

What's Up MÄK

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VT MÄK Chosen to Deliver Wargaming Software to Stimulate Raytheon's Command View C4I System

MÄK will enhance VR-Forces, a powerful and flexible CGF platform, to provide a high-level wargaming environment



We are proud to announce that Raytheon Integrated Defense Systems has selected MÄK to develop the simulation that will drive the Wargaming & Training component of the Command View C4I system. The simulation engine will be VR-Forces, MÄK's Computer Generated Forces platform.

We will use VR-Forces' flexible architecture to enhance the aggregate combat model to operate at the division, battalion, and company levels. The VR-Forces scenario authoring environment will allow role players to "play the war" and transmit intel reports to the C4I system.

VR-Forces is known for its uses in tactical leadership trainers, threat generators for man-in-the-loop training systems, testbeds for hardware-in-the-loop weapon systems development, and embedded course of action analysis stimulators for operational systems; this contract will customize the software to stimulate command and control systems and enable higher level wargaming.

MÄK has a history of success using VR-Forces as the basis for Command & Staff Trainers (CST). MÄK provides commercial off-the-shelf (COTS) Command & Staff Trainers, such as Battle Command and QuickStrike, as well as development services to help customers build custom CST solutions. Our CST customers include the US Air Force (ASOC), the Dutch Army, Elbit's Homeland Security Trainer, and Rheinmetall's Air Defense Operations Simulator (ADOS) program.

“Despite a crowded field of competitors, Raytheon has chosen MÄK's VR-Forces as the simulation engine for their Command View C4I system. Raytheon's purchase and confidence reinforces MÄK's value proposition of offering a flexible, extendible, and agile simulation solution.”

– Dan Schimmel, CEO of VT MÄK 🌸

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Use Feature Data in VR-Forces to Build Higher Fidelity Scenarios

VR-Forces makes it easy to create complex and high-fidelity scenarios. This tip takes a look at a specific example from our [Community Forum](#) that shows how you can use widely available feature (vector) data to generate more realistic background traffic in your scenario.

Feature data sets contain geospatial information about natural and man-made objects in the environment. Linear features can describe roads, rivers, pipes, telephone wires, or fences. Common area data includes building foot-prints, political jurisdictions, and land use (like forests or orchards). Point data covers things like telephone poles, trees, garbage cans, or wells. Much of this geospatial information is available for large areas of the earth and more is being created every day. With so much data available, it's a great thing that VR-Forces can use it out-of-the-box.

The VR-Forces simulation engine uses feature data in two important ways:

- 1) **To Help with Navigation:** In addition to using feature data to enrich the visual scenes, recent versions of VR-Forces take advantage of S-57 data to navigate ocean water and building footprint data to plan routes around structures and urban obstacles.
- 2) **To Control User-Defined Logic:** Users can load any arbitrary feature data into VR-Forces and then access it in a script. For example, it's possible to load feature data about locations of named streets or addresses and then create tasks that will move an entity to the nearest street. VR-Forces has an built in example of a task "Go to Street", which moves the selected entity to a desired street using vector data.

For more realistic patterns of life in your simulations, use feature data. In the example from our [Community Forum](#), we use feature data of residential houses and local businesses to define peoples location within in the scenario. We use road systems to define bus routes and way-points to define bus stops. With a few scripts in VR-Forces, we set up simple behaviors in the scenario to represent daily patterns of life. These patterns include activities like people leaving their homes in the mornings to go to bus stops, where the buses pick them up and take them to work. By taking advantage of commonly available feature data, our scenario has more realistic background traffic and becomes a much higher fidelity scenario.

Let us know how you use vector data and scriptable tasks to build a high-fidelity scenario! 🌸

Limited Time Offer!

WebLVC + VR-TheWorld = Immediate Savings

Now through **December 19th, 2013**, we are bundling VR-TheWorld, MÄK's streaming terrain server, with the MÄK WebLVC Suite, a collection of web-based applications that can interact with existing simulations or be a platform for new applications. This bundle gives you ready-to-use thin clients, like a browser-based 2D/3D observer and a lightweight call-for-fire application.

Together, the MÄK WebLVC Suite and VR-TheWorld allow you to rapidly create customized interfaces that are easier to use and more intuitive to operate while reducing your overall development time and cost. Don't let this offer pass you by – contact us today at info@mak.com.

