Diagram Report

System

Version 1.0 ● Proposed

System diagram

Class diagram in package 'System'

Figure 1: System
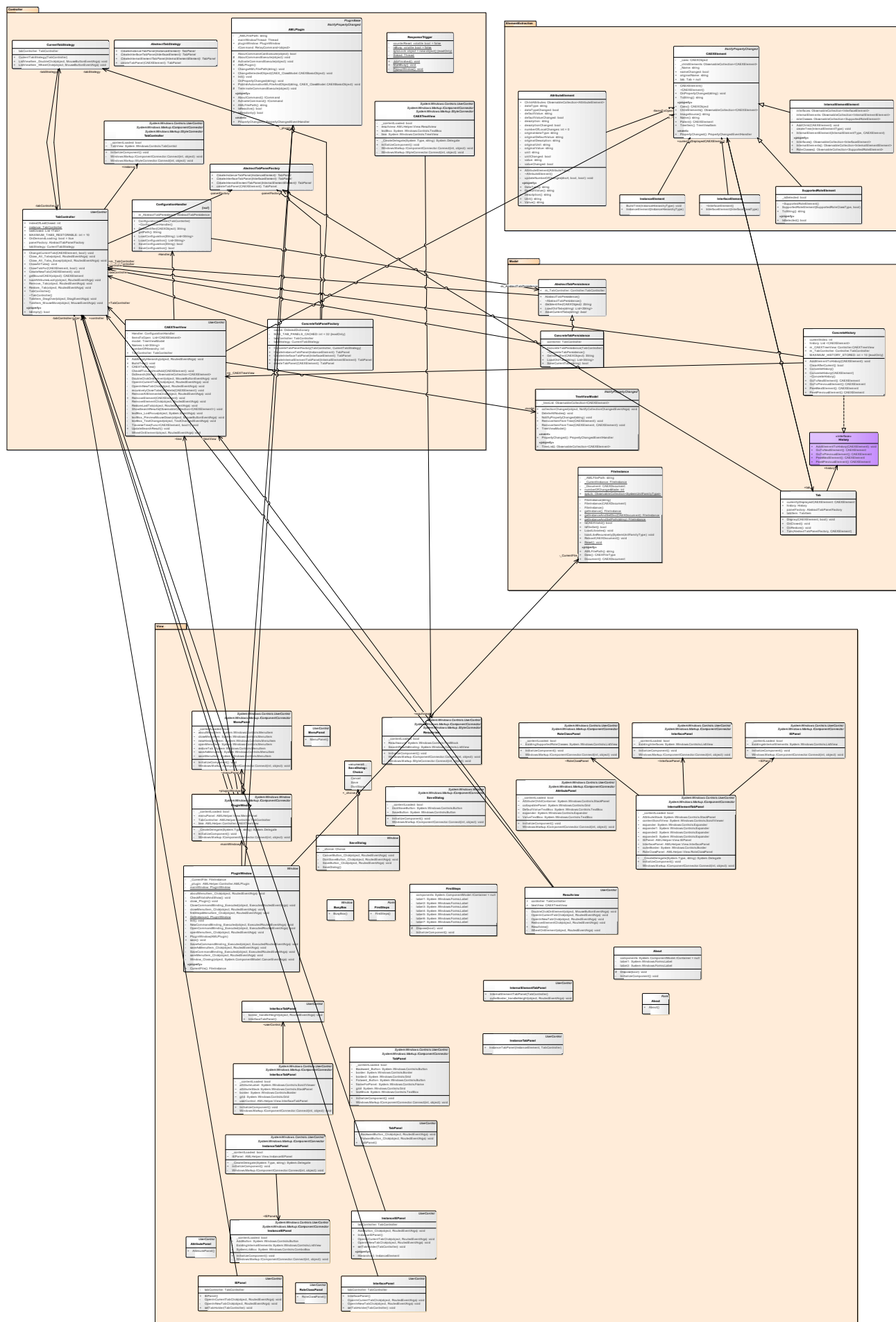
Controller diagram

Class diagram in package 'Controller'

Controller
Version 1.0
kellne created on 15.03.2016. Last modified 15.03.2016
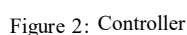

Figure 2: Controller

ElementExtraction diagram

Class diagram in package 'ElementExtraction'

