



Streaming Files Tutorial

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Product

Surpac™ 6.6.1

Last modified: Tuesday, 1 April 2014

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Introduction

Overview

You can use streaming files to present three-dimensional data in various Microsoft products, such as Word, PowerPoint, and Internet Explorer. The procedures you can use to implement streaming files in these products vary depending on the version.

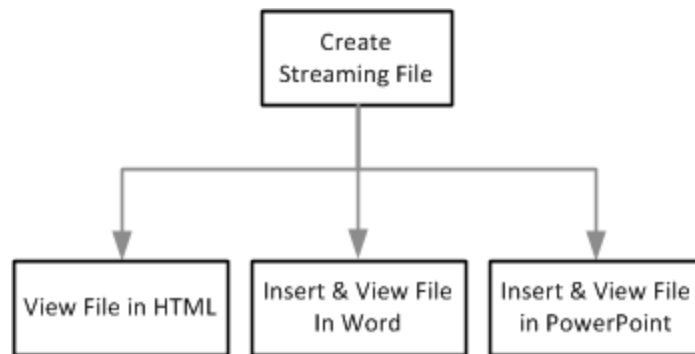
When you embed the streaming file into one of the Microsoft products, you can use visualisations such as real-time rotation and zooming

Requirements

Before proceeding with this tutorial, you will need:

- Surpac
- The streaming files data set
- Internet Explorer
- Microsoft Word 2003 (or a later version) 32-bit.
- Microsoft PowerPoint 2003 (or a later version) 32-bit.

Workflow



Note: This workflow demonstrates the steps in this tutorial. There are other ways to view streaming files.

Setup for this tutorial

Setting the work directory

A work directory is the default directory for saving Surpac files. Files used in this tutorial are stored in the folder **<shared_files>\demo_data\tutorials\streaming_files**.

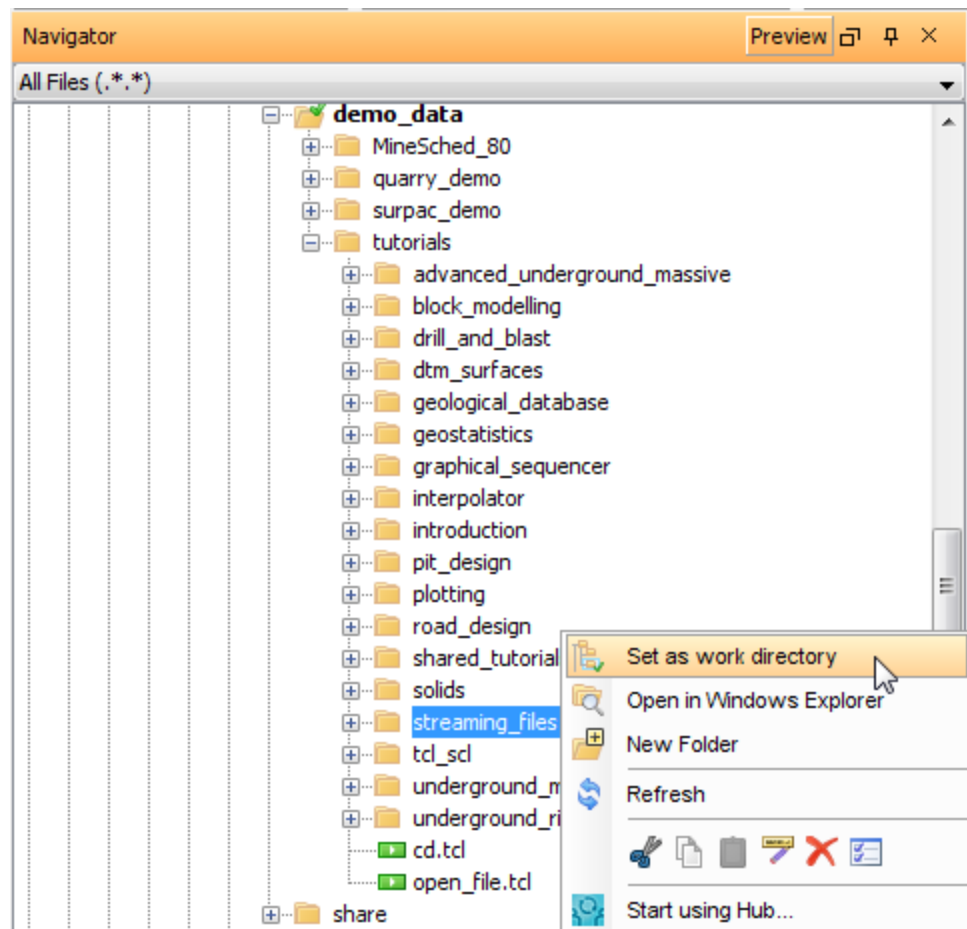
Where **<shared_files>** is the directory in which the Surpac shared files were installed.

In Windows 7, and Windows 8, the default path is

C: \Users\Public\GEOVIA\Surpac\66\demo_data\tutorials\streaming_files.

Task: Set the work directory

1. In the Surpac **Navigator**, right-click the **streaming_files** folder.
2. On the shortcut menu, select **Set as work directory**.

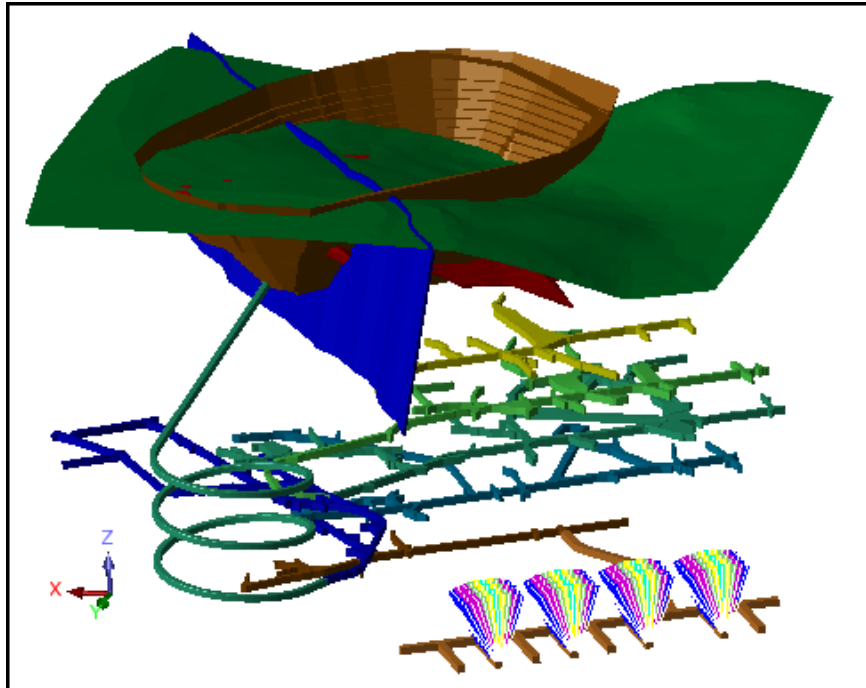


The name of the work directory is displayed in the title bar at the top of the Surpac window.

Creating a streaming file

Task: Display the data set in Graphics

1. Open **project.swa**.
DTMs and string files are displayed.



Task: Export a streaming file

1. Choose **File > Save to Stream Control**.
2. Enter the information as shown, and click **Apply**.

Export HOOPS Interchange Format

Filename

Generate HTML page?

HTML Properties

Page Title

Description of scene

Width of preview area

Height of preview area

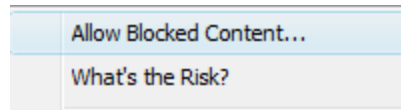
Note: Two files are created in the working directory **design.hsf** and **design.html**.

Viewing a streaming file in HTML

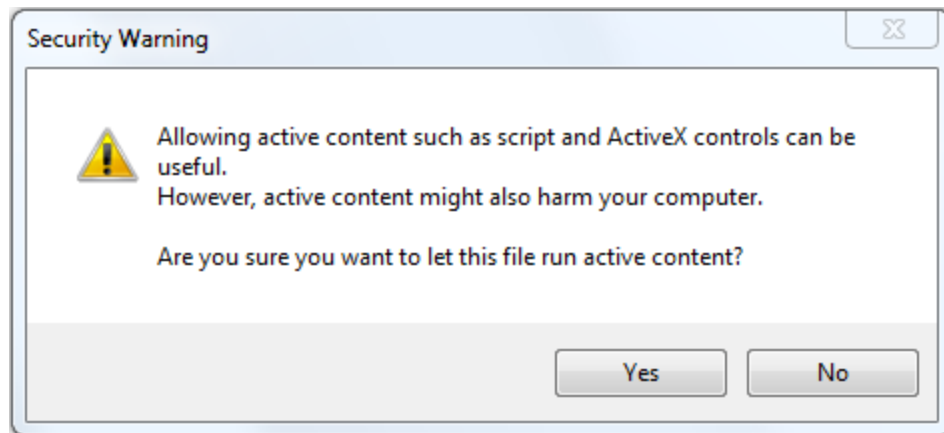
Task: View the HTML file

1. In Windows Explorer, browse to the working directory, and open **design.html** in Internet Explorer.
An Internet security warning will appear on the page.


2. Click on the warning bar and select **Allow Blocked Content...** .



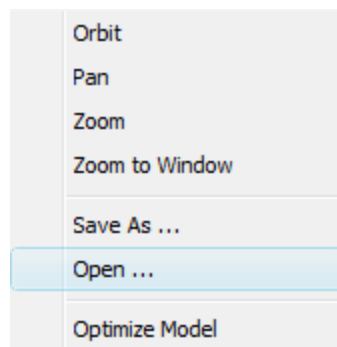
The *Security Warning* dialog box is displayed.



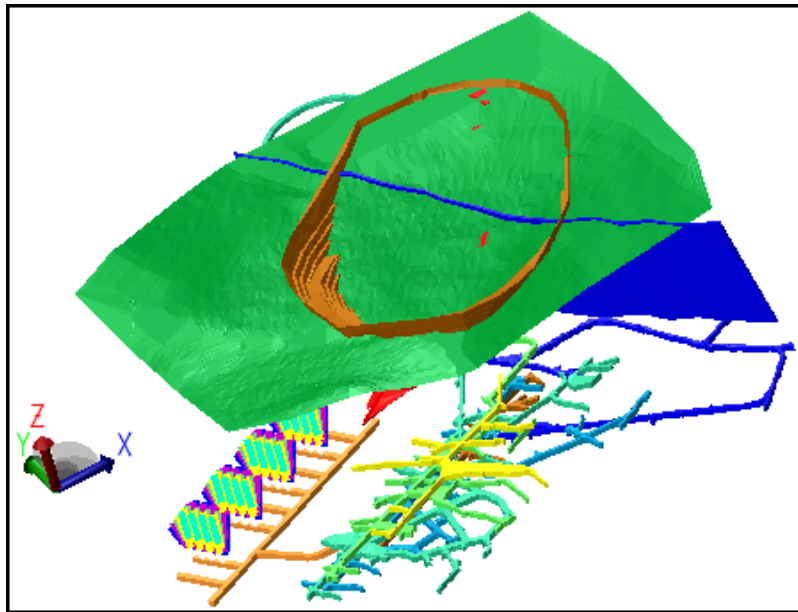
3. Click **Yes**.
The control is displayed in the page.

 **Note:** If you have not previously installed the **GEOVIA Software Stream Control**, you will be prompted to download and install the control on your machine. After you have installed the **GEOVIA Software Stream Control** you will see it displayed in the page.

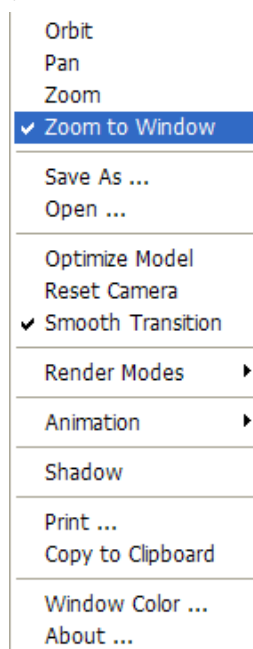
4. Right-click on the control and select **Open...** .



5. Navigate to the **design.hsf** file.
6. Click **Open**.
The streaming file is displayed.


Task: View the data

1. Click and drag in the viewport to spin the data in three dimensions.
2. Right-click anywhere on the image, and a shortcut menu is displayed:



3. Select **Zoom to Window**, and then click and drag in the viewport to zoom the data. Some options, such as **Shadow**, are toggle functions.

The **Window Color** option allows you to set different background colours for the upper and lower halves of the viewport.

 **Tip:** To zoom out, select **Reset Camera**.

Inserting, viewing, and saving a streaming file in Word

Be aware of the following restrictions when using streaming files in Word:

- Streaming files work with 32-bit Microsoft Word, but not 64-bit Microsoft Word. This is because the streaming files control is 32-bit.
- You cannot *embed* a streaming file in Word. Therefore, if you want to open the Word document on another computer you must also copy the **.hsf** to that computer, and store the **.hsf** file in the same folder from which you inserted it.



