WWW.TMF.IWM.FRAUNHOFER.DE
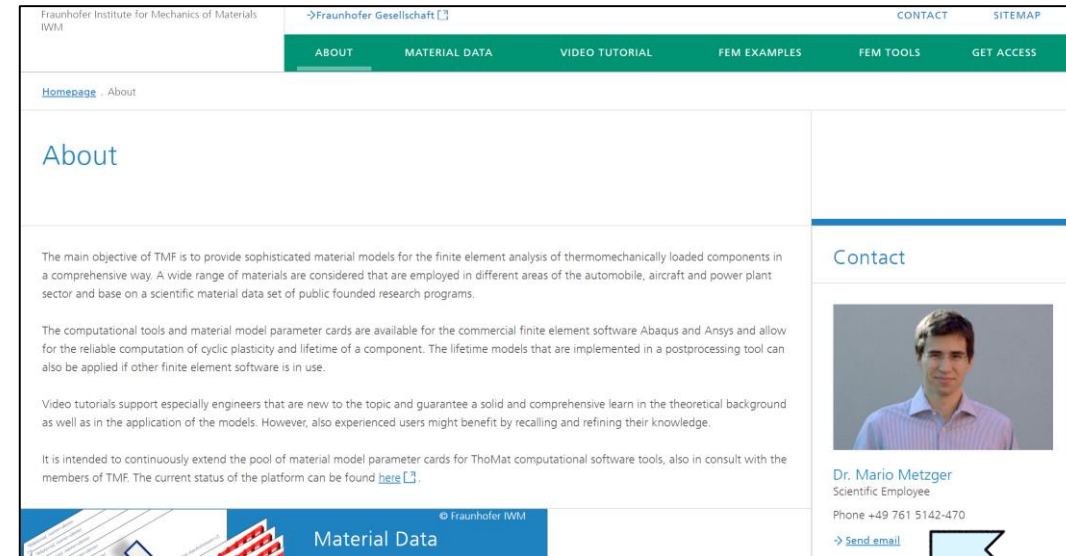
A computational platform for the TMF community

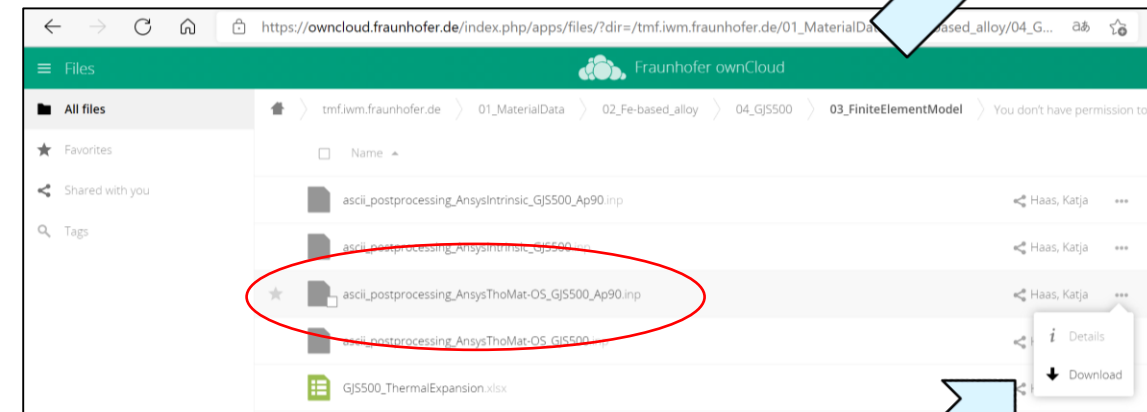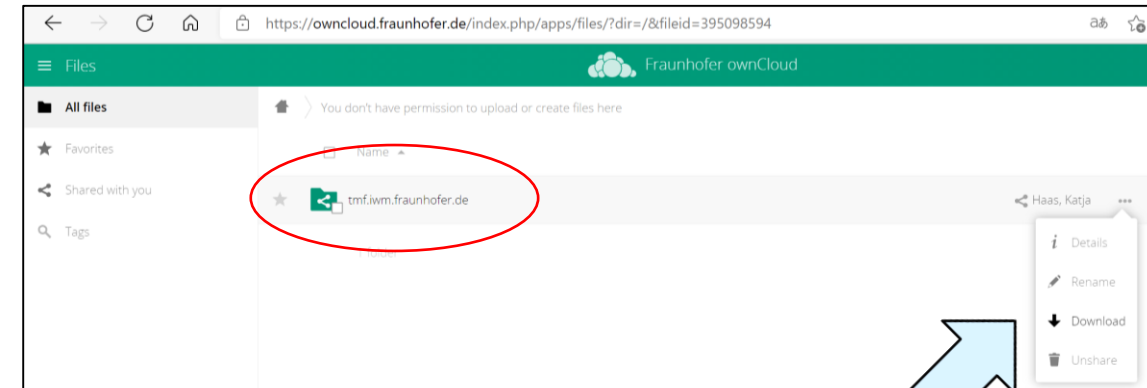# ACCESS OWNCLOUD: GET ACCESS

