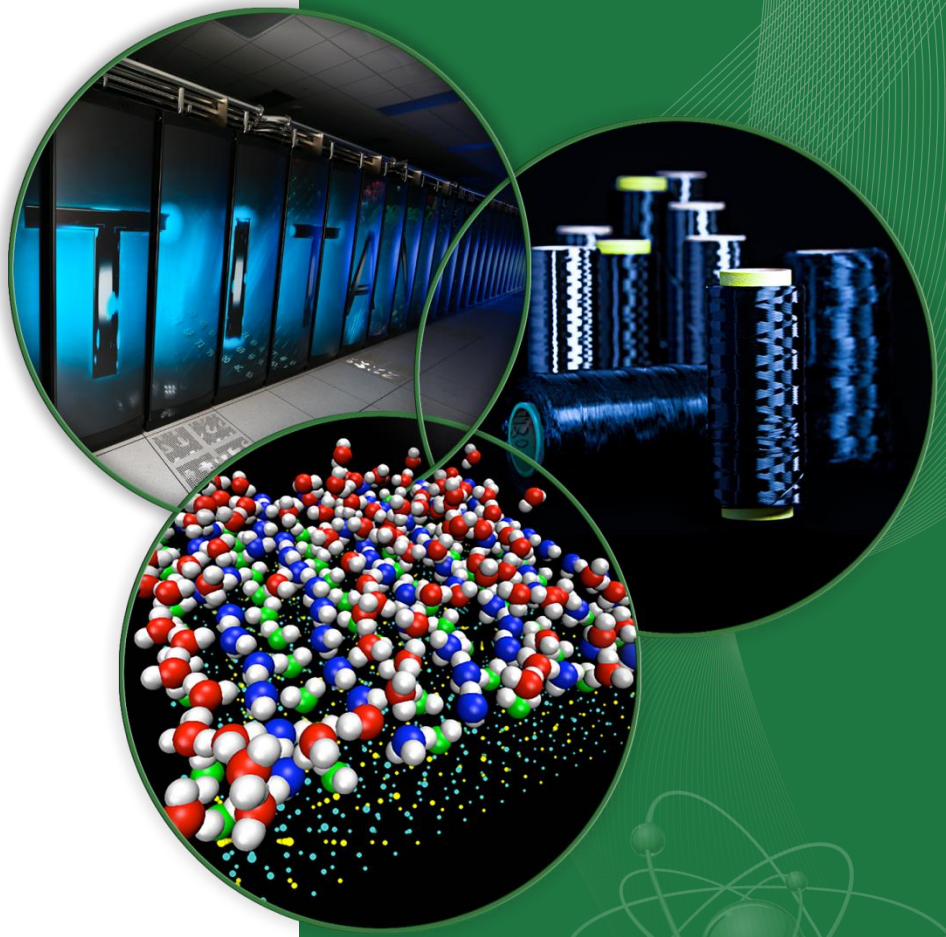
Control System Studio: First Steps



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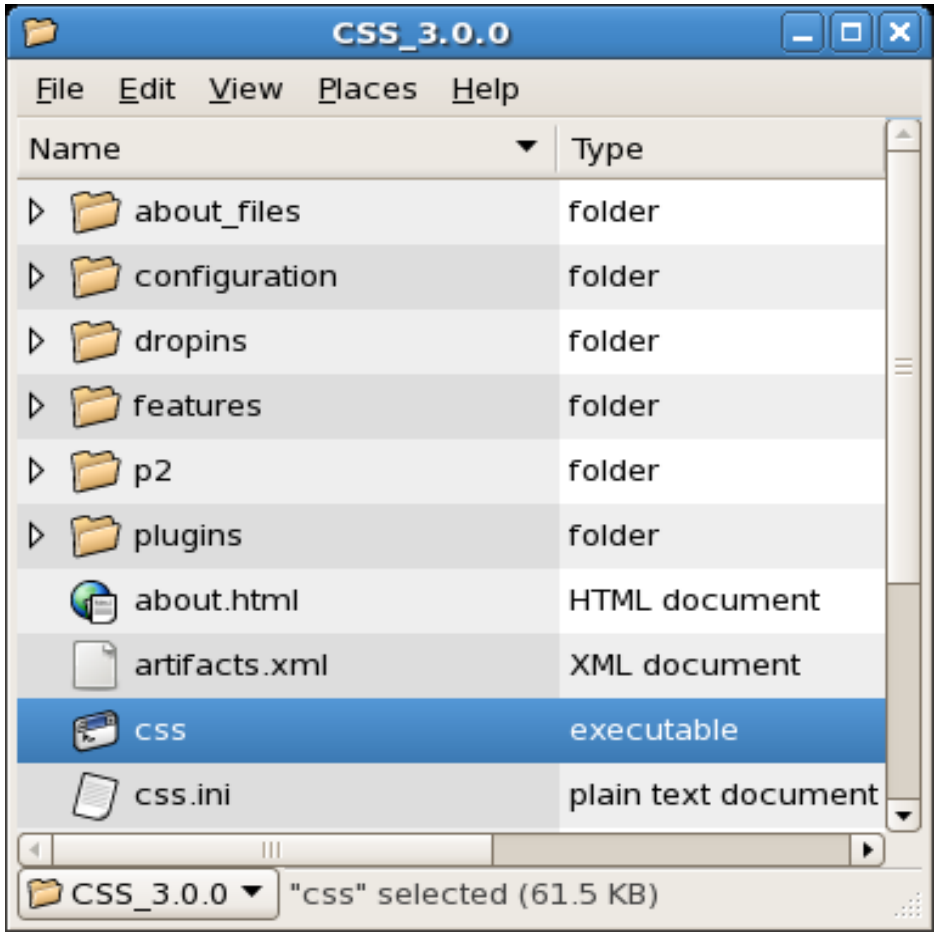
Exercise: Start CSS

