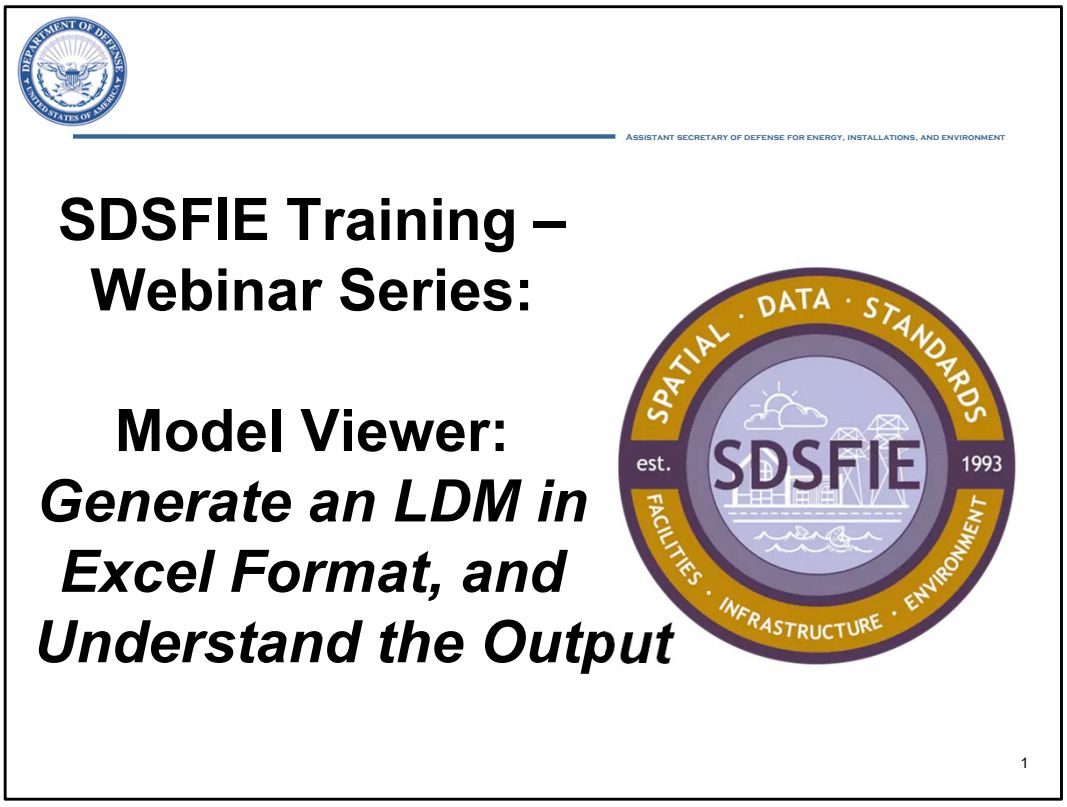
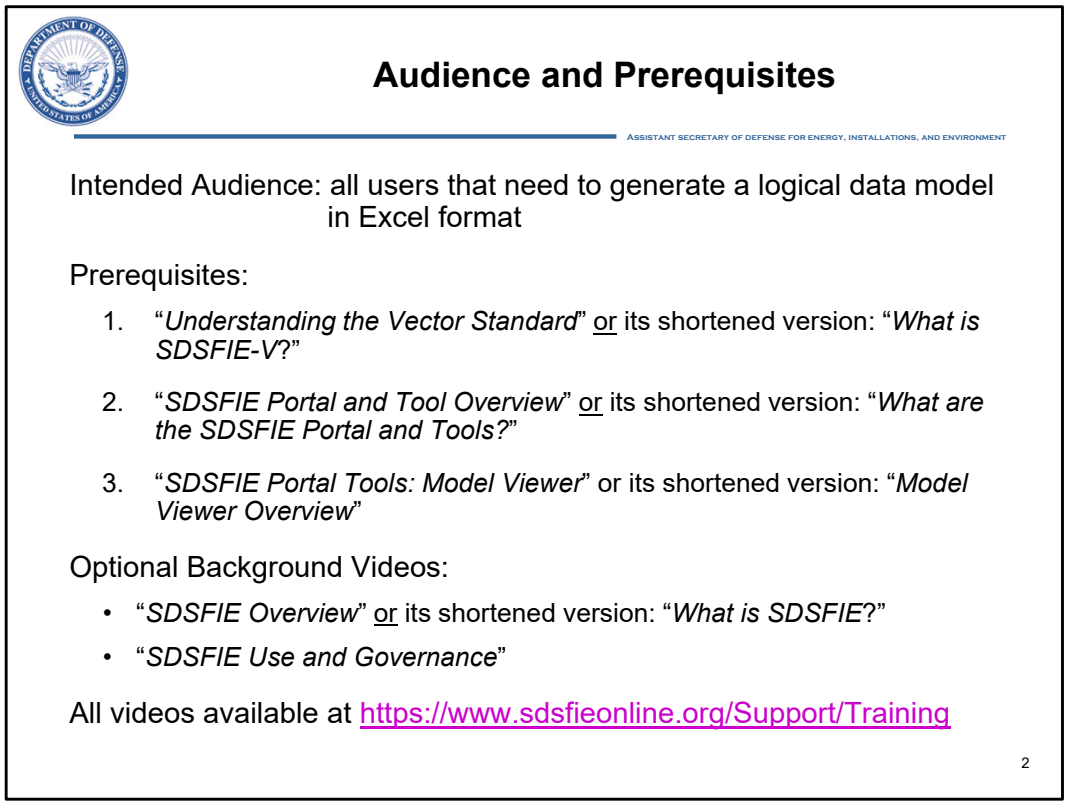


