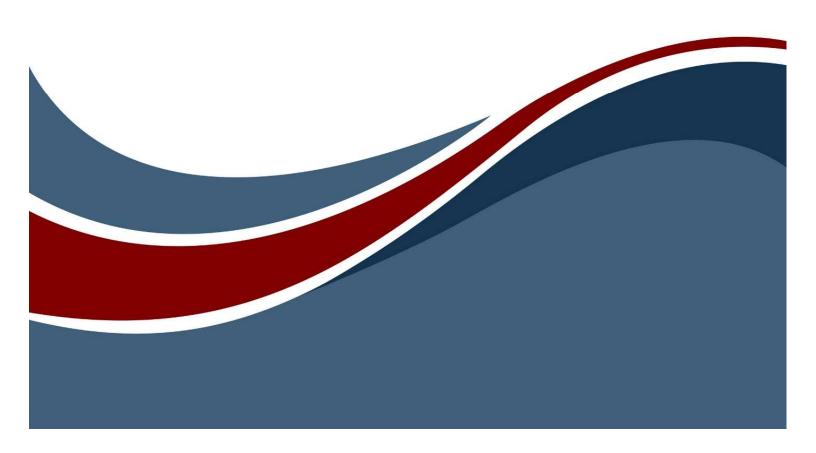


Installation Guide



Copyright © 2009-2023 Zuken Vitech Inc. All rights reserved.

No part of this document may be reproduced in any form, including, but not limited to, photocopying, language translation, or storage in a data retrieval system, without Vitech's prior written consent.

Restricted Rights Legend

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in the applicable GENESYS End-User License Agreement and in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7013 or subparagraphs (c)(1) and (2) of the Commercial Computer Software - Restricted Rights at 48 CFR 52.227-19, as applicable, or their equivalents, as may be amended from time to time.

Zuken Vitech Inc. 2270 Kraft Drive, Suite 1600 Blacksburg, Virginia 24060 540.951.3322 | FAX: 540.951.8222 Customer Support: <u>support@vitechcorp.com</u> www.vitechcorp.com



is a trademark of Zuken Vitech Inc. and refers to all products in the GENESYS software product family.

Other product names mentioned herein are used for identification purposes only and may be trademarks of their respective companies.

Publication Date: December 2023



TABLE OF CONTENTS

Getting Started	1
Overview of the GENESYS Product Family	2
GENESYS 2023 R2	2
GENESYS 2023 R2 Pro	2
GENESYS 2023 R2 Server	2
GENESYS Licensing Options	3
Named License	3
Floating License	3
Step 1: Installing GENESYS 2023 R2 Products	4
Installing GENESYS 2023 R2	4
Install Desired Connectors	10
Installing GENESYS Server	10
Installing GENESYS License Manager	16
Configuring Microsoft Windows Firewall for GENESYS	19
GENESYS 2023 R2	19
Step 2: Licensing GENESYS Products	21
General Instructions for Activating a GENESYS License	21
Step 3: Automatically Applying License Updates and Deactivations	24
Step 4: Getting Started with GENESYS 2023 R2	27
Logging in to a Local Repository	27
Logging in to a Remote Repository	
Special Considerations for Previous Version Users	31
Installing GENESYS 2023 R2	31
Moving your data	31
FIPS 140 Compliance	31
Additional Tips	
Check for Latest Service Packs	
GENESYS Training	
GENESYS Help and Documentation	
Sample Solutions	
Using Data from CORE™	
Working with Report Files from CORE	
Disaster Prevention/Recovery	
GENESYS Server Backup/Data Recovery	
Uninstalling GENESYS	
Reporting Problems / Making Product Suggestions	
Appendix	35
Prerequisites for Installation	35





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 <u>www.vitechcorp.com/online-resources/</u>.



Webinars

Immense, on-demand library of webinar recordings, including systems engineering industry and tool-specific content.



Screencasts

Short videos to guide users through installation and usage of GENESYS.



A Primer for Model-Based Systems Engineering

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



<u>Help Files</u>

Searchable online access to GENESYS help files.



Technical Papers

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



Technical Support

Frequently Asked Questions (FAQ), support-ticket web form, and information regarding email, phone, and chat support options.



GETTING STARTED

Welcome to the GENESYS 2023 R2 Installation Guide. This guide is intended to assist you with the three steps required for getting started using GENESYS:

- installing the software,
- activating a GENESYS license, and
- starting GENESYS.

If you have any problems or questions regarding installation, licensing, or training for your GENESYS products, contact us:

For installation or general product support support@vitechcorp.com

To submit a license request licensing@vitechcorp.com

For information on systems engineering and GENESYS Visit our website at <u>www.vitechcorp.com</u> or contact your Account Executive +1 540.951.3322 info@vitechcorp.com



OVERVIEW OF THE GENESYS PRODUCT FAMILY

The GENESYS software suite brings the proven STRATA[™] methodology together with an enterprise-ready architecture, giving you the ability to deliver model-based systems engineering (MBSE) seamlessly and consistently across your project team. GENESYS is an open architecture tool based on familiar standards, so you can focus on design and not trying to get disparate tools to work together. GENESYS takes the guesswork out of implementation and delivers context-driven modeling for complex systems engineering problems.

GENESYS 2023 R2

GENESYS 2023 R2 provides individuals, small teams, and distributed users a complete MBSE development solution ready for immediate use against a locally installed and maintained repository, yet also adds the ability to connect to a collaborative design environment as required. Enjoy a robust product that includes a rich requirements-management capability, multiple modeling notations in traditional or SysML view sets, comprehensive architecture analysis, verification and validation, and robust, on-demand documentation.

GENESYS 2023 R2 Pro

Incorporating all the features found in GENESYS 2023 R2, GENESYS 2023 R2 Pro delivers the full complement of available views and reports, providing a single vehicle that enables team-wide perspective and analysis and the industry-exclusive ability to deliver answers and insight in multiple formats, regardless of the input approach. GENESYS Pro includes analytical tools such as behavior simulation as well as connectors for Ansys ModelCenter MBSE, MATLAB, and SIMULINK. Whether working independently or as part of the collaborative enterprise team, GENESYS 2023 R2 Pro provides the ultimate answer in capability and flexibility.

