



“Divide & Conquer” – Project Configuration Management

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Topics:

- Valens overview
- CM Paradigm & requirements
- Solution ... Why SOS
- Project Management Idea
 - Infrastructure
 - Divide & Conquer
- Time for Questions



Leader

ProAV market, with thousands of HDBaseT-enabled products, millions of chips delivered



Innovator

High-speed in-vehicle connectivity

2006

established

> 100

patent portfolio

~ 350

employees

Presence in

8

countries

IL

HQ in Israel



Driving Industry **Standards**



Valens Product Lines

HDBaseT Standard for professional AV

HDBaseT alliance (200+ members)

- Long distance transmission for AV,Power,Control data
- Projectors / TV / Conference rooms / Medical / Transportation / Industrial PC / TV walls etc...



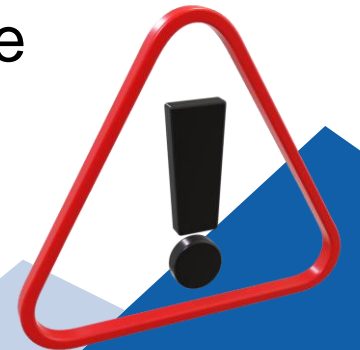
HDBaseT for Automotive

High speed automotive connectivity interface PCIe over HDBT.



CM Paradigm & Requirements

1. Use CM tool to drive design! not to snapshot data: enforce methodology
2. Project complexity & size : 4 domains, 100K objects, 1-1.5Tb database.
3. Proactive design error detection: minimize design error's by enabling "virtual" hierarchical integration
4. Easy data access – immediate visibility of project/directory/file tags or snapshots through native file system
5. Enable near zero data copy for project generation through reusable components
6. ISO 26262 Automotive "Road vehicles – Functional safety"



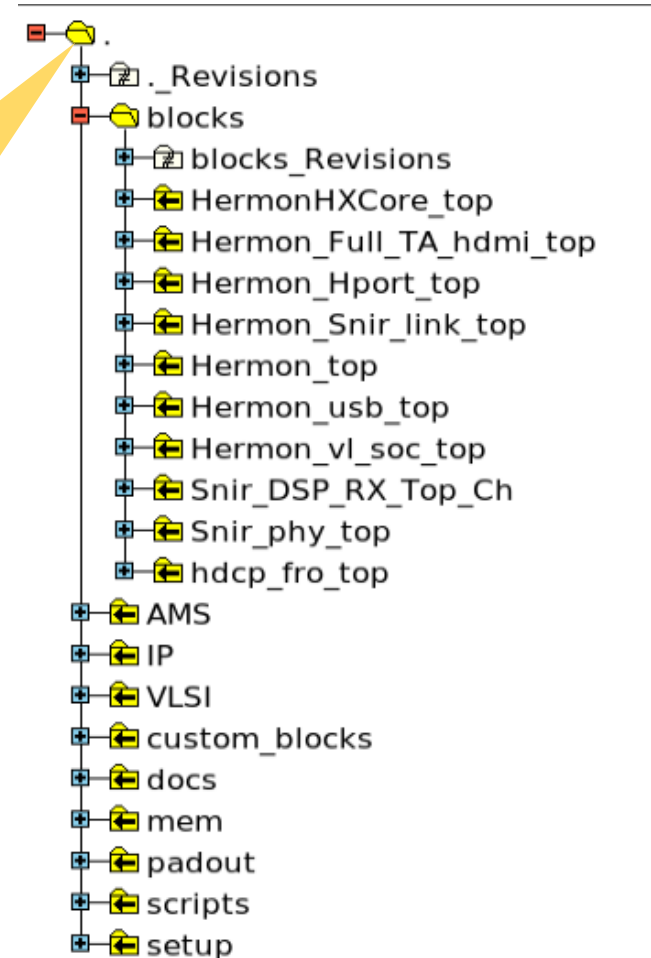
Solution ... Why ClioSoft SOS

1. Seamless CM system: reduce load on designer by correct data allocation
2. UDMA: minimize number of managed objects – programmable packaging of PnR DB objects
3. File (Project) Cache support
4. License: correct license management – allow dynamic user replacement
5. Manage directory versions - extremely important in reusable modular project case
6. Composite Property Management: effortless metadata attributes binding to project tag's & branches
7. Composite from tool support point of view : Different Vendor tools & flows
8. Support Tag and Snapshots



ClioSoft CM Infrastructure

- SOS Server - Product Line
 - Scalability (not limited by one physical host)
 - Isolation (program can be “frozen”)
 - Block Sharing by references (all blocks are ready for reuse from day - 0)
- Project BB (Building Blocks) are managed as projects
- Project Stepping (e.g. A0, B1) is a block to manage top level project connectivity
- New projects steps are reusing existing BB(s)
- Each tag or snapshot added on BB are visible on file-system block cache
- Users are fetching only relevant block(s) and getting the rest of project blocks “virtually” from integration baseline definition