Welcome. This is the “Model Viewer: Generating an LDM in Excel” webinar, a resource for SDSFIE Training.

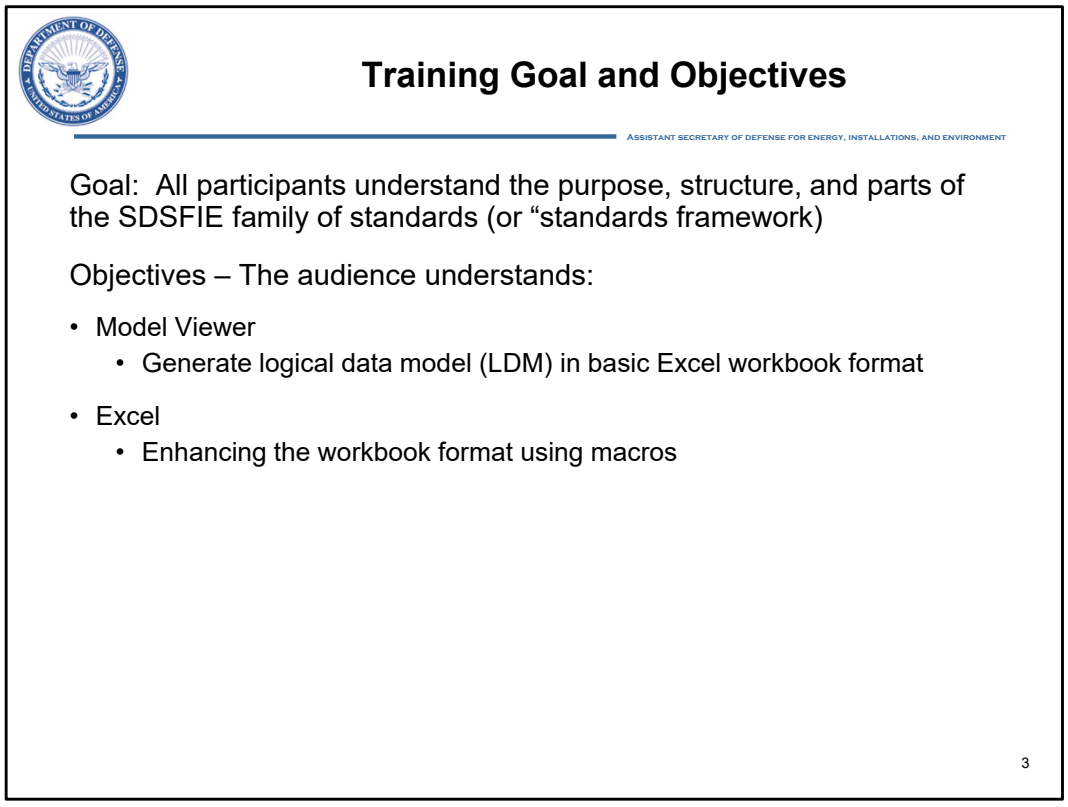


This training resource is designed for all users need to generate a logical data model in Excel format.

