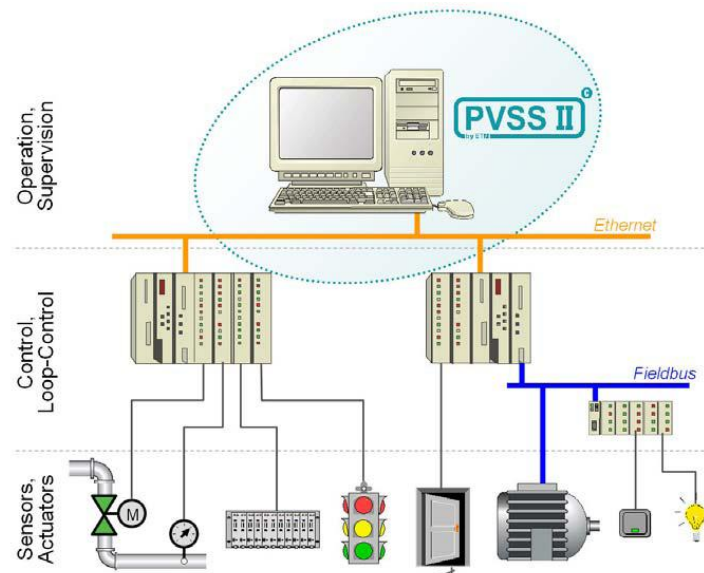


PVSS Navigator



What is PVSS?

- “**P**rozess **V**isualisierung und **S**teuerungs **S**ystem”
(process visualization and control system)
- SCADA (**S**upervisory **C**ontrol and **D**ata **A**cquistition)
- Control and Visualization of process data

