Release Notes V5.1

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Upgrading to Proview V5.1.0

This document describes new functions i Proview V5.1.0, and how to upgrade a project from V5.0.0 to V5.1.0.

New functions

Supervision in component objects

DSupComp and ASupComp is a new type of supervision objects for components. The function is identical to DSup and Asup, but they are separated in a main object, containing the data for the object, and a function object used in the plc code. For DSupComp the function object is DSupCompFo and for ASupComp the function object is ASupCompFo.

Previously when ordinary DSup and ASup object where use in components, these objects were placed in the plc code and the only property that normally could be modified was the event text. With the new objects, all the supervision attributes are available for modification, such as MoreText, EventPriority, EventFlags, TimerTime etc.

All supervision objects in the base components are replaced by DSupComp and ASupComp objects. The figure below shows the DSupComp object for high high limit in a BaseSensor object.

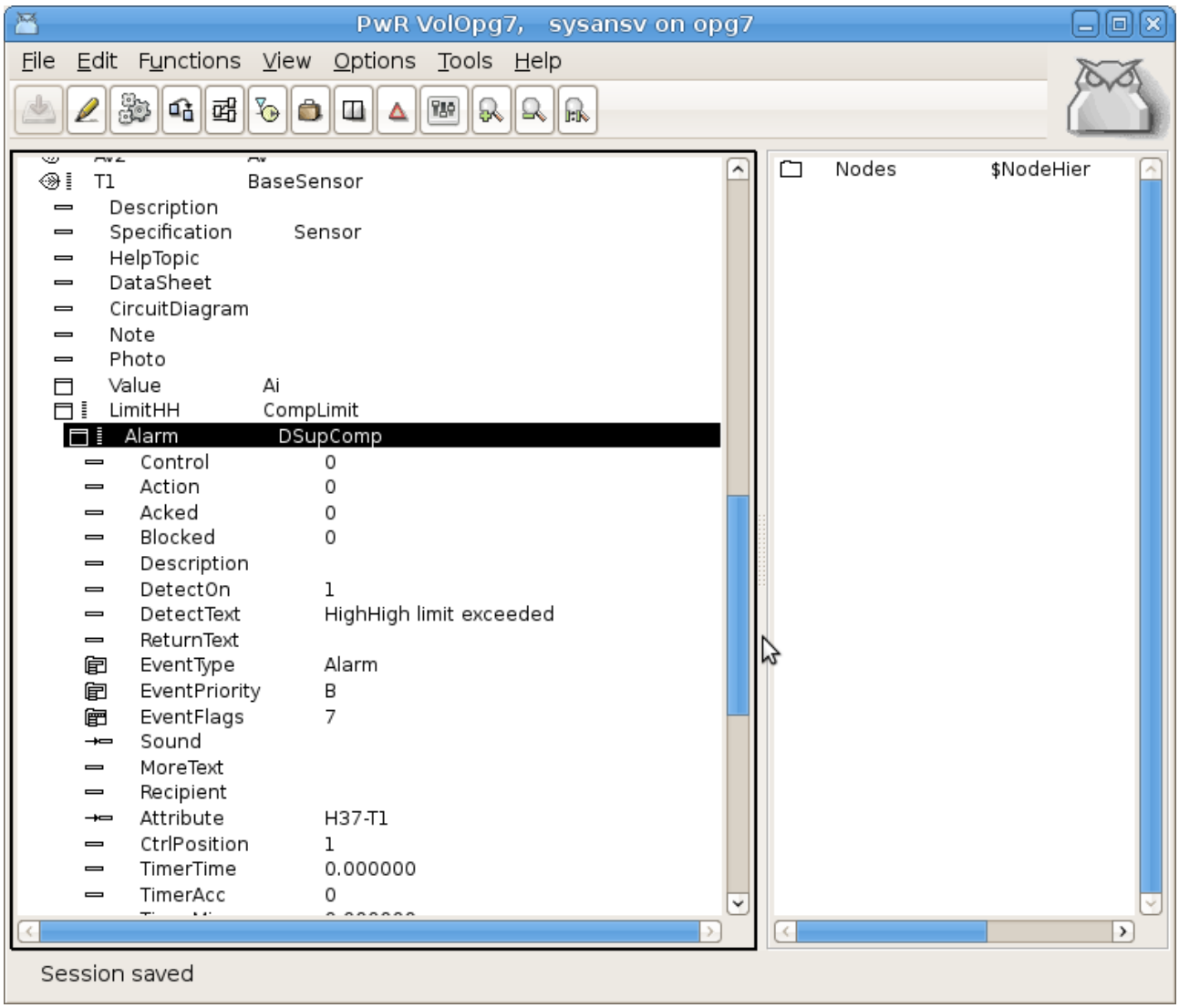

ABB ACS880 with PPO7 Profinet communication

A set of object for communication and control of frequency converter ABB ACS880 with Profinet communication is added. The set contains a profinet device object with predefined gsdm file, a profinet module with IO module fo r the PPO7 communication. Note that the PPO7 message for profinet differs from PPO7 for profibus, and a specific IO module is required. Also objects for the frequency converter, and aggregates for motor, pump and fan control are added.

Ubuntu package for cross compilation of Raspberry projects

The new package that can be installed on Ubuntu, contains cross compiled runtime actives for Rasberry PI, thus making it possible to develop RPI projects on Ubuntu, without having to build a cross compiled Proview release from sources. The name of the package is pwrrpi51 and it requires that the development package pwr51 first is installed.

Also the cross compiler rpi-tools for rasbian has to be installed on the developmen node.

Export of Xtt fast curve

