



## 簡報大綱

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輸出XML Schema 文件

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Enterprise Architect 簡介

XSD和UML的轉換

XSD Diagrams





# XMLSpy



- Altova 公司生產的一款xml文件編輯器及整合式開發環境
- XMLSpy支援XML、SOAP 、 WSDL 、 Xquery 、 Xpath等XML相關技術



# XMLSpy



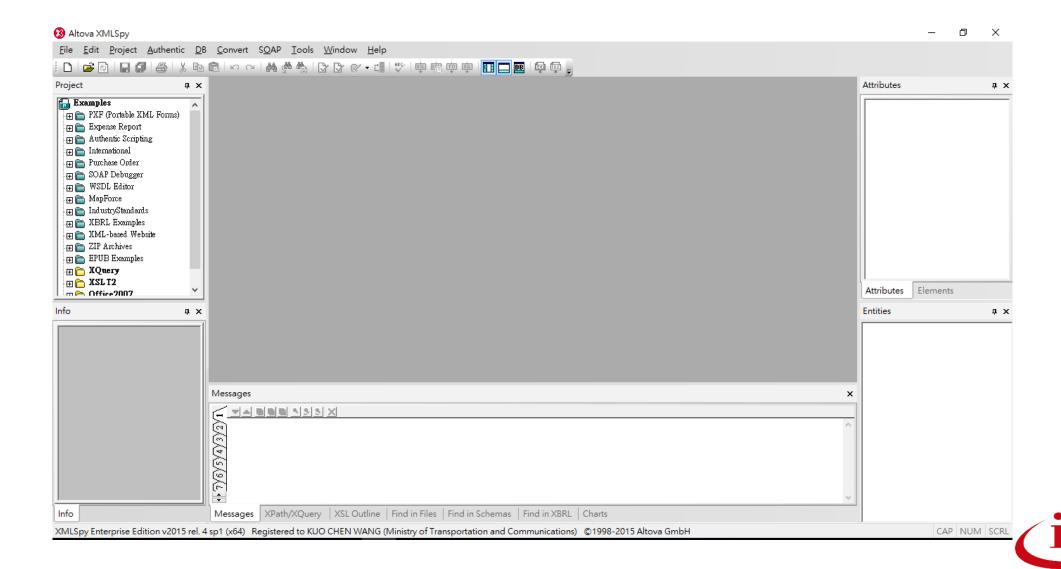
•操作環境:Win10

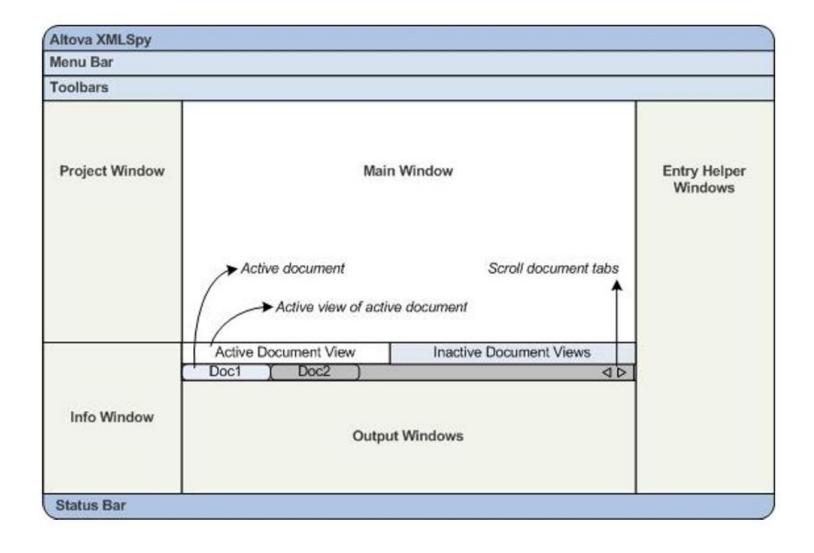
•版本:Altova XMLSpy 2015(x64)





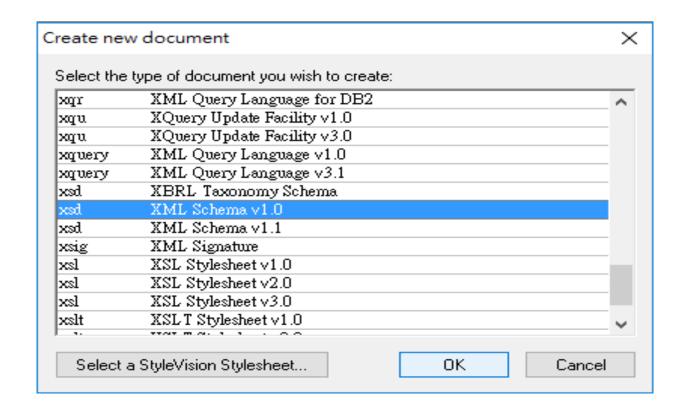






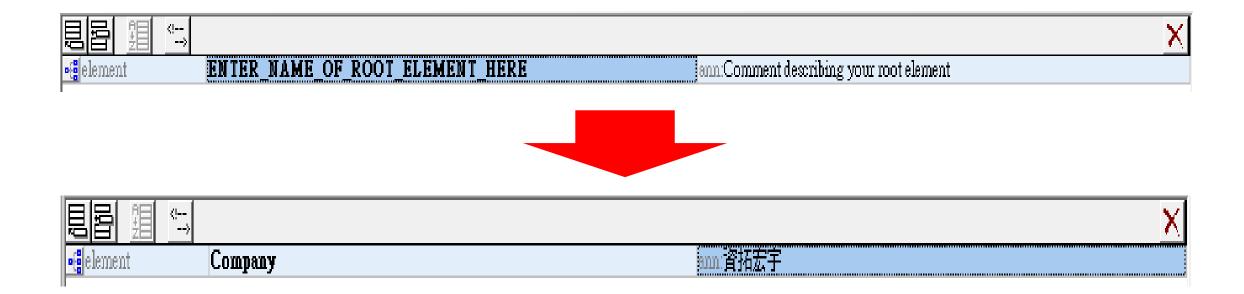


- 建立一個XML Schema的文件
- File | New





• 定義root element的名稱和描述



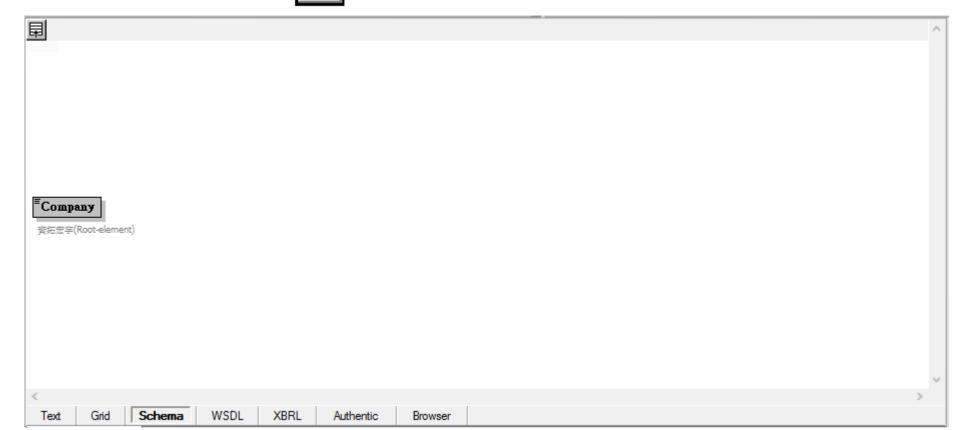


• 設定targetNamespace =>Schema design | Schema settings

Schema settings				×
elementFormDefault:	<ul><li>qualified</li></ul>	ounqualified		
attributeFormDefault:	O qualified	<ul><li>unqualified</li></ul>		
blockDefault:				~
finalDefault:				~
version:				
xml:lang:			id:	
○ No targetNamespace				
targetNamespace:				
				×
Prefix	Namespace			
xs	httn://www.w3	org/2001/XMLScher	ma	
	http://www.altova.com/xml-schema-extensions			
			OK	Cancel

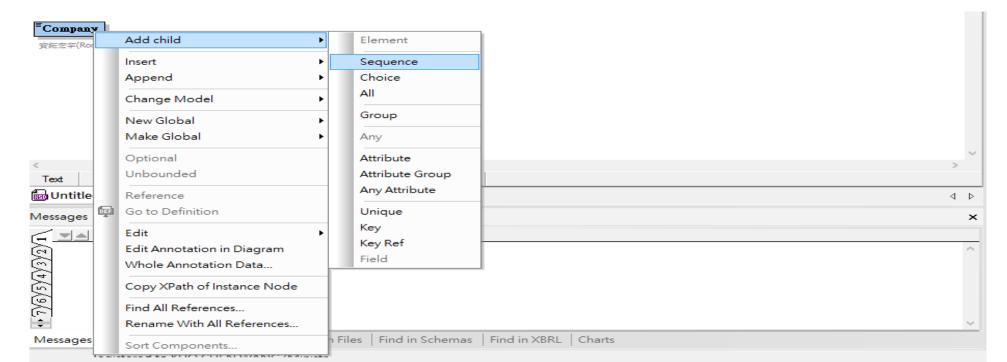


- 開始編輯Root-element底下內容
- 點選左邊小圖式



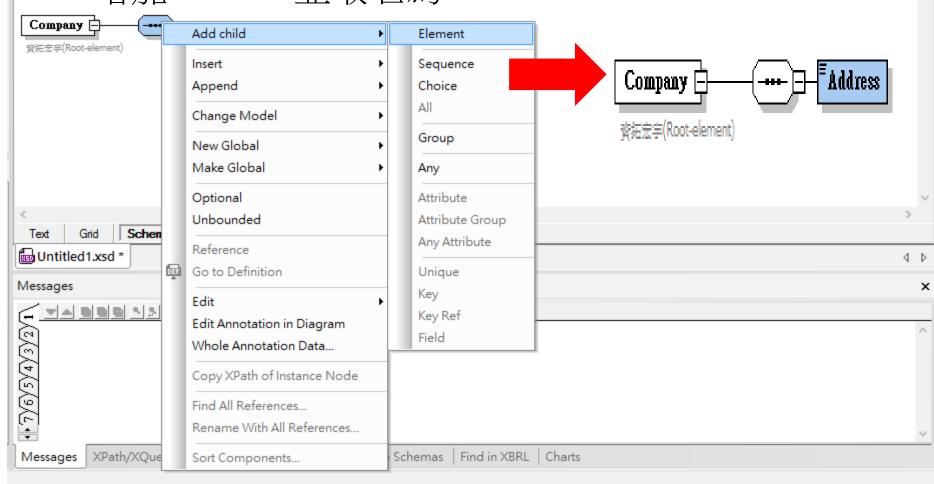


- 選擇compositor(組合)形式 => 對著Company點右鍵
  - Sequence:按順序出現(類似DTD內容模型的",")
  - Choice:任選一者(類似DTD內容模型的"|")
  - All:可以任何順序出現



