

# What's UP MÄK

## CUSTOMER NEWS :

## VR-Forces Chosen for UK Watchkeeper Program

MÄK and our European reseller Antycip Simulation have been awarded a contract by VEGA Group PLC to supply VR-Forces to support the Watchkeeper UAV (Unmanned Air Vehicle) Program for the UK Ministry of Defence.

Under contract to Thales UK, VEGA will be responsible for managing the development and delivery of a training solution for both operator and maintenance crews for the Watchkeeper UAV system.

Watchkeeper will provide the UK armed forces with an essential Intelligence, Surveillance, Target Acquisition and Reconnaissance ("ISTAR") capability, based on a tactical UAV system, and will be a key component of the UK's drive for Network Enabled Capability ("NEC").

VEGA's training solution builds on a heritage of similar projects in both Aerospace and Defence, and delivers significant new advances in the MoD's ability to achieve deployable team training with reduced flight training costs and asset dependency. It employs real-time desktop simulation and image generation in a scalable synthetic environment. It features classroom based instruction facilities, physical models for assembly and

disassembly, and mock-up ground control stations, through which operators will learn to control simulated UAV's and their on-board suite of imaging payloads. To deliver training environments, VEGA has developed a generic software architecture that will integrate commercial off-the-shelf software products with Thales Watchkeeper operational software.

"VR-Forces is a robust and flexible CGF, making it the choice for many large simulation and training programs like Watchkeeper," said Marc Schlackman, vice president of marketing and sales at MÄK Technologies. "MÄK is pleased to be chosen by VEGA to help meet the training needs of the Watchkeeper UAV system in the United Kingdom." ■



NEWS : 2

PRODUCT UPDATES : 2

TECHNICAL TIP : 4

WHERE WE'LL BE : 4

Enter our Chowdah  
Fest '07 Contest.

Learn more inside.



A PUBLICATION OF



68 Moulton Street, Cambridge, MA 02138

PHN 617.876.8085

FAX 617.876.9208

EMAIL [info@mak.com](mailto:info@mak.com)

WEB [www.mak.com](http://www.mak.com)

EDITOR Micheline St. Amand, Senior Marketing Manager

## MÄK InfoSession

Please join us for our bi-annual InfoSession at Fall SIW  
Holiday Inn International Drive  
Orlando, FL  
Tuesday, September 18  
From 12:00 – 1:30 pm  
Pelican Room



Jim Kogler, MÄK's Lead Products Engineer, will share the latest news about our products and listen to your ideas for enhancements. Lunch will be provided. To attend, please RSVP to Mischa St. Amand at [mstamand@mak.com](mailto:mstamand@mak.com) or at our SIW Booth #1.

Can't join us in Orlando? We'll be hosting an InfoSession webinar a week later on Tuesday, September 25 at 9 am EDT and 4 pm EDT. For a link to registration visit [www.mak.com/community/webinars.php](http://www.mak.com/community/webinars.php)



## MMMmmmm...Chowdah Chowdah Fest 2007

Awe your coworkers. Impress your friends. Use your prescience to guess the theme for the 2007 Chowdah Fest! The winner receives a gift certificate to Legal Seafood and ten tickets to the MÄK Chowdah Fest 2007.

(Since we like you, we'll give you a hint – our theme is always related to either MÄK's hometown or our products or both.)

Send your guess to [chowdahfest@mak.com](mailto:chowdahfest@mak.com). Contest closes November 1.

The contest is open to all recipients of the newsletter and current MÄK customers. One guess per person. In the case of more than one correct guess, the winner will be chosen by raffle. Void where prohibited and other necessary legal mumbo jumbo. Extra Credit – If we use your guess as the theme for the Chowdah Fest 2008, you're also eligible for a nifty prize.

## Platform Independent Licensing

MÄK products can now be upgraded to a Multi-Platform License to make the licenses Platform Independent. MÄK products are portable, built for a range of operating systems. You can now take advantage of this by converting your license to a Platform

Independent license. This enables you to build and run your applications on any of the supported platforms.

