

CYLON® TECHNICAL BULLETIN NO. 456 Issue Date: 17 December 2020

ASPECT<sup>®</sup> v3.04

## Summary

ASPECT software and firmware have been updated to make Schedules and Alarms easier to use, and Trendlogs configured to provide a user with more control. Also, support for Security communication standards when downloading Office365 calendars has been enhanced, and Project deployment is quicker and easier.

# Background

As part of ABB's policy of continuous improvement, ASPECT has been enhanced to make it easier to use and more secure.

## Features

- 1. Schedules now support the latest calendar standards and are now even easier to use and distribute.
- 2. Trendlogs can be configured to provide a user with more control over how they view a large number of point values.
- 3. Users can now manage and view alarm data much more easily.
- 4. Administrators now have greater control over the users of an ASPECT BMS system.
- 5. The latest security communication standards are supported including LDAP and OATH2.
- 6. Projects can be deployed more quickly and easily.

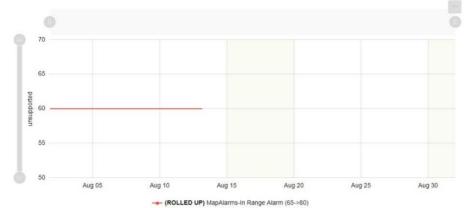
### **ENHANCEMENTS**

#### **SCHEDULING:**

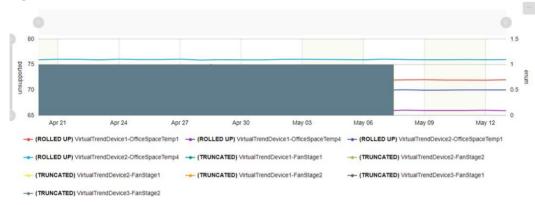
- Schedules have been enhanced so that they can expose the amount of time until the next or time since previous transition state offering project designers the ability to fine-tune equipment startup and setback times. See the new Schedule Transitions element on the Time/Rate diagram tab.
- ASPECT's On-Board Calendaring service option has been upgraded to the current version to support iCal calendar scheduling from an Enterprise or Nexus device to offer customer alternatives to Office365 / Exchange or Google calendars.
- A new "Simple Map Schedule" type has been added that allows users to quickly configure on/off schedules and to utilize the time to next and time since last features provided from the Schedule Transitions element.
- An option to bulk-distribute schedule exceptions is now available to allow exception events to be distributed without disturbing recurring local weekly schedules allowing for easy modifications to holiday lists across multiple locations with different weekly scheduled hours.

#### **TRENDING:**

- In previous versions of ASPECT, trends displayed via the AdHOC Trend UI were automatically summarized when the number of return rows exceeded 2,000. A configuration option called "Trend Rollup Threshold" has been added to the Trend Subsystem Expert tab to make this value user selectable.
- If a request for a trend requires summarization there will now be a visual indication.



• Digital Trends are no longer allowed to be summarized i.e. "Rolled Up". The user will see the following message if a digital trend has been truncated.



#### **ALARMING:**

- Alarm values displayed in the Alarm Console with now be displayed as the enumerated text if configured appropriately rather than a simple display of the enumerated integer value.
- Alarm values configured to append unit, e.g. °F, will now be displayed in the alarm console with the appropriate unit suffix.
- The ASPECT Alarm Console has been enhanced to allow end-users to mask selected columns to reduce the clutter of any column that is perceived as unnecessary. A default list of columns can be preconfigured on the Alarm Subsystem config page.
- Aspect resource tab will now accurately reflect the total count of alarmable points in a project.

Toggie Visibi	Columns: Date Applica	don Name Description Value Priority	Status						
	Date	Application	Name	Description	Value	Priority	Status		
filter page_									
9	2020-08-13 12:16:07	/CiAlarms_TestingThetwork1/ApAlarms	OutORangeAlarm	Out Of Range Test (65->80)	0	100		ю	0ii
0	2020-08-13 12 16:07	CiAlarms_TestingNetworkMapAlarms	LowLimitAlarm	Low Limit Test (Alarm when<=32)	0	100		10	-

- ASPECT now allows the sorting of Alarm History information across multiple pages of alarm history listings.
- Alarms display timestamps in the time zone of the target device not the time zone of the user's P.C.

