Advanced post-processing with META for Crash simulation

Training	Advanced post-processing with META for Crash simulation
Duration	Depends on chosen topics
Level	Advanced
Who should attend	CAE analysts who perform crash analysis and have previous experience of post processing with META .
Training description and objectives	This course introduces users, already familiar with META, to advanced META tools and techniques for evaluating/calculating results from crash analyses. Upon the completion of this course, participants will be able to : – Perform advanced measurements and display them – Calculate proximity between models or groups – Detect the colliding areas between groups – Apply advanced calculations on curves – Compare using dedicated tools and functionality – Calculate forces and moments on cross sections – Match and synchronize videos with FE model – Track results on videos – Use the tools dedicated for analyses like IIHS Structural Rating, Occupant Injury Criteria, Pedestrian, FMVSS 201U, EU-NCAP MPDB – Handle airbag particles (LS-DYNA)
Prerequisites	Basic knowledge of the crash principles and META is required.
Suggestions	This course can be combined with the trainings: – ANSA for Crash simulation pre-processing. – Introduction to post-processing with META. – META basics for Crash simulation post-processing.

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Language	English, German, French, Swedish
	ask for more languages

Suggested topics
Day 1

- Measurements
    a) Distance measurements and contours
    b) Collision Penetration Check
    c) Roll, Pitch, Yaw angles
- 2D Plot
    a) Curve Functions (calculations, crash criteria)
    b) User defined curves with loop options
    c) Interoperability of curves with 3d model
    d) Correlation analysis
- Intrusions
    a) Displacements and Velocities
    b) 3d and 2d results
    c) IIHS Structural Rating toolbar
- Compare results of multiple models and states
- Overlay session
- Template Manager
- Section Forces
- Videos post-processing (correlation of test videos with simulation's animation)
    a) Import, animate and synchronize video with simulation
    b) Overlay (match) 3d model with video
    c) Track points on videos
- Occupant Injury Criteria (OIC) toolbar
- Pedestrian toolbar
- FMVSS_201U toolbar
- EU-NCAP MPDB toolbar
- Airbag particles

Course content is subject to change without notice.
Course content may be adjusted to audience requirements or background.