- Get in contact with us e.g. via email link on homepage: mario.metzger@iwm.fraunhofer.de

- You will receive our offer with terms an conditions.

- After you signed the contract, we send you a password protected link to access the Fraunhofer ownCloud.

- Follow the link and log-in with your password.

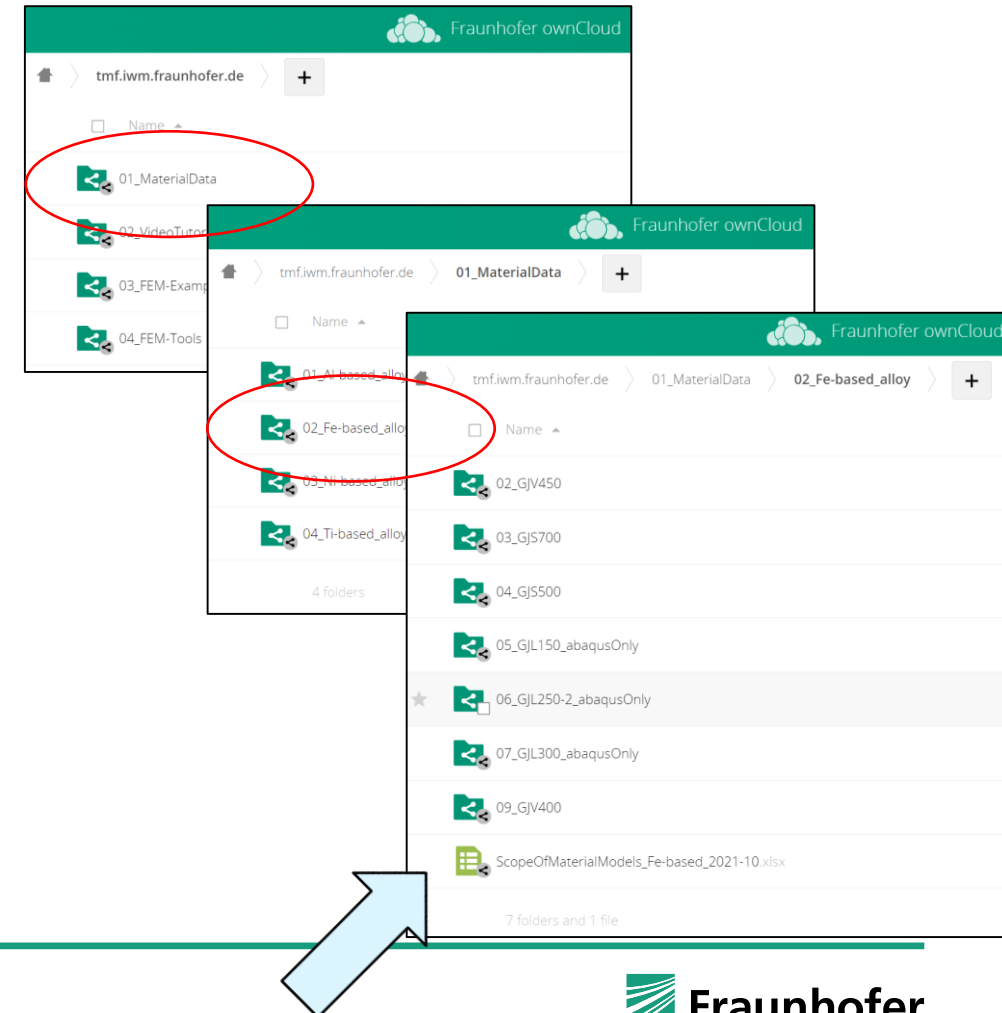- You are allowed to share the password protected link at your company location.