#### **SECURITY:**

- Access to edit Schedules can now be controlled by group access settings on a per schedule basis. Previously scheduled group access configured from the Schedule Subsystem was considered global to all schedules in a project.
- Aspect now supports OAuth2 authentication for Office365 / Exchange iCal calendars providing a secure encrypted connection for collection iCal calendar schedules.
- Aspect Groups/Users can now be edited from the secure SSL port 443/14443 and are appropriately reauthenticated via popup menu when the edit page is displayed.
- Misconfigured LDAP connector will no longer allow Guest access to the ASPECT / ngAdmin portal.
- Aspect now provides fine-grained control of group access for bulk change edits so non-admin group members can now bulk edit if appropriately configured.

#### **GENERAL USABILITY HIGHLIGHTS:**

- ASPECT deployment has been streamlined to decrease the time required to fully deploy a project using the new Light Weight Deployment option. Enabled by default, this option will interrogate an ASPECT Control Engine target for revision state of current dependencies and only deploy files that are required for update reducing the time required to deploy a typical ASPECT Project.
- ASPECT now has a fully sortable and searchable Project History listing to keep track of the location of the last 1000 projects that were opened on a particular PC. Accessible from the main Project menu option or by pressing [F5] before opening an ASPECT project.

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▲ Recent Projects				
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Please select a project to load it:				
Name	Location	Description	Date	
TimeToNext	F:\Workbench\Projects\2020_Projects\	TimeToNext	2020-11-09 14:13	
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MatrixProjVerifyTSCTemplate6	F:\Workbench\Projects\2020 Projects\	MatrixProjVerifyTSCTemplate6	2020-11-03 16:16	
MatrixProjVerifyTSCTemplate5	F:\Workbench\Projects\2020_Projects\	MatrixProjVerifyTSCTemplate5	2020-11-03 16:06	
MatrixProjVerifyTSCTemplate4	F:\Workbench\Projects\2020_Projects\	MatrixProjVerifyTSCTemplate4	2020-11-03 15:59	
MatrixProjVerifyTSCTemplate3	F:\Workbench\Projects\2020_Projects\		2020-11-03 15:51	
MatrixProjVerifyTSCTemplate2	F:\Workbench\Projects\2020_Projects\	MatrixProjVerifyTSCTemplate2	2020-11-03 15:29	
MatrixProjVerifyTSCTemplate	F:\Workbench\Projects\2020 Projects\	MatrixProjVerifyTSCTemplate	2020-11-03 15:25	
SystemDateFormatTest	F:\Workbench\Projects\2020_Projects\	SystemDateFormatTest	2020-11-03 14:59	
ByteSpliter32Test	E:\Workbench\Projects\2020_Projects\	ByteSpliter32Test	2020-10-29 12:26	
BACnetOverride	E:\Workbench\Projects\2020_Projects\	BACnetOverride	2020-10-26 12:37	
FBViSample	C:\Users\Tony.Schoenbachler\Docume	FBViSample	2020-10-21 15:32	
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• The time between device pings can now be controlled at the Global, Network, or Device level in any network topology. As a multiple of the fast ping time, this value is configured using the "Poll Multiplier (Ping)" property. This value will default to be equal to the "Poll Multiplier (Slow)" property at the Map, Network, and Device nodes in a network topology.

topology.	
Basic Expert Edit/Display	
Мар	Мар
Name	Мар
Alarm Update Time	15
AlarmManager	/GlobalConfig/MapAlarmManager
Always Trend, Alarm, Distribute? (careful!)	True
Cleanup Alarm Max Rows	5000
Cleanup Alarms?	True
Cleanup Interval	1440
Cleanup Retain Open Alarms?	True
Cleanup Trend Max Rows	9000
Cleanup Trends?	True
Connection Name	/GlobalConfig/MapDb
Poll Interval (Fast)	5
Poll Multiplier (Ping)	12
Poll Multiplier (Slow)	12
Poll Multiplier (Standard)	3
Project Target Type	Matrix
Timehooo	10

- Proxied eMap requests for alarms will now ignore offline devices to reduce network traffic load.
- Aspect has a new 32 Bit Byte Splitter to evaluate 4 bytes unsigned integers, adding 32-bit masks for diagram view logic programming supplementing the current 8-bit Byte Splitter element.

