

Private 5G Network Design in an Industrial Environment

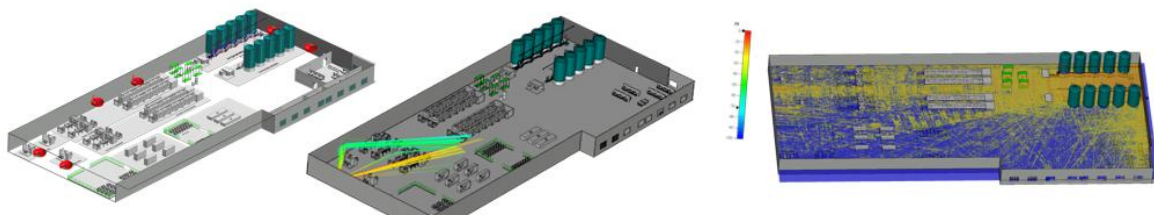
Abstract:

Simulia CST is a product of the Dassault Systemes Portfolio that is dedicated for 3D electromagnetics simulation. It has a complete set of numerical methods that are dedicated to resolve Maxwell equations from DC up to optical frequencies. The 3D simulation allows predicting the performance of a device at early stages in order to avoid unnecessary costs and accelerate the time to market.

During the workshop, we will see how the complete technology of simulia CST allows resolving multiscale scenarios from the smallest part (antenna) to the medium sized objects (equipment) up to the biggest part like a complete factory. We will accomplish by using several numerical methods like the FEM, FIT and the SBR. Connectivity is the key in our scenario and it will be assessed by analysing by some features that we will also show during this workshop.

Workshop outline:

During the workshop we will show a presentation on the simulation of the 5G coverage in a complex environment, showing all the steps from antenna design to the propagation and coverage. We will then apply what is seen in the presentation through an online demonstration of the software.



Dr. Hassan Chreim completed his PhD in electrical engineering with applied electromagnetics specialty from the university of Limoges. He then worked for 4 years on a joint project between the Xlim laboratory, CNES, Thales Alenia Space and the European Space Agency. He joined CST in 2014 as an application engineer. He is now a worldwide Senior Industry Process Specialist focusing on France and the middle east.