ACCESS OWNCLOUD: DOWNLOAD FILES

■ You are now able to download all or specific files of the platform via the download option.

ACCESS OWNCLOUD: MATERIAL DATA

- Under 01_MaterialData you will mainly find the material cards for the current set of materials that is continuously extended.

- The material cards are available for the finite element software Abaqus and Ansys for cyclic plasticity and lifetime estimation.

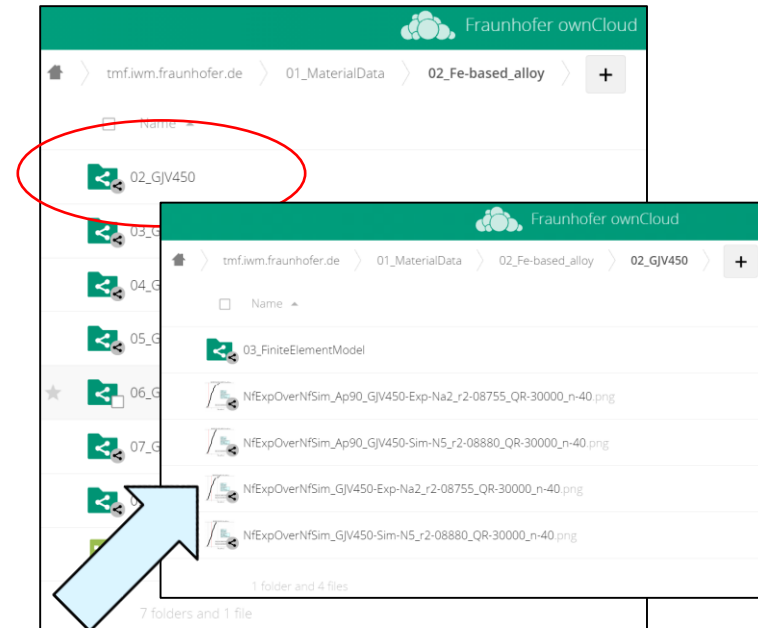- The file ScopeOfMaterialModels*.xls summarizes the experimental data basis.

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- NfExpOverNfSim_*.png shows the quality of the lifetime prediction and the amount of experimental data.

