



Trace

Model Manager

Applicable for Sharpen360 Trace v5.0+

Revision 0.8 (WIP)



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1 Introduction

THIS DOCUMENT IS NOT COMPLETE, BUT WHAT'S THERE IS CORRECT. YOU SHOULD BE FINE GETTING STARTED USING THIS DOCUMENT TO UNDERSTAND THE TRACE MODEL MANAGER. MORE CONTENT WILL BE ADDED DURING THE NEXT DAYS!

Thank you for using our Process Assessment Tool, Sharpen360 *Trace*.

This document describes how to use *Trace Model Manager (TMM)*. The target audience is users who needs to:

- Upload new Assessment Models or Guidelines
- Upload or develop Models, and possible convert Models to Assessment Models.
- Develop Map Sets
- Manage the availability of Assessment Models, Guidelines, Models, and Map Sets for Trace Assessors.

We try to use a precise naming of concepts in Trace and Trace documentation, please see chapter see [Trace Terms and Definitions].

If you have questions, have ideas that you would like to discuss, or just need an introduction to specific parts of *Trace*, please contact us!

Also, we would very much appreciate if you would report any bug or inconvenience you might find. Please use the email below, and add screenshots and descriptions as needed and we will immediately prioritize this.

Use support@sharpen360.com as much as you like. You are welcome!

The Sharpen360 Team.

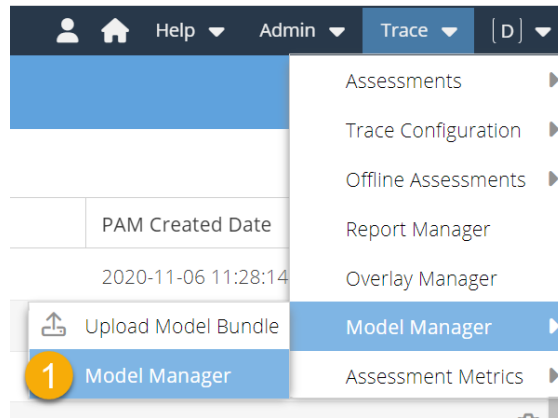
*PS: Please help us by sharing knowledge about *Trace* to your colleagues, network, family, friends, neighbors, mother, or anybody else interested 😊*



2 Model Manager Concepts

2.1 Accessing the Model Manager

Model manager can be opened from the menu: Trace -> Model Manager-> Model Manager (1)



The Model Manager requires “Manage Models and Standards” permission to access the page, which is only assigned to System Administrator and Trace Administrator. The menu is shown only to users with this permission.

Below image shows the Model Manager. The page has four tabs: Assessment Models, Guidelines, Models, Map Sets.

Name	External ID	Revisi...	# Used	Status	Family	Measurement Fr...	PAM Created Date
Agile SPICE - Ready for Pilot	agilespice_RfPilot	1	2	Asses...	ISO33...	ASPICE3_1	2020-11-06 11:28:14
Agile SPICE v1.1 Ready for Piloting	agilespice1_1RFP	1	3	Asses...	ISO33...	ASPICE3_1	2021-04-07 12:00:00
Automotive SPICE for Cybersecurity v1.0	ASPICECE1_0	1	7	Asses...	ISO33...	ASPICE3_1	2021-10-13 09:42:24

2.2 Assessment Models, Guidelines, Models, and Map Sets

Table explaining the four concepts

Name	Description
Assessment Model	
Guideline	
Models	
Map Sets	



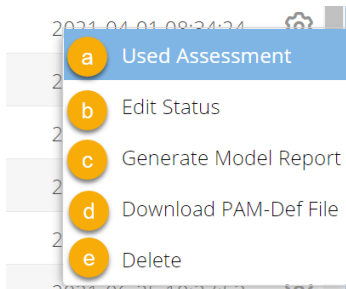
3 Assessment Models

Assessment Models tab shows the list of PAMs in Trace.

Name	External ID	Revisi...	# Used	Status	Family	Measurement Fr...	PAM Created Date	
Agile SPICE - Ready for Pilot	agilespice_rfPilot	1	2	Asses...	ISO33...	ASPICE3_1	2020-11-06 11:28:14	⚙️
Agile SPICE v1.1 Ready for Piloting	agilespice1_1RfP	1	3	Asses...	ISO33...	ASPICE3_1	2021-04-07 12:00:00	⚙️
Automotive SPICE for Cybersecurity v1.0	ASPICECE1_0	1	7	Asses...	ISO33...	ASPICE3_1	2021-10-13 09:42:24	⚙️

The following numbers refer to the orange dots in image above.