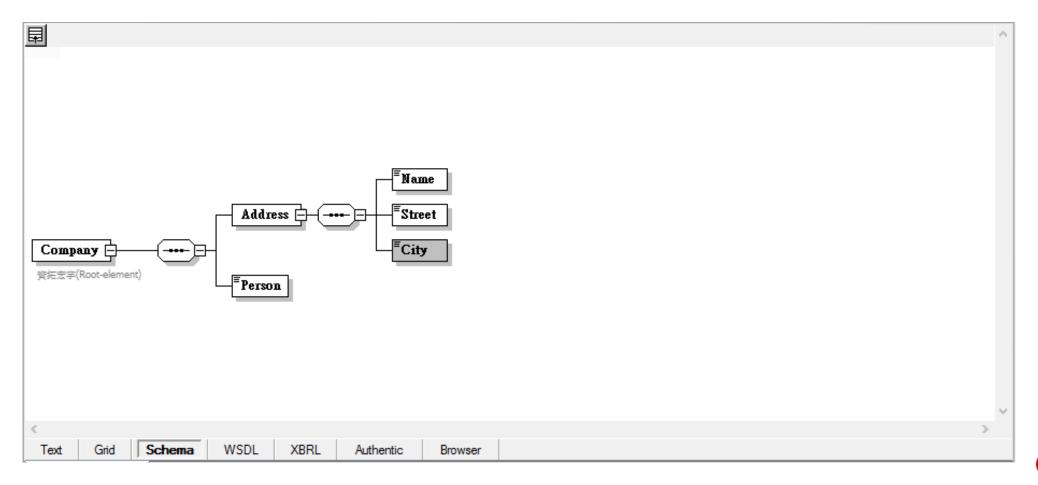


• 增加element並取名為Address



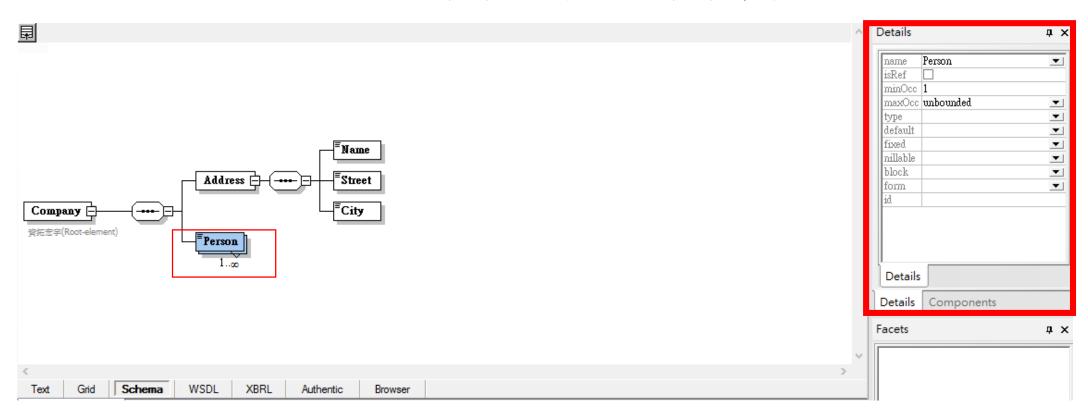


• 按住Ctrl後對element拖曳可達到複製該element效果



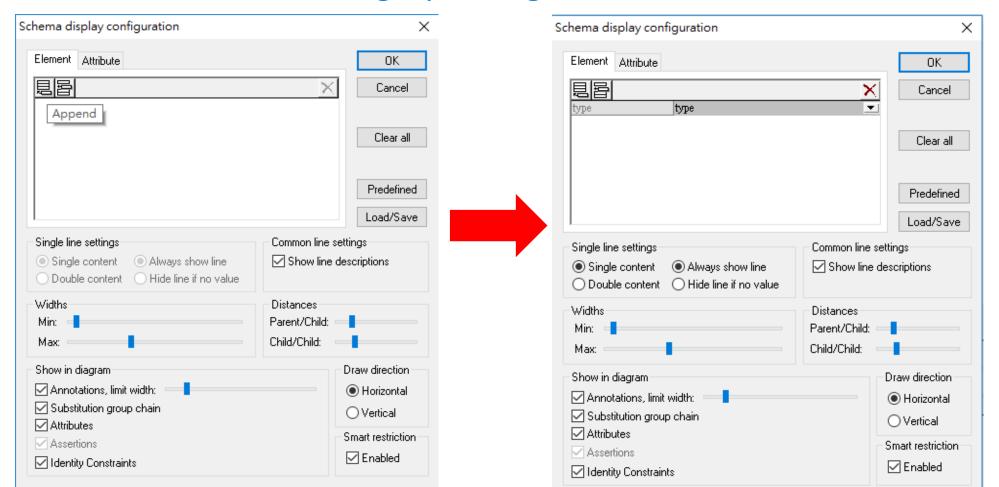


• 點選Person, 右邊Details欄位可設定該欄位資訊



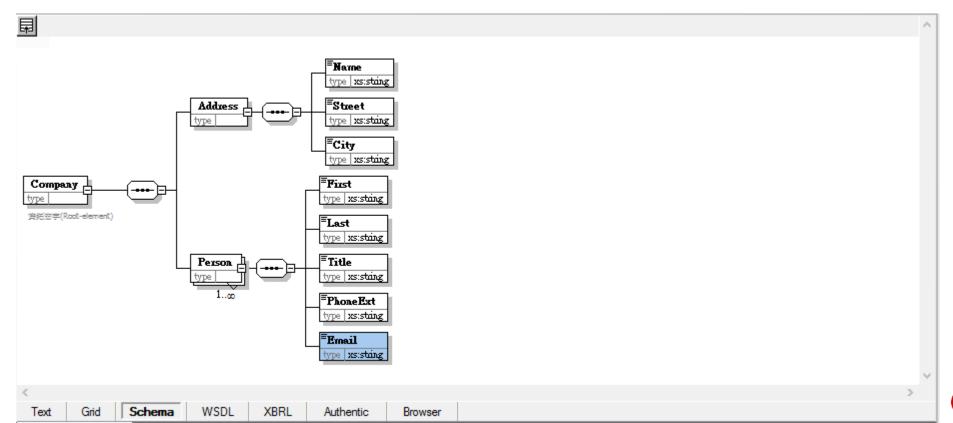


• 工具列上Schema Design | Configure view 可以調整顯示畫面



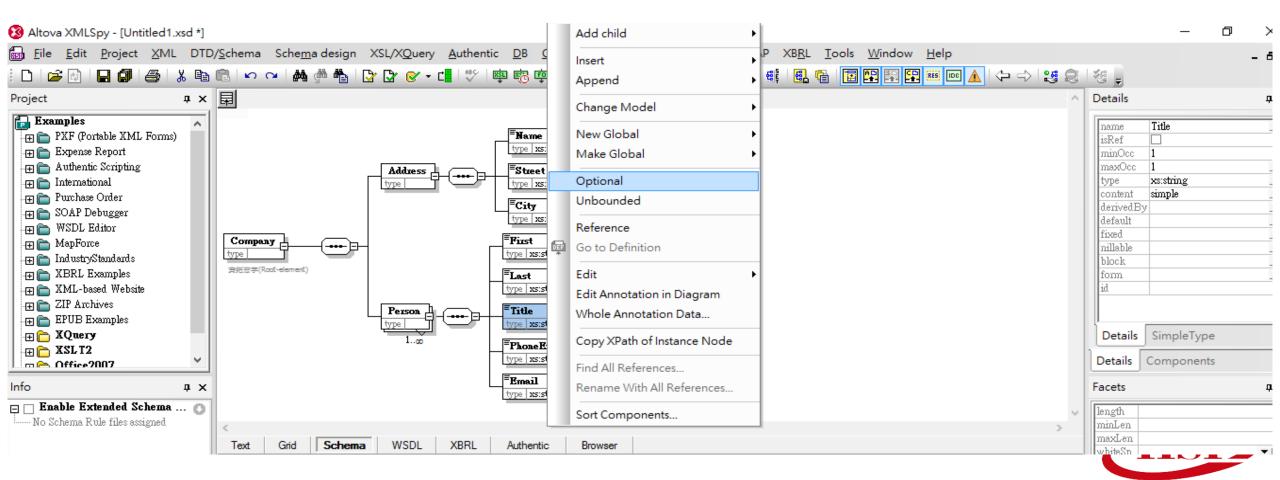


- 將Name、Street、City等元素的type設為 xs:string
- 增加Person底下5個element: First 、Last 、Title 、PhoneExt 、Email

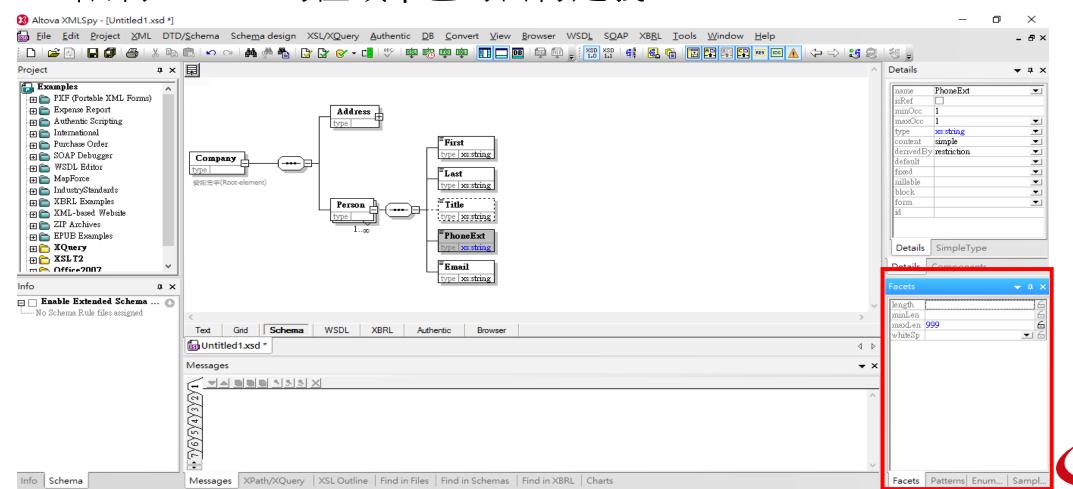




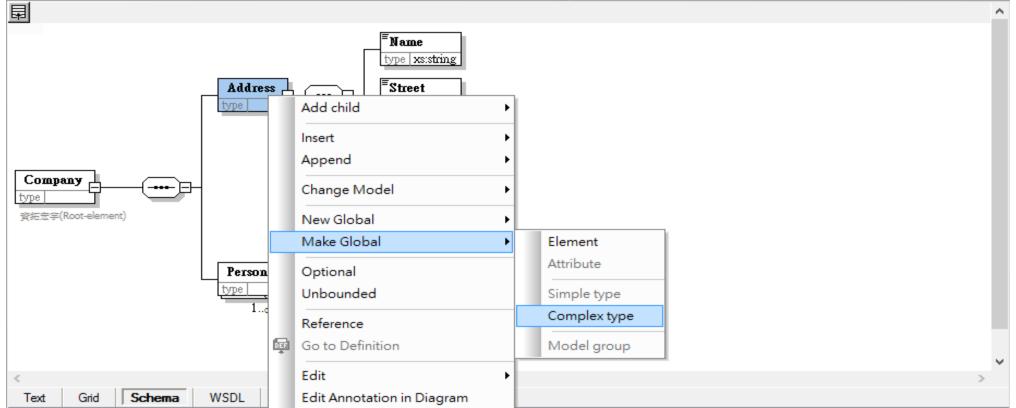
• 設定element為Optional(選填)