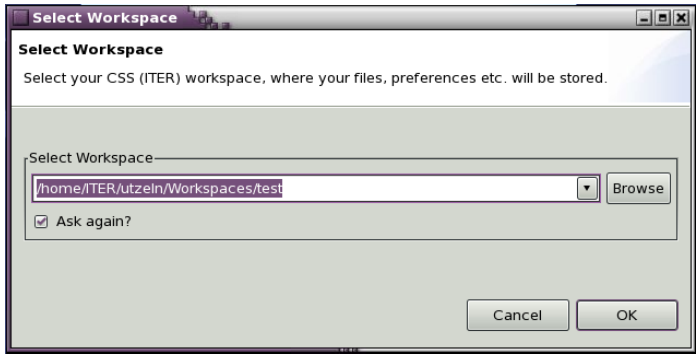
Precondition:
You somehow got CSS onto your computer

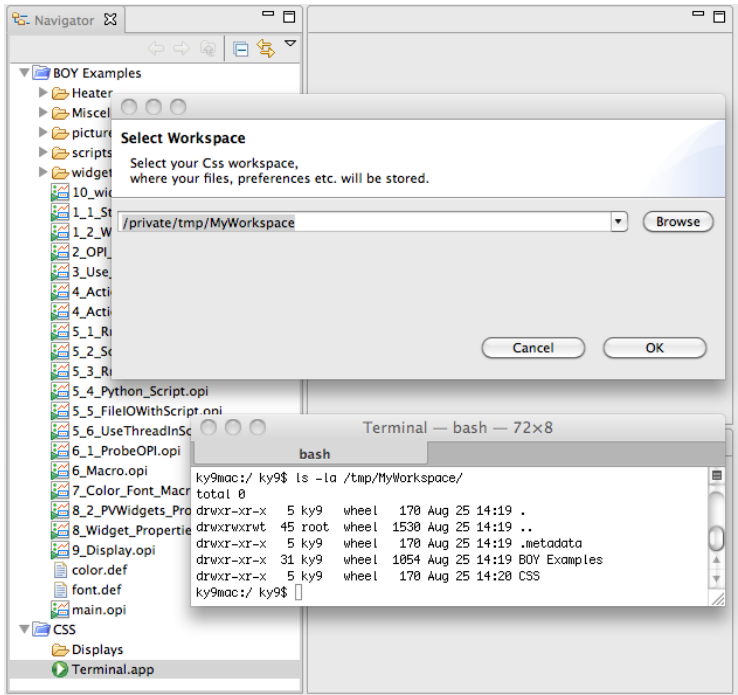
- Start the executable
  - Linux: css
  - Windows: css.exe
  - Mac OS X: css.app



Workspace

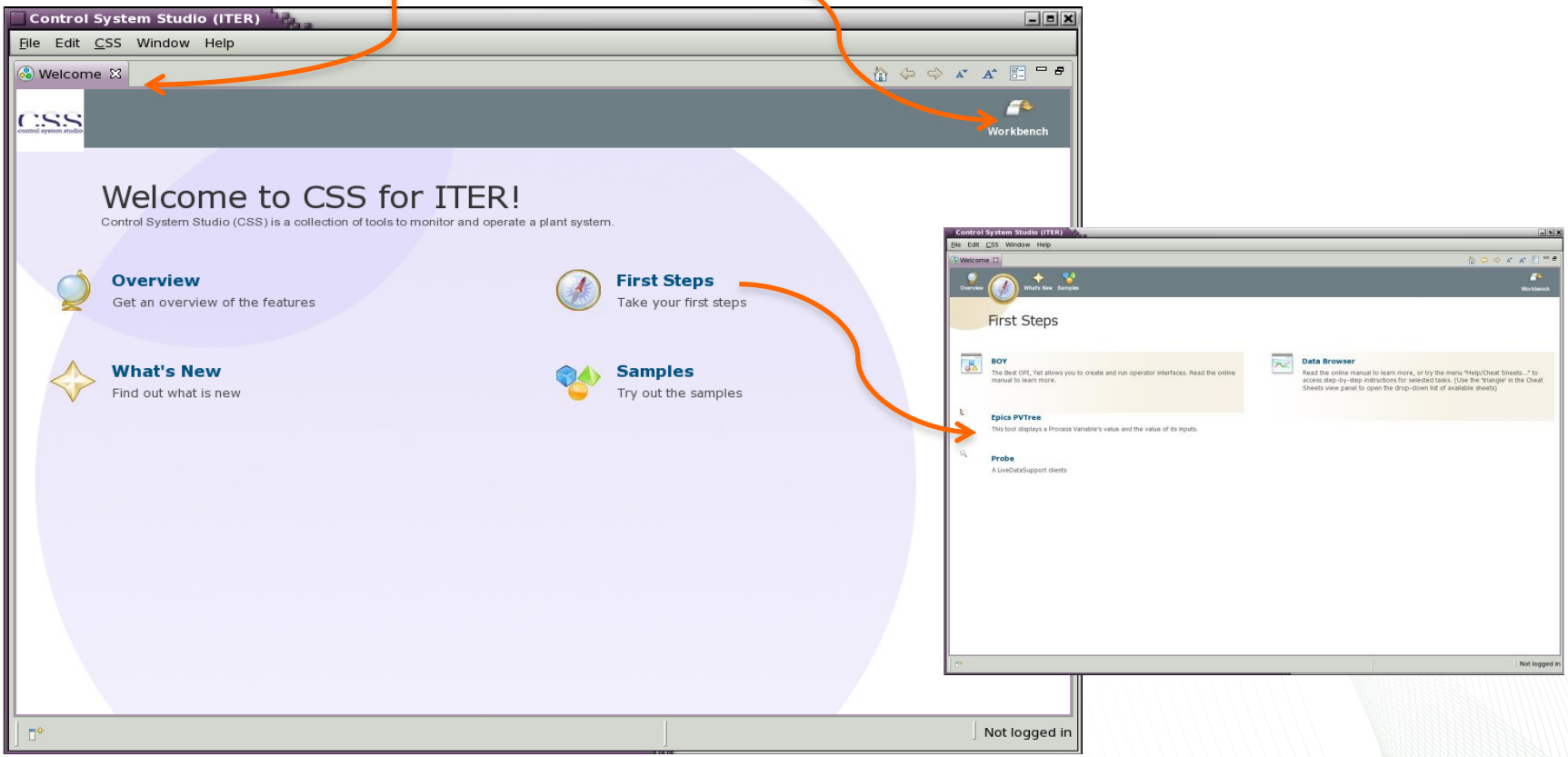
- Workspace
  - Directory where you store files
  - Hidden `.metadata` directory with settings
- Most versions of CSS prompt for a workspace at startup
  - Check or change later via menu *File, Switch Workspace*
- Run only one instance of CSS per workspace!
  - Each user should have own workspaces
  - One for development, one for operation, …