GENESYS 2023 R2 Server

Part of a large, complex, or data-rich effort? Add GENESYS Server as a remote repository and enable GENESYS 2023 R2 and GENESYS 2023 R2 Pro users the ability to operate offline and independently or as part of the collaborative engineering team operating together in one concurrent database. GENESYS Server provides a secure, convenient gateway for the team to operate in unison, taking advantage of the team-wide consolidation of information.

As the engineering team centerpiece, GENESYS Server offers unparalleled ease of use, team-wide system-level insight, live access to the latest system changes, comprehensive analysis, and instant, thorough documentation.



GENESYS 2023 R2 University Edition

Incorporating all features found in GENESYS 2023 R2 and GENESYS 2023 R2 Pro, GENESYS University Edition is a specialized version of GENESYS that is targeted to educational institutions. GENESYS University Edition is not suitable for commercial use.

GENESYS LICENSING OPTIONS

Vitech offers a variety of licensing options to provide flexibility in how GENESYS is deployed within your project team and across your organization. All GENESYS licenses are managed by the Sentinel License Manager, which is installed with all GENESYS products and runs as a service. Please contact your Account Executive if you have questions about your specific configuration.

Named License

Named license files reside on your local hard drive. Frequently referred to as "node-locked" or local license, named licenses are the best option for environments with a one-to-one ratio of licenses to users and/or for teams that want to ensure full-time, on-demand access to GENESYS across the team. Each computer is identified by a unique ID to which the GENESYS activation is locked. The licensing runs in the background and is completely transparent to the user. The license is not mobile, but you can move the license from one machine or location to another. To do so, you must first submit a request to Vitech and may be required to pay a transfer fee before a license can be transferred to the new machine.

Floating License

Floating licenses are the preferred choice for users who require portability of their GENESYS software (such as those traveling between multiple worksites) and teams looking to leverage concurrent-user tokens across a group of users. Floating licenses are available in two different forms:

Network Capable License — A network-capable license is the most flexible licensing approach, allowing you to seamlessly share licenses across your network. The *Sentinel License Manager* hosts any floating licenses activated on a machine. This manager is installed with all GENESYS software and makes these licenses available to any other GENESYS Edition installations on the same network. If you prefer to host GENESYS floating licenses on a different machine (i.e., one that doesn't otherwise have GENESYS software installed), you may install the *GENESYS License Manager* on the host machine for that purpose.

USB License Key — The license file resides on a USB key that can be moved from machine to machine. This option provides the ultimate flexibility as you can work from home, customer sites, or multiple machines in your office. USB keys provide license flexibility for a single individual working in multiple sites or a small co-located team. Large or distributed teams will find more flexibility in a network-capable license. A re-licensing fee applies to lost USB license keys.



STEP 1: INSTALLING GENESYS 2023 R2 PRODUCTS

The following sections provide step-by-step instructions for installing GENESYS products. All GENESYS products should be installed by a user with administrator-level permissions for the computer or server upon which the GENESYS product is to be installed. If you have a question about the group policies defined in your environment, please contact your system administrator or IT support group.

If you have any questions or need assistance at any point during this process, please contact Vitech Customer Support at +1.540.951.3999 or via email at support@vitechcorp.com.

Following product installation, please refer to Step 2: Licensing GENESYS Products to obtain and install a license for products in the GENESYS product family.

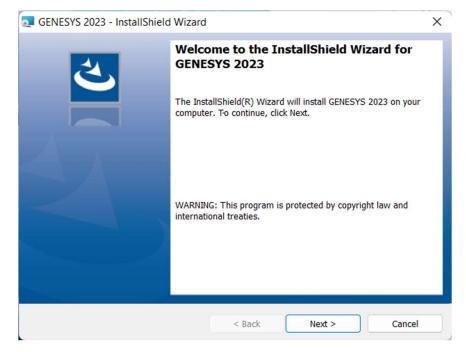
Installing GENESYS 2023 R2

Note: If a SQL Server Express instance named GENESYS is not already installed on your computer, GENESYS 2023 R2 will require a connection to the internet to download SQL Server Express. Please contact Vitech Customer Support if you need further instructions.

- 1. Download the GENESYS 2023 R2 installer from the Vitech website and open the file using the **Run as administrator** option from the context menu. The InstallShield Wizard will launch.
- 2. Select the language to use for the installation. Click **OK**.

GENES	YS 2023 - InstallShield Wizard	×
ٹ	Select the language for the installation fro	m the choices below.
	English (United States)	~
	ОК	Cancel

3. A welcome screen is shown with the software information shown. Click **Next >** to continue.





- 4. Review the end-user license agreement that governs the use of GENESYS.
 - If you accept the terms of the license agreement, click the radio button next to "I accept..." and then click **Next >** to proceed with the installation.
 - Or, if you do not accept the terms of the license agreement, click **Cancel** to end the installation.

🔁 GENESYS 2023 - InstallShield Wizard			×
License Agreement Please read the following license agreeme	ent carefully.		と
IMPORTANT - READ CAREFULLY is a legal agreement between either an and Zuken Vitech Inc. ("Vitech") for the includes computer software and may in "online" or electronic documentation (THAT THIS AGREEMENT IS ENFOR AGREEMENT SIGNED BY YOU. By PRODUCT, you agree to be bound by th terms of this EULA, do not install or us change, modify, add or delete articles in procedures described below in Section RIGHT CONCERNING ANY PRODU	individual or a sii Vitech software Iclude associated (collectively, the CEABLE LIKE / installing, cop he terms of this is se the PRODUC n this EULA at an 11. THIS EULA	ngle entity ("Licens/ product identified b d media, printed m "PRODUCT"). Yo ANY WRITTEN NE ying, or otherwise EULA. If you do not JT. Vitech reserves ny time, in accorda EXPRESSLY EXCI	ee" or "you") welow, which aterials, and OU AGREE EGOTIATED e using the agree to the s the right to nce with the LUDES ANY
• I accept the terms in the license agreemer	ıt		Print
I do not accept the terms in the license ag	reement		
	< Back	Next >	Cancel

5. Optionally, type your name in the "User Name" field and type your organization's name in the "Organization" field. Click **Next >**.

