Stood for AADL

AADL committee
Salt Lake City, 18 April 2007

Ellidiss
Software
www.ellidiss.com
Who we are

UK based company
TNI Europe Ltd
Tools sales office
Tech support for CP-Hood:
  Eurofighter Typhoon
  Tornado
  Nimrod
  Hawk trainer
  Huygens space probe to Titan
...

Fr based company
New tools development
R&D center
Tech support for Stood:
  Airbus A380
  Airbus A340
  Eurocopter Tiger
  EH-101/US-101 helicopter
  ISS European Robotic Arm
  Galileo
...

Independent tool vendor:
flexible commercial approach
strong technical commitment
full range of industrial services:
  (training, tool customization, support, ...)

www.ellidiss.com
import legacy code
     (Ada, C)

import model
     (HOOD, AADL)

import requirements

document gen
     (HTML, PDF, Word, ...)

model checkers
     (have been DO-178B qualified for the A380)

code gen &
     round-trip
     (Ada, C, C++)

export model
     (HOOD, AADL)

customization

meta model

editors

database

LMP: Logical Model Processing:
formal and declarative
m2m and m2t transformations
Stood in the AADL world

- Topcased
- Osate
- Cheddar
- Ocarina
- Others?: Ades, Furness

AADL verification
schedulability
code generators
other verification tools
Stood "specials"

- Light weight standalone tool

- Methodology inherited from HOOD
  - mainly Top-Down
  - mainly Instance based

- Tool level concepts:
  - Project: global context, legacy code, requirements
  - Design: sub-systems, libraries, templates
  - Session: multi-user, conf/version management

- Modelling entry points (use cases)
  - Libraries of reusable components -> AADL package
  - System modelling -> AADL system
  - Software production -> AADL process

- Document oriented component description: ODS
  - AADL properties
  - textual comments
  - annexes
  - code fragments
  - customizable to match standards: DO-178B, MIL-STD-498, ...
Road map

• Previous versions:
  • Stood 5.0 (May 2005): textual AADL I/O
  • Stood 5.1 beta (Jan 2006): graphical editor
  • Stood 5.1 final (Oct 2006)

• Stood 5.2
  • commercial solution
  • distribution initially planned Jan 07
  • postponed to include feedback from R&D projects
  • new target date: mid May 07
  • download site: www.ellidiss.com

• Adele
  • open source solution
  • new AADL graphical editor for Topcased
  • will support Airbus SW modelling requirements
  • will be used as a base for SPICES modelling tool activities
    (CCM; HW/SW co-design)
  • initial prototype: summer 07
  • taking into account Airbus inputs: end 07
  • taking into account SPICES inputs: 2008