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ByteSplitter32	
Bytespirtersz	Array Output D
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	Bit_24
	Bit 25 Bit 26
	Bit_27
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	Bit 29 Bit 30
	Bit_30 Þ
Byte Input	Bit_31 Þ

- ASPECT Enterprise will now support configuration for two ethernet connections for dual IP address access to an ASPECT Enterprise target.
- The polling rate for Graphics can now be adjusted from 5 seconds to support a larger number of points per graphic without taxing the CPU on MATRIX Series or NEXUS Series targets. Graphics Subsystem

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	🗲 Back	Property Detail Level	Low ~	
Basic (3)	Expert (6)			
Debug Level				
No debug (	))			
Friendly Nam	e			
Graphics Su	bsystem			
ID Path				
Poll Rate				
5				

Network Device status will now be displayed with corresponding color codes, red for offline and gray for offline
Display Class Normal



• ASPECT now provides a search option to find bound child points and related graphic element targets. This feature allows an ASPECT engineer to find all points that are bound to a specific graphic element or group of elements and bulk edit graphics properties or the point bound to the element. For example, changing the Style for a group of annunciators.

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• A webserver restart option has been added to **NGAdmin** in case configuration options change or upgrades require a manual restart.

### **IMPROVEMENTS**

- ASP-3607 Support has been added for time-to-next and time-since-previous events in ASPECT/Unitron local schedules.
- **ASP-4572** In the Alarm Viewer it is now possible to assign enumerated text or engineering units for the value of an Alarm.
- ASP-4573 An option has been added to mask which columns are displayed on the H5 Alarm Viewer page.
- ASP-4850 On Network Status page time is now prefixed with 'Last updated:'.
- **ASP-4989** Alarm History sort function has been added.
- ASP-5000 An option has been added to configure ping times with a separate multiplier (at Map/Network/Device levels All Protocols).
- ASP-5047 Project load history list has been added to ASPECT Studio.
- ASP-5079 Duplicated "Set Time" option has been removed from ngAdmin to reduce configuration ambiguity.
- ASP-5143 ASPECT Single Sign On documentation has been enhanced for readability and faster setup.
- ASP-5165 A new Diagram element has been added that will split up to 32 bits from an unsigned input value.
- ASP-5206 ASPECT Enterprise now supports dual IP addresses for servers with multiple NIC cards.
- **ASP-5227** Initial load time for **ngAdmin** has been improved by reducing the size of browser UI dependencies.
- ASP-5228 New time setting menu options for Saudi Arabia Riyadh have been added for NEXUS and Enterprise device targets.
- ASP-5231 ASPECT now has a global configuration option in the Graphics Subsystem to control the polling rate of graphics to efficiently utilize network bandwidth.
- **ASP-5240** A Project can now be configured to toggle SMTP debugging to aid in troubleshooting when setting up email notification in ASPECT.
- ASP-5250 The Baikal onboard CalDAV calendaring server installation option has been updated for use with PHP 7.3 and mated with the Thunderbird email client for calendar schedule editing from an ASPECT Enterprise or NEXUS device target.
- ASP-5273 The Trend Subsystem has been modified to allow the trend rollup threshold to be configurable.
- ASP-5274 ngAdmin now provides visual indication on the trend graph that ASPECT has automatically "Rolled Up" a trend response for summary display.
- ASP-5275 The Baikal On-Board Calendaring server can now be updated from the WebUI to the current PHP 7.3 compatible version of 0.6.1.
- ASP-5286 A new "Simple Combo Schedule" schedule type has been added for use with the new Time to Next and Time Since Last feature in ASPECT.
- ASP-5287 A new Simple Schedule Config Panel has been added for initial configuration of Simple Combo Schedules from ASPECT Studio.
- ASP-5292 BACnet audit logs now list current and previous values when going into override state and when relinquishing a previously overridden value.
- ASP-5302 The ngAdmin System Browser now gives visual color indication of online, offline and disabled statuses of devices by default.
- ASP-5304 Bulk Schedule distribution can now be prequalified to distribute a Full schedule, only the Exception List associated with a schedule or the Weekly Schedule without exceptions.
- ASP-5313 The Device ID property on a Map Device is now located next to the Device Address and is exposed at the "Low" edit level.
- ASP-5314 The "ID Path" property for any point is now visible when editing at the "Low" property edit level.
- ASP-5320 Support has been added for OAuth 2.0 Office365 Exchange Calendars for ASPECT iCal Scheduling.
- ASP-5321 Exception logging has been enhanced to include Pushover notification exceptions.
- ASP-5324 A new Map Search option has been added to find bound "Child" points and a right click option to edit the selected "bound" network point properties.