GENESYS 2023 - InstallShield Wizard	×
Customer Information Please enter your information.	と
User Name:	
Vitech user	
Organization:	
Vitech	
InstallShield	
< Back	Next > Cancel



- 6. The installation wizard prompts you for the location to install GENESYS 2023 R2. By default, Windows applications are installed to the program files directory. You can either:
 - Confirm the location and click Next >
 - Or click Change... to select a different installation location, then click Next > after selecting the alternate location

🧟 GENESY	S 2023 - InstallShield Wizard			×
Destination	on Folder dt to install to this folder, or click	Change to install to	a different folder.	と
	Install GENESYS 2023 to: C:\Program Files\Vitech\GENE	5YS 2023\		Change
InstallShield -		< Back	Next >	Cancel

7. GENESYS reports can be configured to use either US Letter or A4 paper. Select the appropriate paper size and click **Next >**.

GENESYS 2023 - InstallShield Wizard			s 		×
Default Repository Connection Settings				i i	4
Please specify the default repository conne	ection settings.				
Would you like reports to use US Letter or	A4 paper size?				
O US Letter					
○ A4					
InstallShield					
	< Back	Next >		Cance	1

8. GENESYS can either connect locally (localhost) or to another repository. Enter the information if connecting to a remote repository instead of the local repository.



Note: For more information about how to connect to a local repository, go to page 27. For more information about how to connect to a remote repository, go to page 28.

GENESYS 2023 - Install	Shield Wizard		_		×
Default Repository Conr	ection Setting	5		4	
Please specify the defaul	t repository con	nection settings.			-
By default, GENESYS con connection settings below screen when running GEI	v. (Repository co	onnection settings ca	an also be specified		
Repository Address:	localhost				
This can be either a "localhost" shoud be					
Repository Name:	Local				
This is the repository	name displayed	to the user in the G	ENESYS login dialog	j.	
Service Port:	39141 (for GE	ENESYS 2023 R2)			
This is the number of	the port on whi	ch the GENESYS ser	vice is listening.		
InstallShield					
		< Back	Next >	Cancel	

9. Click **Install** to begin the installation or click **< Back** to change settings.

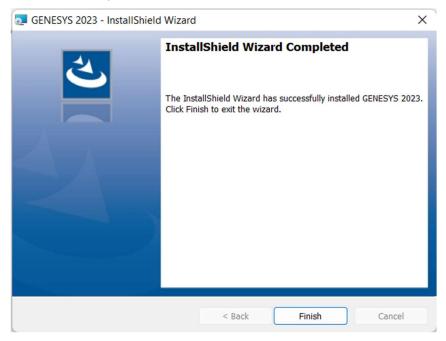
🧟 GENESYS 2023 - InstallShield Wizard			×
Ready to Install the Program			1
The wizard is ready to begin installation.			C
Click Install to begin the installation.			
If you want to review or change any of yo the wizard.	our installation setti	ngs, click Back. Click	Cancel to exit
InstallShield			
	< Back	Install	Cancel



10. A progress meter will let you know what the installer is doing while it is working. Note that the installer will stop any other GENESYS services that are running on your computer for the Sentinel Hasp update to install. After installation, it will be necessary for you to restart any GENESYS services that were stopped.

GENESYS	2023 - InstallShield Wizard			×
	GENESYS 2023 ram features you selected are being installed.			と
17	Please wait while the InstallShield Wizard installs GENESYS several minutes.	2023. This	may take	
	Status:			
	Install drivers			
InstallShield -				
	< Back Nex	t >	Cano	el

11. After the installation is complete, click **Finish**.





- 12. If a SQL Server Express instance named GENESYS is not already installed on your computer, a prompt is shown asking if you want to install a local repository using SQL Server Express.
 - If you have an internet connection and would like to download and install a local repository, select **Yes**.
 - If you do not have an internet connection and have downloaded the SQL Server Express installer, select **No**. Then run the SQL Server Express installer next.
 - If you do not want to download and install a local repository at this time, select No. If you
 decide later that you would prefer to have a local repository, click on the
 SQLServerBootstrap application in your GENESYS Edition directory.

🔁 Local Repository - SQL Server Express	\times
Do you wish to install a local repository using SQL Server Express with this installation of GENESYS?	
Select YES if you would like to download and install a local repository. A local repository does not prevent access to other GENESYS repositories on the network.	
Select NO only if you will be connecting to a GENESYS repository already installed on your network and do not wish to also have a repository installed locally.	n
InstallShield	
Yes No	

13. Downloading and installing SQL Server Express will take some time. There will be various screens presented while this installation takes place. No action is necessary by the user. After the SQL database installation is complete, click **OK**.



14. Reboot your machine for all installations to be completed.



Install Desired Connectors

Also available are installers for some of the GENESYS connectors. These connectors need to be installed on the workstation where they will be used.

The following connector installers are available:

- Microsoft[®] Excel[®]
- Microsoft[®] PowerPoint[®]
- Microsoft[®] Project[®]

The following connectors are included within GENESYS and require no additional installation:

- Ansys ModelCenter[®] MBSE
- IBM[®] Rational[®] DOORS[®]
- MathWorks[®] MATLAB[®]
- MathWorks[®] Simulink[®]
- SBE Vision Digital Thread

Installing GENESYS Server

Note: GENESYS Server will connect to a SQL server. Before installing your GENESYS Server, ensure that your SQL server installation is complete and the version is 2014 (12.0.2000.8 or later). Also, ensure that you have a username and password prepared to log in to the SQL server to create the database as well as a username and password prepared for updating the SQL repository during use. These may be the same username and password, depending on your individual setup. GENESYS should be installed by a user with administrator-level permissions.

- 1. Download the GENESYS 2023 R2 Server installer from the Vitech website and open the file. The InstallShield Wizard will launch.
- 2. Select the language to use for the installation. Click **OK**.

GENESY	YS 2023 Server - InstallShield Wizard	×
ی	Select the language for the installation from the choi	ces below.
	English (United States)	~
	ОК	Cancel

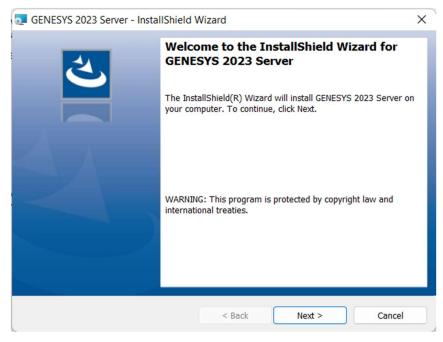
3. If the installer detects that the OLEDB Driver for SQL Server is not present, the installer will prompt to install it. If you already have this driver installed, then this step is skipped.



