the Name, Type, and BatchToolConnection properties.

PLC_TRANSFER OBJECT

- Added the capability to read String datatypes from the CompactLogix and ControlLogix platforms.
- Added the capability to write String datatypes to the CompactLogix and ControlLogix platforms.
- Added a property StringLength that provides a means of reading a fixed-length string rather than the default (blank) variable-length string. This can reduce overall communication performance times.
- Added a property StringParseQty and StringParseLength to provide a way of parsing a fixed-length string into fixed-length sub-strings. This can reduce overall communication performance times.

SCRIPT EDITOR

- When you press Cntrl-F to find search the script, if your cursor is currently on a word it will fill-in the find text with that word. You no longer have to highlight the entire word.

SCREENS

- The lower status panel at the bottom of the screen will now show the name of the current screen.

TROUBLESHOOTER FORM

- Completely revamped the troubleshooter form. When the troubleshooter form is displayed, the system will create a Troubleshooter object under the ClientDefault object. This object

is used to record the troubleshooter water groups so that you can use the watch groups in the future.

- You can open up to four (4) forms at a time. Each form can contain multiple watch groups (tabs). Each watch group has a list of paths that are monitored while the form is loaded. If you enter an event criteria, the system will log events to the messages tab.
- By clicking the check-box “Keep active on close”, you can setup a troubleshooter to remain active when closed. This will cause the form to be invisible and still monitoring properties and triggering events.

Monday, October 17, 2017

Description Version 2016.10.17

LOGGROUP OBJECT

- Added property ExportFile and method ExportData. The ExportData method allows the trend screen file to be exported to a tab-delimited ascii file which can be imported into Excel. This feature is useful in situations where the datafile for the run was corrupted and the customer needs to recover data. The trend screen file is a separate file that can be used to recover the data of a run.

TREND SETUP FORM

- Added a new button to the Trend Setup form that lets you export the trend information. The button will expose the current ExportFile property as the default filename and then will run the new ExportData method.

PLC_TRANFER OBJECT

- For string reads and writes, the system now has the ability to read a fixed-length string from CompactLogix and ControlLogix. A new property, StringLength, sets the number of characters to be written or read. By using a fixed-length communication, the system will bypass the reading and writing of the .LEN data element and will improve communication performance. When using the fixed-length feature, you’ll need to pre-seed the RSLogix controller tag array with a 40-character string or set .LEN = 40 for each array element.
- Added StringParseQty and StringParseLength properties. These will instruct the system to parse the fixed-length string into sub-strings and then place these values in underlying grandchild Tag objects (under Child Tag objects). This feature can be used to reduce communication overhead and hangs associated with variable-length string communications. Note that the CompactLogix string datatypes have a maximum character count of 82.

Friday, October 28, 2016

Description Version 2016.10.28

DATASAVING OBJECT

- Fixed a bug that was causing the auto-index datafile naming function to not function properly when the prior run was after 12pm of the previous day and the new run was before 12pm today. This condition would cause the index number to not reset properly to 1. This bug was erroneously injected into the system in September during another DataSaving object change and was not identified during validation testing.

QUALITY CARD ANALYSIS

- Refined the RampSoak analysis slightly to account for the half interval of soak time that was not accounted for in certain datasets.
- Added more features to the Parallel Phase Criteria entries and the Calculation entry. Prior to this version, you could only use input names in PhaseStartCriteria, PhaseEndCriteria, or Calculations. (ie. HITC > 250). The new feature lets you also use statistical functions based on the specific input type or the names available to the “Change On” dropdown for sequential phases. Here are some available options::
    - Segment – This works the same as input SEG.
    - SegmentChange – this is a True/False value that will switch phases when SEG input value changes.
    - SegmentTime – This works the same as input SEGTIME
    - End – this will end the phase at the end of the dataset. This functions the same as a blank end criteria.
    - SoakComplete – This is a True/False value used with RampSoak calculations. This should only be used in PhaseEndCriteria.
    - TimeInPhase (or PhaseTime) – elapsed time in phase. This can only be used in PhaseEndCriteria and the Calculation.
    - High(PartTC) or Max(PartTC) or MaxPartTemp – highest value of all enabled part thermocouples.
    - Low(PartTC) or Min(PartTC) or MinPartTemp – lowest value of all enabled part thermocouples.
    - Mid(PartTC) – middle of all active part TCs. Equivalent to (High(PartTC)+Low(PartTC))/2.
    - Avg(PartTC) – average of all active part TC readings.
    - Spread(PartTC) – gradient of part thermocouples. Equivalent to Abs(High(PartTC)-Low(PartTC)).
    - High(Probe) or Max(Probe) or MaxProbe – highest value of all enabled part vacuum probes.

- Low(Probe) or Min(Probe) or MinProbe – lowest value of all enabled part vacuum probes.
- Mid(Probe) – middle of all active part vacuum probes. Equivalent to (High(Probe)+Low(Probe))/2.
- Avg(Probe) – average of all active part vacuum probe readings.
- Spread(Probe) – gradient of part thermocouples. Equivalent to Abs(High(Probe)-Low(Probe)).

Monday, October 31, 2016

Description Version 2016.10.31

RECIPE SCREEN EDITING

- Changed the behavior of the recipe editing grid. Before, when you single-clicked on a cell, the system would enter an edit mode for the cell. Now, clicking once on a cell will only select the cell and not enter edit-mode. A double-click will enter edit mode and another click while in edit mode will bring up the pull-down listing if applicable. This new behavior is more consistent with Excel grid and was also changed in order to allow the mouse-wheel to be able to scroll the grid, which it couldn't do while in edit-mode.
- Added mouse wheel scroll capability for recipe rows
- Added a cell group-delete function. You can now highlight multiple cells and then press the delete key to delete multiple cells.
- Added "Copy Segment" and "Paste Segment" buttons. You can now copy and paste individual segments from different recipes.
- Added a right-click menu for add, insert, delete, copy, and paste of segments.
- Adding a new recipe will now automatically add 3 blank segments.
- Entering a new segment message will return cursor focus back to the recipe.

REPORTING/DATAANALYZE SCREEN

- Added mouse wheel scroll to Messages view
- Added mouse wheel scroll to Recipe view
- Added mouse wheel scroll for report page viewing.

RECIPE_LINECONTROL OBJECT

- Added "DefaultAction" property to be used when recipe row is left blank. Normally this would be set for VAC.

VALIDATION_INPUT

- Changed Validation so that it doesn't change the input's status when the input is already in "Test" mode. Prior to this change, if the input value changed or dropped below the LowValidation limit, the input would be changed back to StatuMode="AutoOff".

SCREEN_BUTTON

- Verify text is now compatible with alternate languages and GetAndConvert functionality.

SCREEN_CHECKBOX

- Verify text is now compatible with alternate languages and GetAndConvert functionality.

CLIENTDEFAULT OBJECT

- Implemented the feature that lets you change the default languages. There are five properties (Language1, Language2, Languages3, etc.) that are used to define the languages. The default languages are English, Spanish, German, French, and Italian, however you can now change these to any other language prior to building your language conversion file/array in the Server object.

RECIPESEGMENTPARAM OBJECT

- The RecipeSegmentParam objects have been given additional latitude when naming in the Object Editor. You can now rename the recipe rows and include spaces. The prior version would replace any space with an underscore.

QUALITY CARD MANAGEMENT SCREEN

- Fixed bug that caused the Editing Verification message box to be displayed when the Approved For Production checkbox was set and you entered the screen.
- Fixed the bug that caused the Calculation Variable names to be altered when using a colon character (ie. Variables:OperatorName). The prior version would replace the colon with an underscore character. *Note that the colon is used to identify a variable that is parsed from a saved variable list.*

RECIPE PREVIEW

- The recipe preview has been modified so that it can work properly when an alternate language is used. The previous version would fail the preview if the row names were changed to an alternate language. The new version fixes that behavior.