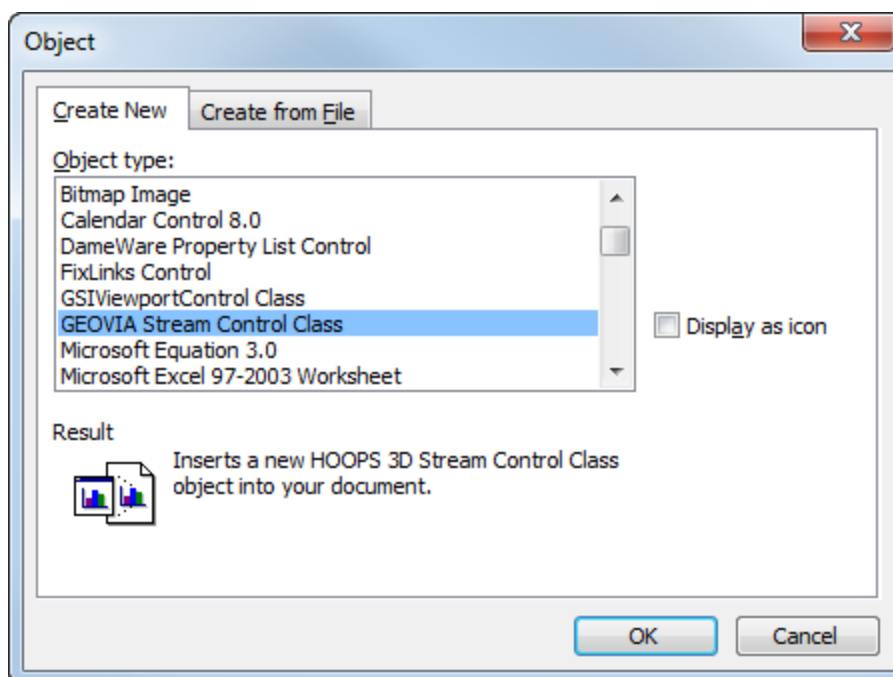
Tip: GEOVIA recommends that you store the **.hsf** files in, and insert the **.hsf** files from, a location with a short file path in a drive in which other users are likely to have write access on their computers. For example, you could save the **.hsf** files in **C:\temp** or **C:\stream**.

- Before you insert a streaming file in Word, you must view the streaming file in Internet Explorer once. When you view the streaming file in Internet Explorer, you download the **GEOVIA Stream Control** to your computer. Without the **GEOVIA Stream Control**, you cannot insert a streaming file in Microsoft Word.

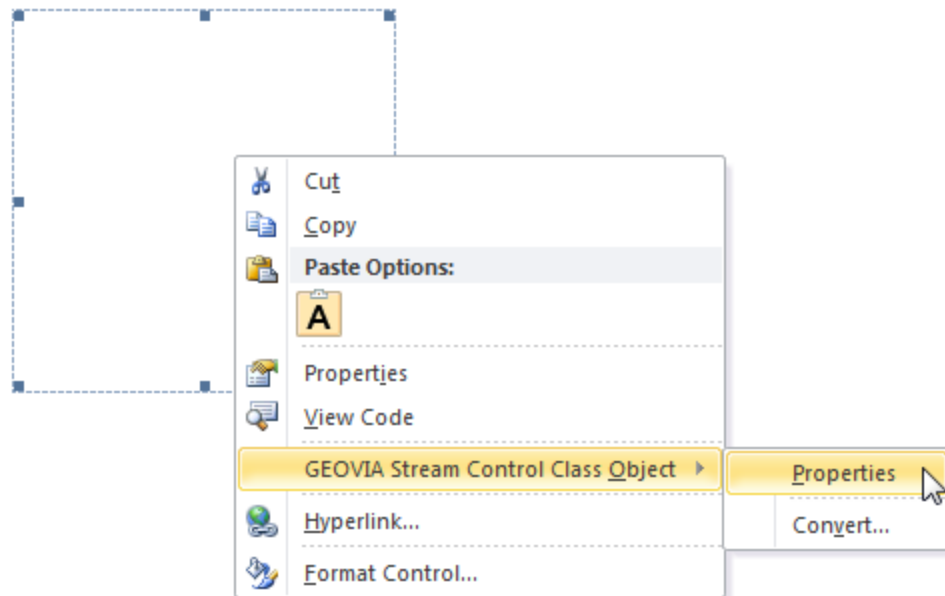
Task: Insert a streaming file in Word 2003

1. Open a new or existing Word document.
2. Position the cursor where you want to insert the file.
3. Choose **Insert > Object**.

The *Object* form is displayed.

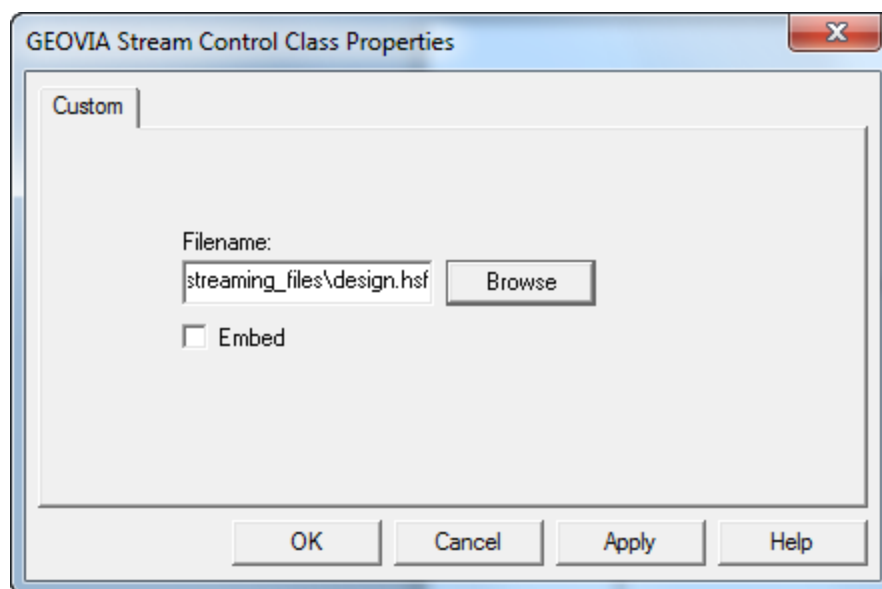


4. Select **GEOVIA Stream Control Class**, and click **OK**.
The draw box is inserted into the document.
5. Right-click on the draw box, and select **GEOVIA Stream Control Class Object > Properties**.



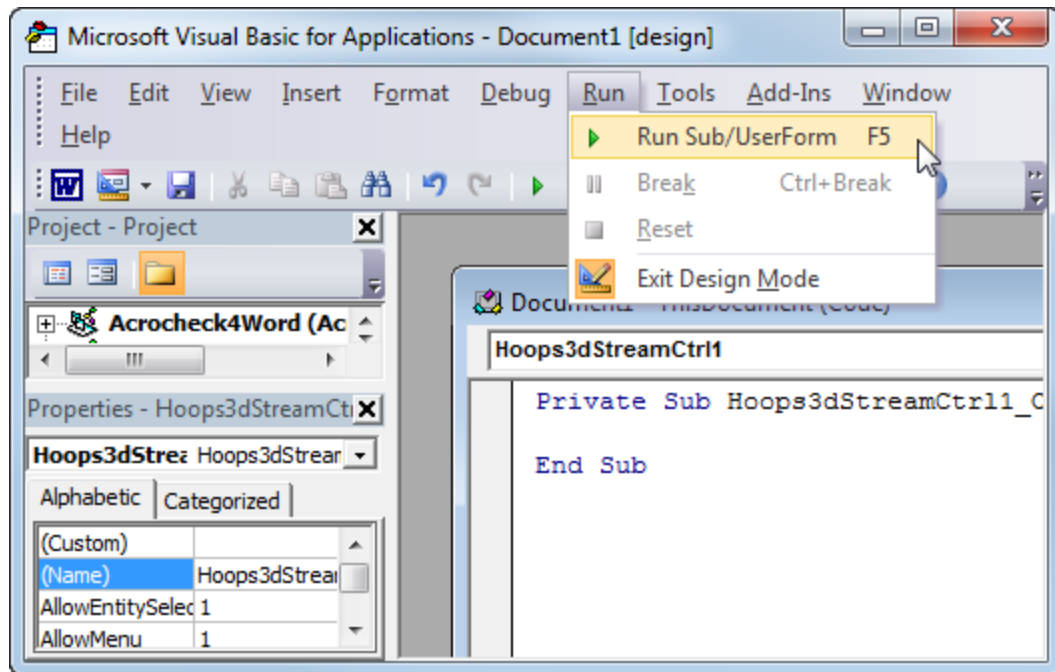
The *GEOVIA Stream Control Class Properties* form opens.

6. Browse to the **design.hsf** file, and click **Open**.
7. Click **OK**.

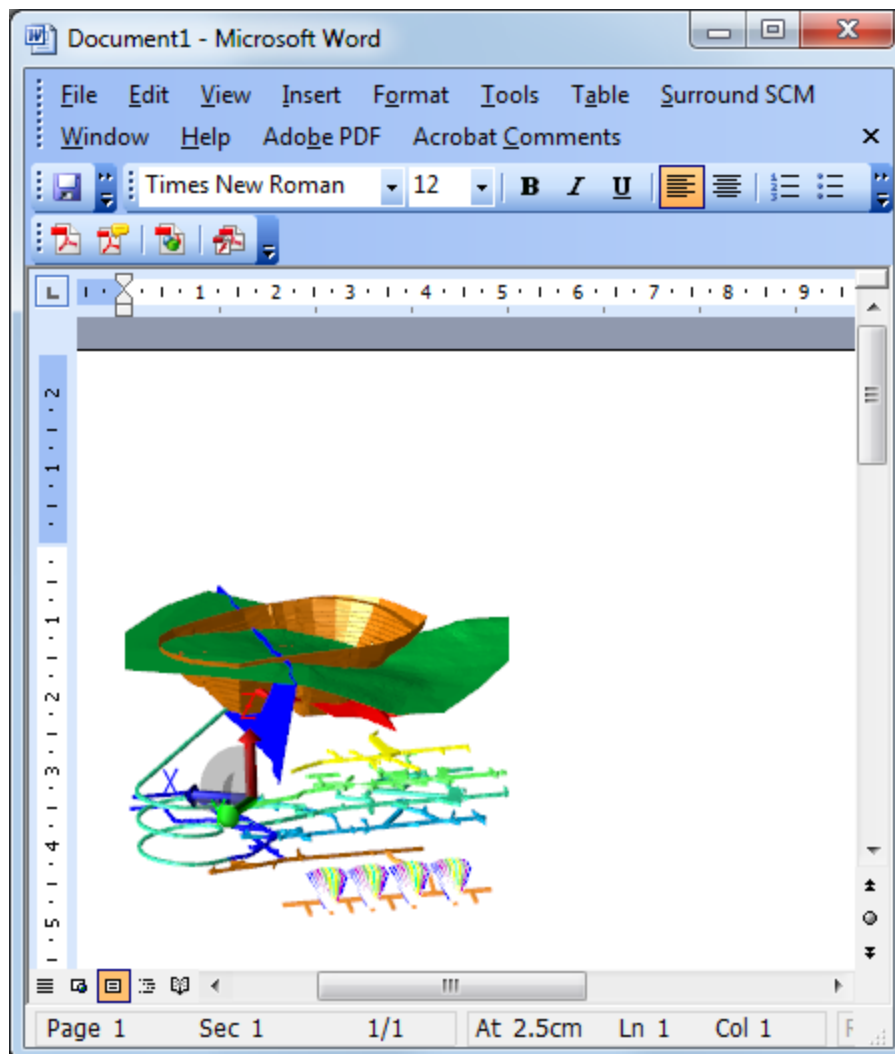


 **Note:** The Microsoft Visual Basic window opens automatically.


8. Choose **Run > Run Sub/UserForm**, or press **F5**.

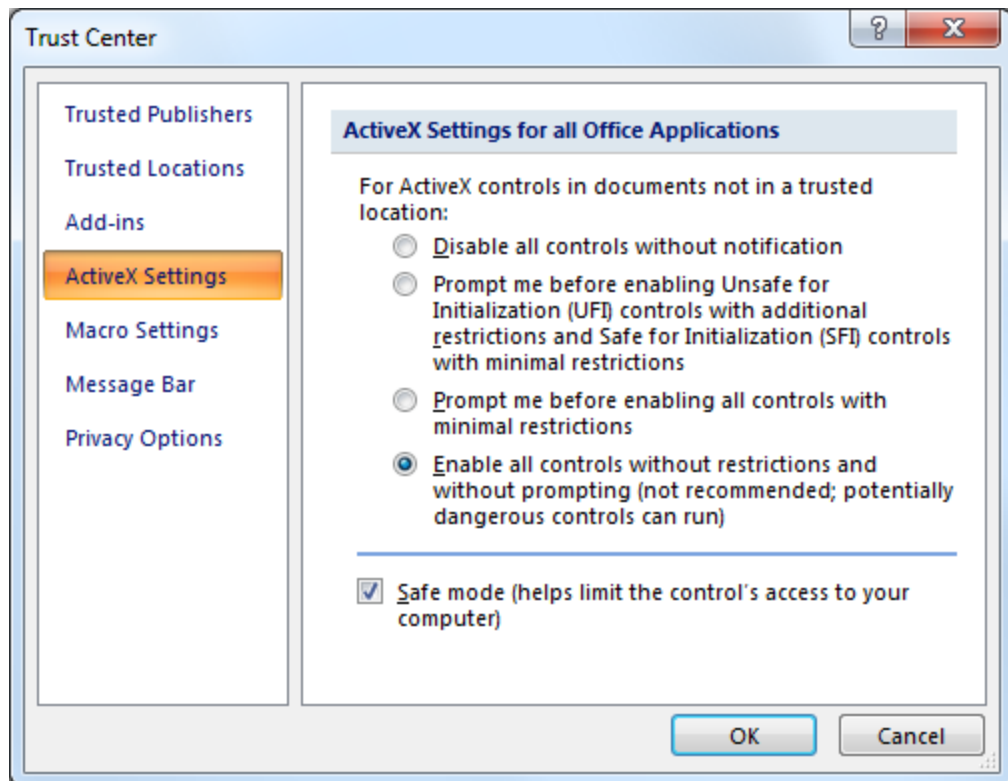



- 9. Close the Visual Basic window.
The **design.hsf** file is displayed in the Word document.

