

Interface Definition of the NETRONIC Visual Scheduling Add-in Developer Toolbox for Microsoft Dynamics 365 Business Central and Microsoft Dynamics NAV

Valid for the VS Add-in Developer Toolbox as of Version 5.3.0

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Contents

1	Changelog	3
2	Introduction.....	10
3	Important Note for C/AL Developers	10
4	Data Model.....	10
4.1	Activity.....	10
4.2	Allocations	22
4.2.1	Allocation.....	22
4.2.2	AllocationEntry	30
4.3	Calendars	31
4.3.1	Calendar	31
4.3.2	CalendarEntry	31
4.4	ContextMenus	32
4.4.1	ContextMenu.....	32
4.4.2	ContextMenuItem	32
4.5	Curves	32
4.5.1	Curve.....	32
4.5.2	CurvePointEntry	33
4.1	DateLine.....	33
4.2	Entity	34
4.3	Link	37
4.4	PeriodHighlighters.....	39
4.4.1	PeriodHighlighter	39
4.4.2	PeriodHighlighterEntry	39

4.5	Resource.....	40
4.6	Settings.....	44
4.7	Symbol.....	68
4.8	TableRowDefinitions	68
4.8.1	TableRowDefinition	68
4.8.2	TableCellDefinition	69
4.9	TooltipTemplate	70
5	Control Add-in	71
5.1	Methods	71
5.2	Events	76
6	Types	82
6.1	ActivityBarDragModes.....	82
6.2	ActivityBarShape	82
6.3	AllocationBarDragModes	82
6.4	AllocationBarShape	82
6.5	CollapseState	83
6.6	CurveInterpolationType	83
6.7	DateLineCaptionOrientation	83
6.8	DateLineCaptionPosition.....	83
6.9	DateLineGridModes	84
6.10	HorizontalAlignment	85
6.11	LinkMarker	85
6.12	LinkRoutingType	85
6.13	ObjectType	85
6.14	PanningMode	85
6.15	PatternType	85
6.16	ProgressBarWidthCalculationMode	85
6.17	RowDesigns	85
6.18	RowDragModes	86
6.19	SnapTargets	86
6.20	TableType	86
6.21	TargetPositions.....	86
6.22	TextWrapMode	86
6.23	TimeType	86
6.24	ViewArea	87
6.25	ViewType	87
6.26	VisualType	87
6.27	WorldViewPosition.....	87

1 Changelog

Version	Description of changes
5.3.0	<p>MINOR: New method ScrollToDateWithOffset.</p> <p>MINOR: New property PM_CollapseStateInLoadsView for Resource objects.</p> <p>MINOR: New settings PM_SymbolColumnBackgroundColor and PM_EntitiesTableSymbolColumnBackgroundColor.</p> <p>MINOR: New setting PM_IgnoreCalendarOnActivityBarInteractions.</p> <p>MINOR: New event OnSaveAsPDFProgress and new method CancelSaveAsPDF.</p> <p>MINOR: New enumeration PatternType, new properties PM_BarPatternType and PM_BarPatternColor on Activity objects, and new properties PM_PatternType and PM_PatternColor on AllocationEntry objects.</p> <p>MINOR: New settings PM_DateLineGridColor, PM_DateLineGridDashArray, and PM_DateLineGridWidth.</p> <p>MINOR: New option PM_ActivityBaselineBarsVisible.</p> <p>MINOR: New link property PM_TargetMarker and new enumeration LinkMarker.</p> <p>PATCH: Internal update to current NWAF libraries (version 6.9.3):</p> <ul style="list-style-type: none">PATCH: Interactive activation of logging (shift-ctrl-alt-L) now also works with Polish keyboards.PATCH: Fixed exception when modifying the property ParentID of an Activity, Entity, or Resource object with an ID of a non-existing object.PATCH: Fixed issues with colored background rectangles in the table when saving a PDF document.PATCH: Fixed issue when canceling dragging of a date line by pressing Escape key.PATCH: Fixed positioning issues when using bar diamond shapes.PATCH: Fixed issue when dragging a release date symbol or due date symbol in Firefox, when the symbol is user-defined.
5.2.3	<p>PATCH: Internal update to current NWAF libraries (version 6.7.0):</p> <ul style="list-style-type: none">PATCH: Issue fixed for invisible curve pane when resource has set property PM_CurveCollapseState to 0 and was added before its parent resource.PATCH: Fixed issues when using curves of type List.PATCH: Fixed issues concerning symbols in table title.PATCH: Watermarks were not scaled on screen anymore since version 6.6.1.PATCH: When using the secondary mouse button while dragging the action now is canceled.PATCH: Fixed issue when sizing a table column interactively that has a background color.PATCH: Sometimes the saved PDF file showed collapsed allocation rows and vice versa.PATCH: Fixed exception when user clicked into timescale with visible world view.PATCH: Fixed issue of not resolving object references in an applied tooltip template.PATCH: Fixed issue of disappearing row(s) at the bottom when user expanded

Version	Description of changes
	some curves or row objects under special conditions.
5.2.2	<p>PATCH: Internal update to current NWAF libraries (version 6.6.1):</p> <ul style="list-style-type: none"> PATCH: Bug fixed concerning adding allocations after first refresh in resources view. PATCH: Issue fixed in method SaveAsPDF concerning referenced SVG images not visible in PDF. PATCH: Infinite loop fixed in method SaveAsPDF when many images are not loadable. PATCH: Performance issue fixed concerning allocation rows in resources view. PATCH: The event arguments for the events OnClicked, OnDoubleClicked did not fill the property CellIndex when triggered for a table row. PATCH: Fixed issue of not recognizing the setting PM_AllocationRowsVisibleInActivities/ResourcesView before first call to Render method. Workaround was to change the view type twice. PATCH: In some situations, the allocation bar was not vanishing on the source row in resources view after dragging vertically to another row. PATCH: Delivered JavaScript files now are prefixed with a UTF8-BOM since in one case concerning Firefox they were misinterpreted as being encoded in ANSI. PATCH: Fixed hanging issue when updating resource objects or period highlighters within drag & drop interaction of allocation bars. PATCH: Bars within a row object disappeared when the grandparent row object was collapsed, and the bars should remain visible (see PM_CollapsedRowDesign) and the parent row object was not collapsed. PATCH: Property PM_AllocationRowsCollapseState of Resource objects was not working. PATCH: Crash fixed when calling method SaveAsPDF without any links in the chart. <p>This document lacked documentation for the properties PM_AllocationRowsCollapsible, PM_AllocationRowsCollapseState for Resource objects introduced with version 5.2.0.</p> <p>This document contained some defective hyperlinks.</p>
5.2.1	<p>PATCH: Internal update to current NWAF libraries (version 6.3.1):</p> <ul style="list-style-type: none"> PATCH: New default for property TextSource in TableCellDefinition objects is "", when property SymbolIDSource is set, else the default is "TableText" as before. This is for convenience. PATCH: Animation on expanding/collapsing rows in loads view is enabled again. PATCH: The vertical splitter can now be dragged to the left until the table has a width of 0 even if fixed columns exist. PATCH: When dragging a bar to the border of time than the user cannot drag it out of sight anymore. <p>PATCH: Rows were not sorted on screen after changing one of the settings AddIn_Activity/Allocation/Entity/ResourceSortCodeSources.</p>
5.2.0	MINOR: Now it is possible to show allocations in own rows also in the resources view:

