

# What's Up MÄK

## ITEC 2012 - A Sneak Peak at What's in Store

*Open Streaming Terrain, UVS Sensor Simulation, HLA Evolved, and Web Enabled Technologies - Oh my!*



VT MÄK is excited to once again be part of ITEC 2012, Europe's premiere simulation and training exhibitions. In London, England, May 20-24, we will be presenting our newest capabilities and concepts in an integrated ISR lab, based on our full suite of interoperable COTS products.

### Open Streaming Terrain

We're proud to present Open Streaming Terrain as a part of the ISR Lab demonstration - most notably, we'll be presenting simulation scenarios on our new Hawaii database. For more information about Open Streaming Terrain and our Hawaii terrain database, check out the story on [page 3!](#)

### UVS Sensor Stimulation with Simulated Video

In addition to Open Streaming Terrain, we will use the ISR Lab to showcase Simulated Video for Unmanned Aircraft Systems (UAS). We will show how our tools are used to build a synthetic, interactive, and scenario-driven simulated video stream that replace live video in the demonstration, development, testing, and embedded training of operational video exploitation systems, such as UAS ground control stations.

### Web Enabled Technologies

You'll also find MÄK combining web and mobile technologies with our traditional COTS modeling and simulation products to provide powerful and lightweight solutions - high-performing yet accessible anywhere. We are demonstrating a UAV ground control station in a web browser as a component of the ISR Lab, showing the flexibility of MÄK's COTS products.

We'll also be offering demonstrations of our Command and Staff Training solution, Battle Command. And of course, we'll be showing our entire line of HLA Evolved supported products.

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## Come see us at ITEC 2012!

Visit us at booth H120 or at either of these presentations:

### "Web-Enabled Modeling & Simulation - A Mash-Up of the Latest Web Technologies and Traditional M&S Products"

Innovation Showcase

Tuesday, May 22: 17:00-17:30

Presented by Len Granowetter, VP of Products and Solutions

### "The New HLA Standard Version: HLA Evolved"

SISO Program Presentation: Interoperability Aspects and Standards

Wednesday, May 23: 11:30-13:00

Presented by Len Granowetter, VP of Products and Solutions

Cashing in on Your Cache

This tech tip is prompted by a recent support question. The customer was planning a demo in which he wanted to view imagery from VR-TheWorld Server in VR-Vantage. However, the demo machine would not be connected to the network. He wanted to know if he could cache the VR-TheWorld imagery.

Yes! Absolutely! We do that ourselves when we are on the road and can't count on a network connection. VR-Vantage supports caching of terrain data by default. The primary reason is to improve performance. The first time you access data, regardless of the source, it might take a long time to load. VR-Vantage caches it in a format that allows it to load the data much more quickly the next time you need it. It uses the cached data whether or not the original source data is accessible. However, the presence of cached data on the local machine gives you the flexibility to use the data even when the source data is no longer accessible, as in the scenario this customer presented.

If you want to cache data for later use, load the source terrain and then move the observer through the terrain and look at all the areas you need to view, at the highest LOD that you need to view. Bear in mind that you can't cache more data than you have disk space on your computer, so you won't want to try to cache the entire world at the highest LOD.

Suppose that you have cached data from VR-TheWorld Online. When you start VR-Vantage, select VR-TheWorld Online from the server list on the splash screen. It will indicate that the server is not available, but you can connect anyway and VR-Vantage will use the cached data.

MÄK Webinars

The COTS Simulation Solution - A Platform for Your Innovation

Thursday, May 10, 2012; 10 am EDT

The benefits of starting your simulation project on a foundation of COTS tools may not always be obvious, especially as you struggle to maximize your program's budget. But a COTS approach can provide you with a starting point to let you focus on the expertise your team brings to project. This webinar will show you how COTS products can reduce your costs, speed your development, and provide you with a platform for your innovation.

Jim Kogler, MAK's Director of COTS products and a veteran of the modeling and simulation industry, will discuss the benefits of a COTS approach and share the highlights of the MÄK COTS interoperable and flexible product line.

Open Streaming Terrain for Faster Time to Simulation - Breaking the Land Speed Record

Thursday, May 17, 2012; 10 am EDT

Imagine a world where building terrain is faster and more streamlined, where scenario generation can occur as you tweak the terrain. This is a terrain without borders, that allows simulation development and terrain creation to happen concurrently. Where your synthetic world can be up and running faster than ever before. This is Open Streaming Terrain, from MÄK.

Join us to learn how you can take advantage of MAK's VR-Vantage, VR-Forces, and VR-theWorld Server to cost effectively build a correlated, seamless, and global 3D environment.

Dan Brockway, a twenty year veteran of M&S terrain technologies, will explain how Open Streaming Terrain can change terrain in your (simulated) world. He'll take you through the development of MAK's Hawaii database, built to show Open Streaming Terrain in action. Sign up today to enter a new world of terrain.

**Want to join us?** To register for the COTS Simulation Solution webinar, click [here](#). For the Open Streaming Terrain webinar, click [here](#).

Aloha! Visit Hawaii with MÄK!

Hawaii Database Illustrates Streaming Terrain



This month MÄK will be taking you to Hawaii. Well, virtually - sorry, no puka shell necklaces or tikis bars here. We're taking you to a not-so-distant paradise where building your terrain is faster, more streamlined, where scenarios can be built while you tweak the terrain. MÄK's Hawaii terrain was built to demonstrate how the terrain techniques supported by MÄK's VR-Vantage, VR-Forces, and VR-TheWorld Server can be combined to cost-effectively create a correlated, seamless, global 3D environment - with just the right amount of fidelity in each area for the tasks at hand.