ElementExtraction
Version 1.0
kellne created on 15.03.2016. Last modified 15.03.2016

INotifyPropertyChanged

CAEXElement

- _caex: CAEXObject
- _childElements: ObservableCollection<CAEXElement>
- _Name: string
+ nameChanged: bool
+ originalName: string
+ tab: Tab = null

+ CAEXElement()
- ~CAEXElement()
+ OnPropertyChanged(string): void
+ ToString(): string
«property»
+ Caex(): CAEXObject
+ ChildElements(): ObservableCollection<CAEXElement>
+ ImageSource(): string
+ Name(): string
+ Parent(): CAEXElement
+ TreeItem(): TreeViewItem
«event»
+ PropertyChanged(): PropertyChangedEventHandler

AttributeElement

+ ChildAttributes: ObservableCollection<AttributeElement>
- dataType: string
- dataTypeChanged: bool
- defaultValue: string
- defaultValueChanged: bool
- description: string
- descriptionChanged: bool
- numberOfLocalChanges: int = 0
- originaldataType: string
- originalDefaultValue: string
- originalDescription: string
- originalUnit: string
- originalValue: string
- unit: string
- unitChanged: bool
- value: string
- valueChanged: bool

+ AttributeElement(AttributeType)
- ~AttributeElement()
- updateNumberOfChanges(short, bool, bool): void
«property»
+ DataType(): string
+ DefaultValue(): string
+ Description(): string
+ Unit(): string
+ Value(): string

InstanceElement

- BuildTree(InstanceHierarchyType): void
+ InstanceElement(InstanceHierarchyType)

InterfaceElement

- ~InterfaceElement()
+ InterfaceElement(InterfaceClassType)

SupportedRoleElement

- _isSelected: bool

- ~SupportedRoleElement()
+ SupportedRoleElement(SupportedRoleClassType, bool)
+ ToString(): string
«property»
+ IsSelected(): bool

InternalElementElement

- interfaces: ObservableCollection<InterfaceElement>
- internalElements: ObservableCollection<InternalElementElement>
- roleClasses: ObservableCollection<SupportedRoleElement>

+ AddChild(CAEXElement): void
- createTree(InternalElementType): void
+ InternalElementElement(InternalElementType, CAEXElement)
«property»
+ Interfaces(): ObservableCollection<InterfaceElement>
+ InternalElements(): ObservableCollection<InternalElementElement>
+ RoleClasses(): ObservableCollection<SupportedRoleElement>
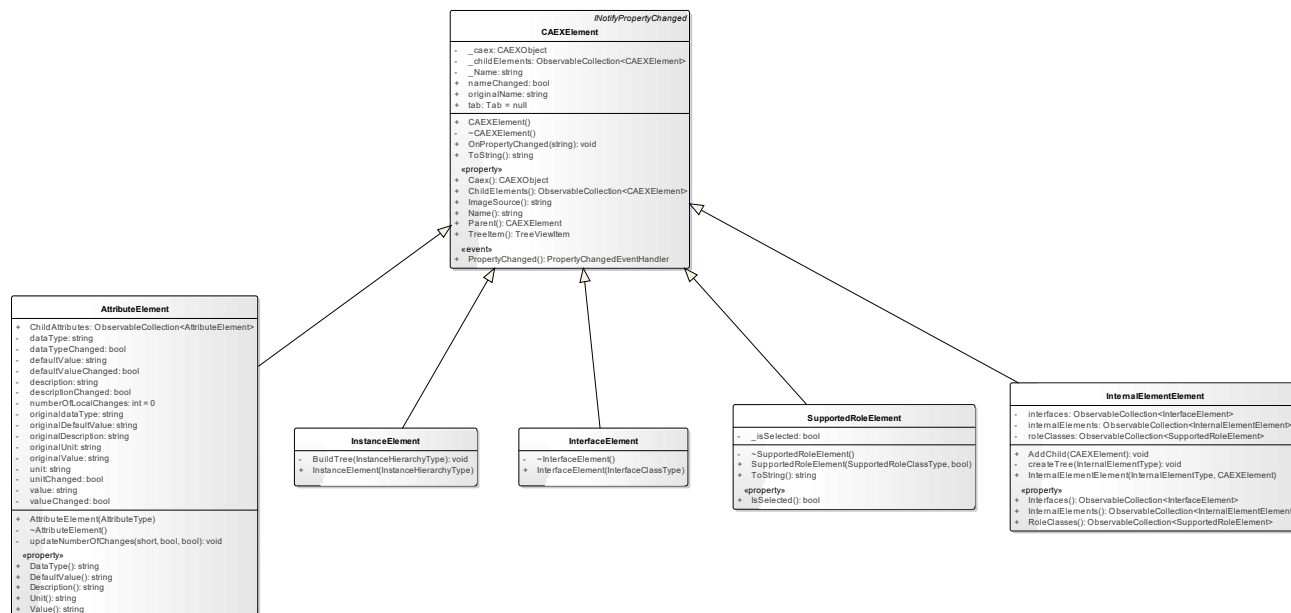
Figure 3: ElementExtraction

