isegOPCServer-Readme.txt
History of the iseg OPC software package, release 4.

//4.00
-       new OPC engine DA 3.0
-       new "isegHVOPCServer" that is independent from any hardware
        encryption (tested under Windows 2000/SP4 and Windows XP/SP2)
-       new name space, that includes the items of modules and crates,
        details see "isegHVOPCServer.pdf"
-       modified item names and additional items in order to have
        a fault-tolerant system
-       some items now have additional properties (EU, High EU, Low EU)
-       new configuration tool "isegHVOPCcfg.exe" to configure the files
        "isegHVOPCServer.ini", "EHQ32156Srv.opc" and "ECHx38SVr.opc"
        (see "isegOPCSetup.pdf")
-       new "isegHVOPCUserNameSpace" client to create an ASCII file
        in order to establish an default user name space
        (see "isegHVOPCUserNameSpace.cfg")

//4.01
-       erase of the HV module items "Alarm", "AlarmInformation" and
        of the crate items "Alarm", "AlarmInformation" and "AlarmValue"
        by reset of the corresponding status bit

//4.02
-       The display of the Items Vmeas and Imeas depends from the
        corresponding entries in the file "..\cfg\res.cfg".
-       multi-voltage modules with the correct handling of the set values

//4.03   multi-voltage modules with handling of the item RampSpeed in % of
NominalV

//4.04   additional INHIBT support for device class 7

//4.05   wrong data type of item GeneralStatus changed from VT_UI2 to VT_UI1

//4.06   HardwareILimit, HardwareVLimit and ErrorThreshold of device classes 4,5
and 8 items
        from namespace removed! Dynamic channel namespace depending of the
channel count
        has been made.

//4.07   include the latest OPC Toolbox from softing version 4.10
        remove a bug in isegHVOPCServer version 4.06 for device class 0

//4.10   support for the new EHS Multi-Channel HV modules
        (support of the device class 4)

        The write only items has been changed into items with property of
write-/readable state.

        Some bits of the status channel item has been added the property of a
write-able state
        and the item canx.mtyy.chzz.On has been removed.

        The access to items of the crate monitoring unit has been changed into
canx.crateyy.ITEM
        to have a consistent structure (crate CAN nodes lower than 10).

//5.00   isegHVOPCServer with new namespace according to the
iseg_OPC_Server_requested_upgrades.doc
        Support of the PEAK CAN hardware via the isegpcan.dll CAN channels
numbering has been changed from 1..16 to 0..15.
        Support of the SYS TEC USB CAN hardware via the isegscan.dll CAN
channels numbering has been changed from 1..16 to 0..15.