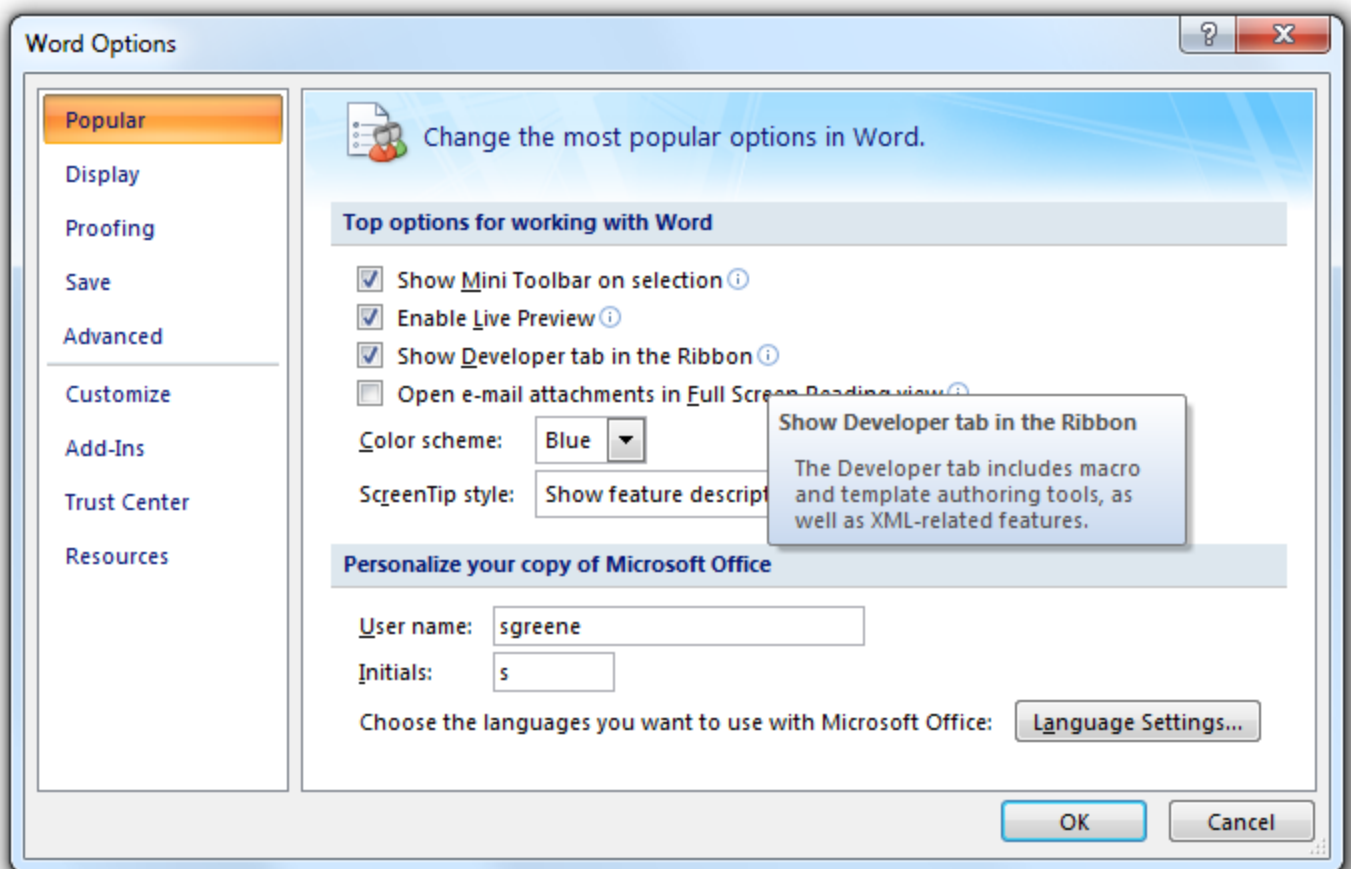


Task: Insert a streaming file in Word 2007

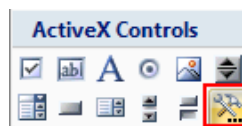
1. Open a new or existing Word document.
2. Position the cursor where you want to insert the file.
3. Click the **Office**  button, and then click **Word Options**.
4. Click **Trust Center**.
5. Click **Trust Center Settings**, and click **ActiveX Settings**.
6. Complete the form as shown, and click **OK**.



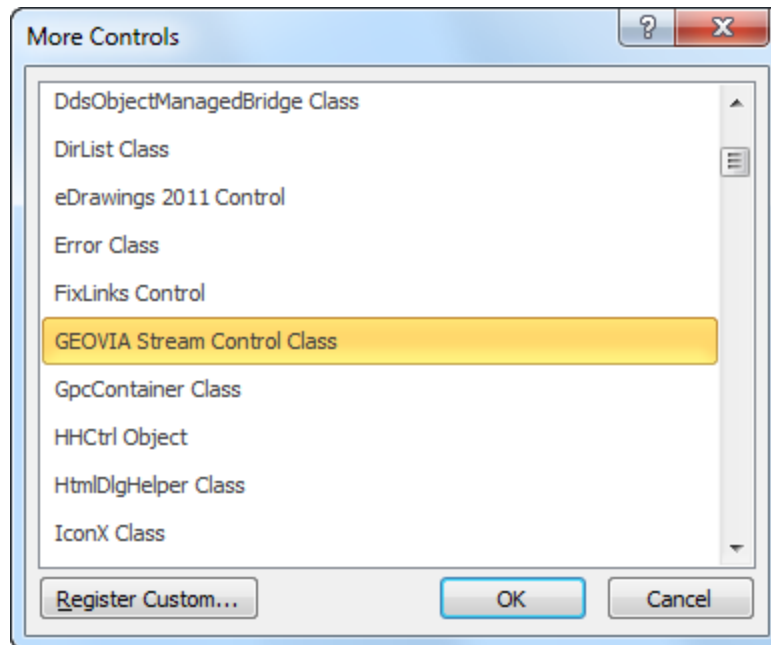
7. Click **OK**.
8. Click the **Office**  button, and click **Word Options**.
9. In the **Word Options** form, click **Popular**.
10. Select **Show Developer tab in the Ribbon**, and click **OK**.




11. Click the **Developer** tab.
12. In the **Controls** group, click **Legacy Tools** , and click **More Controls**.

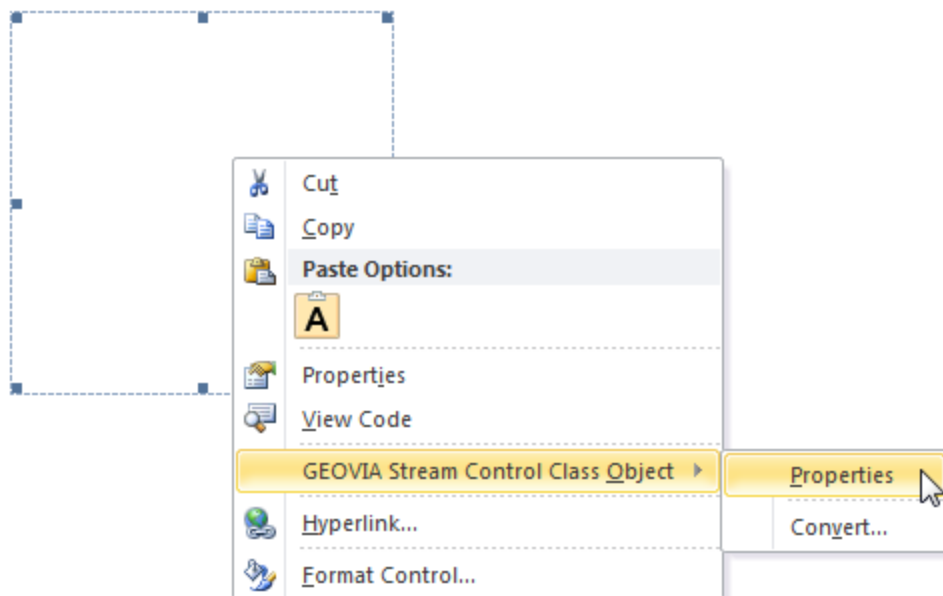


13. On the *More Controls* form, select **GEOVIA Stream Control Class**, and click **OK**.




 **Note:** A draw box is displayed in your Word document.

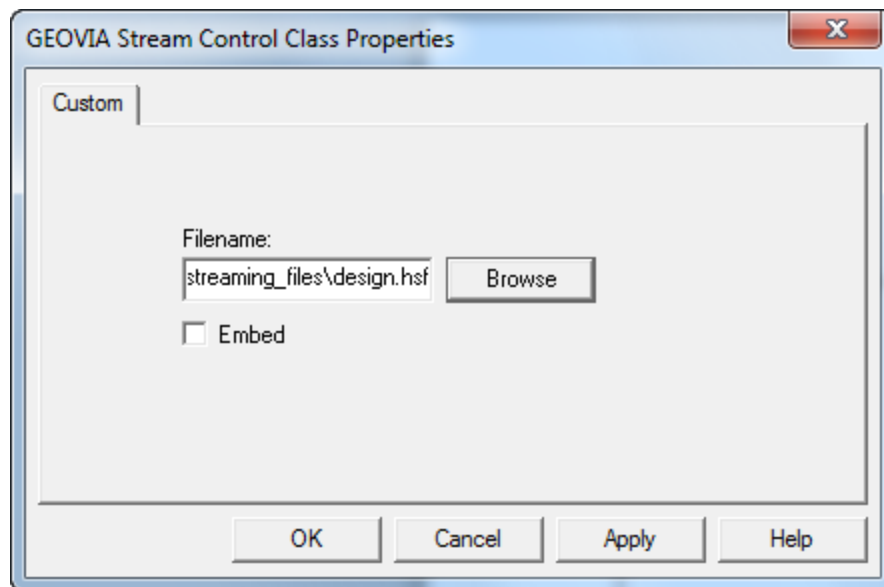
14. Click on the draw box, right-click and choose **GEOVIA Stream Control Class Object > Properties**.



15. Browse for **design.hsf**, and click **Open**.

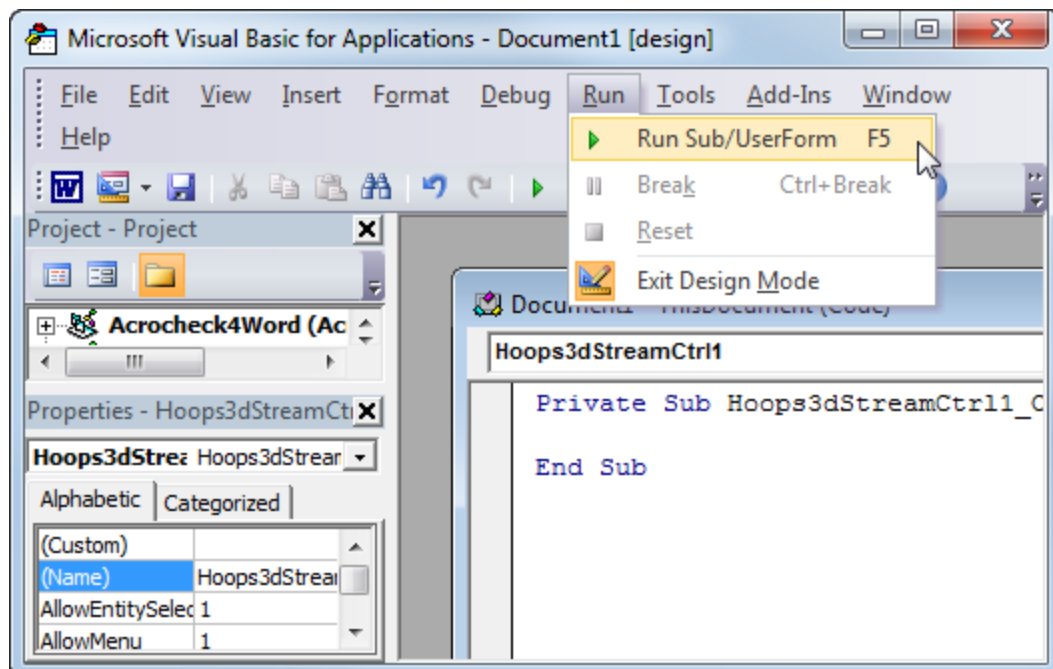
 **Note:** If you might use this Word document on another computer, you would copy the **.hsf** file to a short path on **C:** drive such as **C:\temp** or **C:\stream** before opening it. To view the streaming file correctly on the other computer you must also copy the **.hsf** file to the same short path from which you inserted the **.hsf** file.

16. Click **OK**.

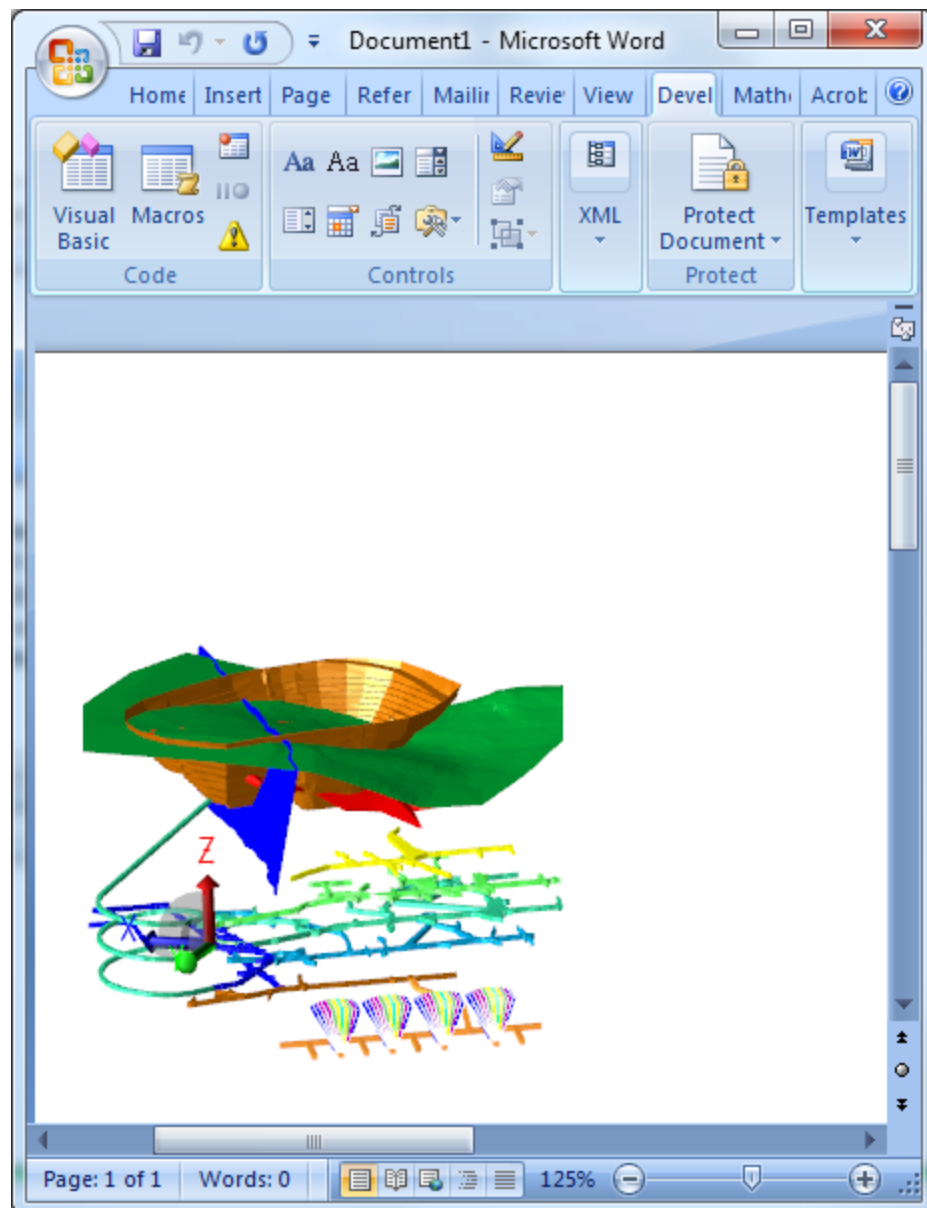


Note: The Microsoft Visual Basic window opens automatically.

