

Tailoring and Deploying an Enterprise Architect Configuration Adapted to your Preferred Modeling Language and User Experience

The present guidelines provide practical steps for configuring Sparx Enterprise Architect following your preferred user experience. Such configuration can then become your organization's standard.

Sparx Enterprise Architect is an elastic modeling tool. Its extensibility is limitless. For example, we can easily create a language of our own, then deploy this language to end users with the Enterprise Architect configuration that goes with it.

Out of the box, Sparx is optimized for UML modelers. So, if people in your organization need to model with another language than UML, then you might need to adapt the Enterprise Architect user's experience and modeling constraints. The present guidelines will help you configuring this either manually or automatically.

Target audience of these guidelines

- The community of modelers working at higher levels of abstraction than UML, for example users of the Labnaf, Archimate or BPMN modeling languages. The default Enterprise Architect configuration does not always bring the required user's experience.
- Sparx MDG (Model-Driven Generation) and add-in developers who created their own modeling language and who want to deploy their Enterprise Architect extension on end users' computers.

How these guidelines are organized

Each section of the guidelines addresses a specific configuration item. It tells you how to optimize each item in two ways:

- Manually, by selecting the right options in the Enterprise Architect user interface
- Automatically by changing some specific registry keys, or by copying some configuration files.

Sample Registry keys and XML configuration files

If you are looking for a complete set of XML configuration files and a registry key file that you can immediately apply (and adapt as you wish), go to the [Labnaf web site](#) and select **Download**. Then proceed to download the free Labnaf add-in for Enterprise Architect.

What you will have downloaded is a zip file that contains notably what you are looking for:

- A registry file containing all the registry keys to be updated
- A set of XML configuration files. If "Labnaf" is not your preferred language, then change the name in these XML files.
- An installation command to install the XML configuration files and the registry keys

Of course, the zip file contains also the free Labnaf Add-in set up file, and the sample files are the ones needed for optimizing Enterprise Architect for the Labnaf modeling environment. But the registry keys used for Labnaf are also suitable, as-is, for most modeling languages other than UML.

If you want to further configure items to your needs, just edit the provided XML configuration files and the registry key file as you wish. The guidelines provided below will tell you what each configuration item really means.

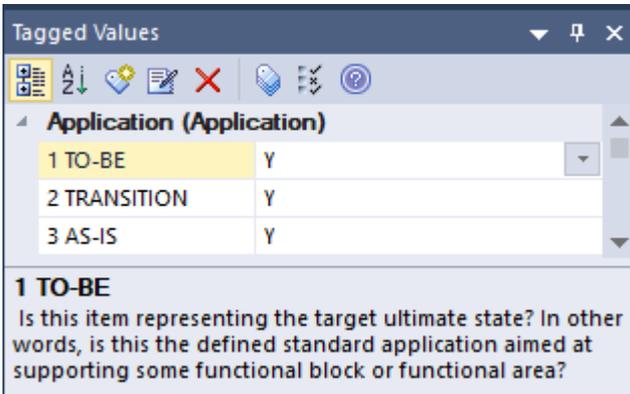
To apply these Enterprise Architect settings, double click on the command called "**ApplySparxEACConfiguration.cmd**". And once you are happy with the configuration, you can start packaging for deployment on all end users' machines.

Configuration Items

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SHOW THE PROPERTIES INFO SECTION

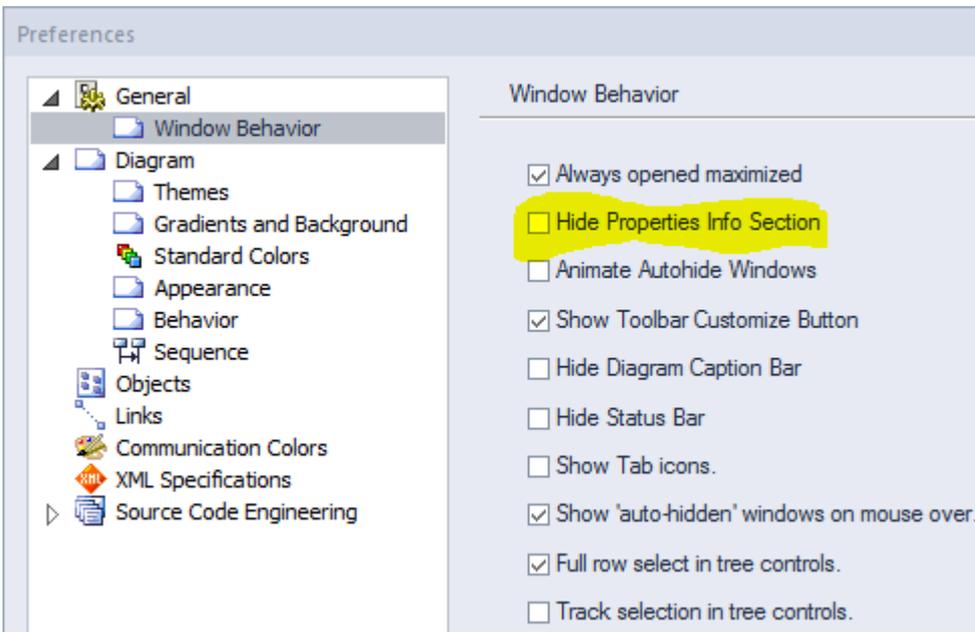
A property info section is a properties information bar at the bottom of various displays such as the element Properties window, Properties dialogs and Tagged Values window. For example:



MANUAL STEPS

Uncheck the checkbox **“Start / Preferences / General / Diagram / Hide Properties Info Section”**

NB: You must restart EA for this change to take effect. But you can of course complete all the remaining settings before restarting EA.



