

## Advanced post-processing with META for Durability analyses

<b>Training</b>	Advanced post-processing with META for Durability analyses
<b>Duration</b>	1 day (8 hours)
<b>Level</b>	Advanced
<b>Who should attend</b>	CAE analysts who analyze durability models and have experience in post-processing with META.
<b>Training description and objectives</b>	<p>This advanced course, introduces participants to advanced META tools and techniques for evaluating/calculating results from durability analyses.</p> <p>Upon course completion, participants will be able to :</p> <ul style="list-style-type: none"> <li>– explode parts of the 3d model</li> <li>– calculate and display results on contact surfaces</li> <li>– transform data and results with respect to a different coordinate system</li> <li>– handle different display styles, store and re-apply them</li> <li>– perform calculations between loaded results</li> <li>– create new results as a linear combination of already available ones</li> <li>– display and calculate forces and moments in cross sections</li> <li>– calculate the torsion angle and stiffness of a vehicle body</li> <li>– map results from one model to another</li> <li>– create custom paths for viewing results, apply strain gauges and perform stress linearization</li> <li>– perform a bore distortion analysis</li> <li>– plot results on a Haigh diagram</li> <li>– calculate the Dang Van, Crossland and Sines equivalent stresses</li> </ul>
<b>Prerequisites</b>	Basic knowledge of durability principles and META.



<b>Suggestions</b>	This course can be combined with the trainings: <ul style="list-style-type: none"><li>– ANSA for Durability analyses pre-processing.</li><li>– Introduction to post-processing with META.</li><li>– META basics for Durability analyses post-processing.</li></ul>
<b>Language</b>	English, German, French <i>*ask for more languages</i>

<b>Suggested topics</b>
Day 1
<ul style="list-style-type: none"><li>– Explode parts</li><li>– Results on contact surfaces</li><li>– Local coordinate systems</li><li>– Reading/transforming units</li><li>– Vector display settings</li><li>– Handling display styles for 3D models and 2D plots</li><li>– Connection Manager</li><li>– Post processing of critical areas</li><li>– Calculated states</li><li>– Linear combination of results</li><li>– User field function</li><li>– Section forces</li><li>– Stiffness calculation</li><li>– Map results</li><li>– Parametric point paths and strain gauges</li><li>– Stress linearization</li><li>– Bore distortion analysis</li><li>– Haigh Diagram</li><li>– Multi-axial criteria</li></ul>

*Course content is subject to change without notice.*

*Course content may be adjusted to audience requirements or background.*