Version	Description of changes
	<ul style="list-style-type: none">• New setting PM_AllocationRowsVisibleInResourcesView. <p>MINOR: Now allocation links do not require activity IDs anymore.</p> <p>MINOR: Now links can connect activities and allocations.</p> <p>MINOR: Symbols shown for properties ReleaseDate and DueDate on Activity objects are now specifiable and draggable:</p> <ul style="list-style-type: none">• New properties PM_ReleaseDateAllowedDragModes, PM_ReleaseDateSymbolHeight, PM_ReleaseDateSymbolID, and PM_ReleaseDateSymbolWidth for the release date.• New properties PM_DueDateAllowedDragModes, PM_DueDateSymbolHeight, PM_DueDateSymbolID, and PM_DueDateSymbolWidth for the due date.• New properties Start/EndPropertyName in EventArgs of events CanDrag, OnDragStart, OnDragEnd, OnDrop. <p>MINOR: New properties Background/TextColor, on TableRowDefinition objects.</p> <p>MINOR: New argument CellIndex at events OnClicked and OnDoubleClicked.</p> <p>MINOR: New methods ScrollViewAreaHorizontally and ScrollViewAreaVertically.</p> <p>MINOR: New locales added for Japanese, Russian, Thai, and Chinese.</p> <p>MINOR: Clarification of options and properties concerning title, a.o. renaming Header to Title (compatibility is given):</p> <ul style="list-style-type: none">• New setting names are PM_TableTitleBackgroundColor, PM_TableTitleTextColor, PM_TableTitleColumnSeparatorColor, PM_TableTitleHighlightingColor, PM_EntitiesTableTitleBackgroundColor, PM_EntitiesTableTitleTextColor, PM_EntitiesTableTitleColumnSeparatorColor, PM_EntitiesTableTitleHighlightingColor. <p>MINOR: Now additional dates on allocation and activities can be defined either as link source or link target:</p> <ul style="list-style-type: none">• New properties LinkSourceDate/LinkTargetDate on activity and allocation objects.• New values for property RelationType on link objects: SourceDateStart, SourceDateEnd, EndTargetDate, StartTargetDate, SourceDateTargetDate. <p>MINOR: New property PM_TooltipTemplateID for PeriodHighlighterEntry objects.</p> <p>MINOR: Symbols at the left side of the table rows now are clickable. See event arguments SymbolIndex and SymbolID of event OnClicked.</p> <p>MINOR: New settings to specify default tooltip templates: PM_DefaultActivityBar/RowTooltipTemplateID, PM_DefaultAllocationBar/RowTooltipTemplateID, PM_DefaultEntityRowTooltipTemplateID, PM_DefaultLinkTooltipTemplateID, PM_DefaultPeriodHighlighterEntryTooltipTemplateID, PM_DefaultResourceRow/CurveTooltipTemplateID.</p> <p>MINOR: New setting FirstDayOfWeek.</p> <p>MINOR: Internal update to current NWAF libraries (version 6.3.0).</p> <p>PATCH: Fixed issue with tooltip template markup using keywords beginning with #, and concerning date formatting.</p>

Version	Description of changes
	PATCH: Fixed issue concerning eventually false week numbering in timescale.
5.0.1	<p>PATCH: Internal update to current NWAF libraries (version 6.0.5).</p> <p>PATCH: Fixed issue when dragging an entity without a non-zero duration.</p> <p>PATCH: Fixed detecting the false PeriodHighlighterEntry for callbacks.</p> <p>PATCH: Fixed issue where two adjacent PeriodHighlighterEntries made tooltip disappear.</p> <p>PATCH: Fixed issue with update of allocation bars when changing the default calendar.</p> <p>PATCH: Fixed default value for property PM_BarOpacity of Allocation and Activity objects in .NET wrapper classes of C/AL edition (version of assemblies set to 5.0.1.0!).</p>
5.0.0	<p>MINOR: New method SaveAsPDF, new event OnSaveAsPDFFinished (not usable with IE11 and with Windows client).</p> <p>MINOR: Now allocation rows can be made visible in activities view by using the new option pm_allocationRowsVisibleInActivitiesView. Additionally other additions were made in this environment:</p> <ul style="list-style-type: none"> • New settings PM_AllocationDefaultTableRowDefinitionID, PM_DefaultAllocationMinimumRowHeight, PM_DefaultAllocationRowSelectable, PM_DefaultActivityAllocationRowsCollapsible, PM_DefaultAllocationRowDesign, PM_DefaultAllocationAllowedBarDragModesInActivitiesView, PM_ForceAllocationAllowedBarDragModesInActivitiesView. • New properties PM_AllocationRowsCollapsible, PM_AllocationRowsCollapseState, PM_HasAllocationRows on Activity objects. • New properties PM_MinimumRowHeight, PM_RowSelectable, PM_RowDesign, PM_AllowedBarDragModesInActivitiesView, TableText on Allocation objects. • New EventArgs property IsForAllocationRows in event OnCollapseStateChanged. • New enum value BarsInHiddenAllocationRows for RowDesigns. <p>MINOR: Now links can be defined between allocations:</p> <ul style="list-style-type: none"> • New properties Source/TargetAllocationID for links. • New settings PM_DefinedAllocationLinksVisibleInActivities/ResourcesView. <p>MINOR: New sorting capabilities for table rows by new settings AddIn_Activity/Allocation/Entity/ResourceSortCodeSources.</p> <p>MINOR: New settings PM_WatermarkSymbolID and PM_WatermarkOpacity (only for AL version of control add-in, not usable with IE11 and with Windows client).</p> <p>MINOR: New properties PM_StatusFrameColor/Visible for activities and allocations. New settings PM_DefaultActivity/AllocationStatusFrameColor.</p> <p>MINOR: New property PM_BarOpacity for activities and allocations.</p> <p>MINOR: New properties Background/TextColor, Background/TextColorSource on TableCellDefinition objects.</p> <p>MINOR: New settings TableViewWidthInActivitiesView/ResourcesView/LoadsView and</p>