"Welcome"

- Displayed when CSS opened for the first time (i.e. on a new workspace)
  - Close here or here



  - Re-open: Menu *Help*, *Welcome*

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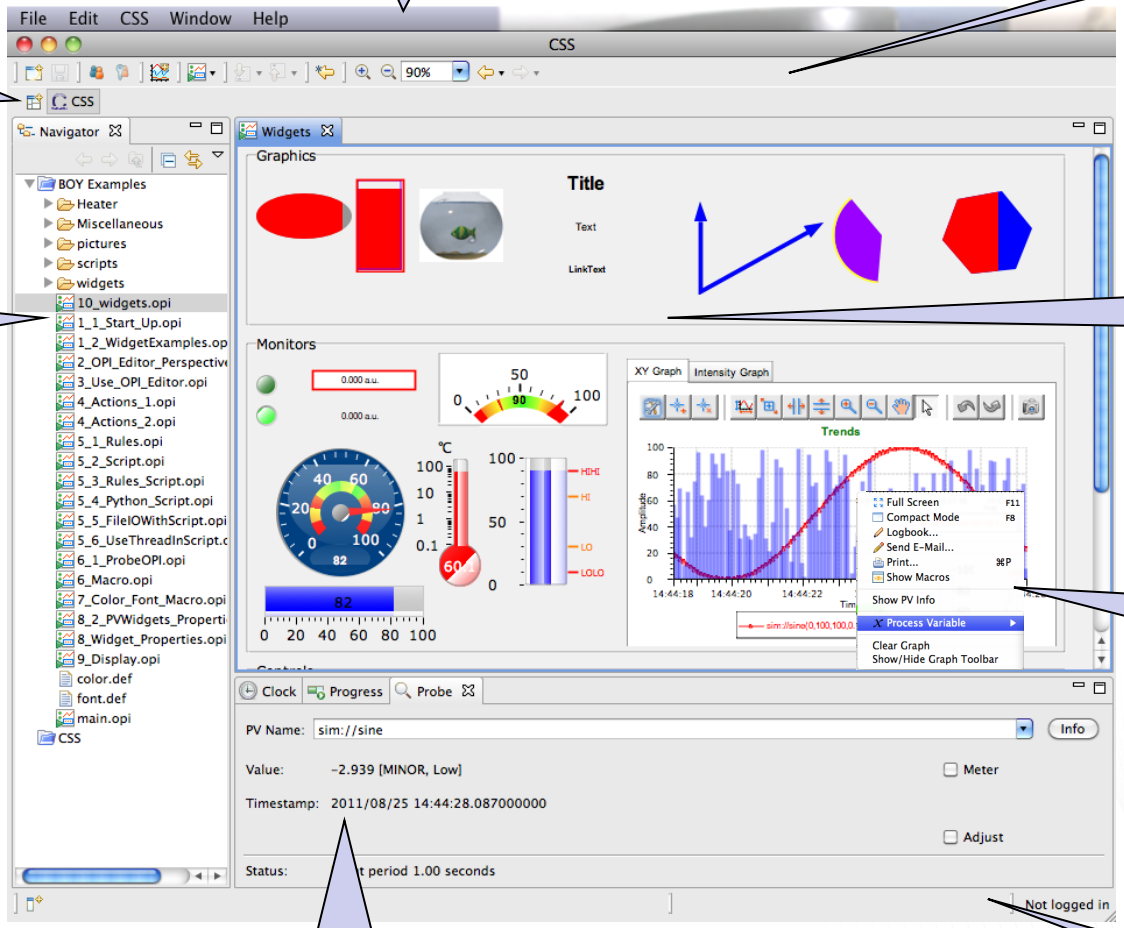
Workbench