Product versions available by operating system are listed at <http://www.mak.com/products/productversions.php>

For pricing or more details, please contact [info@mak.com](mailto:info@mak.com) or 1.617.876.8085 x2

## Now SHOWING: MÄK Webinars

Many users have expressed interest in our bi-annual InfoSession held at SISO's SIW Conference. Unfortunately, many of those interested people have been unable to join us. We're pleased to announce that we'll be bringing our InfoSession to the web, as we kick off the MÄK webinar series.

In addition to the InfoSession, upcoming topics of our webinars include B-HAVE and the RotorLib helicopter plug-in to VR-Forces.

To check out the full schedule, visit [www.mak.com/community/webinars.php](http://www.mak.com/community/webinars.php).

Or drop us an email at [webinar@mak.com](mailto:webinar@mak.com) with "Subscribe" in the headline and we'll add you to our webinar announcement list.

## MÄK Platform Support Updated

Periodically, MÄK reviews the platforms upon which we build and support our suite of products. We recently completed a review, and are pleased to announce several minor updates to our supported platform list. The changes will affect the Linux and Solaris platforms.

Starting early this fall, new Feature Releases for products which currently support Linux or Solaris will add support for Fedora 7, Red Hat Enterprise 5, and SPARC Solaris 10. Simultaneously, we will stop building new Feature Releases on several older versions of these platforms: Red Hat Enterprise 3, Fedora Core 3, and SPARC Solaris 8. These changes only affect new Feature Releases; older platforms will still be supported by Maintenance Releases.

We're also pleased to announce that MÄK products\* now run on Red Hawk Linux. While our products are not built with specific Real Time capabilities, they will run on the OS. ■

\* With the exception of the MÄK Stealth

## PRODUCT UPDATES

### MÄK RTI 3.2

This is a Feature Release that adds significant new functionality to the RTI. Some of the improvements include:

- "Implicit DDM" – a unique feature that allows you to take advantage of HLA's DDM (Data Distribution Management) functionality without having to modify application code to use the DDM API. Instead, FOM-specific RTI plug-ins can inspect your federation data, and automatically make DDM calls on your applications' behalf.
- An interactive graphical representation of your federation's topology has been added to the Web-based RTIspy GUI.
- Ability to modify many RID-settings during run-time through the Web-based RTIspy GUI.
- Dynamic graphs in the Web-based RTIspy GUI to depict update rates and data rates for each federate.
- Modular FOMs – an important feature inspired by HLA Evolved, that

we have implemented with the context of the existing HLA 1.3 and IEEE 1516 APIs. The RTI now allows a federation to build up a FOM at runtime by loading several "FOM Modules". This allows new federates that require FOM extensions to join existing federations without having to update and distribute a new extended FOM to all federates.

- Smart Update Rate Reduction – another feature inspired by HLA Evolved, that we have implemented for HLA 1.3 and IEEE 1516. Federates can specify to the RTI a maximum rate at which they would like to receive updates for specific class attributes. Updates that are sent more frequently are filtered by the RTI, so they do not reach federates that don't require high frequency updates.
- The Qt-based rtiexec GUI no longer requires an RTIplus license. (RTIplus licenses will still be required for the web-based rtiexec GUI and the web-based LRC Console.)

## VR-Exchange 1.4

This is a Feature Release that adds significant new functionality, and brings VR-Exchange up to date with current versions of VR-Link (3.11) and the TENA Middleware (5.2.1). Some of the new capabilities and fixes in VR-Exchange 1.4 include:

- New translators have been added to the DIS Broker for the following PDUs:
  - Start/Resume
  - Stop/Freeze
  - Acknowledge
  - Comment
  - Data
  - SetData
  - Radio Transmitter
  - Radio Receiver
  - Signal
- New translators have been added to the HLA Broker for Data and SetData interactions
- HLA Broker now correctly translates variable datum records in Comment interactions
- TENA Broker now correctly transmits variable datum records in Comment interactions, and correctly populates the receiver ID.
- Translation of Aggregate State PDUs in the DIS Broker now works correctly.

