What's Up MÄK

SRC, Inc. Chooses VR-Forces as Platform for Speech Synthesis Simulation

SRC, Inc. will simulate the "Ditching of Flight 1549" to demonstrate their text-to-speech technology in the MÄK booth at this year's I/ITSEC.

VT MÄK and SRC Announce Partnership after Collaborating on Text-to-Speech API

MÄK is proud to announce that SRC Inc. (SRC) has chosen MÄK's VR-Forces Computer Generated Forces (CGF) simulation solution as the platform for their speech synthesis simulation. VR-Forces' robust open application programming interface (API) and text messaging capabilities were key factors in their choice.

This text-to-speech simulation environment will provide the ability to synthesize and manipulate natural sounding speech in multiple voices, while also allowing users to synthesize speakers from short recorded samples. From these samples, users will be able to generate many hundreds of individual speakers. Ultimately, a human listener will think and believe that the synthesized speech was produced by a live human. The overarching goal of the entire project is to train linguists in the collection of accurate intelligence from communication intercepts and in the understanding of rare dialects.

SRC found that VR-Forces provided a user-friendly and effective demonstration platform. They configured MÄK's CGF to fit their needs and were able to create a plugin for text-to-speech technology.

As a result of their successful work together, MÄK and SRC have embarked on a marketing partnership. MÄK will host SRC in their booth at I/ITSEC (Booth #2549), in Orlando this November 28 – December 2 where they will demonstrate their speech synthesis capabilities.

> "MÄK's VR-Forces product has allowed SRC to explore various modeling and simulation environments in our Advanced Technology Initiatives Program. Our progress in areas such as Natural Speech Synthesis, highlighted in a meaningful simulation, has connected our innovative solutions to the future success of our customers."
>
> ~Paul Tremont
> President, SRC Inc.

INSIDE THIS ISSUE

MÄK's Tech Tip by Fred Wersan

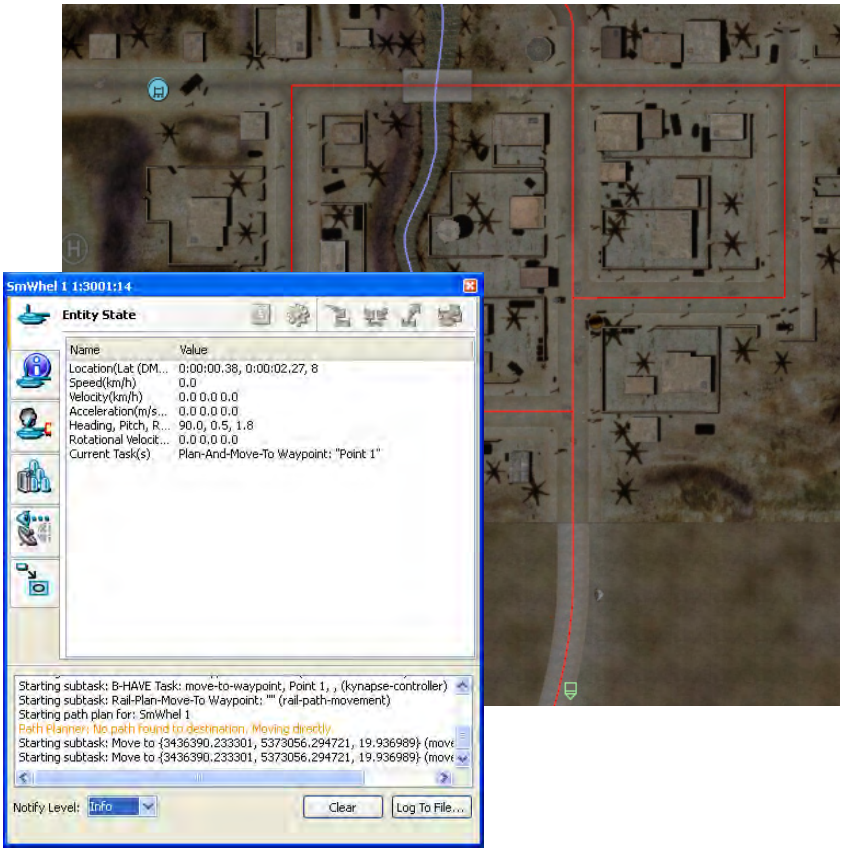
Use the VR-Forces Entity Console to Debug Entity Behavior

Sometimes you create a plan for an entity and it just doesn't do what you expect. The Entity Console can help you understand the behavior and find a solution. To view the console, select the entity that you are debugging and press i. This opens the Entity Information dialog box. At the bottom of the dialog box, select Info in the Notify Level list. Now run the scenario. As the entity executes its plan, status messages get sent to the console. They can help you understand what VR-Forces is doing and why it might not be doing what you expect.

For example, in a scenario I was working on, a fixed-wing aircraft was supposed to taxi along a runway from point to point. However, it was not doing this. I opened the console and viewed the messages. I saw the entries "Taking off." and "Touching down." Since a fixed-wing aircraft will try to take off when tasked to move towards a point in the air, this told me that the waypoint it was moving to was off the ground and needed to be moved to 0 altitude.

So for user-level analysis of entity behavior, the Entity Console is your friend.

In the figures, an entity is tasked to move to a waypoint, but it doesn't move as you expect it to. When you look at the entity console, you see that it could not find a path to follow to its destination, so it moves directly towards it.



Webinars

Building Hawaii – An Example of Integrating Open Streaming Terrain with Traditional Database Techniques

December 15, 2011; 9 am EDT & 4 pm EDT

There are a lot of ways to build a terrain database for visual simulation. This webinar will step you through the process MÄK used to create a virtual Hawaii using a combination of 3D object modeling, site model integration, and streaming features from VR-TheWorld. We'll discuss the database techniques used and explain how each matched the design requirements of the Hawaii database.

