



## Opis zmian wprowadzonych w Adroit7 wersja 7.0.1.1

Note: Please check that your Adroit installation folder (typically C:\Adroit) does not contain any .DMP files, and if it does then delete them.

### Those affecting the Agent Server

- Fixed the memory creep issues related to using CreateThread.
- Moved the affinity code from as.exe to pool.dll so that it now applies to both the Agent Server (as.exe) and the Agent Server Service (ass.exe.).
- Agent Server dump files (.DMP) are no longer created by default. These files are only created when there is a problem with a WGP file. If necessary, you can enable their creation by adding the HKEY\_LOCAL\_MACHINE\Software\Adroit Technologies\Adroit\Workgroup\CreateDumpFiles DWORD registry key and setting its value to 1.
- The efficiency of the screen messages, displayed when loading the Agent Server, has been improved to avoid long loadup times.
- The logon and logoff of the Adroit UI are now auditable events, when auditing the Agent Server.
- Fixed the intermittent failure of the Agent Server to start up that was caused by the unprotected multithreaded access to internal string variables.
- Potential invalid memory operations are now prevented.
- Changed the GetSupergroup methodology to improve the reliability and efficiency on Agent Servers with large agent counts (more than 100000).
- Improved memory allocations for public transactions.
- Fixed a bug which caused XP embedded computers that do not support the mailslot functionality (used for AS window messages) to continually have 100% CPU load.
- Fixed a memory creep issue that is particularly noticeable when using DBAccess agents.

### Those affecting the following agents:

#### - Alarm:

1) The alarm priorities now default to the agent priority setting when loading Adroit 6.0 WGP files.

2) NEW: Implemented the following DWORD registry key:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Adroit

Technologies\Adroit\Workgroup\WG.INI\AcknowledgeAtStartup, whose default value is 1, which

enables the acknowledgement of alarms at startup. Set this value to 0 to disable the acknowledgement of alarms at startup. Set this value to 1 to startup and check and acknowledge each startup alarm individually to ensure that the process is under control.

#### **- AlarmManagement:**

- 1) Fixed issues with the queries, Pie/Bar checkbox and exporting of data.
- 2) NEW: Added support for the TOP(%t) constraint, which If enabled, specifies the topmost number of incidents returned by this query. For instance, when the table records are ordered by time in ascending order, the specified number of the most recent records is returned. Likewise, when the table records are ordered by time in descending order, the specified number of the oldest records is returned.
- 3) NEW: Added the UserKPIs table so that users can add and/or specify their own KPI target values. Some of these values parameterize certain default queries so that you can customize these queries according to your needs.
- 4) NEW: Added the INTEGER engineQueueSize slot, which displays the number of incidents that the AlarmManagement agent still needs to log to the database. This should always remain at 0.

#### **- Analog:**

- 1) Improved the accuracy of ROC alarming for sub-second changes.

#### **- Audit:**

- 1) Fixed the initialization of each tag's startup value, so that subsequent changes are properly detected.

#### **- Counter:**

- 1) If the agent name contains the '/' character, these characters are now replaced with underscores '\_' in their persistence file names, so that these files can be created.

#### **- Datalog:**

- 1) When fetching data from SQL Server, this agent no longer uses the user regional settings and ONLY uses the SYSTEM regional settings. Therefore please ensure that the SYSTEM regional settings (and in particular that the decimal separator character) are compatible with the regional settings used by your SQL Server otherwise ALL the updates to and from SQL will fail.

#### **- DBAccess:**

- 1) Checking whether the Agent Server is in standby mode (for an Adroit cluster) no longer relies on subscriptions to minimize delays in detecting this change in Agent Server status, which previously caused double entries to be logged as the new standby server continued to write to the database.

#### **- Device:**

- 1) Removed a global variable to prevent the intermittent crashing of the Agent Server when

starting a device.

2) NEW: Implemented the following DWORD registry key: HKEY\_LOCAL\_MACHINE\Software\Adroit Technologies\Adroit\Scanning\MarkBadOnStartup, whose default value is 1. If this value is set to 0 then all values are marked healthy on startup. Currently the Agent Server does not poll values at startup, so if you use long poll periods then you can set this value to 0 to mark your values healthy and display the values on startup that were last saved in the WGP file.