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = "HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/HIDEPROPINFO"

Key Value = 0

The screenshot displays the Windows Registry Editor. On the left, the tree view shows the path: Sparx Systems > EA400 > EA > OPTIONS > HIDEPROPINFO. The right pane shows a list of registry values. The value HIDEPROPINFO is highlighted in yellow and has a value of 0x00000000 (0).

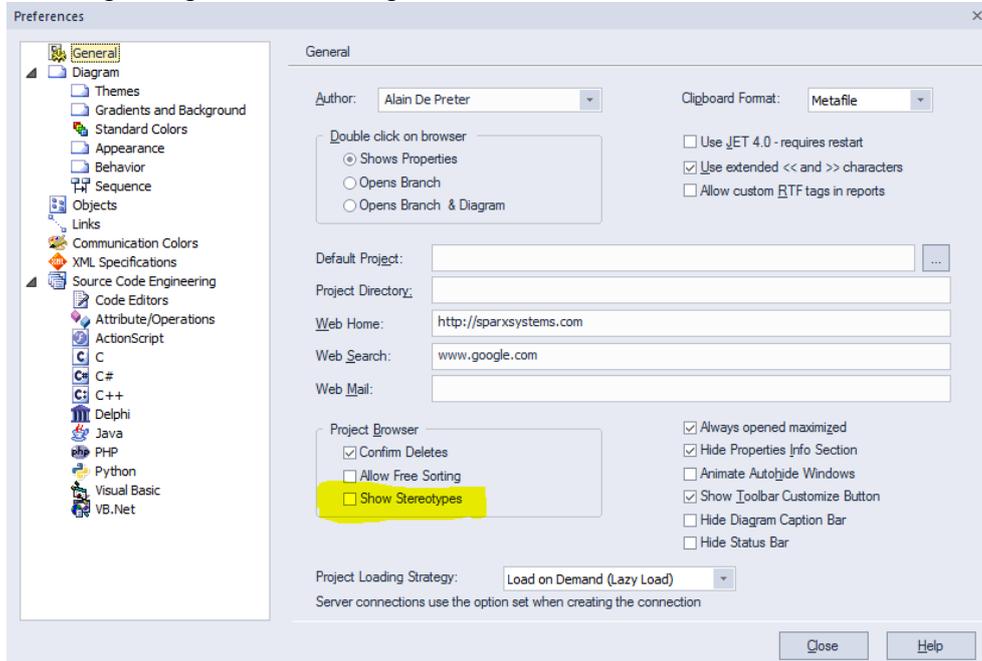
Value Name	Value Type	Value
HD_SCRIBBLE_EFFECT_NORMAL	REG_DWORD	0x00000096 (150)
HD_SEG_LEN_LOW	REG_DWORD	0x000001f4 (500)
HD_SEG_LEN_MESSY	REG_DWORD	0x00000064 (100)
HD_SEG_LEN_NORMAL	REG_DWORD	0x0000009b (155)
HD_TWO_SEG_LEN_LOW	REG_DWORD	0x00000064 (100)
HD_TWO_SEG_LEN_MESSY	REG_DWORD	0x00000064 (100)
HD_TWO_SEG_LEN_NORMAL	REG_DWORD	0x00000064 (100)
HD_WAVE_EFFECT_LOW	REG_DWORD	0x00000011 (17)
HD_WAVE_EFFECT_MESSY	REG_DWORD	0x000000c8 (200)
HD_WAVE_EFFECT_NORMAL	REG_DWORD	0x00000068 (104)
HIDE_APPLOOK_DLG	REG_DWORD	0x00000001 (1)
HIDEBORDERS	REG_DWORD	0x00000000 (0)
HIDEPROPINFO	REG_DWORD	0x00000000 (0)
HIERARCHY_SHOW_CLASSIFIERS	REG_DWORD	0x00000001 (1)
HIERARCHY_SHOW_FQ_NAMES	REG_DWORD	0x00000001 (1)
HIERARCHY_SHOW_MORE_EMBED...	REG_DWORD	0x00000001 (1)
HTML_HIDE_STEREOTYPE	REG_DWORD	0x00000001 (1)
HTML_HYPEREX_TARGET	REG_DWORD	0x00000000 (0)
HTML_NOTEXT	REG_DWORD	0x00000000 (0)
HTML_PRESERVEVS	REG_DWORD	0x00000001 (1)
HTMLEXTENSION	REG_SZ	.html
IMAGE_SORT_TYPE	REG_DWORD	0x00000000 (0)

HIDE STEREOTYPES IN THE PROJECT BROWSER

MANUAL STEPS

Uncheck the checkbox **“Start / Preferences / Project Browser / Show Stereotypes”**