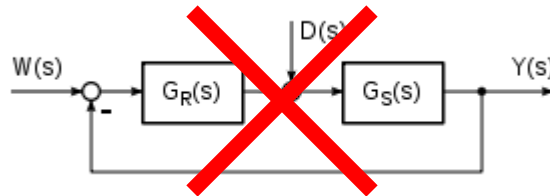


What is PVSS **NOT** for

- **NOT** for realtime control



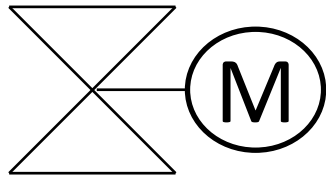
- **NOT** for closed loop control



- **NOT** for high bandwidth data acquisition

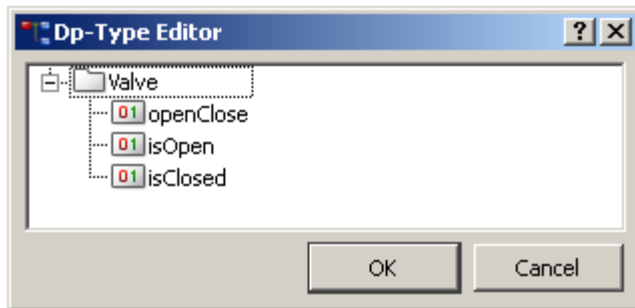
HIGH SAMPLE RATE

PVSS Data Point Concept

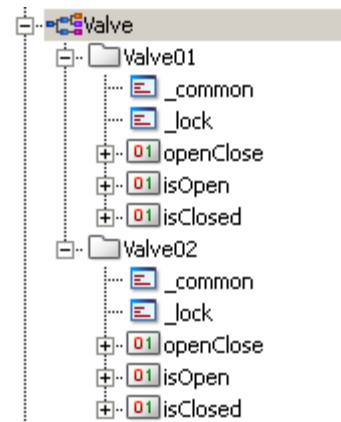


- one input: openClose
- two outputs: isOpen, isClosed

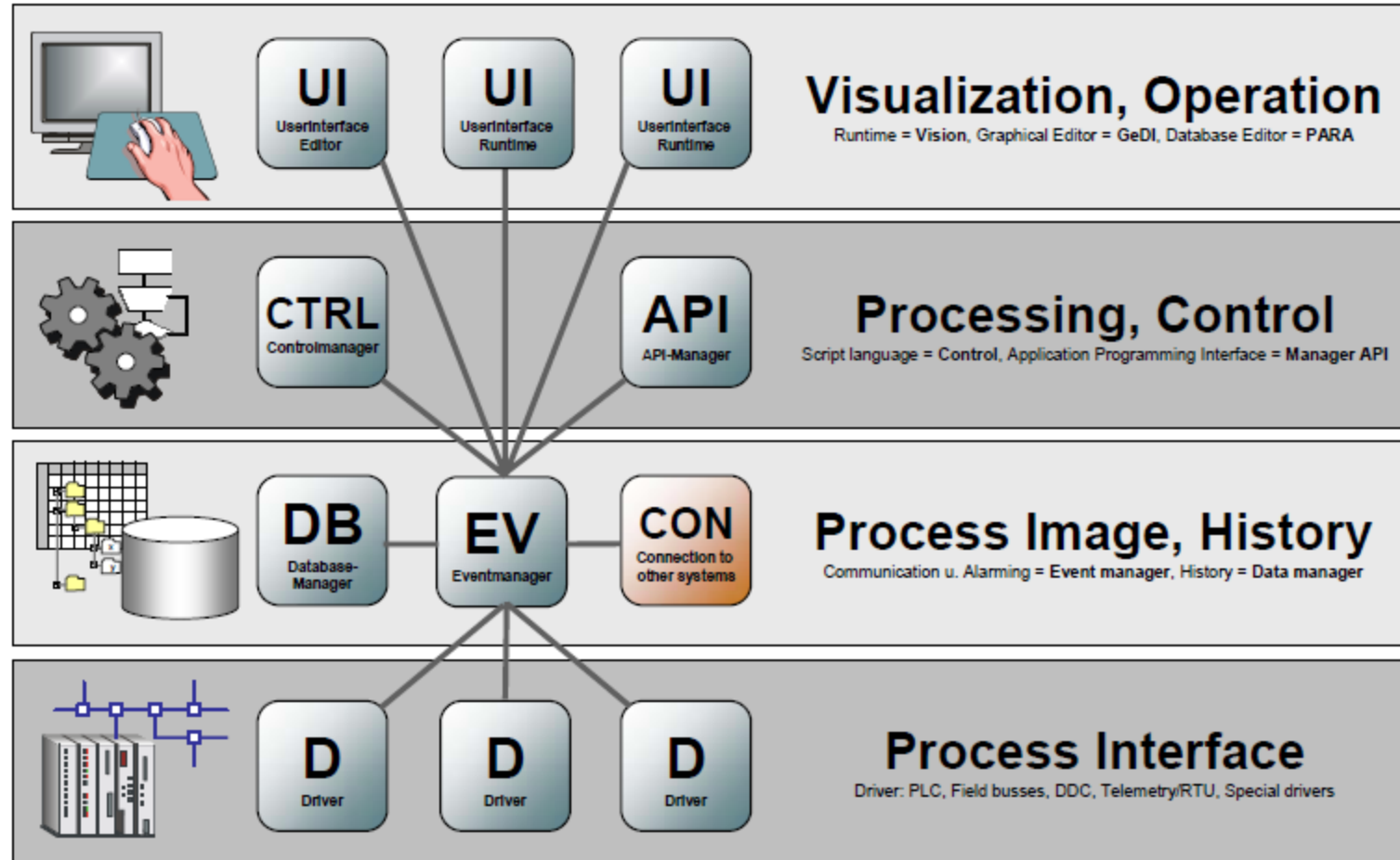
Create the Type:



Create instances:



PVSS Manager Concept



Managing the Panels

Questions:

- How to find a particular panel?
- How to open a particular panel?
- Who takes care of the screen configuration?
- Who takes care of panel access rights?



Answer:

The Navigator



What is/does the Navigator

- Single access point for all control panels
- Holds all information about available panels
- Let the user browse through the panels in a tree structured view
- Handles the user login
- Handles the permissions (users, roles, domains)
- Takes care on the screen configuration (working place, number of screens, resolution)

