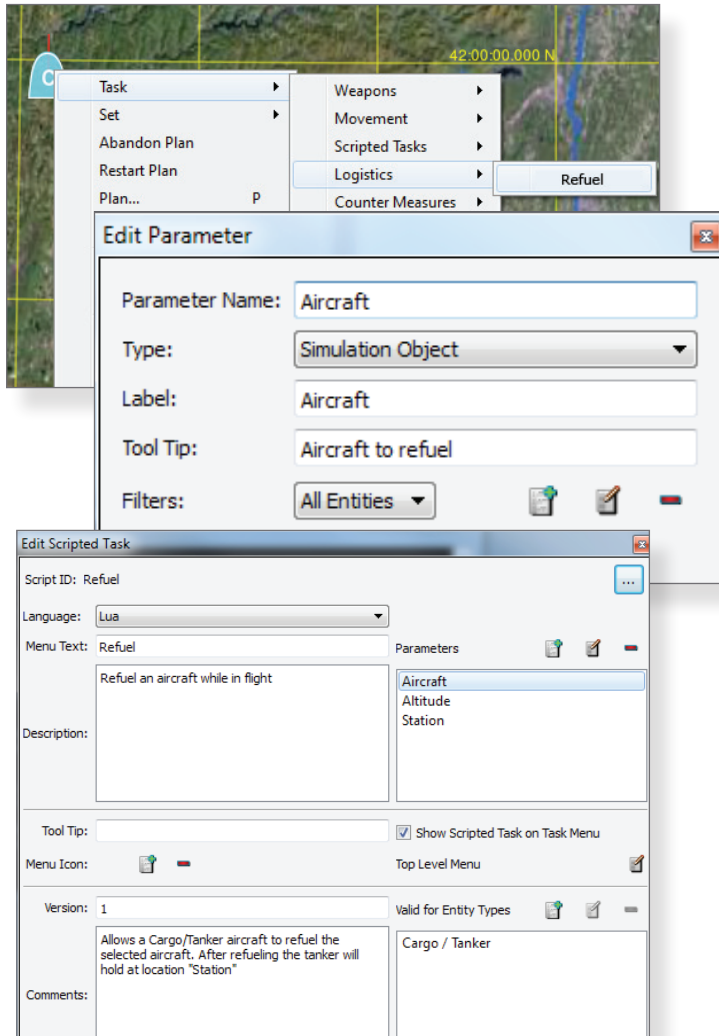


What's Up MÄK

Build Better Behaviors in VR-Forces 4.1 with Lua Scripting



We've got a new member coming on board to the VR-Forces team - say hello to Lua, a scripted and light-weight programming language, soon to be available in VR-Forces 4.1. Because of Lua's light-weight and fast nature, in addition to its ability to bind to C++ toolkits, it's become quite popular in the video game industry as the preferred way to extend game engines; these same reasons will make Lua a wonderful part of MÄK's software arsenal.

By taking advantage of Lua, MÄK will make scenario generation in VR-Forces significantly easier for several reasons.

- The process of developing a new task will be more approachable, meaning that task developers will not need to configure a large and complicated C++ environment. For example, you won't need a compiler installed when writing or maintaining a task. If your team has developed a custom task and you discover a small issue with it, you can edit the task quickly through VR-Forces without having to set up (or go back to) your development environment.
- The lightweight/scriptable nature of Lua tasking will offer a whole new approach to task development, which is not possible with a compiled language. Because Lua is a run-time interpreted scripting language, you can develop tasks while running VR-Forces and simultaneously developing a test scenario. You still need to write and test the task with Lua, but there is no requirement to open and close applications, or compile anything. You can test your work in real time by just replaying your scenario.
- MÄK plans to write a number of "higher level tasks" in Lua to distribute with VR-Forces. Once tasks start focusing on more complex maneuvers like refueling a fighter or battle drills, we believe different customers may want slightly different behaviors. Because MÄK will write these tasks in Lua, it will be easy for you to edit the tasks in real time (while VR-Forces is running) to tailor them for your specific environment and tactical philosophy.

When Lua scripting is available in VR-Forces 4.1, customers who have always been able to write tasks in C++ can now use Lua to write their tasks. The Lua scripted tasks will appear in the task menu with all C++ tasks and the end user will not be able to tell the difference between a C++ and a Lua task.

Expect to see Lua and the new features of VR-Forces 4.1 at the end of Q4 2012.

