TOPCASED

Current status

Current tasks & facts

- Definition of quality assurance & Control by the Quality Group
- Build the maintenance infrastructure for the already developped software :
  - To fund architecture evolutions like merge Topcased and GMF graphical editors generators
  - To fund common facilities like user support on the mailing list, GForge administration, etc.
  - Discussions are in progress with other teams with the same needs (French competitivity clusters Minalogic and System@tics)
- Restart of Open Source Licenses studies
- Relations with Eclipse foundation and projects
- Prepare Topcased 1.0.0 (July 2007)
- A lot of contacts with new potential partners...
- About 15000 downloads and 60000 visitors in 2006

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Quality group status

Product	Progress	Initial target	Updated target	Workable objective	Possible lever
Topcased SDP	30%	15/12/2006	31/01/2007		
Topcased SQP	20%	15/12/2006	31/01/2007		
Topcased SCP	10%	15/12/2006	23/02/2007		
Quality Tool Kit	80%	15/01/2007	30/01/2007		
Training Tool Kit	0%	15/01/2007	31/01/2007		
Implementation on 2 Tools	0%	15/02/2007	15/02/2007		
Implementation on all Tools	0%	15/05/2007	15/05/2007		

Workable objective

Partly workable objective or reduction of the initial objective

Unreachable objective for TOPCASED V1.0

Nb of QG meetings	4
Nb of Trainings	0
Nb of compliant components	0

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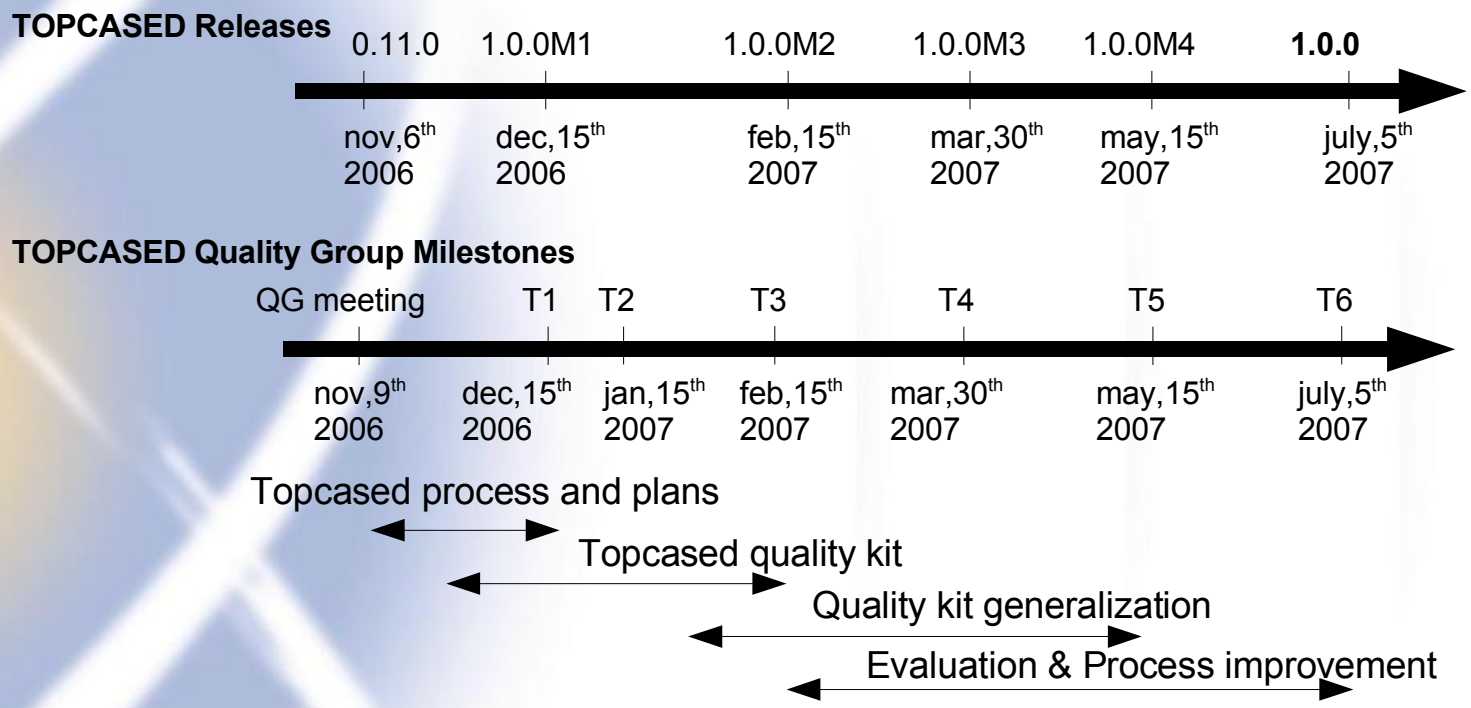
Roadmap



T1 : First draft of Topcased Plans & first integration controls
T2 : Quality Kit and the training slides
T3 : Check of the Quality Kit implementation on 2 tools
T4 : Complete description of Topcased plans
T5 : Quality Kit implemented on all the contributions
T6 : V1.0.0 totally compliant with Topcased Quality Policy

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New features and tools

- Tramway : a requirement traceability tool in open source (https://gforge.enseeiht.fr/projects/topcased-topreq/)
- Code generators : based on www.acceleo.org
  - UML > C, UML > ADA, UML > Java, UML > Python
  - dedicated to prototyping and low criticity developments because of the acceleo architecture.
  - AADL > C for OSEK, ATL based.
- Doc generators based on well-known technologies
  - docbook, Dita, etc. TBD
  - EMF
- First elements of team work support (splitting up of models)
- Test cases generator for Mealy machines is in test
- Polychrony/SIGNAL graphical editor is to be released.
- Generic change management tool (GPM)

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TOPCASED and Eclipse

- Contact taken with EMP people at EclipseSummit2006
- Merging the 2 approachs will take some time and effort, but can not be delayed due to the Eclipse foundation marketing strength...
- Light involvement in the EMF Compare initiative
- Participation to the proposal of a SysML editor
- A short talk and a demo session have been proposed for EclipseCon2007.
- ATLAS team (new Topcased member) gives us a far better view of the EMP internals.

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Simulation

- The goal is to develop a simulation engine independent of the modeling language.
- It will include a generic graphical animator
- Cover only discret needs. Continuous and hybrid simulation are currently not targeted.
- Follows a pragmatic approach, as graphical editors generators : very specific needs will still be coded by hand.
- Studies managed by Marc Pantel, ENSEEIHT
- First step (July 2007 ?) : prototype for UML statecharts
- Imply to define behavioral information at the meta model level.
- AADL behavioural annex is not enough for that purpose : need also some runtime information : current state, signals exchanged at a precise step, etc.

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TOPCASED and AADL

- Welcome to SEI as a new Topcased member
- Simplified graphical editor based on HOOD + AADL concepts (SPICES development taken in charge by P. Dissaux for Airbus) definition stage has begun.
- Ready to work on more AADL code / doc generators
- Ready to define OCL rules for AADL thanks to the latest OCL engine improvements (now support split up metamodels).
- Need to synchronize OSATE work and release 1.0.0

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