Version	Description of changes
	<p>TableViewWidthsSynchronized (not in C/AL version!).</p> <p>MINOR: New settings PM_SymbolColumnTitleVisible/SymbolIDs as well as PM_EntitiesTableSymbolColumnTitleVisible/SymbolIDs.</p> <p>MINOR: New property AddIn_TooltipText on PeriodHighlighterEntry objects.</p> <p>MINOR: Additional values for event OnVerticalScrollOffsetChanged.</p> <p>MINOR: Constraint dates are now also considered in the summary and in the diamond bar shape of allocations and activities. For the diamond shape, the PredictedEnd property is also taken into account.</p> <p>MINOR: Settings PM_Activity/ResourceTableRowDefinitionIDForTitle renamed to PM_TableRowDefinitionIDForTitleInActivitiesView/ResourcesView. Setting PM_EntityTableRowDefinitionIDForTitle renamed to PM_TableRowDefinitionIDForTitleInEntitiesTable. Old option names are deprecated but accepted for compatibility reasons.</p> <p>MINOR: New setting PM_TableRowDefinitionIDForTitleInLoadsView.</p> <p>MINOR: New setting TooltipDelay.</p> <p>MAJOR: Internal update to current NWAF libraries (version 6.0.1):</p> <ul style="list-style-type: none"> MAJOR: After dragging and dropping a draggable date line, the application now needs to update the date line object within the OnDrop event handler to apply the changed date. In older versions the date line incorrectly remained on the new date. MAJOR: Activity rows and resource rows do not show the calendar of an ancestor anymore when the represented objects do not have an own calendar. PATCH: Several fixes concerning tooltips and captions of PeriodHighlighterEntries.
4.0.2	<p>PATCH: Internal update to current NWAF libraries (version 5.7.9).</p> <p>PATCH: Fixed and improved appearance of bars while dragging and of dragged entities in time area also especially when using the settings TimeStepUnit and TimeStepUnitFactor for a more intuitive user experience.</p> <p>PATCH: Fixed cursor issue on entities table, not being updated correctly when moving the mouse.</p> <p>PATCH: Fixed issue concerning snapping when dragging bars in collapsed rows and bars of collapsed sub rows are shown.</p> <p>PATCH: Fixed issue concerning snapping when dragging bars and start dates or end dates of other bars contain millisecond values. Now these start dates and end dates are rounded down or up, resp., to full seconds.</p>
4.0.1	<p>PATCH: Internal update to current NWAF libraries (version 5.7.6).</p> <p>PATCH: Collapse states (children and curves) are cached when interactively changing state.</p> <p>PATCH: Collapse states (children and curves) are now far more often cached (when setting ParentID, when updating objects of other views).</p> <p>PATCH: Behavior of dragged bars now improved.</p>

Version	Description of changes
	<p>PATCH: Fixed false recognition of visual type of row objects in callback triggers.</p> <p>PATCH: Fixed crash when using world view together with bar symbols.</p> <p>PATCH: Zooming out of the currently visible time range by using the “up” button in the timescale resulted in an incorrect horizontal scroll offset.</p> <p>PATCH: Fixed issue when using the method updateDateLines (not all properties have been updated).</p> <p>PATCH: Fixed issue where the curves were not shown when adding a resource with property PM_CurveCollapseState set to 0.</p> <p>PATCH: Fixed issue with settings TimeStepUnit and TimeStepUnitFactor.</p>
4.0.0	<p>MAJOR: Additional parameters for method ScrollToObject.</p> <p>MAJOR: To be treated as a bug fix, the property DragMode in the event OnDrop now contains the actual drag mode of the interaction that took place and not all allowed drag modes on the object!</p> <p>MINOR: New settings MultipleBarDraggingEnabled, PM_ForcedActivityAllowedBarDragModes, PM_ForcedAllocationAllowedBarDragModes. New properties CoupledObjectIDs and StartsAndEndsOfCoupledObjects in event OnDrop.</p> <p>MINOR: New event CanDrag.</p> <p>MINOR: World view implemented. See settings WorldViewVisible, WorldViewPosition, WorldViewExtent.</p> <p>MINOR: Improved loading performance.</p> <p>MINOR: New settings LoggingEnabled and InteractiveActivationOfLoggingEnabled.</p> <p>MINOR: New properties HorizontalTitleAlignment and SymbolIDSource in TableCellDefinition object.</p> <p>MINOR: When dropping a date line interactively, the resulting date is rounded to the best possible date that is represented by the X coordinate the line phantom is shown on.</p> <p>MINOR: New options PM_ScrollToObjectAnimationEnabled, PM_ScrollToObjectHighlightFlashingEnabled, and PM_ScrollToObjectHighlightingColor.</p> <p>MINOR: New properties PM_BarTextPrefixSymbolID/Height/Width, PM_Left/RightBarSymbolID, PM_Left/RightBarSymbolWidth, PM_Left/RightBarSymbolHeight for Allocation and Activity objects.</p> <p>MINOR: Added values ‘1046’ (pt-PT) and ‘2070’ (pt-BR) for settings LocaleId/LanguageId.</p> <p>MINOR: New setting PM_MainViewAreaVisible.</p> <p>MINOR: New properties AddIn_CustomText1/2/3 for objects of types Activity, Allocation, Entity, Link, Resource, mainly for C/AL users.</p> <p>MINOR: New setting AddIn_PingTimeInMilliseconds and new event OnPing.</p> <p>MINOR: Internal update to current NWAF libraries (version 5.6.4):</p> <ul style="list-style-type: none"> • PATCH: Many bug fixes.