QUALITY CARD MANAGEMENT SCREEN

- Fixed a bug that caused the “Probe Values at Phase End - Max” textbox to not accept a change.

Thursday, November 03, 2016

Description Version 2016.11.3

QUALITY MANAGEMENT SCREEN

- Added a check-box for “Include End Interval in Analysis” for parallel phases.

QUALITY CARD ANALYSIS

- Fixed bug that caused locked up the client if you used TimeInPhase or PhaseTime in a phase custom calculation.

Thursday, November 10, 2016

Description Version 2016.11.10

TREND SETUP SCREEN

- Fixed bug that caused the Export function to be called when selecting a trend group from the drop-down listing. This bug was created when the Export functionality was added on a recent update.

CERTIFICATION OBJECT

- Renamed the Property “DataFormat” to “FormatForValues” to avoid confusion.

DATAANALYZEPHASE OBJECT

- Added property “ForceRateCalcSpanning” which, if True, will cause the phase to calculate its three rates by using a single calculation based on the value (ie. Temperature) at the low range and the temperature at the high range. If a range isn’t entered, the span of the calculation will be start of phase to the end of phase.

DATAANALYZECALCULATION OBJECT

- Added property “DontShowName”. If True, this property suppresses the calculation name on the report. It is meant to be used for cases where a script is used to form a custom ResultDisplay.

CARD MANAGEMENT SCREEN

- Added the checkbox for the “Force Rate Calc to Span Range”
- Renamed the “Cool phase invert rates” checkbox to “Invert rate values during cooling phase”
- Added “Don’t Show Name” in the Calculation section. This option suppresses the calculation name on the report. It is meant to be used for cases where a script is used to form a custom ResultDisplay.

QUALITY CARD ANALYSIS

- The new “Force Rate Calc to Span Range” capability has been added to the part temperature rate analysis. This will calculate for each thermocouple a single 2-point rate based on the first temperature in the range and the last temperature in the range. This overrides the normal interval-based rate calculation.

Wednesday, November 16, 2016

Description Version 2016.11.16

CHECKSLEAK OBJECT

- Added a DuringCheck quick-script. This script can be used to counteract any manual operator action and force valves to be off during the leak test.

SCREENTREND OBJECT

- Added ShadeInput, ShadeCriteria, and ShadeColor so that you can provide a shaded region of the trend based on the value of a specific trended input. This is useful in showing a light red region in cases of alarm status.

DATAANALYZE OBJECT

- Added ShadeInput, ShadeCriteria, and ShadeColor so that you can provide a shaded region of the reported trend based on the value of a specific trended input. This is useful in showing a light red region in cases of alarm status.

SCREEN TREND ICON

- Fixed a small bug that caused a button remnant to display near the Traceline grid when the grid was moved or resized.

ALARM OBJECT AND MESSAGE SCREEN

- For “Deviation” alarms, changed the alarm messaging so that the message “Setting” property will show the base reference plus the setting.

CHECKLEAK OBJECT

- Added “StartDelay” property. This time entry instructs the leak test to delay initial readings until after a specified amount of time.

Thursday, November 17, 2016

Description Version 2016.11.17

QUALITY CARD REPORTS

- Fixed a bug that caused the part temperature rate calculation to be slightly wrong when using the newer “Rate Span Range” feature. The prior version was erroneously leaving out a few data points near the Low Range prior to calculating the value.

Tuesday, December 13, 2016

Description Version 2016.12.13

ALARMS OBJECT

- Added a new method ExportAlarmsToWord has been added which creates a Word document and writes all individual alarm settings and alarm help information to that document. This is used to create the Alarms portion of a manual.

SERVER OBJECT

- Added a new licensing feature that allows a temporary license to be initiated. This includes a new method of the Server object called SetTemporaryLicence. The feature allows a temporary license date to be initiated.

"ABOUT" FORM

- The "About" form has been modified to show whether the application has been permanently licensed or is operating on a temporary license. If temporary, the form includes a button that can be used to set a permanent license.

RECIPE EDITING

- Fixed bug that caused operators to not be able to edit the RunRecipe with proper authentication.
- Fixed bug that caused the delete key to still function on recipes that were secured.
- Fixed bug that caused 3 empty segments to be added when copying and pasting a recipe.
- When recipe editing is locked or the recipe is secured, the various editing buttons are now shown as disabled.
- Added ability to control the capitalization of entries using the new ChangeCapitalization property for the RecipeSegmentParam object (see below)

RECIPESEGMENTPARAM OBJECT

- Added a new property called ChangeCapitalization which switches the case of the entry between AllCaps (default), NoCaps, and FirstCaps (first letter capitalized). This feature is necessary for cases where you require non-capitalized text parameters for setpoints and variables (ie. SystemA, SystemB, Auto).

BATCH SCREEN

- Fixed bug that caused the batch contents to update twice when clicking the batch object. This now updates only once.

OUTPUT_PLC OBJECT

- Fixed a bug that caused a Long datatype to not transfer properly to an Allen Bradley CompactLogix 32-bit DINT datatype.

Thursday, December 22, 2016

Description Version 2016.12.22

DATAANALYZE SCREEN

- Limited the movement of the file list-box resizer. This keeps the list-box from being sized to zero or maximum width.
- The width of the "Reports saved in Datafile" pull-down listing has been increased to show full name of longer report titles.

- Selecting from the pull-down listing “Reports saved in Datafile” will automatically display the report. You won’t have to click the “View Report” button.

BATCHES OBJECT

- Applies to CurrentBatch. New property ChecksObjectPath to target the current Checks object. This is required in order to have the batch screen reset the Checks on changes to the batch. *Note: The system will attempt to set this property by searching the objects under the current equipment for “Checks” object.*
- Applies to CurrentBatch. New property PartQty which is set by the Batch Screen on exit. This shows the current part quantity in the CurrentBatch.Batch object.

BATCH SCREEN

- The screen now resets the Checks object whenever there is any change to the batch contents. This requires that the ChecksObjectPath property is set.
- The screen now sets the PartQty property of the CurrentBatch object. This can be used in pre-run checks.

CHECKLEAK OBJECT

- New property PartQty that is set to the quantity of parts present during the CheckLeak operation.

SENSORGRID OBJECT

- Added ValueFormat property. This sets the format for the Value column of the grid. You can enter a single format (ie. 0.0) or you can have different formats for different units by using a comma-delimited list with units and formats (ie. deg=0.0,mbar=0.00)
- Added RateFormat property. This sets the format for the Rate column of the grid. You can enter a single format (ie. 0.0) or you can have different formats for different units by using a comma-delimited list with units and formats (ie. deg=0.00,mbar=0.000)

Thursday, January 5, 2017

Description Version 2017.1.5

SERVER OBJECT

- Changed the clock timing function in order to allow the retention of the ClockAdder variable during reboot or PCA/PCB switching.
- Added a property CPCClockOffset to hold the current offset.
- Added a new method RetainPreviousClock which is used in the OnStartup script to retain the previous sessions CPCClockOffset in cases where a run is in progress during startup.
- Changed the threshold for what will generate a new ClockOffset. If the PCClock is moved ahead more than 60 seconds, CPC will create a new offset to counteract the change. Any change less than 60 seconds will not generate an offset. If however the PC clock is moved back in time, CPC will automatically generate an offset to counteract this change.

- Added new feature that will force all clients to synchronize their PC clocks to the same date and time of the Server PC. This ensures that PCB and PCC will have the same date/time as the server. This action only occurs if the times are more than 30 seconds different.
- Added a new property DisableClientClockSynchronization which can be used to disable the new clock synchronization feature. The default is False which will allow synchronization.

OUTPUT_PID OBJECT

- Modified the function of the output ramping so that it does not calculate when a large time interval occurs (ie. >10seconds). This fixes a bug that caused the output value to jump above 100% when the PC clock function allows a timer to increase.
- Added a limiting of the output value between 0 and 100 when using a ramped output. Prior to this the ramped output was not limited properly.