- If you want to install the driver and continue, click **Install**.
- If you do not want to install the driver, click **Cancel** to end the installation.

ENESYS	2023 Server - InstallShield Wizard
	SENESYS 2023 Server requires the following items to be installed on your computer. Click Install to begin installing these requirements.
Status	Requirement
Pending	Microsoft OLEDB Driver for SQL Server 18.3.0.0 (x64)
	Install Cancel

4. In the InstallShield Wizard window, click Next >





- 5. Review the end-user license agreement that governs the use of GENESYS.
 - If you accept the terms of the license agreement, click the radio button next to "I accept the terms in the license agreement." And then proceed with the installation.
 - Or, if you do not accept the terms of the license agreement, click the radio button next to "I do not accept the terms in the license agreement" to end the installation.

GENESYS 2023 Server - InstallShield V License Agreement Please read the following license agreeme			×
IMPORTANT - READ CAREFULLY is a legal agreement between either an and Zuken Vitech Inc. ("Vitech") for the includes computer software and may in "online" or electronic documentation (THAT THIS AGREEMENT IS ENFOR AGREEMENT SIGNED BY YOU. By PRODUCT, you agree to be bound by th terms of this EULA, do not install or us change, modify, add or delete articles in procedures described below in Section RIGHT CONCERNING ANY PRODU	individual or a sii Vitech software clude associate collectively, the CEABLE LIKE / installing, cop he terms of this is se the PRODUC this EULA at at 11. THIS EULA	ngle entity ("Licens product identified b d media, printed m "PRODUCT"). Y ANY WRITTEN NE ying, or otherwise EULA. If you do not T. Vitech reserves ny time, in accorda EXPRESSLY EXC	ee" or "you") below, which naterials, and OU AGREE EGOTIATED e using the agree to the s the right to ance with the LUDES ANY
• I accept the terms in the license agreemen	it		Print
\bigcirc I do not accept the terms in the license age	reement		
InstallShield			
	< Back	Next >	Cancel

6. Type your name in the User Name field and your organization's name in the Organization field. Click **Next** >.

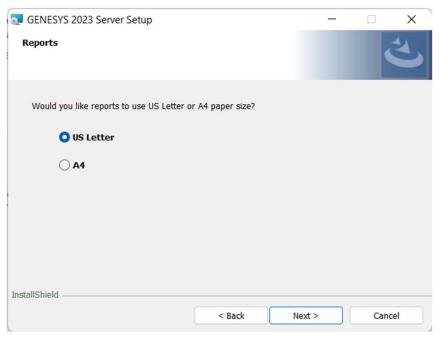
GENESYS 2023 Server - InstallShield	Wizard		×
Customer Information Please enter your information.			と
<u>U</u> ser Name:			
Vitech user			
Organization:			
Vitech			
InstallShield			
	< Back	Next >	Cancel



- 7. The installation wizard prompts you for the location to install the GENESYS Server application files. You can either:
 - Confirm the location and click Next >
 - Or click Change... to select a different installation location, then click Next > after selecting the alternate location.

GENESY:	5 2023 Server - InstallShield	Wizard		×
Destination Click Nex	on Folder at to install to this folder, or click	Change to install to	a different folder.	と
	Install GENESYS 2023 Server to C:\Program Files\Vitech\GENES			Change
InstallShield -		< Back	Next >	Cancel

8. GENESYS reports can be configured to use either US Letter or A4 paper. Select the appropriate paper size and click **Next** >.





9. The installation wizard prompts you for the username and password of the user account that will run the GENESYS Server service and may be used (if using Windows authentication in the next screen) to connect to the SQL Server database. To use the Local System account when the SQL Server is installed on the same machine, enter ".\LocalSystem." If you use ".\LocalSystem" you do not need a password. Type your SQL Server username in the "User name" field in the domain\username format or select **Browse...** to choose from available domains and usernames. Type your password in the "Password" field. Note that if Windows Authentication is in use with SQL Server, your account (the account that is running the installer) must have permission to create the database within the SQL Server instance that will be specified in the following step. Click **Next** >.

GENESYS 2023 Server - InstallShield N GENESYS Service Logon Information Specify a user name and password	Wizard	× L
Specify the user name and password of the u user account must be in the form DOMAIN\Us		use as its Log On. The
If using LOCAL SYSTEM account use ".\Local:	System" for User Name and leave F	Password blank.
ALocalSystem		Browse
InstallShield		
	< Back Next >	Cancel

- 10. The installation wizard prompts you for the location of your SQL Server and the authentication type being used.
 - a. In the database server field, use "(local)" if the SQL Server is on the same machine. Otherwise, select **Browse...** and then select the server and SQL Server instance hosting your Repository database. If the SQL Server is not listed, ensure that the SQL Server Browser service is enabled.
 - b. Select the authentication type being used and, if SQL Server authentication is specified, enter the credentials. If using SQL Server authentication, the user account specified will be used to create the database and access the database during application runtime. If using Windows authentication, your account (the account that is running the installer) is used for a one-time login to create the database within the SQL Server instance during installation, and the login information from Step 9 is used to interact with the SQL Server during application runtime. Note that the user account used during application runtime will need to have permission to create and delete tables for repository GENESYS2023R2 within SQL server (we recommend that dbowner permissions are used). Click Next >.



Database Server				1
Select database s	erver and auther	ntication method		
Database server the	at you are install	ling to:		
(local)	at you are motal	ing to.	~	Browse
Connect using:				-
g-				
O Windows auth	nentication crede	ntials of current user		
		ntials of current user e Login ID and password be	low	
			low	_
⊖ Server auther	ntication using th		low	
○ Server authen Login ID:	ntication using th		low	
○ Server authen Login ID:	ntication using th		low	
Server authen	ntication using th		low	

11. Click **Install** to begin the installation or click **< Back** to change settings.

GENESYS 2023 Server - InstallShield Wizard	×
Ready to Install the Program	4
The wizard is ready to begin installation.	S
Click Install to begin the installation.	
If you want to review or change any of your installation settings, c exit the wizard.	lick Back. Click Cancel to
InstallShield	
< Back Ins	stall Cancel

- 12. After the installation routine completes, click **Finish**.
- 13. Once the install completes, ensure that the user specified in step 9 has "dbowner" permissions on repository GENESYS2023R2.



