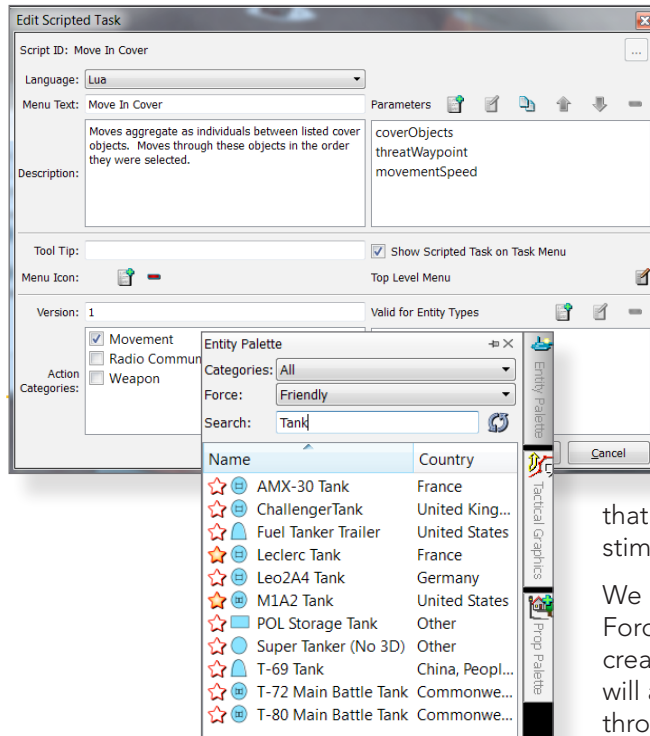


What's Up MÄK

VR-Forces 4.1: Raising the Bar for Scenario Generation



MÄK is excited to announce that in January 2013, we will release VR-Forces 4.1. This release introduces significant changes in the way people will use VR-Forces; specifically, it raises the bar on the type and complexity of the scenarios users can create. **These changes aren't incremental - they are revolutionary.**

Like most VR-Forces releases, this one is packed with exciting new features including tactical graphics, which work in both 2D and 3D view modes allowing users to understand their tactical environment quickly and easily. We have added new models such as mortar teams and bombs, both smart JDAM GBUs and CBU's. You will also find new camera effects view modes so that in-set views can mimic IR or NVG sensor views as you create and play your scenario. We have increased the fidelity of our artillery model so that users can enable the simulation of individual rounds from both mortars and other artillery units. By simulating individual rounds, simulations that are using radar to detect incoming rounds can now use VR-Forces to stimulate their virtual environments.

We are also significantly overhauling the way entities are created in VR-Forces. This is necessary because we are committed to significantly increasing the simulation model set content in VR-Forces. The 4.1 release will add fifty more simulation models and we plan to add hundreds more throughout the coming year. You can now assign all entity types to any force type on creation. Additionally, users can search for model types by model name, country, or category simply by typing a few characters. You

can also tag entities in VR-Forces as favorites, which will then show up on the right click menu for fast future reference.

The most exciting change to VR-Forces 4.1, however, is the addition of Lua scripted tasks. This feature allows users to quickly script tasks that are significantly more complex than previously possible. Lua is a lightweight and relatively simple scripting language used widely in the commercial video game industry. (If you want to know more about Lua you can have a look here: www.lua.org.) What's significant about Lua scripting is that both MÄK and our customers will be able to generate higher level state machine based tasks, complete with an automatically generated task GUI, in a record amount of time. It's difficult to describe just how powerful this new feature is, so here are a few tasks we've already created:

- **Aircraft Holding** – A tasked plane will assume a racetrack holding pattern using the correct entry criteria at the specified altitude and velocity.
- **Talk to Friends** – When assigned to multiple people in a B-HAVE environment, most of the people will wander around, but occasionally pairs of people will stop and talk to each other.
- **Move In Cover** – An aggregate formation will move between cover points using a bounding over watch-scheme. Entities will run between cover positions while other teams' members keep weapons trained on threat.
- **Place a bomb** – An entity can be tasked to place a bomb in a given location.
- **Provide Close Air Support** – a tasked aircraft will take the 9 Line CAS inputs and execute a bombing mission.

These are only a few of the tasks we have created. Each of them was created with under 100 lines of Lua. To understand more how Lua can help you, please request your Early Adopter release today from our Director of COTS products, Jim Kogler, at jkogler@mak.com!