1. **Upload Assessment Model (PAM)** button can be used to upload a PAM Def file other Trace systems. See below for how to download PAM Def file.
2. This column shows **the number of assessments** that are using this PAM.
3. This column shows the **status** of the PAM. (Assessable or Disabled)
4. This column shows the **family** that the PAM belongs. (e.g. ISO3300)
5. This column shows the measurement framework that the PAM uses. (e.g. ASPICE3_1)
6. This column shows the created date of the PAM.
7. Cog wheel can be clicked to display actions on the PAM. Options shown below: (options may vary depending on the PAM)



- a. Show assessments using this PAM
- b. Edit Status of the PAM (e.g. Name and status)
- c. Generate Model Reports (only available for non-protected PAMs)
- d. Download PAM Def file to transfer to another Trace system. (only available for non-protected PAMs)
- e. Delete the PAM



4 Guidelines

Guidelines tab shows the list of available guidelines in Trace.

Assessment Models Guidelines Models Map Sets		
Upload Guideline (GDL) 1		
Name	Version	Model 2
Automotive SPICE Guidelines	1st. edition	Automotive SPICE v3.1
Automotive SPICE Guidelines	1st. edition	Automotive SPICE v3.1 (HWE 1.0 1st rel)
Automotive SPICE HWE Guidelines (APAM)	1.0 1st release	Automotive SPICE v3.1 (HWE 1.0 1st rel)

The following numbers refer to the orange dots in image above.

1. Upload Guideline (GDL) button can be used to upload a guideline file from other Trace system.
2. This column shows the linked model (PAM) of the guideline. The guideline is only offered in assessments when the model is assigned.



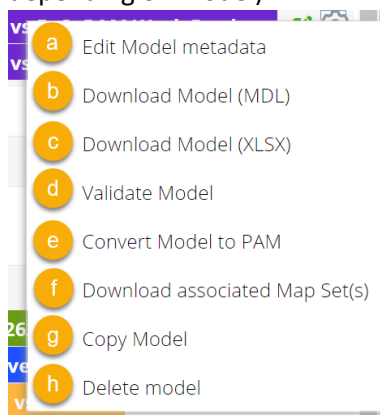
5 Models

5.1 Model tab and Model menu

Name	External Id	Family	Last modified	Last modified by	Mapped to	
Automotive SPICE Guidelines	ASPACE	Guidelines	2022-02-23 16:06:46	Christoffer Bruun		⚙️
Automotive SPICE for Cybersecurity v1.0	ASPACECE1_0	ISO33000	2022-02-23 16:06:53	Christoffer Bruun	Automotive SPICE for Cybersecurity v1.0	⚙️
Automotive SPICE for Cybersecurity v1.0 Guidelines	ASPACECE1_0_G...	Guidelines	2022-02-23 16:06:51	Christoffer Bruun		⚙️

Screenshot of mechanisms in cogwheel, explain this is where to find the function, and write that they will be explained below.

1. Upload Model (MDL) button: upload model file from other Trace system.
2. Download Model Template (XLSX) button: download Excel template file for defining. See below for steps to create a model.
3. Upload Model (XLSX) button: upload edited Excel file from (2) to create new model. See below for steps to create a model.
4. This column shows Map Sets associated with the model.
5. Shows the state of the model (editable or copyright protected)
6. Cog wheel can be clicked to display actions on the model. Options shown below: (options may vary depending on model)



- a. Edit Model Metadata: open window to change name, external Id, and state of the model
- b. Download Model (MDL): download model file to transfer to another Trace system. This file can be uploaded in Upload Model (MDL) (1)
- c. Download Model (XLSX): download Excel file to be edited and uploaded. This file can be uploaded in Upload Model (XLSX) (2)



- d. Validate Model: checks whether the model can be used in assessment
- e. Convert Model to PAM: converts model to PAM to be used for assessments. This requires specific structure for the model, therefore checks automatically for the structure.
- f. Download associated Map Set(s): download related Map Sets for this model
- g. Copy Model: creates a copy of the model
- h. Delete Model: delete this model

5.2 Create or update a Model

Explain how create a model, copy text from excel and make this better/more precise here

refer to Model Families (point to last chapter) for an explanation of the formats.

Explain how to update, the name / description columns.