Installing GENESYS License Manager

Note: The licensing software is included with all GENESYS products. GENESYS License Manager need only be installed on a machine where no other GENESYS products will be installed. This is solely for the management of floating licenses.

- 1. Download the GENESYS License Manager installer from the Vitech website and open the file. The InstallShield Wizard will launch.
- 2. Select the language to use for the installation. Click **OK**.

ENES	YS License Manager - InstallShield Wizard	X
ی	Select the language for the installation from the choic	es below.

3. In the InstallShield Wizard window. Click Next >.

2	Welcome to the InstallShield Wizard for GENESYS License Manager
	The InstallShield(R) Wizard will install GENESYS License Manager on your computer. To continue, click Next.
	WARNING: This program is protected by copyright law and international treaties.

- 4. Review the end-user license agreement that governs the use of GENESYS License Manager.
 - If you accept the terms of the license agreement, click the radio button next to "I accept the terms in the license agreement," then click **Next >** to proceed with the installation.
 - Or, if you do not accept the terms of the license agreement, click **Cancel** to end the installation.



License Agreement		1
Please read the following license agre	eement carefully.	
IMPORTANT - READ CAREFU is a legal agreement between either and Zuken Vitech Inc. ("Vitech") for includes computer software and ma "online" or electronic documentation	r an individual or a single entity (the Vitech software product ide ay include associated media, pi	("Licensee" or "you") entified below, which rinted materials, and
THAT THIS AGREEMENT IS ENF AGREEMENT SIGNED BY YOU. PRODUCT, you agree to be bound terms of this EULA, do not install of change, modify, add or delete article procedures described below in Sec RIGHT CONCERNING ANY PRO	ORCEABLE LIKE ANY WRIT By installing, copying, or or by the terms of this EULA. If you or use the PRODUCT. Vitech es in this EULA at any time, in tion 11. THIS EULA EXPRESSI	TEN NEGOTIATED therwise using the u do not agree to the reserves the right to accordance with the LY EXCLUDES ANY
AGREEMENT SIGNED BY YOU. PRODUCT, you agree to be bound terms of this EULA, do not install of change, modify, add or delete article procedures described below in Sect RIGHT CONCERNING ANY PRO	ORCEABLE LIKE ANY WRIT By installing, copying, or o by the terms of this EULA. If you or use the PRODUCT. Vitech es in this EULA at any time, in tion 11. THIS EULA EXPRESSI DOUCT THAT LICENSEE DI	TEN NEGOTIATED therwise using the u do not agree to the reserves the right to accordance with the LY EXCLUDES ANY
AGREEMENT SIGNED BY YOU. PRODUCT, you agree to be bound terms of this EULA, do not install of change, modify, add or delete article procedures described below in Sect RIGHT CONCERNING ANY PRO	ORCEABLE LIKE ANY WRIT By installing, copying, or o by the terms of this EULA. If you or use the PRODUCT. Vitech i es in this EULA at any time, in tion 11. THIS EULA EXPRESSI DOUCT THAT LICENSEE DI	TEN NEGOTIATED therwise using the u do not agree to the reserves the right to accordance with the LY EXCLUDES ANY ID NOT ACQUIRE
AGREEMENT SIGNED BY YOU. PRODUCT, you agree to be bound terms of this EULA, do not install of change, modify, add or delete article procedures described below in Section	ORCEABLE LIKE ANY WRIT By installing, copying, or o by the terms of this EULA. If you or use the PRODUCT. Vitech i es in this EULA at any time, in tion 11. THIS EULA EXPRESSI DOUCT THAT LICENSEE DI	TEN NEGOTIATED therwise using the u do not agree to the reserves the right to accordance with the LY EXCLUDES ANY ID NOT ACQUIRE

- 5. The installation wizard prompts you for the location to install the GENESYS License Manager application files. You can either:
 - Confirm the location and click **Next >**.
 - Or click **Change...** to select a different installation location, then click **Next >** after selecting the alternate location.

-	Install GENESYS License Manager	to:		
B	C:\Program Files\Vitech\GENESYS		ger\	Change



6. Click **Install** to begin the installation or click **< Back** to change settings.

Ready to Install the Program		4
The wizard is ready to begin installat	ion.	C
Click Install to begin the installation.		
If you want to review or change any the wizard.	of your installation settings, clic	k Back. Click Cancel to exit
allShield		

7. The following window displays the installation progress.

	5 License Manager - InstallSh GENESYS License Manager	ield Wizard				×
The prog	ram features you selected are be	eing installed.			<u> </u>	0
P	Please wait while the InstallShi This may take several minutes.		GENESYS Licen	ise Mai	nager.	
	Status:					
	Install drivers					
stallShield -						
		< Back	Next >	(Can	cel

8. After the installation routine completes, click **Finish**.



ger - InstallShield Wizard InstallShield Wizard Complete	>
The InstallShield Wizard has successfully ins License Manager. Click Finish to exit the wiza	

Configuring Microsoft Windows Firewall for GENESYS

If the Microsoft Windows Firewall is being used within your enterprise, you may need to create firewall exceptions.

GENESYS 2023 R2

Firewall exceptions for GENESYS 2023 R2 are needed only when connecting to a repository on another machine. This is true for connections to another installation of GENESYS 2023 R2 as well as connections to GENESYS 2023 R2 Server.

Please note that all instructions below are for Windows 10 and 11 Firewall. If you are using a different version of Windows or another firewall program, your process may differ.

Create a new Inbound Rule to allow TCP port access.

- 1. Click Start, then type "firewall" and press Enter. The Windows Firewall window will open.
- 2. Select Advanced settings.
- 3. In the left-hand pane, click Inbound Rules.
- 4. In the Actions pane (on the right), click **New Rule**. The New Inbound Rule Wizard will open.
- 5. Select Port, and then click Next >.
- 6. Select TCP.
- Specify port number "39141." (Note: Port 39141 is the default port used by GENESYS for remote repository communication. If you changed this default, you must use the changed port number here.)
- 8. Click Next >.
- 9. Select Allow the connection, then click Next >.
- 10. Select the network profile to which you would like this rule to apply. If you are unsure which to select, please contact your IT organization.
- 11. Click Next >.



12. In the Name field, enter "GENESYS 2023 R2 Repository Communication," then click **Finish**.

If you are using a network-enabled license and are unable to access your license through your network, you may need the following firewall exception on the computer that hosts the license.

