https://msdn.microsoft.com/en-us/library/ms752362(v=vs.110).aspx#See Also

Control Pattern Classes and Interfaces

The following table describes the UI Automation control patterns. The table also lists the classes used by UI Automation clients to access the control patterns, as well as the interfaces used by UI Automation providers to implement them.

|  |  |  |
| --- | --- | --- |
| **Control Pattern Class** | **Provider Interface** | **Description** |
| [DockPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.dockpattern(v=vs.110).aspx) | [IDockProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.idockprovider(v=vs.110).aspx) | Used for controls that can be docked in a docking container. For example, toolbars or tool palettes. |
| [ExpandCollapsePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.expandcollapsepattern(v=vs.110).aspx) | [IExpandCollapseProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iexpandcollapseprovider(v=vs.110).aspx) | Used for controls that can be expanded or collapsed. For example, menu items in an application such as the **File** menu. |
| [GridPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.gridpattern(v=vs.110).aspx) | [IGridProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.igridprovider(v=vs.110).aspx) | Used for controls that support grid functionality such as sizing and moving to a specified cell. For example, the large icon view in Windows Explorer or simple tables without headers in Microsoft Word. |
| [GridItemPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.griditempattern(v=vs.110).aspx) | [IGridItemProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.igriditemprovider(v=vs.110).aspx) | Used for controls that have cells within grids. The individual cells should support the GridItem pattern. For example, each cell in Microsoft Windows Explorer detail view. |
| [InvokePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.invokepattern(v=vs.110).aspx) | [IInvokeProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iinvokeprovider(v=vs.110).aspx) | Used for controls that can be invoked, such as a button. |
| [MultipleViewPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.multipleviewpattern(v=vs.110).aspx) | [IMultipleViewProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.imultipleviewprovider(v=vs.110).aspx) | Used for controls that can switch between multiple representations of the same set of information, data, or children. For example, a list view control where data is available in thumbnail, tile, icon, list, or detail views. |
| [RangeValuePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.rangevaluepattern(v=vs.110).aspx) | [IRangeValueProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.irangevalueprovider(v=vs.110).aspx) | Used for controls that have a range of values that can be applied to the control. For example, a spinner control containing years might have a range of 1900 to 2010, while another spinner control presenting months would have a range of 1 to 12. |
| [ScrollPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.scrollpattern(v=vs.110).aspx) | [IScrollProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iscrollprovider(v=vs.110).aspx) | Used for controls that can scroll. For example, a control that has scroll bars that are active when there is more information than can be displayed in the viewable area of the control. |
| [ScrollItemPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.scrollitempattern(v=vs.110).aspx) | [IScrollItemProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iscrollitemprovider(v=vs.110).aspx) | Used for controls that have individual items in a list that scrolls. For example, a list control that has individual items in the scroll list, such as a combo box control. |
| [SelectionPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.selectionpattern(v=vs.110).aspx) | [ISelectionProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iselectionprovider(v=vs.110).aspx) | Used for selection container controls. For example, list boxes and combo boxes. |
| [SelectionItemPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.selectionitempattern(v=vs.110).aspx) | [ISelectionItemProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iselectionitemprovider(v=vs.110).aspx) | Used for individual items in selection container controls, such as list boxes and combo boxes. |
| [TablePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.tablepattern(v=vs.110).aspx) | [ITableProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.itableprovider(v=vs.110).aspx) | Used for controls that have a grid as well as header information. For example, Microsoft Excel worksheets. |
| [TableItemPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.tableitempattern(v=vs.110).aspx) | [ITableItemProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.itableitemprovider(v=vs.110).aspx) | Used for items in a table. |
| [TextPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.textpattern(v=vs.110).aspx) | [ITextProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.itextprovider(v=vs.110).aspx) | Used for edit controls and documents that expose textual information. |
| [TogglePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.togglepattern(v=vs.110).aspx) | [IToggleProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.itoggleprovider(v=vs.110).aspx) | Used for controls where the state can be toggled. For example, check boxes and checkable menu items. |
| [TransformPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.transformpattern(v=vs.110).aspx) | [ITransformProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.itransformprovider(v=vs.110).aspx) | Used for controls that can be resized, moved, and rotated. Typical uses for the Transform control pattern are in designers, forms, graphical editors, and drawing applications. |
| [ValuePattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.valuepattern(v=vs.110).aspx) | [IValueProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.ivalueprovider(v=vs.110).aspx) | Allows clients to get or set a value on controls that do not support a range of values. For example, a date time picker. |
| [WindowPattern](https://msdn.microsoft.com/en-us/library/system.windows.automation.windowpattern(v=vs.110).aspx) | [IWindowProvider](https://msdn.microsoft.com/en-us/library/system.windows.automation.provider.iwindowprovider(v=vs.110).aspx) | Exposes information specific to windows, a fundamental concept to the Microsoft Windows operating system. Examples of controls that are windows are top-level application windows (Microsoft Word, Microsoft Windows Explorer, and so on), multiple-document interface (MDI) child windows, and dialogs. |

See Also

[UI Automation Control Patterns for Clients](https://msdn.microsoft.com/en-us/library/ms746719(v=vs.110).aspx)  
[Control Pattern Mapping for UI Automation Clients](https://msdn.microsoft.com/en-us/library/ms750574(v=vs.110).aspx)  
[UI Automation Overview](https://msdn.microsoft.com/en-us/library/ms747327(v=vs.110).aspx)  
[UI Automation Properties for Clients](https://msdn.microsoft.com/en-us/library/ms743492(v=vs.110).aspx)  
[UI Automation Events for Clients](https://msdn.microsoft.com/en-us/library/ms752297(v=vs.110).aspx)