3) Imported @scan tags can now be unscanned.

4) New: In order to make the cluster mode switchover more efficient, the Device agent now performs the standby mode subscription monitoring. This provides a far less noisy and more efficient switchover especially in heavily overloaded scanning configurations that contain hundreds of scan agents. It also puts a lot less stress on the internal subscription buffer and so is less prone to agent locks and timeouts.

**- Digital:**

1) Changed the CreateThread calls to \_beginthreadex to eliminate possible memory creep.

**- Marshal:**

1) Changed the methodology for pulsing its digital values.

**- MaxDemand:**

1) NEW: This agent no longer requires an OEM licence to function.

2) NEW: You can now browse REAL slots into the enableTag slot. In this case if the REAL value is greater than or equal to 1 then the agent is enabled (its enable slot is set to TRUE,) otherwise if the REAL value is 0 the agent is disabled (its enable slot is set to FALSE).

**- Perfmon:**

1) NEW: Added the \\Process(as)\\Virtual Bytes counter as a default counter.

**- Recipe:**

1) Fixed an importing bug affecting list slots in which only the first entry in the list of strings was imported.

**- Scan:**

1) NEW: Implemented the following DWORD registry key: HKEY\_LOCAL\_MACHINE\Software\Adroit Technologies\Adroit\Scanning\MarkBadIfWriteFails, whose default value is 1. If this value is set to 0 then Adroit does not mark values bad when their write fails. Typically you would set this value to 0 for devices that do not allow writes to certain registers and therefore the write fails which causes the agent to go scan bad, so that the next read will simply overwrite the value that the user wanted to write in the first place.

2) NEW: This agent no longer performs standby mode subscription monitoring, which is now handled by the device agent to make the cluster mode switchover more efficient.

#### - **SNMPManager:**

- 1) Improved the agent locks and the transaction efficiency.
- 2) NEW: Added the STRING lastWriteStatus slot, which displays a text message that informs the user whether the last value written to the device was successfully changed in the device or not.

#### - **Statistical:**

- 1) If the agent name contains the '/' character, these characters are now replaced with underscores '\_' in their persistence file names, so that these files can be created.

#### - **Stringlist:**

- 1) Fixed an importing bug affecting list slots in which only the first entry in the list of strings was imported.

### **Those affecting the UI:**

#### **General**

- Fixed the file Open dialog to include recipe and wizard documents.
- Changed the method of timing in the AdrSchedule() class in attempt to resolve the intermittent missing of long schedule times.
- Improved support for the translation of the Alarm, Chart, Configurator and Trend windows.
- Trend, Recipe, Chart, Web and Event windows now occupy the same ratio of the screen regardless of the size of the monitor on which they are opened, like Mimic and Alarm windows. In other words their position and size relative to the window size are now ratio rather than pixel specific. This MAY cause your previously saved Adroit document windows to become misaligned in their relationship to each other, in which case you need to open them on your engineering station, re-align and resave them.
- When overriding monitor size settings, these overridden values are saved for your Adroit document windows and NOT the detected screen size values.
- Improved support for document portability across monitors
- Added the **Monitor setup...** button to the Advanced UI preferences dialog. This opens the Monitor dimensions dialog, which allows you to view and/or override your monitor dimensions and/or provide multi-monitor support (when the Adroit UI screen is displayed on more than one monitor). It also allows you to specify the methodology that should be used (for advanced use only) when positioning saved Adroit document windows on the screen (either Ratio (in relation to monitor dimensions, default) or Pixels (as designed/saved)).
- Fixed the display of the overridden monitor width and height values when opening the monitor dimensions dialog.
- If your monitor and/or graphic card and/or resolution has changed since the last time an Adroit document was saved, then a message box is displayed containing the previous and current monitor sizes and resolutions. If you disagree with the new reported sizes, you are directed to the Advanced UI preferences so that you can override these values.

## Alarm windows

- Fixed the disabling of the global acknowledge menu item if HIDDEN is specified as its security group.
- Fixed the intermittent exception when changing column formats that caused the UI to crash.