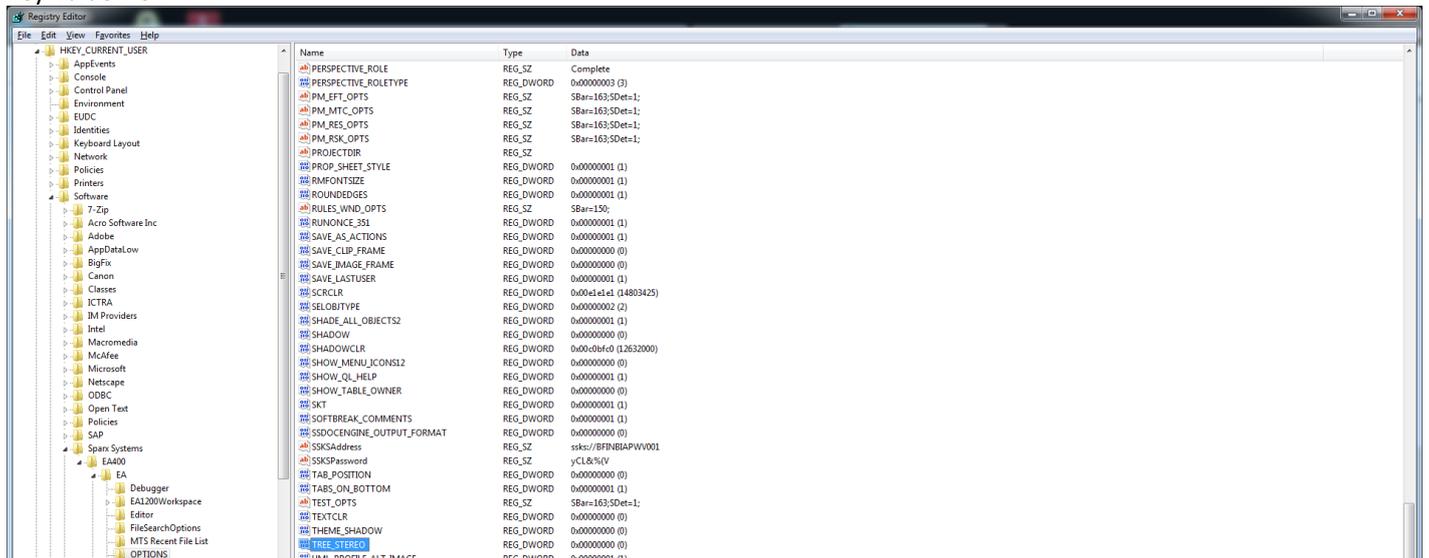
NB: A pop-up window tells you that **“you must restart EA for this change to take effect”**. But you can of course complete all the remaining settings before restarting EA.



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

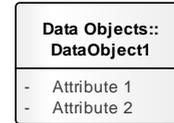
Key Name = **“HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/TREE_STEREO”**

Key Value = 0



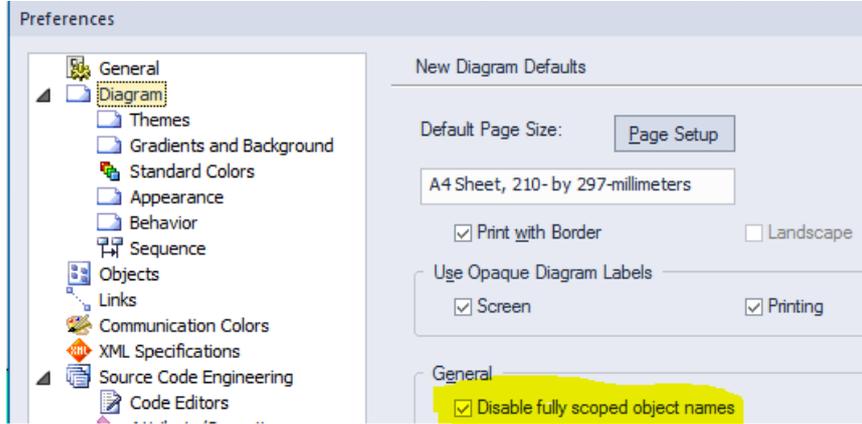
DISABLE FULLY SCOPED OBJECT NAMES

Avoid diagrams to show object names prefixed with the package names when the object is not in the same package as the diagram.



MANUAL STEPS

Check the option “Start / Preferences / Diagram / Disable fully scoped object names”