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- ASP-5325 A "Light Weight" deployment option has been added to ASPECT Studio.
- ASP-5326 eMap Proxied Alarm requests now filter offline devices to reduce network traffic load.
- ASP-5330 A Data validation check has been added to ensure that poll rate parameters cannot be misconfigured and to adjust fatal property values.
- ASP-5386 A new option has been added to restart the webserver from ngAdmin.
- ASP-5393 Support has been added for the European Small Business Solution, one MATRIX and one Cylon BACnet device for scheduling.

### **RESOLVED ISSUES**

- ASP-4685 Discovered BACnet objects with an empty object-name property are no longer imported with an empty reference name.
- ASP-4706 ContextGrabber now adds ID\_PATH property to the value object.
- ASP-4849 After panic stop NTP now automatically restarts (All target platforms).
- ASP-4853 Importing a JSON file no longer resets previously added Targets.
- ASP-4890 Edit levels on Schedules now works properly.
- ASP-4907 Lookback Interval now accepts values that are multipliers of 10.
- ASP-4914 Misconfigured LDAP servers no longer allow guest access to ngAdmin and WebUI.
- ASP-4929 Import from EC and Close option is no longer greyed-out when opening a project in ASPECT Studio.
- ASP-4943 An issue has been fixed where license violations had been intermittently displayed on points for no reason.
- ASP-4959 Licensed Devices in System Information Page shows percentages with fewer digits.
- ASP-4990 Bulk edit Search function now works as expected.
- ASP-5024 Historical Alarms now displays the timezone set on WebUI rather than that of the PC.
- ASP-5053 The ability to add, remove, edit connectors while editing an Application in ASPECT Studio has been restored.
- ASP-5072 Bulk change group edit permissions are now working when configured from the Security subsystem interface
- ASP-5081 Style display order is now persisted in Style dropdown in the Annunciator/Label/Link elements
- ASP-5100 After sorting saved trends in ng-admin, the selected trends data will now correctly render in the graph element when the user clicks on any of the newly-sorted saved trends.
- ASP-5105 Incorrectly configured Security driver no longer throws Null pointer exceptions.
- ASP-5120 All buttons in ng-admin now render in the appropriate shade of "Cylon Green".
- ASP-5164 All HTTPS web UI routes now work on HTTPS enabled sites.
- ASP-5168 ASPECT Studio resources tab now shows the correct count of alarm points in a project.
- ASP-5181 All Map 'Service' properties are now propagated to all targets when deployed. Service properties imported from a target are also correctly mapped in ASPECT Studio.
- ASP-5200 BitKinex WebDAV Client used to copy files to the Local Storage Area on an ASPECT target no longer fails with a 401 error during authentication.
- ASP-5203 All Trends now refresh data if any Tree / Menu item has been clicked.
- ASP-5204 Schedule Exception start date and times no longer get reset after entering End Date and Time.
- ASP-5233 ASPECT eMap device License counts in ASPECT Enterprise now correctly reflect actual ACE device counts.
- ASP-5235 A guard has been added to ASPECT Studio to prevent ASECT Services configuration nodes from being inadvertently duplicated.
- ASP-5239 Ad-Hoc Trend graphs will no longer "Rollup" i.e. summarize trends containing digital or binary sample data.
- ASP-5270 Annunciator graphic elements now respect the Background Color and Background Opacity settings of the currently selected style issue introduced in v3.03.03.

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ASP-5301	. PNG files now render correctly when developing Graphics pages in ASPECT Studio.
ASP-5306	Copy/Paste bugs in ASPECT Studio Graphics designer have been resolved.
ASP-5307	Trend Graph Menu Tree element will now properly scale its container window to display relevant "sample name" text.
ASP-5316	Advanced Element Search Query will now filter elements as selected in the search query dialog.
ASP-5335	ASPECT Studio will no longer lock up when toggling live/sim if MySQL connection manager is not configured to connect to an accessible, live MySQL Server.
ASP-5339	Bulk change feature no longer allows disparate data types between source and target change elements.
ASP-5341	All relevant configuration files are now included in an ACE target configuration backup $.tgz$ file.
ASP-5353	NWS Element has been modified to use the new secure url endpoint for weather information from the National Weather Service.
ASP-5354	Editing Groups / Users and Project Source Download options now works when SSL is enabled from the WebUI Administrators console.
ASP-5365	The Network ID in the Network node of the Map will now default to 0 instead of blank.
ASP-5391	Data gaps have been resolved in Unitron data being pushed from ASPECT Nexus target to Active Energy.

# **Customer Impact**

Any customer wishing to take advantage of the new features should upgrade when convenient.