Menu Bar

Tool Bar

Perspective Selector

Navigator "View"

Main "Editor" Area

Context Menu (right-click)

More "Views" in "Tabs"

Status Bar

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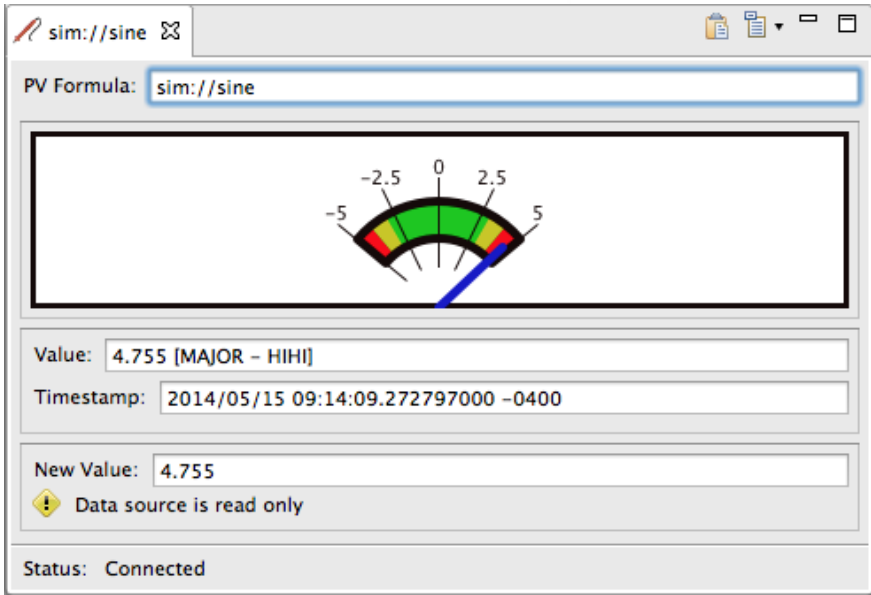
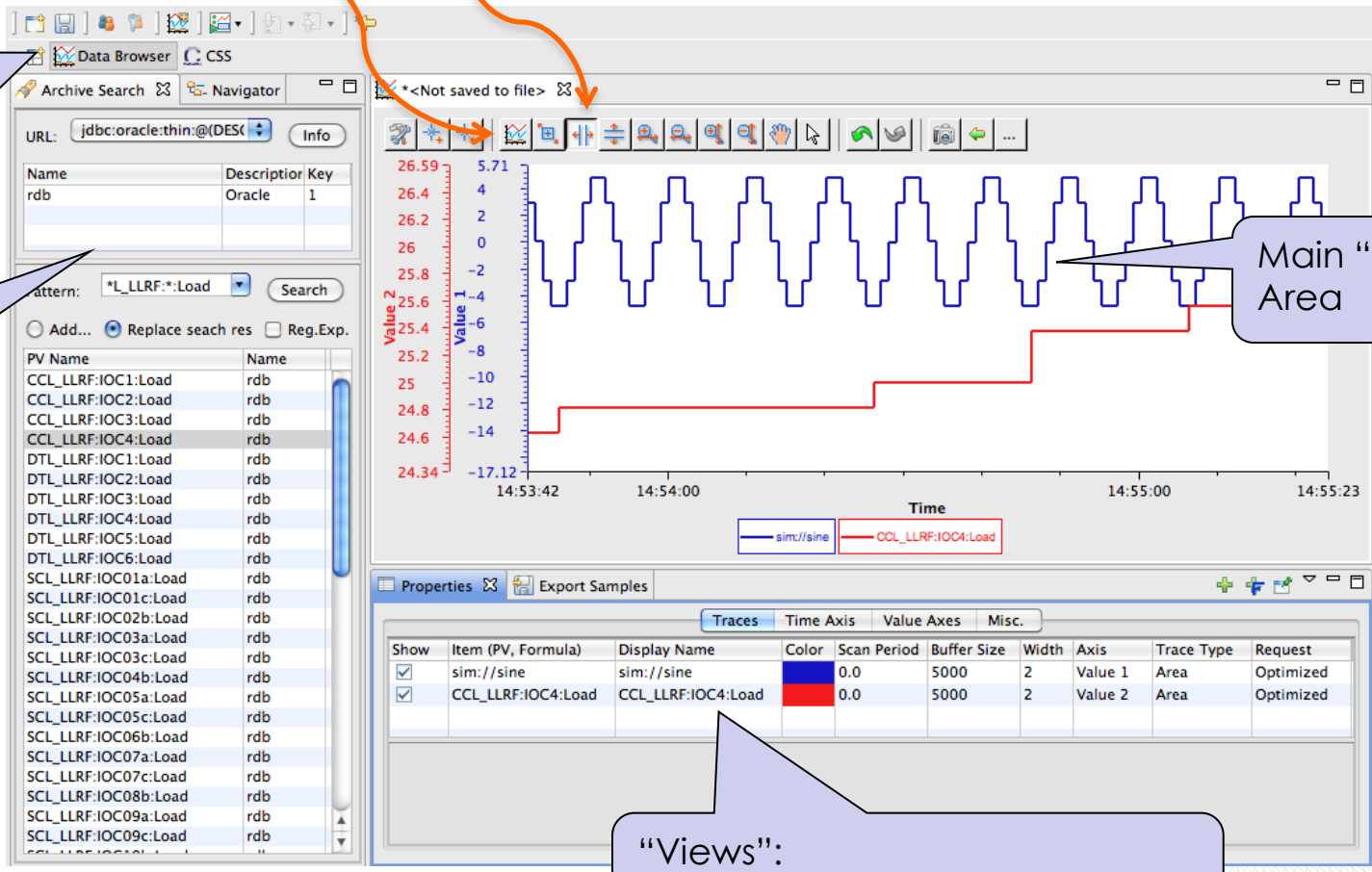
Exercise: Probe