## MÄK Gateway 4.3

This is a minor Feature Release that brings the Gateway up to date with recent compiler and VR-Link versions. FOM Mapper plug-ins for MÄK Gateway 4.3 can now be built against VR-Link 3.11, and support for MSVC++ 8.0 has been added. (MSVC++ 7.1 is still supported as well).

In addition to the platform upgrades, MÄK Gateway 4.3 includes several fixes and enhancements, including:

- Ability to poll for host discovery for emitter systems. If an emitter system is discovered before the entity that it is attached to, the Gateway polls for the discovery of the entity and properly processes the system. Enable this feature with the pollForHostDiscovery parameter.
- The Gateway can now translate entity embarkation and disembarkation messages.

## VR-Forces 3.10.1 & MÄK Plan View Display 2.10.1

This is a Maintenance Release that contains various bug fixes implemented since VR-Forces 3.10. We recommend moving to VR-Forces 3.10.1 if you are currently using VR-Forces 3.10. We have also released a corresponding Maintenance Release of the MÄK Plan View Display – version 2.10.1.

Some of the fixes include:

- Ground vehicles and dismounted infantry sometimes became 'stuck' while executing movement tasks. This happened if their speed dropped to zero while performing collision avoidance.
- Entities were not displayed after they disembarked.
- If a global plan created an entity and the scenario was saved, the entity was not recreated when the scenario was reloaded.
- The VR-Forces back-end sometimes crashed when an entity was tasked to follow an extremely short route while embarked.
- Fixed-wing entities did not perform the default circle behavior properly when positioned in the southern hemisphere.
- If you created an entity on a geodetic database, opened its entity information dialog box and selected MGRS or UTM coordinates, VR-Forces crashed.
- Broken links in the class documentation were fixed.
- Loading CTDB databases on Linux took a very long time, during which VR-Forces might become unresponsive.
- The terrain profile widget did not display correct terrain height for units other than meters.
- The TDB Tool could not load GeoTIFF files.
- The TDB Tool was only able to load .dfd files when coordinate system was UTM.
- Vector features created using the TDB Tool that have non-zero

height above did not work correctly with the VR-Forces path planning algorithm.

- In the OPD Editor, the order in which connections were displayed was counterintuitive. They were displayed in alphabetical order, instead of connection order.
- The OPD Editor sometimes crashed after adding a new detection type.

## B-HAVE 1.1

This release of B-HAVE is compatible with VR-Forces version 3.10.1. This is a Feature Release, with a number of significant new features and improvements, including the following:

- Ability to create a group of entities (e.g. a crowd of people) in one simple operation, and assign a task to the entire group at once.
- Automatically configure entities to avoid or prefer roads (without having to specify a road seed graph).
- Restrict the wander task to a specific area.
- Support for "Local Zones" in PathData Generation, so that navigation maps can be generated at different levels of detail for different areas of the terrain.
- Lifeform entities can now move sideways.
- An entity can now be told to always face another entity while carrying out its tasks (e.g. keep a target entity in view).
- Entities now consider and respect VR-Forces "obstacle" objects when determining collision avoidance behaviors.
- Ability to display PathData around an individual entity in the MÄK Stealth plug-in.
- Support for following VR-Forces routes in reverse – from end to start.
- Several new example scenarios demonstrating the capabilities of B-HAVE.
- Access to more entity state information from Lua scripts, such as current Rules of Engagement, Ordered Speed, and whether an entity is currently under fire. You can also now exchange text messages among entities from Lua scripts.
- Dynamic avoidance is now compatible with embarkation – embarked entities will no longer attempt to avoid the entity upon which they are embarked.