TREND DISPLAYS

- The trend displays will now show the actual date on the upper border when clicked rather than a derived date/time from the saved clock-timer information. Before this option, the data and time shown on the trend would include the CPCClockOffset. This means that if the offset were 60 minutes, the date and time shown on the trend would be 60 minutes from the current time. Now, the data-time displayed will always be the current clock time, even after a PC clock change occurs.

Thursday, January 19, 2017

Description Version 2017.1.19

QUALITY CARDS

- Modified the part temperature analysis when using ControlBy = Highest TC and Lowest TC. Before this update, the analysis would use the HITC and LOTC sensor which worked properly for Batch analysis but would not work for individual part analysis. The new modification will now analyze the highest and lowest thermocouple on each part when the ControlBy is selected for Highest or Lowest.

Monday, January 23, 2017

Description Version 2017.1.23

SERVER OBJECT

- Fixed bug that caused the computer date and time to revert to 1899 when the CPC client attempted to load a non-responsive server. This bug was discovered recently in the new clock synchronization feature created on the 2017.1.5 version. This new version checks the returned date and if the date varies by more than 1 day, the synchronization will not take place. The bug exists in 2017.1.5 and 2017.1.19 versions. If you have those versions, you can disable the synchronization feature in the

Server object by setting the property DisableClockSynchronization to True.

Tuesday, January 24, 2017

Description Version 2017.1.24

QUALITY CARD ANALYSIS

- Fixed bug that caused the “Disregard Part TC” option to not work properly. Also changed the list from numeric to tag names (ie. PTC1, PTC5, etc.)
- Changed the global “Min Part TC Quantity” check so it reports both during Quality Batch reports as well as Quality Individual Part reports. Prior to this version, the analysis would only show on Quality Batch reports. Title of this analysis in report now adds “for Entire Run” to differentiate it from TC qty count in phase.
- Updated Quality Card Manual to Rev A on web-site to show changes.

Monday, February 13, 2017

Description Version 2017.2.13

QUALITY CARD ANALYSIS

- Changed quality card reporting (Batch, Individual Part, Exception) so that when a quality report is selected and there is no matching card, the system will no longer deactivate the report but will instead display the report with title and batch information and a warning message indicating the lack of a proper match.
- Fixed a bug that caused the quality card matching function to not select properly when matching by part field.

Friday, February 24, 2017, 2017

Description Version 2017.2.24

CHECKS

- Added object help information for this object.

CHECKATTACHMENT

- Changed the reporting so that for the range check the report now shows passing sensor values as well as the failing values.

CHECKDRAWDOWN

- Added object help information for this object.
- Fixed a bug that caused the drawdown to not report on the sources attached to Header B on systems configured for dual-use vacuum lines.
- Changed reporting so that it shows all sensor results, even if the sensors pass. Prior reports only reported on the failures.

ADDING OBJECTS

- Made changes to the AutoChildren class property so that you identify the name of the auto-child as well as the class using a colon separator (ie. Recipe_RampSoak:PressControl). Now, when you add certain objects via the object editor the object will automatically add children of a specific name. Before, the auto children function would only default the names of children to the classname. This mainly affects the recipe segment objects.

RECIPE EDITING

- Fixed a bug that caused the client to lockup when there are no recipes in the Recipes folder.

Friday, March 10, 2017

Description Version 2017.3.10

QUALITY CARDS

- Fixed a bug in the sequential phase analysis using "SegmentChange" option for phase change. When using SegmentChange, the system was incorrectly subtracting one data interval and was misreporting the phase time.

OUTPUT_DIRECT

- Fixed a bug that caused the ControlMode=Man to not allow a manual change of the OutputValue property.

OUTPUT_TIMEPROPORTION

- Fixed a bug that caused the ControlMode=Man to not allow a manual change of the OutputValue property.
- Added TimePropOutput to display the current On/Off time-proportioned signal. Prior versions would only show this value in the child IO object.
- Changed behavior of object so that the TimePropOutput property is updated both during Do_Calc and also Do_Send operations.
- Updated Help information on this object.

OUTPUT_CASCADE

- Added a new property DisableCascadeForFeedback which is a list of input names that will force the cascade to be disabled when selected as the feedback source. This new property will default to AIRTC. Note that in previous versions AIRTC was hard-coded to disable the cascading. This new feature allows you to add a list of additional feedbacks (ie. AIRTC1, AIRTC2, etc.) that will also deactivate the cascade.
- Fixed a bug with the AddPerTime value. It was not calculating properly.
- Updated Help information on this object.

SCREEN_PARTGRID

- Added a new property Formats to this icon. This lets you provide a numeric format to any of the columns being displayed in the grid. The entry is a comma list (ie. S,0.0,S,0.00). The default format is 0.0 for numeric data.

Monday, March 20, 2017

Description Version 2017.3.20

SECURITY SETUP SCREEN

- Fixed a screen bug that caused the groups not to update when you clicked the user grid. The previous version required you to double-click the grid to update the groups.

RECIPEPREVIEW_GROUP OBJECT

- Changed the recipe preview so that it disregards the UpperLimit, UpperLimitSlowdown, LowerLimit, and LowerLimitSlowdown in cases where these properties are blank. The prior version would assume that a blank entry was a zero (0).
- Added help information to RecipePreview_Group objects.

VERIFICATION OBJECT

- Changed form to non-modal. This allows other client tasks to continue in the background.
- Changed form so that it is placed on top of all other forms.
- Added new properties Button1Method, Button2Method, and Button3Method. These are methods that can be used to call a local client method or a server-based object method.

DATAMANAGER OBJECT

- Added help information to the object

DATASAVING OBJECT

- Added help information to the object
- Changed Do_Namefile to automatically create and populate the standard DataRecordType children objects and properties.

DATAANALYZE OBJECT

- Changed reporting so that if the PrimaryTags and TagsOnPartReport options are not the same case as the actual input tags (ie. AIRTC versus AirTC), the actual datafile input tag case will be recognized and displayed on the reports and screens.

RECIPEPROCESSOR BEFORESTARTRUN SCRIPT

- Changed the StartRun operations so that the Segment, SegmentTime, Runtime, HoldStatus, and other similar properties are reset prior to the BeforeStartRun script. The RunStatus will still be set to False during this script and only changed to True after the script is completed. The new revision also moves the internal Batch\LinkAttachments operation before the script instead of after. Lastly, the deletion of equipment messages will now occur before this script.

Monday, April 6, 2017

Description Version 2017.4.6

DATAMANAGER OBJECT

- The 3.20 version included a new feature which checked properties of the data saving objects to ensure that all properties were filled out properly. There was apparently a problem with this new feature where it incorrectly filled in one of these properties. This could cause a problem with data saving. The 4.6 version has fixed this small bug.

Wednesday, April 19, 2017

Description Version 2017.4.19

BATCH REPORT PRINTOUT

- Fixed a bug that caused the batch print to overwrite sensor names when the end of the sensor list (ie. PTCs) happened to coincide with the end of a specific page.

EXPORT FROM SERVER

- Fixed a bug in the ExportFromServer method of the DataAnalyze object which caused the RecipeName to show as blank in the file export. This bug occurs only in cases where the original DataSaving record object is configured to look at the RecipeName property of the RecipeProcessor object. The RecipeName property is new and the export function was not configured to recognize it as a valid property. This has now been fixed.

Thursday, April 27, 2017

Description Version 2017.4.27

QUALITY CARD

- Added a new feature that instructs the system to disregard all values of any TC that was disabled during the run. This differs from the default analysis method where only the values which were saved after the disable event are disregarded.

CERTIFICATON OBJECT

- Added a AlternateUnit property. This will override the display of units with an alternate form. This is useful in showing dual units for “Hg and Psig (ie. –“hg/+psi).
- Added a LeftToRightSettingProcess property. This property instructs the system to force a left-to-right certification process for each sensor whereby each setting certification must be completed before moving to the next setting. This allows you to use the same setting value in different certification colums (ie. rising and falling).