Version	Description of changes
3.0.5	<p>MINOR: Added value '1045' (pl-PL) for settings LocaleId/Languageld.</p> <p>PATCH: Internal update to current NWAF libraries (version 5.2.5).</p> <p>PATCH: Bug fix for exception when updating Allocation object with lower count of entries by more than one.</p> <p>PATCH: Added missing property NewDate in object type OnDropEventArgs for C/AL version and here in documentation of event OnDrop.</p>
3.0.4	<p>PATCH: Fixed non-integer values in some pixel values of event argument properties.</p> <p>PATCH: Fixed issue of false type of property PointInTime for object type DateLine in C/AL version.</p> <p>PATCH: Added missing property PM_TableRowDefinitionID for object types Activity and Resource.</p> <p>PATCH: Internal update to current NWAF libraries (version 5.2.4).</p> <p>PATCH: Fixed context menus on period highlighter presentation. See property AddIn_ContextMenuItem of object PeriodHighlighterEntry.</p>
3.0.3	<p>PATCH: Internal update to current NWAF libraries (version 5.2.2):</p> <ul style="list-style-type: none"> Bug fixed concerning using time zones together with DateLineGridMode.Auto and invisible nonworking time. Bug fixed concerning visibility of date line for option CurrentDate.
3.0.2	<p>PATCH: Internal update to current NWAF libraries (version 5.2.1):</p> <ul style="list-style-type: none"> More performance when loading data. Several bug fixes.
3.0.1	<p>PATCH: Several fixes exclusively for C/AL version of control add-in.</p>
3.0.0	<p>MAJOR: New object types DateLine, PeriodHighlighter, TableRowDefinition, TooltipTemplate.</p> <p>MAJOR: New events OnClicked, OnTableCellDefinitionWidthChanged, OnTimeAreaViewParametersChanged, OnVerticalScrollOffsetsChanged</p> <p>MAJOR: Definition of property ContextMenu.Items has changed, new ContextMenuItem object.</p> <p>MAJOR: New methods Add/Update/Remove for new object types.</p> <p>MINOR: Internal update to current NWAF libraries (version 5.1.1).</p> <p>MINOR: New setting AddIn_ForceFillOfPageSpace for resize issue.</p> <p>MINOR: New setting PM_IgnoreCalendarOnAllocationBarInteractions.</p> <p>MINOR: Many new properties on existing object types.</p> <p>MINOR: Many new settings concerning default values.</p> <p>MINOR: Many new settings for additional functionality.</p>
2.2	<p>Internal update to current NWAF libraries (version 4.11.0) with many bug fixes.</p>

Version	Description of changes
2.1	MINOR: New method About. PATCH: Setting LocaleId '2057' (en-GB) now working.
2.0	MAJOR: The setting LicenseKey has to be used mandatory now. MAJOR: The event OnRequestSettings now has a parameter. MINOR: New setting LocaleId. MINOR: New method SetTimeResolutionForView. MINOR: New allocation properties Progress, PM_ProgressColor, and PM_ProgressNonworkingColor. MINOR: New setting PM_LinksVisibleInResourcesView.
1.0	Initial release

2 Introduction

The Visual Scheduling Add-in Developer Toolbox consists mainly of the source code for the Visual Scheduling Control Add-in (VS-CAI). How to compile the client control is explained in the installation guide. In the following the API and data model of the VS-CAI is defined.

3 Important Note for C/AL Developers

The Developer Toolbox can be used for both Microsoft Dynamics 365 Business Central and Microsoft Dynamics NAV. In terms of semantic and contents, there is no difference in the API of the Developer Toolbox for both applications. The only difference between both use cases concerns the syntax. As this documentation uses the AL syntax, C/AL developers have to consider the following:

- Use `List<...>` instead of `JSONArray` of ...

4 Data Model

The data model of the Visual Scheduling Control Add-in is designed for resource planning in general, but is extended to cover presentations of activities view and resources view.

4.1 Activity

An Activity object defines the properties of a single activity.

Activity Property Name	Type	Description
AddIn_BarText	Text	Optional, default: " (empty string) – Text to show on the bar.
AddIn_ContextMenuItemD	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.
AddIn_CustomText1	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_CustomText2	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_CustomText3	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in the tooltip (formatted in HTML). If the text is empty, then no tooltip is shown.
BaselineEnd	DateTime	Optional, default: ODT – Baseline end date of the activity. See also setting PM_ActivityBaselineBarsVisible.
BaselineStart	DateTime	Optional, default: ODT – Baseline start date of the activity. See also setting PM_ActivityBaselineBarsVisible.
CalendarID	Text	Optional, default: " (empty string) – Corresponding calendar. If " (empty string), then the calendar specified by the option defaultCalendarID will be used.
DueDate	DateTime	Optional, default: ODT – Due date of the activity.

Activity Property Name	Type	Description
		See also option <code>pm_releaseDueDateConnectionsVisible</code> , if you want the widget to draw a connection line between a due date and a release date.
EarliestEnd	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
EarliestStart	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
End	DateTime	Optional, default: ODT – End date of the activity.
ID	Text	Required – Identifier of the activity.
LatestEnd	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
LatestStart	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
LinkSourceDate	DateTime	Optional, default: ODT – Additional date serving as an additional “start point” to connect a link. See also property “RelationType” of link object.
LinkTargetDate	DateTime	Optional, default: ODT – Additional date serving as an additional “end point” to connect a link. See also property “RelationType” of link object.
MustEndOn	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
MustStartOn	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
ParentID	Text	Optional, default: " (empty string) – Identifier of the parent of the activity. This serves for setting up a hierarchy of activities. If this property is " (empty string) the current activity will be considered as a root node of the activity hierarchy.
PM_AllocationRowsCollapseState	Integer (see enum CollapseState)	Optional, default: -1 – Specifies whether the allocation rows of the activity should be expanded or collapsed when displayed. See also event <code>OnCollapseStateChanged</code> and setting <code>PM_AllocationRowsVisibleInActivities-View</code> .

