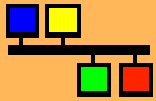


EPICS



Status of New Device Database for DESY XFEL

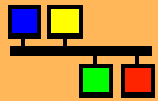
EPICS Meeting – IRMIS Workshop

DESY, April 24, 2006

Christian Gerke, DESY / MKS2



EPICS



Outline

Our history:

- relational databases

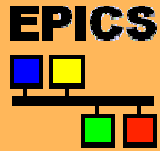
- Oracle Forms for user interface

New approach:

- try to think object oriented

- let Hibernate do the persistence

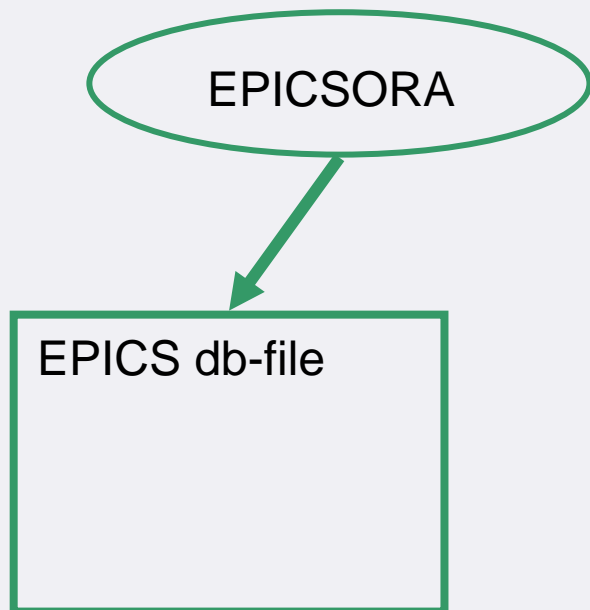
- Jface toolkit for user interface



Past experience: EpicsOra

Use Oracle relational database

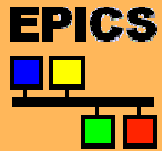
Try to imitate look and feel of objects



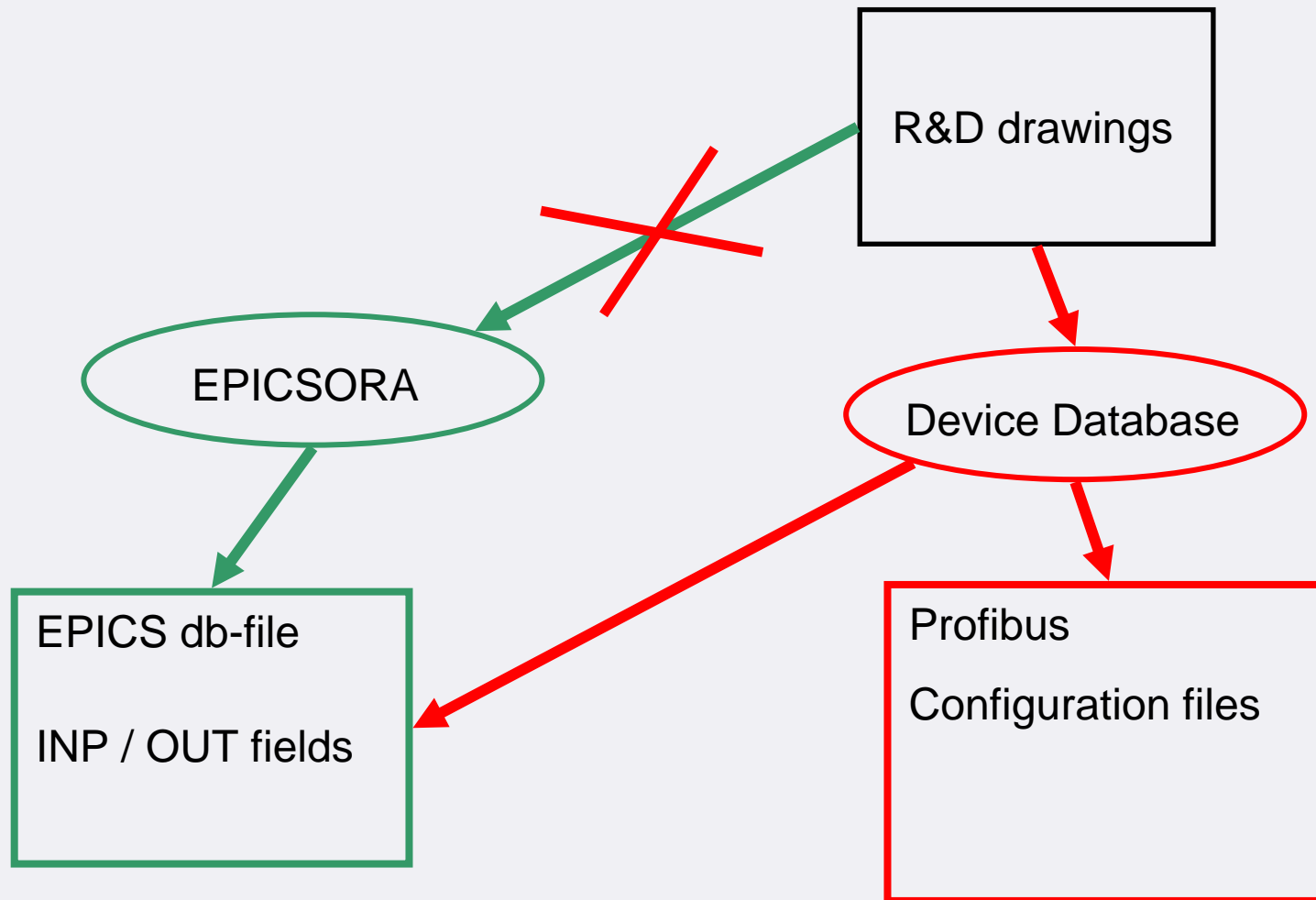
Tables for values:

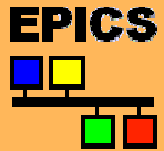
- dbd
- Prototypes (several levels)
- Instances

Grouping of records

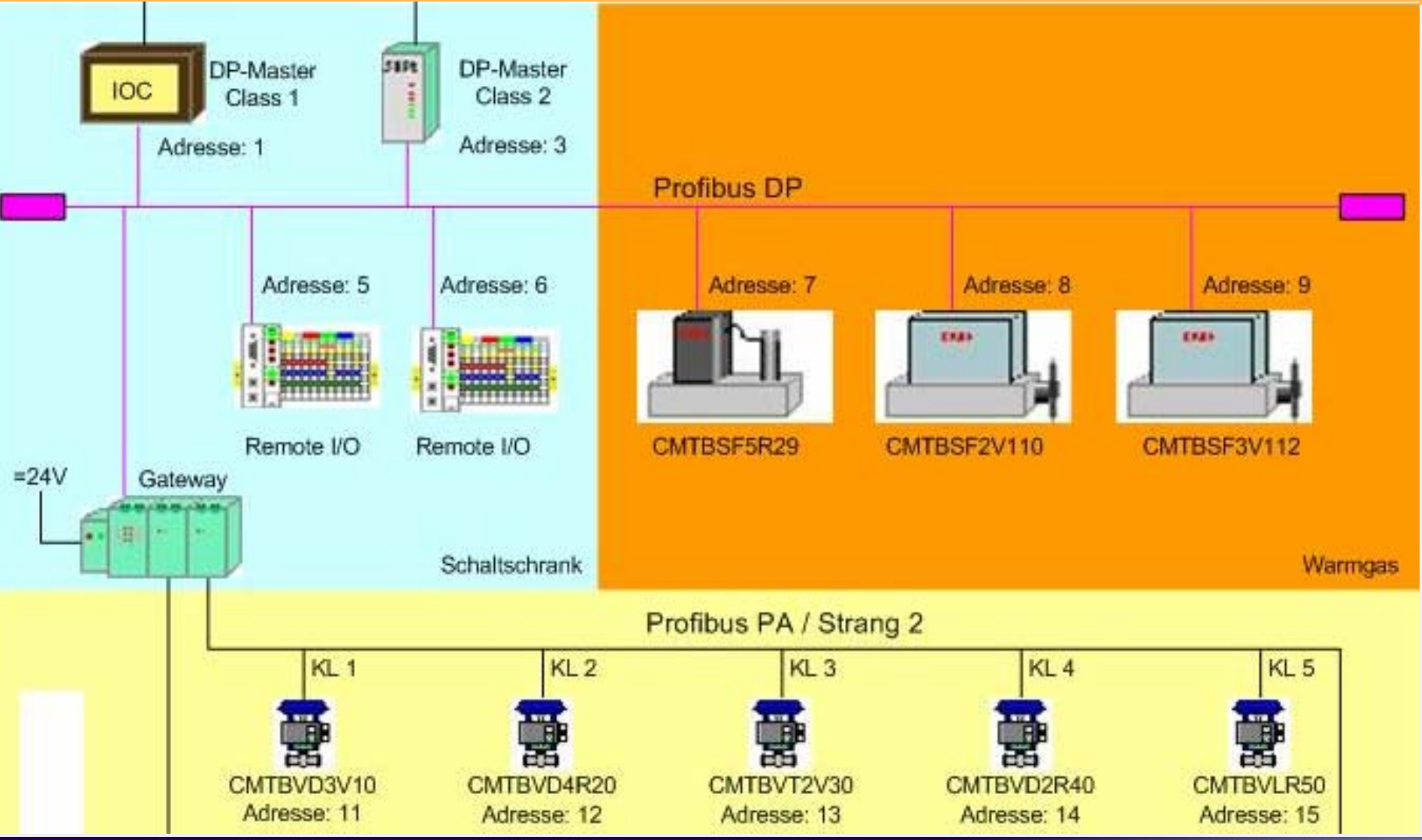


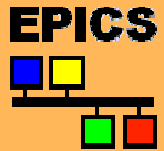
Consistent information