Divide & Conquer - Project Management Idea

Project Transformation:

- Support project design families
- Project structure transformation -> Flat to Modular
- Methodology Aspects : Milestones & Releases
- UDMA packs for vendors & methodology

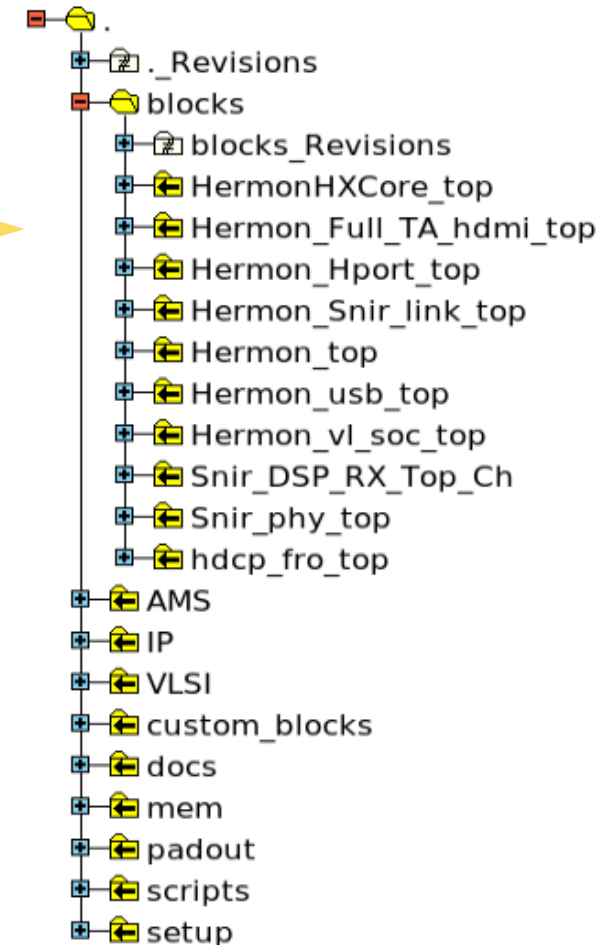
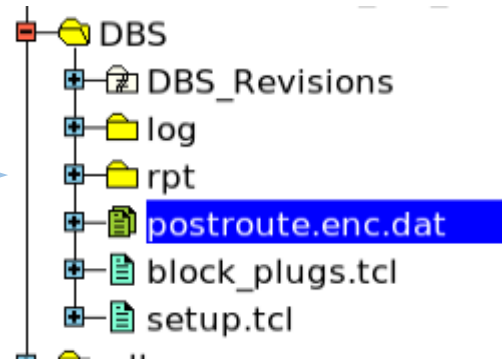
```

-----
-- Integration with Innovus
-----
package INDBS {
  libid matchany
  "**/*.enc.dat";

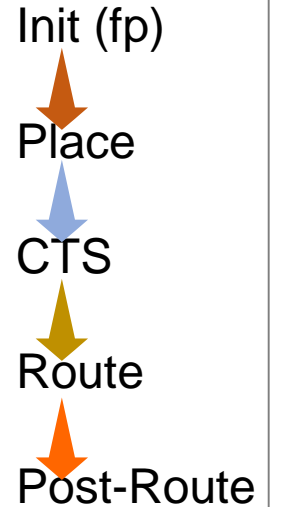
  basename global
  "{*}.enc.dat";

  packname use "$1.enc.dat";

  include globplus
  "$1.enc.dat/*",
  "$1.enc.dat/AAE/*",
  "$1.enc.dat/ccopt/*",
  "$1.enc.dat/mmmc/*",
  "$1.enc.dat/mmmc/views/*/*.sdc",
  "$1.enc.dat/mmmc/modes/*/*.sdc",
  "$1.enc.dat/libs/*/*",
  "$1.enc.dat/libs/*/*/*",
  "$1.enc";
}
  
```



Block Flow:



- User roles & workarea structure : PnR & Layout, Analog & Layout flows
- Flows supporting Backend Pnr & Analog/Layout:

PnR Flow : Acquire → Analyze → Explore → Implement → Signoff → Tapeout

Analog Flow: Ready4Layout → Ready4Extraction → Release

ClioSoft SOS advantages

1. Power of triggers
2. Ability provided to the administrators for environment customizations
3. Visual Design Diff for Virtuoso users (gives users the power to quickly compare two versions of a schematic or layout by graphically highlighting the differences directly in the design editor)
4. Easy way to configure SOS to meet customer's needs
5. Availability of the path for IP Management (designHUB)
6. ISO 26262 Certification
7. Great technical support



Time for Questions





Valens

Thank You