

Coder 4.06-7 Release Notes

DATE:

Dec 16th, 2012

BACKGROUND:

Version 4.06-7 is a new release of the Coder and Coder Libraries

Compatibility:

This version only supports the MicroNet, ECM3, MCU and PCMHD product families (Atlas and easYgen are excluded)

Compatibility:

To use this version of the GAP Coder, you must use GAP 2.18E or higher

Compatibility:

To use this version of the GAP Coder, you must use SOS 4.01 or higher

NEW FEATURES:

16575	MODBUS_M port delay functionality	Added a global delay variable (RTU_Port_Delay) which can be set through a C_FUNCTION block. The delay variable defaults to 0 and is measured in milliseconds.
16579	EFI_CORE pattern 2 without sensor invoked tooth reset	Implemented the requested pattern. The pattern is only available to customers who sign a release agreement and employ a compile-time password.

ISSUES:

The following knowledge base ("PID") issues were addressed in 4.06-7:

Issue #	Description	Solution
15666	ISA Firewall blocks SOS from communicating with NetSim at the LocalHost (127.0.0.1) port on Windows 7 PCs.	Transferred the fix from version 6.00 of the GAP Programmer: The TCP call sendTo() was passed a null pointer for the socket descriptor to prevent the ISA Firewall bug from obstructing the call.
16511	TDC_FLAG on EFI_CORE reports incorrectly for 4-stroke patterns	Made changes so that the TDC flag outputs as expected in all circumstances.
16533	MicroNet I/O Lock when tuning a large CURVE_2D_S block	Interrupts were being disabled for too long while blocks of tunable values were changed. The number of blocks per tunable group has been reduced from 400 to 100 and the scope of the interrupt disable was reduced to 1 tunable group.
16264 16371	Backup CPUs failed and could not be resynced with the Syscon.	The DMA driver being used for block transfers between CPUs has been changed to allow recovery if there is a glitch in the DMA and the system has been changed to allow the backup to resync if it fails due to a DMA failure. NOTE: The recovery logic requires footprint version 5418-2566H.

PART NUMBERS:

Version 4.06-7

Gap/Coder Installation: 9927-2072 A

Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-6 Release Notes

DATE:

June 8th, 2012

BACKGROUND:

Version 4.06-6 is a new release of the Coder and Coder Libraries

Compatibility:

This version only supports the MicroNet, ECM3, MCU and PCMHD product families (Atlas and easYgen are excluded)

Compatibility:

To use this version of the GAP Coder, you must use GAP 2.18D or higher

Compatibility:

To use this version of the GAP Coder, you must use SOS 4.02 or higher

NEW FEATURES:

No new functionality was added to 4.06-6

ISSUES:

The following knowledge base ("PID") issues were addressed in 4.06-6:

Issue #	Description	Solution
2222 2355 4031	Modbus link errors when using RTU option	Implemented a hardware-based timer to achieve the accuracy necessary for proper RTU multidrop functionality
14325	LATCH_AE coder crash	Corrected indexing bug
14432	B_ALARM doesn't reset when RST field has a constant TRUE value	Added logic to clear outputs when RST is a constant TRUE and IN goes FALSE
14636	Coder crash when CAN_NTW_EN has a constant FALSE value	Made the coder exit with an error message whenever a CAN network block (COPEN_NTW, J1939_NTW or CUSTOM_NTW) has a constant FALSE value for CAN_NTW_EN
15473	ACT_CTRL block interprets all constant values for the NULL_I field as zero	Loaded the constants in the correct format for the system
15627	Wrong ModTable size in Engine platforms	Replaced the include file with the correct version
15629	Problem with EFI_CORE patterns with more than 360 teeth	Changed calculation to use floating point values for greater accuracy
15766	EVENT_MGR E_VAL count overflow	Changed usage of E_VAL and related variables to access all 32 bits
15781	Inpulse II and ECM3 discrete input state changes. This issue was evaluated in CAC 1508	Changed Discrete input monitoring from edge triggered to a periodic polling of the pin state to prevent any potential of the input state getting latched in the wrong state as a result of severe EMC phenomena. This mitigation was approved by the corrective action committee which addressed CAC 1508
15810	Modbus slave connection timeout not long enough	Changed the constant timeout value of 2 seconds to a variable which can be set through a C_FUNCTION block. This variable defaults to 21 seconds.
16154	CO_DVP.RES_ER_MD block describes the mapping of values opposite of how they actually work	Corrected the help

PART NUMBERS:

Version 4.06-6
Gap/Coder Installation: 9927-2072
Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-5 Release Notes

DATE:

