

Microsoft® PowerPoint® Connector Guide

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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.



PREFACE

This Microsoft[®] PowerPoint[®] Connector Guide provides information on how to install and use a PowerPoint extension developed to connect the GENESYS[™] database to Microsoft PowerPoint. The connector is a .NET application that extends the Microsoft PowerPoint application provided in Microsoft Office[®] 2013, 2016, 2019, and 2021. Figure 1 displays the extended blank Microsoft PowerPoint presentation.

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Slide 1 of 1 English (United States)		Click to add subtitle

Figure 1 Sample Microsoft PowerPoint Connector

This guide describes the process to import and add the extension in Microsoft PowerPoint, how to interface directly with the GENESYS repository and individual projects in the repository, how to use the features in the Microsoft PowerPoint extension to export data out of the GENESYS data repository, and how to use the dashboard features coded into the Microsoft PowerPoint extension.

This guide is intended to augment the Model-Based Systems Engineering (MBSE) with GENESYS training course and the reference material provided with GENESYS. The goal of this guide is to expose the user to the Microsoft PowerPoint extension and thereby extend the use and application of GENESYS for both system design and development and project management associated with a system development project.

The following additional resources are available for use with this guide:

- For descriptions of GENESYS including database classes and folders, different views, diagram notation, and the mechanics of entering data into GENESYS, the reader is referred to the GENESYS Help>Documentation feature in the toolset.
- For the definition of schema terms, the reader is referred to the GENESYS schema, which contains descriptions for each schema entity. The schema is accessed in the GENESYS Software.
- For application of GENESYS to system and architecture design, the reader is referred to the GENESYS System Definition Guide (SDG) and Architecture Definition Guide (ADG) supplied with the GENESYS software installation.



CONNECTOR INSTALLATION AND MANAGEMENT

1.1 Installing the Microsoft PowerPoint Connector

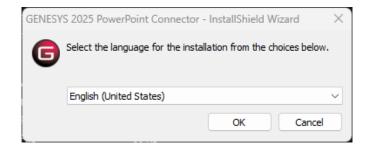
The GENESYS Microsoft PowerPoint Connector is installed via a standard, familiar Microsoft Windows[®] setup program. Please note that separate installers are available for either 64-bit or 32-bit Microsoft Windows and Microsoft PowerPoint operating environments. The connector runs in Microsoft PowerPoint 2013, 2016, 2019, and 2021.

There are separate files for Microsoft PowerPoint Connector depending on the architecture of the computer in which the software is being installed. The files are named:

- "GENESYS2025PowerPointConnector_x86.exe" (for 32-bit operating systems) and
- "GENESYS2025PowerPointConnector_x64.exe" (for 64-bit operating systems).

Double-click the installer .exe file to begin the installation.

Select the language to use. This is both the language of the installer and the language that GENESYS will be set to use. Click "OK."



Click "Next."

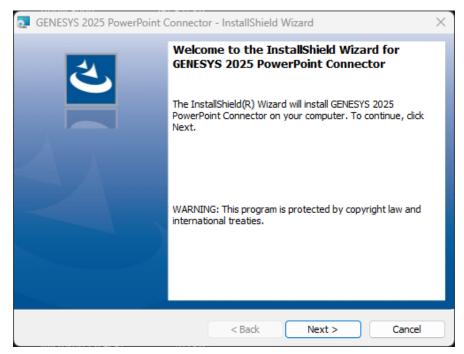


Figure 2 Microsoft PowerPoint Connector Installer, Step 1



Review and accept the licensing agreement terms and click "Next."

GENESYS 2025 PowerPoint Connecto	r - InstallShield	Wizard	×
License Agreement Please read the following license agreem	ent carefully.		と
IMPORTANT - READ CAREFULLY is a legal agreement between either "you") and Zuken Vitech Inc. ("Vitech below, which includes computer so printed materials, and "online" or "PRODUCT"). YOU AGREE THAT THI WRITTEN NEGOTIATED AGREEMEN otherwise using the PRODUCT, you a you do not agree to the terms of this Vitech reserves the right to change, r any time, in accordance with the proc	an individual or n") for the Vitec ftware and may electronic doc S AGREEMENT T SIGNED BY Y gree to be boun S EULA, do not i modify, add or d	a single entity ("L h software produ / include associa umentation (colle IS ENFORCEABL OU. By installing, d by the terms of install or use the lelete articles in t	Licensee" or ct identified ated media, ectively, the LE LIKE ANY copying, or this EULA. If PRODUCT. his EULA at
 I accept the terms in the license agreem I do not accept the terms in the license a 			Print
	< Back	Next >	Cancel

Figure 3 Microsoft PowerPoint Connector Installer, Step 2

Click "Install" to begin the installation.