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name =

Name	Type	Data
HD_WAVE_EFFECT_NORMAL	REG_DWORD	0x00000068 (104)
HIDE_APPLOOK_DLG	REG_DWORD	0x00000001 (1)
INSTANCE_DEF2	REG_DWORD	0x00000001 (1)
LAST_DIAGRAM_TYPE2	REG_SZ	NMBS::Information Ar
LAST_DOC_COVERPAGE	REG_SZ	aCover Page
LAST_DOC_FILENAME	REG_SZ	C:\A\LT\SparxDev\ba1
LAST_DOC_FORMAT	REG_DWORD	0x00000000 (0)
LAST_DOC_STYLESHEET	REG_SZ	aStyle Sheet
LAST_DOC_TEMPLATE	REG_SZ	Model Report
LAST_DOC_TOC_PAGE	REG_SZ	aTOC
LAST_GEN_THEME	REG_SZ	<current user theme>
LAST_PERSPECTIVE_SET	REG_SZ	{739d11ea-6fdb-49f8-f
Last_Source_Type	REG_DWORD	0xffffffff (4294967295)
Last_Target_Type	REG_DWORD	0x00000003 (3)
LAST_THEME	REG_SZ	Enterprise Architect 12
Last_Transfer_Source	REG_SZ	C:\A\LT\SparxBU\Repi
Last_Transfer_Target	REG_SZ	DBType=3;Connect=P
Last_Transfer_Type	REG_DWORD	0x00000002 (2)
LASTELEM	REG_DWORD	0x00000002 (2)
LASTELEMPAGE	REG_SZ	UML::Component
LastSearchTerm	REG_SZ	Test
LASTUSER	REG_SZ	Admin
LINECLR	REG_DWORD	0x00000000 (0)
LINETHICKNESSES	REG_DWORD	0x00000001 (1)
LOAD_STARTUP_WORKSPACE	REG_SZ	Custom::NMBS Works
MAINTChange_OPTS	REG_SZ	SBar=150;SDet=1;
MAINTDecision_OPTS	REG_SZ	SBar=150;SDet=1;
MAINTDefect_OPTS	REG_SZ	SBar=150;SDet=1;
MAINTEvent_OPTS	REG_SZ	SBar=150;SDet=1;
MAINTIssue_OPTS	REG_SZ	SBar=150;SDet=1;
MAINTToDo_OPTS	REG_SZ	SBar=150;SDet=1;
MDG_TECHNOLOGY_STATUS	REG_SZ	NIEM=0;WebProfile=0
MDGTechnology PathList	REG_SZ	N:\
MY_TECHNOLOGY	REG_SZ	<global>
NEWPACKAGE_ADDVC	REG_DWORD	0x00000000 (0)
NEWPACKAGE_INITCONTENT	REG_DWORD	0x00000002 (2)
NO_FULL_NAMES	REG_DWORD	0x00000001 (1)

“HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/NO_FULL_NAMES”

Key Value = 1

WORKSPACE CONFIGURATION

USER RIBBON

MANUAL CREATION OF THE CONFIGURATION ITEMS

UPDATE PERSONAL PREFERENCES

- Start / Workspace / My Workspaces / Ribbon
- Uncheck menu options

AUTOMATED DEPLOYMENT OF THE CONFIGURATION ITEMS

UPDATE USERS CONFIGURATION

- Copy RibbonSets.xml to %APPDATA%\Sparx Systems\EA
- Copy UserRibbon.xml to %APPDATA%\Sparx Systems\EA
- Update registry keys
 - [HKEY_CURRENT_USER\Software\Sparx Systems\EA400\EA\OPTIONS]
 - "CURRENT_PERSPECTIVE"="{My language}"

PERSPECTIVES

MANUAL CREATION OF THE CONFIGURATION ITEMS

UPDATE PERSONAL PREFERENCES

- Start / View / Perspectives / Customize List of Available Perspectives... / My Perspectives
- New
- Set Name: {My language}
- OK

- Select PERSPECTIVES (on the upper-right corner of the screen)
- My Perspectives / {My language}

AUTOMATED DEPLOYMENT OF THE CONFIGURATION ITEMS

UPDATE USERS CONFIGURATION

- Copy TechnologySets.xml to %APPDATA%\Sparx Systems\EA
- Copy UserTechnologySet.xml to %APPDATA%\Sparx Systems\EA

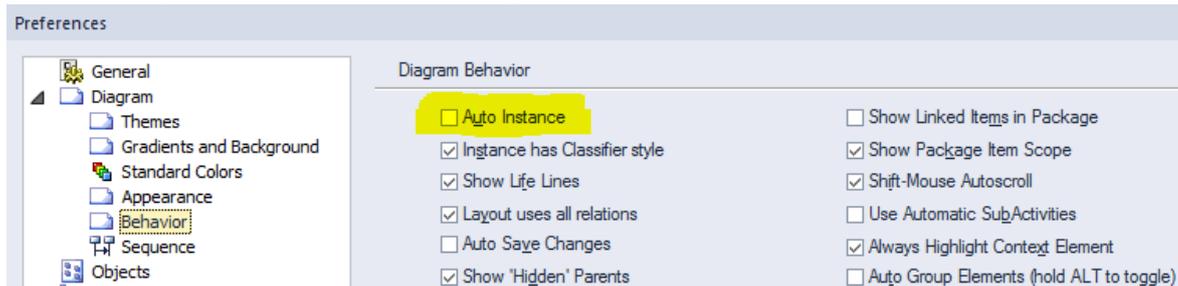
DISABLE AUTO INSTANCE

When you [drag and drop some elements from the project browser](#) (“paste from the tree”), like applications and data entities, from the project browser onto a diagram, avoid automatic creation of a new instance (instead of a simple link to the element) and avoid prompting to select whether to create a link or an instance.

When [dragging and dropping some elements from the project browser](#) to a diagram **for the first time**, uncheck the “Hold Ctrl to Show this dialog”.