Learn more about
our "What's New in
VR-Forces 4.1"
Webinar

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Making Sense of 2D Label Jumble-aya

In Plan View mode in current versions of VR-Forces and VR-Vantage, entity labels can quickly look more like a bowl of SpaghettiOs® than a useful display of information. Figure 1 shows a scenario with relatively few entities and only two of a possible seven text labels enabled. Yet they are all merged into a jumble. Fortunately, VR-Forces and VR-Vantage have some features to help make sense of this information.

The entity label text for each entity is actually placed on a rectangular panel. By default, this panel is transparent so that you can see the terrain beneath it. However, you can control the opacity. Open the Display Settings dialog box and select the Symbol Decorations page. If you drag the Background Opacity slider to the right, you will see the panel background displayed (Figure 2). If you select an entity, its labels jump to the front (outlined in black). If you don't like our choice of color, you can change the background color.

In VR-Forces 4.1 and VR-Vantage 1.5, you will be able to change the color of the text and add a shadow to improve visibility on different color terrains.

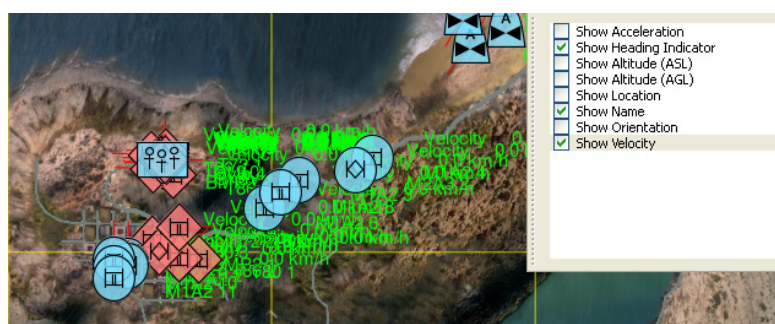


Figure 1

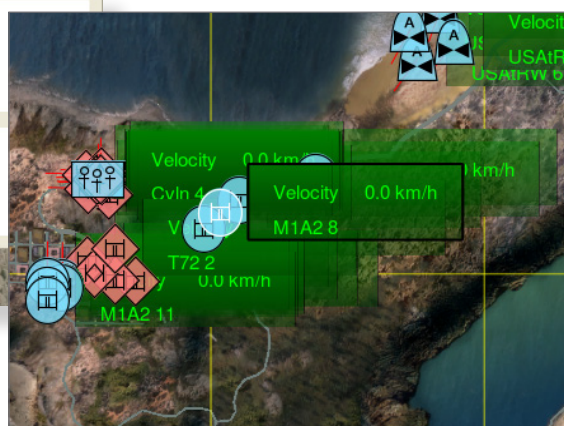


Figure 2

MÄK Webinars

MÄK @ I/ITSEC - An After Show Webinar

Tuesday, December 18, 2012; 9-10 am and 3-4 pm EDT

To share the I/ITSEC experience with the folks who can't make it this year, we are hosting a webinar we're calling MÄK at We'll walk attendees through the highlights of I/ITSEC 2012 and share industry trends spotted at the show, as well as MÄK's demonstrations and presentations. Hear an overview of MÄK's WebLVC Initiative, learn what's new in VR-Forces, and find out the latest news about MÄK's full product line.

What's New in VR-Forces 4.1

Wednesday, January 23, 2013; 9am EDT

Join Jim Kogler, Director of COTS Products, as he enumerates the many new aspects of VR-Forces 4.1. Available in January 2013, VR-Forces 4.1 will focus on better scenarios and increased usability; features will include scriptable tasks using LUA, large and streaming feature data sets, bombs, mortars, ballistic munitions model, force independent entity creation, increased entity types, MSDL laydown and support, and enhancements to 3.12 features including tactical graphics and tactical smoke and hazard cloud displays.

Harnessing the Power of Lua: A Technical Tutorial

Wednesday, February 27, 2013; 9am EDT

VR-Forces 4.1 puts the power of Lua, the light-weight programming language, to work to help you script complex behaviors. Join Bob Holcomb, MÄK's Principal Engineer, New Technologies, and Lua scripting expert, to learn how you can put Lua to work for your simulation. This 90 minute tutorial will provide a quick overview of the Lua language and offer some hands on examples of its use in VR-Forces.

Can't join us? Registrants receive a link to download the recorded webinar.

VR-Vantage 1.5 Adds Streaming Video and CameraFX to VR-Vantage Product Line

Updates to VR-Forces aren't the only thing going on at MÄK! We are also pleased to announce our most recent release of VR-Vantage, featuring Streaming Video and CameraFX.

