

## **VIRTUAL EVALUATION OF SYSTEM CONNECTIVITY**

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**KEYWORDS –**  
Connections, Process Automation, Python

**ABSTRACT –**  
During the model build process validation of subsystem connectivity is a large challenge. Of particular importance is determining where models are missing connectivity. The specific difficulties of identifying missing connections in large and complex vehicle models are shown. The historic “visual inspection” approach is presented as the baseline solution. A modern, mathematics driven, solution will then be discussed. An overview of the technical characteristics are covered including zone definition, positive space definition, and negative space definition. The modern model validation workflow is then contrasted to the historic approach focusing on how the characteristics of the mathematical solution drive the change in process.