

Frequently Asked Questions

Q1: What is being announced?

A1: On March 11, Autodesk announced that it has completed the acquisition of Blue Ridge Numerics, Inc., a leading provider of fluid flow and heat transfer simulation software.

Blue Ridge Numerics, Inc. is headquartered in Charlottesville, Virginia. In addition to its headquarters, it has regional offices in the UK, France, China, Germany, India and Japan.

Q2: What is Blue Ridge Numerics, Inc.?

A2: Charlottesville, VA-based Blue Ridge Numerics, Inc. is a provider of fluid flow and heat transfer simulation software for industries including automotive, aerospace, medical, consumer products, electronics, industrial machinery, oil and gas and more. Founded in 1992, it is the fastest growing computational fluid dynamics (CFD) software company in the world. Its CFdesign® CFD software helps engineers to determine “will it work?” reducing the need for repeated physical testing in the lab. The company's CFD software integrates comprehensive fluid-flow and heat-transfer simulation into early phases of design and engineering, when companies can dramatically improve product quality, time-to-market, and ultimately profitability. The company's software is based on finite element analysis, a numerical technique for comprehensive engineering simulations that can be widely applied to products like pumps, fans or turbines or to mechanical, electrical or plumbing systems in buildings.

Q3: What technology does Blue Ridge Numerics provide?

A3: Blue Ridge Numerics software allows mechanical and building system engineers to virtually test and predict real-world behavior of new and existing designs and eliminate expensive physical prototyping cycles in the lab. Its CFD software allows engineers to make informed, up-front decisions about air flow, fluid flow or electronics cooling to help design and manufacture safer, quality products or construct more energy efficient buildings.

Blue Ridge Numerics has successfully broken down technological barriers that previously prevented the integration of CFD within the mainstream product development process. The company's robust, general-purpose analytical engine produces accurate simulations from within a range of CAD systems with little human time or simulation experience required. Recognized by *Desktop Engineering* magazine as “high-power CFD that operates from the designer's point of view,” CFdesign automates and removes the complexities of CFD set-up and meshing.

Blue Ridge Numerics' product line includes a broad spectrum of simulation capabilities focused on fluid flow and heat transfer. Engineers can visualize a digital prototype of a product, such as a hair dryer, vacuum cleaner, oven, or blender, to test single or multi-scenario flow and thermal properties at once, so they can digitally optimize the design, placement, and performance of critical components. In the construction industry, engineers can use CFdesign with Autodesk® Revit® MEP to more accurately predict air flow and plan optimum ventilation for their building design to meet environmental regulations or energy efficiency objectives.

Q4: Why did Autodesk acquire Blue Ridge Numerics, Inc.?

A4: The acquisition of Blue Ridge Numerics shows Autodesk's commitment to creating comprehensive and versatile Digital Prototyping offerings. Autodesk recognizes that simulation is a critically important element of design for manufacturing companies to be successful and compete. Simulation also represents a significant growth area for Autodesk's business. The acquisition of the Blue Ridge

Numerics business is expected to extend Autodesk's simulation capabilities with a broad spectrum of new advanced fluid flow and thermal simulation.

Q5: How will customers benefit from this deal?

A5: The addition of Blue Ridge Numerics simulation technologies will enhance the Autodesk solution for Digital Prototyping and help a larger audience of engineers to automate fluid flow and thermal simulation decision-making with digital prototypes. Autodesk® Inventor® and Autodesk Revit MEP (mechanical, electrical, and plumbing) customers will have enhanced ability to optimize and improve product or building system designs before they are built. Autodesk also plans to continue to support multi-CAD integrations on behalf of Blue Ridge Numerics, Inc. customers.

Q6: How will Blue Ridge Numerics technology be integrated into your software portfolio? Are there areas of duplication in Autodesk's and Blue Ridge Numerics' product lines? If so, how will they be addressed?

A6: We will continue to sell Blue Ridge Numerics products. Autodesk is absolutely committed that the Blue Ridge Numerics tools will remain CAD independent and interoperable with AutoCAD, Autodesk Inventor and Autodesk Revit as well as other competitive CAD products.

Autodesk intends to provide both simulation tools via Autodesk Inventor Professional and Autodesk Revit MEP as well as the more horizontally focused Blue Ridge Numerics product line. While there is overlap with Autodesk Algor CFD capabilities, Blue Ridge Numerics technology is largely complementary to existing Autodesk assets including our simulation software such as Autodesk® Algor® and Autodesk® Moldflow® software. Our goal is to provide our customers with the best available technology to solve their simulation needs.

Q7: What is Digital Prototyping, and why does it matter to Autodesk and Blue Ridge Numerics customers?

A7: Digital Prototyping gives manufacturers the ability to digitally explore a complete product before it is built—so they can design, visualize, and simulate designs from the conceptual design phase through the manufacturing process. By using a single digital model, manufacturers can determine real-world performance of the design with less reliance on costly physical prototypes – thereby improving cost and time-to-market, and increasing competitive advantage.

Blue Ridge Numerics customers will benefit from tight integration with Autodesk's industry leading 3D design and engineering software portfolio and the wide range of Autodesk partners that can help realize the benefits of Digital Prototyping.

Q8: Who are Blue Ridge Numerics' customers? Will Autodesk continue to support the Blue Ridge Numerics customers?

A8: Blue Ridge Numerics customers include many industry leading companies such as Parker Hannifin, Philips Medical, Top-Flite, and Wolf Appliance, Inc. These and many other customers have used Blue Ridge Numerics software and services to test the success or failure of a broad range of products like hydraulics, heat exchangers, pumps, fans, compressors, valves, nozzles, electronics systems, lighting, HVAC systems, medical devices and consumer products..

Autodesk is committed to supporting Blue Ridge Numerics customers and bringing them into the Autodesk manufacturing community.

Q9: Where will Blue Ridge Numerics software be available?

A9: The Blue Ridge Numerics, Inc. products are currently sold by a direct sales force and by resellers internationally. It is our current intention to retain many of these existing distribution methods during a transitional period and then in the long term ramp up distribution with the global Autodesk channel. Blue Ridge Numerics products currently support six languages including English, French, German, Japanese, Simplified Chinese and Traditional Chinese.

Q10: Will Autodesk continue to offer direct data exchange with competitive CAD modeling tools?

A10: Today Blue Ridge Numerics' products provide multi-CAD support through direct CAD/CAE data exchange with other CAD modeling software including CATIA®, Creo™ Elements/Direct™, NX™, Creo™ Elements/Pro™, SolidWorks®, Solid Edge™ and SpaceClaim®. Autodesk's intention is to work with these other CAD companies to enable Autodesk to continue to support this direct data exchange. In addition to operating with other CAD systems, CFdesign software supports direct data exchange with Autodesk® Revit® and is a 32- and 64-bit Certified Application for Autodesk® Inventor® 2011.

Q11: How will this acquisition strengthen Autodesk's differentiation in the CAD software space?

A11: The addition of Blue Ridge Numerics' product lines to Autodesk's existing portfolio will both complement and enhance the company's simulation capabilities and provide customers with a more comprehensive solution for Digital Prototyping.

Autodesk serves all size manufacturers -- from small to the very largest and they tell us that in today's global competitive environment, 3D alone is not enough for product designers to compete and win anymore. The ability to work with digital prototypes sets apart the companies who are best in class. Unlike our competition, Autodesk is well positioned to deliver scalable, attainable, and cost-effective Digital Prototyping tools to manufacturers of any size, across industries including consumer products, automotive/transportation, building products and fabrication and industrial machinery.