An export function is added to the Xtt fast curve window to export the curve to text file. The text file can later be opened in a curve window with the xtt command ”open fast /file='filename'”.

Xtt command to close the current graph and multiwindow

These close commands are used for command buttons to close the current graph or multiwindow. When using multiwindows and window objects the name of the graph can be unknown when editing, and the name $current can be used to point out the current multiwindow or graph.

```
xtt> close graph $current
xtt> close multiwindow $current
```

Xtt logging modifications

Some changes are made in the xtt logging utility. The default filename is changed and is individual for the different entries. An entry is cleared before a restore is done.

New Classes

DSupComp

Digital supervision object for components. Basically a DSup object that is divided into a main object in the plant hierarchy, and a function object in the plc, DSupCompFo.

DSupCompFo

Function object to DSupComp.

ASupComp

Analog supervision object for components. Basically an ASup object that is divided into a main object in the plant hierarchy, and a function object in the plc, ASupCompFo.

ASupCompFo

Function object to ASupComp.

Modified Classes

Upgrade procedure

The upgrading has to be done from any version in the interval V4.7.0. If the project has a lower version, the upgrade has to be performed stepwise following the schema

V2.1 -> V2.7b -> V3.3 -> V3.4b -> V4.0.0 -> V4.1.3 ->V4.2.0->V4.5.0->V4.6.0->V4.7.0->V4.8.6->(V5.0.0)->V5.1.0

When upgradeing from lower versions than V5.0.0, upgradeing from V4.8.x can be done directly to

V5.1.0.

The upgrade procedure is to dump the database with reload.sh, change the version of the project in the projectlist, and then execute the script upgrade.sh.

NOTE !!

Do not activate Update Classes.

If the previous version should be kept, first make a copy of the project.

Make a copy of the project

Do `sdf` to the project and start the administrator

```
> pwra
```

Now the Projectlist is opened. Enter edit mode, login as administrator if you lack access. Find the current project and select Copy Project from the popup menu of the ProjectReg object. Open the copy and assign a suitable project name and path. Save and close the administrator.