GENESYS 2025 PowerPoint Connecto	or - InstallShield	Wizard	×
Ready to Install the Program The wizard is ready to begin installation			と
Click Install to begin the installation.			
If you want to review or change any of exit the wizard.	your installation	settings, click Back. (Click Cancel to
InstallShield	< Back	Install	Cancel

Figure 4 Microsoft PowerPoint Connector Installer, Step 3



The setup program will run and install the Microsoft PowerPoint connector. When the process is complete, simply click "Finish" to complete the installation. The connector will now be available for use in any Microsoft PowerPoint presentation.

💀 GENESYS 2025 PowerPoint C	Connector - InstallShield Wizard	\times
	InstallShield Wizard Completed The InstallShield Wizard has successfully installed GENESYS 2025 PowerPoint Connector. Click Finish to exit the wizard.	
	< Back Finish Cancel	

Figure 5 Microsoft PowerPoint Connector Installer, Step 4

1.2 Managing the Microsoft PowerPoint Connector

Add-ins to Microsoft PowerPoint are sometimes disabled by customers. Note that for our connector to work, it may be necessary to adjust the settings by enabling Microsoft PowerPoint to use add-ins.

Once installed, the GENESYS Microsoft PowerPoint connector can be managed via standard Microsoft Office add-in tools. Note that the steps below apply to Microsoft PowerPoint 2016 installations and may vary slightly in different versions of Microsoft PowerPoint.



The extension to GENESYS in Microsoft PowerPoint is accessed via the "GENESYS" tab in an open presentation, as shown in the figure below. To manage the connector, first click the "FILE" tab.

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File Home Insert Design Transi	tions Animations Slide Show GENESYS Q Tell me what you want to do Dor	nna M. Long 🔑 Share
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Clipboard 🕞 Slides	Font 5 Paragraph 5 Drawing	🕤 Editing 🔨
	Click to add title Click to add subtitle	
Slide 1 of 1 English (United States)	🚔 Notes 📮 Comments 🛛 🖭 🕮 🗐 🖃 🗕	+ 61% 🔛

Figure 6 Microsoft PowerPoint GENESYS and FILE Tabs

Once in the "FILE" tab, click the "Options" item from the menu on the left.

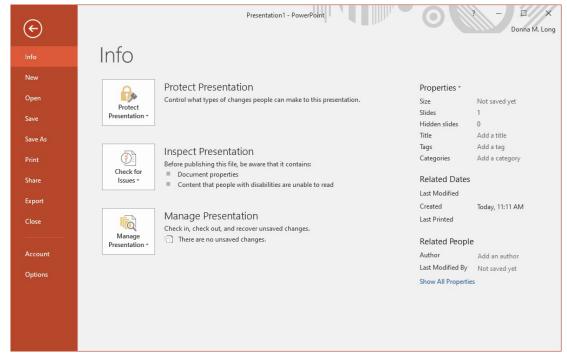


Figure 7 Microsoft PowerPoint FILE tab, Options Menu Item



In the Options dialog that opens, select the "Add-Ins" option from the menu on the left.

PowerPoint Options		?	×
General Proofing Save	General options for working with PowerPoint.		
Typography Language Advanced	 ✓ Show Mini Toolbar on selection ① ✓ Enable Live Preview ③ ScreenTip style: Show feature descriptions in ScreenTips ▼ 		
Customize Ribbon Quick Access Toolbar Add-ins	Personalize your copy of Microsoft Office User name: Initials:		
Trust Center	☐ Always use these values regardless of sign in to Office. Office Background: Circles and Stripes ▼ Office Theme: Colorful ▼ Start up options Choose the extensions you want PowerPoint to open by default: Default Programs		
	 ✓ Iell me if Microsoft PowerPoint isn't the default program for viewing and editing presentations. ✓ Show the Start screen when this application starts 		
	ОК	Car	ncel

Figure 8 Microsoft PowerPoint Options Dialog, Add-Ins Menu Item



In the Add-Ins dialog that opens, select "COM Add-ins" from the "Manage:" combo box at the bottom, then click the "Go..." button.

