Introduce a Standardized Calibration Process with AVL CRETA™

PSA uses the predefined calibration workflow of AVL CRETA™ for worldwide consistent projects.

**SUMMARY**

By introducing AVL CRETA™ and the AVL CRETA™ Component Library at PSA, their process of calibration data management, especially with respect to the delivery of calibration work by the application engineers, was greatly simplified, thus saving a huge amount of time and costs for calibration projects while at the same time improving the stability of the data management and guaranteeing the robustness during the merge of results.

**FAST FACTS**

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<th>Customer / Country</th>
<th>PSA / France</th>
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<tr>
<td><strong>Challenge</strong></td>
<td>Manage large calibration projects with worldwide distributed teams in time</td>
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<td>Ensure high quality, robustness of calibration data and fully traceable calibration projects</td>
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<td>Simplify the data delivery to complex variant structures</td>
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<td><strong>Solution</strong></td>
<td>Use the predefined calibration workflow of AVL CRETA™ to establish a standardized and traceable process</td>
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<td>The client-server based software solution allows comfortable interaction also for worldwide distributed calibration teams</td>
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<td>With the AVL CRETA™ Component Library modular calibration and automatic delivery of data to multiple projects is enabled</td>
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**CHALLENGE**

*Increasing number of vehicle variants*

Increasing complexity of calibration projects especially regarding the number of variants and their increasingly complex structure has made it more and more difficult and time intensive for application engineers to deliver their data correctly with respect to the multiple projects and variants. Therefore, with email and project drives being utilized to coordinate calibration work and distribute and exchange calibration data for approximately 900 application engineers, PSA was experiencing increasing difficulties concerning the handling and management of their data.

*Handling of multiple tools in calibration projects*

Furthermore, the monitoring of projects was becoming more and more challenging due to the multiple different tools in usage.

**SOLUTION**

*Improved calibration data management*

By introducing AVL CRETA™, central storage of data as well as an improved management and exchange of calibration data and knowledge was achieved. To further improve the handling and delivery of calibration packages especially with respect to the continuously increasing complexity of variant structures, the AVL CRETA™ Component Library is used in combination with the AVL CRETA™ Work Package functionality. By using work packages, calibration tasks and work load are clearly divided between the team members.

Implementing the AVL CRETA™ Component Library enabled the application engineers to deliver their work packages directly to the respective component, thus preventing them from having to work through and fully understand the complex variant structures of the different projects. The delivery of calibration work to the correct projects and variants is performed automatically by the AVL CRETA™ Component Library.

To enable this, attributes are assigned to components as well as to variants during the startup phase of a project, to allow for a comparison of the data and ensure delivery of components to the correct destination variants.

**RESULT**

By implementing AVL CRETA™, the management of calibration data was centralized and significantly improved. By introducing defined processes, responsibilities and roles the work of PSAs application engineers was greatly simplified. Moreover, by introducing the AVL CRETA™ Component Library the reuse of calibration work and knowledge was enforced, preventing redundant calibration tasks while at the same time easing the delivery of calibration data. Furthermore, work packages help to quickly retrieve information on the project’s progress, based on concrete terms, enabling to monitor the progress of calibration projects very precisely.

To sum up, the overall data handling and processes concerning data management at PSA were significantly improved by introducing AVL CRETA™, thus saving a huge amount of time, effort and costs for calibration projects.

**OUTLOOK**

With the implementation of AVL CRETA™ and the AVL CRETA™ Component Library the delivery of calibration work to the various variants and projects was centralized to delivering to one single component. Therefore, increasing the complexity of calibration projects and number of variants in future will not affect the data delivery process for PSAs engineers, as this is independent of the variant structure.

Furthermore, integration of function developers by means of various interfaces to AVL CRETA™ renders further future possibilities yet to be explored.