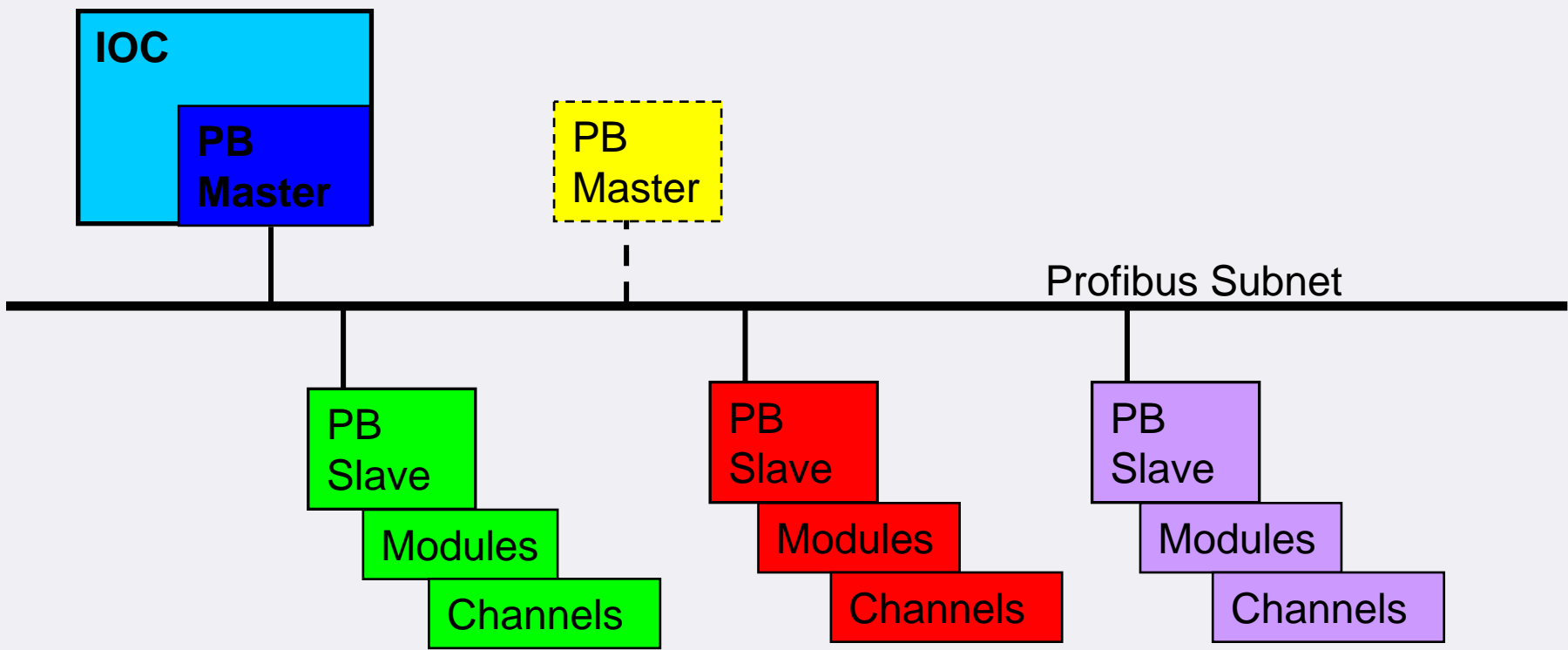
Fieldbus: Example Profibus at DESY-CMTB



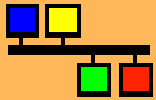


Fieldbus Tree Structure

Example Profibus

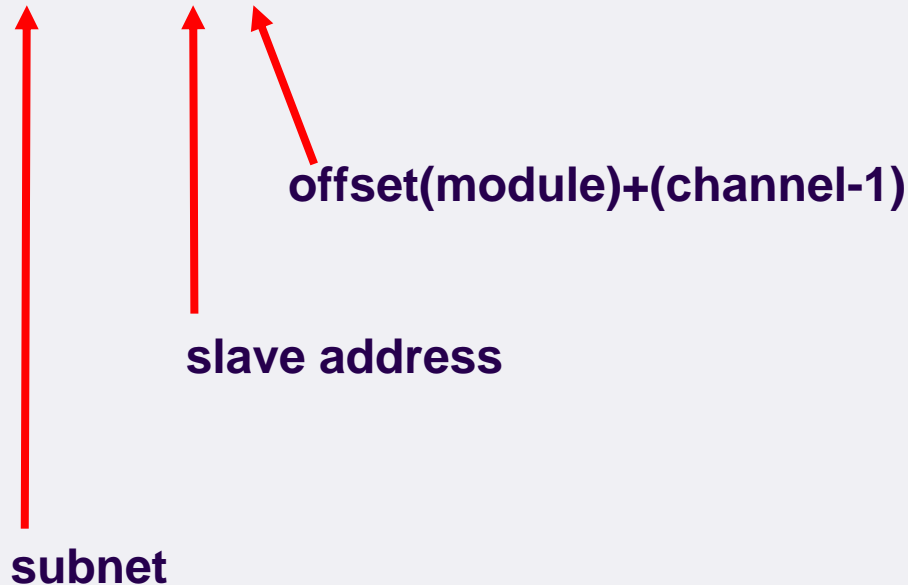