17. Choose **Run > Run Sub/UserForm**, or press **F5**.

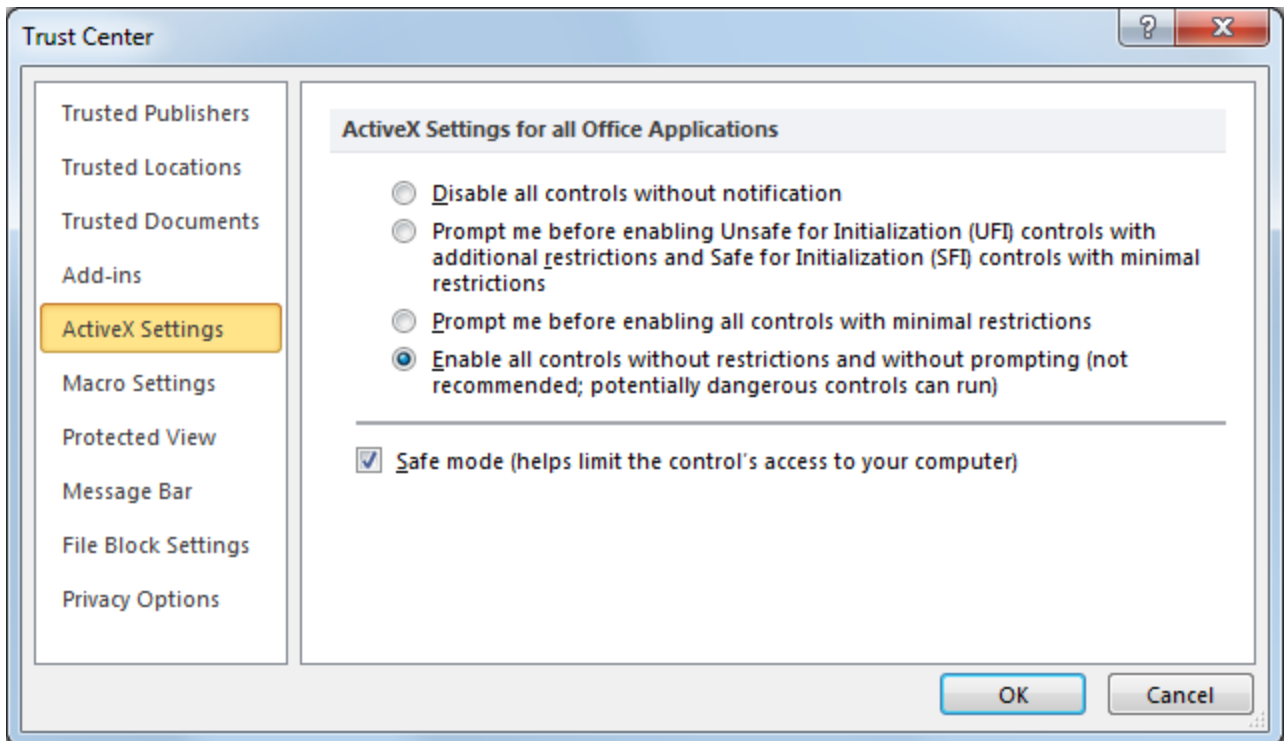


18. Close the Visual Basic window.
The **design.hsf** file is displayed in the Word document.



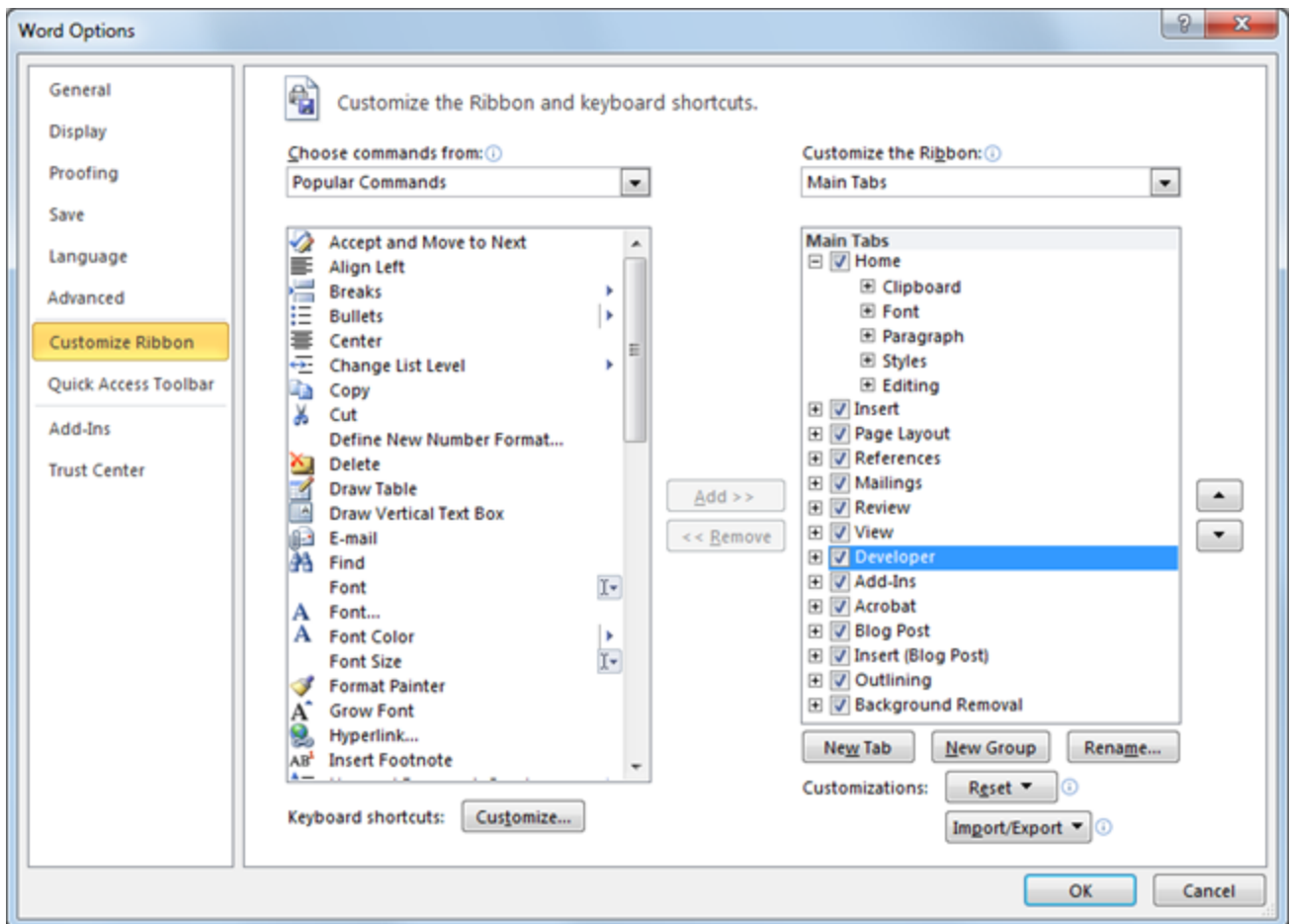
Task: Insert a streaming file in Word 2010 or Word 2013

1. Open a new or existing Word document.
2. Position the cursor where you want to insert the file.
3. Choose **File > Options**.
4. Click **Trust Center**.
5. Click **Trust Center Settings**, and click **ActiveX Settings**.
6. Complete the form as shown, and click **OK**.



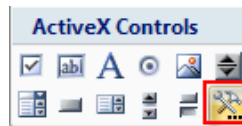
7. Click **Customize Ribbon**.

8. In the **Main Tabs** list, select the **Developer** check box, and click **OK**.

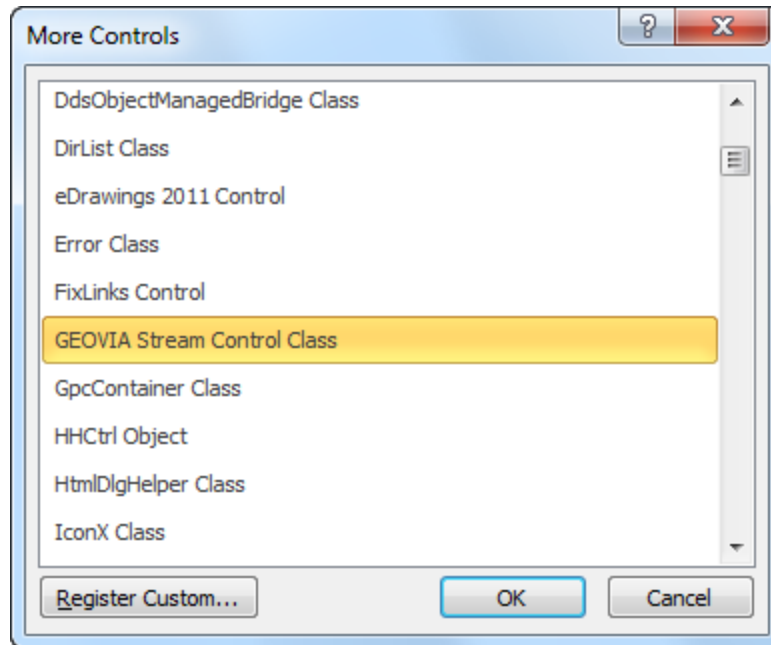



9. Click the **Developer** tab.

- In the **Controls** group, click **Legacy Tools** , and then click **More Controls**.

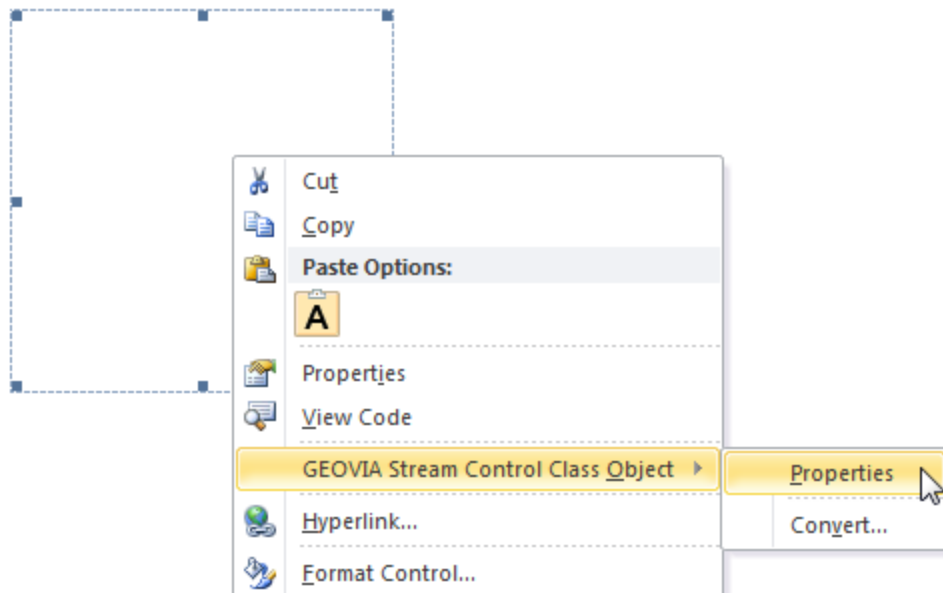


- On the *More Controls* form, select **GEOVIA Stream Control Class**, and click **OK**.




 **Note:** A draw box is displayed in your Word document.

- Click on the draw box, right-click and choose **GEOVIA Stream Control Class Object > Properties**.

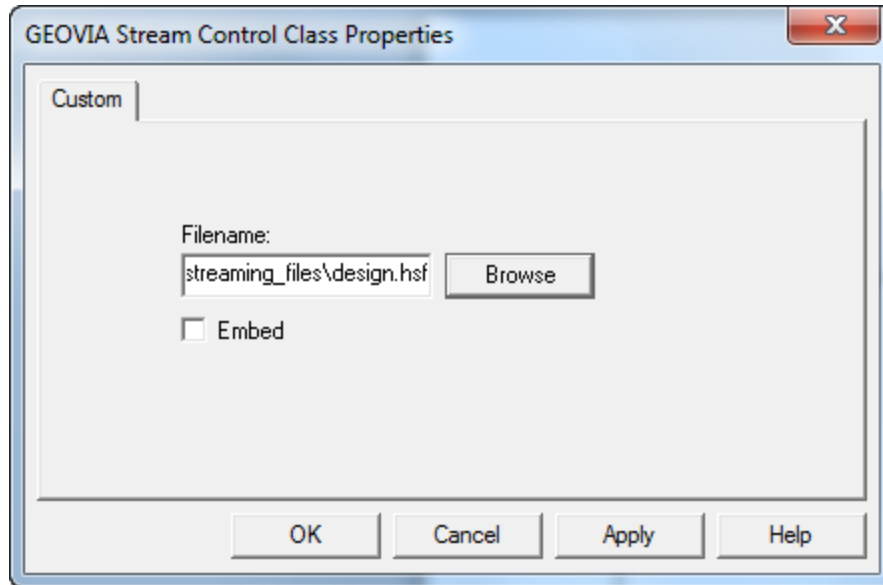


- Browse for **design.hsf** and click **Open**.