- 1. Click Start, then type "firewall" and press Enter. The Windows Firewall window will open.
- 2. Select Advanced settings.
- 3. In the left-hand pane, click **Inbound Rules**.
- 4. In the Actions pane (on the right), click **New Rule**. The New Inbound Rule Wizard will open.
- 5. Select **Program**, and then click **Next**.
- 6. Click Browse.
- 7. Navigate to the C:\Program Files (x86)\Common Files\Aladdin Shared\HASP folder and select the hasplms.exe file.
- 8. Click **Open**, then click **Next >**.
- 9. Select Allow the connection, then click Next >.
- 10. Select the network profile to which you would like this rule to apply. (If you are unsure which to select, please contact your IT organization.)
- 11. Click Next >.
- 12. In the Name field, enter "Sentinel LM," then click **Finish**.



STEP 2: LICENSING GENESYS PRODUCTS

For specific information about the licensing types, refer to GENESYS Licensing Options. If you have any questions or need assistance, please contact Vitech Customer Support at +1 540.951.3999 or support@vitechcorp.com.

General Instructions for Activating a GENESYS License

- 1. Install GENESYS.
- 2. Upon first launch, you will be prompted to complete the Product Activation.
- 3. Select the appropriate Licensing Mode:
 - a. Select "Use a local license" if the license is on the machine where GENESYS is installed.
 - b. Select "Use a network license" if the license resides on a different machine than where GENESYS is installed.
- 4. Click Next >.

Note: If you are connecting to a license on your network and not activating a new license after you select the radio button next to "Use a network license," the wizard will complete.

ctivation Wizard		
p 1 of 5	 	
Select Licensing Mode		
This machine does not have select the 'Use a Network Lie option.	the second s	
Use a local license.		
Use a network license.		
050 J. T. T. T. T. S.		



5. Copy and paste the Product Key provided by Vitech into the field and click Next >.

👋 Product License Activation	>
Y Product requires activation. P	ease select licensing options.
Activation Wizard Step 2 of 5	
Please enter the product key you	eceived from Vitech for this product.
Product Key:	
	Cancel << Back Next >>

 Select your activation method as defined in your Welcome Letter. Most activations use a product key. Click Next >.

🎉 Product License Activation		×
Y Product requires activation. Please s	elect licensing options.	
Activation Wizard Step 3 of 5		
There are two methods of local license internet, select 'Activate Online' and co	CONTRACTOR CONTRACTOR AND	ted to the public
If you are in a secure environment, or o activate your license with a .v2c file. To send it to the Vitech licensing team at ' licensing team will reply back to you wi With .v2c file' and continue.	receive a .v2c file you will first need to licensing@vitechcorp.com' as an attac	create a .c2v file and hment. The Vitech
 Activate Online 	O Activate With .v2c File	Create .c2v File
Help	S8_	
	<u>C</u> ancel << <u>B</u>	ack <u>N</u> ext >>



7. Click Activate to apply the Product Key.

	ise select licensing o	ptions.	
tivation Wizard			
Operation Instructions			
our request will be submitted to		Server. You will be abl	e to use the
he activation process may take a	minute.		

8. You should receive a confirmation message that the software has been activated successfully.

If the machine is not connected to the internet or if the activation is not successful, restart GENESYS to restart the activation wizard. In Step 4, click the **Create .c2v file** button. Save the file and send it to <u>licensing@vitechcorp.com</u> along with the product key you used and ask for a manual activation.



STEP 3: AUTOMATICALLY APPLYING LICENSE UPDATES AND DEACTIVATIONS

GENESYS users can now use the GENESYS License Utility that is automatically installed with the GENESYS software to update GENESYS software licenses. This makes updating and deactivating licenses easier for GENESYS users because they no longer must wait for the Vitech License Administrator to email them the license update and apply the update manually with the Sentinel License Manager. Since the Sentinel Entitlement Management System (EMS) automatically enters the license changes, the Vitech License Administrator must only apply the changes to the product key and notify the customer that the license is ready.

The GENESYS License Utility is shown below.



If a GENESYS product key is not present, the **Update** button will be disabled.

When the user selects the **Update** button, the Update window displays, as shown below.



License Generate Request Activate Update Switch Licensing Mode Update Key ID: 673087435493598474 Download and apply any outstanding updates for the selected key ID.	17	GENESYS License Utility	-	×
Update Key ID: 673087435493598474 v	License			
Key ID: 673087435493598474 v	Generat	e Request 🛛 🙀 Activate 🛸 Update 🔄 Switch Licensing Mode		
	Update			
				_
Download and apply any outstanding updates for the selected key ID.	Key ID:	673087435493598474 ~		
		Download and apply any outstanding updates for the selected key ID.		
Update Cancel	<u> </u>		Cance	

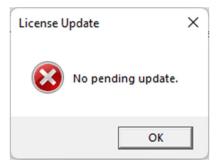
At the Update window, the user should select the Key ID from the drop-down list. The Key ID should be present on the local machine.

NOTE: The default selected key is determined by the order in which they are returned from the License Manager.

On successful update, a confirmation message is displayed listing the number of updates successfully applied.



If no updates are pending, the following message is displayed, indicating "No pending update."





If the update fails due to transport layer exceptions (e.g., "server not found," "connection timeout," etc.), an error message displays the cause of the exception with brief instructions or a link to instructions on how to proceed manually.



The GENESYS License Utility does not support updates for license formatting operations, license clone protection resets, or when the local machine does not have access to the public internet.

All updates will occur in the order that they are received from the License Manager.



STEP 4: GETTING STARTED WITH GENESYS 2023 R2

This section describes the basic steps required to launch GENESYS and log in.

Logging in to a Local Repository

The installation program creates a new program group entry on the start menu with the title "GENESYS 2023 R2." It contains an entry labeled "GENESYS 2023 R2." Simply click on this menu item.

Note: If the Microsoft Windows Firewall is being used and you are using a network-capable license, a firewall window will appear when you start GENESYS for the first time. Windows Firewall will ask you to choose to either block or unblock. Select **Unblock**. The GENESYS Login window will then appear.

If GENESYS is configured to use a network license, the following dialog will be displayed, allowing the user to select a license from the network. This dialog will not be shown when using a local license. Select the desired license and click **OK**.