- Menu *CSS*, *Diagnostic Tools*, *Probe*
- Enter PV name “sim://sine”
- Close Probe
- Open it again
- Note previously entered PV in history
- Move Probe to other view area
- Close Probe



Exercise: Data Browser

- Menu *CSS*, *Trends*, *Data Browser*
- Plot context menu, *Add PV*, “sim://sine”
- Wait a little, use *Stagger* and *zoom* buttons



Data Browser Perspective

Archive Search “View”

Main “Editor” Area

“Views”: Plot Properties, Sample Export

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Editors, Views, Perspectives

Editors: Central Workbench Area

- Text editor, BOY Operator Interface panel, Data Browser plot, …
  - Associated with a file. "Do you want to save?" when closed.

Views: Auxiliary panels around Editors

- *Probe, Properties, Navigator, …*

Perspective: Arrangement of Editors and Views

- *Size* of editor area. Actual editors remain.
- *Choice* of Views. Views change when switching perspectives.

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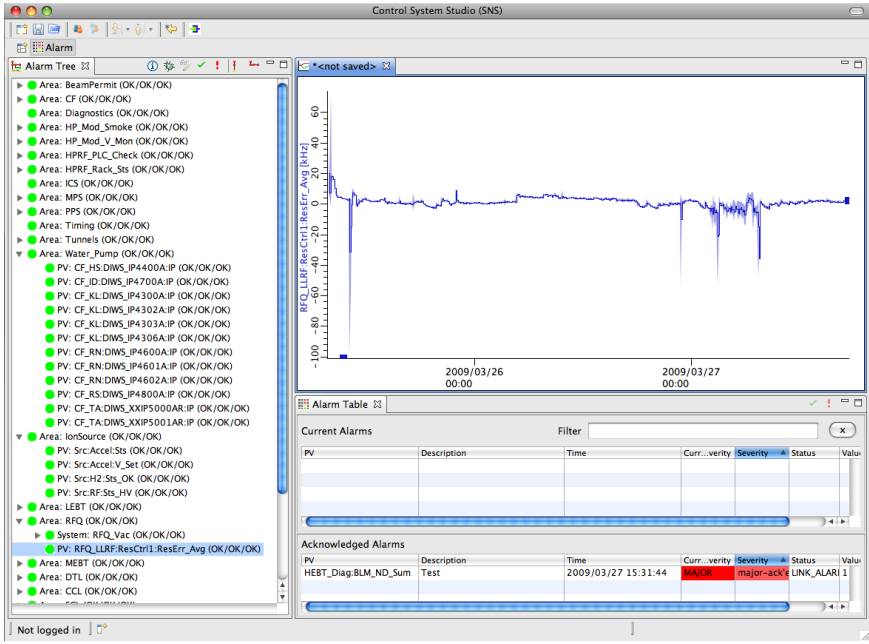
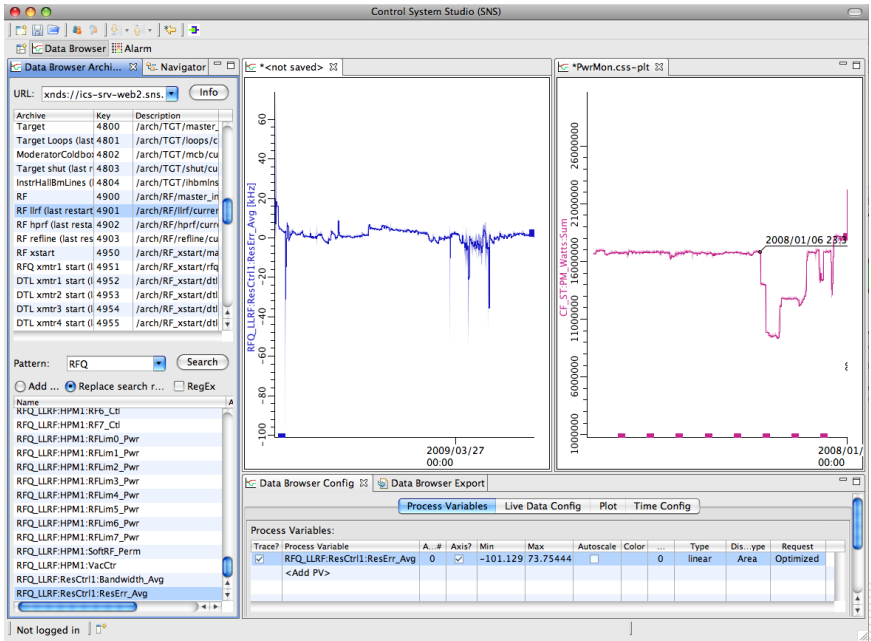
Layout Options

- Editors, Views can be closed, reopened, repositioned
  - Grab title of panel, move while watching black rectangle indicate possible target locations
  - Arrange ‘behind’ or ‘beside’ other panels
- Multiple Perspectives
  - Use Context Menu of Perspective to Name, Save, Close, Restore





Editor/View/Perspective Limitations

Perspectives conserve the location of ‘Views’.