There are three recommended prerequisites for this webinar, watching the "Understanding the Vector Standard" video or the abbreviated version entitled "What is SDSFIE-V?", the "SDSFIE Portal and Tool Overview" video or its abbreviated version entitled "What are the SDSFIE Portal and Tools?", and the "SDSFIE Portal Tools: Model Viewer" video or its shortened version entitled "Model Viewer Overview".

The 3 background training resources listed here are optional, but they may add to your overall understanding of SDSFIE.

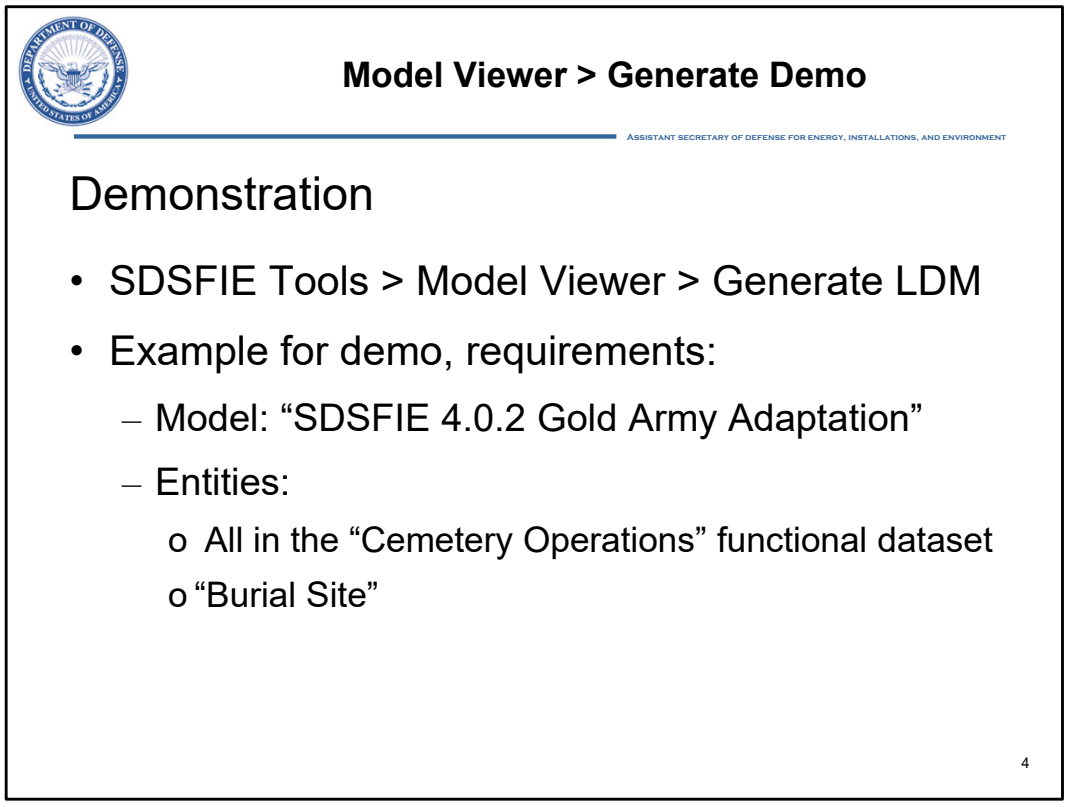
All of these videos are accessible from the Support section of the SDSFIE Portal at the URL shown.



The overall goal for our training resources is that all SDSFIE users understand the purpose, structure, and parts of the SDSFIE family of standards or "standards framework" and how to implement those standards.

The specific objectives for *this* presentation are that the audience gains an understanding of the following:

- How to use Model Viewer to generate a logical data model or "LDM" as a plain Excel workbook, and
- How to format the element property records within the workbook using an Excel macro



I will now demonstrate the Generate LDM functionality of the Model Viewer tool.