MANUAL STEPS

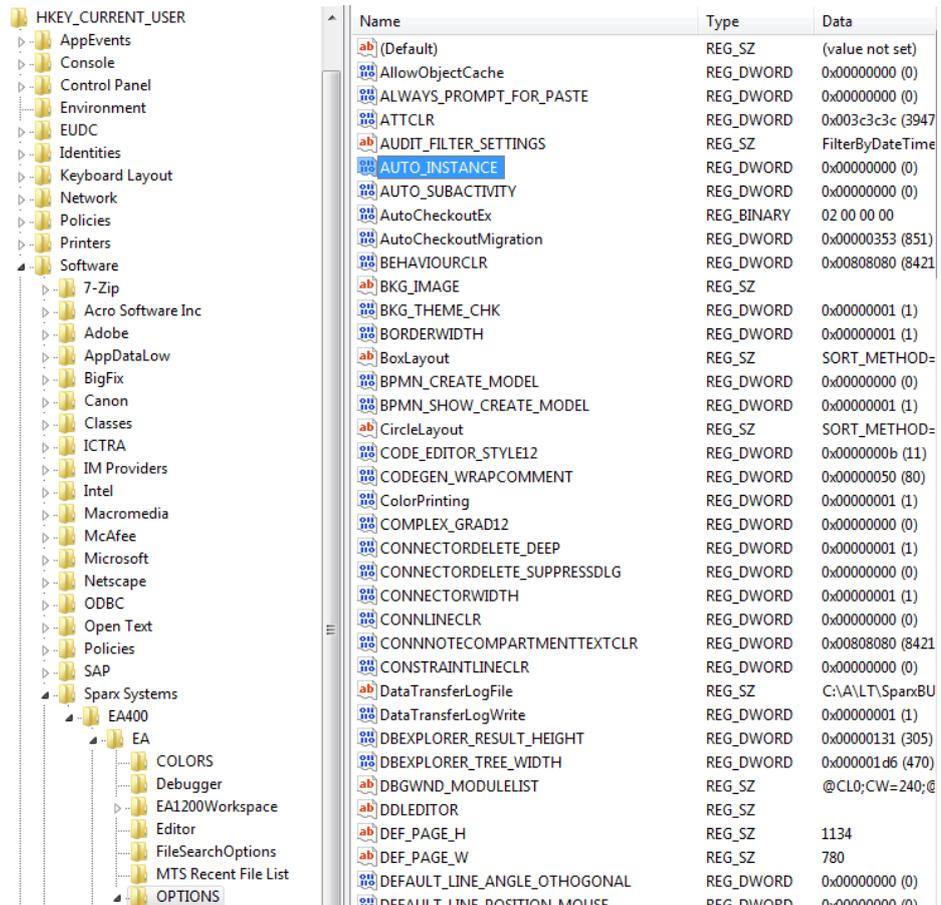
Uncheck the option “**Start / Preferences / Diagram / Behavior / Auto Instance**”



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = “HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/AUTO_INSTANCE”

Key Value = 0



Key Name = "HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/ ALWAYS_PROMPT_FOR_PASTE"
 Key Value = 0

The screenshot displays the Windows Registry Editor. On the left, the tree view shows the path: HKEY_CURRENT_USER > Software > Sparx Systems > EA400 > EA > OPTIONS. The right pane shows a list of registry values with columns for Name, Type, and Data.

Name	Type	Data
(Default)	REG_SZ	(value not set)
AllowObjectCache	REG_DWORD	0x00000000 (0)
ALWAYS_PROMPT_FOR_PASTE	REG_DWORD	0x00000000 (0)
AUTO_INSTANCE	REG_DWORD	0x00000000 (0)
AUTO_SUBACTIVITY	REG_DWORD	0x00000000 (0)
AutoCheckoutEx	REG_BINARY	02 00 00 00
AutoCheckoutMigration	REG_DWORD	0x00000353 (851)
CODE_EDITOR_STYLE12	REG_DWORD	0x0000000b (11)
CODEGEN_WRAPCOMMENT	REG_DWORD	0x00000050 (80)
ColorPrinting	REG_DWORD	0x00000001 (1)
CONNECTORDELETE_DEEP	REG_DWORD	0x00000001 (1)
CONNECTORDELETE_SUPPRESSDLG	REG_DWORD	0x00000000 (0)
DBGWND_MODULELIST	REG_SZ	@CL0;CW=240;@E
DDLEDITOR	REG_SZ	
DEF_PAGE_H	REG_SZ	1130
DEF_PAGE_W	REG_SZ	780
DEFAULT_LINE_ANGLE_OTHOGONAL	REG_DWORD	0x00000000 (0)
DEFAULT_LINE_POSITION_MOUSE	REG_DWORD	0x00000000 (0)
DEFAULT_MYSQL_STORAGE_ENGINE	REG_SZ	
DEFAULT_PROJECT	REG_SZ	
DefaultModel	REG_SZ	C:\PROGRA~2\SPA
DEFNOTE_SIZE	REG_DWORD	0x00000000 (0)
DGM_AUTOGROUP	REG_DWORD	0x00000000 (0)
DIAGRAM_RENDERER	REG_DWORD	0x00000001 (1)
DYNWEBSEARCH	REG_SZ	www.google.com
EMF_FORMAT	REG_DWORD	0x00000001 (1)
ENABLE_QL	REG_DWORD	0x00000001 (1)
ExtendedTechEnabled	REG_DWORD	0x00000001 (1)
GRADLUM	REG_DWORD	0x00000032 (50)
GRADSTART	REG_DWORD	0x00000050 (80)
GRPBOX:ParametersList	REG_DWORD	0x00000000 (0)
GRPBOX:Relations	REG_DWORD	0x00000000 (0)
HD_KINK_EFFECT_LOW	REG_DWORD	0x0000001c (28)
HD_KINK_EFFECT_MESSY	REG_DWORD	0x00000158 (344)
HD_KINK_EFFECT_NORMAL	REG_DWORD	0x00000088 (136)
HD_LENGTH_EFFECT_LOW	REG_DWORD	0x000000c8 (200)
HD_LENGTH_EFFECT_MESSY	REG_DWORD	0x00000115 (277)
HD LENGTH EFFECT NORMAL	REG DWORD	0x0000008f (143)