Activity Property Name	Type	Description
		-1: no change 0: display activity row in an expanded way for allocation rows. 1: display activity row in a collapsed way for allocation rows.
PM_AllocationRowsCollapsible	Boolean	Optional, default: True – If set to true, then the row representing this activity row will be interactively collapsible when allocation rows exist.
PM_AllowedBarDragModes	Integer (see option ActivityBarDragModes)	Optional, default: -1 = value in setting PM_DefaultActivityBarDragModes – This option determines the allowed bar drag modes for this activity in the activities view.
PM_BarHeight	Integer ($\geq 0, \leq 1000$)	Optional, default: -1 = value in setting PM_DefaultActivityBarHeight – Height of the bars in pixels. This property is useful, when more than one line of text is shown inside (see property BarText). Proposal: For one line take 22, for two lines 38, for three lines 54, and so on. When no progress bar is needed, then you can subtract 4 from the value.
PM_BarOpacity	Decimal ($\geq 0.0, \leq 1.0$)	Optional, default: 1.0 – Specifies the opacity of the entire activity bar (including the visualization of the progress bar, symbols, constraint dates, and baseline bar).
PM_BarPatternColor	Text	Optional, default: "white" – Color for the pattern when this is visible by using property PM_BarPatternType.
PM_BarPatternType	Integer (see enum PatternType)	Optional, default: -1 – If set to a value ≥ 0 , then a pattern is shown on top of the fill color and behind the text. ATTENTION: Value ignored when using IE11!
PM_BarSelectable	Boolean	Optional, default: AL: value of setting PM_DefaultActivityBarSelectable; C/AL: True – If set to True, then the bar representing this activity will be selectable.
PM_BarShape	Integer (see option ActivityBarShape)	Optional, default: 0 – This option defines which shape is used for the visualization of bars.
PM_BarTextPrefixSymbolHeight	Integer	Optional, default: 12 – Height of the bar symbol before the text (see property PM_BarTextSymbolSymbolID) in pixels at a zoom factor of 100%.
PM_BarTextPrefixSymbolID	Text	Optional, default: undefined – Identifier of the symbol to be shown before the

Activity Property Name	Type	Description
		text inside of the activity bar. The symbol will be shown vertically centered inside the bar.
PM_BarTextPrefixSymbolWidth	Integer	Optional, default: 12 – Width of the bar symbol before the text (see property PM_BarTextPrefixSymbolID) in pixels at a zoom factor of 100%.
PM_BarTextWrapMode	Integer (see enum TextWrapMode)	Optional, default: TextWrapMode.None – Specifies whether the text inside the bar is wrapped.
PM_BarTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a tooltip template. The template is used for the tooltip that appears on the activity bar.
PM_BaselineBorderColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the border of the baseline bar. If undefined, a default value of the widget will be used.
PM_BaselineColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the working time periods of the baseline bar. The nonworking time periods of the bar will be colored with the same color as long as the property PM_BaselineNonworkingTimeColor is undefined or set to 'calculated'. If undefined, a default value of the widget will be used.
PM_BaselineNonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " (empty string) – Color for the nonworking time periods of the baseline bar. If undefined, a default value of the widget will be used. If set to 'calculated', a color will be calculated using the color defined by the PM_BaselineColor property.
PM_BorderColor	Text (CSS color value, e.g. '#ff0000', 'rgb(255, 0, 0)', or 'red' or 'calculated')	Optional, default: " (empty string) Color for the border of the bar. If " (empty string), a default value of the control add-in will be used. If set to 'calculated', a color will be calculated using the color defined by the PM_Color property. This can be useful in situations where two bars are positioned next to each other and a graphical indicator is needed to visually distinguish the two bars.
PM_CollapsedRowDesign	Integer (see enum RowDesigns)	Optional, default: -1 = value in setting PM_DefaultActivityCollapsedRowDesign – Specifies how the time area is filled when the row is collapsed and visible.

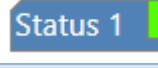
Activity Property Name	Type	Description
		See enum RowDesigns in the Enumerations chapter for details.
PM_CollapseState	Integer	<p>Optional, default: -1 – Specifies whether the row of the activity should be expanded or collapsed.</p> <p>-1: do not change the way the activity row is displayed 0: display activity row in an expanded way 1: display activity row in a collapsed way</p> <p>See option CollapseState in the Enumerations chapter for details.</p>
PM_Color	Text (CSS color value)	<p>Optional, default: " (empty string)</p> <p>Color for the working time periods of the bar. The nonworking time periods of the bar will be colored with the same color as long as the property PM_NonworkingTimeColor is " (empty string).</p> <p>If " (empty string), a default value of the control add-in will be used.</p>
PM_CurveCollapseState	Integer (see enum CollapseState)	<p>Optional, default: -1 – Specifies whether the curves in a activity row should be expanded or collapsed when displayed (only applicable, when setting CurvePanesVisibleInActivitiesView is set). See also event OnCurveCollapseStateChanged.</p> <p>-1: no change 0: display curves 1: hide curves</p>
PM_DueDateAllowedDragModes	Integer (see enum ActivityBarDragModes)	Optional, default: None – Determines the allowed drag mode for the due date of this activity in the activities view (these can be overwritten using the callback canDrag). In this context only None and DragHorizontally are used.
PM_DueDateColor	Text (CSS color value)	<p>Optional, default: " (empty string)</p> <p>Color for the due date symbol. If undefined, a default value of the widget will be used.</p>
PM_DueDateSymbolHeight	Integer	Optional, default: 12 – Height of the due date symbol (see property PM_DueDateSymbolID) in pixels at a zoom factor of 100%. Currently the default symbol cannot be sized.
PM_DueDateSymbolID	Text	Optional, default: internal diamond symbol – Identifier of the symbol to be shown at the due date of the activity.

Activity Property Name	Type	Description
		See also PM_DueDateSymbolHeight, and PM_DueDateSymbolWidth.
PM_DueDateSymbolWidth	Integer	Optional, default: 12 – Width of the due date symbol (see property PM_DueDateSymbolID) in pixels at a zoom factor of 100%. Currently the default symbol cannot be sized.
PM_EarliestDragStart	DateTime	Optional, default: 0DT – If set, then the time before the given date is grayed, when beginning to drag the activity bar. If the setting PM_DragDatesLimitingInteraction is set to True, then the bar itself cannot be dragged before the date.
PM_EarliestEndColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolColor – Color for the EarliestEnd constraint symbol.
PM_EarliestStartColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolColor – Color for the EarliestStart constraint symbol.
PM_ExpandedRowDesign	Integer (see enum RowDesigns)	Optional, default: -1 = value in setting PM_DefaultActivityExpandedRowDesign – Specifies how the time area is filled when the row is expanded and visible. See enum RowDesigns in the Enumerations chapter for details.
PM_HasAllocationRows	Boolean	Optional, default: False – If set to True, then the row representing this activity will be collapsible/expandable for allocation rows even when no allocations exist referencing this activity. This serves for lazy loading.
PM_HasChildren	Boolean	Optional, default: False – If set to True, then the row representing this activity will be collapsible/expandable even when there are no children defined. This serves for lazy loading.
PM_LatestDragEnd	DateTime	Optional, default: 0DT – If set, then the time after the given date is grayed, when beginning to drag the activity bar. If the setting PM_DragDatesLimitingInteraction is set to True, then the bar itself cannot be dragged after the date.
PM_LatestEndColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolColor – Color for the LatestEnd constraint symbol.
PM_LatestStartColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolColor

Activity Property Name	Type	Description
		or – Color for the LatestStart constraint symbol.
PM_LeftBarSymbolHeight	number	Optional, default: 12 – Height of the left bar symbol (see property PM_LeftBarSymbolID) in pixels at a zoom factor of 100%.
PM_LeftBarSymbolID	string	Optional, default: undefined – Identifier of the symbol to be shown at the left side of the activity bar. The symbol will be shown vertically centered inside the bar. See also PM_RightBarSymbolID , PM_LeftBarSymbolHeight , and PM_LeftBarSymbolWidth .
PM_LeftBarSymbolWidth	number	Optional, default: 12 – Width of the left bar symbol (see property PM_LeftBarSymbolID) in pixels at a zoom factor of 100%.
PM_MinimumRowHeight	Integer	Optional, default: -1 = value in setting PM_DefaultMinimumActivityRowHeight – Minimum height of the activity row in pixels. This property is useful, when more than one line of text is shown inside the table cells. Proposal: For one line take 36*, for two lines 52, for three lines 68, and so on. In order to have the same height also, when no bar is placed in the row, take the maximum bar height adding 20 (f.e. 42) as minimum. For using word wrapping in table cells, it is necessary to use a table row definition by setting the property PM_TableRowDefinitionID and setting the property WrapMode in a contained table cell definition.
PM_MustEndOnColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolCol or – Color for the MustEndOn constraint symbol.
PM_MustStartOnColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityConstraintSymbolCol or – Color for the MustStartOn constraint symbol.
PM_NonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " (empty string) – Color for the nonworking time periods of the bar. If " (empty string), a default value of the control add-in will be used.

Activity Property Name	Type	Description
		If set to 'calculated', a color will be calculated using the color defined by the PM_Color property.
PM_PeriodHighlighterID	Text	Optional, default: " (empty string) – Reference to a period highlighter object that contains colored time periods. This can be used to show shifts or exceptions to the calendar (see property CalendarID) that defines work and non-work times.
PM_PredictedEndColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the predicted end bar.
PM_ProgressBackgroundColor	Text (CSS color value)	Optional, default: value in setting PM_DefaultActivityProgressBackgroundColor – Color for the background of the progress bar region.
PM_ProgressColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the working time periods of the progress bar. The nonworking time periods of the bar will be colored with the same color as long as the property PM_ProgressNonworkingTimeColor is undefined or set to 'calculated'. If " (empty string), a default value of the control add-in will be used.
PM_ProgressNonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " (empty string) – Color for the nonworking time periods of the progress bar. If " (empty string), a default value of the control add-in will be used. If set to 'calculated', a color will be calculated using the color defined by the PM_ProgressColor property.
PM_ReleaseDateAllowedDragModes	Integer (see enum ActivityBarDragModes)	Optional, default: None – Determines the allowed drag mode for the release date of this activity in the activities view (these can be overwritten using the callback canDrag). In this context only None and DragHorizontally are used.
PM_ReleaseDateColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the release date symbol. If undefined, a default value of the widget will be used.
PM_ReleaseDateSymbolHeight	Integer	Optional, default: 12 – Height of the due date symbol (see property PM_ReleaseDateSymbolID) in pixels at a zoom factor of 100%. Currently the default symbol cannot be sized.

Activity Property Name	Type	Description
PM_ReleaseDateSymbolID	Text	Optional, default: internal diamond symbol – Identifier of the symbol to be shown at the due date of the activity. See also PM_ReleaseDateSymbolHeight, and PM_ReleaseDateSymbolWidth.
PM_ReleaseDateSymbolWidth	Integer	Optional, default: 12 – Width of the release date symbol (see property PM_ReleaseDateSymbolID) in pixels at a zoom factor of 100%. Currently the default symbol cannot be sized.
PM_RightBarSymbolHeight	Integer	Optional, default: 12 – Height of the right bar symbol (see property PM_RightBarSymbolID) in pixels at a zoom factor of 100%.
PM_RightBarSymbolID	Text	Optional, default: undefined – Identifier of the symbol to be shown at the right side of the activity bar. The symbol will be shown vertically centered inside the bar. See also PM_LeftBarSymbolID, PM_RightBarSymbolHeight, and PM_RightBarSymbolWidth.
PM_RightBarSymbolWidth	Integer	Optional, default: 12 – Width of the right bar symbol (see property PM_RightBarSymbolID) in pixels at a zoom factor of 100%.
PM_RowCollapsible	Boolean	Optional, default: AL: value of setting pm_defaultActivityRowCollapsible, C/AL: True – If set to True, then the row representing this activity will be interactively collapsible when children exist.
PM_RowSelectable	Boolean	Optional, default: AL: value of setting pm_defaultActivityRowSelectable, C/AL: True – If set to True, then the row representing this activity will be selectable.
PM_RowSymbolIDs	JsonArray of Text	Optional, default: empty array – Array of identifiers of the symbols to be shown in the table symbol cell of the beginning of the table row. The symbols will be arranged one below the other. However, if the cell is not high enough to hold all symbols, then the remaining symbols are also arranged side-by-side. If this still does not fit, an additional 'show more' symbol will be displayed. An empty string ("") will cause an 'empty' symbol to be displayed. By this