CERTIFICATION SCREEN

- Added a landscape mode to the report when the total number of certification points exceed 7. The prior version would overrun the portrait report width.
- When you select a single tolerance and not a comma-list of different tolerances, the system will now show that tolerance individually on the report instead of showing multiples using commas.

- Changed the certification screen so that it shows the units of the settings. The units are pulled from the starting sensor input object or by using the AlternateUnit property.
- Changed the certification report so that is shows units in the Tolerance field and also on the specific setting titles (ie. 100 deg.F 200 deg.F)

Saturday, May 13, 2017

Description Version 2017.5.13

RECIPE PROCESSOR

- Added an Edit method so that on multi-equipment systems you don't have to use the Recipe\Edit method. Also fixed a bug that caused the Recipe\Edit method to not work properly.

RECIPE SCREEN

- On multi-equipment configurations, we changed the behavior relating to when the warning dialog is displayed regarding a mismatch of segment rows. Now, when you click on a disabled recipe (ie. used for another piece of equipment), the system won't warn you about mismatch of segment rows.

Sunday, June 11, 2017

Description Version 2017.6.11

TCPLISTENER

- Fixed the response function for when the remove TCPTalker initiates a TCPVariableList Set method.

Sunday, July 24, 2017

Description Version 2017.7.24

DATABASEINTERACTION

- Added properties and methods for real-time saving of inputs and messages to a separate database. These include RealtimeConnectionString, RealtimeDatabaseName, RealtimeEnable,RealtimeInterval,RealtimeOpenStatus,and method SaveRealtimeData. See updated document on DatabaseInteraction object for more details.

MESSAGEMANAGER

- Added property DatabaseInteractionPath which targets the DatabaseInteraction object. This is used for realtime message saving.

RECIPE_ALARM

- Added more help information for object properties.

Tuesday, July 25, 2017

Description Version 2017.7.25

DATAANALYZE OBJECT

- Added a new capability which allows different printing orientations for each of the reports configured in in the ReportsToPrint property. Now, you can append the text ":Landscape" or ":Portrait" to the end of each report. For example, you can set ReportsToPrint to "NumericPrimary:Landscape,Messages:Portrait,TrendPrimary:Landscape" to switch between landscape and portrait orientations.

Thursday, August 17, 2017

Description Version 2017.8.17

RECIPE_RAMPSOAK OBJECT

Added a new property called BumpOnRateChange. This new property is used to change the behavior during ramping when the ramp rate is changed. Before, when a ramp rate changed, the system would merely change the current ramp rate of the setpoint and would not realign the setpoint to start the ramp at the current feedback value (ie. Press). This caused problems in situations where the feedback was lagging setpoint during a high ramp rate process. In those situations, if the ramp rate were lowered, the feedback would continue to try to approach the slowed setpoint rather than being controlled to the slower rate immediately. Now, if this property is True, the system will bump the setpoint to be equal to the feedback and then start the new ramp rate at the current feedback value.

Thursday, October 05, 2017

Description Version 2017.10.5

See individual update PDF on web-site for this update.

WINDOWS 10 COMPATABILITY

- This version includes new library files that will allow compatability with Windows 10. When updating a Windows 7 system, the installation will require a reboot to allow core Windows files to be updated. Do not attempt to load on Windows 10 without assistance of ASC. Contact ASC engineering for Window 10 installation guide.

DATAANALYZE OBJECT

- Added a new property called QualityBatchPassFailCaption will instructs the system to display a large PASS or FAIL on the first page of the Quality Batch report. You can enter PASS,FAIL or any pair of text that will be shown on the report.

Sunday, October 22, 2017

Description Version 2017.10.22

RECIPEMANAGER in FORMS

- A new variable “AutomaticEditing” has been added to the RecipeManager form object (under Forms). This variable defaults to True and can be set to False to require that the operator select “Edit Enable” from the drop-down menu of a recipe object in order to edit the recipe. This forces the recipes to be locked from editing to avoid inadvertent editing.

Tuesday, October 31, 2017

Description Version 2017.10.31

QUALITY CARD BATCH ANALYSIS

- Fixed a bug that caused the leak-test to show a failure when there were no probes on the part.

Saturday, March 03, 2018

Description Version 2018.3.4

SCRIPTING

- Added ROUND function.
- Added TRIMTONULL function. This function trims a string up until the null character

INPUTS BACKUP

- Fixed the backup so that True/False inputs will store to ascii file as -1 and 0 value.

REPORTING

- The reporting screen now shows the run length (mins) in the information section.

SCREEN_LIST

- The listbox has been changed so that it will refresh the list when the object’s child count changes or if the list contents change. The count will refresh the list immediately while a contents change will uSASpdate every 10 seconds.

RECIPEPROCESSOR

- RecipeToTransfer property has been enhanced so that you can use different formats. Format1: object path (ie. .Recipes.ThisRecipe, Format2: recipe path with (ie. Recipes\ThisRecipe), and Format3: recipe name (ie. ThisRecipe).

Sunday, March 18, 2018

Description Version 2018.3.20

TIMER OBJECT

- Added a new Description property. This can hold a description of the timer.

DATAANALYZEPHASE OBJECT

- Added new property CalcRatesBeforeRange which allows the card to calculate rates using data intervals before the current phase and/or range. The property can be False (default) or True.

DATAANALYZECALCULATION OBJECT

- Added new AfterLast script that is used to calculate after all interval scripts and calculations have been performed.
- Added reserved variables MaxPartTemp, MinPartTemp, MaxProbe, and MinProbe in order to allow scripting to analyze these statistical values for individual parts or the entire batch.

QUALITYCARD EDITING SCREEN

- Added checkbox for “Allow rate calc to use points before range or phase” option.
- Added button for editing the AfterLast script.

LINKATTACHMENTS

- Added feature that allows one sensor to be associated with more than one part. If there is a duplicate attachment on two parts, the linkattachments will create a comma-delimited entry in the Attachment property of the input or output object.

INPUTVIEWER POPUP

- The input viewer popup now recognizes when a sensor is associated with more than one part. The Part # textbox has been replaced with a combo-list box.

TREND VIEW

- Modified Trend display so that the trend doesn’t refresh when hovering over points or clicking on a point to get a snapshot view.
- Modified part selector on trend icon so that it properly views inputs that are attached to more than one part.

PARTTEMPLATEMANAGER OBJECT

- Added new property AllowMultipartAttachment. This instructs the batch screen to allow the assignment of sensors to multiple parts.

BATCH ATTACHMENT EDITOR

- The attachment editor now supports multi-part attachments. When a sensor is used on another part, the grid will now show a light-gray number rather than a blank grid entry.

SCRIPTING ENGINE

- Fixed a compiler bug that caused negative numbers with decimal points (ie. -.232) to be recognized incorrectly and not calculated properly as a result.

RECIPEPREVIEW_GROUP OBJECT

- Added the ability to plot the tolerance band represented by MinRate, MaxValue, MaxRate, and MaxValue. This feature adds the following properties: MaxToleranceTag, MaxToleranceColor, MinToleranceTag,MinToleranceColor,ToleranceMaxRateRow, ToleranceMinRateRow, ToleranceMaxValueRow, and ToleranceMinValueRow. For temperature tolerance band, we recommend black for ToleranceMax and gray for ToleranceMin. The tag recommendations are MINTOL and MAXTOL.

Thursday, March 22, 2018

Description Version 2018.3.22

STOREDPROCEDURE OBJECT

- New object used to execute stored procedures on SQL Server databases. The object is used only for stored procedures that use input and output variables. If the stored procedure returns a recordset, then you should use the Table object's new Execute method.

TABLE OBJECT

- Added new method **Execute**. The execute method will allow you to execute a stored procedure that returns a recordset. When this happens, the object will create field objects for the returned fields. The object also will support input and output storedprocedure fields. See specific topic sheet on this capability.
- Add new property Status. This shows the status of the executing procedure or table recordset.