	4	SVite	:0
License Manager	Product	Available	-
betaserver2019	GENESYS 2023 R2	10	
betaserver2019	GENESYS 2023 R2 Developer Edition	10	
betaserver2019	GENESYS 2023 R2 Pro	10	
desktop-957kn2q	GENESYS 2023 Pro	10	1
desktop-957kn2q	GENESYS 2023 Pro	10	
desktop-957kn2q	GENESYS 2023 R2	10	
desktop-957kn2q	GENESYS 2023 R2 Developer Edition	10	
desktop-957kn2q	GENESYS 2023 R2 Pro	10	
<		>	

If no licenses are displayed in the License Selection dialog, please contact your GENESYS administrator to ensure that GENESYS licenses have been configured on your network. Additionally, please see the section on using network licenses listed under Additional Tips at the end of this document.

The GENESYS Login window shown below will open. GENESYS is configured with one initial user account, which is the Administrator account. The username and password are case-sensitive. Log in as shown below:

Username: Administrator Password: admin



	YS Login			×
	NESYS™∂	2023		⊜ Vitech
Username Password				
💌 Reposit	tory: Local			
Help		Ok	(Cancel

GENESYS will access the repository specified during installation, which is on the local machine by default. If you would like to access a repository on another machine after installation, please reference the next section in this document: Logging into a Remote Repository.

		GENI	ESYS 2023 Pro			– 🗆 ×
File Home Data Views	Project Schema Utilities					* 🕐
Rename Renumber Delete	Lock Unlock Set Alert	Refresh Window	Paste C Font		다. Find 옥ac Replace	
Insert	Manage	Show	Tools Clipboard	Paragraph	Editing	
Project Explorer - 4 ×						
A Home	Copen Project New Project Administrative Tools Documentation Help Michaeles Michaeles Documentation	analysis, modell pro Open Project Projects SAMPLE: Geospatial Library	bol providing a flexible combin ing, and simulation functional aduct and process engineering y y	hation of data ty supporting p		
Repository: Local Project: Usernam	e: Administrator Authentication	Mode: GENESYS				



After logging in, new user accounts can be created, and passwords may be changed via the User/Group Tool accessible via the Administrative Tools link.

Logging in to a Remote Repository

On the GENESYS 2023 R2 login screen, click the arrow to the left of "Repository." This will reveal the Repository selection field. Click the Plug icon is to add a repository.

GENESYS Login		×
G ENESYS™202	3	
		⊜ ∕itech
Username Administrator		
Password		
Repository: Local		
Repository Local (localhost)		~ 🎉
Authentication Method GENESYS		
Help	OK	Cancel
Click the Add Repository icon.		
G Manage Repository Configurati	i —	
So 🔂 🖕		
Local (localhost)		
	Γ	Close



In the "Hostname" field, enter the machine name where the repository is hosted. This may be another instance of GENESYS 2023 R2 or a GENESYS 2023 R2 Server.

Leave the Port designation as the default unless this setting was changed.

🕞 Manage	Repository Configurati	—		\times
i 😼 🧓	÷			
Local (local	lhost)			
Connect to	Repository			×
Hostname:				
Port:	39141		Connect	

Click **Connect**, then **Close**. You can then select that repository from the drop-down list.



Special Considerations for Previous Version Users

Installing GENESYS 2023 R2

GENESYS 2023 R2 products will install side-by-side with previous GENESYS versions.

Upgrading SQL Server

GENESYS Edition versions prior to 2020 required SQL Server Express 2008 R2 or later. Starting with GENESYS 2021, GENESYS requires SQL Server 2014 or later. If an older version of SQL Server Express is installed on your machine, GENESYS will attempt to upgrade the installation. If the installer is unable to complete the upgrade, the user is notified that the upgrade will have to be done manually before running the GENESYS installer.

Moving your data

A simple migration utility has been built into GENESYS. This utility will upgrade your schema to the latest version. (Details of the schema changes can be found in the Appendix.) The steps below will move both your data and your Users and Groups.

To migrate your data:

- 1. Log into your current version of GENESYS.
- 2. Export your project to GNSX format using the **Project Backup** option.
- If you want to preserve your user preference settings, export the Users and Groups option. If you
 do not want your user preferences, exporting the Project Backup will create the users with default
 preferences in GENESYS 2023 R2.
- 4. Log out of the previous version of GENESYS.
- 5. Log in to GENESYS 2023 R2.
- 6. Import the Users and Group export if you exported it.
- 7. Import the project GNSX file, allowing the import wizard to create the new projects for you. While doing this, add "old" to the beginning of the project name. This will help you in a later step.
- 8. Select the **Project** tab on the ribbon, then click **Migrate Schema**.
- 9. The Schema Migration Wizard will open.
- 10. This utility makes a copy of the project with the new schema, so in most cases, you will want to let the wizard create a new project. Select **Create New Project**, set the project name as desired, and click **Migrate**.
- 11. The Job Monitor Dialog will open and alert you when the migration is complete.
- 12. When complete, examine the Job Monitor Dialog to see if conflicts were reported. Examine the conflict log if one is available.
- 13. A new project has been created using the name you specified in Step 10. Review this project.
- 14. When you are satisfied with the results, close and then delete the project you named in Step 7.
- 15. Upon first login, a user's password will expire. The user must change their password to proceed.

FIPS 140 Compliance

Starting in GENESYS 4.0, GENESYS accounts can now be used in an environment that has FIPS 140 enforcement enabled. GENESYS 3.0 users who previously could not have FIPS 140 enforcement enabled in the operating system may now do so. Further, passwords from GENESYS 3.0 do not meet the compliance standards for FIPS 140. If you wish to import your GENESYS 3.0 accounts to GENESYS 4.0 or later versions, the Administrator must reset the passwords after import.



ADDITIONAL TIPS

The sections below provide useful information to support your use of GENESYS.

Using Network Licenses

By default, GENESYS will automatically search the local subnet of the connected network to attempt to find available network licenses. If no network licenses are found, the location of the server on which the network licenses are installed may need to be provided. The IP address or name of the network license server can be specified in the Sentinel Admin Control Center on the machine where GENESYS is installed. Do the following to specify the network license server location:

- 1. Ensure GENESYS is installed.
- 2. Open the Sentinel Admin Control Center Configuration tab at <u>http://localhost:1947/_int_/config_to.html</u>
- 3. Enter the IP address or server name in the Remote License Search Parameters field.