• 限制element的值域 | 也可自行定義

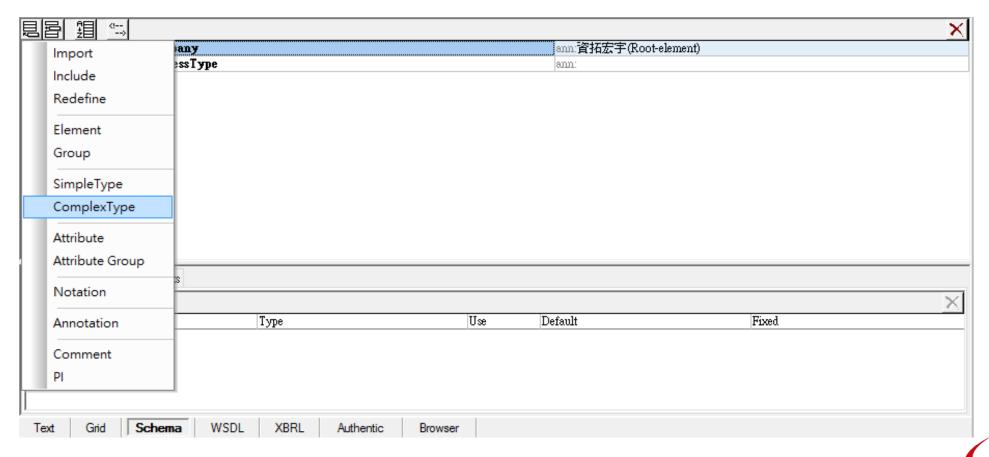


- 製作Globel Complex type
- 對Address右鍵,選取Make Global,點選Complex type





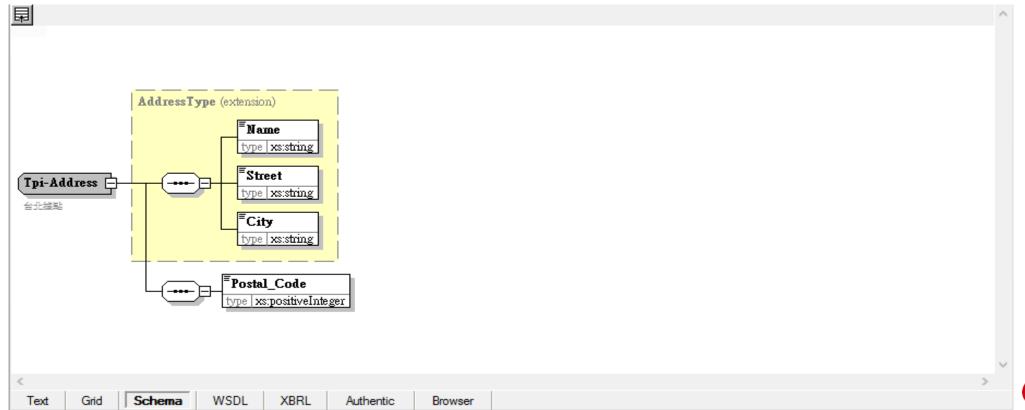
•新增一個Complex type 繼承AddressType 並取名為Tpi-Address



Company ComplexType AddressType			X Deta	ails ▼ ‡ X
egelement Company		ann:資拓宏宇(Root-element)		m : 4.11
<b>≪</b> complexType <b>AddressType</b>		ann:	nan	
complexType Tpi-Address		ann:台北據點	mix	rivedBy AddressType xed Tpi-Address stract xs:anySimpleType xs:anyType
Attributes Identity constraints				xs:duration 💙
			De	etails
Name Type	Use	Default Fixed	Deta	tails Components
			Face	ets ▼ Ţ X
Text Grid Schema WSDL X	BRL Authentic Browser			