Activity Property Name	Type	Description
		<p>placeholder, you can reserve space for a symbol that may be shown at a later time.</p> <p>Please note: Each symbol will be resized to an image with a width and height of 16 pixels each at a zoom level of 100%.</p>
PM_SnapTargetsForEnd	Integer (see enum SnapTargets)	<p>Optional, default: value of setting PM_DefaultActivitySnap-TargetsForEnd</p> <p>– When dragging horizontally, then the visible end date of this allocation will optionally be snapping to date lines and calendar grids. The user can override an active snapping by pressing the ALT key while dragging.</p>
PM_SnapTargetsForStart	Integer (see enum SnapTargets)	<p>Optional, default: value of setting PM_DefaultActivitySnap-TargetsForStart</p> <p>– When dragging horizontally, then the visible start date of this activity will optionally be snapping to date lines and calendar grids. The user can override an active snapping by pressing the ALT key while dragging.</p>
PM_Status1Color	Text (CSS color value)	<p>Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears. Only visible, when property PM_Status1Visible is True.</p>
PM_Status1Visible	Boolean	<p>Optional, default: False – If set to True and the corresponding status color is set in property PM_Status1Color, then a predefined symbol is displayed to the right of the bar.</p> 
PM_Status2Color	Text (CSS color value)	<p>Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears. Only visible, when property PM_Status2Visible is True.</p>
PM_Status2Visible	Boolean	<p>Optional, default: False – If set to True and the corresponding status color is set in property PM_Status2Color, then a predefined symbol is displayed to the right of the bar.</p> 
PM_Status3Color	Text (CSS color value)	<p>Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears.</p>

Activity Property Name	Type	Description
		Only visible, when property PM_Status3Visible is True.
PM_Status3Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status3Color, then a predefined symbol is displayed to the right of the bar. 
PM_Status4Color	Text (CSS color value)	Optional, default: " (empty string) – Color for the status symbol to the left of the bar. If undefined, no symbol appears. Only visible, when property PM_Status4Visible is True.
PM_Status4Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status4Color, then a predefined symbol is displayed to the left of the bar. Note: This property may be used with rectangle bar shapes only! 
PM_StatusFrameColor	Text (CSS color value)	Optional, default: value of setting PM_DefaultActivityStatusFrameColor – Color for the status frame that will be shown when property PM_StatusFrameVisible is set.
PM_StatusFrameVisible	Boolean	Optional, default: False – If set to true, then a frame is shown around the bar. See also property PM_StatusFrameColor.
PM_TableColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the table row. If " (empty string), a default value of the control add-in will be used.
PM_TableRowDefinitionID	Text	Optional, default: " = value of setting PM_DefaultEntityTableRowDefinitionID – Identifier of a TableRowDefinition object that defines the composition of the table row.
PM_TableTextColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the table row texts, see property AddIn_TableText. If " (empty string), a default value of the control add-in will be used.
PM_TextColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the texts of the bar, see property AddIn_BarText. If " (empty string), a default value of the control add-in will be used.

Activity Property Name	Type	Description
PM_TopLeftBarSymbolID	Text	Optional, default: " (empty string) – Identifier of the symbol to be shown at the top left side of the activity bar. Please note: A symbol will be resized to an image with a width and height of 12 pixels each at a zoom level of 100%.
PM_TopRightBarSymbolID	Text	Optional, default: " (empty string) – Identifier of the symbol to be shown at the top right side of the activity bar. Please note: A symbol will be resized to an image with a width and height of 12 pixels each at a zoom level of 100%.
PredictedEnd	DateTime	Optional, default: ODT – A date that indicates the predicted end of the activity. This date is used to display a bar between this date and the end of the activity.
Progress	Decimal (in percent; $\geq 0, \leq 100$)	Optional, default: 0 – Used to display a completion layer.
ReleaseDate	DateTime	Optional, default: ODT – Release date of the activity. See also setting pm_releaseDueDateConnectionsVisible, if you want the widget to draw a connection line between a due date and a release date.
Start	DateTime	Optional, default: ODT – Start date of the activity.

4.2 Allocations

4.2.1 Allocation

An Allocation object defines an allocation of one activity to one resource.

Allocation Property Name	Type	Description
ActivityID	Text	Optional, default: " (empty string) – Identifier of an Activity
AddIn_BarText	Text	Optional, default: " (empty string) – Text to show on the bar.
AddIn_ContextMenuItemD	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.
AddIn_CustomText1	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject.

Allocation Property Name	Type	Description
		The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_CustomText2	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject s. The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_CustomText3	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject s. The property name can then be used in TableCellDefinition.SymbolIDSource/Text Source and in TooltipTemplate objects.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in the tooltip (formatted in HTML).
EarliestEnd	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
EarliestStart	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
Entries	JsonArray of AllocationEntry	Optional, default: empty array – array of allocation entries.
ID	Text	Required – Identifier of the allocation
LatestEnd	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
LatestStart	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
LinkSourceDate	DateTime	Optional, default: ODT – Additional date serving as an additional “start point” to connect a link. See also property “RelationType” of link object.
LinkTargetDate	DateTime	Optional, default: ODT – Additional date serving as an additional “end point” to connect a link. See also property “RelationType” of link object.
MustEndOn	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.
MustStartOn	DateTime	Optional, default: ODT – If defined, an additional symbol will be displayed to indicate this date.

Allocation Property Name	Type	Description
PM_AllowedBarDragModes	Integer (see option AllocationBarDrag-Modes)	Optional, default: -1 = value of setting PM_DefaultAllocationBarDragModes – This option determines the allowed bar drag modes for this allocation in the resources view.
PM_AllowedBarDragModesInActivitiesView	Integer (see option AllocationBarDrag-Modes)	Optional, default: -1 = value of setting PM_DefaultAllocationBarDragModesInActivitiesView – This option determines the allowed bar drag modes for this allocation in the resources view.
PM_BarHeight	Integer ($\geq 0, \leq 1000$)	Optional, default: -1 = value in setting PM_DefaultAllocationBarHeight – Height of the bar in pixels. This is useful, when more than one line of text is shown inside (see property AddIn_BarText). Proposal: For one line take 22, for two lines 38, for three lines 54, and so on. When no progress bar is needed, then you can subtract 4 from the value.
PM_BarOpacity	Decimal ($\geq 0.0, \leq 1.0$)	Optional, default: 1.0 – Specifies the opacity of the entire activity bar (including the visualization of the progress bar, symbols, constraint dates, and baseline bar).
PM_BarSelectable	Boolean	Optional, default: AL: value of setting PM_DefaultAllocationBarSelectable, C/AL: True – If set to True, then the bar representing this allocation will be selectable.
PM_BarShape	Integer (see enum AllocationBarShape)	Optional, default: -1 = value in setting PM_DefaultAllocationBarShape – This option defines which shape should be used by default for the visualization allocation bars.
PM_BarTextPrefixSymbolHeight	Integer	Optional, default: 12 – Height of the bar symbol before the text (see property PM_BarTextSymbolSymbolID) in pixels at a zoom factor of 100%.
PM_BarTextPrefixSymbolID	Text	Optional, default: undefined – Identifier of the symbol to be shown before the text inside of the allocation bar. The symbol will be shown vertically centered inside the bar.
PM_BarTextPrefixSymbolWidth	Integer	Optional, default: 12 – Width of the bar symbol before the text (see property PM_BarTextPrefixSymbolID) in pixels at a zoom factor of 100%.
PM_BarTextWrapMode	Integer (see enum TextWrapMode)	Optional, default: TextWrapMode.None – Specifies whether the text inside the bar is wrapped.