What we would like to “freeze” the display:

*.opi, Data Browser, Alarm Panel, ..

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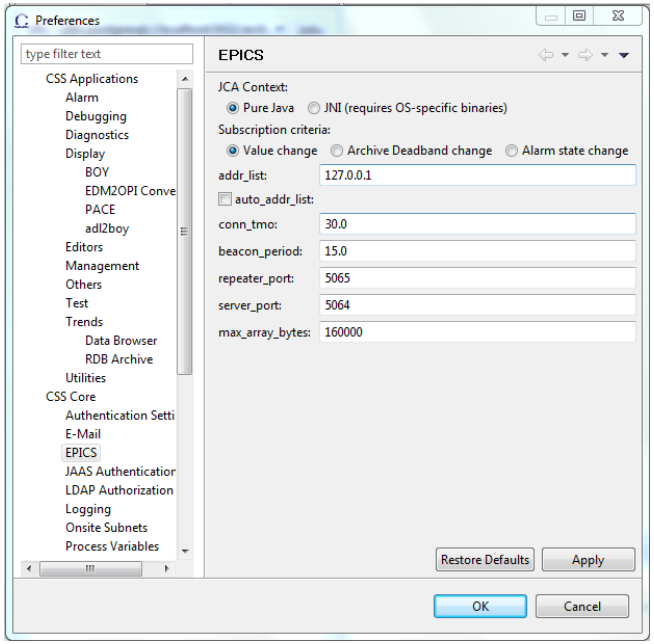
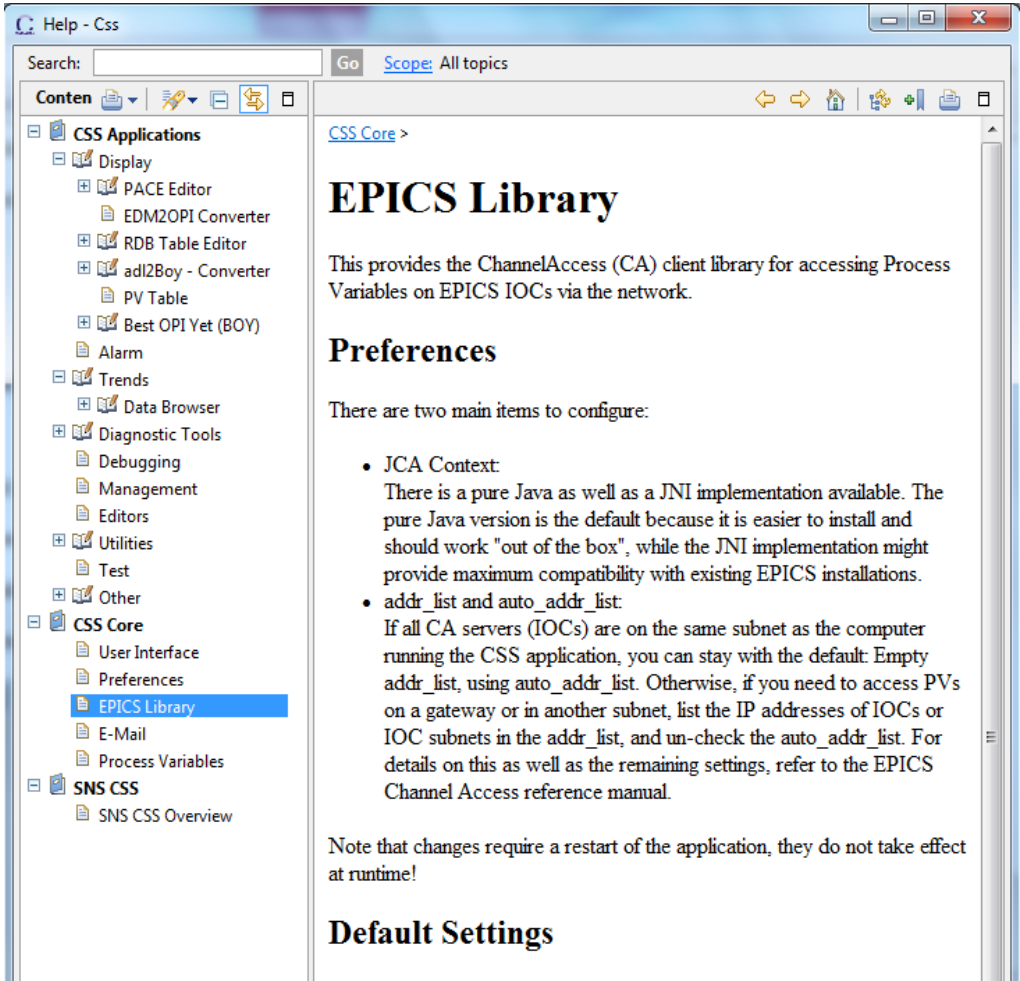
Exercise: Preferences, Online Help