- 對Tpi-Address新增一個名為Postal\_code的element,
- type為xs:positiveInteger

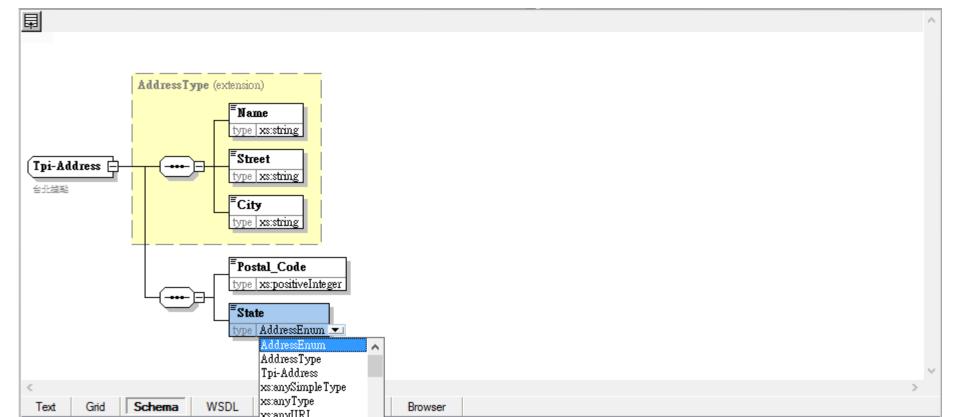




•新增一個Simple type 且restriction為xs:string並取名為AddressEnum

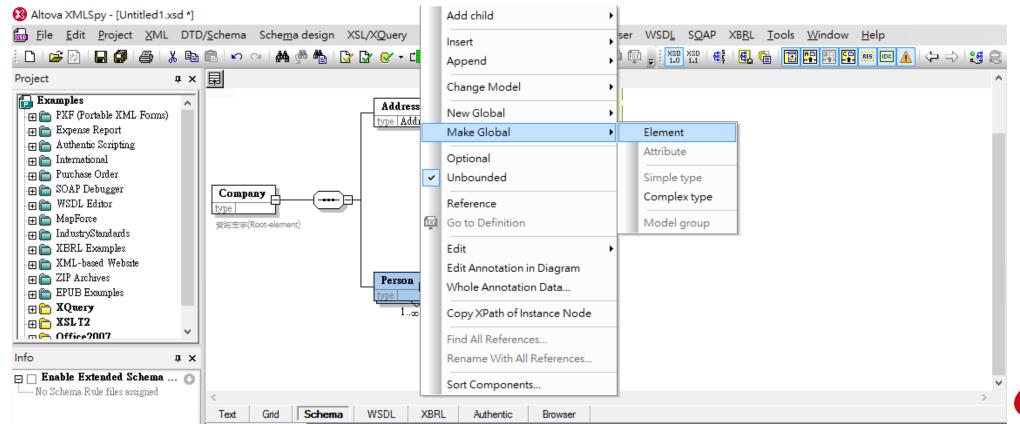


• 對Tpi-Address 新增一個element且type繼承AddressEnum, 取名為State



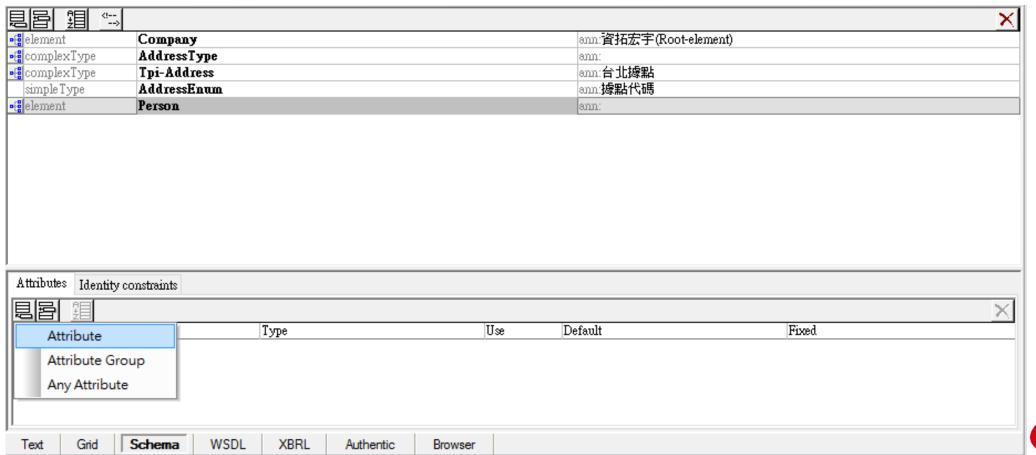


- Referencing Global Elements
- 對Person製作Global Element

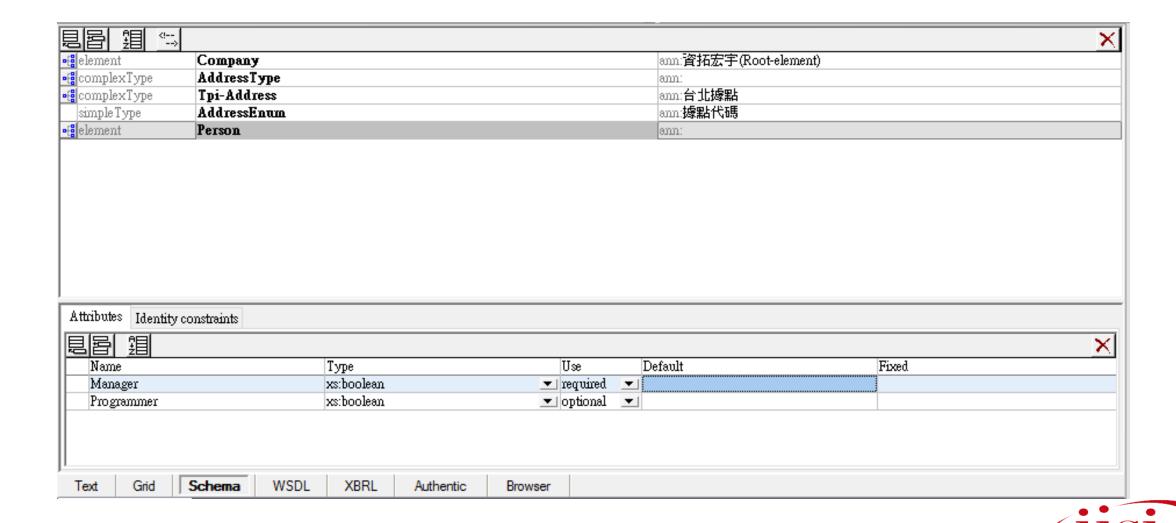




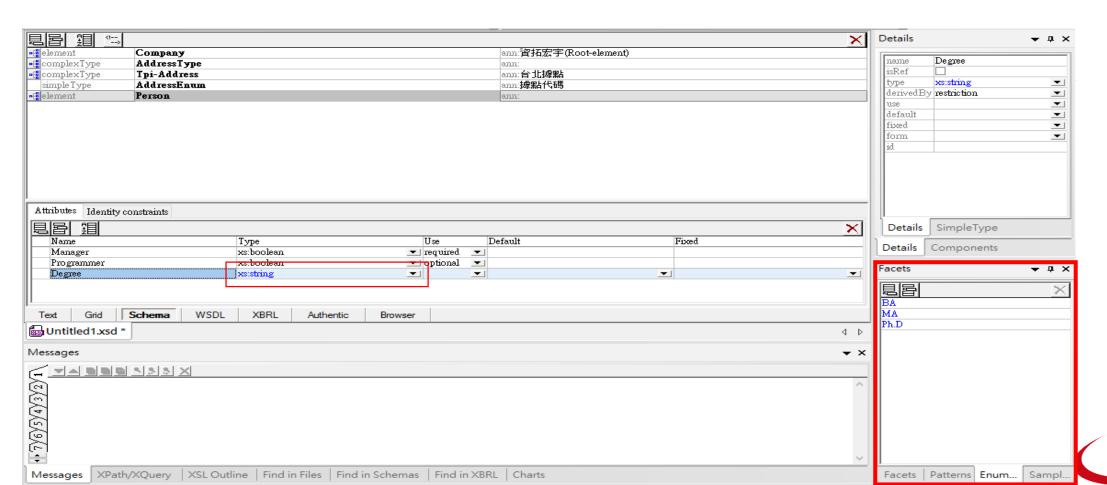
• 對element增加attribute

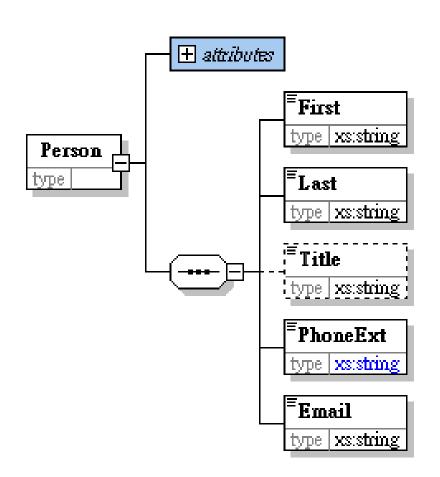


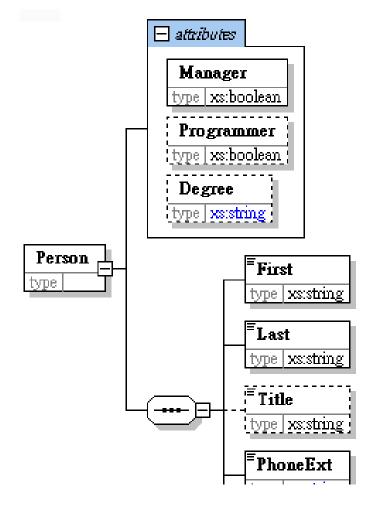




• Attribute設定Enum(列舉)













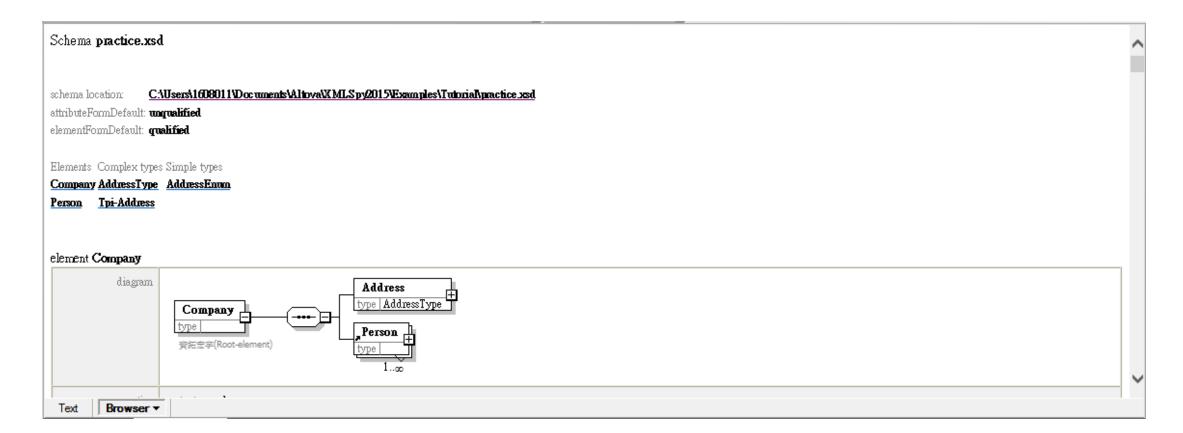
## 輸出XML Schema

- Schema design | Generate documentation
- 可選擇HTML/Word/RTF 等型式

<ul> <li>Use fixed design for Schema documentation in HTML,</li> <li>Use user-defined design for HTML, Word, RTF or PDF</li> </ul>	
Select 3F3 design. %AltovaSchemaDoc%\OverallE	Documentation.sps \to Browse Edit
Output format  Output format  Create diagrams as:  Output format  Create diagrams as:  PNG EMF Embed diagrams  Create folder for diagrams  Split output to multiple files	✓ Show result file after generation ✓ Save schema documentation settings  Generate links to local files  absolute
☑ Embed CSS in HTML	relative to result file
Index	Details  Diagram



# 輸出XML Schema

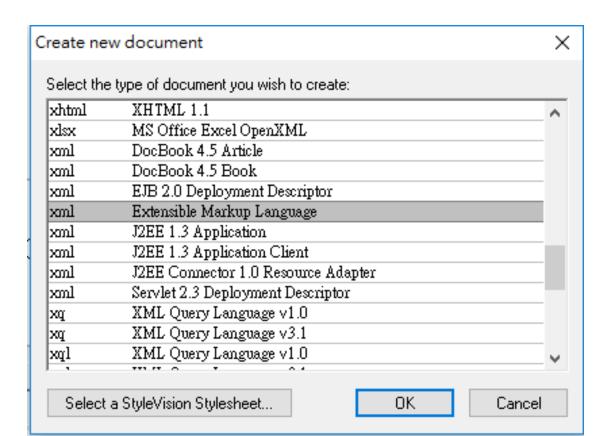




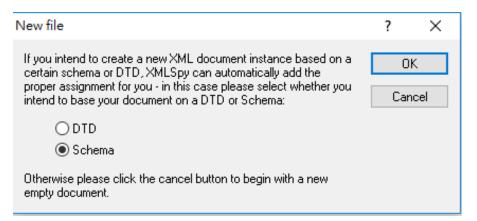


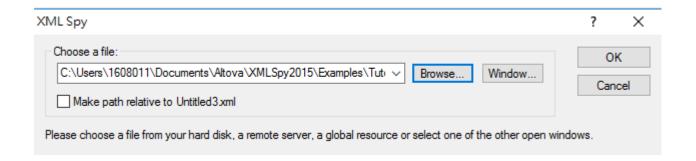
#### XML Documents

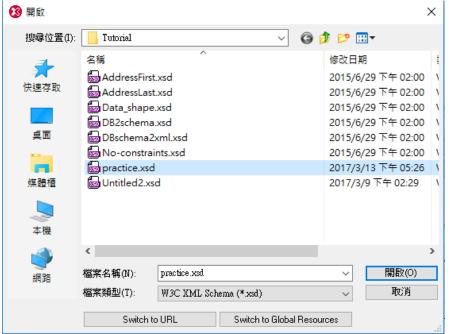
- 用現有的Schema(DTD or XML Schema)去建立一份XML文件
- File | New





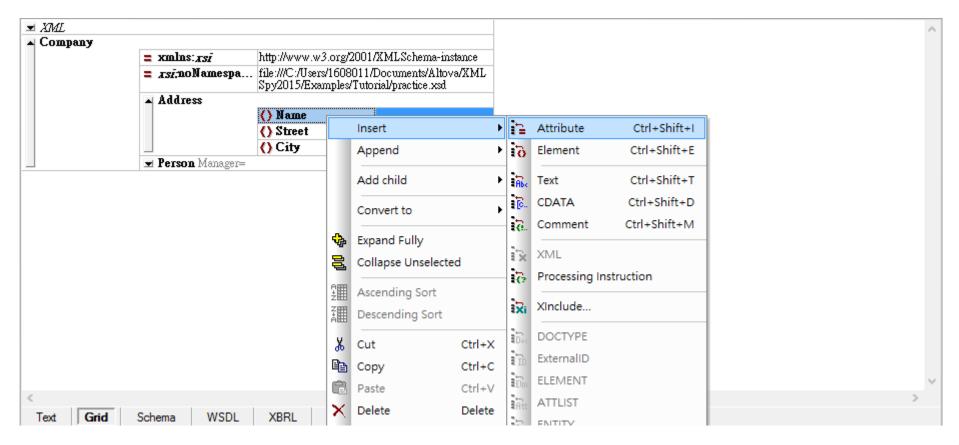








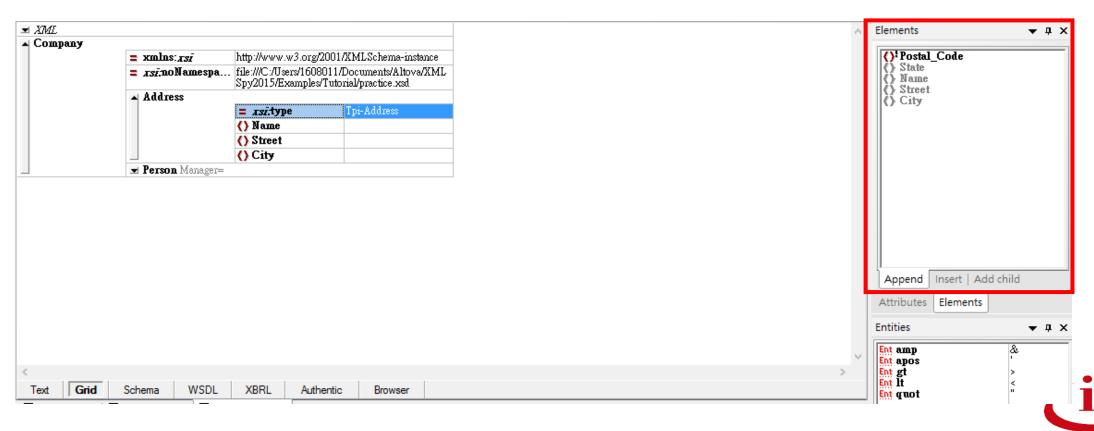
• 切換到Grid頁面,在Name上插入Attribute



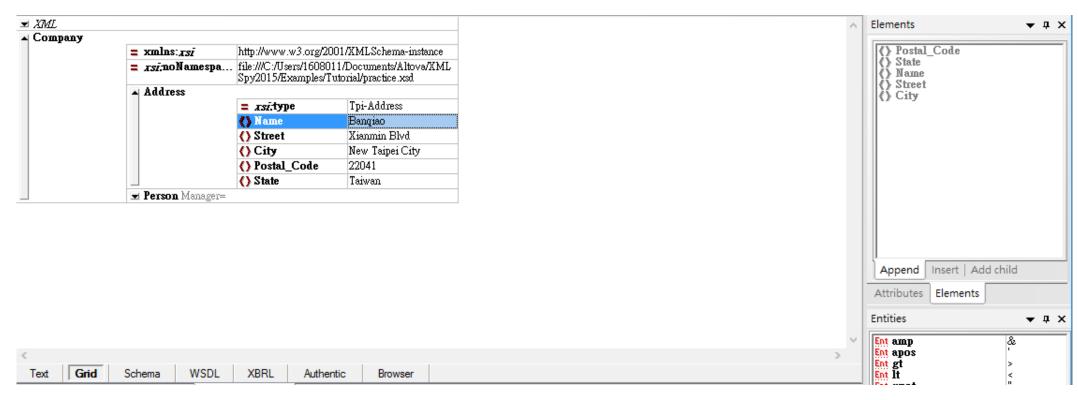


- Xsi:type 選取 Tpi-Address
  - =>(從哪一個Complex type extend 而來)