DISABLE AUTOMATIC SUB-ACTIVITIES

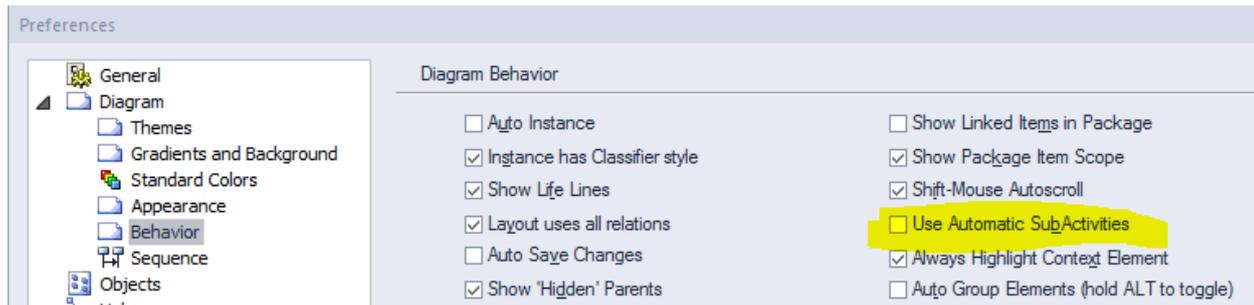
This configuration might be necessary in the case where your custom language/MDG contains

- Element stereotypes that derived from Activity
- Diagram stereotypes derived from Activity Diagram

In such case you might want to avoid automatic creation of a new Structured Activity element when you drag one Activity diagram from the Project Browser onto another Activity diagram and select the 'Hyperlink' option.

MANUAL STEPS

Uncheck the option **“Start / Preferences / Diagram / Behavior / Use Automatic SubActivities”**



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = "HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/AUTO_SUBACTIVITY"

Key Value = 0

The screenshot displays the Windows Registry Editor. The left pane shows the tree structure expanded to HKEY_CURRENT_USER\Software\Sparx Systems\EA400\EA\OPTIONS. The right pane shows a list of registry values with columns for Name, Type, and Data.

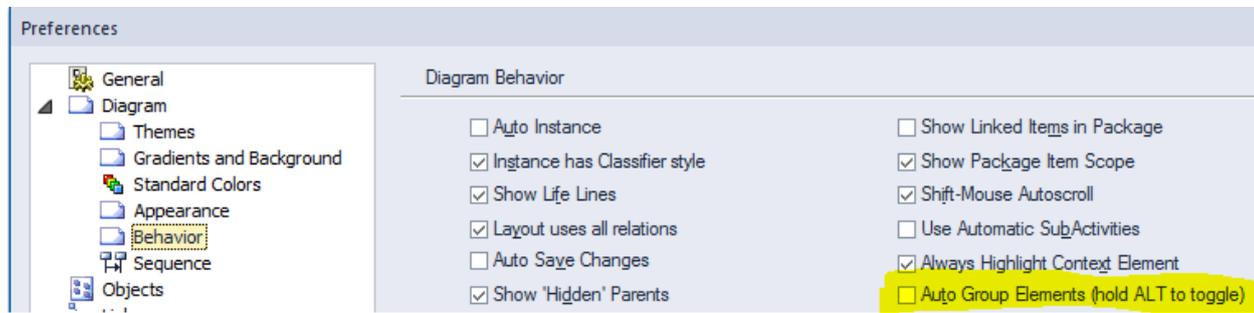
Name	Type	Data
(Default)	REG_SZ	(value not set)
AllowObjectCache	REG_DWORD	0x00000000 (0)
ALWAYS_PROMPT_FOR_PASTE	REG_DWORD	0x00000000 (0)
ATTCLR	REG_DWORD	0x003c3c3c (3947580)
AUDIT_FILTER_SETTINGS	REG_SZ	FilterByDateTime=0;Pe
AUTO_INSTANCE	REG_DWORD	0x00000000 (0)
AUTO_SUBACTIVITY	REG_DWORD	0x00000000 (0)
AutoCheckoutEx	REG_BINARY	02 00 00 00
AutoCheckoutMigration	REG_DWORD	0x00000353 (851)
BEHAVIOURCLR	REG_DWORD	0x00808080 (8421504)
BKG_IMAGE	REG_SZ	
BKG_THEME_CHK	REG_DWORD	0x00000001 (1)
BORDERWIDTH	REG_DWORD	0x00000001 (1)
BoxLayout	REG_SZ	SORT_METHOD=None
BPMN_CREATE_MODEL	REG_DWORD	0x00000000 (0)
BPMN_SHOW_CREATE_MODEL	REG_DWORD	0x00000001 (1)
CircleLayout	REG_SZ	SORT_METHOD=None
CODE_EDITOR_STYLE12	REG_DWORD	0x0000000b (11)
CODEGEN_WRAPCOMMENT	REG_DWORD	0x00000050 (80)
ColorPrinting	REG_DWORD	0x00000001 (1)
COMPLEX_GRAD12	REG_DWORD	0x00000000 (0)
CONNECTORDELETE_DEEP	REG_DWORD	0x00000001 (1)
CONNECTORDELETE_SUPPRESSDLG	REG_DWORD	0x00000000 (0)
CONNECTORWIDTH	REG_DWORD	0x00000001 (1)
CONNLINECLR	REG_DWORD	0x00000000 (0)
CONNNOTECOMPARTMENTTEXTCLR	REG_DWORD	0x00808080 (8421504)
CONSTRAINTLINECLR	REG_DWORD	0x00000000 (0)
DataTransferLogFile	REG_SZ	C:\ALT\SparxBU\Repr
DataTransferLogWrite	REG_DWORD	0x00000001 (1)
DBEXPLORER_RESULT_HEIGHT	REG_DWORD	0x00000131 (305)
DBEXPLORER_TREE_WIDTH	REG_DWORD	0x000001d6 (470)
DBGWND_MODULELIST	REG_SZ	@CL0;CW=240;@ECL0
DDLEEDITOR	REG_SZ	
DEF_PAGE_H	REG_SZ	1134
DEF_PAGE_W	REG_SZ	780
DEFAULT_LINE_ANGLE_OTHOGONAL	REG_DWORD	0x00000000 (0)
DEFAULT_LINE POSITION MOUSE	REG_DWORD	0x00000000 (0)