RECIPEPREVIEW_GROUP OBJECT

- Fixed a bug in the new tolerance band feature. The band was not showing properly when the rate or value was X (blanked) in the recipe.

TEXTBOX ICON

- Fixed a bug that caused the textbox to incorporate its own format (ie. 0.0 deg.F) in the value it writes to the targeted object property. The textbox will now only write the entered numeric value in situations where the textbox is setup with a format that includes the units.

RECIPEPROCESSOR OBJECT

- Fixed TransferRecipe method so that it properly shows the FilePath property.

LISTBOX ICON

- Fixed bug that caused the listbox to hang the screen when it was targeting an object with no children.

Monday, April 09, 2018

Description Version 2018.4.9

SECURITYMANAGER OBJECT

- New properties (Username, Groups, Action) and method (SetClientSecurity) to allow scripting to login and logout a user at a specific client PC. The action can be “Login” or “Logout”. This method is primarily used by scripts that reads user login information from an exernal customer database and then logs in the user based on results of that query.

DATAANALYZE OBJECT

- The reporting screen now will show Report objects that were saved to the datafile. To save a Report object, create a DataSaving object that targets the Report object and then use “Description,Contents,Count” in the SourceProperties. The Description will be the title of the report shown in the Other Reports drop-down listing on in the reporting screen.

Sunday, April 15, 2018

Description Version 2018.4.15

CHECKLEAK OBJECT

- Fixed bug that caused the leak deviation to calculate in InchHg units even when the final leak value was in positive psig units. This only occurs when the leak test is performed during a run and the bag leaks to a positive pressure. Prior to the bug fix, the system would calculate the deviation between initial value (“Hg) and the final value (psig) without converting the psig value back to the vacuum units of “Hg. This has now been corrected.

SCREEN_TEXTBOX

- Fixed a bug in the class definition of the PasswordCharacter property. It was incorrectly set to a True/False entry.

Tuesday, April 25, 2018

Description Version 2018.4.25

OUTPUT_CASCADE

- Fixed bug that caused the AddPerTime function to switch the AmountAdded property to be equal to the CascadeOut whenever the AmountAdded dropped to the limit of negative CascadeOut.

SCREEN OBJECT

- Added a Close client method. This allows scripting to close a specific screen by running a Notification to the specific client.

Tuesday, May 08, 2018

Description Version 2018.5.8

DATAANALYZE OBJECT

- Added property RateCalcIntervalDataOnly which forces the numeric screen to calculate rates only using interval data points and not the non-interval datapoints saved during segment changes.

NUMERIC VIEW ON REPORTING SCREEN

- Added a checkbox that can set the RateCalcIntervalDataOnly property.

DATAANALYZEPHASE OBJECT

- Added property RateCalcIntervalDataOnly which forces the quality analysis to use only interval data points when calculating rates.

SERVER

- Changed memory properties to track primary PC's CPCServer and CPCClient application memory. These properties are updated by the computer once every 15 seconds.

VALUELIST ICON

- Added property OutputOnOffDisplay property that is used when the value list is using PRB/SRC switching. When true, the system will show an "(On)" or "(Off)" indicating when the source valves are in the SRC position. This will pull it's status information from the OutputValue property of the targeted output.

Monday, May 14, 2018

Description Version 2018.5.14

OUTPUT_CASCADE OBJECT

- Fixed bug that caused the AddPerTime function to use a default value of 1 instead of the AddPerTime value. The new version properly uses the value entered in the AddPerTime property.

Tuesday, July 03, 2018

Description Version 2018.7.3

VALIDATION_INPUT OBJECT

- Added capability to deactivate inputs on high rate changes.

SCRIPTING

- Added GetUTC to return the current time in ISO 8601 formatted string. The format can include milliseconds or just seconds. The trailing letter will be "Z".
- Added GetUTCLocal to return the current time in ISO 8601 formatted string with the offset (ie. -07:00) at the end of the string. The format can include milliseconds or not.

- Added GetUTCOffset to return the current offset time from local time to GMT/UTC time. The return value will be an integer (ie. -7). For positive values, the "+" symbol will not be included.

DATASAVING OBJECT

- Added a new auto-name "Date-Letter" that will name the files with an appending index of A, B, C, D, etc. in a single day.

Tuesday, July 10, 2018

Description Version 2018.7.10

BATCH SCREEN

- Changed the tool cycle alarm so that it not only creates an alert during tool name changes, but also if a new part is added with a tool already configured.

BATCHES OBJECT

- Fixed a bug in the RemovePartsFromBatch method so that it clears the Batch object's recipe. The prior version left the Recipe property unchanged.

SCRIPTING

- Corrected GetUTCLocal and GetUTCOffset so that it worked properly when local time is less than UTC time.

Sunday, July 22, 2018

Description Version 2018.7.22

PART ATTACHMENT FORM

- Fixed a bug that caused decertified sensors (ie. Part thermocouples) to show normally in the part attachment form in the batch screen. The sensor number now correctly shows as red, indicating that it can't be selected.

Saturday, September 8, 2018

Description Version 2018.9.8

CERTIFICATION REPORT

- The certification report had a bug that caused the 2nd page of the report to over-write the header. This has been corrected.

QUALITY CARD EDITOR

- The quality card editor was showing an incorrect audit-track when you selected Show Alarms or Show Bag Pressure checkbox. This has been corrected.

Monday, September 10, 2018

Description Version 2018.9.10

TREND DISPLAYS

- The trend displays will now show a trend when the selected group is a different case (ie. upper) than the input names. In the previous versions, the case of the selected group items had to match the case of the input names stored to the trend. This affects the standard trend display as well as reporting trends.

QUALITY CARDS

- Modified cards so that they work properly when data input names are of normal case (ie. AirTC) and the tag information in the DataAnalyze object is in upper case (ie. AIRTC).
- Changed the analysis of Min and Max values so that they don't use the new NonIntervalDataExclusion option. The version from 5/18/18 would exclude segment change non-interval data from the Min/Max analysis, even though the option was meant for rates only.

Friday, September 28, 2018

Description Version 2018.9.28

SCREEN_CHECKBOX

- Added a feature for the VerifyText property that allows you to reference an external property. This lets you change the confirmation text with scripting.

SCREEN_BUTTON

- Added a feature for the VerifyText property that allows you to reference an external property. This lets you change the confirmation text with scripting.

Sunday, September 30, 2018

Description Version 2018.9.30

FORMS OBJECT – HOT KEYS

- Added the ability to associate a SecuritySentry to the ScreenViewer object under the Forms object. You can now put a SecuritySentry below each hot-key to associate a specific UserGroup list to the hot-key.

Monday, November 05, 2018

Description Version 2018.11.5

SECURITYMANAGER

- Added properties to allow the security database to be switched between Access and MSSQL.

PARTTEMPLATEMANAGER

- Added properties to allow the security database to be switched between Access and MSSQL.

RUN DATABASE

- Added the capability to allow run database to save to MSSQL format. This includes a new object called RunDatabaseInfo which will be automatically created by the RecipeProcessor object. The new object will located as a root object. It will define the run database tables, connections, and database files. Request document on this from ASC to setup.

SPC ANALYSIS

- Enhanced the analysis screen to use either Access or MSSQL. Also changed the location of SQLScripts to use new DatabaseQuery objects stored under the RunDatabaseInfo object.

Tuesday, November 13, 2018

Description Version 2018.11.13

RUN DATABASE

- Fixed bug that caused run database and sql buttons on reporting screen to not display when using Connection rather than MSAccess databases.
- Changed Tag field in Alarms table to 20 characters.

Wednesday, November 14, 2018

Description Version 2018.11.14

RUN DATABASE IN REPORTING SCREEN

- When using the MSSql run database format using the EU date formatting for the PC, the MS Sql queries will not recognize the EU format. This caused the query result to show blank. This has been fixed by converting the EU date to a yyyy-mm-dd format prior to querying.