Model diagram

Class diagram in package 'Model'

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Model
Version 1.0
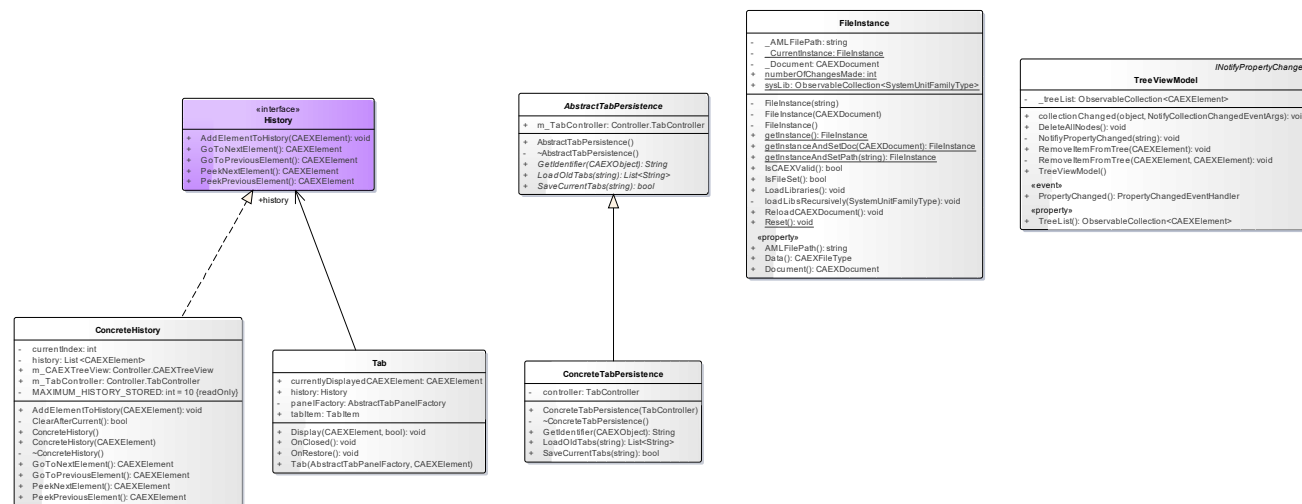kellne created on 15.03.2016. Last modified 15.03.2016

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FileInstance

- _AMLFilePath: string
- _CurrentInstance: FileInstance
- _Document: CAEXDocument
- numberOfChangesMade: int
- sysLib: ObservableCollection<SystemUnitFamilyType>

- FileInstance(string)
- FileInstance(CAEXDocument)
- FileInstance()
- getInstance(): FileInstance
- getInstanceAndSetDoc(CAEXDocument): FileInstance
- getInstanceAndSetPath(string): FileInstance
- IsCAEXValid(): bool
- IsFileSet(): bool
- LoadLibraries(): void
- loadLibsRecursively(SystemUnitFamilyType): void
- ReloadCAEXDocument(): void
- Reset(): void

«property»
+ AMLFilePath(): string
+ Data(): CAEXFileType
+ Document(): CAEXDocument

TreeViewModel *(INotifyPropertyChanged)*

- _treeList: ObservableCollection<CAEXElement>

+ collectionChanged(object, NotifyCollectionChangedEventArgs): void
+ DeleteAllNodes(): void
+ NotifiyPropertyChanged(string): void
+ RemoveItemFromTree(CAEXElement): void
+ RemoveItemFromTree(CAEXElement, CAEXElement): void
+ TreeViewModel()

«event»
+ PropertyChanged(): PropertyChangedEventHandler
«property»
+ TreeList(): ObservableCollection<CAEXElement>