- NfExpOverNfSim_A90*.png shows the lifetime prediction for that 90% of the experimental data is predicted conservatively.
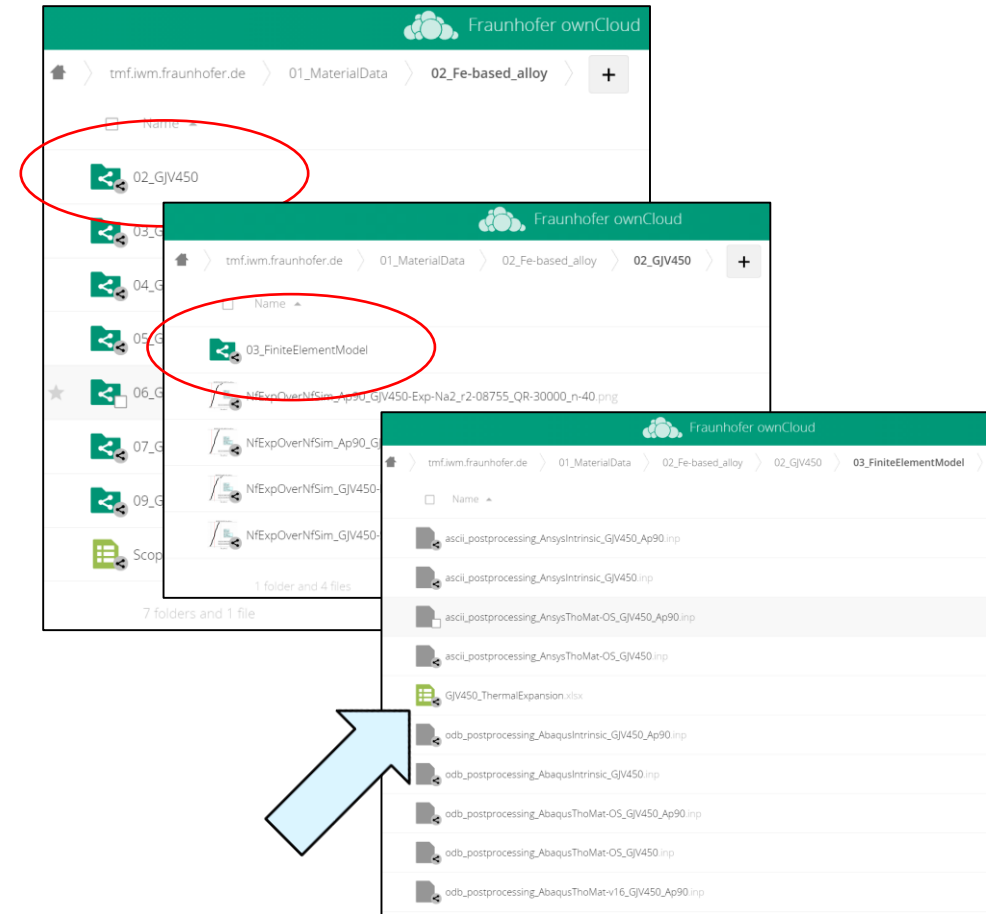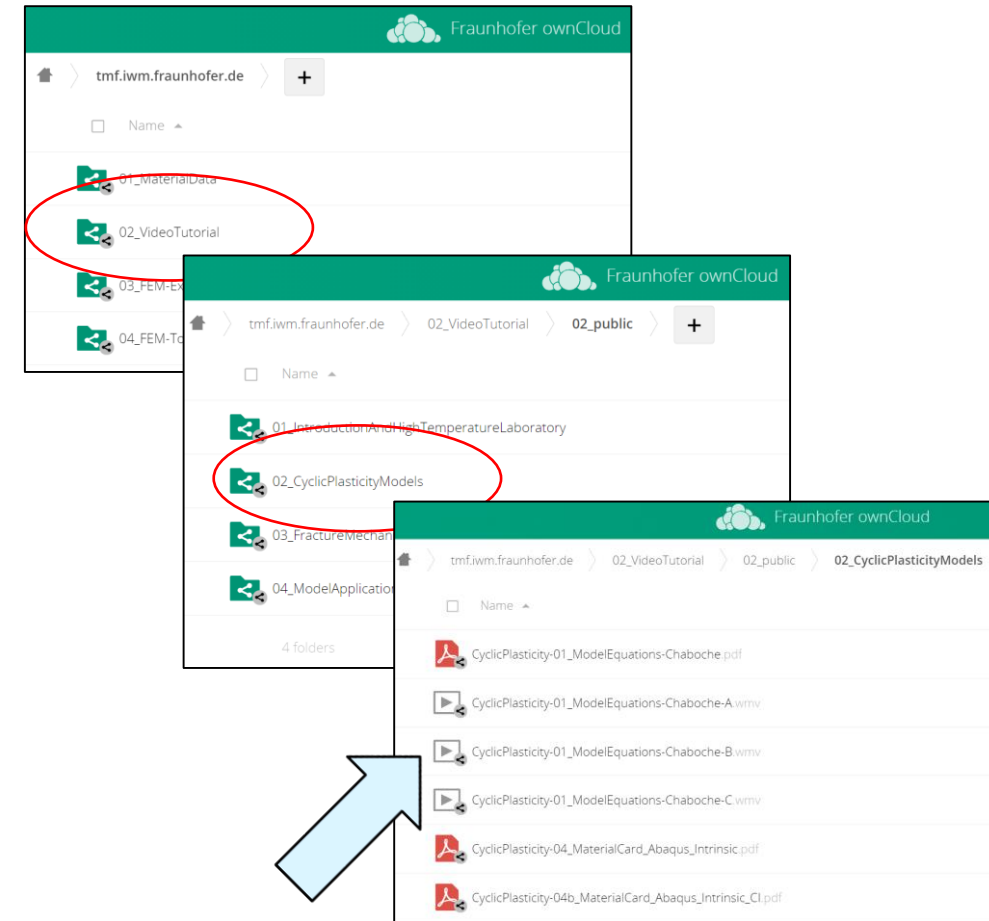
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- Under 01_MaterialData you will mainly find the material cards for the current set of materials that is continuously extended.

