Artop – AUTOSAR Tool Platform.

Artop.

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BMW Car IT
Artop - AUTOSAR Tool Platform.

Overview.

- What is Artop?
- Why we did it?
- Discussion
AUTOSAR Tool Platform.
Situation today – brief summary.

- AUTOSAR has been around for quite a while.
- First series projects are heavily using AUTOSAR.
- Tool support is rather limited.
- Interoperability of available tools is limited (strong Vendor-Lock-In of these tools).
- Quite a lot of tools fail to fulfill the very minimum requirements (i.e. performance, availability for target platform, ...)
- Todays tools cover only parts of the AUTOSAR methodology.
AUTOSAR Tool Platform.
Artop User Group.

**Artop User Group**
A Group of AUTOSAR members und partners with a special interest in AUTOSAR tools that create and establish the AUTOSAR Tool Platform.

**Artop – AUTOSAR Tool Plattform**
A jointly developed AUTOSAR tool infrastructure that contains basic, non-competitive parts of an AUTOSAR tool.

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**Start-Up Members:**

- BMW Car IT
- Continental
- Geensys
- PSA

**New Partners welcome!**

Requirement: AUTOSAR member or partner

http://www.artop.org

membership@artop.org
AUTOSAR Tool Platform Concept.
A smarter approach.

Exploit the **Eclipse success factors** for AUTOSAR tools:

→ Create Ecosystem for AUTOSAR tools

„**Open“ tool basis“
„Open“ = Common base platform that is open within the AUTOSAR community

**Extensibility**
custom plug-ins to extend core functionality

**Large community**
Users and developers
AUTOSAR Tool Platform.
Approach.

Artop‘s approach:
- Cooperative development of an infrastructure basis for tools.

Allows for:
- Specialisation on party‘s expertise
- Better tool interoperability through common basis
- Better utilization of human resources
- Faster adoption of new versions of the standard
- Better support for migration scenarios
- New business model for tool development
- Establishment of an Ecosystem for AUTOSAR tools (Details)
- Development of commercial tools based on top of Artop

→ Ecosystem is the new approach (at least for automotive tools).
Artop contains: **Non-competitive** Basic parts, required for every AUTOSAR tool
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![AUTOSAR Tool Platform](image)
AUTOSAR Tool Platform.
Status and next steps.

14-Okt 08:
Artop User Group Agreement signed

27-Okt 08:
Webseite „www.artop.org“ online.

27-Okt 08:
Artop Release Candidate RC1 available to all AUTOSAR members and partners

2008/2009:
Iterative Development of Artop

End 2009:
Artop Release 2.0 available close to the point in time of the AUTOSAR R4.0 (Artop 2.0 is based on AUTOSAR R4.0)
Artop - AUTOSAR Tool Platform.
Backup.
AUTOSAR Tool Platform.
An Ecosystem that works (1/2).

– Community approach can only work, if it has advantages for all participants.

Advantages for OEM’s and Tier-1’s
– Better interoperability of tools that share a common base platform.
– Large user base of common platform ensures higher maturity and quality of tools.
– Avoidance of vendor lock-in.
– Investment in tool extensions is safer since extensions are vendor-neutral.
– Effort invested into base platform development is spread over a large community.

Advantages for AUTOSAR partnership
– During the parallel development of the tool platform and the AUTOSAR specifications feedback is generated towards AUTOSAR. Parallel tool implementation will improve the AUTOSAR specification process.
**AUTOSAR Tool Platform.**
**An Ecosystem that works (2/2).**

**Advantages for established tool vendors**
- The development effort needed for maintenance of the base platform is spread over many shoulders, especially the effort that is needed to adapt the platform to evolving AUTOSAR specifications/releases.
- Benefit from large community and resulting higher quality of the base platform.
- Knowledge exchange with other companies in a non-competitive area.

**Advantages for upcoming tool vendors**
- Lower entry barriers for market entry. The tool vendor can focus on its area of expertise and does not need to invest in the development of a base platform.
- Base platform ensures interoperability in an overall tool chain.

**Advantages for universities / research institutes**
- Availability of a common base platform enables institutes to focus on their research topic.
- Easy availability of a tool platform encourages AUTOSAR related research.