



1. What did ANSYS announce today?

ANSYS acquired substantially all the assets of Delcross Technologies today, a leading developer of computational electromagnetic (CEM) and radio frequency (RF) interference analysis software products. Delcross Technologies is a former partner of ANSYS.

2. What does Delcross Technologies do?

Delcross Technologies solutions allow engineers to evaluate installed antenna performance. Engineers responsible for integrating antennas onto platforms are typically interested in the performance as installed. In other words, they want to know how the presence of the platform changes the performance of the antenna and its interaction with other antennas on or off the same platform. Performance of the antenna is much different when installed on real-world vehicles and platforms than when installed on a big, flat ground plane in an anechoic chamber.

Additionally, Delcross offers a unique radio frequency (RF) interference co-existence tool in their portfolio that allows users to design systems with multiple wireless connections on a single platform, where a platform could range from a consumer electronics device to a large military vehicle. Delcross is the specialist in RF cosite modeling involving many antennas and radios. The Delcross solution provides rapid identification and “root-cause” analysis of EMI issues in complex RF environments.

3. Why is this acquisition strategic?

Delcross Technologies provides software complementary to ANSYS HFSS that will allow ANSYS to solve new problems in multi-radio/sensor platforms (especially aero/defense), wireless connected automobiles, and automotive radar. Its Savant product relies on ray-tracing techniques that solve antenna and wireless problems that are orders-of-magnitude larger in size compared to HFSS. A unique RF interference and co-existence tool in their portfolio, EMIT, allows users to design systems with multiple wireless connections on a single platform, where a platform could range from a consumer electronics device to a large military vehicle. As mentioned previously, Delcross is the specialist in RF cosite modeling involving many antennas and radios.

Adding ray-tracing capability to HFSS is a logical next step in our HFSS development. Acquiring Delcross provides ANSYS the leading technology to solve emerging problems in these strategically important applications. It further strengthens our leadership in high-frequency electromagnetics.

The addition of a unique RF interference simulation capability to the ANSYS solution portfolio opens new markets and application areas as well as extends the application scope for existing HFSS customers.

4. What was the relationship between ANSYS and Delcross in the past?

ANSYS and Delcross Technologies partnered in 2014 with the intent to develop an interface between HFSS and Savant for aerospace/defense and automotive customers.

5. How does antenna performance and RF interference simulation fit into ANSYS' long-term strategy?

We envision a tightly-coupled, bi-directional hybridization between HFSS and Delcross Savant. For example an aircraft with multiple antennas and/or detailed engine inlets could be solved rigorously. HFSS will be used for the fine details, Savant for the rest of the platform. Communications on any large platform, such as a commercial airliner or even communication systems in an office and/or multiple electronics in an automobile, could be simulated. Longer term, the ray-tracing engine can be used for city-scale wireless propagation modeling or for other physics like acoustics and lighting.

There are multiple opportunities for ANSYS integration with EMIT for cosite interference and coexistence simulation. A bi-directional interface with ANSYS EM solvers will permit antenna installation studies to be performed to evaluate the impact on system-level performance. The solution will provide for the inclusion of other coupling paths (enclosure, aperture, etc.) within the system level EMIT analysis. Additionally, EMIT's built-in RF system radio and component models can be greatly enhanced via direct integration with ANSYS RF system and circuit modeling tools to provide higher fidelity and more capable models within the cosite simulation environment.

6. What are Delcross Technologies' key products?

- **Savant** – Savant simulates the performance of antennas as installed on electrically large platforms, to analyze radiation and receiving characteristics and coupling among multiple antennas. This technology leverages the Shooting and Bouncing Rays (SBR) method with unique enhanced physics models, which is an asymptotic technique for short wavelength - high frequency analysis. Applications are in aero/defense, space, automotive and wireless propagation.
- **EMIT** – EMIT is a simulation tool for predicting RF interference and coexistence problems. EMIT takes a unique multi-fidelity approach to predicting RF interference to provide rapid identification and “root-cause” analysis of EMI issues in complex RF environments. EMIT provides a software framework for managing RF system performance data, simulating RF interference effects, and mitigating EMI issues, resulting in a comprehensive database/model maintainable over the life of a system. EMIT can use results from measurements, SAVANT and HFSS to include antenna-to-antenna coupling.

7. Who are Delcross Technologies' customers?

Delcross has focused on the aerospace and defense industry and has begun to market to the automotive and consumer electronics industries as well. Its customer list includes: Northrop Grumman, General Atomics, Lockheed Martin, Raytheon, Bell Helicopter, NASA, Caterpillar, Israeli Aerospace Industries, Aselsan, Selex ES Ltd. and Robert Bosch.

8. How will this affect ANSYS and Delcross customers?

Customers of both companies will benefit from the transaction. ANSYS customers will have direct access to Delcross' leading simulation products. The combined solution will provide a powerful high-frequency electromagnetic field and system simulation platform. Legacy Delcross customers can choose from proven product development solutions to meet all of their simulation needs.

9. How many people does Delcross employ?

Delcross currently employs 16 people. Many are located at the corporate headquarters in Champaign, IL, while others work in the R&D center in Chicago and will relocate to the ANSYS office in Evanston, IL.

10. Do you intend to retain Delcross employees?

ANSYS is acquiring the assets of Delcross to accelerate our development plans and to acquire key industry knowledge and competencies. For this reason, ANSYS is making every effort to retain employees to help grow this key business.

11. How does Delcross fit into the overall structure at ANSYS?

While the specifics are still being evaluated, the Delcross assets and most of the Delcross development team will integrate into ANSYS' existing product development organization.

12. Who will be responsible for the integration of the two businesses?

As with past acquisitions, leaders from both companies will work collaboratively to plan the product and employee integration for the benefit of the combined organization.

13. What are the plans for integrating Delcross products with ANSYS' existing solutions?

Each of the Delcross solutions adds crucial technology to further build upon existing ANSYS solutions. The optimal value of both ANSYS and Delcross can be fully realized by enabling the tools to operate closely with each other. While the specifics are still being decided, it is clear that the integration of the two product streams will provide the most benefits. For instance, the integration will allow Savant and EMIT to enhance the high-frequency electromagnetic field simulations done in ANSYS HFSS.

Forward-Looking Information

Information provided by the Company or its spokespersons, including the above statements and any others in this document that refer to plans and expectations for the future are forward-looking statements. The Company cautions investors that its performance (and, therefore, any forward-looking statement) is subject to risks and uncertainties. A detailed discussion of these risks and other factors that could affect ANSYS' results is included in ANSYS' SEC filings, including the report on Form 10-K for the year ended December 31, 2014, filed on February 26, 2015.

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