警告目前還缺少那些 element尚未輸入

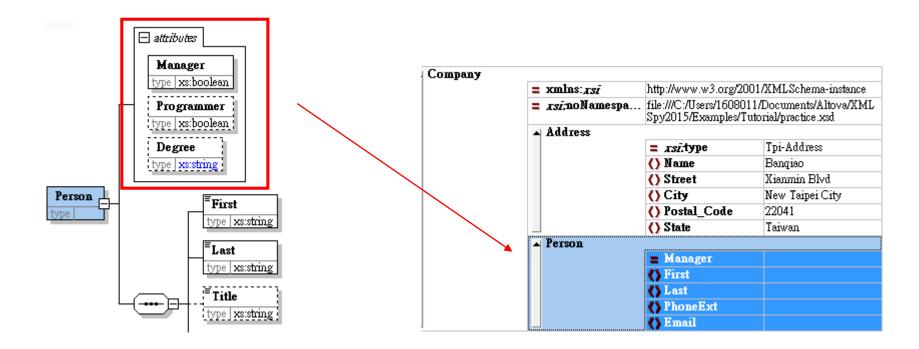


• 輸入Name、Street 、City 、Postal\_code 、State等資訊



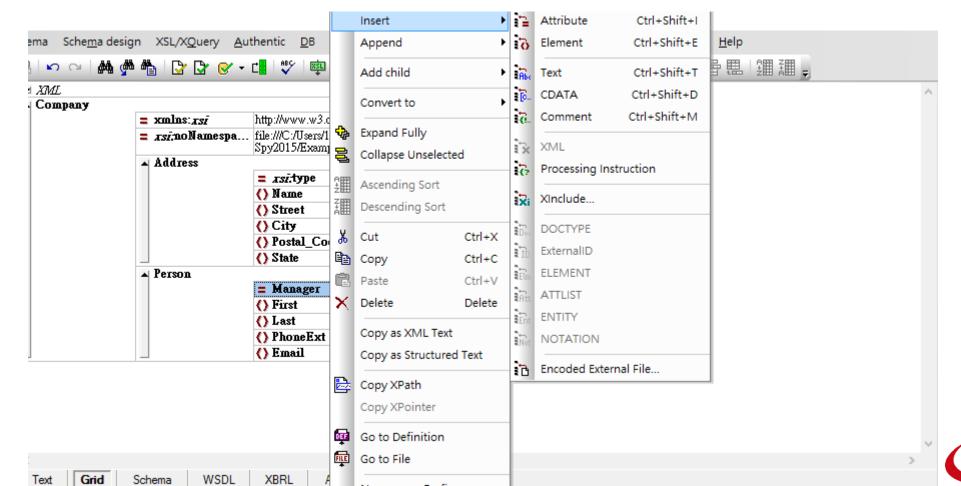


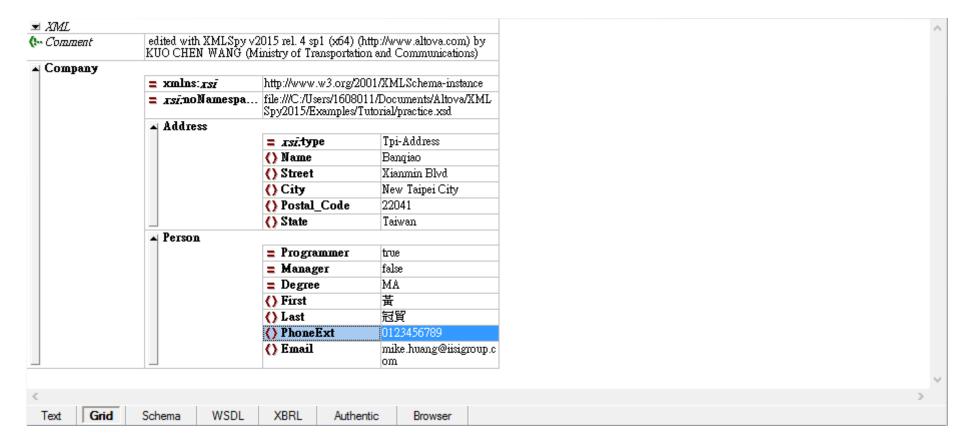
• Person部分,由於先前Attribute中的Programmer和Degree為Optional,所以不會出現在上面。





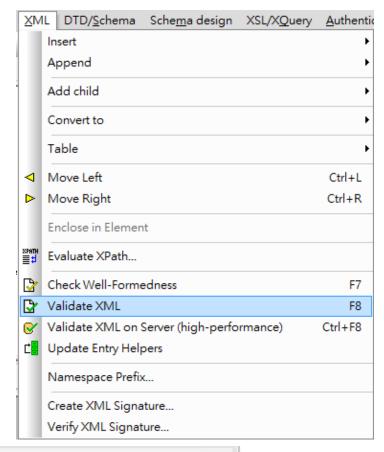
• 若要插入為Optional的Attribute,Insert|Attribute 選取該Attribute

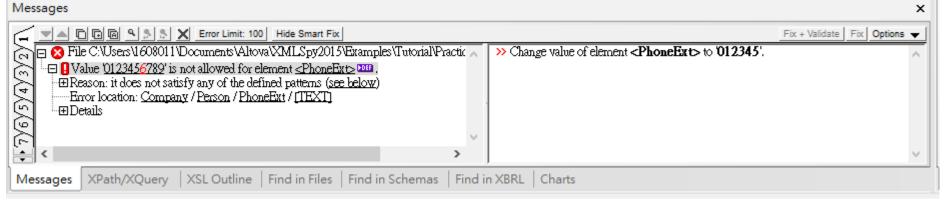






- Validating the Document
- XML | XML Validate or F8
- 對XML資料進行檢驗評估並回報錯誤

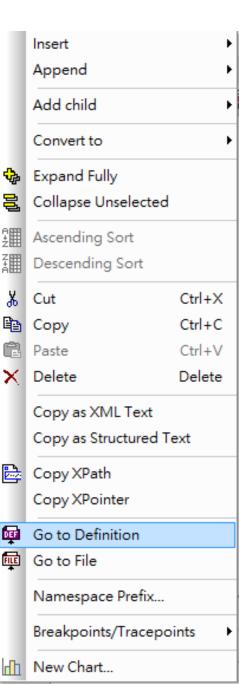




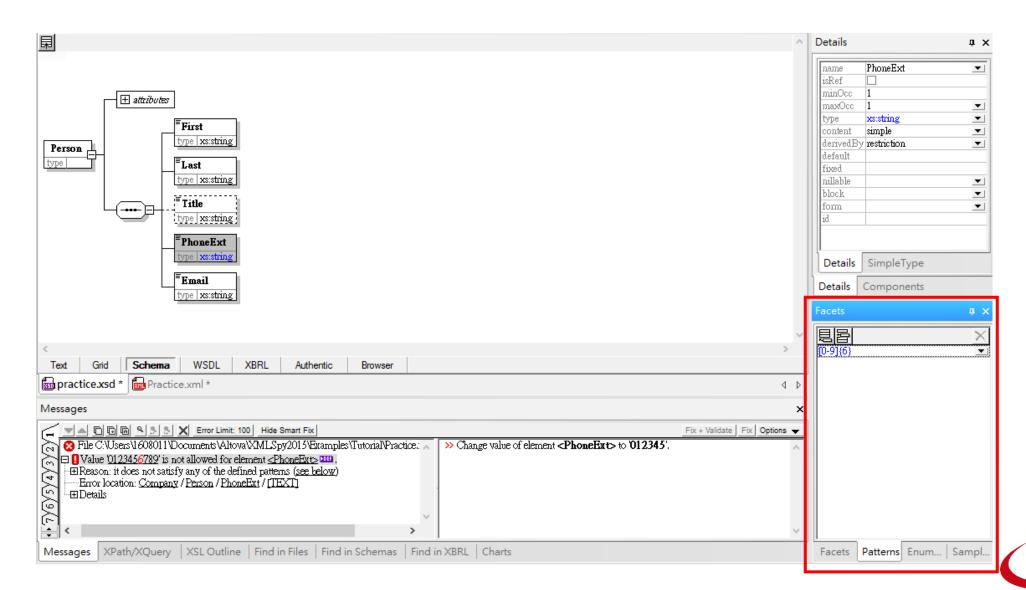


• 解決方法:更改資料 or 重新修改Schema

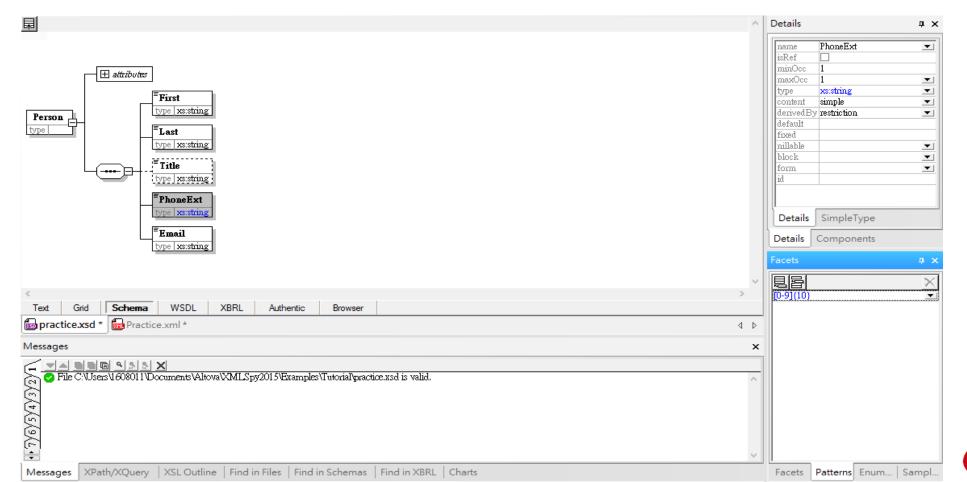
- Modifying the Schema
- 右鍵點選錯誤欄位PhoneExt
  - => Go to Definition





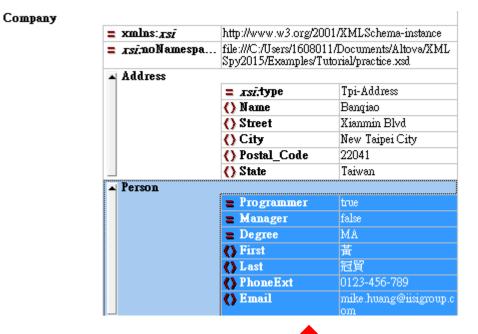


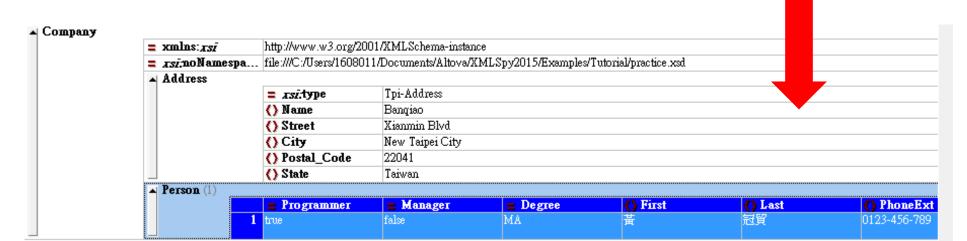
• Patterns屬性方面更改為[0-9]{10},按下F8重新檢測。





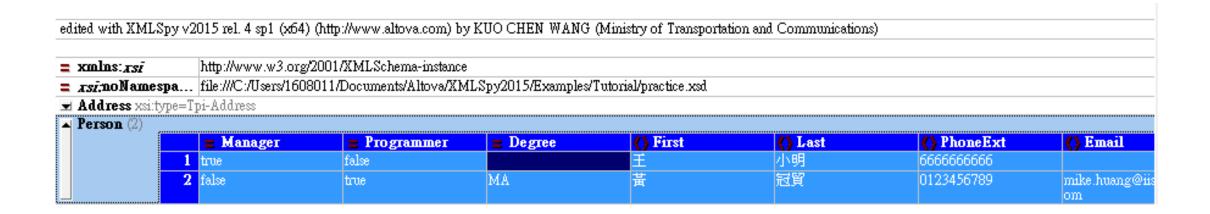
• F12可更換顯示方式







- 新增Person資料
  - =>右鍵Insert|Element







### XMLSPY 版控



環境: Visual Studio 2013 / Visual Studio 2015 以上版本

使用工具: Visual Studio Team Foundation Server(TFS)