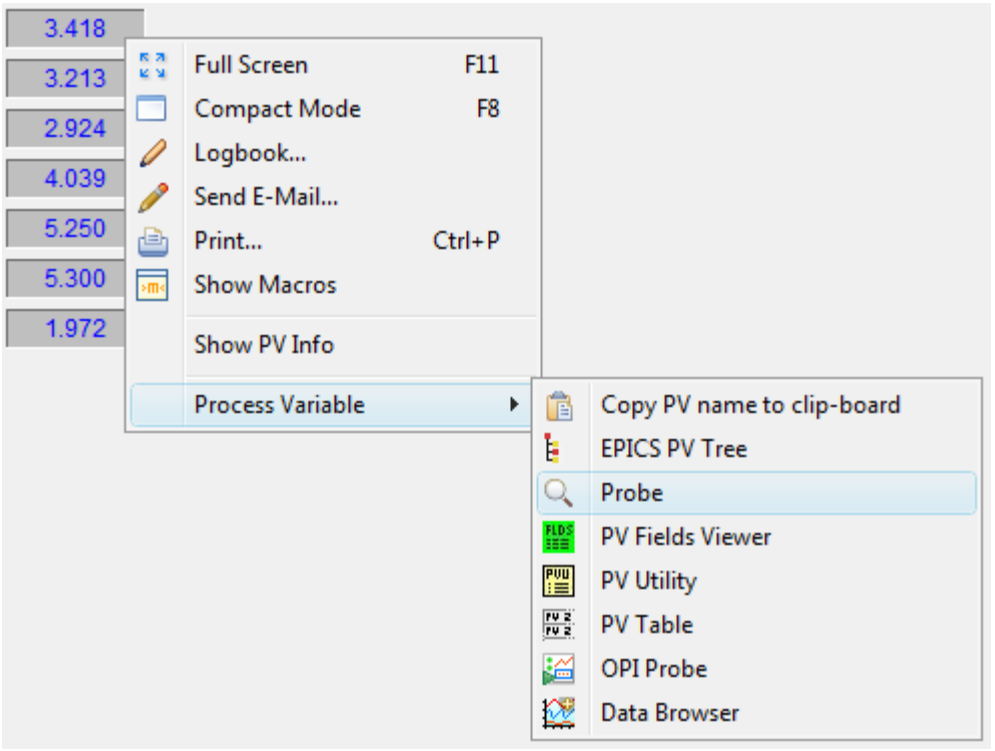
- Menu *Edit*, *Preferences* resp. *Help*, *Help Content*
- Locate preferences and help for
  - CSS Core, EPICS
  - CSS Applications, Trends, Data Browser

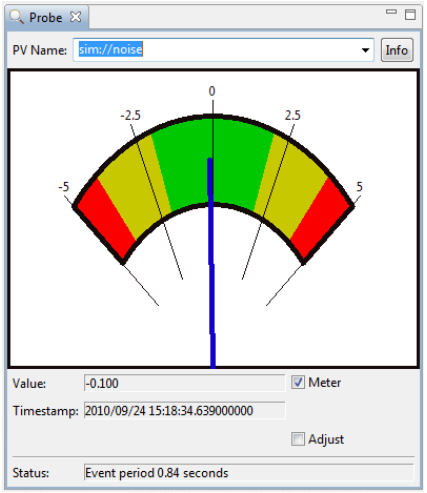




CSS PV Exchange

- PV in *any* CSS Tool
  ➔ Context Menu ➔ Select other PV Tools
  - Opens other tool with that PV