Dump the databases

Execute the first pass, *dumpdb*, in the script *`reload.sh`*.

```
> reload.sh

  reload.sh   Dump and reload of database.

  Arguments   Database or databases to reload.
              I no arguments is supplied, all databases will be
             reloaded.

  Pass

    dumpdb       Dump database to textfile $pwrp_db/'volume'.wb_dmp
    classvolumes Create structfiles and loadfiles for classvolumes
    renamedb     Rename the old database
    dirvolume    Load directory volume
    loaddb       Load the dump into the new database
    compile      Compile all plcprograms in the database
    createload   Create new loadfiles.
    createboot   Create bootfiles for all nodes in the project.


-- Reloading volume  directory volopg2

Pass: dumpdb classvolumes renamedb dirvolume loaddb compile createload
createboot

Enter start pass [dumpdb] >

------------------------------------------------------------------------
 Pass dump database
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
ls: cannot access /data0/pwrp/opg2/common/db/*.wb_dmp: No such file or
```

```
directory
Dumping volume directory in /data0/pwrp/opg2/common/db/directory.wb_dmp
...
I Database opened /data0/pwrp/opg2/common/db/volopg2.db
ls: cannot access /data0/pwrp/opg2/common/db/*.wb_load: No such file or
directory



------------------------------------------------------------------------
 Pass create structfiles and loadfiles for classvolumes
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] n
setdb is obsolete
>
```

Check that the one dumpfile is created for every rootvolume

```
> cd $pwrp_db
> ls -l *.wb_dmp
-rw-rw-r-- 1 cs pwrp 7467 2010-03-26 16:32 volopg2.wb_dmp
```

Linux release upgrade

If you are using an older Ubuntu version to upgrade the linux release and install the pwr51 package.

Change version

Enter the administrator and change the version of the project to V5.1.0. Save and close the administrator.

upgrade.sh

Do `sdf` to the project.

upgrade.sh is a script that is divided into a number of passes. After each pass you you have to answere whether to continue with the next pass or not.
Start the script with

```
> upgrade.sh
```

Start from the classvolumes pass.

```
Enter start pass [classvolumes] >
```

classvolumes

Create loadfiles and structfiles for the class volumes.

renamedb

Store the old databases under the name `$pwrp_db/'volumename'.db.1.`

cnvdump

Converts DSup and ASup to DSupComp and ASupComp for base component objects.

loaddb

Create databases and load the dumpfiles into them.

cnvobjects

Convert objects in loaded database.

compile

Compile all the plc programs.

createload

Create loadfiles for the root volumes.

createboot

Create bootfiles for all nodes in the project.

If the project contains any application programs, these has to be built manually.

Delete files from the upgrading procedure:

`$pwrp_db/*.wb_dmp.*`
`$pwrp_db/*.db.1` (old databases, directories which content also should be removed)

