6 Keys to Navigating Connected Car’s Software Quagmire

Who will lead the infotainment software platform in the future?

Contrary to the emphasis on Apple and Google, both of which are portrayed as contenders for the next-generation IVI platform, neither CarPlay nor Android Auto is positioned to move into the dashboard at this point. Their role is strictly limited to middleware that’s designed to allow smartphone integration inside the car.

Gaining momentum in the IVI platform are nonprofit industry alliances such as GENIVI and AGL. GENIVI is supported by many European carmakers and Tier 1s and some US carmakers. AGL is getting popular among Japanese car OEMs, Juliusen said.

The motivation for automakers to opt for the open-source model is the skyrocketing amount of software required in cars today. A decade ago, a car used tens of thousands of lines of code. Now it uses 50 million or 100 million.

However, all the Linux variations were “barely getting started” when BMW started to use GENIVI a year ago, Juliusen said. “BMW is the first car OEM to push GENIVI into their cars. But they’ve done so with almost no publicity.”

The GENIVI Alliance was formed in early 2009. Its eight founding members are BMW, PSA Peugeot Citroen, GM, Delphi, Magneti-Marelli, Visteon, Intel, and Wind River.

AGL announced last week that its first open-source software release is available for download. The consortium boasted that the move is “bringing the industry one step closer to achieving a standard Linux-based software platform for the connected car.”

Quoting from a 2013 IHS report last year, Dan Cauchy, general manager of automotive for the Linux Foundation, told EE Times: "The auto industry prefers OS platforms in which it can control direction and features. Such control is not possible in proprietary OS platforms."

He made it clear that AGL’s aim is “to create a common platform that any OEM or Tier 1 a supplier can use as a starting point for innovating on top of,” rather than having every OEM build a Linux automotive stack from scratch.

6 Key Questions:

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