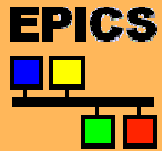
EPICS



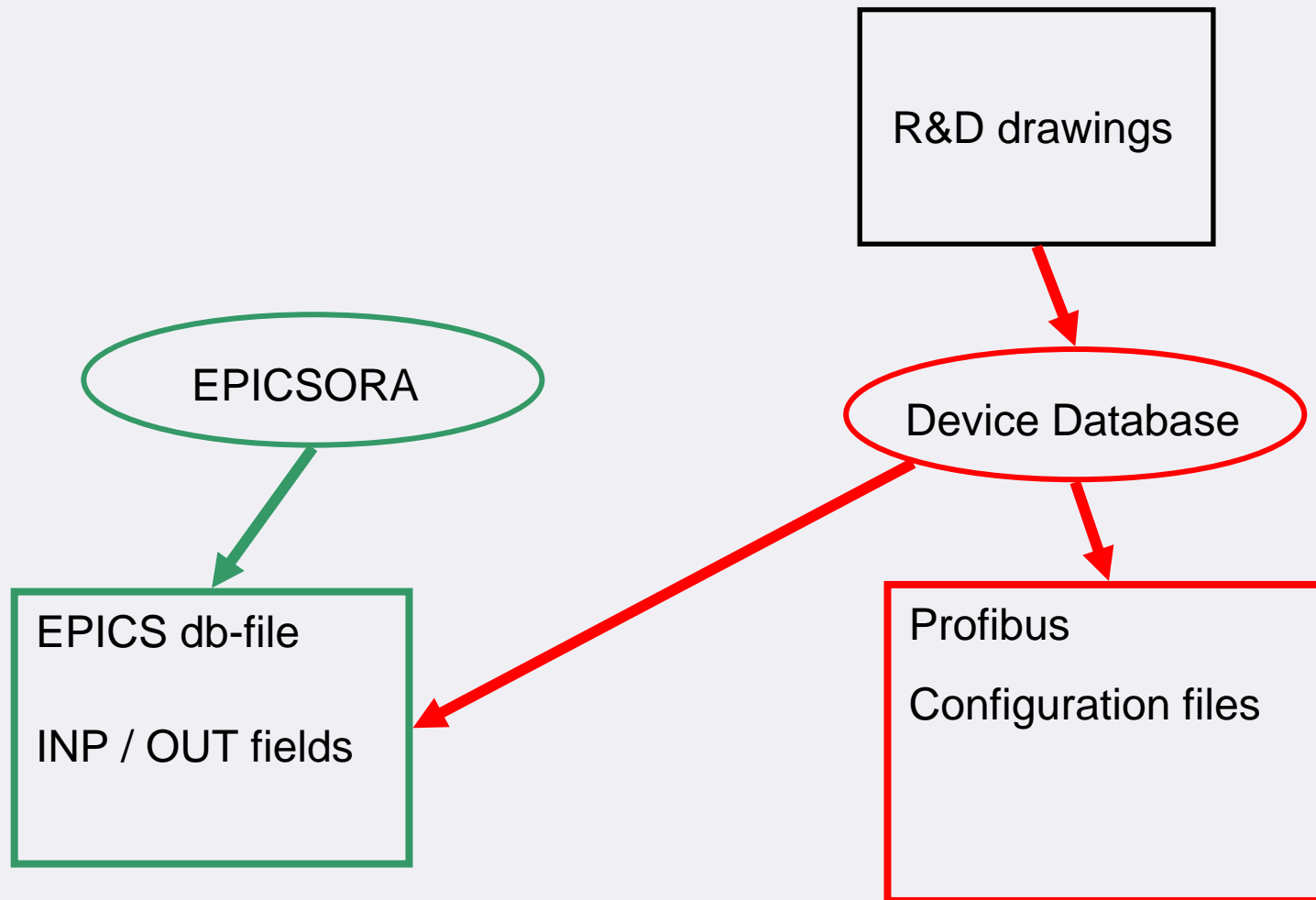
Fieldbus objects know their contribution to address string of a channel

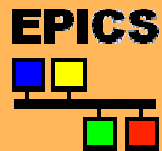
INP = @PBDP1: 37/0 'T=FLOAT'