General									
Proofing	💾 View and manage Microsoft Office Add	·ins.							
Save	Add-ins								
Language	Name ^	Location	Туре						
Accessibility	Active Application Add-ins		1						
dvanced	Acrobat PDFMaker Office COM Addin	C:\Program Files (x86)\Adobe\Acrobat DC\P	COM Add-in						
ustomize Ribbon	GENESYS 2025 PowerPoint Connector	file:///C:\Program Files\Vitech\GENESYS 202	COM Add-in						
Quick Access Toolbar	Inactive Application Add-ins								
dd-ins	OneNote Linked Notes Add-In	C:\Program Files\Microsoft Office\root\Offic	COM Add-in						
rust Center	OneNote Notes about PowerPoint Presentations	C:\Program Files\Microsoft Office\root\Offic	COM Add-in						
	Document Related Add-ins No Document Related Add-ins								
	Disabled Application Add-ins								
	No Disabled Application Add-ins								
	Add-in: Acrobat PDFMaker Office COM	Addin							
	Publisher: Adobe Inc. Compatibility: No compatibility information av	vailable							
	Compatibility: No compatibility information available Location: C:\Program Files (x86)\Adobe\Acrobat DC\PDFMaker\Office\x64\PDFMOfficeAddin.dll								
	Description: Acrobat PDFMaker Office COM Addin								
	Manage: COM Add-ins •								

Figure 9 Microsoft PowerPoint Add-Ins Dialog, Manage COM Add-Ins Option

In the COM Add-Ins dialog that opens, select the GENESYS Microsoft PowerPoint Connector item. Any of three actions can be performed:

- 1) The GENESYS Connector can be unchecked. Clicking "OK" will then disable the connector from running in workbooks.
- 2) If the GENESYS Connector is unchecked, it can be checked. Clicking "OK" will then enable the connector to run in workbooks.
- 3) The GENESYS Connector can be selected, and the "Remove" button can be clicked. The connector will be uninstalled.

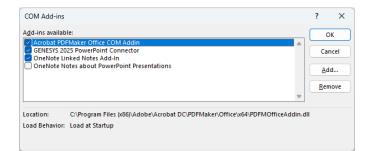


Figure 10 COM Add-Ins Dialog, Managing the GENESYS Connector



CONNECTING MICROSOFT POWERPOINT WITH GENESYS

1.3 Connecting to GENESYS from Microsoft PowerPoint

With Microsoft PowerPoint open on the desktop, navigate to a blank presentation, or open a blank presentation. Select the GENESYS tab on the ribbon. Then 'connect' Microsoft PowerPoint by logging in to GENESYS using the icon on the left-hand side of the ribbon.

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File	Ho	me	Insert	Design	Transiti	ons	Animations	Slic	de Show	GENESYS	Q Te	ell me what y
G	0	Reposit	ory: (not	t logged in)	Select by	Folder		7.	Diagram		-	
_	+	Project		~	Folder			5	Insert to	A new slide	+	
Login .	ogout	gout			Include child folders		Y Show all options		all options		Insert Diagram	
	Rep	ository /	Project		Diagrams (with content only)							

Figure 11 GENESYS Login in Microsoft PowerPoint Using Ribbon Button

Clicking on the GENESYS Login button will launch and bring up the GENESYS login screen.

File	Home	Insert	Draw	Design	Transitions	Animations	Slide Show	Record	Review	View	Help	Acrobat	GENESYS			r 19 -
G Login	Logout	Repositor Project	y: (not lo <u>c</u>	iged in) ~	Select by Folde Folder			n A new sli		Insert	Diagram					
	Rep	ository / Pro	ject)iagrams (with co									\sim
				Click to	add notes	© GENES © GENES Username Password Repository	WS Login	2 · · · · · 1 5™2O2! ost) 5ENESYS	ок		SVIte Cancel	× 	3	5 6		
Slide 1 of	1 1	Accessibili	ty: Good I	o go			Ξ	ÊNotes ⊑	Display S	ettings		88 🗎	। 모		- + 57%	Ô

Figure 12 Microsoft PowerPoint with GENESYS Login

Log in to GENESYS using the appropriate Username and Password. This connects Microsoft PowerPoint with the Repository. Once logged into GENESYS, the controls on the GENESYS ribbon will be "active" and no longer be grayed out.