List example

```
>
> sdf opg2
Setting base /data0/x4-7-1/rls
bash: cd: /data0/pwrp/opg2/src/login: No such file or directory
>
> upgrade.sh

  upgrade.sh  Upgrade from V4.7.0 to V4.8.0


  Pass

    classvolumes   Create loadfiles for classvolumes.
    renamedb       Rename old databases.
    cnvdump        Convert the dumpfiles.
    loaddb         Load dumpfiles.
    cnvobjects     Convert objects in loaded database.
    compile        Compile all plcprograms in the database
    createload     Create new loadfiles.
    createboot     Create bootfiles for all nodes in the project.


-- Upgrade opg2
```

```
Enter start pass [classvolumes] >

------------------------------------------------------------------------
Pass create structfiles and loadfiles for classvolumes
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
ls: cannot access /data0/pwrp/opg2/src/db/*.wb_load: No such file or
directory

------------------------------------------------------------------------
Pass rename old databases
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
-- Saving file /data0/pwrp/opg2/src/db/volopg.db ->
/data0/pwrp/opg2/src/db/volopg.db.1

------------------------------------------------------------------------
Pass cnvdump
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
/data0/pwrp/opg4/src/db/volopg2.wb_dmp

------------------------------------------------------------------------
Pass load database
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
-- Loading volume volopg
...
-- Processing line: 57
-- Building volume directory
I Volume directory loaded
I Database opened /data0/pwrp/opg2/src/db/directory.wb_load
-- Processing line: 200
-- Building volume VolOpg
I Volume VolOpg loaded
Berkeley DB 4.6.21: (September 27, 2007)
info put: 0
Berkeley DB 4.6.21: (September 27, 2007)
info get: 0
int rc =  m_txn->abort(): 0

------------------------------------------------------------------------
 Pass convert objects in loaded database
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y

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-- Processing line: 21
```

```
-- Building volume localWb
I Volume localWb loaded
-- Set H5-V1.Actuator.Mode.AlarmLocalMode.Attribute = H5-
V1.Actuator.Mode
-- Set H5-V1.Actuator.DiffAlarm.Attribute = H5-V1.Actuator
-- Set H5-V1.Actuator.SwitchAlarm.Attribute = H5-V1.Actuator
-- Set H19-M1.TempSwitch.Alarm.Attribute = H19-M1.TempSwitch
-- Set H19-M1.TempSensor.LimitHH.Alarm.Attribute = H19-M1.TempSensor
-- Set H19-M1.TempSensor.LimitH.Alarm.Attribute = H19-M1.TempSensor
-- Set H19-M1.TempSensor.LimitL.Alarm.Attribute = H19-M1.TempSensor
-- Set H19-M1.TempSensor.LimitLL.Alarm.Attribute = H19-M1.TempSensor
%WNAV-E-MSG, Session saved

------------------------------------------------------------------------
Pass compile plcprograms
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
...
Berkeley DB 4.6.21: (September 27, 2007)
info get: 0
I Database opened /data0/pwrp/opg2/src/db/volopg.db
-- Plc window generated            F1-Z1-Plc-W
-- Plc window compiled for x86_linux optimized -O3 F1-Z1-Plc-W
-- Plc plcpgm compiled for x86_linux optimized -O3 F1-Z1-Plc
-- Plc window generated            F1-Z2-Plc-W
-- Plc window compiled for x86_linux optimized -O3 F1-Z2-Plc-W
-- Plc plcpgm compiled for x86_linux optimized -O3 F1-Z2-Plc

------------------------------------------------------------------------
Pass create loadfiles
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
-- Removing old loadfiles
rm: cannot remove `/data0/pwrp/opg2/bld/common/load/ld_vol*.dat': No
such file or directory
...
Berkeley DB 4.6.21: (September 27, 2007)
info get: 0
I Database opened /data0/pwrp/opg2/src/db/volopg.db
-- Building archive for volume: 000_001_001_012
-- Archive built for volume: 000_001_001_012

-- Working with load file volume 'VolOpg'...
-- Open file...
-- Successfully created load file for volume 'VolOpg'
-- 26 objects with a total body size of 21976 bytes were written to new
file.

Before this pass you should compile the modules included by ra_plc_user.


------------------------------------------------------------------------
Pass create bootfiles
------------------------------------------------------------------------
Do you want to continue ? [y/n/go] y
-- Creating bootfiles for all nodes
```

```
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-- Creating bootfile for node opg
      plc_opg_0507_00011
-- Plc thread generated priority 0, scantime   0.10000 s, 2 plcpgm's
-- Plc process compiled for x86_linux optimized -O3 Dummy
-- Plc program linked for x86_linux  node plc_opg_0507
-- Creating bootfile for node aristotle
      plc_aristotle_0517_00011
-- Plc thread generated priority 0, scantime   0.10000 s, 2 plcpgm's
-- Plc process compiled for x86_linux optimized -O3 Dummy
-- Plc program linked for x86_linux  node plc_aristotle_0517

-- The upgrade procedure is now accomplished.

setdb is obsolete
>
>
```