✓ ACC Thales Sentinel A	CC: Configurat × +			-	0	×
← → C () k	ocalhost:1947/_int_/config_to.html		☆		C	÷
Sentinel Ad	min Control Center					
	Configuration Host Name: Ip-an	w17				
Sentinel Keys	Basic Settings Users	Access to Remote License Mana	gers Access from Re	note Clie	nts	
Products	Allow Access to Remote Licenses	🗹 🥹 You n	nay experience a delay of a few	minutes	before	you
Features	Broadcast Search for Remote Licenses Remote License Search Parameters	s 🔽 😡				7
Sessions						
Update/Attach						
Access Log						
Configuration		Submit	Cancel Set Defaults			
						•

- 4. Click Submit.
- 5. Restart GENESYS.

Check for Latest Service Packs

Periodically, Vitech provides service packs to upgrade the GENESYS product suite. Please check to ensure that you have the latest service pack by visiting the Software page at <u>https://www.vitechcorp.com/software-downloads/</u>.

GENESYS Training

Vitech offers ongoing training to help users learn more about using GENESYS in support of systems engineering and architecture frameworks, including:



- Model-Based Systems Engineering with GENESYS You will learn the interfaces of GENESYS and how to best apply it to the management of system design. You will learn how the GENESYS .NET interface and capability allow you to intuitively create robust system models. You will build complete design models using the designer-friendly user interface.
- Fundamentals of Writing Reports in GENESYS You will learn the intuitive and user-friendly reporting capability of the new GENESYS tool. You will craft custom reports from "scratch" as well as through basic templates. Your reports, created through GENESYS' Visual Basic .NET reporting tools, will say what you need to say about your models. This course shows you the way.

GENESYS Help and Documentation

The GENESYS user reference guide is accessible within GENESYS using the Help icon in the upper right corner. If you prefer to navigate by volume, flip through the index or simply perform a search. The help tool will meet your needs.

Sample Solutions

The Samples directory within your GENESYS installation provides three sample projects. These files can be imported into GENESYS to view and manipulate.

You will also find two API Samples to demonstrate the use of the GENESYS API.

Using Data from CORE[™]

GENESYS supports the import of CORE 9 files in the xml format using the standard import dialog. If you have data from previous versions of CORE that you would like to import into GENESYS, you must first use CORE to upgrade that data to the CORE 9 schema. Please note that the CORE 9 projects will import into projects using the v40 schema by default. From here, you should migrate your projects if you want to use later schemas.

If you need assistance migrating data to the CORE 9 schema, please contact our Customer Support Team.

Working with Report Files from CORE

While the GENESYS reporting framework brings a level of simplicity in drag-drop reporting, it is not capable of running reports created in CORE. Our Professional Services team is available to discuss your need for custom reports and the process of recreating CORE reports in GENESYS.

Disaster Prevention/Recovery

In GENESYS 2023 R2, your data is maintained by SQL Server Express. The SQL Server database files for the GENESYS local repository are located in the \ProgramData\Vitech\GENESYS 2023 R2\Data folder. These files are actively in use when the GENESYS 2023 R2 Services Host and SQL Server (GENESYS) services are running. At minimum, both services must be stopped before using standard file system backup utilities to archive the SQL Server database files. You should follow Microsoft's recommendations for backup and recovery of SQL Server.

Should you have complete failure of the machine on which you have GENESYS 2023 R2 installed and have backup files available, follow these steps to restore your data:

- 1. Install GENESYS 2023 R2 on the desired machine.
- 2. Stop the following services in the order listed:
 - a. "GENESYS 2023 R2 Services Host" (Genesys2023R2Svc),
 - b. "SQL Server (GENESYS)" (MSSQL\$GENESYS).
- 3. Locate the archived files and save them to the C:\ProgramData\Vitech\GENESYS 2023 R2\Data, overwriting the blank files currently in that folder.
- 4. Start the following services in the order listed:
 - a. "SQL Server (GENESYS)" (MSSQL\$GENESYS),
 - b. "GENESYS 2023 R2 Services Host" (Genesys2023R2Svc).



GENESYS Server Backup/Data Recovery

Data in a GENESYS Server is maintained by SQL Server. You should follow Microsoft's recommendations for backup and recovery of SQL Server.

Uninstalling GENESYS

To remove GENESYS from your system, select **Add/Remove Programs** from the Windows control panel. Select the GENESYS product from the list of applications available to uninstall and click the **Add/Remove** button. Follow the instructions provided by the installer to remove the application.

Please note that this will not remove the repository itself, as GENESYS repositories are maintained by either SQL Server Express or SQL Server. These must be removed separately.

Note: If you are uninstalling GENESYS with the intention of moving your license to another machine, contact Vitech Customer Support for assistance.

Reporting Problems / Making Product Suggestions

All customer observations and recommendations are valuable to us. If you should encounter a problem with the software, please notify us via e-mail, phone, or fax, as indicated below. Any information you can provide in your report regarding the hardware and software configuration of the host machine, the circumstances in which the problem occurred, conditions to reproduce the problem, and such test data as you can reasonably provide to assist Vitech in reproducing the problem would be greatly appreciated.

We hope that you enjoy the new capabilities of GENESYS 2023 R2.

Vitech 2270 Kraft Drive, Suite 1600 Blacksburg, Virginia 24060 540.951.3322 | Fax: 540.951.8222 <u>support@vitechcorp.com</u> www.vitechcorp.com



APPENDIX

Prerequisites for Installation

GENESYS 2023 R2 software requires that the Microsoft .NET Framework 4.8 be installed on the computer. This must be installed before running the GENESYS 2023 R2 installers.

Most computers will already have this prerequisite installed. If you do not have this installed and run the GENESYS 2023 R2 installers, you will be prompted with an alert of the need to install the prerequisite.

In this situation, if your computer has internet access, our installer will obtain the installer for you. If you do not have internet access on this computer, you must retrieve the installer from another computer and install it separately.

Should you need to obtain and install Microsoft .NET Framework 4.8, you can access the installer and installation instructions here: <u>https://dotnet.microsoft.com/en-us/download/dotnet-framework/net48</u>.



THIS PAGE INTENTIONALLY BLANK





2270 Kraft Drive, Suite 1600 Blacksburg, Virginia 24060 540.951.3322 | FAX: 540.951.8222 Customer Support: <u>support@vitechcorp.com</u> <u>www.vitechcorp.com</u>