April 28th, 2011

BACKGROUND:

Version 4.06-5mn is a new release of the Coder and Coder Libraries

Compatibility:

This version only supports the MicroNet and MicroNet Plus controls

Compatibility:

To use this version of the GAP Coder, you must use GAP 2.18 or higher

Compatibility:

To use this version of the GAP Coder, you must use SOS 3.3 or higher

NEW FEATURES:

No new functionality was added to 4.06-5mn

ISSUES:

The following knowledge base ("PID") issues were addressed in 4.06-5mn:

Issue #	Description	Solution
15639	DVP over CAN does not work in RTN chassis	Code was changed to unload the CAN buffers when the fastest rate-group is scheduled instead of every 5mS
15208	Corrected various incorrect help topics. Many errors had been introduced in version 4.06-1.	Reverted topics to version 4.06-0 help files where appropriate and manually corrected information where necessary.

PART NUMBERS:

Version 4.06-5mn

Gap/Coder Installation: 9927-1914

Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-4 Release Notes

DATE:

May 25th, 2010

BACKGROUND:

Version 4.06-4mn is a new release of the Coder/Opsys

WARNING:

This version only supports the MicroNet and MicroNet Plus controls

WARNING:

To use this version GAP/Coder you must use GAP 2.18 or higher

WARNING:

To use this version GAP/Coder you must use SOS 3.3 or higher

NEW FEATURES:

No new functionality was added to 4.06-4mn

ISSUES:

The following knowledge base ("PID") issues were addressed in 4.06-4mn:

Issue #	Description	Solution
15168	LinkNet Module NODE_FLT output goes TRUE during reset of non-faulted LinkNet modules.	Code was changed to eliminate erroneous Fault Alarms.

PART NUMBERS:

Version 4.06-4mn

Gap/Coder Installation: 9927-1806

Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-3 Release Notes

DATE:

December 18, 2009

BACKGROUND:

Version 4.06-3mn is a new release of the Coder/Opsys

WARNING:

This version only supports the MicroNet and MicroNet Plus controls

WARNING:

To use this version GAP/Coder you must use GAP 2.18 or higher

WARNING:

To use this version GAP/Coder you must use SOS 3.3 or higher

NEW FEATURES:

No new functionality was added to 4.06-3mn

ISSUES:

The following knowledge base ("PID") issues were addressed in 4.06-3mn:

Issue #	Description	Solution
7491, 8593	When an application has a configuration error and can't run, the _SYS_INFO.STOP_PER stop permissive can prevent the crippled application from being stopped and removed	The stop permissive is now overridden if the application is not properly running. Also see footprint fixes below which address the states reported in AppManager
8593	see #7491 above	
12632	Values from ZMINUS_ blocks with DATA_LOG_M are not synchronized with other rate group values	This situation arises because of when the DATA_LOG_M samples the data. It is set up to sample the data at the start of the rate group and before the ZMINUS_ blocks run. We tried sampling after the ZMINUS_ blocks run, but that introduced jitter depending on when the ZMINUS_ blocks executed in the longer rate groups. It was decided that the way it is, is less of an issue. The help for the ZMINUS_ blocks and the DATA_LOG_M blocks has been updated to describe this policy
14466	Tunable save can cause FBUS_M LINK_ERR and/or Servlink communication pauses	Changed the function "update_ee()" to time-slice during the EE save process. This allows lower priority tasks to have some time to run and eliminates communication time-out problems
14468	SYNCHRO .GEN-PHASE and BUS_PHASE help is incorrect	Corrected Block Help
14514	Please update the block help and the MicroNet Hardware manual to explain that SIO will set the channel faults for a short time during a CPU change-over. Please elaborate and/or modify the exact wording as appropriate	Updated Block Help
14599	ACT_CTRL blocks in RTN chassis can lose the calibration on channel #1	Changed system to save the correct TEMP values for channel #1 in the RTN chassis

The following knowledge base ("PID") issues are addressed in the new footprints **5418-2566F** and **5418-2918A**. **The control must have one of these footprints installed to take advantage of these fixes:**

Issue #	Description	Solution
7491, 8593, 9271, 14402	AppManager sometimes reports "Running" when the application is in fact unable to run because of a configuration error	An additional state was added to AMService and AppManager 2.10 which reports "Inactive" for this circumstance. AppManager 2.10 is required to take advantage of this fix
8593	see #7491 above	
9271	see #7491 above	
14305	VxWorks 5.5.1 TFFS Corruption	VxWorks True Flash File System patch implemented
14359	Please add a "remove application from autostart" feature to AppManager	Command added to AppManager and AMService on control. AppManager 2.10 is required to take advantage of this fix
14402	See #7491 above	

PART NUMBERS:

Version 4.06-3mn
Gap/Coder Installation: 9927-1776
Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-2 Release Notes

DATE:

September 1, 2009

BACKGROUND:

Version 4.06-2mn is a new release of the GAP Coder and Libraries

WARNING:

This version only supports the MicroNet and MicroNet Plus controls

WARNING:

To use this version GAP/Coder you must also use GAP 2.18 or higher.