The example that I will use for the LDM generation demo is all of the Cemetery entities plus the Burial Site entity from the Army Headquarters model.

In this demo I will first use Model Viewer, then a file manager window on my computer, and finally the Microsoft Excel program.

[[[show “Demonstration” slide, then to Portal page – already logged in]]]

At the top of the SDSFIE Portal’s home page, logged-in SDSFIE Portal users are presented with a set of cards that link directly to the tools, including Model Viewer.

Clicking on its card…

[[[CLICK - Open Model Viewer]]]

opens the Model Viewer tool in a new tab.

Model Viewer starts with the Model Selection panel open in the sidebar, where we select the model and set of entities to generate.

“Generate” is the other panel that we will use today, and it opens by clicking its tab.

[[[CLICK – Generate tab]]]

Note that both Generate buttons are inactive. These buttons are activated when a model and one or more entities within it are selected. So, we will go back to the Model Selection panel…

[[[CLICK - Open the Model Selection panel]]]

and select “Army” as the Component…

[[[CLICK – choose the “USA” Component]]]

and the Army headquarters Adaptation as the Data Model.

[[[CLICK – choose the “SDSFIE 4.0.2 Gold Army Adaptation” Data Model]]]

We can now see all of the entities in the Army model in the Tree View.

Rather than looking through all 282 entities…

[[[SCROLL down to the bottom and then SCROLL back up to the top of the list]]]

to select the set of Cemetery and Burial Site entities, I will collapse the tree at the model-level…

[[[CLICK on the COLLAPSE ALL function]]]

expand at the model-level…

[[[CLICK to Expand at the model-level]]]

expand the "Cemetery Operations" functional dataset…

[[[CLICK to Expand the "Cemetery Operations" functional dataset]]]

select all "Cemetery Operations" entities…

[[[CLICK to select all "Cemetery Operations" entities]]]

scroll down to, and then expand the "Cultural Resources" functional dataset…

[[[SCROLL down to, and then expand the "Cultural Resources" functional dataset]]]

and finally, select the "Burial Site" entity.

[[[CLICK to select the "Burial Site" entity]]]

Now that our 7 entities to be generated are selected, we can return to the Generate panel…

[[[CLICK – Generate tab]]]

where the 2 Generate buttons are now active. Pressing the "Generate Logical Model" button, our last interaction with Model Viewer in this use case…

[[[CLICK on the "Generate Logical Model" button]]]

extracts the elements from the Army model and creates a zip file that is downloaded to my computer.

If I go to my Downloads and find the “LogicalModel.zip” file, and extract that file to new LogicalModel

folder…

[[[DISPLAY a File Manager window for the new (LogicalModel) folder]]]

then I see that the zip file contained three files:

- A LogicalModel.xlsx Excel workbook,
- A MakeLinks.bas file, a visual basic file that contains 2 macros that are optionally run in Excel to provide formatting for the workbook, and
- A README.txt file, which every savvy user would open first.

[[[DOUBLE-CLICK the README.txt file]]]

Of the 11 steps in the README, the first is to open the Excel file.

[[[DOUBLE-CLICK the LogicalModel.xlsx Excel workbook file, and then click the “Enable Editing” button in the banner at the top of Excel. The “Entity” sheet will be open.]]]

The first thing to note is that there are 5 tabbed worksheets in this Excel workbook: one sheet for each of the primary element types in an SDSFIE logical data model.

[[[Expand column B, by CLICKING on the dividing line between Column B and C]]]

In the “Entity” sheet, the 7 selected entities from the Army model and their properties are present.

In the “Attribute” sheet…

[[[CLICK on “Attribute” tab]]]

all of the attributes of those 7 entities are present. The “Enumeration” sheet…

[[[CLICK on “Enumeration” tab]]]

contains the enumerations that are used to constrain attributes in our selected set of elements. The “Enumerant” sheet…

[[[CLICK on “Enumerant” tab]]]

contains the enumerants in those enumerations.

[[[CLICK on “Association” tab]]]

There are no associations between these 7 entities, so the Association sheet has no entries.

[[[CLICK on “Attribute” tab]]]

Notice also that there is no formatting in the workbook.