建立相關工作區:

教學

依照使用者的版本下載:

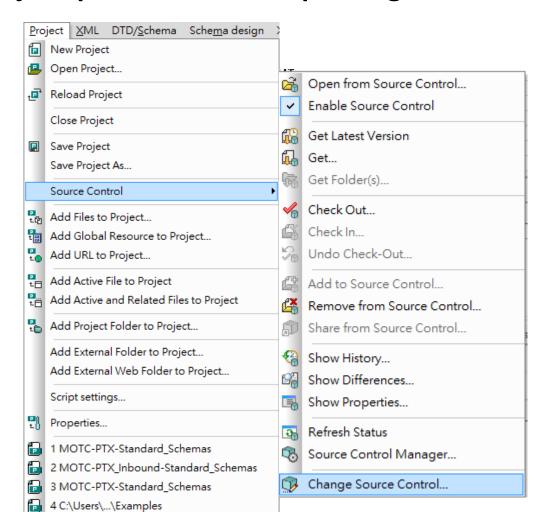
visual studio team foundation server msscci provider 2013&2015



### XMLSPY 版控



#### **Project | Source Control | Change Source Control**



#### 設定TFS相關路徑及網址

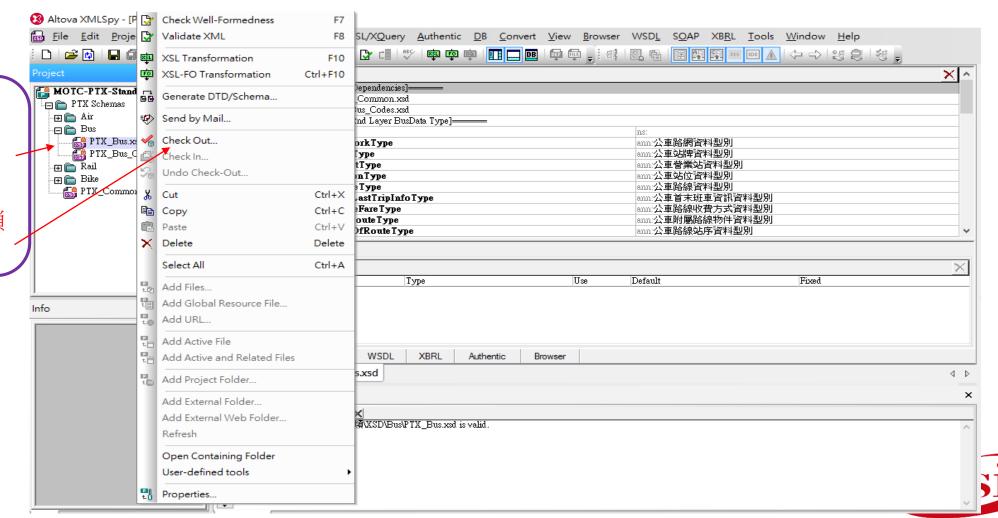
Change Source Control X		
Local Path:	D:\PTX_TFS\01·文件類\XSD	Browse
Scc Provider:	Team Foundation Server MSSCCI Provider	Select
Server Name:		Bind
Server Binding:	\$/D161514/01·文件類/XSD	Unbind
Logon ID:	IEAD\1608011	
Connected:		
	OK Cancel	