 **Note:** If you might use this Word document on another computer, you would copy the **.hsf** file to a short path on **C:** drive such as **C:\temp** or **C:\stream** before opening it. To

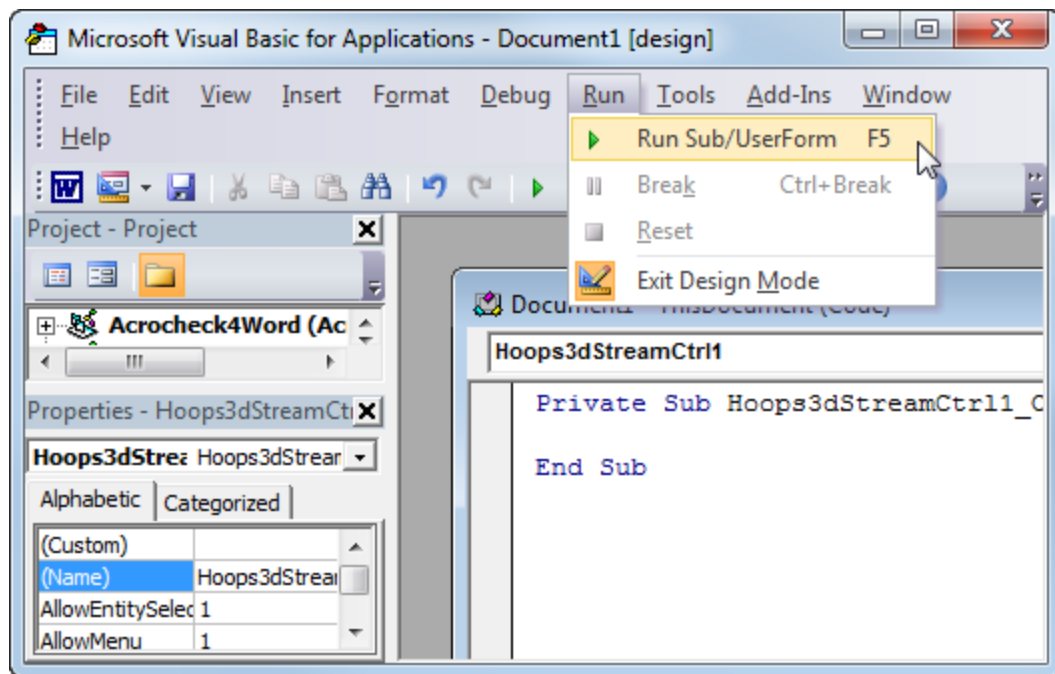
view the streaming file correctly on the other computer you must also copy the **.hsf** file to the same short path from which you inserted the **.hsf** file.

14. Click **OK**.

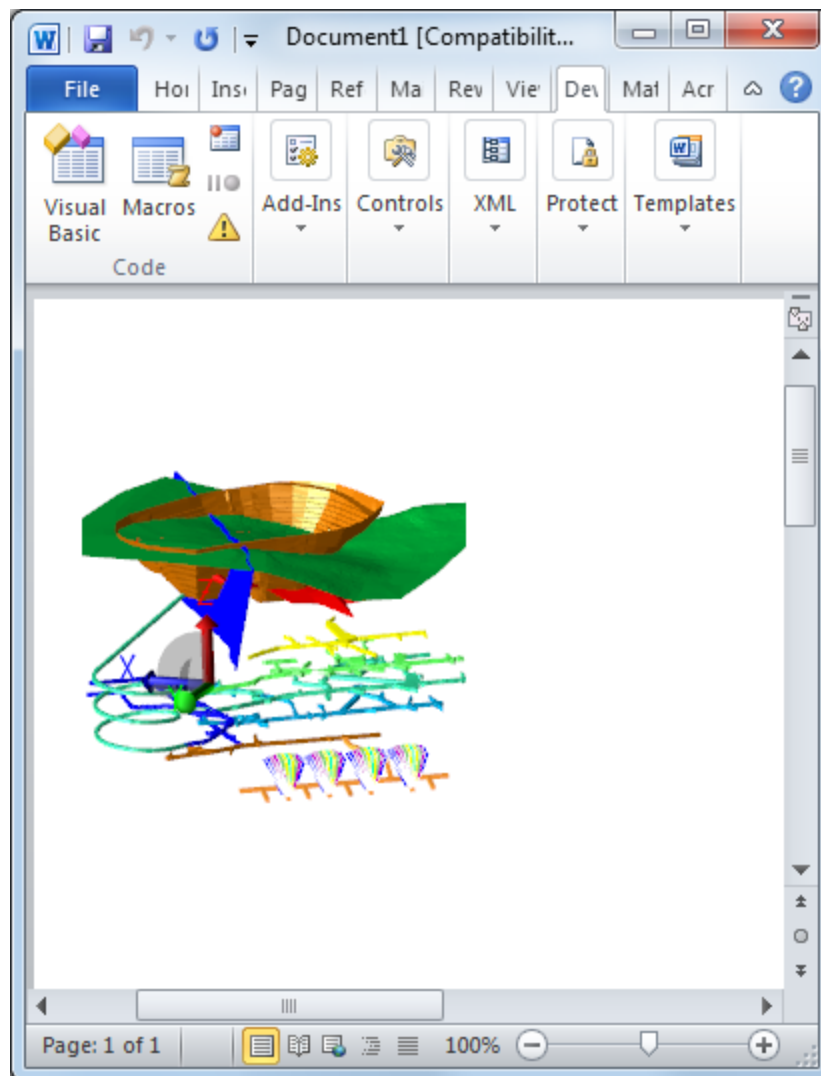


Note: The Microsoft Visual Basic window opens automatically.

15. Choose **Run > Run Sub/UserForm**, or press **F5**.



16. Close the Visual Basic window.
The **design.hsf** file is displayed in the Word document.

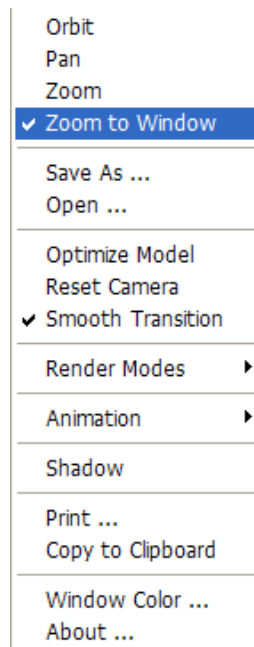


Task: View a streaming file in Word


You can view a streaming file in 32-bit versions of Word 2003 or later versions.

Before you attempt the following procedure on any computer, you must view the streaming file in Internet Explorer once. When you view the streaming file in Internet Explorer, you download the **GEOVIA Stream Control** to your computer. Without the **GEOVIA Stream Control**, you cannot view a streaming file in Microsoft Word.


1. Right-click anywhere on the image to open the shortcut menu.




2. Select **Zoom to Window**, and then click and drag in the viewport to zoom the data.
3. Select **Orbit**, and then click and drag in the viewport to rotate the data.

 **Tip:** To zoom out, click **Reset Camera**.

Task: Save a streaming file in Word

1. Select the **Save As** command:
 - In Word 2003, 2010, or 2013 choose **File > Save As**.
 - In Word 2007 click the **Office**  button, and select **Save As > Word Document**.
2. Navigate to the directory you want to save the file in and type the file name.
3. Click **Save**.

 **Note:** You can save the document in **.docx** format. You do not have to save the Word document in **.docm** format. The only exception to this is if you have Word 2003 (which does not support the **.docx** format, but does allow you to save as **.doc** or as **.docm**) you must save in **.docm** format.
4. If you send the Word document to another computer, also send the **.hsf** file, and save the **.hsf** file in the same folder from which you inserted the **.hsf** file.

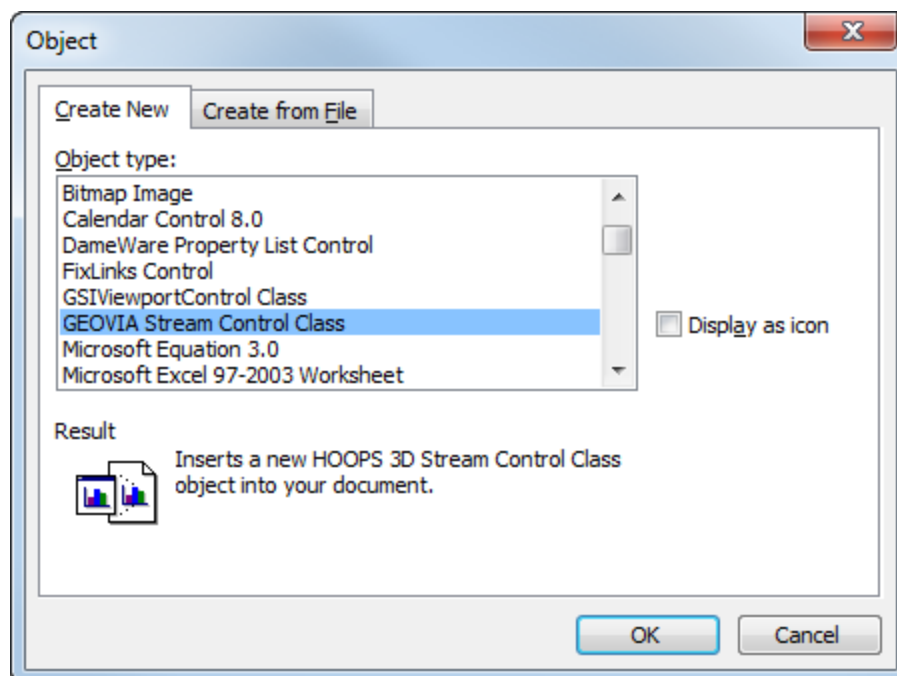
Inserting, viewing, and saving a streaming file in PowerPoint

Be aware of the following restrictions when using streaming files in PowerPoint:

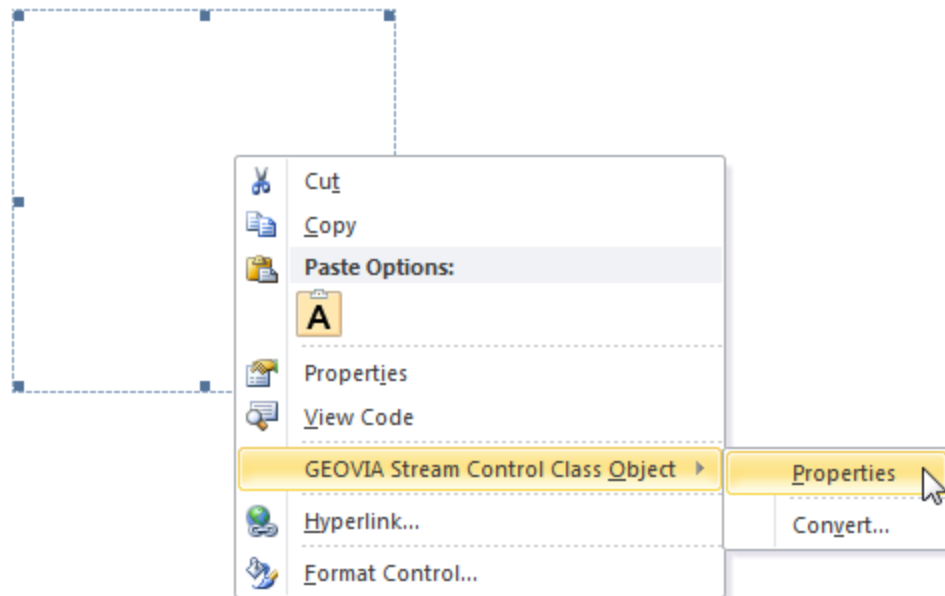
- Streaming files work with 32-bit Microsoft PowerPoint, but not 64-bit Microsoft PowerPoint. This is because the streaming files control is 32-bit.
- You cannot *embed* a streaming file in PowerPoint. Therefore, if you want to open the presentation on another computer you must also copy the **.hsf** to that computer, and store the **.hsf** file in the same folder from which you inserted it. GEOVIA recommends you insert **.hsf** files from a short path on **C:** drive such as **C:\temp** or **C:\stream**.
- Before you attempt to insert a streaming file in Microsoft PowerPoint, you must view the streaming file in Internet Explorer. When you view the streaming file in Internet Explorer, you download the **GEOVIA Stream Control** to your computer. Without the **GEOVIA Stream Control**, you cannot insert a streaming file in Microsoft PowerPoint.

Task: Insert a streaming file in PowerPoint 2003

1. Open a new or existing PowerPoint document.
2. Choose **Insert > Object**.
The *Object* form is displayed.

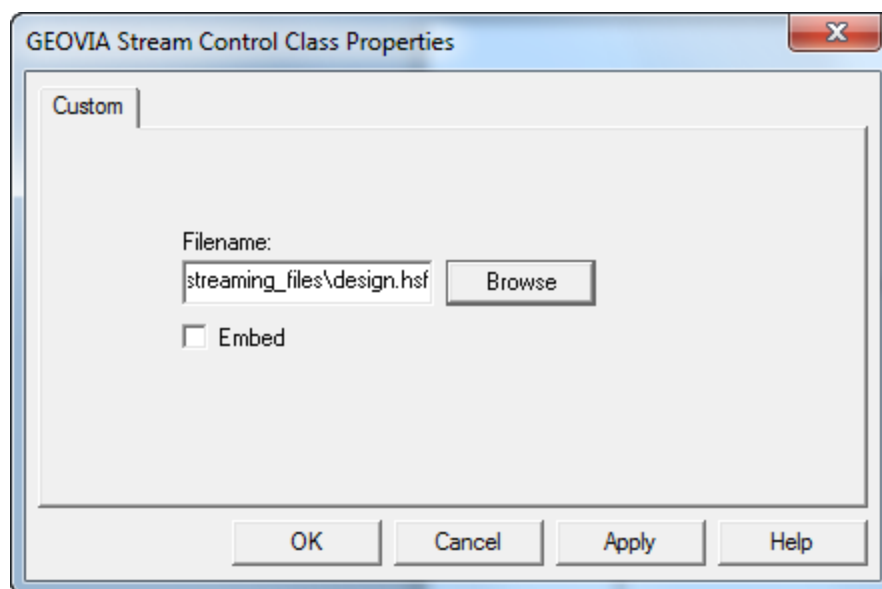


3. Select **GEOVIA Stream Control Class**, and click **OK**.
The draw box is inserted into the document.
4. Right-click on the draw box and select **GEOVIA Stream Control Class Object > Properties**.