Tuesday, November 27, 2018

Description Version 2018.11.28

DATAANALYSISCARD OBJECT

- New property PartIndexOfCurrentAnalysis to the card object. This works when performing quality card analysis. When the quality card is analyzed, it can be analyzed by batch or by individual part. The Quality-Batch report assumes that all part attachments are analyzed together, while in a Quality_All Parts or Quality_Exceptions report, the system performs a separate analysis for each part. When you use the DataBuyoff object or the Phase Calculation scripts to perform custom analysis, it is often important to know whether the report is being generated as a By-Part analysis or the batch analysis. This new property will show All or show the specific part being analyzed. This can be used in these scripts to change the results.

Tuesday, December 18, 2018

Description Version 2018.12.18

REPORTING DATABASE

- Fixed a bug with the reporting database. The screen was not setting the DatabaseInfo object properties correctly, and this caused the database to not load properly when viewing from the reporting screen.

Tuesday, January 01, 2019

Description Version 2019.1.1

REPORTING

- Fixed a bug with that caused the individual part reports to not work when generating files.

RUNDATABASEINFO

- Added a feature where the reporting screen will create the RunDatabaseInfo object if it doesn't already exist.

Sunday, February 24, 2019

Description Version 2019.2.24

QUALITY CARDS

- New property “VacAnalysisMinMaxSwitch” which lets you switch how analysis works with vacuum probes. If true, the analysis will assume Max = greatest negative value and Min = least negative value.
- New property “ShowAlarmsOnly” which instructs the analysis to show only alarms and not all the messages.
- When using cooling rate invert, the system will display the message showing a range from high to low rather than low to high.

QUALITY CARD EDITOR

- Added new settings quality card settings for ShowAlarmsOnly and VacAnalysisMinMaxSwitch

DATAANALYZE OBJECT

- Added property “AllowTemporaryDataChange” which lets the user change sensor data in reporting for testing quality card analysis. This will add a large message on all reports indicating “Contains manipulated sensor data” to avoid falsification issues. With this property set to True, you can double-click on the numeric grid to change values.
- Added sentry object “AllowDataChange” to Forms object for security.

REPORTING NUMERIC SCREEN

- When the AllowTemporaryDataChange property is set in the DataAnalyze object, you can double-click on the numeric grid to change values. This will trigger the “Manipulated Data” warning messages in the reports.

CERTIFICATION OBJECT

- Added properties PositiveValueUnits and NegativeValueUnits. These properties override the Units and AlternateUnits properties and lets you define a different units for negative and positive certification values. This is particularly useful for vacuum certification where you might have –“Hg and +Psig.

VALUELIST ICON

- When the valuelist is pointing to a SRC/PRB vacuum probe input, it will change color when the connected output does not match the action-value of the input. This is particular useful during in-run leak checks.’

DBGRID ICON

- Fixed bug that wouldn’t allow the font size to update on titles when the property was changed.

Monday, March 11, 2019

Description Version 2019.3.11

RECIPE “TRANSFER” SENTRY

- The “Transfer” security sentry object in the RecipeManager form under the Forms object was not locking out the transfer operation. This has been fixed.

DATABUYOFFPARSE OBJECT

- The parsing object now parses the run’s recipe when you select “Recipe” RecordType. This will expose all entries and segment information.

BATCH SCREEN

- Fixed a bug that would cause the client to lockup when you tried to add a part after first accessing the part database editor.

QUALITY CARD PRINTOUT

- Enhanced printout to include all quality card settings, including the script contents.

BATCHES OBJECT

- Added new quickscripts for AfterAdd and AfterEdit. These can be used with the new properties EditedPart and EditedField to override the field naming and perform functions on barcoded part entries such as parsing.
- Added properties EditedPart and EditedField for use in new quickscripts.

Wednesday, March 20, 2019

Description Version 2019.3.20

DATASAVING OBJECT

- The “Part” record type has been changed to have an additional saved field called “LeakTime”. This is the time for the leak test.

PART OBJECT

- The part object includes a new property called “LeakTime” which will store the leak test duration for the LeakTest integrity check.

CHECKLEAK OBJECT

- The leak-test will store the “LeakTime” setting to the Part objects at the beginning of a leak test.

DATABUYOFFPARSE

- The “Recipe” parse was incorrectly exposing segment properties. This bug has been fixed.

Friday, March 22, 2019

Description Version 2019.3.22

QUALITY CARD LOADING

- When the system loads quality cards from storage (ie. drive path), it will now remove all existing memory-resident compiled quick-scripts for the objects that are being replaced. This is done to avoid a bug that causes existing quick-scripts to not function after quality card load.

OBJECT DELETION

- When an object is deleted, the memory-resident quick scripts associated with the object will now be removed.

Saturday, April 21, 2019

Description Version 2019.4.21

RECIPES OBJECT

- When a recipes object was set for AutoLoadFromStorage and was also setup to clear before load, on loading it would clear not only the recipe objects but also any child Recipes objects. This would preclude the ability to auto-load the sub Recipes folders. Now, the clear will only remove Recipe objects, and will allow the Recipes objects to remain. This lets them properly auto-load themselves.
- New SortOnLoad property that will force the specific Recipes folder to be sorted after each load operation. This was implemented to correct a customer issue when the storage drive was changed to a Linux server that didn't sort files alphabetically.

RECIPE SCREEN

- If the folders are setup for auto-load and SortOnLoad, the files will load in alphabetical order with sub-folders being listed after the recipes.
- You can now sort the contents of a recipe folder on the recipe screen. Just right-click on the folder and select Sort Folder from the drop-down menu.

DATAANALYZE AND EXPORTING

- The existing property ExportTimeDateFormat will now change all report headers which show Run Start and Run End.

PART OBJECT

- A new property LeakStart is used to store the worst vacuum level on each part at the start of the vacuum leak test. This property will then be stored to the datafile for DataBuyoff custom reporting.

DATASAVING OBJECT

- The datasaving system will store the new part property LeakStart.

DATABUYOFF OBJECT

- The databuyoff load will now load the new LeakStart property of the part object.

DATABUYOFFPARSE OBJECT

- When parsing the Batch record, the system will now show the LeakStart property of the part.

Sunday, April 28, 2019

Description Version 2019.4.28

RECIPES OBJECT

- Fixed a bug that caused the Recipes object to lock up the client if it was performing an auto-load from storage but had no recipes immediately inside the folder.
- Enhanced the AutoLoadFromStorage feature to create a popup warning message if the main Recipes storage folder or subfolder storage folders failed to load. This would occur if the network resource is disconnected. This feature is also activated when auto-loading inside the Recipe Screen.

Thursday, May 02, 2019

Description Version 2019.5.2

CHECKLEAK OBJECT

- Fixed a bug that caused the system to lock when performing a leak-test on a part with no probes. This bug was inadvertently created during the 2019.4.21 update.

Tuesday, May 14, 2019

Description Version 2019.5.14

RECIPE_CASCADE OBJECT

- Changed the SpreadLimiting property so that it can use a property path. Prior versions required a True or False entry. This can now directly target the recipe segment row. Note that this property will also respond properly with an ON or OFF entry.
- Changed the SpreadLimitThreshold property so that you can enter “Max” to force the threshold to be equal to the current limit. This maximizes the control range during a spread event.
- Added a new property SpreadControlMinRate which lets you override the default minimum rate set by the spread controller. In prior versions, the default was .1deg/min. Now, you can enter 0 or a negative number to allow the spread controller to cool when the spread exceeds the spread limit (minus the offset).
- Added a new property SpreadLimitControlOffset which is used to reduce the controlled limit so that it’s smaller than the actual entered spread. So, if the spread limit is 20 deg and the offset is 3, the actual controlled limit will be 17.

- Fixed a bug that caused the system to lock when performing a leak-test on a part with no probes. This bug was inadvertently created during the 2019.4.21 update.