«interface» History

+ AddElementToHistory(CAEXElement): void
+ GoToNextElement(): CAEXElement
+ GoToPreviousElement(): CAEXElement
+ PeekNextElement(): CAEXElement
+ PeekPreviousElement(): CAEXElement

+history

AbstractTabPersistence

- m_TabController: Controller.TabController

+ AbstractTabPersistence()
+ ~AbstractTabPersistence()
+ GetIdentifier(CAEXObject): String
+ LoadOldTabs(string): List<String>
+ SaveCurrentTabs(string): bool

ConcreteHistory

- currentIndex: int
- history: List<CAEXElement>
- m_CAEXTreeView: Controller.CAEXTreeView
+ m_TabController: Controller.TabController
- MAXIMUM_HISTORY_STORED: int = 10 {readOnly}

+ AddElementToHistory(CAEXElement): void
+ ClearAfterCurrent(): bool
+ ConcreteHistory()
+ ConcreteHistory(CAEXElement)
+ ~ConcreteHistory()
+ GoToNextElement(): CAEXElement
+ GoToPreviousElement(): CAEXElement
+ PeekNextElement(): CAEXElement
+ PeekPreviousElement(): CAEXElement

Tab

+ currentlyDisplayedCAEXElement: CAEXElement
+ history: History
- panelFactory: AbstractTabPanelFactory
- tabItem: TabItem

+ Display(CAEXElement, bool): void
+ OnClosed(): void
+ OnRestore(): void
+ Tab(AbstractTabPanelFactory, CAEXElement)

ConcreteTabPersistence

- controller: TabController

+ ConcreteTabPersistence(TabController)
+ ~ConcreteTabPersistence()
+ GetIdentifier(CAEXObject): String
+ LoadOldTabs(string): List<String>
+ SaveCurrentTabs(string): bool

<div align="center">

Figure 4: Model

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Properties diagram

Class diagram in package 'Properties'

<div align="right">

Properties
Version 1.0
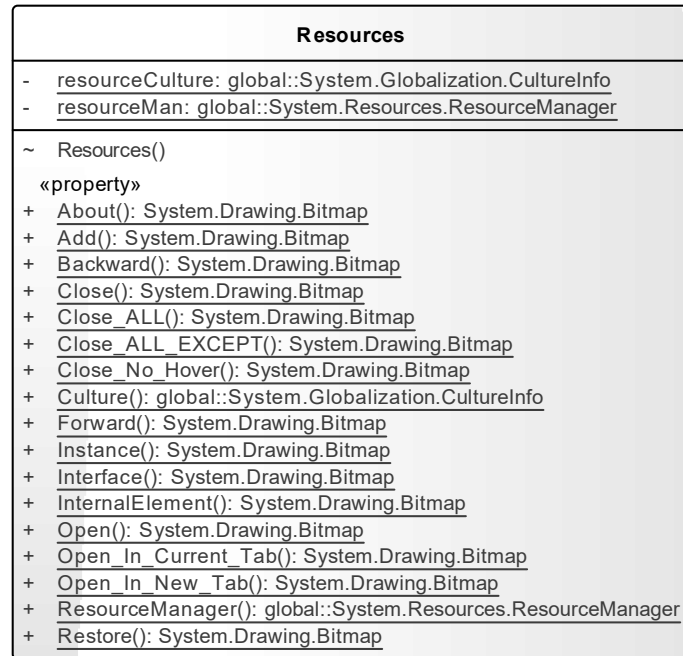kellne created on 15.03.2016. Last modified 15.03.2016

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Resources
-    resourceCulture: global::System.Globalization.CultureInfo -   resourceMan: global::System.Resources.ResourceManager
~   Resources() «property» +   About(): System.Drawing.Bitmap +   Add(): System.Drawing.Bitmap +   Backward(): System.Drawing.Bitmap +   Close(): System.Drawing.Bitmap +   Close_ALL(): System.Drawing.Bitmap +   Close_ALL_EXCEPT(): System.Drawing.Bitmap +   Close_No_Hover(): System.Drawing.Bitmap +   Culture(): global::System.Globalization.CultureInfo +   Forward(): System.Drawing.Bitmap +   Instance(): System.Drawing.Bitmap +   Interface(): System.Drawing.Bitmap +   InternalElement(): System.Drawing.Bitmap +   Open(): System.Drawing.Bitmap +   Open_In_Current_Tab(): System.Drawing.Bitmap +   Open_In_New_Tab(): System.Drawing.Bitmap +   ResourceManager(): global::System.Resources.ResourceManager +   Restore(): System.Drawing.Bitmap