WARNING:

To use this version GAP/Coder you must also use SOS 3.3 or higher.

NEW FEATURES:

No new functionality was added to 4.06-2.

ISSUES:

The following issues are addressed in version 4.06-2mn:

- Coder Version is changed to 4.06-2
- RTOS version is changed to 4.06-2
- Coder will not complete for any platform except MicroNet and MicroNet Plus

- KBA 14441 - IACT_EM does not work in RTN Expansion chassis
- KBA 14376 - If more than one LON module is installed in any RTN chassis, only the first LON module works correctly
- KBA 14165 - The LAG and LAG_2 blocks' outputs can go to NAN and lock up
- Help file updates (KBA 14075, 14164, 14234, 14306, 14452, 14453):
 - Updated Rate group topic
 - Updated DIVIDE block topic
 - Updated DATA_LOG_M topic
 - Added Dual Coil Behavior topic for AO_RM_DVR
 - Updated DITHER topic
 - Updated DIG_RVLV topic
 - Integrated all of these updates with appropriate links

PART NUMBERS:

Version 4.06-2mn
Gap/Coder Installation: 9927-1747
Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-1 Release Notes

DATE:

June 5th, 2009

BACKGROUND:

Version 4.06-1 is a new release of the Coder/Opsys
WARNING: To use this version GAP/Coder you must also use GAP 2.12 or higher.
WARNING: To use this version GAP/Coder you must also use SOS 3.3 or higher.

NEW FEATURES:

No new functionality was added to 4.06-1:

ISSUES:

The following knowledge base issues were addressed in 4.06-1:

- Issue: Incorrect Datalength on DVP slow message data.
Solution: Modified blk_can.c
Knowledge Base Article: 14274
- Issue: Modbus_m Exception Errors on Redundant.
Solution: Modified file
Knowledge Base Article: 14284
- Issue: Modbus_m Link Errors on Redundant.
Solution: Modified file
Knowledge Base Article: 14283
- Issue: Atlas II ACT output going high near zero demand.
Solution: Modified Actuator zero clamping.
Knowledge Base Article: 14232
- Issue: Increase states in the MPlus.
Solution: Modified Files
Knowledge Base Article: 14216
- Issue: Icorrect Backup state on MPlus.
Solution: Modified Files
Knowledge Base Article: 14211
- Issue: Modbus_S Holding register not accounting for Multiplier.

Solution: Modified blk_mod.c
 Knowledge Base Article: 14107

Issue: Hardware CPU # 335 not initializing.
 Solution: Modified Files
 Knowledge Base Article: 13966

Issue: A_CURVE2, A_CURVE3, CAL_CURVE2 and CAL_CURVE3 data may not get saved.
 Solution: Modified files
 Knowledge Base Article:13275

Issue: Datalog_M string names were added.
 Solution: Modified files
 Knowledge Base Article:13197

Issue: DOW in Redundant not updated.
 Solution: Modified files
 Knowledge Base Article:12996

Issue: AO_RM_DVR rework
 Solution: Modified files
 Knowledge Base Article: 10771, 14083

Issue: ACT_CTRL tunable downloads were not getting saved
 Solution: Modified files
 Knowledge Base Article:10591

Issue: Updated CO_DVP to IPS
 Solution: Modified files
 Knowledge Base Article: 5471,5472,5473,5474,5475,5477,5478,13985

Issue: BUS_OFF not functioning on 565 platform
 Solution: Modified files
 Knowledge Base Article: 3307

Issue: LATCH_AE Events.log.csv re-created after power cycle
 Solution: The name of this file was changed to "ae_eventlog.csv" to overcome a one-period per file name limitation in the control's FTP implementation
 Knowledge Base Article: 13263

Issue: LATCH_AE Events sometimes not written to the log file
 Solution: This was because of a buffer overrun in the particular (stress test) application. The buffer has been adjusted appropriately to prevent this error
 Knowledge Base Article: 14015

Issue: Various Coder Bugs
 Solution: Modified various files.
 Knowledge Base Article: 14073, 13985, 13918, 13873,13305, 13300, 13179, 11671, 10211, 5612, 5191, 2477

PART NUMBERS:

Version 4.06-1
 Gap/Coder Source: 9927-1545
 Software: 9927-1701
 Master Kit: 9927-1333, 8928-1088, 1796-1068

Previous Coder 4.06-0 Release Notes

DATE:

July 21st, 2008

BACKGROUND:

Version 4.06-0 is a new release of the Coder/Opsys
 WARNING: To use this version GAP/Coder you must also use GAP 2.12 or higher.
 WARNING: To use this version GAP/Coder you must also use SOS 3.3 or higher.