Wednesday, May 15, 2019

Description Version 2019.5.15

SECURITY SETUP

- Fixed bug that restricted renaming of security groups when using a Connection type security database such as MS SQL.

RECIPES OBJECT

- Added a Hide property that can be set to True or False. When True, the Recipes folder in the editing screen will not show the recipe. This is useful in hiding specific folders based on scripting.
- Added an AccessGroups property. This is a comma-delimited list of security access groups that are permitted to view the folder. If a group is entered, the system will only show the recipe if the current has that specific group.

CHECKLEAK OBJECT

- Fixed bug that caused the check to lockup when using the rarely used StartDelay property. This bug was inadvertently created on 2019.4.21 update.

Sunday, May 19, 2019

Description Version 2019.5.19

DATABUYOFFPARSE OBJECT

- Added pulldown list of all properties for RecordName property in Object Editor.

SPC REPORTING

- Fixed a bug that caused the SPC printed report to fail during generation.
- Added “Description” field which is printed with the report.
- Fixed a bug that caused the query renaming to not work properly.
- Reduced the font size on the spreadsheet report to 8pt font.
- Changed the Plot and Bar reports so that they can use Landscape orientation.

MULTI-LANGUAGE SUPPORT

- You can now define up to 5 languages in the ClientDefault object. If you blank out a language, it will not be selectable on the Language drop-down menu.
- When there isn’t a matching language element for a specific text or caption, the system will now display the key with a prefix of the first three letters of the language.

Saturday, May 26, 2019

Description Version 2019.5.26

REPORT FILE GENERATION

- Enhanced the filenaming function in report generation to allow the inclusion of unprintable characters (ASCII 28, 29, 30, and 31) in the filename. Prior to this update, if the filename was generated using part fields and if the partfields included separator characters, the file would not be able to be opened. Now, the system will strip out these unprintable characters before opening the file.

Sunday, June 2, 2019

Description Version 2019.6.2

RECIPE OBJECT

- Added ModificationDate property. This will be set based on the modification of the underlying RecipeData object.

RECIPES OBJECT

- Added LastModified property. This is set to the date/time of the last recipe modified. This property is only updated on the main Recipes object. It is not updated on children Recipes.
- Added UpdateStorage method. This will update all newly modified recipes to the storage location. This can be triggered by a timer or via the new OnExit quickscript.
- Added OnEnter quickscript. This is executed when an operator enters the recipe screen.
- Added OnExit quickscript. This is applied to the main Recipes folder and can be used to UpdateStorage or other methods.
- Added UpdateOnExit property. This is set on the main Recipes folder and if True, the system will run the UpdateStorage method automatically.

RECIPES SCREEN

- Properly sets the new ModificationDate for the edited Recipe object.

PARTTEMPLATEMANAGER OBJECT

- Added property SeparatorCharacter. This is used to define a separator character for the part entry textbox. This allows the part database matching function to work when the part entry includes multiple field with a separator.

BATCHES OBJECT

- Added property PartSelectorEntry to expose the part selector textbox entry during adding parts on the Batch screen. This can be used for parsing the entry using the AfterAdd quickscript.

PART ENTRY SCREEN

- When using the AfterEdit quickscript to modify fields, the system will now show those changes in the current part entry grid.

Monday, June 17, 2019

Description Version 2019.6.17

DATAANALYZE OBJECT

- Added ClearBeforeLoadFromStorage property. This will instruct the system to clear the underlying QualityCard objects from under the DataAnalyze object before loading the new cards. This effectively disallows any cards that haven't been saved to storage.
- Added property QualityAllPartsPassFailCaption which will instruct the system to display a large PASS or FAIL on the first page of the Quality All Parts report for each part. You can enter PASS,FAIL or any pair of text that will be shown on the report.

TIMER OBJECT

- Added a Repeat property. When true, this property will instruct the timer to automatically repeat on Done or on Reset operations.

Thursday, June 20, 2019

Description Version 2019.6.20

RUNDATABASEINFO OBJECT

- Fixed a bug that caused the RunDatabaseInfo object to misconfigure the EquipmentTable property to be set to "Runs". On new installations, this caused the Equipment table to be called Runs, and inadvertently disallow the real Runs table to be created.

Sunday, August 11, 2019

Description Version 2019.8.11

DATAANALYZE OBJECT

- Added property DisableBrowseButton which can be used to restrict operators from being able to change the reporting folder.

Tuesday, August 13, 2019

Description Version 2019.8.13

REPORTING SCREEN

- Fixed a bug that caused the screen buttons to not be disabled when there is no File selected. Also added the ability to open the reporting engine with the File and Filename properties blank.

ACTIVECLIENTS OBJECT

- Added LastGroups which is updated on Login and Logout so that you can use the OnLogin and OnLogout scripts to check what

groups are active. be disabled when there is no File selected. Also added the ability to open the

Sunday, October 27, 2019

Description Version 2019.10.27

MESSAGES REPORT

- Fixed a bug that caused the message report to lock the client when a message exceeded a length of 3.6". This only affected systems where input names were extremely long.

QUALITY CARD ANALYSIS

- Fixed a bug that caused the Global Probe Pressure analysis to report -9999 requirement when the quality card field was blank. This resulted in a situation where the card would indicate a non-conformance.

RUN DATABASE

- Fixed a bug that caused a new Run Database to be built without setting table primary keys.

FINDREPLACE FORM

- The form will now remember its position and size. These values will be written ot he Windows registry.
- The form now includes a "Find Scripts" which will display all non-blank quickscripts and script objects in the system.

SENSOR QUICKVIEW FORM

- If this form is visible and a user logs out, the Enable, Disable, and Faulty buttons will now be automatically disabled.

CHECKLEAKTEST OBJECT

- Added fields for SaveFailMessage, SavePassMessage, MessageGroup, FailMessageCode, and PassMessageCode. These fields work together to instruct the checks object to save a Pass or Fail message to the message screen. If the group or code is defined, the message will also be saved to the RunDatabase's Alarms table.

MESSAGEMANAGER OBJECT

- Added fields for MessageGroup and MessageCode. These two are used to generate alarm messages that you want saved to the Alarms table in the Run Database.
- Changed AddMessage method to incorporate the group and code.

Monday, November 11, 2019

Description Version 2019.11.11

RECIPES OBJECT

- Fixed a bug that caused the ClearOnLoad to not work correctly in some situations. In these cases, most of the recipes would be cleared, but some would not and as a result would not load properly from the storage location.

MODBUSAXP OBJECT

- New object is added to handle communications to PLCs and instruments that communicate via the Modbus protocol. This incorporates a new built-in Modbus AXP driver which allows serial and ethernet communications. At this time, the Ethernet communications is the only comms implemented, however serial will be implemented in the future. This object works in a similar fashion as the IngearAB object using PLCTransfers and PLCTransfer child objects.

Sunday, May 03, 2020

Description Version 2020.5.3

DATAANALYZE OBJECT

- Added a new property called SkipValuesInterval which instructs the reporting engine to load only a specified interval of data values. This property is meant to suppress the loading of data on large datafiles that might not be loadable. This would be a temporary setting used in cases where a customer set a small data saving interval and ends up with a massive datafile.

ALARM OBJECT

- Fixed a bug that caused Group1 and Group2 to be stored to the run database instead of the AlarmGroup and AlarmCode. The intention was for the Group1 and Group2 properties to be used for EventLog entries only. The new version uses the AlarmGroup and AlarmCode for run database storage of alarms.

RECIPE SCREEN

- You can now display two optional entries in the information grid. This is set using the variables InfoOption1Title and InfoOption2Title in the Forms->RecipeManager object.
- You can now lock a recipe revision, disallowing all future edits. This will require a new revision for any new edits. Once the new revision is created, it will be unlocked until the lock occurs. To lock a revision, right-click on the recipe in the tree and select LockRevision. This also works nicely with setting the AllowAutomaticEdits variable in Forms->RecipeManager to false.