AUTO GROUP ELEMENTS OFF

Avoid model elements to be relocated in the project browser structure when dragging and dropping items from one parent to another in a diagram.

MANUAL STEPS

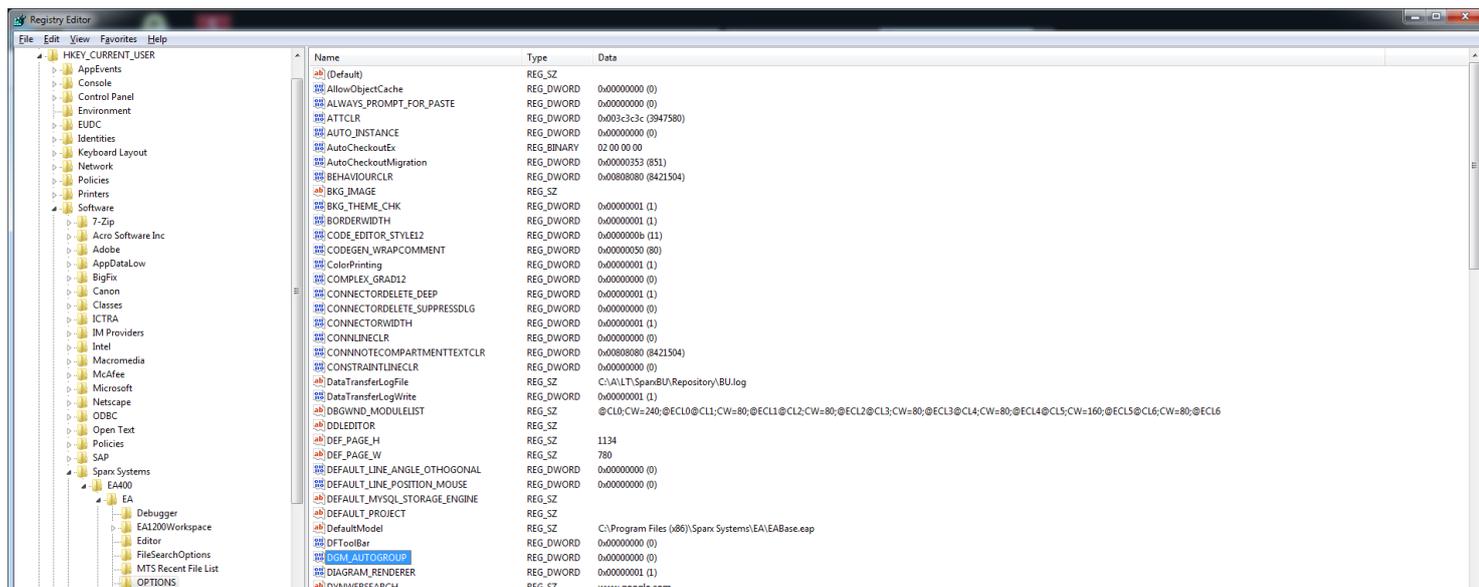
Uncheck the option “**Start / Preferences / Diagram / Behavior / Auto Group Elements**”



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = “HKEY_CURRENT_USER/Software/Sparx Systems/EA400/EA/OPTIONS/DGM_AUTOGROUP”