MÄK Webinar: DIS 7 - A Technical Tutorial

Tuesday, November 19th, 9am - 10am EDT

For the first time in almost 15 years, the DIS IEEE standard has been updated. The simulation standard now provides ways to expand and customize your DIS exercise. What does this mean for you? How can you take advantage of its new features? Will you have to rewrite your DIS software to support it? Join us for this one hour seminar, presented by MÄK's interoperability expert and Link Team Lead Engineer, Felix Rodriguez.

Felix will answer common questions, including:

- What has changed in this release of DIS?
- How can these changes help your simulation environment?
- How can you use VR-Link to take advantage of the new DIS 7 features?
- What does this new standard mean for backwards compatibility with existing DIS systems?

Sign up today! Registrants will receive a recording of the webinar.

Connect the Dots with MÄK at I/ITSEC 2013!

Each year at I/ITSEC, MÄK presents its line of  Simulation,  Visualization,  Interoperability,  Terrain, and  Web tools. To help make it easier for our customers to create and use simulations, this year we are showcasing the MÄK Training System Demonstrator. This system takes the advantages of each product group and connects them together to show you how to **reduce operator workload and increase development productivity**.

You will experience all the critical components of a training system, including:

- Custom high fidelity interfaces tailored to the specific needs of the student
- Light-weight role-player stations to cost effectively add part-task training
- Easy-to-use scenario authoring and powerful AI to generate rich and compelling simulated environments
- Informative visual presentations to maintain situational awareness, analyze training activities, and tell the scenario's story
- Innovative web-based instructor apps to control and dynamically influence the training exercise and to automate compelling presentations

Our demonstrator focuses on a maritime environment simulated by VR-Forces, but we'll help you see a clear path for a training system in whatever domain you require. In our demonstrator environment, you'll see air, land, sea, and submarine entities start off behaving according to their plans; through our training interfaces, CGF, and web-apps, users can manipulate the simulation to achieve training in their techniques, tactics, and procedures.

The left side of the demonstrator is the student station where VR-Vantage's amped up visuals provide a ship's bridge out-the-window view for the student. Our newest partner, Buffalo Computer Graphics, loaned us a Bridge Master E (BME) Radar simulation to add fidelity to the bridge crew station. The Task Group Commander uses a tablet (mobile device) to role-play the activities of the task group. The right side of the demonstrator is for the instructor. VR-TheWorld streams terrain into the VR-Forces CGF where every aspect of the running scenario can be manipulated. VR-Vantage provides a dynamic visualization that is remotely controlled by a web-based presentation app.



Visit us at I/ITSEC booth #1225 to see how MÄK is connecting the dots      to make training easier, more capable, and cost effective.

MÄKer Spotlight: Len Granowetter

Vice President of Products and Solutions



This month the spotlight shines on Len Granowetter, MÄK's Vice President of Products and Solutions. As a VP, Len takes part in all kinds of MÄK activities, whether it's whiteboarding design with engineers, negotiating licensing terms with a partner company, helping generate content for marketing material, reviewing proposals, interviewing new hires, or even working on SISO standards.

Len is a true "lifer" here at MÄK. He joined the company right out of school at age 21 and he's been leading the company to success ever since. He just celebrated his 20th anniversary with MÄK, which also happens to be the longest tenure of anyone at MÄK. When he first started, Len first worked on VR-Link development and tech support. Then he advanced to the VR-Link Lead, which gave him the opportunity to become the Lead Products Engineer. After that, he was promoted to the Director of Product Development, which finally brought him to his current position, the VP of Products and Solutions. Mr. Granowetter holds a B.S in Computer Science and Engineering from MIT.

Some fun things you may not know about Len - he's competed in three marathons and his best time was 3:49:36! He is the 1991 Massachusetts Monopoly state champion. Len met his wife Amy at MIT and they have two children - Jack, who is 6 1/2, and Isla, who is 2 1/2. He's spent more than a year of his life in Orlando, despite never having spent more than 7 days in a row there! That's a lot of traveling!

His hobbies include poker (he once won \$300 in a rock-paper-scissors tournament in Las Vegas!) as well as skiing, ice hockey, hiking and iPhone word games like Scrabble, Words with Friends, and Letterpress.

We hope we've piqued your interest in our MÄK team! For more info, visit www.mak.com. 