We'll talk about how we used VR-TheWorld to provide the entire planet as a background; how we found source data on the internet to add high resolution elevation, imagery, and features for the island of Oahu; how we mapped the feature data to automatically generate 3D cultural models; how we added specific models to increase fidelity in the neighborhood of Waiau; how we used the features to facilitate vehicle traffic; how we cut site models into the Honolulu Airport; and how we used imagery produced by Harris to smooth out the transition between the low resolution ocean and the high resolution Honolulu imagery.

Join us December 15 for a (virtual) trip to Hawaii. (Mai Tais and Leis not included.)

Space is limited so register now to reserve your seat.
Can't make it to the webinar? Registrants receive access to the recording after the event, so register now!

Want to join us? To register for the 9:00 am webinar, click here.
For the 4:00 pm webinar, click here.

Stay Tuned for Our Next Webinar - Coming in January

"Simulated Video - Image Generation for Unmanned Vehicle Systems"
For a full webinar listing, visit www.mak.com/news-and-events/events.

Company News

NASA Langley Uses MÄK RTI to Implement HLA in Large Scale Air Traffic Management Simulations

MÄK Brings Simulation Interoperability Technology into the Area of ATM

VT MÄK is pleased to announce that the Air Traffic Operations Laboratory (ATOL) at NASA Langley has chosen the MÄK Run Time Infrastructure (RTI) to implement High Level Architecture (HLA) in its Air Traffic Management (ATM) simulations. This HLA network will help create a realistic air traffic simulation environment by linking together over 500 individual flight simulators.

ATOL at NASA Langley studies how to make air traffic safe and more efficient; it is designed to explore inter-aircraft, aircraft/airspace, and air/ground interactions. Its goal is to provide a better understanding of the roles, responsibilities, and requirements for automation and human-operators in future ATM systems.

The lab has developed large scale and distributed simulation capabilities to investigate the feasibility of such complex distributed-authority operational concepts. These capabilities facilitate system-level design by simulating how the system would operate, in addition to establishing the credibility of new ATM concepts for researchers, policy makers, and operational personnel.

"We are delighted that NASA Langley's Air Traffic Operations Laboratory has chosen the MÄK RTI to implement HLA in their ATM simulation environment. We are pleased to bring the robust simulation interoperability technology developed for the military into the area of ATM."

~Warren KATZ, Chief Executive Officer, VT MÄK

Product Updates
(September-November)

MÄK Data Logger 5.1. - Improvements made to remote control API; Logger is now available for MS VC++ 10; database export functionality upgraded to support MySQL ODBC Connector 5.1.

VR-Forces 4.0.2 - Maintenance release adding support for Red Hat Enterprise Linux 5.

VR-Forces 3.12.0.2 - This binary compatible maintenance release for VR-Forces 3.12 includes a number of fixes and performance optimizations to VRForces. Any plugins and add on modules developed for VR-Forces 3.12.0.x, including B-HAVE and the VR-Forces 3D GUI, will continue to work with this new version of VR-Forces.

B-HAVE 2.0 - Improved path generation speed and better vehicle traffic.

VR-Vantage 1.3.1 - Adds Linux support, terrain scaling, and camera zooming while integrating the ability to configure display units (miles, feet, kilometers, etc.)

For more information, please contact info@mak.com.

MÄKer Spotlight: Family (TOTS) Edition

we've got TOTS (Tons Of TykeS)

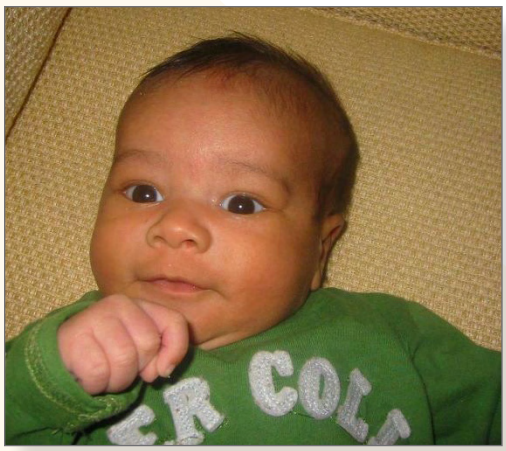
Instead of spotlighting just one of our many talented MÄKers in this issue, we thought it prudent to brag about all our new MÄKers. And by new, we mean *really* new. Total babes, right?

Meet the newest addition, **Graham Douglas Johnson**, son of Kevin and Angela Johnson, born on November 18, 2011. Kevin is the Technical Product Manager of Terrain Products at MÄK.

Say hello to **Ian Mead Kogler** (and his older sister, Annika). He was born on June 6, 2011 to proud parents Jim and Jeannie Kogler. Jim is the Director of COTS products at MÄK.

A warm welcome goes to **Sophia Camden Spaulding**, daughter of Brian and Carolyn Spaulding. She was born on October 28, 2011. Brian is the Director of Solution Architecture at MÄK.

Greetings to **Matthew St. Amand**! He was born on May 8, 2011 to Michelene St. Amand and Wayne St. Amand. Michelene is the Director of Marketing at MÄK.



Meet **Alexander Mateo Williams**, born on September 27, 2011 to proud parents Calvin Willams and Eva Sanchez. Calvin is a Quality Assurance Engineer on the VR-Vantage Team at MÄK.

Check out our blog! MÄK's product managers and business development team are blogging about industry news, changing standards, product updates, and even passing along technical tips. Don't miss out on the latest!