## Chart windows

- NEW: Each document window can now chart up to 16 pens (previously only 8 were supported).
- To reduce the effect of "ghost images" from appearing when using Adroit charts (which requires that the UI is restarted), new charts are now created with the "display of series values hints" (tooltips) option DISABLED (OFF) by default.
- The chart is also automatically placed into real-time trend mode when undoing zoom mode for line and strip charts.

## Web windows

- Added menu item security for the Navigate menu.

## Those affecting Other components:

### - Adroit Datalog Backup Viewer (logviewer.exe):

- 1) Added support for a universal separator in CSV files. So that these CSV files are no longer limited to being delimited by commas but now can be delimited using the List separator character specified by the system.

### - Adroit DB Generator (dbgen.exe):

- 1) Fixed CSV file paths for importing CSV files when using the CSV connector.

### - Adroit OPC Browser (opcbrowser.exe):

- 1) NEW: Implemented the following DWORD registry key: HKEY\_LOCAL\_MACHINE \Software\Adroit Technologies\Adroit\OPC Browser\DisableItemProperties, whose default value is 0. Set this value to 1 to improve the speed of retrieving information from certain slow OPC servers.

### - Adroit Security Manager (adrsecurity.exe):

- 1) Minor fixes.

### - Adroit Server OLE Interface (MISSrvr.exe):

- 1) Fixed the local time UCT conversion when poking date/time slots.

- **Adroit Utility DLL (adrutils.dll):**

- 1) Fixed the Visual Studio 2005 compatibility issue in ShowFileList.

- **Adroit WGP Inspector (wgpinspect.exe):**

- 1) Functionality improvements.

Other enhancements:

**Changes made to the Adroit 7.0.1 CD Setup:**

- A new setup option has been added to install SQL Express.

**Changes made to the Adroit Demonstration:**

- Various improvements affecting the correct display of the Adroit document windows launched by the demo.

**Changes made to the supported Utilities on the Adroit 7.0.1 CD:**

- The password for the wrapped SQL Express installation is now strong so that it will meet domain password naming rules.
- Microsoft SQL Server Management Studio Express is now on the CD (\Utilities\SQL\_EXPRESS\Microsoft SQL Server Management Studio Express), which allows you to manage and view instances of Microsoft SQL Server 2005 Express Edition (SQL Server 2005 Express).

**Drivers:**

**IMPORTANT:** Since we use Microsoft's latest compiler to produce the Adroit 7 drivers, **ALL the protocol drivers from Adroit 7 onward are incompatible with protocol drivers in previous versions of Adroit.** See the procedure at the top of this email on how to **UPGRADE EXISTING DRIVERS.**

**UPGRADE any existing drivers when upgrading from a prior version of Adroit to Adroit 7, as follows:**

**Note:** This procedure does NOT apply if you performed a **COMPLETE** uninstall of the previous version of Adroit or if you are installing Adroit 7 on a new computer.

1. Ideally, select YES when you are asked by the Adroit installation to upgrade your existing drivers. If you select NO then open the **Start** menu, **Programs, Adroit 7** and select the **Upgrade Existing Drivers** shortcut.

This compares any drivers in the Adroit installation folder against the Adroit 7 drivers on the Adroit installation. If you have existing drivers, then the **Adroit driver install** dialog is displayed, listing the currently installed drivers.

2. Select the first driver in the **Available drivers** list and click the **Install** button.
3. Once the driver is installed (and its relevant documentation is displayed), select the next driver and click the **Install** button.
4. Repeat this until all the listed drivers have been upgraded.

The following is a list of drivers provided by Adroit 7.0.1:

**Note:** Drivers with **bold** revision numbers indicate that the driver has been updated, see below

for a description of the improvements.

