Yamatake Corporation (azbil group) DTM for HART Type Smart Positioner Overview

2010-4

Yamatake Corporation

azbil Group

Leaping Ahead from Yamatake's 100 Years
Human-centered Automation

Table of Contents

I. Specification

A) Standard

- FDT Interface specification 1.2.0
- HART Rev.5

B) Smart positioner specification

Model number	AVP302	AVP102	AVP202	SVX102
Description	HART General type. Ex. Proof casing	HART General Type Int. Safe casing	HART Remote type	HART for Rotary Valve Water proof casing
HART Device revision	2	2	2	2
Yamatake S/W Ver.	3.D or later	4.D or later	3.D or later	4.D or later
Released date	2004/9/1	2004/11/1	2004/9/1	2004/9/1
Apperance				

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II. Functions overview

A) Calibration

Executing Auto-setup (Automatic calibration program) ,
Manual zero-span adjustment, current signal calibration, etc.

B) **Parameterization**

Valve system configuration (Direct/ Reverse setting), In/Out characterization, Actuator size, Gland packing type, etc.

C) **Simulation**

Dummy input signal , Dummy drive signal

D) **Device status and alarms**

Failures alarms (i.e. VTD fault, NVM fault, Low input signal, etc),
Status information (i.e. Manual mode, HI/LO EPM OUT, etc)

E) **Valve diagnostics status and alarm**

Stick slip parameter status and alarm, Total stroke parameter status and alarm,etc.

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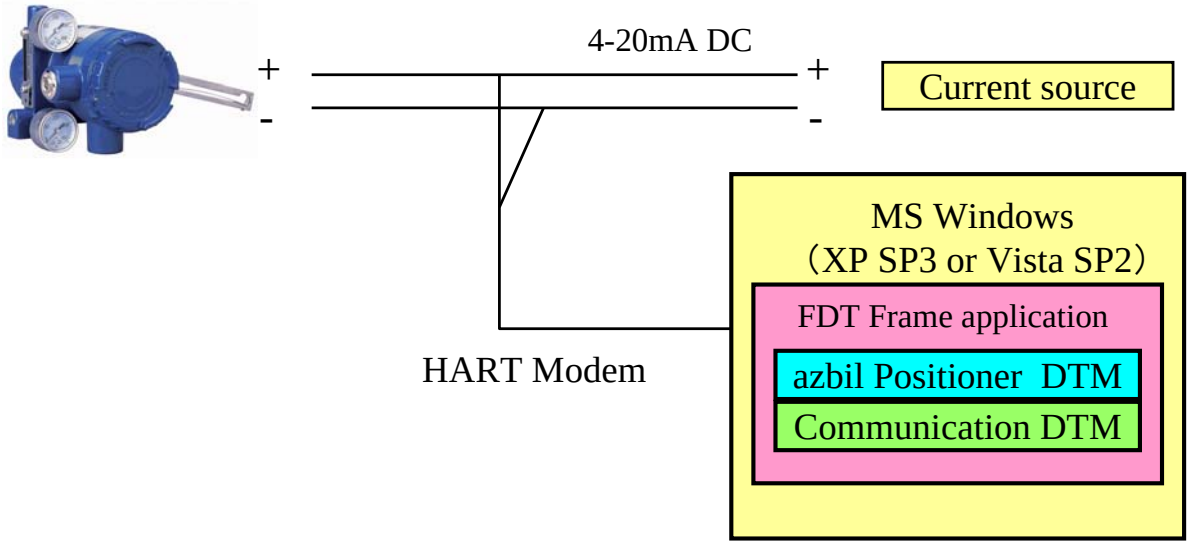
Typical system structure



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IV. Sample interface images

- FDT Frame application
  PACTWare consortium / PACTWare
- Communication DTM
  CodeWrights GmbH / HART Communication DTM
- Device DTM
  Yamatake / HART positioner Device DTM (Ver. 1.0.0)