Figure 5: Properties

Properties diagram

Class diagram in package 'Properties'

View diagram

Class diagram in package 'View'

View
Version 1.0
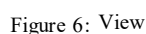kellne created on 15.03.2016. Last modified 15.03.2016

Figure 6: View

AMLPlugin diagram

Class diagram in package 'AMLPlugin'

AMLPlugin
Version 1.0
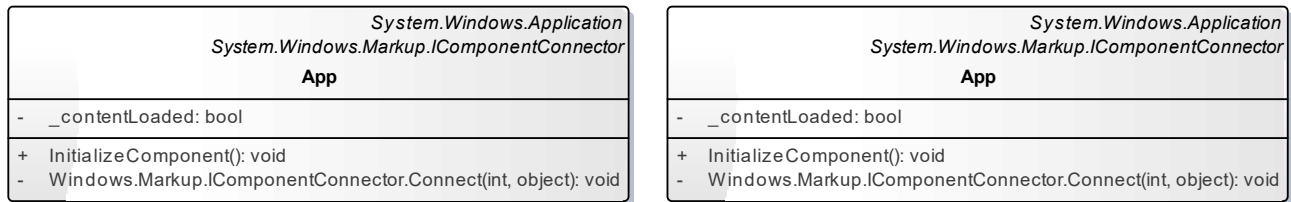kellne created on 15.03.2016. Last modified 15.03.2016

| *System.Windows.Application* |
| *System.Windows.Markup.IComponentConnector* |
| **App** |
| -   _contentLoaded: bool |
| +   InitializeComponent(): void |
| -   Windows.Markup.IComponentConnector.Connect(int, object): void |

| *System.Windows.Application* |
| *System.Windows.Markup.IComponentConnector* |
| **App** |
| -   _contentLoaded: bool |
| +   InitializeComponent(): void |
| -   Windows.Markup.IComponentConnector.Connect(int, object): void |

Figure 7: AMLPlugin

AMLPlugin diagram

Class diagram in package 'AMLPlugin'

View diagram

Class diagram in package 'View'

Figure 8: View

XamlGeneratedNamespace diagram

Class diagram in package 'XamlGeneratedNamespace'

XamlGeneratedNamespace
Version 1.0
kellne created on 15.03.2016. Last modified 15.03.2016

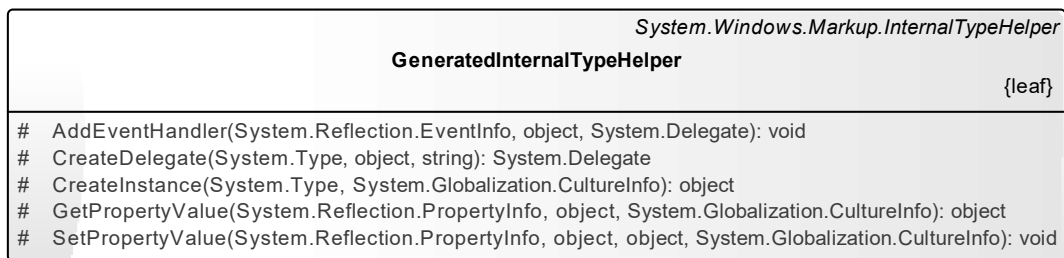| *System.Windows.Markup.InternalTypeHelper* |
| --- |
| **GeneratedInternalTypeHelper** |
| {leaf} |
| # AddEventHandler(System.Reflection.EventInfo, object, System.Delegate): void |
| # CreateDelegate(System.Type, object, string): System.Delegate |
| # CreateInstance(System.Type, System.Globalization.CultureInfo): object |
| # GetPropertyValue(System.Reflection.PropertyInfo, object, System.Globalization.CultureInfo): object |
| # SetPropertyValue(System.Reflection.PropertyInfo, object, object, System.Globalization.CultureInfo): void |

Figure 9: XamlGeneratedNamespace

XamlGeneratedNamespace diagram

Class diagram in package 'XamlGeneratedNamespace'