## MÄK Data Logger 4.2

This Feature Release adds several new major capabilities to the MÄK Data Logger, including the following:

- Export of simulation data to SQL databases (currently MySQL or Microsoft Access). This allows the Data Logger to serve more easily as an integral part of an analysis or data mining system. SQL output for HLA is FOM-independent; the Logger will read your FOM and automatically generate a database schema to use for export.
- Record to multiple files – You can now instruct the Logger to save out portions of a federation recording to separate files, supporting cases where users want to start playing back and reviewing early portions of an exercise while continuing to record the ongoing federation. You can also break up a recording into pieces after the recording is complete.
- The Graphic User Interface has been upgraded to Qt 4.3.

## MÄK Stealth 6.1

This Feature Release contains many enhancements and fixes, including:

- MetaFlight files can now be loaded from the File menu
- The Stealth can now record video of the 3D display area to an AVI file
- A new Remote Drawing API allows you to remotely command the Stealth to draw lines, shapes, and other primitives, either on the 2D overlay, or in the 3D scene
- View constraints allow you to prevent the eyepoint from going through walls or other polygons

CONTINUED ON NEXT PAGE

PRODUCT UPDATES CONTINUED

- A new and improved cloud and environment model, inherited from Vega Prime 2.1
- Stealth plug-ins can now access keyboard events
- Inset views now work with MetaFlight databases

Contact Us

If you are a current product customer with up-to-date maintenance, please contact Fay Nickles at [keys@mak.com](mailto:keys@mak.com) for the latest product versions. You must have your MÄK invoice number available when requesting updated versions. For additional information or pricing, please contact the MÄK sales department at [info@mak.com](mailto:info@mak.com) or 617.876.8085 x2. ■

WHERE WE'LL BE :

EuroSim 2007

September 9 – 13  
University of Ljubljana  
Ljubljana, Slovenia

Booth #1

FOR INFO. & ATTENDANCE VISIT:  
[www.eurosim2007.org](http://www.eurosim2007.org)

Fall SIW

September 16 – 21  
Holiday Inn  
Orlando, FL

Booth #1

FOR INFO. & ATTENDANCE VISIT:  
[www.sisostds.org](http://www.sisostds.org)

Huntsville Simulation Conference

October 30 – November 1  
Huntsville Marriott Hotel  
Huntsville, AL

Booth TBD

FOR INFO. & ATTENDANCE VISIT:  
[www.scs.org/confernc/hsc/hsc07/hsc07.htm](http://www.scs.org/confernc/hsc/hsc07/hsc07.htm)

I/ITSEC 2007

November 26 – 29  
Orange County Convention Center  
Orlando, FL

Booth #1701

FOR INFO. & ATTENDANCE VISIT:  
[www.iitsec.org](http://www.iitsec.org)

TECH TIP :

MÄK Data Logger Export

TIP 2007.9.3

Logger 4.2 adds export of Logger data to MySQL and Microsoft Access. Once you configure a data source, exporting data is as simple as selecting a menu command and choosing the data source. If you are running the Logger on Windows XP, you do not even have to have Access installed to take advantage of data export. The export process is independent of Access. If you have a spreadsheet, such as Microsoft Excel, that can open Access databases, you can open the tables in the database and view them in the spreadsheet (see figure.)

Support reminder: Please send you support email to [support@mak.com](mailto:support@mak.com), not to individual support staff. We at MÄK are proud of the success of our "engineer down the hall" approach to providing tech support and we know that many of you appreciate the relationships you've built with our engineers. However if you send support email directly to an engineer, you risk delayed response time if that person is out of the office. If you send email to [support@mak.com](mailto:support@mak.com), you can be assured that someone will see it and respond. ■

RESELLERS

For a full list of MÄK's international resellers, please visit [www.mak.com/products/resellers.php](http://www.mak.com/products/resellers.php)

- Australia
- China
- Czech Republic
- Cyprus
- Egypt
- Ecuador
- Finland
- France
- Germany
- Greece
- India
- Indonesia
- Israel
- Italy
- Japan
- Korea
- Malaysia
- The Netherlands
- Norway
- Poland
- Portugal
- Russia
- Singapore
- Spain
- Sweden
- Taiwan
- Turkey
- United Kingdom

Link - Simulate - Visualize

Learn how inside.

Earn Chowdah Fest Fame...