No.	DLL name	Driver Description	Revision
1	ABBP214	Asea Brown Boveri Procontrol 214 Driver	77
2	ABSLC500	Allen Bradley SLC 500-DF1 Serial Driver	7
3	ABTCP	Allen Bradley Ethernet Driver	18
4	ABXKF2B	Allen Bradley (DH+) KF2 Driver	90
5	ADVNTTECH	Advntech PCL818 Series Driver	5
6	BECKER	Becker M500 Relay Serial Driver	1
7	BECKHOFF	Beckhoff TwinCAT ADS-DLL API Driver	8a
8	BLNDTECH	Blendtech Series 20 Additive Controller Driver	0
9	CEFP2000	Centralised Electronics Fire Panel 2000 Driver	90
10	CONET	Conet Card Exception-based Driver	17
11	CONETPCI	Conet PCI Card Exception-based Driver	6b
12	CYPHER	Cypher Base Station Driver	1
13	DIAMONSP	DiaMon Serial Driver	7
14	DIGIBUS	DIGibus DPM Driver	2
15	DIMETRAP	Dimetra-P TCP driver	8
16	DLRML81	DLRA MUL-T-LINK Driver	14
17	DNP3	DNP 3 Driver	49a
18	DT95SEAL	DT95SEAL Exception-based Driver	8
19	DTAKER	Datataker Telemetry Driver	
20	EAGLE	Eagle PC Card Driver	11
21	EAGLEE	Eagle EDR-Enhanced (EDRE) PCI Card Driver	2
22	ELEOLV24	Electromatic Optolink V24 Dupline 128 Driver	80
23	GEM80	General Electric ESP (GEM 80) Driver	3c
24	GSM_SMS	GSM SMS Driver	9e
25	GSTPROFI	GST Profibus Exception-based Driver	16
26	GSTPROFS	GST Profi SoftFEP Exception-based Driver	12
27	HITACHIE	Hitachi Ethernet Driver	15
28	HITACHIH	Hitachi H Series Driver	23
29	INTRAC	Intrac 2000 Exception-based Driver	12
30	JOYSCC	JOY SCC Exception-based Driver	4a
31	KDL105KS	Koyo Direct Logic 105 K-Seq Driver	75
32	KDL205KS	Koyo Direct Logic 205 K-Seq Driver	75
33	KDL405KS	Koyo Direct Logic 405 K-Seq Driver	75
34	KMSUCOMA	Klockner Moeller SUCOM-A Driver	15a
35	KOYO_ETH	Koyo DirectLogic Ethernet Driver	6
36	LECOMAB	Lenze LECOM A or B Serial Driver	4

37	LG_GLOFA	LG Glofa GM Series Driver	2
38	LONWORKS	LonWorks Driver	
39	LOVATO	Lovato RGAM Serial Driver	4
40	MITAJC24	Mitsubishi A-Series C24 Driver	17
41	MITAJE71	Mitsubishi AJ71E71 TCP (not UDP) Driver	105
42	MITFXS	Mitsubishi FX Series Driver	8
43	MITQJE71	Mitsubishi Q or QnA Ethernet Driver	28
44	MOD_ETH	Modbus Ethernet Driver	47
45	MODBUSI	Modbus I (RTU and ASCII) Driver	57
46	MODBUSP	Modbus Plus MBXAPI Driver	19
47	MODBUSR	Modbus Radio Driver	14
48	MOOICI32	Moore Local Instrument Link via ICI 320 Driver	4
49	NHPMICRO	NHP MicroLink (MLC14) Driver	1
50	OMR_ETH	OMRON Ethernet Driver	12
51	OMRSYSMC	OMRON Sysmac Driver	99
52	OMRSYSMM	OMRON Sysmac Modem Driver	100
53	OPC_CL	OPC Client Driver	67
54	OPTO22	Opto 22 (OPTOMUX) Driver	1
55	PAGER	Pager Exception-based Driver	12
56	POLY_ETH	PolyComp GTX Sign Ethernet Driver	7
57	POLYCOMP	PolyComp Sign (GTX) Driver	7
58	RDC8102	RDC8102 Exception-based Driver	5
59	REMOTRON	Remotronics GAR System 300 Exception-based Driver	1
60	RKC_CBXX	RKC CB100 - 900 Serial Driver	1
61	RODAM	RODAM Driver	0
62	SAMSUNG	Samsung N70 or 700+ Driver	1
63	SASCOM	SASCOM (RTU and ASCII) Driver	3
64	SCANRS	ScanRs (RS-232 Barcode Scanner) Driver	13
65	SCH3964R	Schiele SYSTRON S 800 3964 and 3964R Driver	2
66	SCHCUST1	Schiele Custom Protocol #1 Driver	9
67	SCS_SGC	SCS_SGC Alarm Station Driver	1
68	SDESYMAX	SQUARE D SyMax Ethernet Driver	6
69	SHIMSR	SHIMDEN SR50 Series Driver	2
70	SIE3964R	Siemens S5 3964 and 3964R Driver	90a
71	SIEH1	Siemens H1 Driver	27
72	SIEINAT	Siemens Ethernet Driver	11
73	SIEL1	Siemens Sinec L1 Bus Exception-based Driver	3
74	SIEL2	Siemens L2 Driver	9