### XMLSPY 版控



設定成功的話, 出現Checkout選 項, 且圖示變成一個鎖



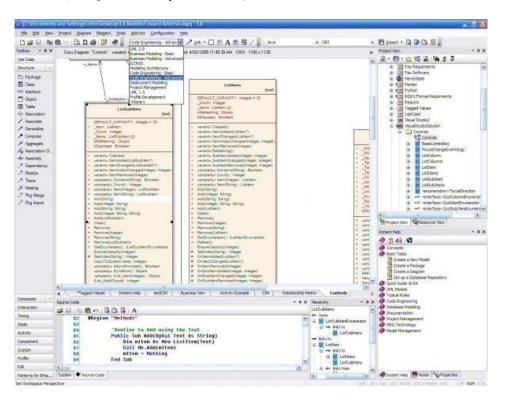


# Enterprise Architect



•Sparx System 生產的一款基於OMG UML

視覺化模型的設計工具





# Enterprise Architect



•操作環境:Win10

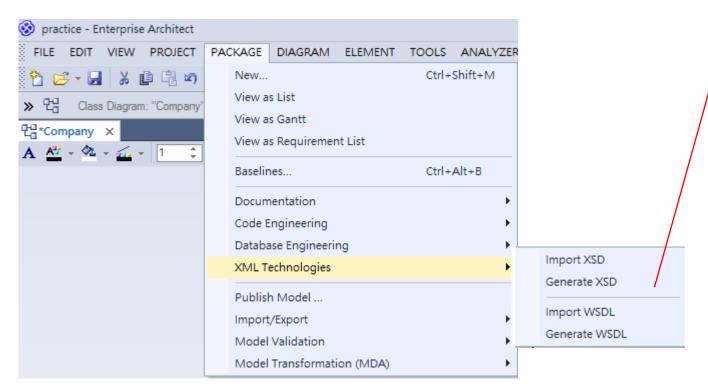
•版本:Enterprise Architect 12

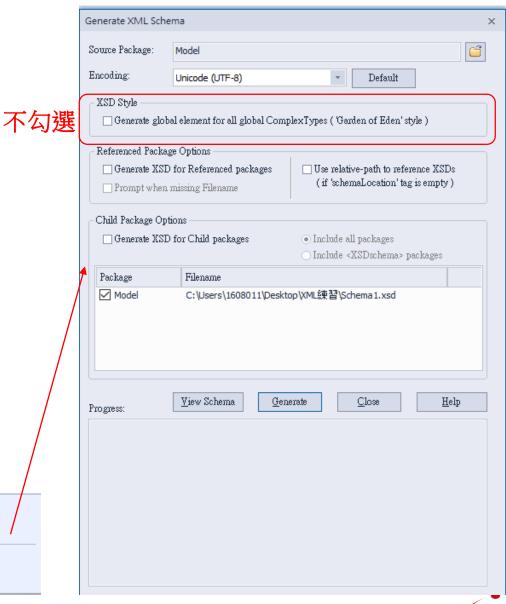




### XSD & UML

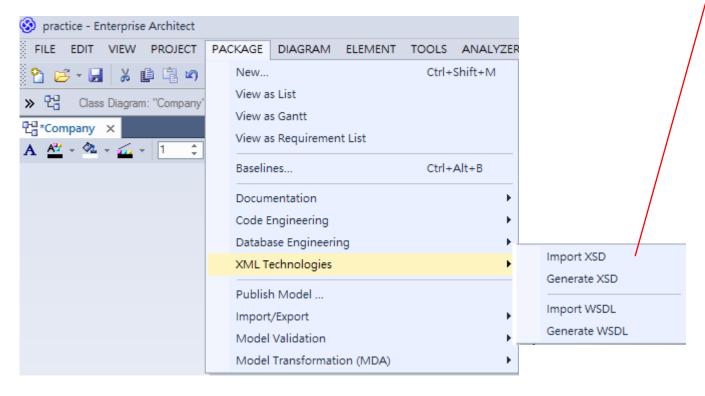
•將繪製好的UML轉成XSD文件

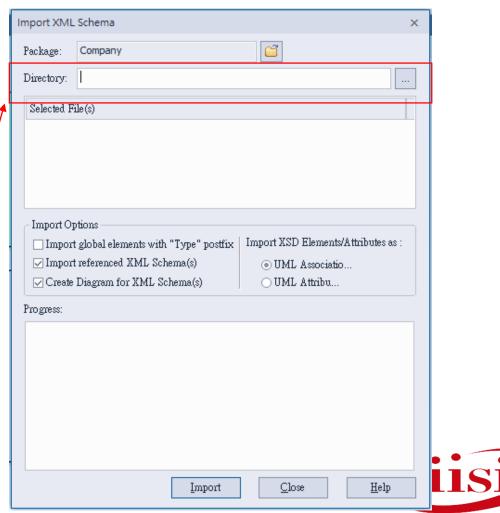


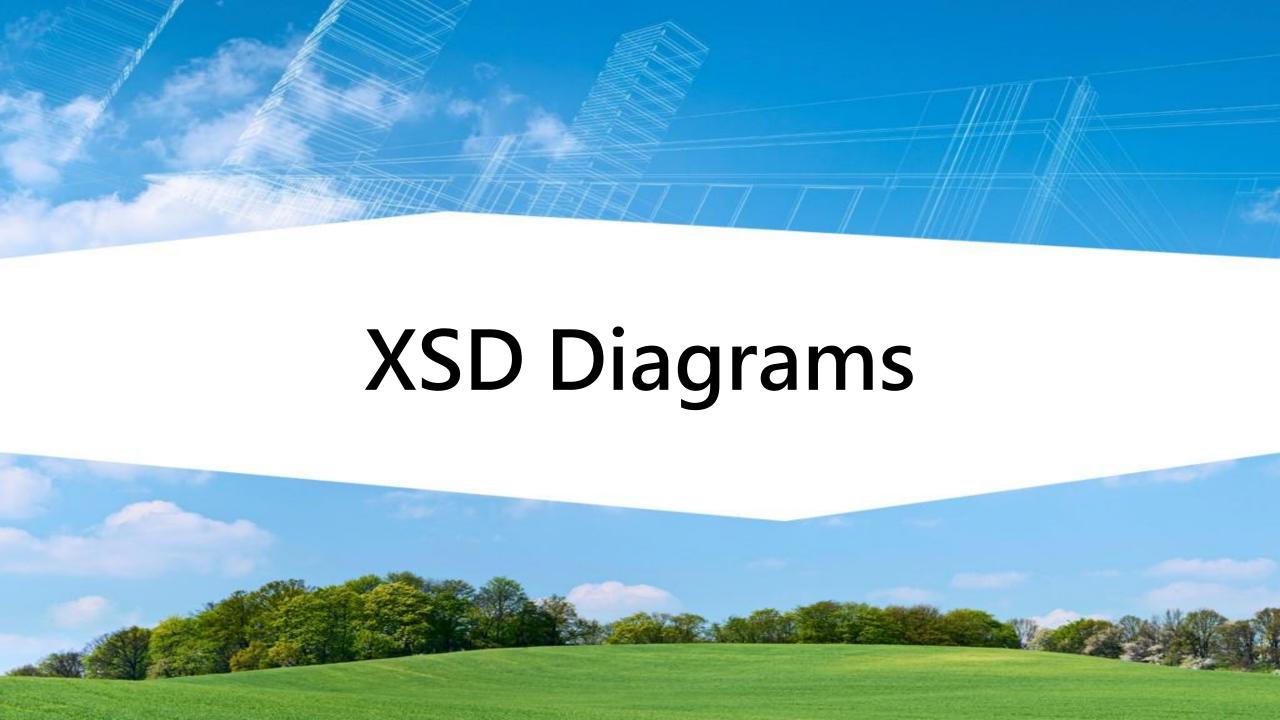


### XSD & UML

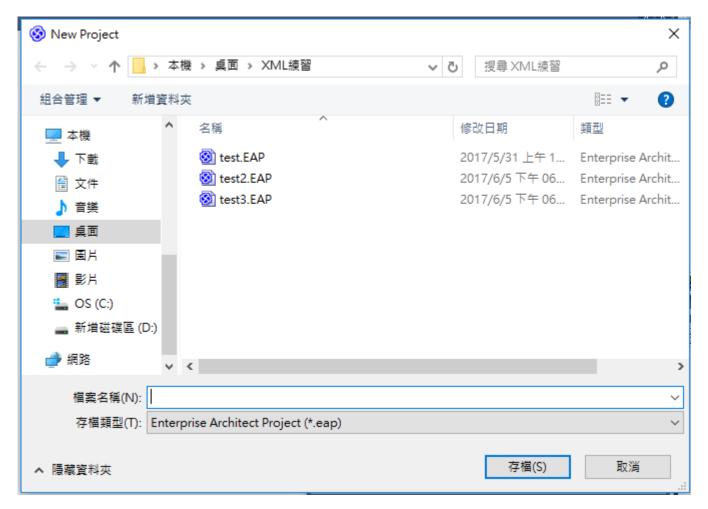
• 從現有的XSD文件匯入至Package中 =>產生UML模型圖



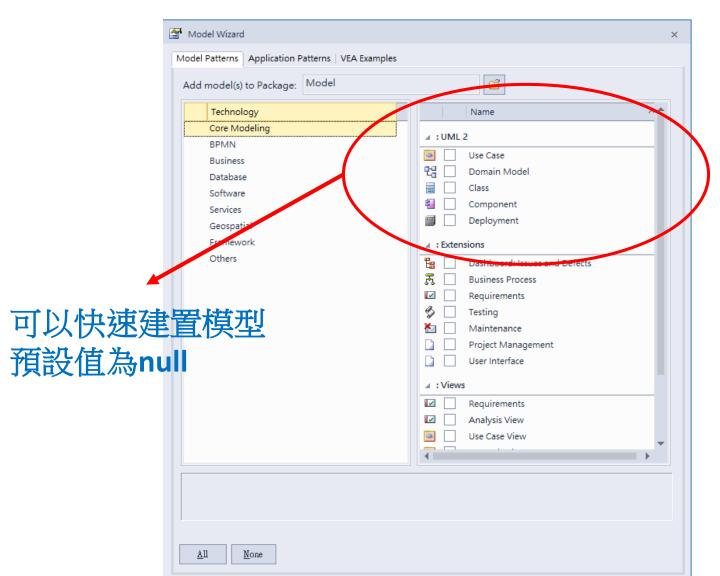




- •新建立一個 New Project
- File | New Project







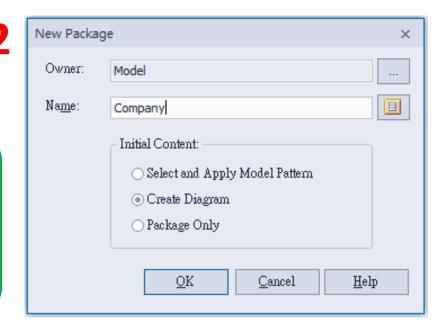


1

New Package

Create a new package in the model

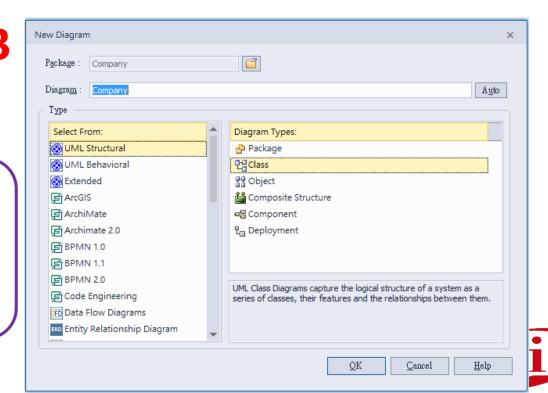
在Model底下建立 新的Package 並且建立Diagram



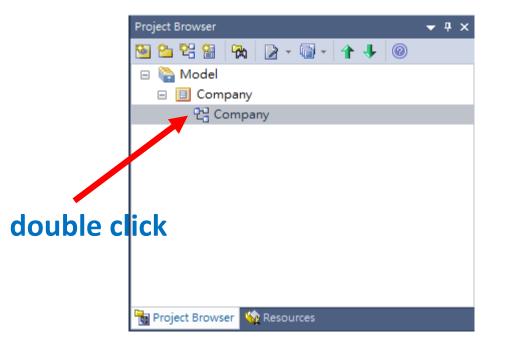
▼ 7 × . Browser Model 🙀 Project Browser Resources