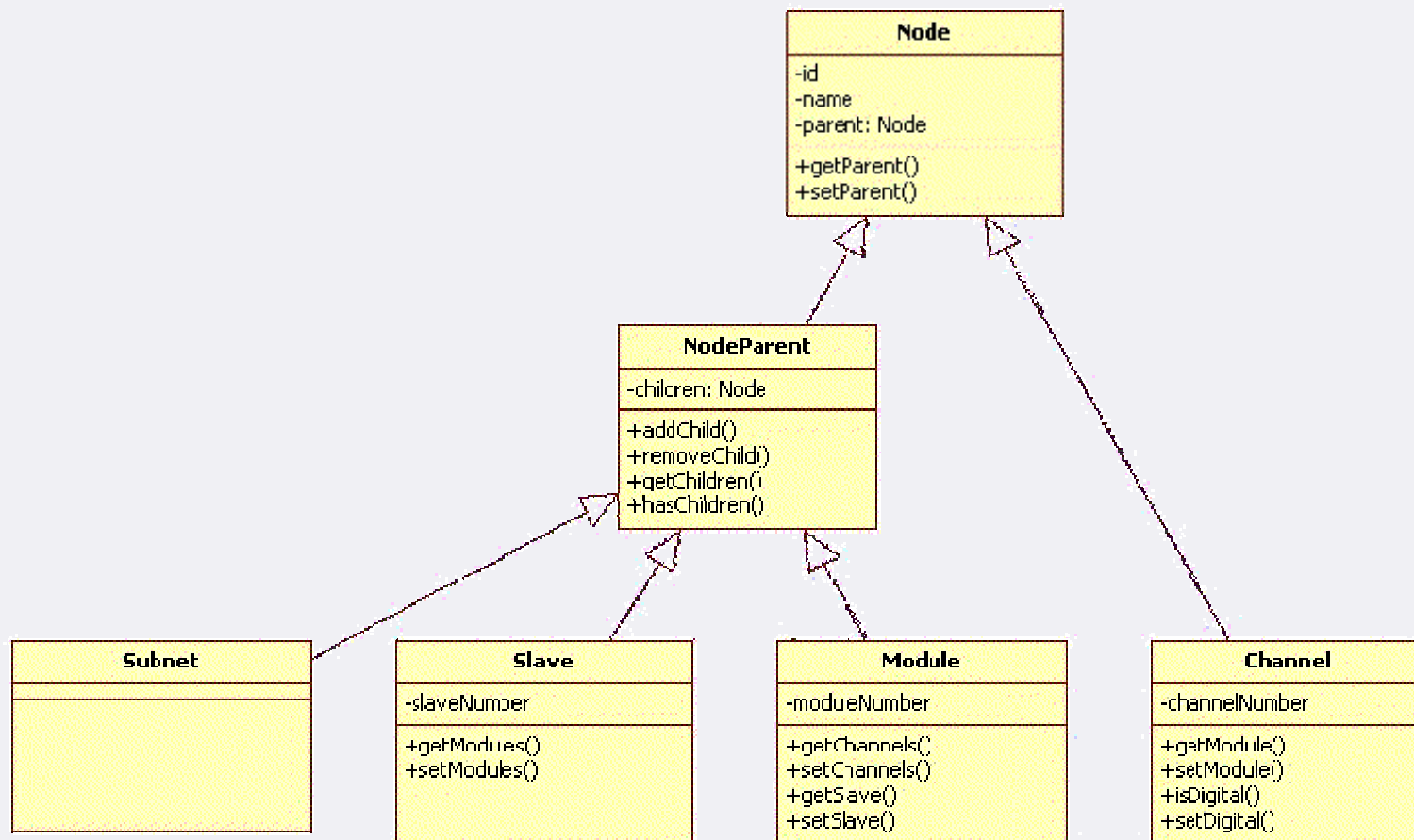


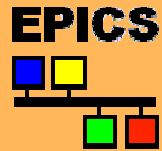
Consistent information



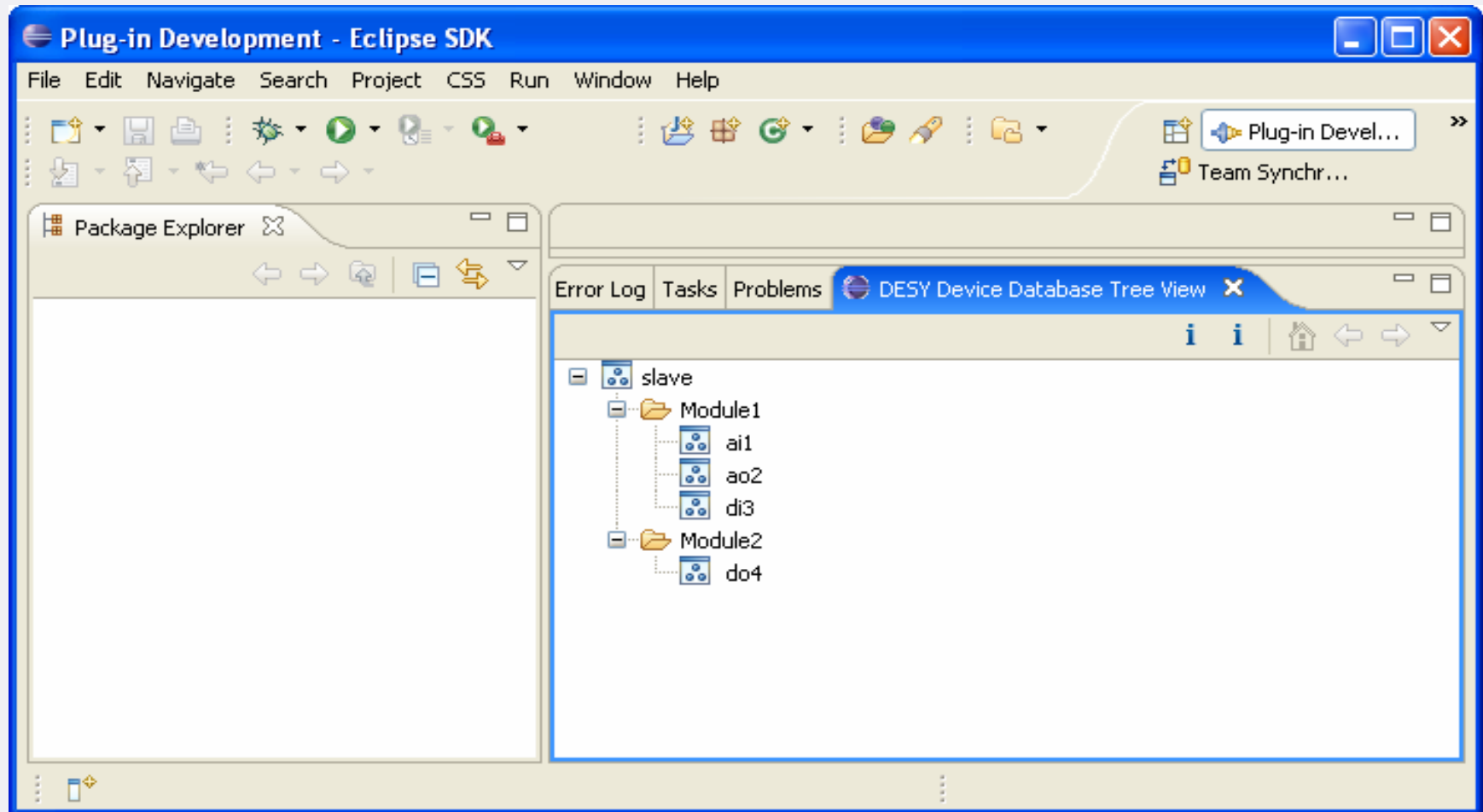


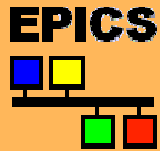
Object Model





Treeview of Device Objects





Layout idea

Plug-in Development - Eclipse SDK

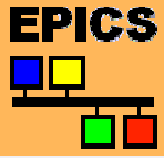
File Edit Navigate Search Project CSS Run Window Help

Package Explorer

Error Log Tasks Problems **Device Database**

Device database

- Profibus Subnet 1
 - Profibus Slave 1.1
 - Module 1.1.1
 - Channel 1.1.1.1
- Profibus
 - Slave#9
 - Modul#9
 - Kanal#91
 - Kanal#92
 - Kanal#93
 - Slave123
 - Modul123
 - Kanal1231
 - Kanal1232



Comments, Questions?

Thank you