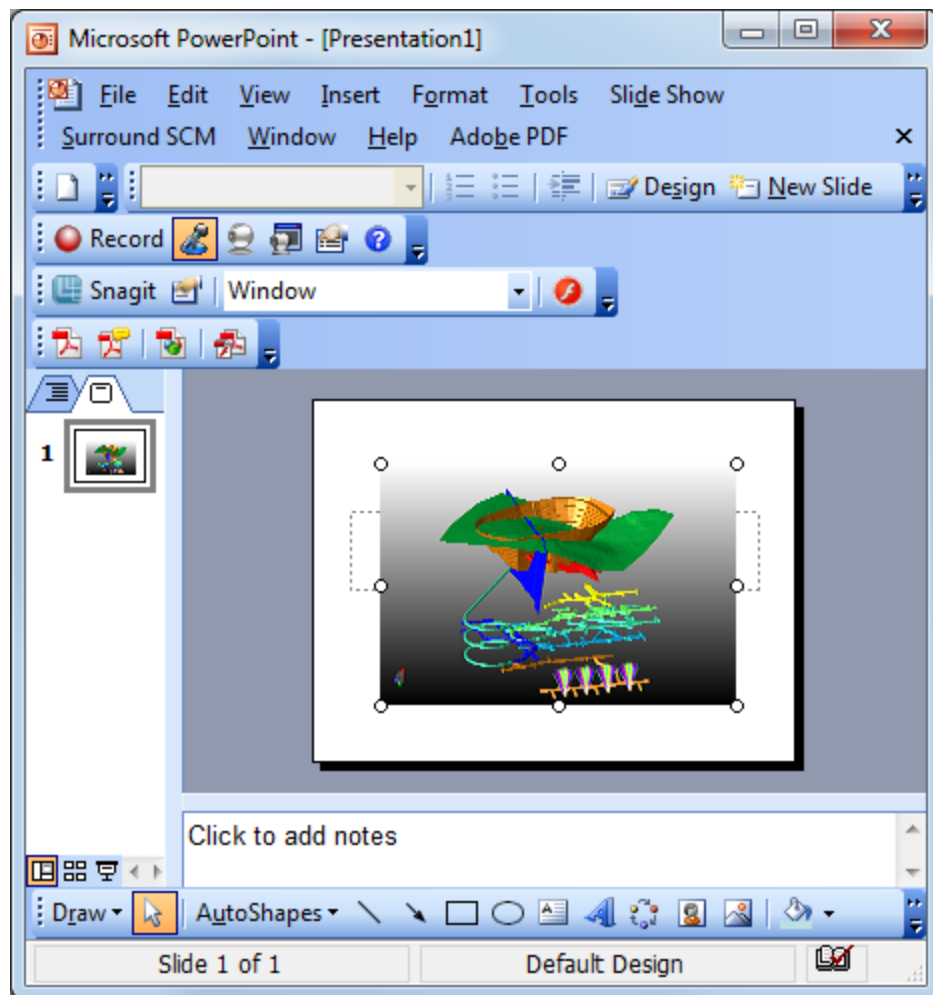


The *GEOVIA Stream Control Class Properties* form opens.


5. Browse to the **design.hsf** file, and click **Open**.
6. Click **OK**.

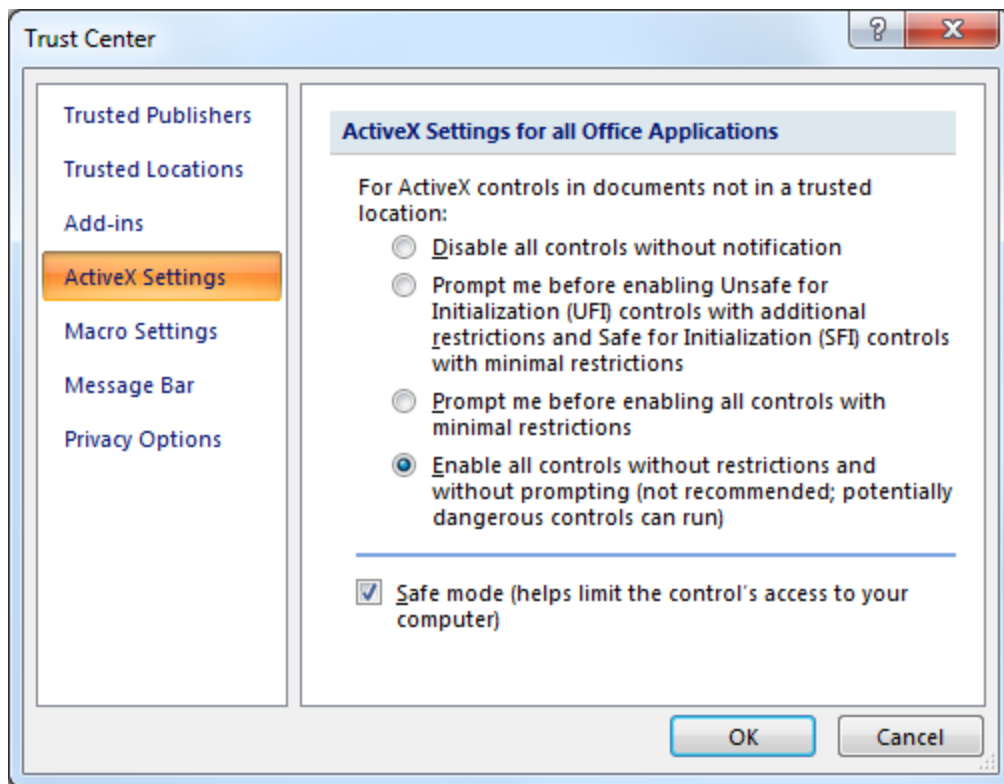


7. Choose **Slide Show > View Show**, or press **F5**.
The **design.hsf** file is displayed in the slide.

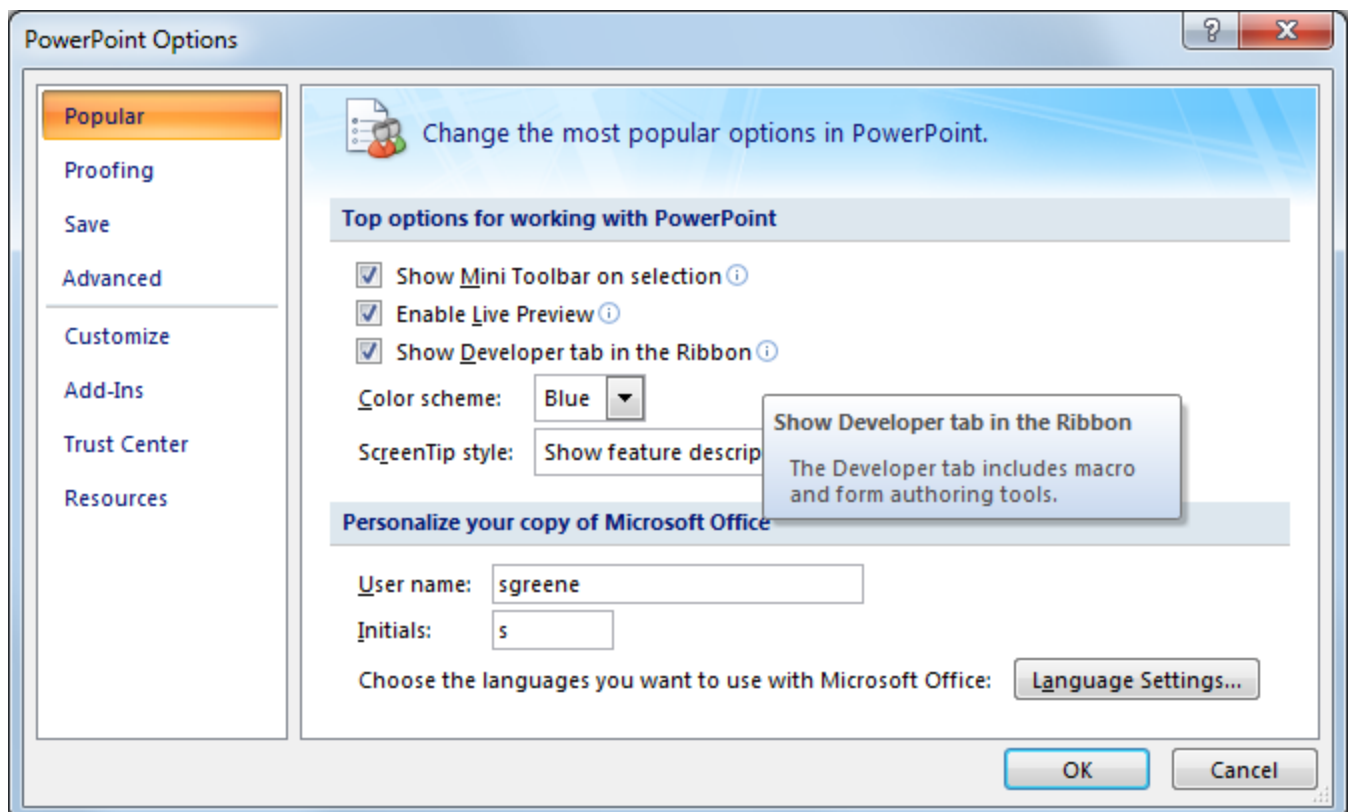


Task: Insert a streaming file in PowerPoint 2007

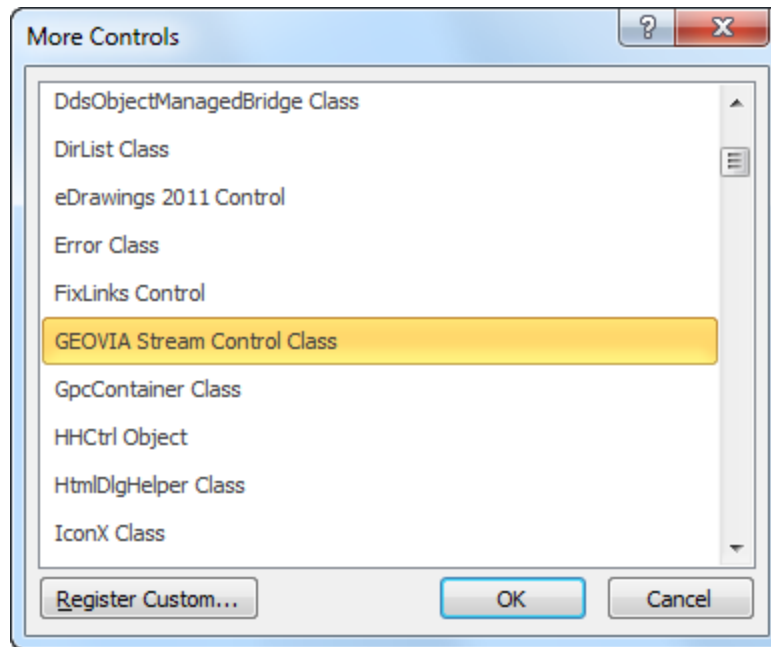
1. Open an existing document, or create a new PowerPoint document.
2. Click the **Office**  button, and click **PowerPoint Options**.
3. Click **Trust Center**.
4. Click **Trust Center Settings**, and click **ActiveX Settings**.
5. Complete the form as shown, and click **OK**.



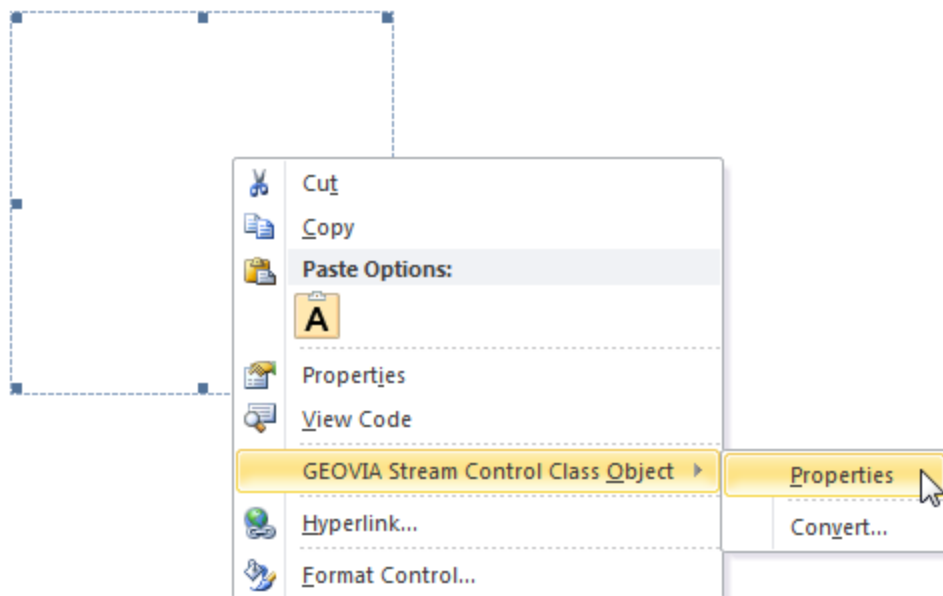
6. Click **Popular**.
7. Select **Show Developer tab in the Ribbon**, and click **OK**.