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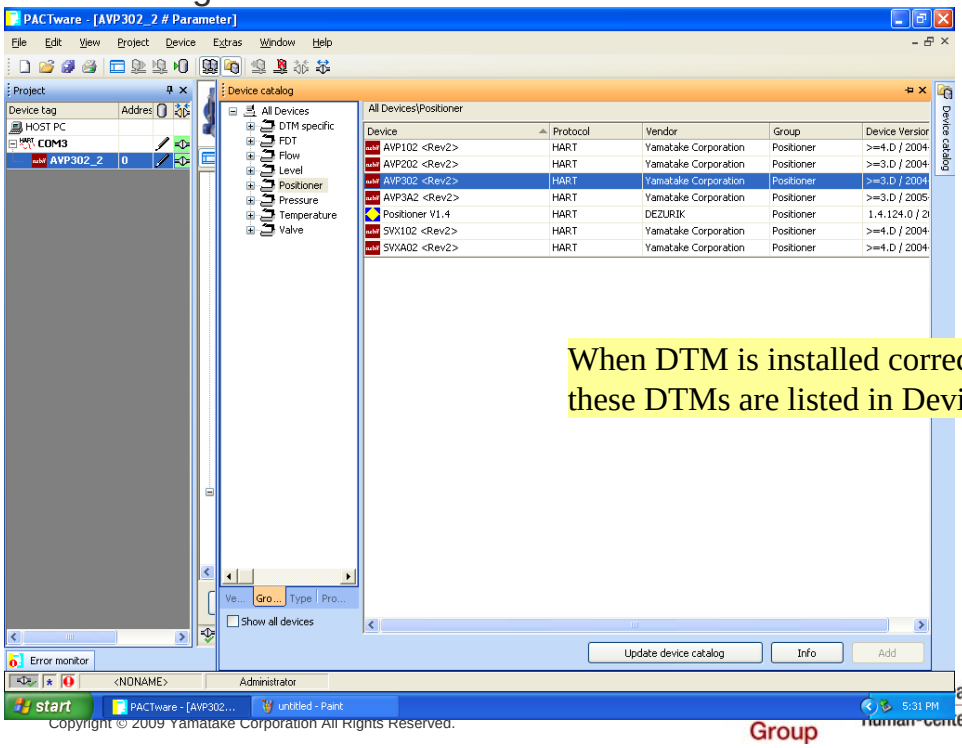
IV. Sample interface images

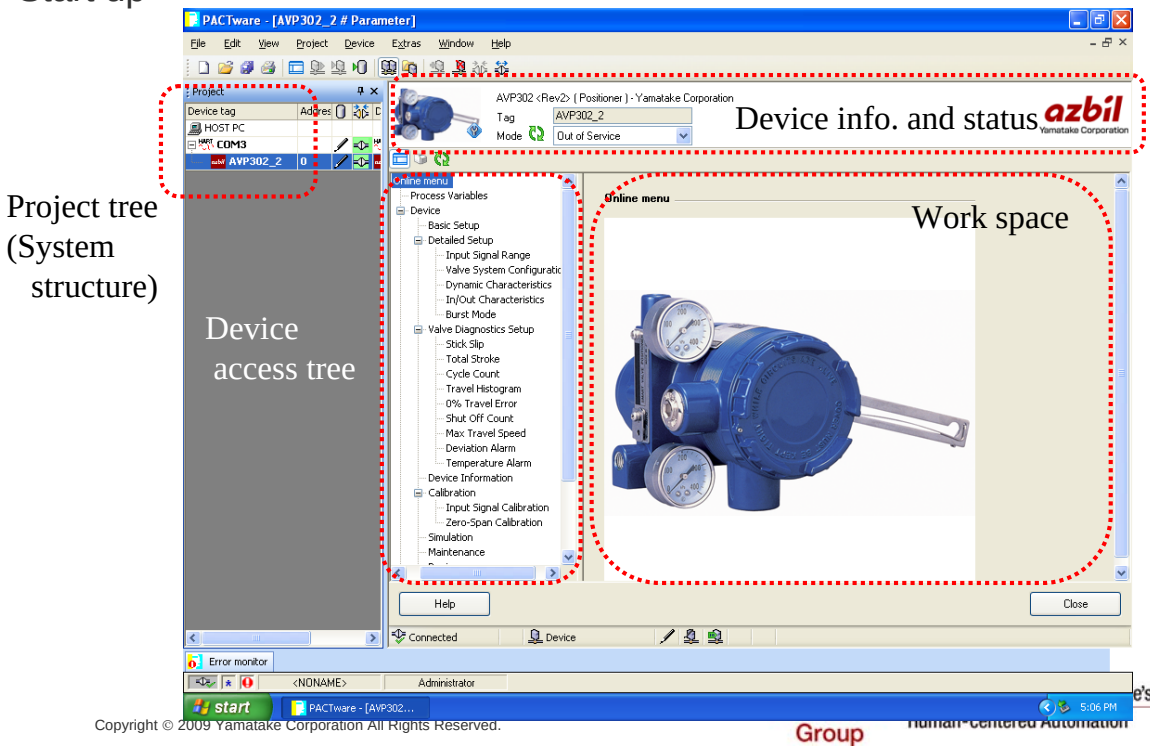
Device catalogue



When DTM is installed correctly,
these DTMs are listed in Device catalogue.