To create a model, first download Excel template file from Download Model Template (XLSX) button (1).

Name	External Id	Family	Last modified	Last modified by	Mapped to
Automotive SPICE Guidelines	ASPICE	Guidelines	2022-02-23 16:06:46	Christoffer Bruun	
Automotive SPICE for Cybersecurity v1.0	ASPIECE1_0	ISO33000	2022-02-23 16:06:53	Christoffer Bruun	Automotive SPICE for Cybersecurity v1.0
Automotive SPICE for Cybersecurity v1.0 Guidelines	ASPIECE1_0_G...	Guidelines	2022-02-23 16:06:51	Christoffer Bruun	

Open the Excel file and open Model_Info sheet (2) and enter name of the model in B2 cell (3) and external id in B3(4).

	A	B	C	D	E
1	Key	Value			
2	name	My Unique Assessment Model v1			
3	externalid	MyUniqueAssessmentModelVersionId			
4	externalrev				
5	family	GenericAM			
6	editable	1			
7	END-OF-TABLE				
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

Open Model sheet to create model nodes.



Row	A	B	C	D	E	F	G	H
Alt...	ParentId	ExternalId	SubId	Type	Name	Description		Reference
1	1	Model	P2	P2	Area	Peter's Management Process		
2							organizations involved in the execution of the safety lifecycle, i.e. those that are responsible for the safety lifecycle or are performing safety activities in the safety lifecycle, achieve the	
3	2	P2	P2.5	5	Group	Management of Deliveries		
4	3	P2.5	P2.5.a	a	Outcome	All project wp's are identified		
5	4	P2.5	P2.5.b	b	Outcome	project milestones		
6	5	P2.5	P2.5.c	c	Outcome	Tino's outcome		
7	6	P2.5	P2.5.d	d	Outcome	My outcome d		
8	7	P2.5	P2.5.e	e	Outcome	My outcome e		
9	8	P2.5	P2.5.Q1	5.Q1	Question	With which elements does the organization maintain a culture of safe work?	Details of the first question goes here	Outcome: a
10	9	P2.5	P2.5.Q2	5.Q2	Question	Is a defined and documented FS process effective for all relevant phases of the safety lifecycle in all levels and functions?		Outcome: b
11	10	P2.5	P2.5.Q3	5.Q3	Question	Does the organization have a safety anomaly resolution process? Peter		Outcome: c, d, e
12		P2	P2.6	6	Group	Peters area		
13		P2.6	P2.6.a	a	Outcome	My outcome a for 2.6		
14		P2.6	P2.6.Q1	6.Q1	Question	what's wrong?		Outcome: a
15	15	Model	WP_1	WP_1	WorkProduct	Acceptance criteria		
16	16	Model	WP_2	WP_2	WorkProduct	Architecture		
17	17	Model	WP_3	WP_3	WorkProduct	Audit report		
18	END-OF-TABLE							
19								

The Model sheet contains sample data that can be used as reference when creating a new model from Excel sheet. The sample data can be removed before inserting new nodes in the model. Each row represent a node in the model.

5.3 Validate a model

5.4 Publishing a Model as an Assessable Model

5.5 Exporting and Importing a Model

5.6 Retire a Model



6 Map Sets

6.1 Map Set tab and Map Set menu

4	Name	ExternalId	Model A	Model B	Last modified	Last modified by	5	6	7
	Automotive SPICE for Cybersecurity	ASPIECE1_0-vs-A...	Automotive SPICE...	Automotive SPICE...	2022-02-18 08:33...	Daiki	🔒	👁	⚙️
	FuSaPAM vs FuSaPAM Work Products	FuSaPAMV1_0_vs_...	FuSa PAM version...	FuSa PAM version...	2022-02-18 13:51...	Daiki	📄	👁	⚙️
	FuSaPAM vs ISO26262 No P12	FuSaPAMV1_0_vs_...	FuSa PAM version...	ISO26262:2018	2022-02-18 13:51...	Daiki	📄	👁	⚙️
	Automotive SPICE v3.1-vs-Automotiv	aspam31-vs-ASPI...	Automotive SPICE...	Automotive SPICE...	2022-02-22 15:28...	Daiki	🔒	👁	⚙️

Screenshot of mechanisms in cogwheel, explain this is where to find the function, and write that they will be explained below.