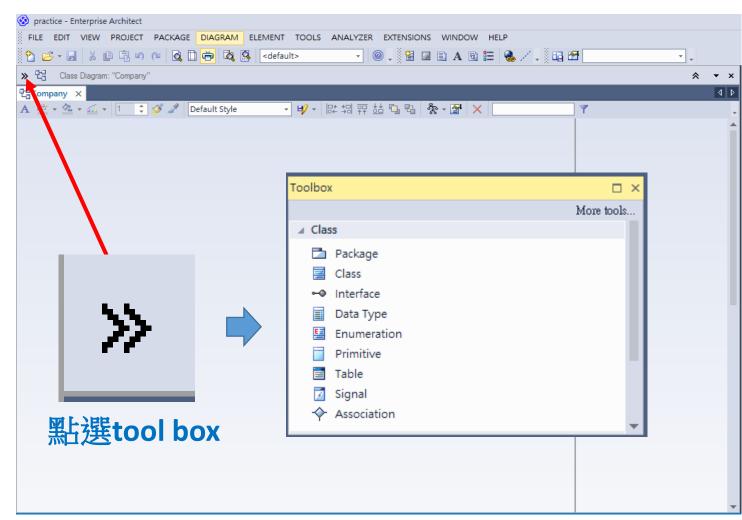
**Type: UML Structural** 

**Diagram Types: CLass** 



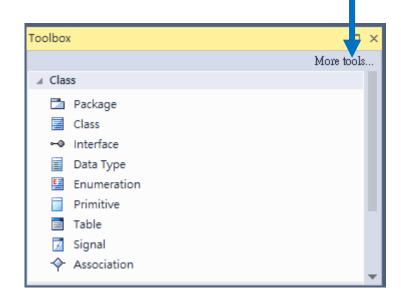
- 建立UML物件
- 對著Company點選兩下

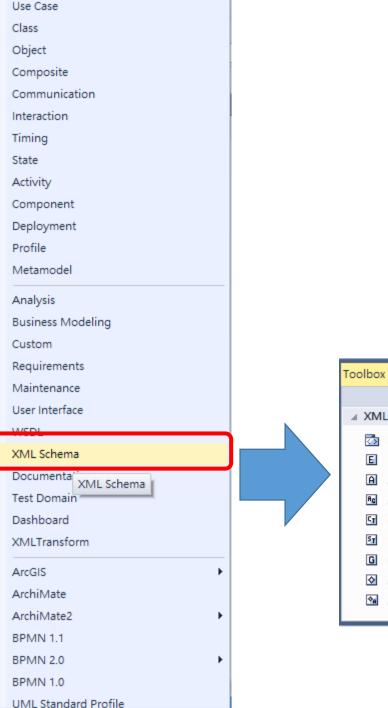


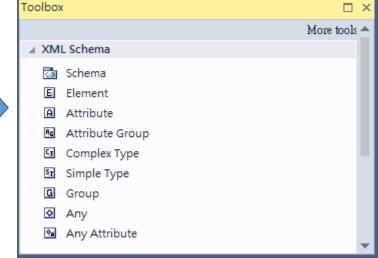




- 點選More tools
- 選擇XML Schema

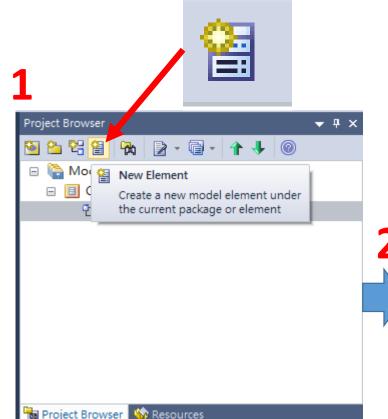


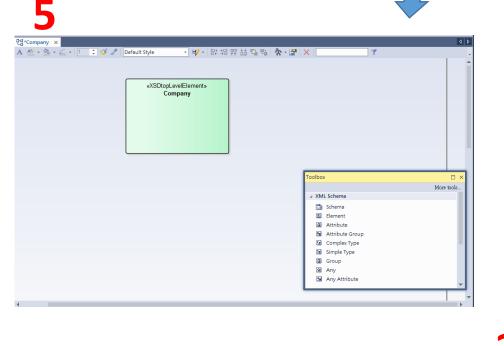


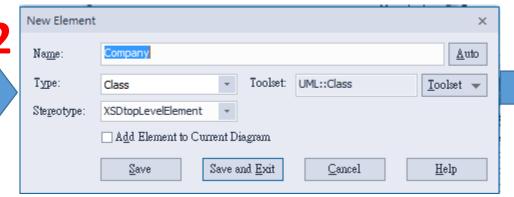


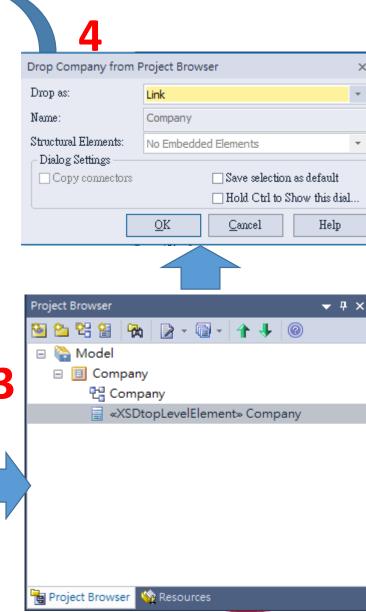


- 建立root element
- 按 New Element



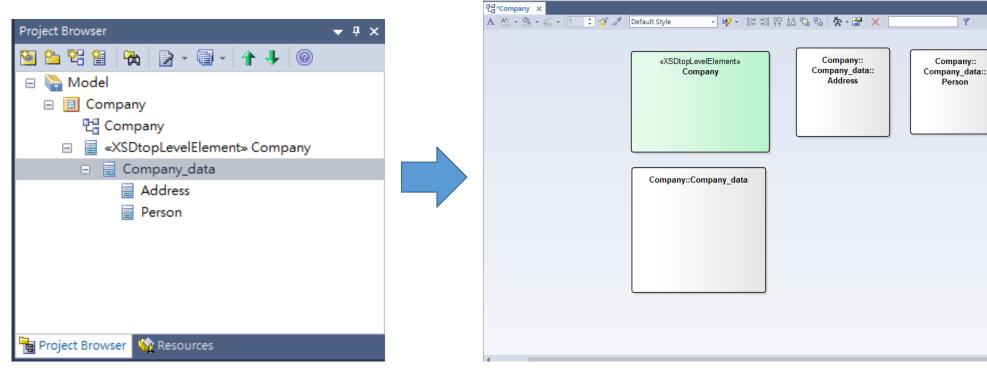




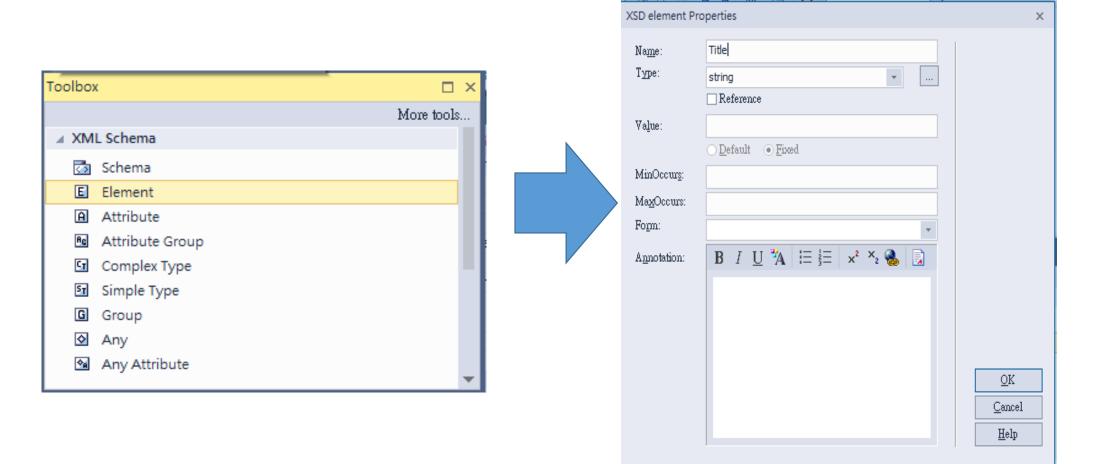


- 新增底下element
- 重複上一頁的1,2步驟建立名為Company\_data的Class

• 且在這Class底下再新增兩個名為Address和Person的Class

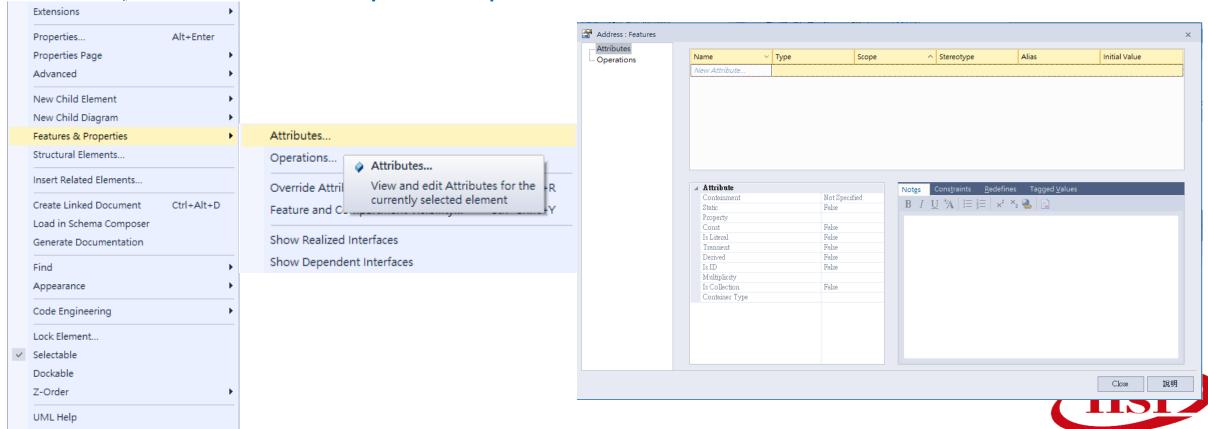


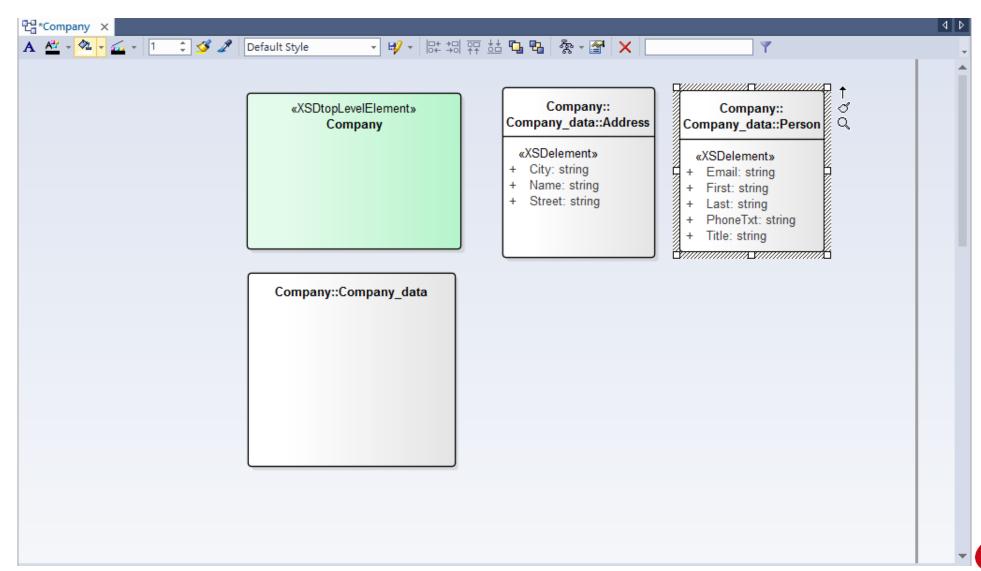
• 方法1:將tool box內的 element拖曳至Address和 Person裡



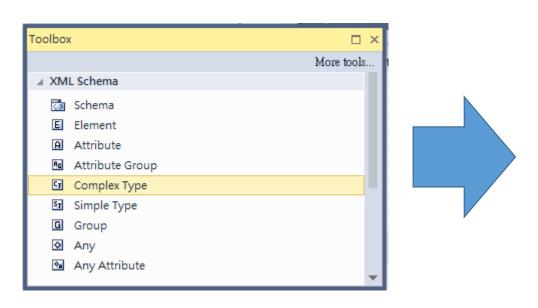


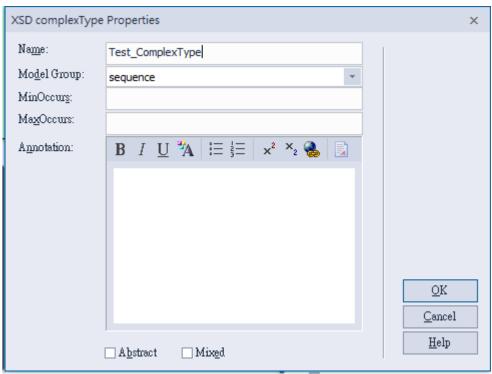
- 方法2:分別對Address和Person點選右鍵,
- 選取Features & Properties | Attributes



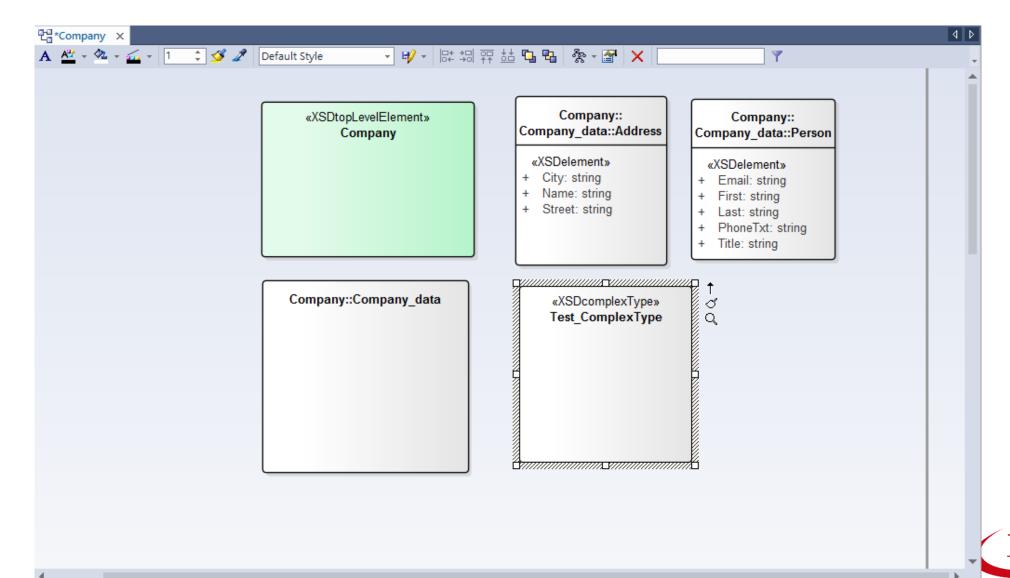


- 建立ComplexType方法
- Toolbox選取Complex Type

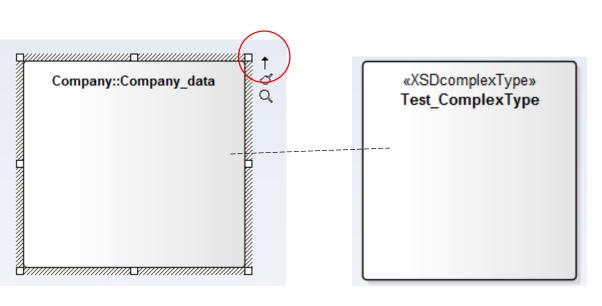


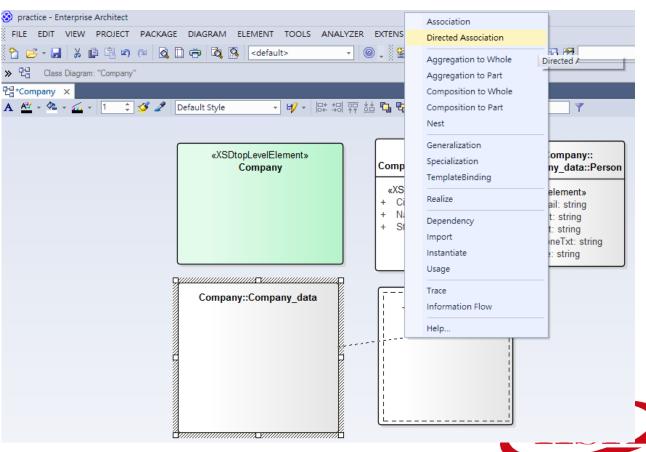






• 設定關聯:點選Company\_data右上箭頭,拖曳至Test\_ComplexType





• 重複先前方法1 or 方法2 將element寫入complextype裡