75	SIES7FN	Siemens S7 Functions (SAPI) Exception-based Driver	32
76	SISTAR	SiStar PCU Server Driver (Intel)	33
77	SPABUS	SpaBus Driver	4
78	SPECTR	Spectrum tele-RANGER Driver	56
79	SPESCADA	Spectrum SCADA-MUX Driver	12
80	SQDSYMAX	SQUARE D SyMax Serial Driver	2
81	STKEMAX	Strike ENERMAX Driver	9
82	TDC0550	TDC I 0550 Serial Driver	0
83	TI500	Texas Instruments 500 or 505 Series Driver	14
84	TITCPIP	Texas Instruments TCPIP Ethernet Driver	13
85	TOSHBIN	Toshiba (Binary) Driver	2
86	TOSHIBA	Toshiba (RTU and ASCII) Driver	13
87	TOST2ETH	Toshiba T2 Ethernet Driver	29
88	UHT4	UHT4 - Engine hot-test bay (Motorola) Driver	2
89	UNIPCOM	Unitronics PCOM M-90 or M-2XX Series Driver	6
90	USERDRV	User-defined Exception-based Driver	32
91	VAALCOR	Vaalcor Exception-based Driver	1
92	VAMS	Voest Alpine Monitoring System Driver	19a
93	VANT_PRO	Vantage Pro Serial Driver	1
94	YOKOGAWA	Yokogawa uXL DCS Driver	4a

#### Driver Enhancements and Bug Fixes:

##### **DiaMon Meter Serial Protocol Driver**

7 : This fixed the issue which required all 24 items to be used in order for the scan job to succeed.

6 : Removed Carriage Return in messages to create connection to modem.

5 : Implemented a check for nulls.

4 : Added check for modem echo when dialling up and also added purge of communications before each write.

##### **Mitsubishi Q/QnA Ethernet Protocol Driver**

28 : Support the writing to clusters and fixed the Device Dialog, which previously did not allow you to select Secondary when creating the first device.

27 : Added String Support.

26 : Implemented multiple CPU and MC protocol and PLC cluster checking also fixed the Primary/Secondary switching.

Documentation updated.

##### **Modbus Ethernet Protocol Driver**

47 : Bug fix.

46 : NB FIX - fixed the memory creep injected in rev 43

45 : Removed Start/Stop from the Critical Section to allow one to easily start or stop when the device is backlogged (the over-subscription of one or more scan jobs).

44 : Fixed issue with extension max items.

43 : Added IEC addressing functionality.

Documentation updated.

**IMPORTANT:** If you are using rev 43 of the Modbus Ethernet Driver then we HIGHLY RECOMMEND that you upgrade to the latest rev 47.

#### **Modbus I (RTU and ASCII) Protocol Driver**

57 : Added 6-character Modbus Address size, same as MOSCAD for all PLC types and also added Topological Address Specification as in MOD\_ETH. Also add check for DSE PLC type for it's write only registers that should be in a single job.

56 : Added Multiple Write with Deep Sea Electronics Unit and Added DSE Unit as PLC selection.

55 : Removed Start/Stop from the Critical Section to allow one to easily start or stop when the device is backlogged (the over-subscription of one or more scan jobs). Also Writes, Validate and Map Preference are now given priority over reads to improve performance when backlogged.

#### **RKC CB100 - 900 Serial Protocol Driver**

1 : Added Moxa Cluster Aware Capability.

#### **Siemens Ethernet Protocol Driver (INAT)**

11 : Added better error checking when creating connections.

10 : Fixed a bug introduced by rev 8 in the 4 byte jobs.

9 : Added optimized string support.

8 : Fixed incorrect pseudo to job mapping, fixing rare edge anomalies and unpacking errors.

Documentation updated.

#### **Strike ENERMAX Protocol Driver**

9 : Fixed the crash in the driver when Processing Billing Data used invalid date/time data, such as day = 90.