RECIPEDATA OBJECT

- Added InfoOption1 property to hold the option1 property set in the recipe information grid. This gives the ability to create custom information settings for a recipe.The display and ability to

set this property is enabled with the Form->RecipeManager->InfoOption1Title variable.

- Added InfoOption2 property to hold the option2 property set in the recipe information grid. This gives the ability to create custom information settings for a recipe. The display and ability to set this property is enabled with the Form->RecipeManager->InfoOption1Title variable.
- Added LockRevision property to track whether the revision is locked for editing. Revisions are locked via the LockRevision menu option.

FORMS->RECIPEMANAGER

- Added new form setting variables for InfoOption1Title and InfoOption2Title. By entering values in these variables, you will enable the setting of custom options in the the recipe information section of the editing window.

Tuesday, August 25, 2020

Description Version 2020.8.25

CHECKLEAK OBJECT

- Changed the reporting of leaks when a StartDelay is used. Now, the test will show the probe value at the Start, and then at the Delay, and then finally at the End. Three values will now be displayed. A new property was added to retain the Start values (InitialArray).

Sunday, November 01, 2020

Description Version 2020.11.1

RECIPEPARSE

- New capability which parses the selected recipe into discrete objects so that scripting can access recipe values for each and every segment. When a recipe is transferred, the system will create a RecipeParse object with individual RecipeParseRow objects as children. The children row objects will be named with the row index, underscore, and then the name of the row. The SegmentArray property in the RecipeParseRow object will contain a 1-based array of the segment values for each row. You can access this recipe with the scripting function GetArray.

DATAANALYZE OBJECT

- Added properties EnableQualityCardFail and QualityCardFail properties. The QualityCardFail property is set to False or True at the end of a quality analysis, but only if the EnableQualityCardFail is set to true. For proper operations, reset the QualityCardFail property to False in the BeforeStartRun quickscript, and set the EnableQualityCardFail to True in the AfterEndRun quickscript.
- Added RecipeReportSegments to change the column width of segments when you print the recipe from the reporting screen.

RECIPEPROCESSOR OBJECT

- Added ReportSegmentsPerPage property to change the column width of segments in the recipe reports. This is useful when recipe entries are long (ie. long input names) to avoid overrun of segment information on the report.

ALARM OBJECT

- Fixed bug that caused the alarm to be enabled when the Enabled property was blank. It will now be disabled on blank entry.

PARTDATABASE EDITING

- Fixed bug that disallowed the change of a text field size in the PartDatabase editing screen.

SECURITY DATABASE

- Changed security editing screen to show user names in alphabetical order.

Thursday, December 10, 2020

Description Version 2020.12.10

DATABUYOFFPARSE

- The parser now supports the new data record called LeakValues. This record is used to record part leak values for in-run leak checks. This gives the ability to parse and perform quality checks on each independent leak test in the run.

Tuesday, December 15, 2020

Description Version 2020.12.15

DATABUYOFFPARSE

- Changed the LeakValues parser so that it updaed RecordsCount to be the number of tests and the FirstIndexUbound to reflect the number of parts.

Sunday, December 27, 2020

Description Version 2020.12.27

DATABUYOFFPARSE

- Fixed bug that caused server to lock with attempting to Parse a LeakValues record on a datafile that had no leak values.

Monday, December 28, 2020

Description Version 2020.12.28

PARTTEMPLATEMANAGER

- Added new property MultiPartAttachmentGroups that lets you limit the list of attachment groups that can be attached to multiple parts at the same time. This entry is a comma-delimited list of group names (ie. Thermocouples) that will allow multi attachment.

Sunday, March 28, 2021

Description Version 2021.3.28

OUTPUTRAMPSOAK

- Fixed bug in Float that caused a single scan of setpoint = 0 to occur when transitioning into float.

VALUELIST ICON

- When part attachments use a comma list of multiple parts, the system will now show the first and last part index as a prefix (ie. 1,..,2)

Monday, April 12, 2021

Description Version 2021.4.12

RECIPELOOPING

- Fixed bug in the looping calculation that caused half the number of loops to occur.

Wednesday, May 26, 2021

Description Version 2021.5.26

RECIPEMANAGER

- The system now includes a separate security lock for the DisallowRun selection on each recipe. You can setup a distinct access to this function using the Sentry object called “DisallowRun” under the Forms->RecipeManager object. The default access is Supervisor and Engineer.

Monday, August 1, 2021

Description Version 2021.8.1

MTCONNECT

- New capability to create an adapter for MTConnect ioT. Capability includes four new classes: MTConnect, MTConnectElement, MTConnectAttribute, and MTConnectItem. If you’re interested in setting up MTConnect on your CPC system, contact ASC for upgrade costs and assistance.

PARTTEMPLATEMANAGER

- Modified the MultiPartAttachmentGroups property to allow the use of a count attribute (delimited with colon character “:”). Now, you can define the maximum limit of shared attachments. For example, if the entry is “PartThermocouples:2”, then a part TC can only be shared with 2 parts.

SCREENDESIGN

- Visibility wasn’t able to use the “<” operator. This has been fixed.

INPUTS

- Backup method and capability was not property saving True or False input values. This has been corrected.

Wednesday, March 01, 2023

Description Version 2023.3.1

RECIPEPARSER

- Fixed bug that caused the parser to create multiple child objects.

SPC ANALYSIS

- Fixed bug that caused unrecognized elements in the query to no longer request information. The new capability lets you enter a {parameter} using curly brackets and those parameters will be requested during the query.

RECIPE

- Fixed the bug that allowed the recipe revision to be blanked. This caused a run to run the wrong recipe. Now, if the operator attempts to blank the revision, it will not allow it.

DATAANALYZE REPORTING

- Fixed a bug that caused the reports to show scrambled results when the QualityAllPartsPassFailCaption was set and a Quality All Parts the report was generated. The fix has corrected this behavior.

Monday, March 13, 2023

Description Version 2023.3.13

PART ENTRY

- Fixed bug that caused a lockup when the AddDatabaseEntry option of the PartTemplateManager was set to true.

PROBECONNECT CHECK

- Fixed a bug that caused the Probe Connect integrity check to fail when there was only one header.

Sunday, April 26, 2026

Description Version 2026.4.26

RECIPE MESSAGE

- Recipe messages will be posted immediately after the segment change. Prior to this, a watch message would be displayed first.

QUALITY REPORTS

- The QualityIndividualPart report type was failing and skipping over every other part. This has now been corrected.

INPUT OBJECT

A new SQLDataType property has been added to work with the BuildDatabase functionality of the DatabaseInteraction object. See below.

DATABASEINTERACTION OBJECT

- The BuildDatabase was adding columns based on determination of datatype from the values. This would select smallint, real, or nchar(10) depending on the evaluation of the input value. Now, you can use the new SQLDataType of each input to specify the exact datatype for the input.
- The BuildDatabase will not modify existing columns and change datatypes where appropriate.
- The SaveAllData and SaveData methods will now save data without first converting it to a number. This was happening for all datatypes, including varchar and char data types.

Sunday, August 23, 2026

Description Version 2026.8.23

INPUTS OBJECT

- New SQLTable, DisableSQLSave, SQLRealtimeTable and DisableRealtimeSQLSave properties have been added to work with the BuildDatabase and Database save functionality of the DatabaseInteraction object. See below.

DATABASEINTERACTION OBJECT

- SQL tables are limited to 510 inputs and their enables. BuildDatabase will split the database tables based on Table names from input objects.
- Inputs can be disabled from being saved into SQL tables.

QUALITY CARD DATA COLLECTION

- Fixed bug that caused quality card data to show incorrectly when different data files were loaded subsequently.

Sunday, October 12, 2026

Description Version 2026.10.12

DATAANALYZE – QUALITY CARDS

- Fixed a bug that caused the Disregarded TCs feature to fail for certain temperature analysis functions in the card.