[[[DISPLAY the README.txt file]]]

Following the remaining 10 steps in the README text file, which is optional, provides that formatting.

Once the formatting has been established, the workbook contents now look like this!

[[[Show the fully-formatted workbook, with the “Attribute” tab open. SCROLL (horizontal bar at bottom) to the left]]]

Each sheet is now an Excel table, with links between the Entity and Attribute sheets established…

[[[CLICK on “Burial Site” link in cell A2, PAUSE, then CLICK on the “BurialSite” link in cell C2]]]

and links between a constraining enumeration in the Attribute sheet…

[[[CLICK on “AlternativeRegisterStatus” link in cell L2]]]

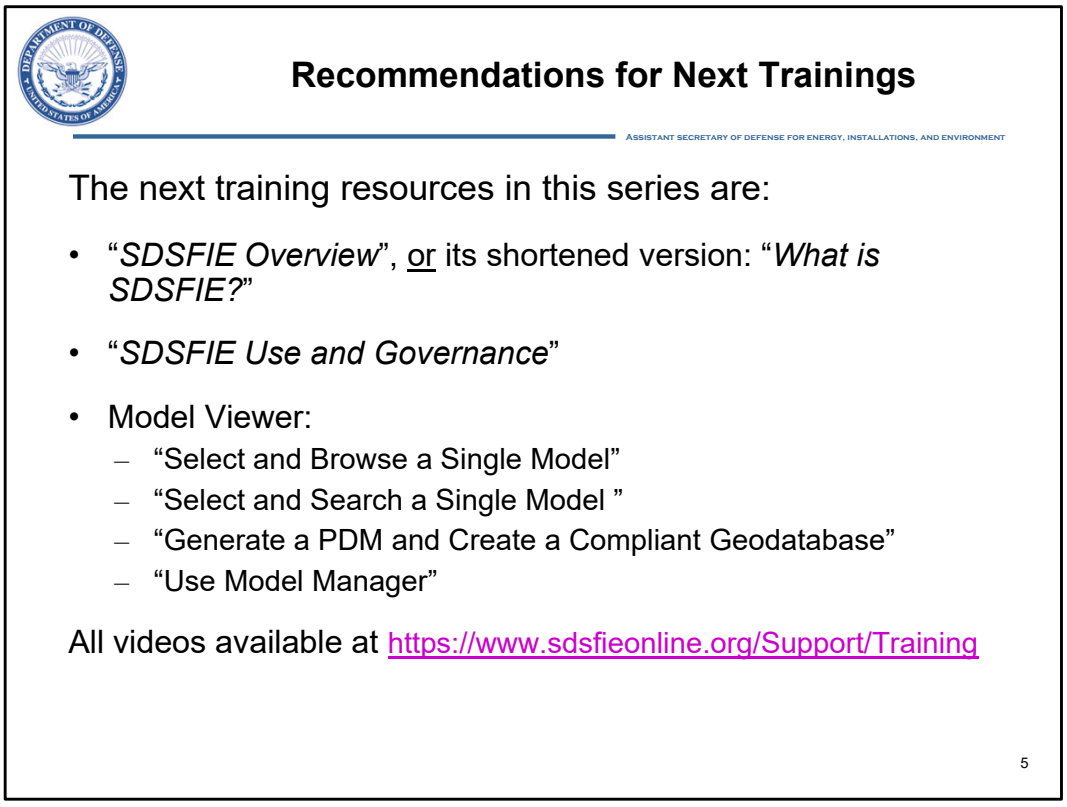
to that entry in the Enumeration sheet…

[[[CLICK on “AlternativeRegisterStatus” link in cell B2]]]

to the set of enumerants for that enumeration in the Enumerant sheets.

This concludes our demonstration of generating a logical data model and understanding the Excel workbook output.

[[[PAUSE. Go to “Recommendations for Next Trainings” slide]]]



This concludes the "Model Viewer: Generating an LDM in Excel" training. If you want to learn about SDSFIE at a high-level, SDSFIE Governance and Use, more on the Model Viewer tool, or other detailed SDSFIE topics, visit our Training Resources page at the URL listed here.

Thank you for your interest in SDSFIE.

Questions & Answers