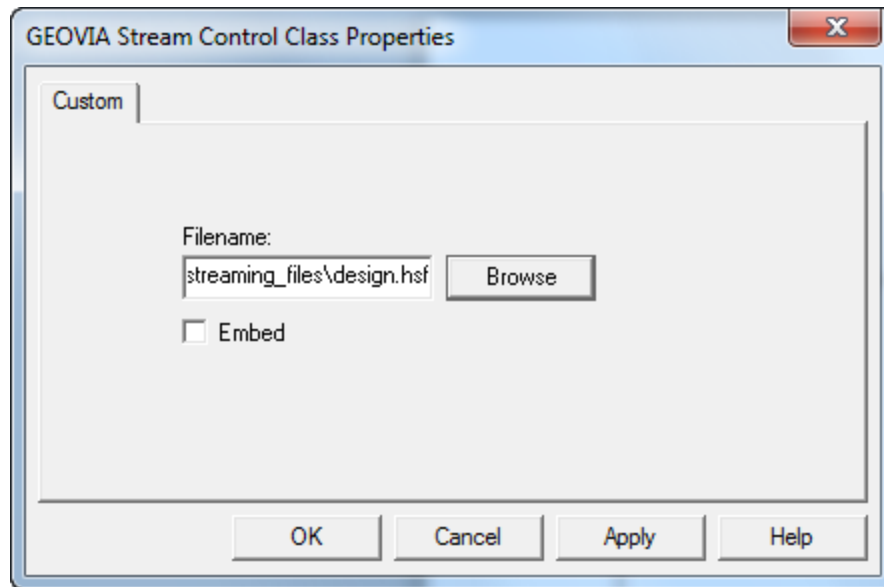
8. Click on the **Developer** tab.
9. In the **Controls** group, click **More Controls** .
10. On the *More Controls* form, select **GEOVIA Stream Control Class**, and click **OK**.



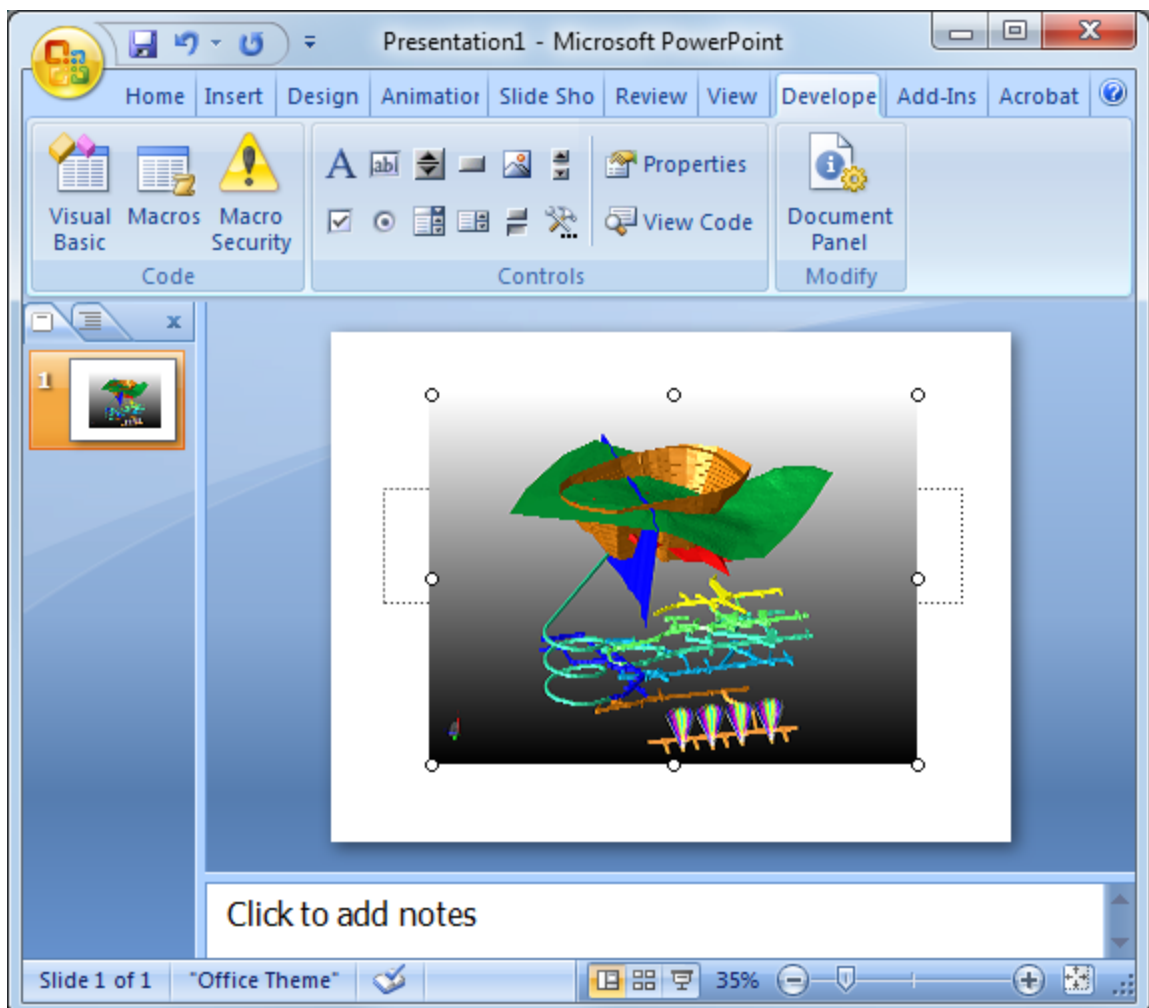
11. Click and drag the pointer to draw a shape in your presentation.
 ✎ **Note:** You can resize the display area by clicking on the draw box and resizing using the drag arrows.
12. Right-click on the draw box, and choose **GEOVIA Stream Control Class Object > Properties**.



13. Browse to **design.hsf** file, and click **Open**.
 ✎ **Note:** If you might use this presentation on another computer, you would copy the **.hsf** file to a short path on **C:** drive such as **C:\temp** or **C:\stream** before opening it. To view the streaming file correctly on the other computer you must also copy the **.hsf** file to the same short path from which you inserted the **.hsf** file.
14. Click **OK**.

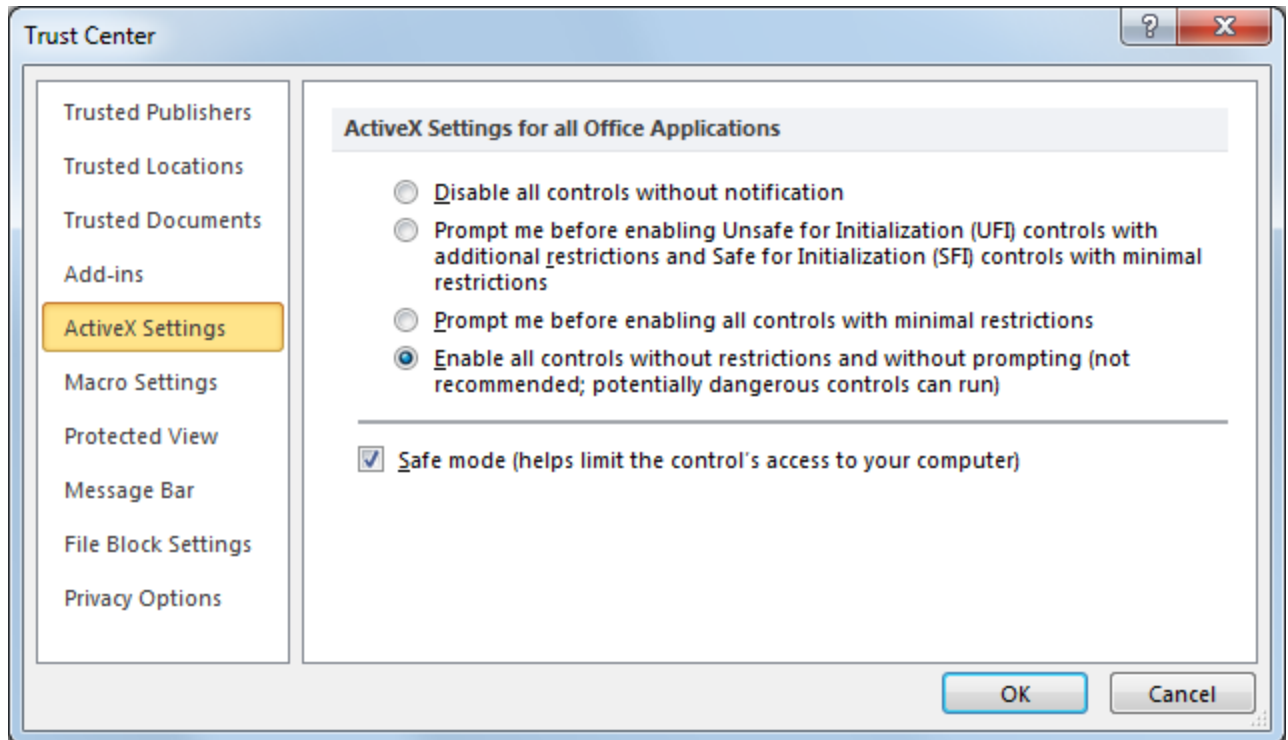


15. Press **F5**.
The **design.hsf** file is displayed in the slide.

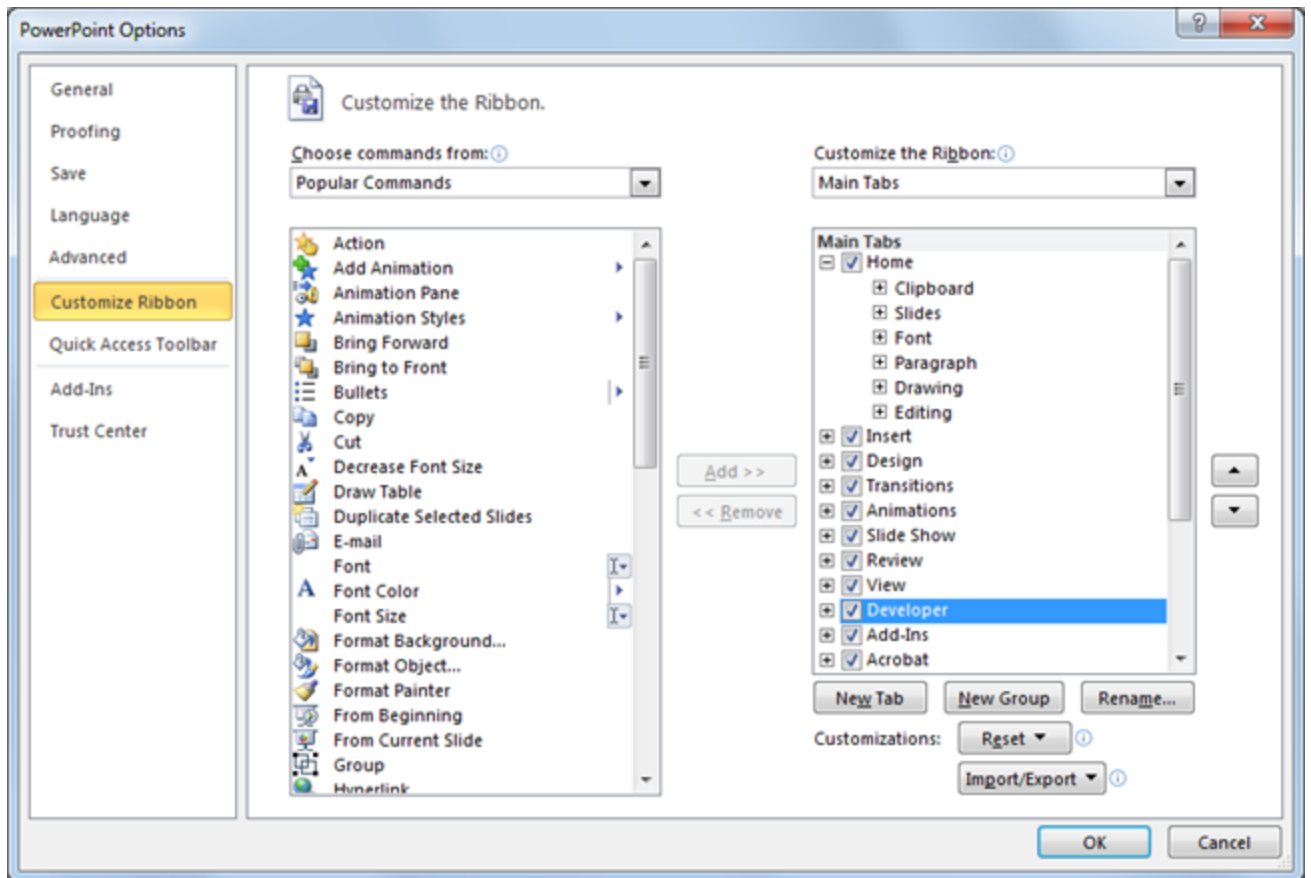


Task: Insert a streaming file in PowerPoint 2010 or PowerPoint 2013

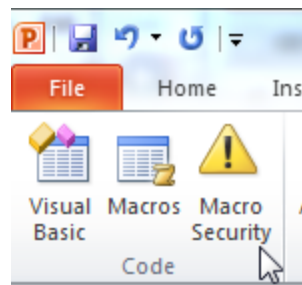
1. Open an existing document, or create a new PowerPoint document.
2. Choose **File > Options**.
3. Click **Trust Center**.
4. Click **Trust Center Settings**, and click **ActiveX Settings**.
5. Complete the form as shown, and click **OK**.