IV. Sample interface images

Start up

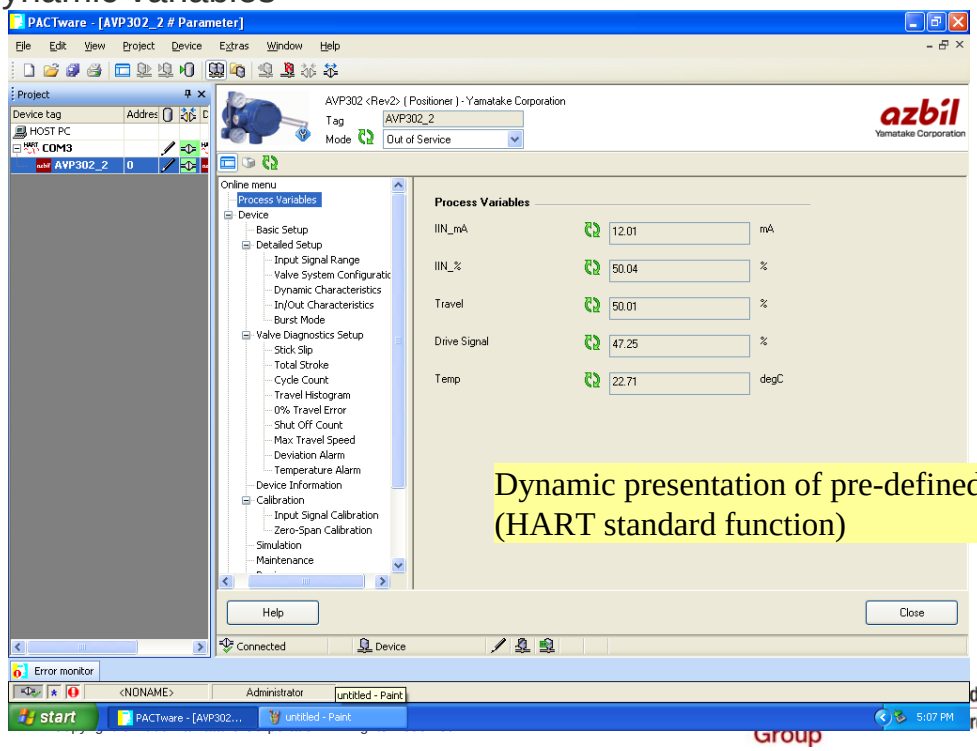


Project tree (System structure)