- The material cards are available for the finite element software Abaqus and Ansys for cyclic plasticity and lifetime estimation.

- The files *.inp contain the material model parameters for Abaqus/Ansys:

  - Intrinsic/ThoMat Chaboche model

  - ODB/ASCII-based postrocessing tool

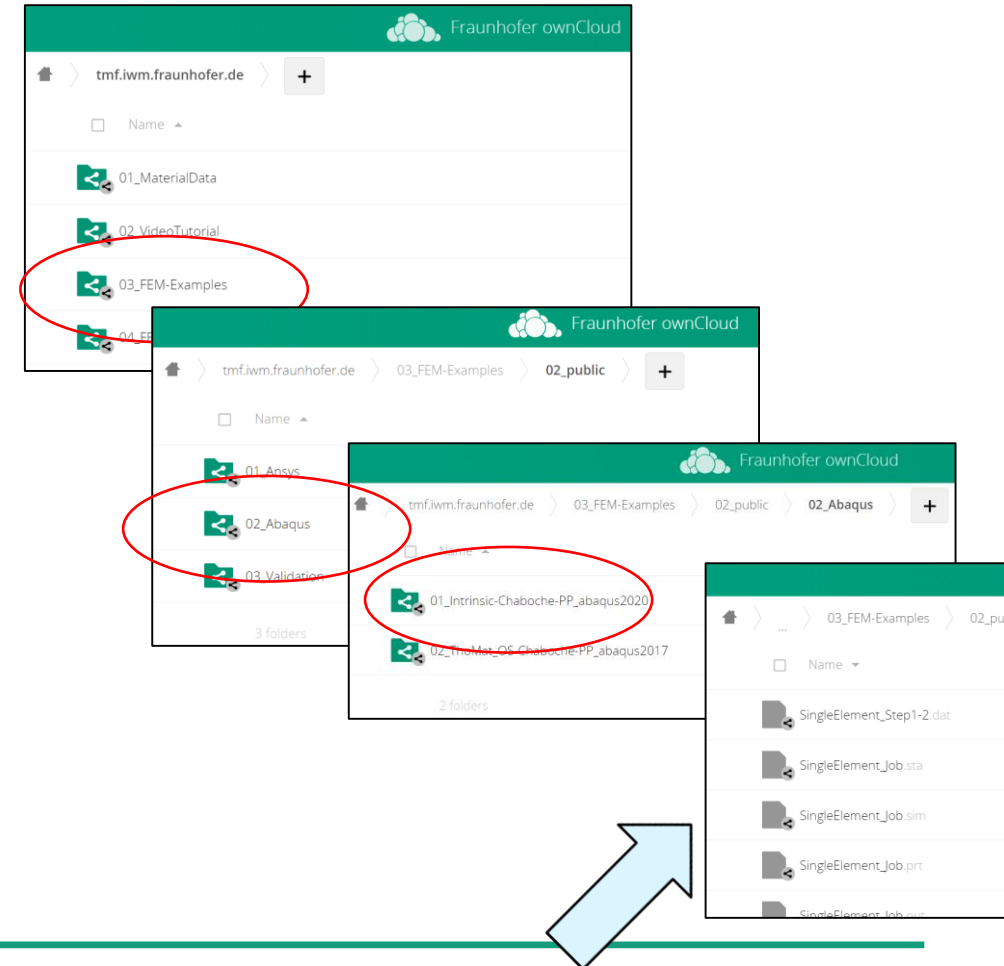- The file *ThermalExpansion.xls contains the thermal expansion coefficients of the material.

ACCESS OWNCLOUD: VIDEO TUTORIAL

- Video tutorials *.wmv with corresponding *.pdf files are available for the used cyclcic plasticity and the lifetime models, as well as their application.

- An introduction to the testing capacity of the high temperature laboratory at the Fraunhofer IWM is given as well.

ACCESS OWNCLOUD: FEM-EXAMPLES

- Single finite element examples are available for Abaqus and Ansys for intrinsic/ThoMat cyclic plasticity analysis and the respective lifetime estimation.

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ACCESS OWNCLOUD: FEM-TOOLS

- FEM tools for Abaqus include the compiled cyclic plasticity and lifetime models.

- FEM tools for Ansys include the compiled cyclic plasticity and lifetime models as well as an UPF and ACT for the lifetime estimation.