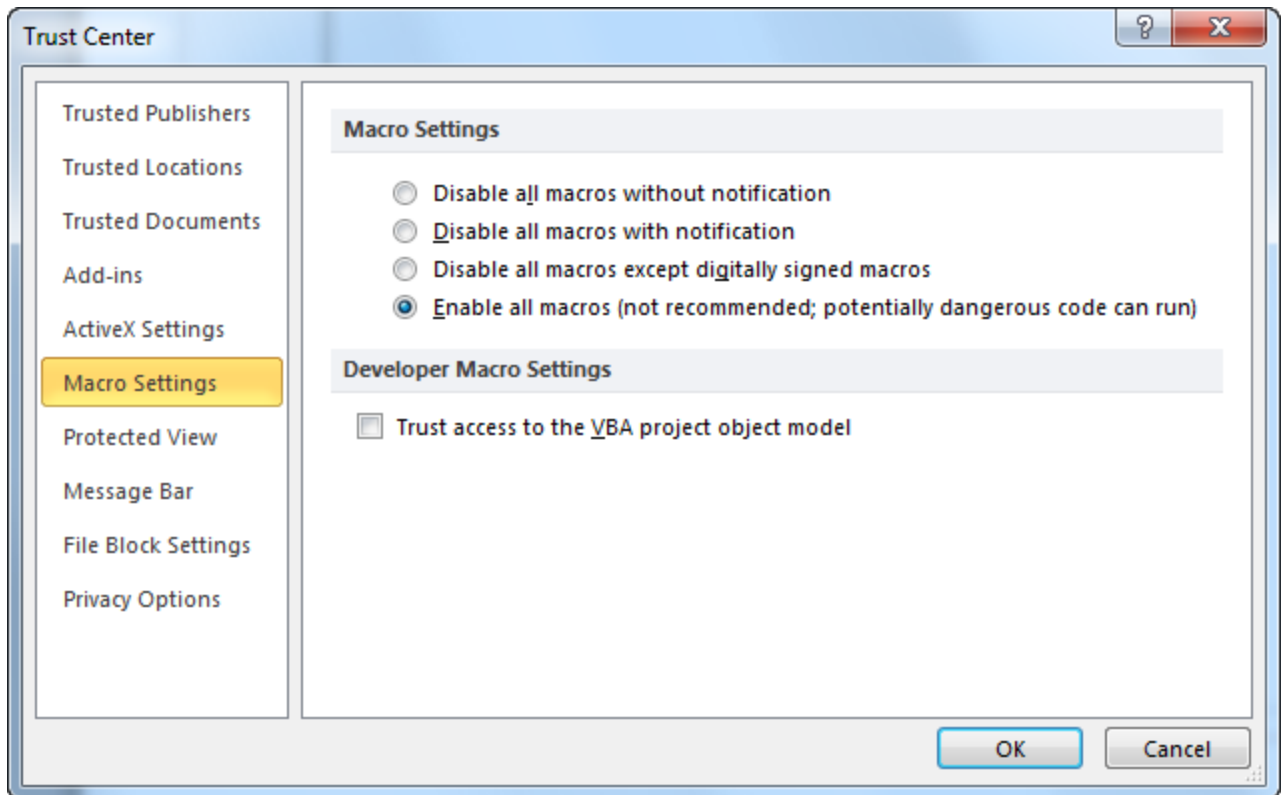
6. Click **Customize Ribbon**.
7. In the **Main Tabs** list, select the **Developer** check box, and click **OK**.



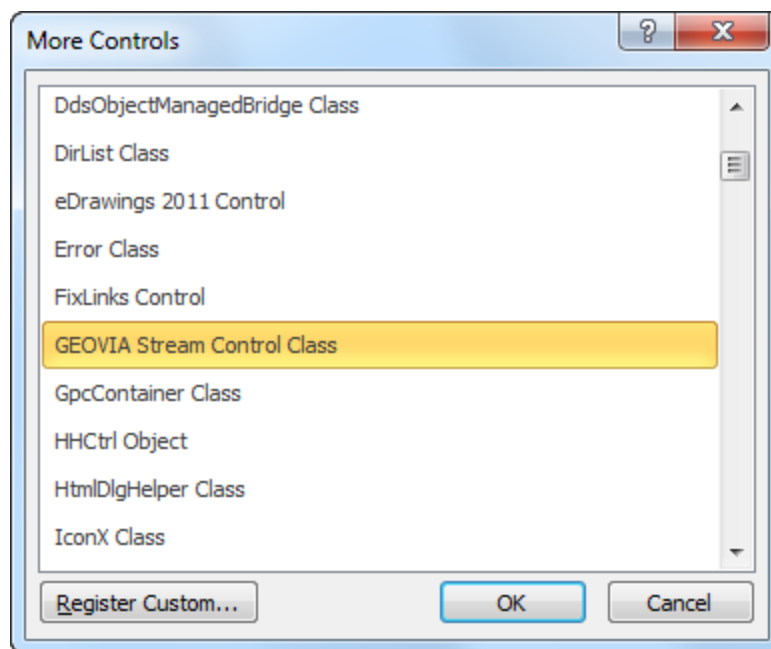
8. Click on the **Developer** tab.
9. Click **Macro Security**.




10. Under **Macro Settings**, select **Enable all macros**, and click **OK**.

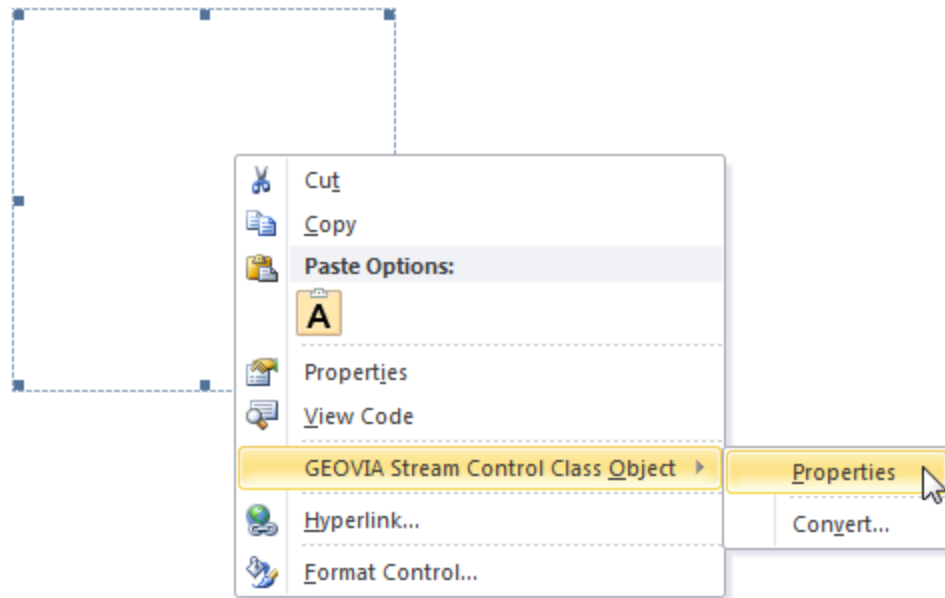


11. In the **Controls** group, click **More Controls**  .
12. On the *More Controls* form, click **GEOVIA Stream Control Class**, and then click **OK**.

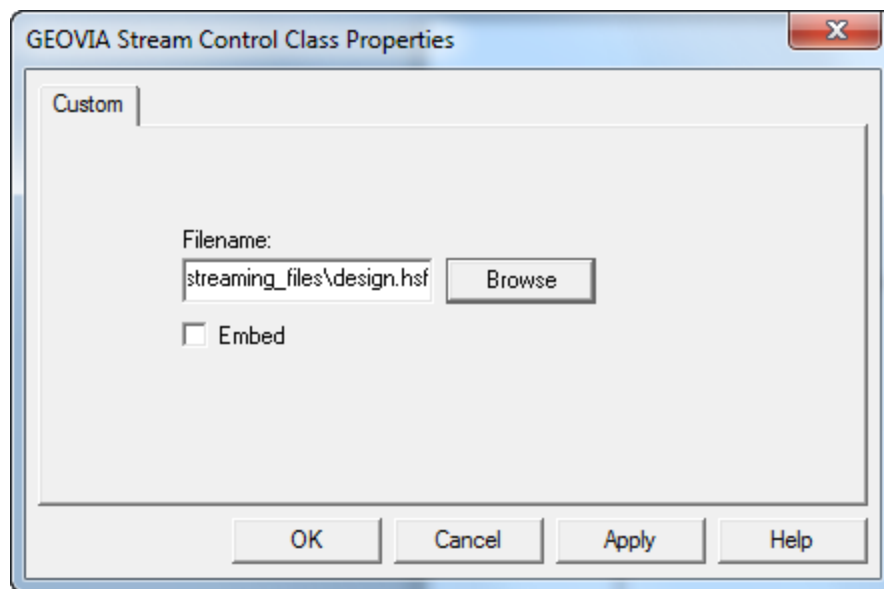


13. Click and drag the pointer to draw a shape in your presentation.
 **Note:** You can resize the display area by clicking on the draw box and resizing using the drag arrows.

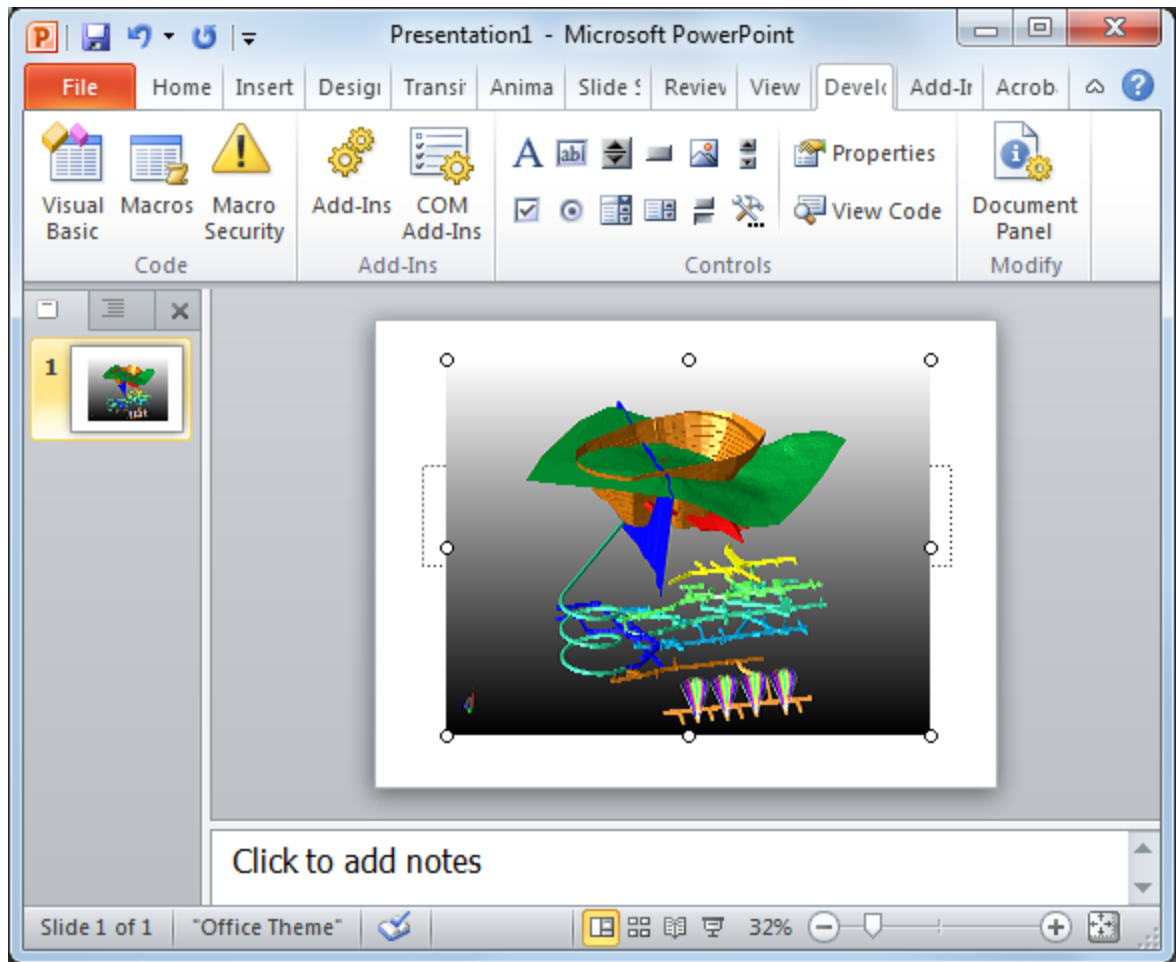
- Right-click on the draw box, and then choose **GEOVIA Stream Control Class Object > Properties**.



- Browse to **design.hsf**, and click **Open**.
 - Note:** If you might use this presentation on another computer, you would copy the **.hsf** file to a short path on **C:** drive such as **C:\temp** or **C:\stream** before opening it. To view the streaming file correctly on the other computer you must also copy the **.hsf** file to the same short path from which you inserted the **.hsf** file.
- Click **OK**.

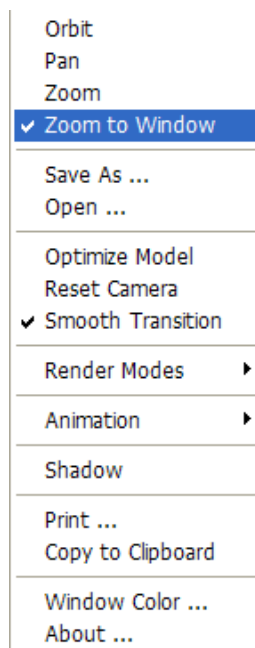


- Press **F5**.
The **design.hsf** file is displayed in the slide.




Task: View a streaming file in PowerPoint

1. Press **F5**.
2. Right-click anywhere on the image to open the shortcut menu.



3. Select **Zoom to Window**, and then click and drag in the viewport to zoom the data.
4. Select **Orbit**, and then click and drag in the viewport to rotate the data.

Task: Save a streaming file in PowerPoint

1. Select the **Save As** command:
 - In PowerPoint 2003, 2010, or 2013 choose **File > Save As**.
 - In PowerPoint 2007 click the **Office**  button, and select **Save As > PowerPoint Presentation**.
2. Navigate to the directory you want to save the file and type the file name.
3. Click **Save**.
4. If you send the PowerPoint document to another computer, also send the **.hsf** file, and save the **.hsf** file in the same folder from which you inserted the **.hsf** file.