New Features Guide

Vitech

Vitech Corporation
2270 Kraft Drive, Suite 1600
Blacksburg, Virginia 24060
540.951.3322 FAX: 540.951.8222
Customer Support: support@vitechcorp.com
www.vitechcorp.com

Publication Date: November 2016

TABLE OF CONTENTS

CUSTOMER RESOURCE OPTIONS

Supporting users throughout their entire journey of learning model-based systems engineering (MBSE) is central to Vitech's mission. For users looking for additional resources outside of this document, please refer to the links below. Alternatively, all links may be found at www.vitechcorp.com/resources.

Webinars

Webinar archive with over 40 hours of premium industry and tool-specific content.

Screencasts

Short videos to guide users through installation and usage of Vitech software.

A Primer for Model-Based Systems Engineering

Our free eBook and our most popular resource for new and experienced practitioners alike.

Help Files

Searchable online access to Vitech software help files.

Technical Papers

Library of technical and white papers for download, authored by Vitech systems engineers.

MySupport

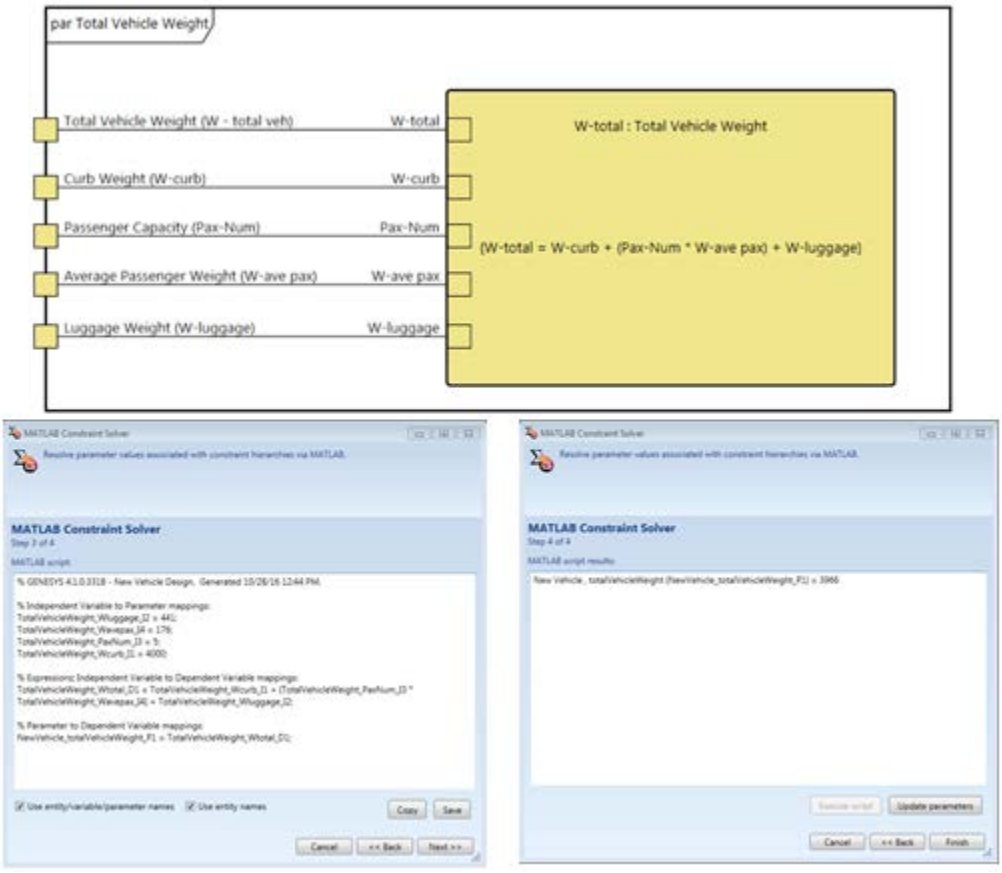
Knowledge Base, Exclusive Webinars and Screencasts, Chat Support, Documents, Download Archive, etc.

Our team has also created resources libraries customized for your experience level:

All Resources	**Advanced**
Beginner	**IT / Sys Admin**
Intermediate	**Student**

MATLAB® CONSTRAINT SOLVER

The MATLAB Constraint Solver interfaces the descriptive architectural model (GENESYS™) and analytics (in MATLAB) by providing the ability to solve a set of parametric equations constraining the design of a system. The solver uses MATLAB Version 2015b to solve a selected set of ConstraintDefinitions determined by the user by converting project relationships, parameter values, and attribute values into a script that can be directly executed against the MATLAB engine without having to leave the GENESYS interface. Following script execution, project parameter values can be updated based on the MATLAB solution.