NEW FEATURES:

The following functionality was added to 4.06-0:

- 1) Created I_TO_32B and B32_TO_I and MOMNTARY_B blocks
- 2) Faster Failover
- 3) File Input for CURVES_2D_S
- 4) ModBus IP options
- 5) EGD Enhancements

ISSUES:

The following knowledge base issues were addressed in 4.06-0:

Issue: MCU/IP2 The PWM_DRIVER block duty cycle / frequency clamps
Solution: Modified files
Knowledge Base Article: 2381

Issue: infer RG from Parent
Solution: Modified files
Knowledge Base Article: 6575

Issue: MIL Block
Solution: Modified files
Knowledge Base Article: 9192

Issue: Faster Failover
Solution: Modified
Knowledge Base Article: 7651,8091,8931,9294,9851,11471

Issue: Synchro
Solution: Modified files
Knowledge Base Article: 9291,9292,7715,7716

Issue: Event Manager Issues
Solution: Modified files
Knowledge Base Article: 7351,2473,5273,5651,7311,2542,11454,11391,5572

Issue: Various Coder Help Issues
Solution: Modified Coder Help
Knowledge Base
Article: 2499,2885,3666,5075,5331,5751,6135,6191,7331,7791,8172,8831,9112,9113,9116,9117,11091,11514,2518,4874,5691

Issue: Various Coder Bugs
Solution: Modified various files.
Knowledge Base Article: 3832,6091,7071,7111,8691,9032,9391,9471,4611,5492,6132,11091,7472,9051,2056

UNSUPPORTED BLOCKS:

The following is a list of blocks that are not supported in the 4.05-0 release.

[RATIO LIM2](#)
[CO_SPC](#)

The following is a list of blocks that have been removed from the 4.05 template.

None

SUPPORTED BLOCKS:

The following is a list of blocks that are new in the 4.06 template.

B32_TO_I	EDMHD_SPRK	EG_01_1100
EG_01_1292	EG_CAN_16AI	EG_CAN_4AQ
EGIAC_PHM	EGEN2000	L_TO_32B
MOMNTARY_B	PCM_KNOCK	

The following is a list of blocks that are in the 4.06 template, but are temporarily password protected.

CAL_ID
TEMP_HIST
PCI04_ATL

NEWLY SUPPORTED BLOCKS:

The following is a list of blocks that were previously in the template (in 4.05), were not supported, but are supported in 4.06-0.

None

PART NUMBERS:

Version 4.06-0
Gap/Coder Source: 9927-1545
Software: 9927-1598
Master Kit: 9927-1333, 8928-1088, 1796-1068

Template Changes in 4.06

The major changes from 4.05 to 4.06 were:

- 1) EGD Enhancements
- 2) Faster Failover in Impulse II and ECM3
- 3) Coder Bug Fixes

NEW BLOCKS

The following block was added new to this template.

B32_TO_I	EDMHD_SPRK	EG_01_1100
EG_01_1292	EG_CAN_I6AI	EG_CAN_4AO
EG1AC_PHM	EGEN2000	I_TO_32B
MOMNTARY_B	PCM_KNOCK	

DELETED BLOCKS

The following blocks were deleted going from the 4.05 template to the 4.06 template.

[MULTIPROG](#)

MODIFIED BLOCKS

Going from the 4.05 template to the 4.06 template, the following blocks input and/or output fields were modified.

<u>Block Name</u>	<u>Description of Template Changes</u>
CURVE_2D_S	Added File input support
EGD_PROD	Modifications
EGD_CON	Modifications
J1939_CURV	Added Rev field
CAN_READ	Removed MSG_TYPE
MODBUS_M	Removed B_ENABLE
SYS_INFO	Modifications
EFI_CORE	Removed B_ENABLE
EVENT_MGR	Modifications
MIL	Removed B_ENABLE
EFI_P_CORE	Modifications
MODBUS_S	Removed B_ENABLE
EDMHD_SPRK	Modifications
PNET_UTIL	Modifications