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Learn more about building better behaviors in VR-Forces with our
Lua Scripting FAQ

MÄK's Tech Tip by Jeff Bail

Creating Local Objects in the VR-Forces Front-end

Most objects simulated by VR-Forces are published by the simulation engine (back-end) and re-lected into the GUI (front-end), as well as all the other applications on the simulation network. In some cases however it's nice to have certain objects which only exist within one front-end. Some objects may only be useful or relevant to the operator of one particular front-end. For instance, if an operator is creating and manipulating intervisibility lines to determine where to place entities, those graphics should not be shown on any other displays. Other objects may be private or sensitive and should not be shared amongst the other displays. For instance, in a training application tactical graphics which describe the missions and plans for a trainee on the friendly force should not show up in the display of an opposing force trainee; otherwise the trainee's every move would be known in advance. You'll be able to take advantage of this capability with the new tactical graphics features which are coming up in VR-Forces 4.1!

In VR-Forces 4.0.4, a new class called `DtLocalObjectManager` was introduced which allows a front-end to track its own collection of objects, which are created locally and never sent to the back-end or published on the network. In addition to the state data for each object, the visibility of the object and its assignment to a tactical graphics layer is also stored. `DtLocalObjectManager` has methods to create and manage local environmental objects (such as waypoints or routes) as well as entity objects (such as tanks or planes). VR-Forces 4.0.4 also includes a new example plug-in called `gui-LocalCreateObject` which sets up a new "Object Demo" menu from which the user can add and remove a variety of local objects. Try enabling this plug-in, opening the "Ground-db.mtf" terrain, and then adding some of the objects from the menu. You'll see them on the terrain display, you'll see them in the Overlays tab of the Objects List dialog box (where they'll be organized under an overlay created by the example), and you'll see them in all the other object lists, but you won't see them in any other front-ends!

MÄK Webinars

WebLVC – Bringing Live, Virtual, Constructive Simulation to the Web

Wednesday, October 31, 2012; 9:00-10:00 am and 3:00-4:00 pm EDT

A Payload Operator Station in a browser? A Stealth viewer built on Google Earth? HLA federates written in JavaScript? An IOS running on iOS? From WebGL to WebSockets, the latest technologies enable browser-based modeling and simulation applications that are powerful and lightweight – high-performing, yet accessible anywhere.

VT MÄK is building on our twenty years of interoperability expertise to link web-based applications with traditional HLA and DIS federations. Join us in this webinar to learn how MÄK can put web technologies to work for your program, whether you're operating in a closed lab, or over the internet.

We'll introduce you to the WebLVC protocol, prototyped by MÄK and proposed as the basis for a new SISO Standard. See how the MAK WebLVC Server can speed your web development by delivering data from native simulations directly to your browser-based applications. And take a test drive of the future of M&S on the web with our WebLVC Testbed. This webinar will be led by Len Granowetter, MÄK's Vice President of Products and Solutions, and Chair of the SISO WebLVC Study Group.

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

Want to join us? To register for the WebLVC webinar at 9 am, click [here](#). To register for the 3 pm webinar, click [here](#).

Product Updates

VR-Forces 4.1 - Supporting Import and Export of MSDL

The next release of VR-Forces (4.1 - due to release in Dec 2012) will support the import and export of Military Scenario Definition Language (MSDL). MSDL is a SISO Standard (SISO-STD-006-2010) that provides a format for specifying force and entity lay-downs. With MSDL, you can define where all your players are located in a given scenario. By supporting MSDL, VR-Forces will be able to import scenario placements from other compliant simulation tools, such as OneSAF, greatly increasing the speed and ease of building a new scenario. Supporting MSDL is part of MAK's continuing commitment to open standards. If you are interested in more information about MSDL, please let us know!



Psst...We're moving!

Starting October 8, our new address is:
**150 Cambridge Park Drive, 3rd Floor
Cambridge, MA 02140**

MÄKer Spotlight: Michelene St. Amand

The Most...*



**"I don't always market simulation software,
but when I do, I prefer MÄK."**

Her degree from BU is a BABS**.
When hit by a car, she bounced.
She knows what a Utilidoor is and has navigated one.
She once named a MÄK conference room "TARDIS."
She has been questioned for orchidcide.
Her attic holds gold medals for fastest...walker.
Her handwriting has been mistaken for a font.
She once threw a party and everybody came.
Librarians cry when they see her, because she can read all those books in two weeks.
She still roots for the Steelers...from 1979.
She finds Jonathan Goldsmith and Will Lyman, uninteresting.
Her summer job was to create Star Trek factoids.
Her company has paid her to dress like a construction worker, princess, superhero, beer wench and rock star.
Her son was so excited to meet her he arrived five weeks early, and brought her appendix along.
Her organ donation card, also lists her tiara.
She considers marketing her hobby.
She juggles brand building, messaging, awareness generation, tradeshow planning, public relations, content creation, and cacti on a daily basis.
Reporters send her press releases.

She is...the Most Interesting Marketing Director at MÄK.

* Inspired by [The Most Interesting Man in the World](#)

** Bachelor of Arts and Bachelor of Science from Boston University