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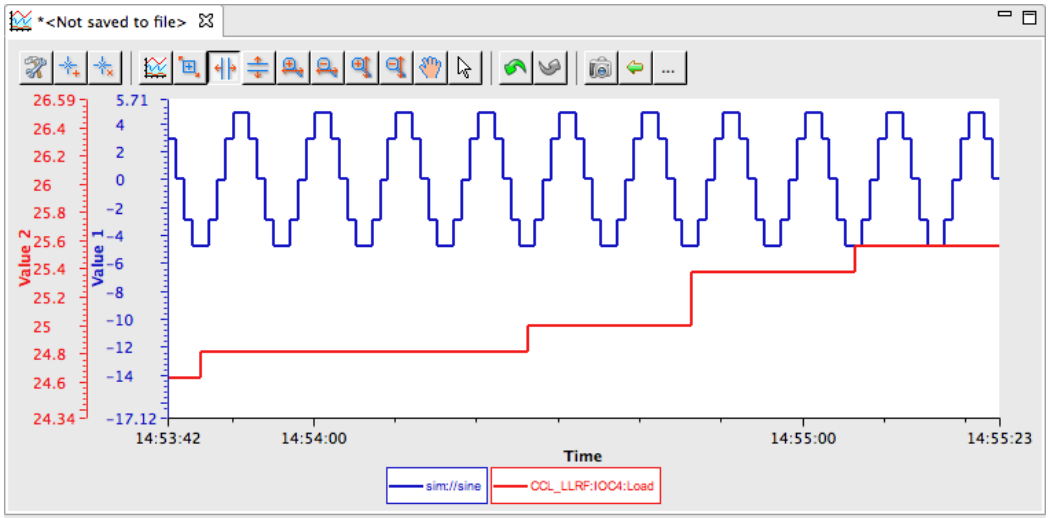
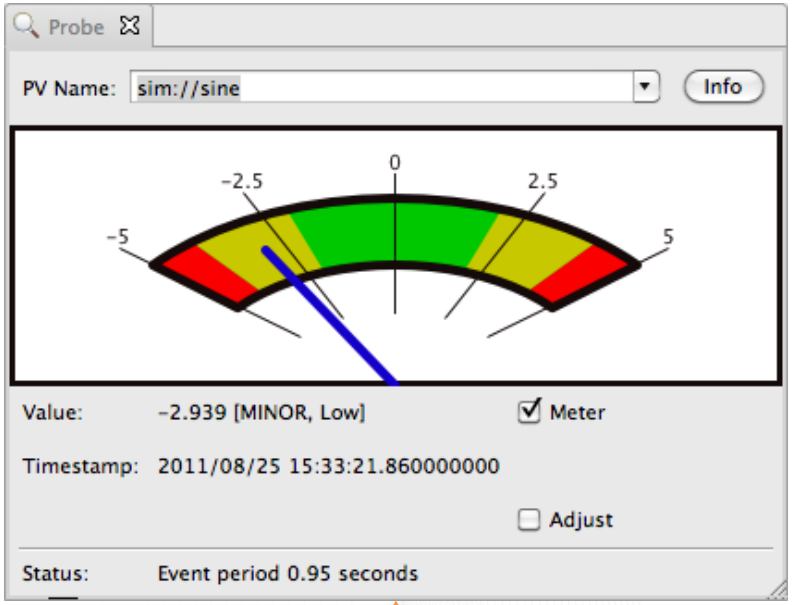
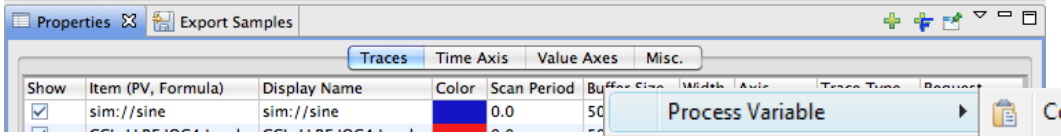
Exercise: Probe via PV Exchange

Open Probe on PV from Data Browser

- Properties Panel
- Context menu of “sim://sine” trace
- *Process Variable*, *Probe*







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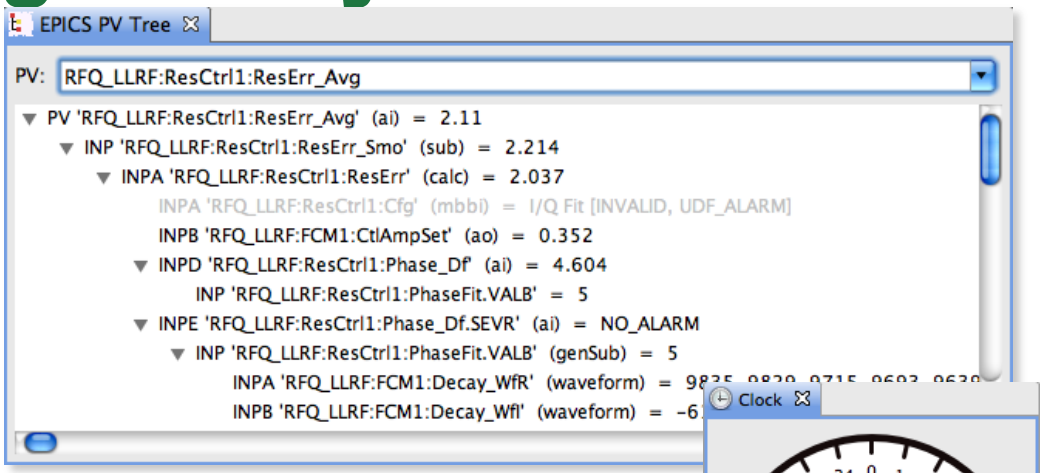
Exercise: Things to Try

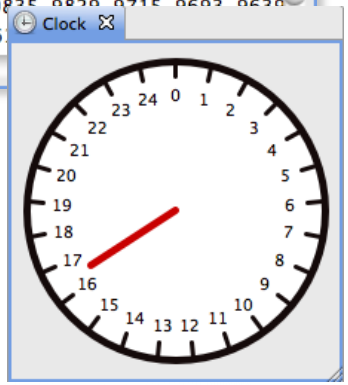
EPICS PV Tree

- Trace PV links



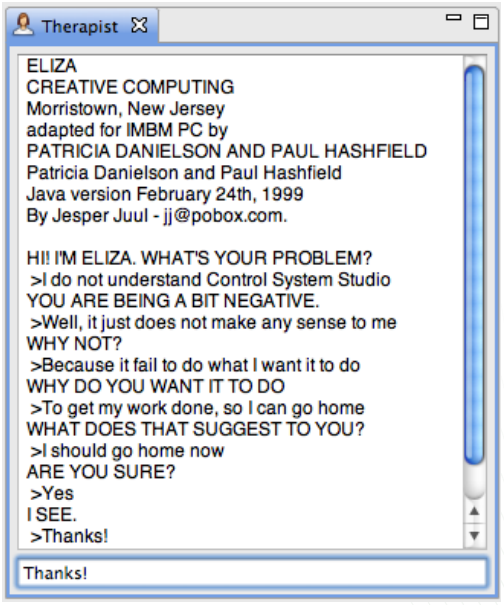
Clock

- What's special about it?



Therapist

- When all else fails



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