1.4 The GENESYS Ribbon in Microsoft PowerPoint

There are several sections on the GENESYS ribbon in Microsoft PowerPoint which are used to control access to the GENESYS database.

8 5-	ত্যু ত	& -	÷				Р	resentation	1 - PowerPoint		
File Ho	ome	Insert	Design	Transi	tions	Animations		lide Show	GENESYS	Q	Tell me what y
G 🔐	Reposit	ory: Loc	al	Select by	Folder			Diagram	Activity		
Login Logout	Project	ject SAMPI	PLE: Ge… →	Folder	Catego	ry	✓ Insert to	A new slide	-		
Login Logout	gout			🗌 Inclu	de child	e child folders 🛛 🍸 Show		T Show	all options		Insert Diagram
Repository / Project					Diagrams (with content only)						

Figure 13 GENESYS Ribbon in Microsoft PowerPoint

The Repository / Project section controls access to a particular system design project in the GENESYS repository. Within this section the "Project" selection provides a drop-down menu where the user can select the project within the database repository from which diagrams will be extracted. This is the project from which all diagrams will be associated in Microsoft PowerPoint.

The "Diagrams" section of the ribbon allows the user to select diagrams from the model in GENESYS to be displayed on Microsoft PowerPoint slides. Each control in this section is described below:

- **Select by**: Provides a drop-down selection where the user can pick selections either by Folder or Package.
- **Folder**: Provides a drop-down selection of Class Folders or Package Folders that have been created in the project repository.
- **Include child folders**: Provides the option of iterating through all the sub-folders for diagram creation.
- **Diagram**: Provides a drop-down selection of diagram types to choose from for extract and placement in the Microsoft PowerPoint presentation.
- **Insert**: Provides the option of inserting a new slide or creating the diagram on the current slide.

When using the selections in the ribbon, the connector will iterate through all the entities in the folder selected and develop the diagram selected for each entity.

Class / Folder Package	All items Clear
Category Change Request Pack Component Concem Constraint Definition Defined Tem Document Domain Set Event Ext Ext	kage
Function	-
ntity (optional)	
iagram	
iagram ctivity DD Jass onstraintBDD FFBD FFD FFD FFD FFD FFD	
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iagram ctivity DD Jass onstraintBDD FFBD FFD FFD FFD FFD FFD	
lagram ctivity DD lass onstraintBDD FFBD FBD lowintemalBlock lierarchy	

Figure 14 GENESYS Diagrams Dialog Box



DEVELOPING INDIVIDUAL GRAPHICS FOR INSERTION INTO A PRESENTATION

1.5 Using Advanced "Show all options" to Control Individual Diagrams

The user can select individual diagrams for individual slides in a Microsoft PowerPoint presentation by expanding the options available in the ribbon. To do this, click or select the "Show all options" label on the ribbon, this will open a dialog box to right hand side of the Microsoft PowerPoint screen. This dialog box is used to either query (or extract) information from the database as well as import or update information into the database.

The dialog box has four main sections. The top box provides for selection of the Class and Folder from which to create the diagram.

When the class or folder is selected, the second window is populated with the entities of that class. Pick a single entity by clicking on the entity. Or select multiple Entities by holding down the <Ctrl> key.

The Diagram box allows the user to select the diagrams to be provided for the entity or entities selected in the Entity box. To select multiple diagrams, use the <Ctrl> key. If a diagram is selected that is not provided or not appropriate for the entity, an error message is generated. Once the error message is read, close the error message and change the selection as needed.

The bottom section of the dialog box provides controls for titling and inserting slides. The "Slide title" selection has two alternatives: "Auto-title the slide" and "Use a custom title." If "Use a custom title" is selected, insert the desired title in the text box. Finally, in the "Insert to" selection create the graphic diagram either as "A new slide" or on the current slide. If more than one entity and/or more than one diagram has been selected then, there will be multiple slides created for each diagram.

Once all the selections have been made, create the slides for the Microsoft PowerPoint presentation by clicking on the "Insert" radio button at the bottom of the dialog box.





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