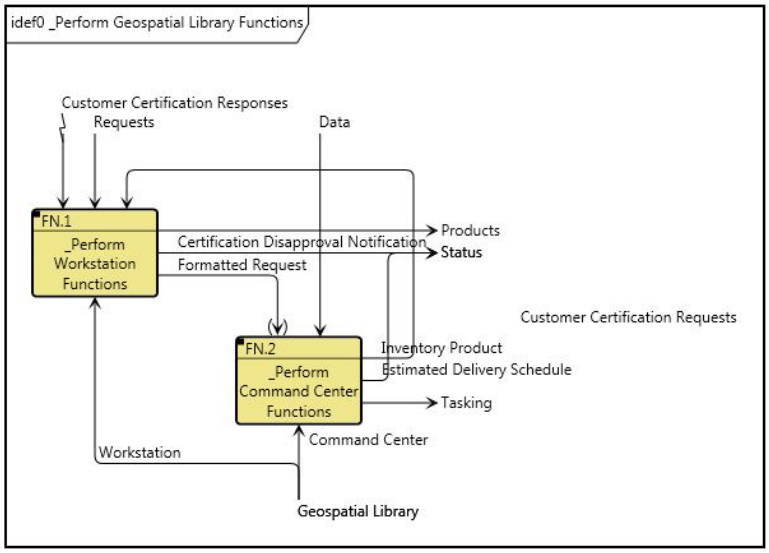
For more detailed instructions on using the MATLAB Constraint Solver see the MATLAB Constraint Solver guide in your GENESYS Documentation folder or visit the Product Documentation page on www.vitechcorp.com.

EXPANDING OUR TOOLKIT OF SYSTEM REPRESENTATIONS

GENESYS 4.1 brings IDEF0 and IDEF0 A-0 views to help enrich communication across the comprehensive engineering team, providing additional insight into the system design.

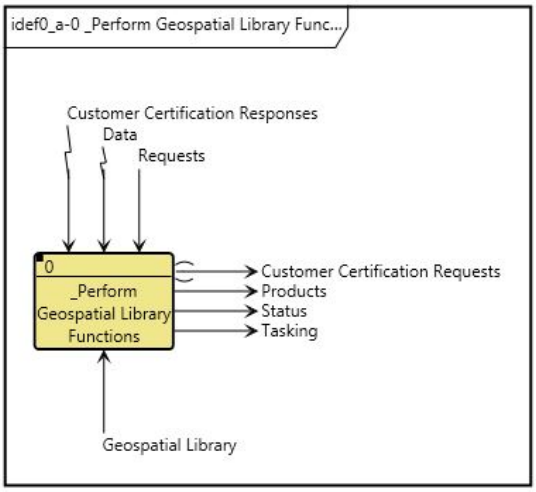
IDEF0

The IDEF0 diagram presents an integrated picture of the inputs, controls, outputs, and mechanisms (ICOM) for a function's decomposition. Part of the behavioral (logical architecture) representation set, the IDEF0 diagram displays a great deal of context information on the interrelationships of the decomposition without displaying the actual control logic / structure of the decomposition. Originally specified by National Institute of Standards and Technology (NIST) Standard FIPS-183, the IDEF0 diagram is used less frequently than other behavioral representations but is still a valuable part of an integrated representation set.



IDEF0 A-0

The IDEF0 A-0 (pronounced "A minus zero") diagram presents a context-level view of the inputs, controls, outputs, and mechanisms (ICOM) for a specific function in your logical model. Part of the behavioral (logical architecture) representation set, the IDEF0 A-0 is a contextual representation that complements the full IDEF0 and other behavioral representations at any level of your logical architecture.



ADDITIONAL REFINEMENTS

GENESYS 4.1 includes several minor enhancements as well.

Rename Entities During Duplication and Transformation

During entity duplication or transformation, you can now rename entities as you go instead of after the action is performed.

Flexibility When Filtering Entity Lists

Filters can now include the presence or absence of any diagnostic error for an entity.

Delete Entities With Folder Deletion

In previous versions of GENESYS, deleting a folder would delete the entities within that folder as well. This could cause inadvertent loss of data. GENESYS 4.1 has changed the behavior so that deleting a folder will move the entities to the parent folder. If you wish to delete the folder and the entities contained within, select the command Delete Folder and Entities.

Vitech Corporation
2270 Kraft Drive, Suite 1600
Blacksburg, Virginia 24060
540.951.3322 FAX: 540.951.8222
Customer Support: support@vitechcorp.com
www.vitechcorp.com