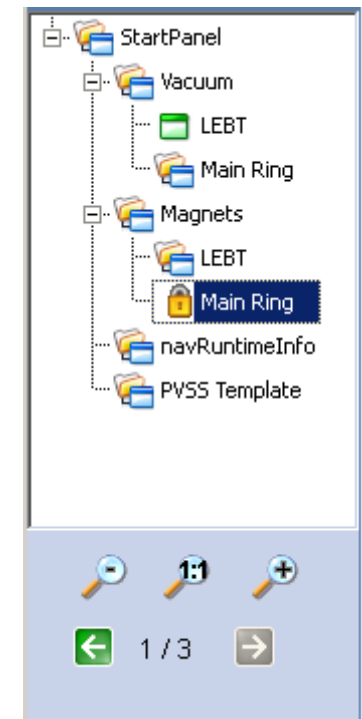


Navigator

The screenshot displays the MACS Navigator Accelerator Controls interface. The window title is "MACS_Navigator1: Accelerator Controls". The main content area is titled "Sources Overview" and contains the text "Main Source". The interface includes a left-hand navigation tree with the following items: StartPanel, Vacuum (containing LEBT and Main Ring), Magnets (containing LEBT and Main Ring), Sources (highlighted), Source1, Source2, navRuntimeInfo, Role Administration, and PVS Template. The top status bar shows "#1", "Filepath: /Sources/pnlSourceMain.pnl", and "Version Number: 001.001.008". The bottom status bar shows "User: mmarchha" and "Roles: root; VacuumExpert; MagnetExpert; SourceExpert;". The time and date "1:46:38 PM 6/18/2010" are displayed in the bottom right corner.

Tree Configuration

- Each node has a assigned panel
- Multiple nodes can refferere to the same panel
- Organizing the tree according to the current user permissions
- Holds the panel information
(a panel may be opened at the same time only once)
- All information about the tree and the panels is stored in a Data Point



Access Control

- Includes Access Control Component of JCOP
- Concept of Users, Roles and Domains
- Domain permissions: read, write and execute
- Required permission can be defined per panel and per element in the panel (e.g. button)



User login

- Over the actual OS user



Screen Configuration

- Definable per user and per working place(planned)
- Each Screen has his own navigator panel



- 3 supported resolutions
 - 1280x1024
 - 1920x1200
 - 2560x1600

Example: Navigator Information

MACS_Navigator1: Accelerator Controls

Navigator 1 / 5 #1 Filepath: /Navigator/nav_runtimeInfo/pnlMain_nav_runtimeInfo_1920_1200_1... Version Number: xxx

Navigator Runtime Information

ebg MedAustron

Navigator Name	User Name	User Roles	File Name	Path	UI Manager	Host Name	Host IP	Monitor	start time
Ui2_1	mmarchha	root;	pnlMain_nav_runtimeInfo_1920	...	#2	pcebgma29	137.138.195.153	#1	2010.06.18 13:29:33.054
Ui3_1	root	root;	pnlMain_feco_control_1920_1200	...	#3	pcebgma29	137.138.195.153	#1	2010.06.18 13:37:33.276

User: mmarchha Roles: root; 1:39:24 PM 6/18/2010

Example: FECOS panel

MACS_Navigator: Accelerator Controls

Navigator 1 / 2

#1

Filepath: /FECOS/feco_control/pnlMain_feco_control_1920_1200.pnl Version Number: xxx

Current State: Ready
Current Mode: SERVICE

Claimed by: mmarchha
Locked by:

Connected with Component **VAVC01**

Last CMD
Command: QUIE
CmdID: 20
Issued by: mmarchha

CMD Status
Command: QUIE
CmdID: 20
Status: Completed

Select Component:
VAVC01

PreInfo:
Claimed:
Locked:

Related Devices

Device Name
VAV01

MODE SERVICE

DPE Name	Value	Type
VAV01.openCloseIn	TRUE	BOOL

DPE Name	Value	Type
VAV01.statusOut	<input checked="" type="checkbox"/>	BOOL

Output Log Error Log

FECOS

log Panel output

User: mmarchha Roles: root

1:30:25 PM 6/18/2010

Example: PCON DataAcquisition

MACS_Navigator1: Accelerator Controls

Navigator 1 / 4

#1

Filepath: /PowerConverter/pcon_dataAcquisitionVisualization/pnlMain_pco ...

Version Number: xxx

PCON DataAcquisition

Power_Converter	Color	Style
PO_06_005_POC_G001	green	cwLineSolid
PO_01_001_POA_C001	blue	cwLineDash

add>>

remove

startPlot

halt

resume

Toolbox

Scale

ppm

mA

A

User: mmarchha

4:58:15 PM 6/23/2010

Outlook

- Next Panels to develop:
 - Power Converter Data Acquisition Panel (ongoing)
 - ProShell Control Panel
- Additional features:
 - Screen configuration per working place
 - Dynamic screen configuration