

New Technology from Maplesoft Helps Cities Go Green through Smarter Fleet Electrification

MapleSim Fleet Forward helps transit authorities reduce risk during the transition to electric buses.

WATERLOO, Canada (<u>PRWEB</u>) August 29, 2018 -- Maplesoft[™] today announced the release of <u>MapleSim[™]</u> <u>Fleet Forward</u>, a new product that enables transit authorities to create a smarter fleet electrification strategy. MapleSim Fleet Forward provides municipalities with the knowledge they need to make informed decisions during their transition to electric buses.

By combining virtual prototyping techniques, electrification expertise, and data about specific buses and bus routes, MapleSim Fleet Forward analyzes electric bus behavior under a variety of conditions. Because the simulation and analysis is done virtually, transit authorities are provided with insights into their specific electrification needs at a fraction of the cost of physical testing. Planners can make data-based decisions when developing their electrification strategies, and identify and address problems before they occur in the field.

MapleSim Fleet Forward provides answers to questions such as:

- How will passenger loads, hills, weather, or other variables impact the bus's range?
- Where is the best placement for charging stations, to maintain service while minimizing infrastructure costs?
- Will regulatory requirements and emission targets be met?
- How will the costs compare to running diesel buses?

MapleSim Fleet Forward is the result of a strategic partnership between Maplesoft and the National Research Council of Canada (NRC). Together, they provide a comprehensive set of tools and services to help transit authorities determine the best electrification strategy for their city. Maplesoft provides the system-level modeling and simulation tools and expertise, while the NRC provides electrification expertise for vehicle design, integration, and analysis.

"Many municipalities are looking for ways to go green, and reducing carbon emissions from transit is a critical aspect of their plans. However, moving to electric buses can present serious challenges to organizations because battery-driven vehicles behave differently than the diesel buses they are used to," says Paul Goossens, Vice President of Market Development at Maplesoft. "With MapleSim Fleet Forward, we supply the information about that behavior, using their buses, running on their routes, in their weather. As a result, cities can develop and implement successful plans that will help them to be environmentally friendly, run an efficient electric fleet, and save money in the process."

"The NRC is excited to be working with MapleSoft in this way. This collaboration will provide Transit Authorities with the information they need for decision making and to develop the best electrification strategy. This development is particularly important with the shift to electric power that the industry is seeing," commented Marie-Chantal Ross, Program Leader, Automotive and Surface Transportation Research Centre of the National Research Council of Canada. "Maplesoft and the NRC collaborated to develop an innovative tool that can provide critical information on electric bus behavior under a variety of conditions, so fleet operators can identify problems before they occur, and confidently make informed decisions."



For more information about MapleSim Fleet Forward, please click here.

About Maplesoft

Maplesoft provides engineers with the tools and expertise they need to enable a model-driven innovation process that helps manage design complexity. Offering experts in a variety of engineering fields, extensive experience in model-based design, and the superior system-level modeling and analysis tools MapleSim and Maple, Maplesoft helps companies reduce development risk and bring high-quality products to market faster. Through Maple, Maplesoft also provides a complete concept-to-deployment environment for advanced analysis and rapid development of technical applications and engineering calculation tools. Maplesoft products and services are used in machine design, robotics, aerospace, automotive, and many other fields where engineers face complex challenges. Customers include Boeing, FLSmidth, Ford, Google, Intel, NASA, and Samsung.

Maplesoft is a subsidiary of Cybernet Systems Group. For further details, please visit



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