Device access tree

IV. Sample interface images

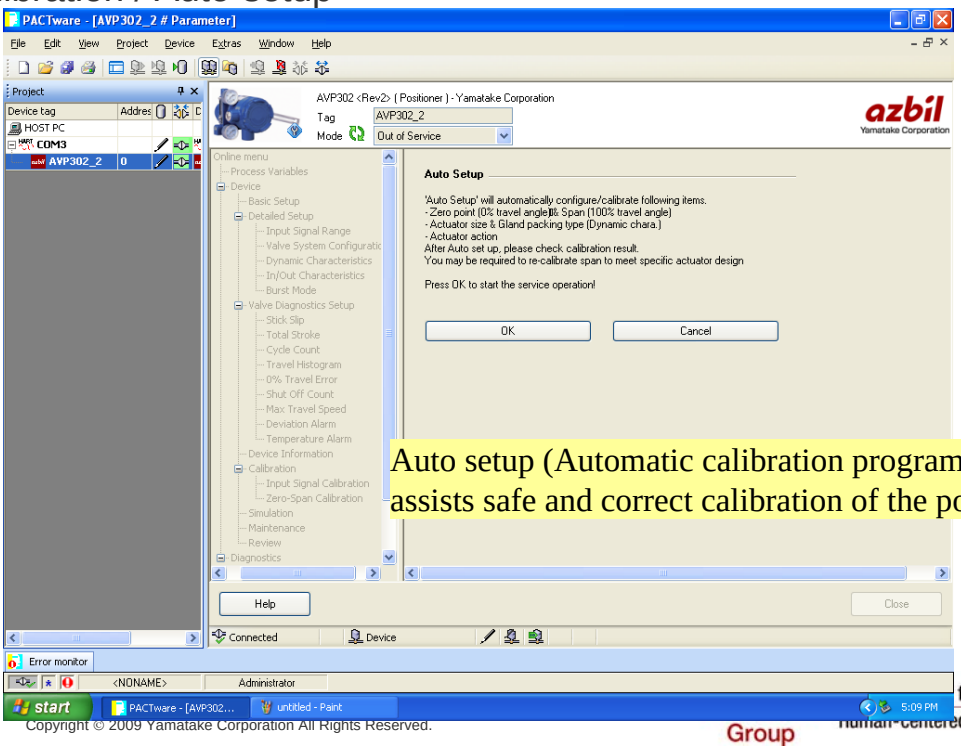
Dynamic variables



Dynamic presentation of pre-defined 4 variables. (HART standard function)

IV. Sample interface images

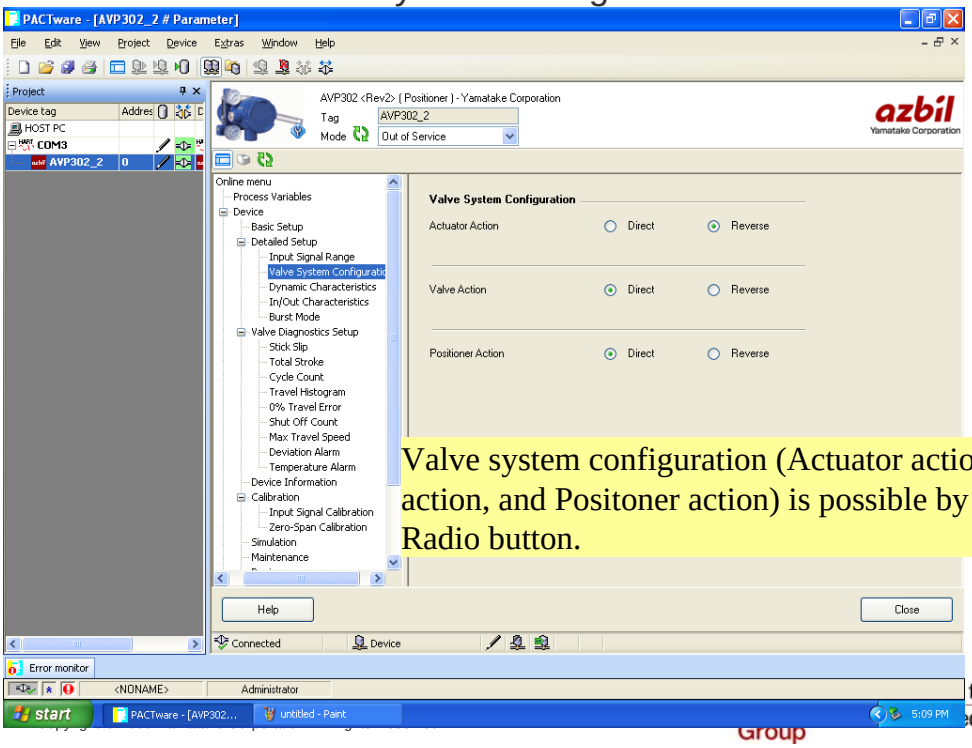
Calibration / Auto-setup



Auto setup (Automatic calibration program) wizard assists safe and correct calibration of the postioner.

IV. Sample interface images

Parameterization / Valve System Configuration



Valve system configuration (Actuator action, Valve action, and Positoner action) is possible by selection of Radio button.