1. Create Map Set: button to create new Map Set
2. Upload Map Set (MAP): upload Map Set file from other Trace system, see below for downloading Map Set file
3. Upload Map Set(XLSX): upload Excel file to create a Map Set
4. Map Set type column: shows the type of Map Sets, hover the icon to see name of the type.
5. Editable status column: shows whether Map Set is editable or not editable
6. Visible status column: shows whether Map Set is visible and can be used in assessments
7. Cog wheel button: shows additional actions on Map Set

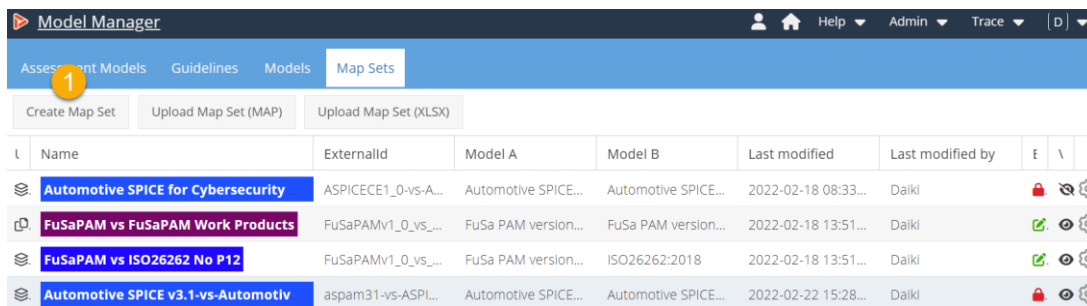
- a Edit Map Set metadata
- b Download Map Set (MAP)
- c Download Map Set (XLSX)
- d Copy Map Set
- e Delete Map Set

- a. Edit Map Set Metadata: open window to change meta data of the Map Set(e.g. name, external Id, color and visible)
- b. Download Map Set(MAP): download Map Set file to transfer to another Trace system. This file can be uploaded in Upload Map Set (MAP)(2)
- c. Download Map Set(XLSX): download Excel file to be edited and uploaded. This file can be uploaded in Upload Map Set(XLSX) (3)
- d. Copy Map Set: create a copy of the Map Set
- e. Delete Map Set: delete the Map Set



6.2 How to create a Map Set

1. Click on Create Map Set button



2. Create new Map Set window will appear. Enter details about the Map Set and click the Save button. You can choose different ways to use the Map Set: Evidence Suggestion, Indicator Overlay or Indicator Linking.

Create new Map Set

Model a:

Model b:

Name:

External Id:

Pick a option: Evidence Suggestion
 Indicator Overlay
 Indicator Linking

Color:

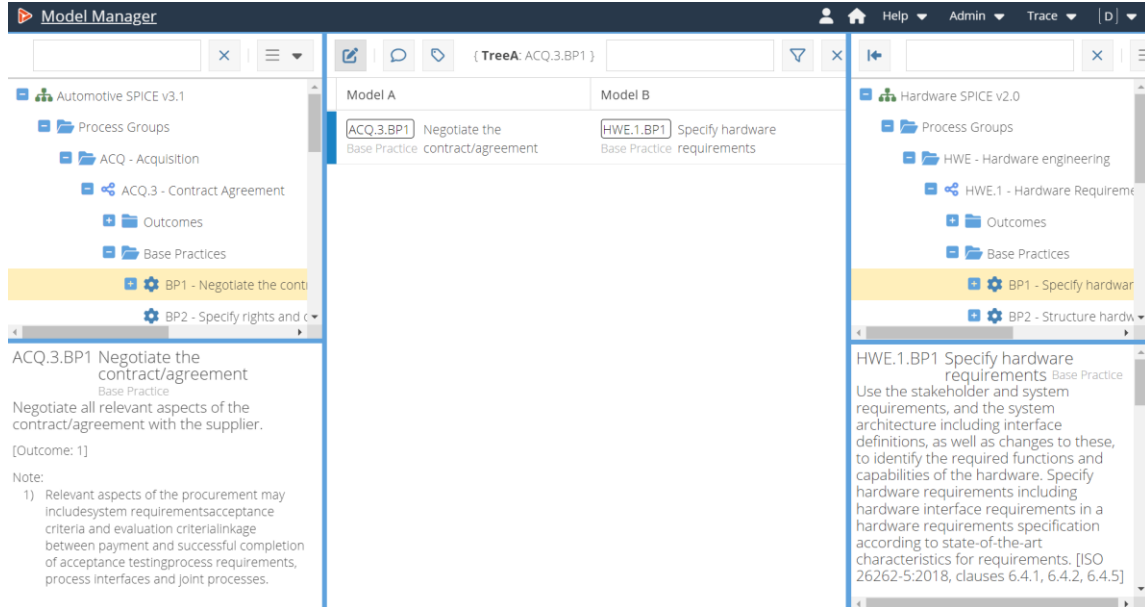
Color Code:

Save Cancel

3. Open the Map Set by double clicking it.



4. Map set editor will open (shown below).



- Left and right panels show the structure of the models selected in step 2 with the details on the selected node below the tree.
- Center panel shows the list of node maps in the Map Set
- Drag a node from a model in the right or the left panel and drop the node onto another node in the panel.
- Following window will pop up when dropping the node. Fill the details about the node map and click Save. Text in the “Node Map Text” will be displayed in the Assessment automatically and



the comment is only shown when it is turned on.

Node A	Node B
ACQ.3.BP5	HWE.1.BP5

- e. Once done editing Map Set, go back to the Map Set tab and click on the cog wheel for this Map Set and select Edit Map Set metadata. Check on the Visible (1) to use it in Assessment and click on Save.

Visible: 1

Pick a option: Evidence Suggestion Indicator Overlay Indicator Linking

Color: [Color palette with blue selected]

Color Code: 1982C4

6.3 How



7 Using Map Sets from Trace Assessment System

To use Map Sets from Trace assessment, open the Scope tab (1) then assign the Map Set from Map Sets selector (2).

The screenshot shows the Trace Assessment System interface. The 'Scope' tab is selected, indicated by a yellow circle with the number '1'. The interface displays three tables:

- Allocated Scope:** A table with columns 'Name', 'TCL', and 'Ma...'. It lists 'Automotive SPICE v3.1 - [NPLF]' with two sub-items: 'ACQ.3 - Contract Agreement' and 'ACQ.4 - Supplier Monitoring', both with a '1' in the TCL column and a checked checkbox in the Ma... column.
- Rating Guidelines:** A table with columns 'Name', 'Version', 'PAM', 'Environments', and 'A...'. It lists 'Automotive SPICE Guidelines' with '1st. edition' in the Version column, 'Automotive SP...' in the PAM column, and '0 out of 6' in the Environments column. The A... column has an unchecked checkbox.
- Map Sets:** A table with columns 'T...', 'Name', 'Model A', 'Model B', and an unchecked checkbox. It lists two map sets: 'Automotive SPICE v3.1-vs-Au' (Model A: Automotive SPICE v3.1, Model B: Automotive SPICE Guidelines) and 'ASPIICE 3.1 to HW 2.0' (Model A: Automotive SPICE v3.1, Model B: Hardware SPICE v2.0). The ASPIICE 3.1 to HW 2.0 row has a checked checkbox in the final column, indicated by a yellow circle with the number '2'.

7.1 Using a Map Set for Evidence Suggestion

7.2 Using a Map Set as Indicator Overlay

After the Map Set is assigned to the assessment (follow the instruction in 7. Using Map Sets from Trace Assessment System), Map set with Indicator Overlay type is automatically assigned to the overlay and displayed for nodes in Grid View and Tree view. The overlay can be configured from Configure Overlay button (1) from the Tree view and Grid view.

The screenshot shows the Trace Assessment System interface in Grid view. The 'Grid view' tab is selected, indicated by a yellow circle with the number '1'. Below the tabs is a toolbar with several icons. The first icon on the left is a checkmark, which is the Configure Overlay button mentioned in the text.

From the Overlay settings, Indicator Overlay can be hidden by unchecking the left most check mark (2). The check marks (3) and (4) will show the name and the description of the node that the node map is referencing. The check mark (5) will display the comment for the node map.



Overlay Settings

Select Overlay: Personal

Hide labels:

Show	Name	Owner	Type	Edit			
<input checked="" type="checkbox"/>	Automotive SPICE v3.1		Model Notes				
<input type="checkbox"/>	Automotive SPICE v3.1		Outcomes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	ASPICE 3.1 to HW 2.0		Indicator Overlay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

7.3 Using a Map Set for Indicator Linking



8 Available Model Families

8.1 Overview of Model Families

8.2 Generic Assessment Model (GAM)

8.3 Generic Hierarchy

8.4 ISO21434

8.5 ISO26262

8.6 ISO33000

8.7 KGAS