//5.00.0007
        - remove a bug when using MIX modules

//5.00.0008
          - With the user namespace file is it possible to change the control of
the HV modules which are hardware connected from CAN line 0..15
          in a full qualified identifier of the namespace from line 1..16.
//5.00.0009
          - With the user namespace file is it possible to change the control of
crate monitoring units which are hardware connected from CAN line 0..15
          in a full qualified identifier of the namespace from line 1..16.
//5.00.0010
          - Remove a bug to use the user namespace file in order to change the
control of crate monitoring units.
          - Implementation of additional modes to update the item cache controlled
through two new items from the Status namespace of the OPC server.
//5.00.0013
          - Implementation of a possibility to read back of the state of kill -
set via the item canx.mtyy.setKillEnable - for EHQ devices of devices class 0
via the "Status channel" canx.mtyy.chzz.stat.
          - The behavior of the server has been improved when a larger number of
items has been written to the devices.
          - The item IRampSpeed has been implemented as a new feature of the
Multi-Channel HV devices, which have a hardware implementation of current
control.
          - The type of the item ErrThreshold has been changed from VT_UI2 to
VT_R4 according to the document iseg_OPC_Server_requested_upgrades.doc.
//5.00.0014
          - adaptation for the use of crates on CAN line 0 only
          - adaptation for the use of SYS TEC hardware
//5.00.0015
          - Implementation of file version for isegpcan.dll, isegscan.dll to
handle the setup (DLL's with a newer version numbers will not overwritten)
          - Remove a bug while backgound refresh mode of the item cache for
VSetAllChannels, ISetAllChannels and ITripAllChannels.
//5.00.0016
          - improvements for item Alarm and AlamInformation isegHVOPCServer after
start up
          - Alive=1 after start up of the isegHVOPCServer
          - doClear Channel in Mode 2: Force=1 and Refresh>0
          - decoupled handling of write for item data in Mode 2: Force=1 and
Refresh>0
          - set of Mode 2 (CacheMode) in isegHVOPCServer.ini file
          - set of ITrip without a read of INominal
//5.00.0017
        implementation for EBS modules
//5.00.0018
        remove of a bug when use the ITrip function for CIO modules (build in
ECH124)
//5.00.0019
          - bugfix for the use of the OPC server with ECH crates only
          - implementation for Omicron devices (O205C0)
//5.00.0020
        faster termination at the end of calibration
//5.00.0025
          - improvements of backgound refresh mode, handle the transmit data in
backgound refresh mode
//5.00.0026
        constant values are loaded during the creation of the namespace when
beackground refresh mode is pre-initialized
//5.00.0028
          - fixed a bug to use the user namedspace in backgound refresh mode
//5.00.0029
          - backgound refresh mode are extended for ECH crates
          - improvements to handle ECH crates
          - canx.mayy.chzz.Stat bit 2 to bit 6 are masked (for internal use only)
//5.00.0032
          - improvements of the background refresh mode, uses two threads, faster
write messages
//5.01.0000
          - includes a patch for the Softing toolbox, first tests under Windows 7

//5.01.0001
        - support for E08C2 modules
//5.01.0002
        - Items of constant values will be read once again after a module was logged again:

 canx.mayy.chzz.NominalV,

 canx.mayy.chzz.NominalI,

 canx.mayy.DeviceID,

 canx.mayy.SoftwareID,

 canx.mayy.BitRate,

 canx.mayy.Option)
        -The items canx.mayy.chzz.VSet, canx.mayy.chzz.ISet and canx.mayy.chzz.ITrip will be read again in backrground refresh mode
        if the write value exceeded the nominal value.
//5.01.0003
        support of M16IO and TxxIO modules
//5.01.0004
        - The background refresh thread includes a handler in order to collect the requested receive message before a new message can be send to the same
        module within a defined time slot.
//5.01.0005
        - bugfix to handle EHQ device class 6 and 7 modules in background refresh mode
//5.01.0006
        - Bugfix of the not correctly displayed item "RampSpeed" (voltage) of 8 channel modules in background refresh mode.
        - Bugfix for user namespace evaluation for crates of the same SUBID on different CAN lines, ECH crate firmware version v2.11 is necessary;
        - The item quality will be set dependent on the state of the item "Alive" in background refresh mode.

If necessary please, make a firmware upgrade by the help of the program "isegCANHVControl" for all modules and crates to have the full functionality! (see operator's manuals of modules and crates also)

To have the full functionality of the "isegHVOPCServer" since release 5.00 use following firmware releases:

        device class 0   r. 3.32   e200_332.hex
        device class 1 and 2   r. 3.21   e82f_321.hex
        device class 3   (on request)
        device class 5   r. 1.25   ciof_125.hex
        device class 6   r. 1.12   e804_112.hex
        device class 7   r. 1.11   e80f4_111a.hex (serial numbers 474001 and 474002)

                                             e80f4_111b.hex (other serial numbers)
        device class 8   r. 1.25   ciof_125.hex

        device class 21   r. 4.17   e16d0_417_cm.hex
        device class 22   r. 5.17   h101.hex
        device class 24   r. 2.12   e08c0_212.hex
        device class 25   r. 2.24   e08f0_224.hex

        crate monitoring unit   r. 2.11   ech211.hex

For user of the program "isegCANHVControl" is recommended an update also to have a better access to the CAN hardware.