Similar to the volcanic activity that created the chain of tropical islands, our streaming terrain solution has been growing and building over time. It started with support for open streaming terrain in VR-Vantage, followed by the launch of our streaming terrain server VR-TheWorld. And we've built from there - correlated streaming terrain in VR-Forces and support for streaming features in VR-TheWorld 2.0 and VR-Vantage. Our release of VR-Forces 4.1 will support streaming features, furthering our open streaming terrain vision. Put all these capabilities together and rising from the sea is Oahu, an example of MÄK's Open Streaming Terrain.

Later this month we'll be offering you a guided tour of the island, but in the meantime, learn more by downloading our [white paper](#) on "Building Hawaii".

And don't forget - you can get two components of MÄK's open streaming terrain for the price of one with MÄK's special VR-TheWorld/VR-Vantage bundle, available for a limited time. [Click here to learn more.](#)

Where we'll be...

- May - [AlaSim 2012](#)  
[ITEC 2012](#)  
[ATCA Technical Symposium](#)
- June - [SimTecT Simulation Technology and Training Conference](#)
- July - [AUVSI's Unmanned Systems North America](#)

# Customer Success!

## Interoperability COTS tools by VT MÄK at the Heart of MLM’s New Approach to Management Systems

For a recent Air and Land Command & Control Integrated Systems project, the team at MLM developed a new management approach that draws on the company’s expertise and existing customer infrastructure, as well as on currently available technology and advanced Information Technology (IT) tools.

The system is the result of over thirty years of significant knowledge and experience in designing and executing national and theater information C4I systems. It offers decision makers’ complete command and control over their forces in peacetime, during times of crisis, in Operations Other Than War (OOTW), and in full-scale conflict. It generates a unified rapid and reliable Situation Picture (SP), while also automating data collection, transfer, processing, management, protection, and dissemination through secured communication networks utilizing Internet/Intranet Technology in near real-time. While efficiently and effectively utilizing the Armed and Paramilitary Forces and Civilian Organizations, MLM’s new management system also enables Central Headquarters to perform command and control functions at all times.

The building blocks for the MLM system are the Air Defense, Navy, Army, National Guard, and Police Control Systems that together provide an overall Integrated Common Situation Picture (ICSP). The other major components include databases, data management tools, information and automatic data processing systems, decision support tools, display systems, and communication networks.

Based on the HLA standard, MÄK’s VR-Link is used as the basic infrastructure for the system’s main data bus connecting all data sources to all the operational stations, enabling the distribution of the Situation Picture, and smoothly merging simulated entities with real live entities. A VR-Link-based component is added to all the applications in the bus, including the operator’s stations with its well-designed map display.

Because HLA is implemented and well-supported by VR-Link and because the tool makes it easy and riskless to implement a distributed network data bus, the team at MLM took advantage of the HLA open standard for their management system.

“This case is a perfect example for a trend we see more and more, of merging M&S technology within C4I systems,” said Jacob Silbiger from Synergy Integration. “It opens new horizons for mission planning and readiness.”

MLM is a multifaceted design, development, and systems engineering organization. Its projects include Air and Missile Defense Systems, Advanced Avionics, Simulation and Training Systems, Crisis and Emergency Management Solutions, and C4I Air and Land Command & Control Integrated Systems. It is part of Israel Aerospace Industries (IAI) Ltd’s Systems, Missiles, and Space group. IAI is the largest aerospace and defense company in Israel, specializing in solutions for a wide range of air, land, sea, space, and homeland defense needs. IAI creates and supplies advanced systems for Israel’s Ministry of Defense and other groups worldwide.

If you would like MÄK to publish your success story, contact [marketing@mak.com](mailto:marketing@mak.com).

Check out some of our recent Customer Success Stories:



# MÄKer Spotlight: Phil Ng

## Software Engineer, VR-Forces



Meet Philip Ng, one of MÄK’s software engineers for VR-Forces. Since he started working at MÄK two and a half years ago, he’s worked on every VR-Forces 4.0 version, as well as B-HAVE 2.0. As with every engineer at MÄK, he works on customer support issues that arise, mostly in the areas VR-Forces and some B-HAVE. You can also find Philip, who goes by Phil, in our [MÄK forums](#) to answer questions regarding our simulation products.

Outside of work, Phil has quite the diverse array of interests. Upon meeting him, his interest and love for food will probably strike you as most notable. He’s willing to try any food at least once – especially those from other cultures – and will specifically seek out places local to the region if he finds himself traveling. While some of the other engineers jokingly label him a “food snob,” Phil prefers the term “food enthusiast.”

More a hobby than interest, Phil is gifted with a rubix cube. He can solve one from any starting position between 1-4 minutes. He says he’s a bit out of practice now, but his shortest time was 1 minute and 22 seconds.

Interesting fact about Phil: His favorite color is blue and makes most purchasing decisions based on whether or not the item comes in blue, how “good” the shade of blue is, and if there’s enough blue in the item. His picture includes only a few of the blue items found in his office.

We hope we’ve piqued your interest in getting to know our MÄK team. Stay tuned to our [website](#) for the latest on MÄK!

## Product Updates:

**VR-Exchange 2.0.1** – Adds VC10 Support and improved HLA Evolved API

**MÄK RTI 4.1.1** – FOM handling performance improvements

**VR-Link 4.0.4** – Maintenance release

**VR-Vantage 1.4.1** – Distributes Freeview and VR-Vantage suite with a terrain configuration allowing users to experience the Hawaii Demo

For more information, contact [info@mak.com](mailto:info@mak.com) or visit [www.mak.com](http://www.mak.com)!

## A Survey for the Non-Survey Inclined

What would I have to give you to get you to answer this survey question?

- A) nothing
- B) a cool t-shirt
- C) \$5
- D) \$500
- E) \$50,000

\*Note: Answering this question does not mean you’ll receive the desired reward.