Key Value = 0

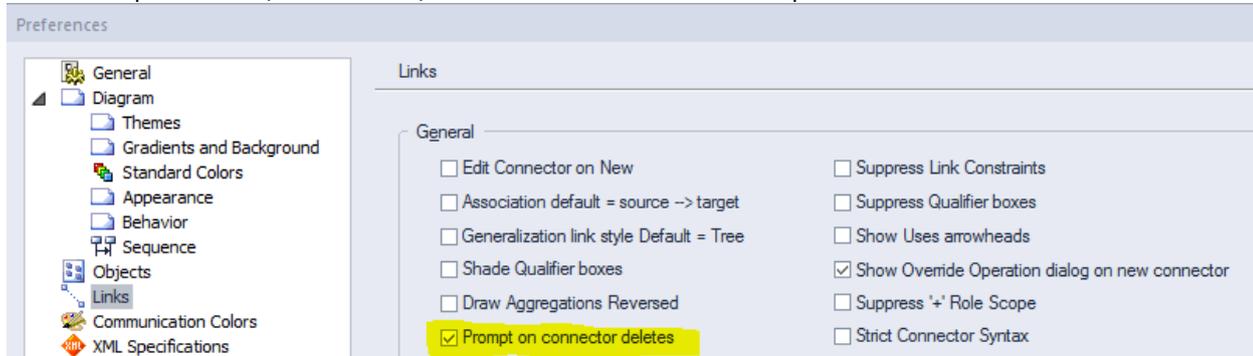


PROMPT FOR CONNECTOR DELETE

When the user opts to “delete” a connector from a diagram, make sure he is prompted to either delete the connector from the model repository or to just hide it in the current view.

MANUAL STEPS

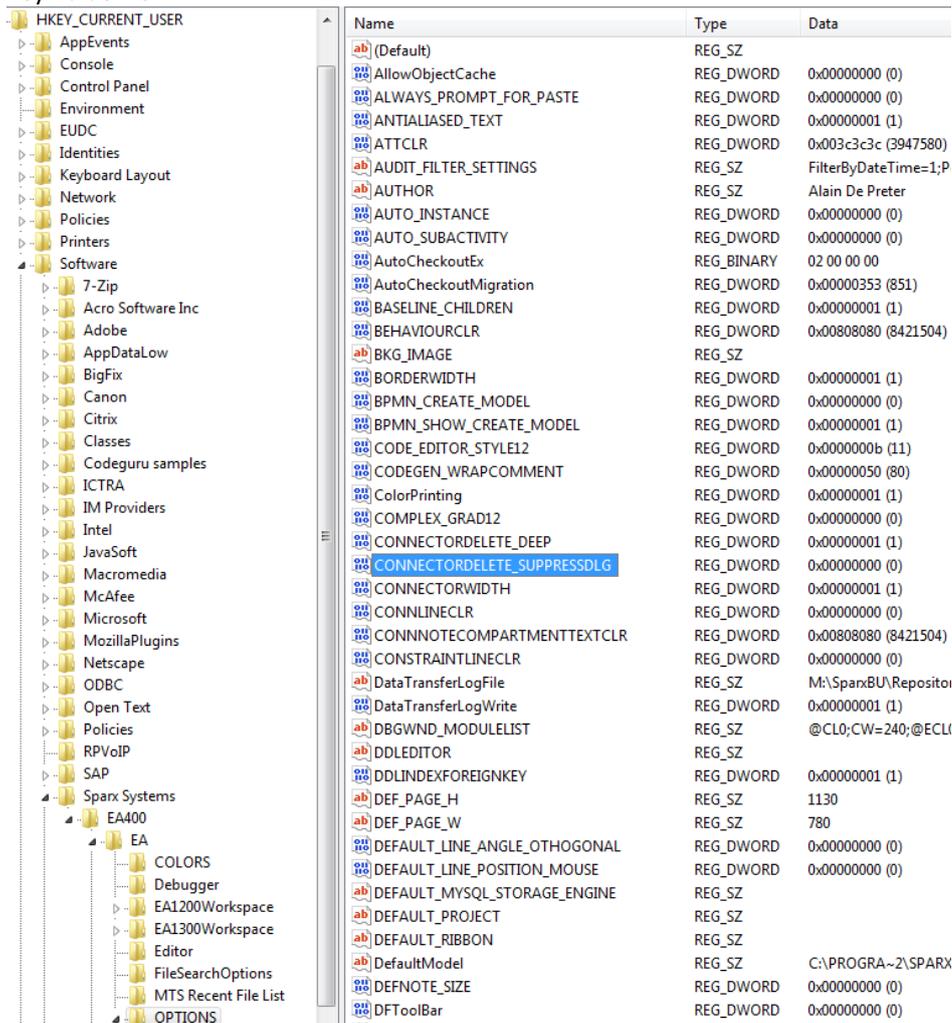
Select the option “Start / Preferences / Links” and check the item “Prompt on connector deletes”:



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = “HKEY_CURRENT_USER\Software\Sparx Systems\EA400\EA\OPTIONS\CONNECTORDELETE_SUPPRESSDLG”

Key Value = 0



NO STRICT CONNECTOR SYNTAX

Do not enforce consistency of stereotyped connectors with underlying UML connector syntax. **This is very important if you don't want your element and connector stereotypes to inherit UML constraints!!!**

MANUAL STEPS

Select the option "Start / Preferences / Links" and uncheck the item "Strict connector syntax":



AUTOMATED SET UP BY UPDATING REGISTRY KEY(S)

Key Name = "HKEY_CURRENT_USER\Software\Sparx Systems\EA400\EA\OPTIONS\UML_STRICT"

Key Value = 0