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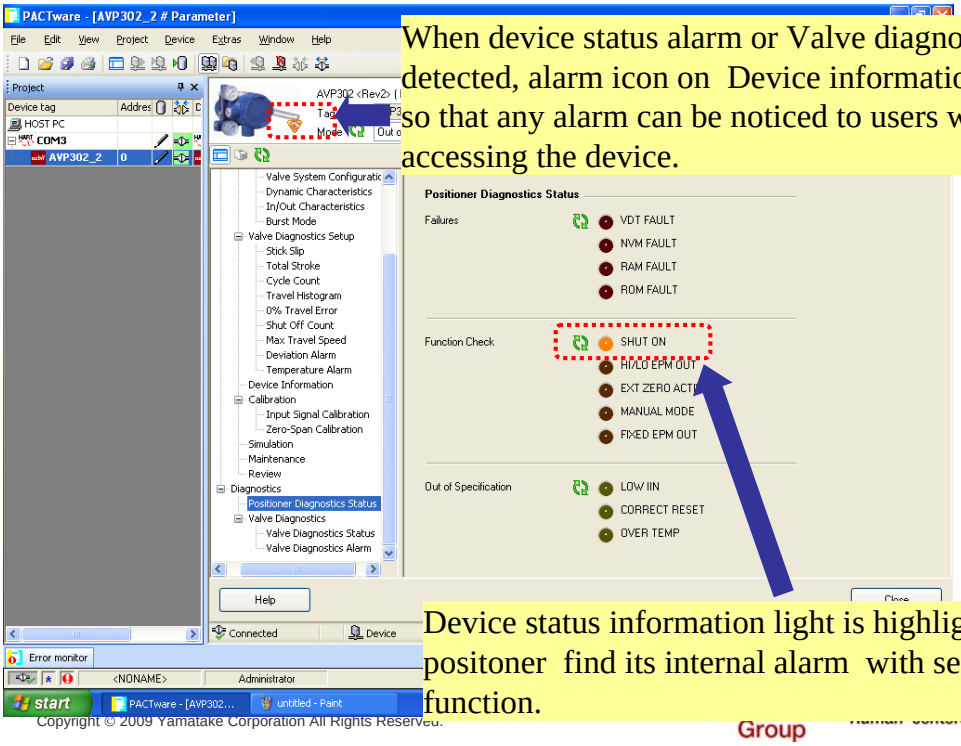
IV. Sample interface images

Device status and alarm



When device status alarm or Valve diagnostics alarm is detected, alarm icon on Device information area appears so that any alarm can be noticed to users whenever accessing the device.

Device status information light is highlighted when the positoner find its internal alarm with self-diagnostics function.

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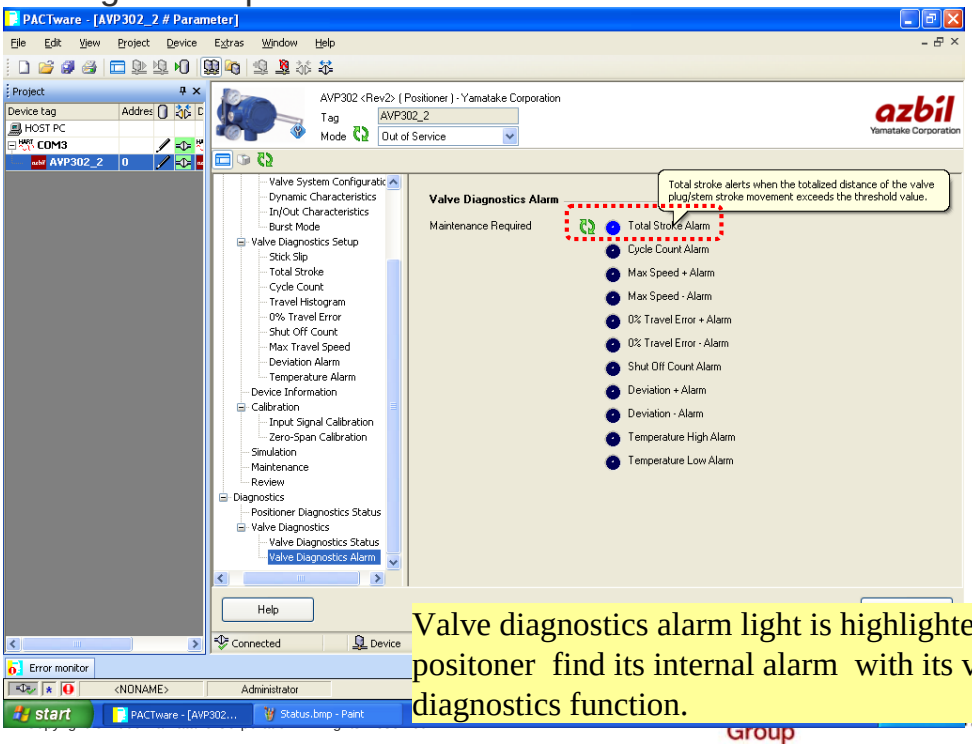
IV. Sample interface images

Valve diagnostics parameters and alarm



Valve diagnostics alarm light is highlighted when the positoner find its internal alarm with its valve diagnostics function.