Streaming Video is the key enabling technology in producing simulated video, the flexible alternative to live video for demonstration, development, testing, and embedded training of operational video exploitation systems. These systems include UAS ground control stations, situational awareness systems, sensor fusion systems, and remote video terminals. This scalable capability can be used in a laboratory, in a classroom, or deployed with the operational system. The video stream, including metadata, uses open standards that are Motion Imagery Standards Board (MISB) compliant, allowing for the video feed to switch between live and simulated video, seamlessly and transparently.

"Streaming Video is the keystone that bridges the gap between a simulated world and a real system. VR-Vantage can now be directly plugged into real systems to simulate video streams, enabling our warfighters to more effectively train as they fight," says Jim Kogler, Director of COTS Products.

CameraFX, which provides affordable, non-physics based visualization of EO, NVG, and IR scenes, is also included in the VR-Vantage 1.5 release. Based on JRM Technologies' sensor technologies, it models a sensor's blur, noise and bloom. The 1.5 release also includes audio support, tactical graphics visualization, radio communication line visualization, and tactical smoke, among others.

VR-Vantage is MÄK's line of visualization products that includes VR-Vantage Plan View Display, VR-Vantage Stealth, VR-Vantage IG, and the VR-Vantage Toolkit. These products let users visualize simulation environments from multiple perspectives. These perspectives range from realistic scenes for out-the-window or sensor views for man-in-the-loop training devices, to 3D informational views and tactical map displays for planning and situational awareness, and also to exaggerated reality views for visual analysis.

TheWorld + TheViews = Special Offer

Buy VR-TheWorld, MÄK's premiere web-based streaming terrain server, and receive a free VR-Vantage Stealth viewer with a year of maintenance. That's a **35% savings** with this bundle.

This special offer allows you to take advantage of the flexibility of MÄK products. Build your simulation in VR-theWorld's synthetic environment and visualize your virtual battle in 3D or 2D with VR-Vantage Stealth.

There's no better time to purchase our VR-theWorld Server. Contact your MÄK sales representative today at info@mak.com or +1.617.876.8085 x2 to learn how this bundle can take your project to the next level.

Hurry! This savings only lasts until December 23.

Attention: Licensing Update

We've listened to our customers' suggestions and are implementing a new policy to improve the usability of our products. Effective immediately, all new license keys can be used on any supported platform (see [matrix](#)).

For already-installed licenses with up-to-date maintenance, you can request a new key that will give you the freedom to use whichever platform you want, whenever you want it.

To receive a new key, please email your request to keys@mak.com and provide your invoice number and machine information. If you've got questions about this new policy, please contact your account manager.

Save the Date: VR-Forces Training

Join MÄK for a VR-Forces Training the week of Monday, January 7! To sign up, please contact your account manager. If you do not know your account manager, please email sales@mak.com. Space is limited, so sign up today!

(Don't be deterred by the chilly Boston weather. Our office is heated AND we have an unlimited supply of coffee, hot chocolate, and hot tea. It's really quite cozy.)

MÄKer Spotlight: Pete Swan Business Development Executive



This year, Pete is celebrating* his 30th year in the simulation and training industry, where he's spent his entire career.

Pete's position at MÄK as a Business Development Executive includes a variety of responsibilities. He is an avid traveler, prospecting for and visiting customers throughout North America and sometimes in Europe and the Middle East. He is frequently the MÄKer you see representing MÄK at conferences and tradeshows worldwide. In addition to traveling the world (and exploring new and wonderful airports and hotels), Pete writes proposals and supports our MÄK sales team in any and every possible way.

Pete is British by birth, Canadian by choice, and lives outside Orlando, close to the epicenter of DoD simulation where PEO STRI, NAWCTSD, PM TRASYS, AFAMS, and many contractors are based. He enjoys pointing his webcam outside from the comfort of his home office in Orlando, especially when it's cold and miserable in Cambridge.

He enjoys passing time with his Kindle, especially now that he's plowing his way through the four book digital copy of the Game of Thrones series. Pete relies on his MP3 player to drown out the screaming kids whenever he's on a plane (which is often) and is always adding to his rock CD collection. (He admits that he seems to be largely stuck in the 70's and 90's - skipping right by the 80's. "It's about time Rush was nominated for the Rock and Roll Hall of Fame," he argues.)

Pete is also an avid hiker and camper in the state parks and wilderness areas around Central Florida and is usually accompanied by his wife, Jennifer, and two dogs. Every chance he gets, Pete is fishing from the shore, from party boats, or from OPBs (other people's boats!).

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

*Note: Pete hesitated to use the word "celebrate."