Allocation Property Name	Type	Description
PM_BarTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a tooltip template. The template is used for the tooltip that appears on the allocation bar.
PM_BarTopOffset	Integer	Optional, default: 0 – Offset of the bar in pixels relative to its upper side. A negative number will shift the bar upwards, a positive number will shift the bar downwards.
PM_BorderColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the border of the bar. If " (empty string), the value of the corresponding activity, if available, will be used. If set to 'calculated', a color will be calculated using the color defined by the PM_Color property. This can be useful in situations where two bars are positioned next to each other and a graphical indicator is needed to visually distinguish the two bars.
PM_EarliestDragStart	DateTime	Optional, default: ODT – If set, then the time before the given date is grayed, when beginning to drag the allocation bar. If the setting PM_DragDatesLimitingInteraction is set to True, then the bar itself cannot be dragged before the date.
PM_EarliestEndColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbol Color – Color for the EarliestEnd constraint symbol.
PM_EarliestStartColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbol Color – Color for the EarliestStart constraint symbol.
PM_EndIsSnapTarget	Boolean	Optional, default: True – If set to True, then the visible end date of this allocation in the resources view is used as a snap target for a dragged bar (see attributes PM_SnapTargetsForStart and PM_SnapTargetsForEnd)
PM_LatestDragEnd	DateTime	Optional, default: ODT – If set, then the time after the given date is grayed, when beginning to drag the allocation bar. If the setting PM_DragDatesLimitingInteraction is set to True, then the bar itself cannot be dragged after the date.
PM_LatestEndColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbol Color – Color for the LatestEnd constraint symbol.

Allocation Property Name	Type	Description
		Color – Color for the LatestEnd constraint symbol.
PM_LatestStartColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbolColor – Color for the LatestStart constraint symbol.
PM_LeftBarSymbolHeight	Integer	Optional, default: 12 – Height of the left bar symbol (see property PM_LeftBarSymbolID) in pixels at a zoom factor of 100%.
PM_LeftBarSymbolID	Text	Optional, default: undefined – Identifier of the symbol to be shown at the left side of the allocation bar. The symbol will be shown vertically centered inside the bar. See also PM_RightBarSymbolID , PM_LeftBarSymbolHeight , and PM_LeftBarSymbolWidth .
PM_LeftBarSymbolWidth	Integer	Optional, default: 12 – Width of the left bar symbol (see property PM_LeftBarSymbolID) in pixels at a zoom factor of 100%.
PM_MinimumRowHeight	Integer	Optional, default: value in setting PM_DefaultAllocationMinimumRowHeight – Minimum height of the allocation row in pixels. This attribute is useful, when more than one line of text is shown inside the table cells. Proposal: For one line take 36*, for two lines 52, for three lines 68, and so on. To have the same height also, when no bar is placed in the row, take the maximum bar height adding 20 (f.e. 42) as minimum. For using word wrapping in table cells, it is necessary to use a table row definition by setting the property PM_TableRowDefinitionID and setting the property WrapMode in a contained table cell definition.
PM_MustEndOnColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbolColor – Color for the MustEndOn constraint symbol.
PM_MustStartOnColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationConstraintSymbolColor – Color for the MustStartOn constraint symbol.
PM_NonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " (empty string) – Color for the nonworking time periods of the bar. If undefined, the value of the corresponding activity, if available, will be

Allocation Property Name	Type	Description
		used. If set to 'calculated', a color will be calculated using the color defined by the PM_Color property of the corresponding activity.
PM_PredictedEndColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the predicted end bar.
PM_ProgressBackgroundColor	Text (CSS color value)	Optional, default: " = value in setting PM_DefaultAllocationProgressBackgroundColor – Color for the background of the progress bar region.
PM_ProgressColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the working time periods of the progress bar. The nonworking time periods of the bar will be colored with the same color.
PM_ProgressNonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " (empty string) – Color for the nonworking time periods of the progress bar. If undefined, a value of the property with the same in the corresponding activity, if available, will be used. If set to 'calculated', a color will be calculated using the color defined by the PM_ProgressColor property.
PM_RightBarSymbolHeight	Integer	Optional, default: 12 – Height of the right bar symbol (see property PM_RightBarSymbolID) in pixels at a zoom factor of 100%.
PM_RightBarSymbolID	Text	Optional, default: undefined – Identifier of the symbol to be shown at the right side of the allocation bar. The symbol will be shown vertically centered inside the bar. See also PM_LeftBarSymbolID, PM_RightBarSymbolHeight, and PM_RightBarSymbolWidth.
PM_RightBarSymbolWidth	Integer	Optional, default: 12 – Width of the right bar symbol (see property PM_RightBarSymbolID) in pixels at a zoom factor of 100%.
PM_RowDesign	Integer (see enum RowDesigns)	Optional, default: value in setting PM_DefaultAllocationRowDesign – Specifies how the time area is filled when the row is visible.
PM_RowSelectable	Boolean	Optional, default: value of setting PM_DefaultAllocationRowSelectable – If set to true, then the row representing this allocation will be selectable.
PM_SnapTargetsForEnd	Integer (see enum SnapTargets)	Optional, default: -1 = value of setting PM_DefaultAllocationSnapTargetsForEnd – When dragging

Allocation Property Name	Type	Description
		horizontally, then the visible end date of this allocation will optionally be snapping to date lines, calendar grids, and start or end dates of other allocations in same row, when dragging lets these dates get near the end date (see property PM_EndIsSnapTarget). The user can override an active snapping by pressing the ALT key while dragging.
PM_SnapTargetsForStart	Integer (see enum SnapTargets)	Optional, default: -1 = value of setting PM_DefaultAllocationSnapTargetsForStart – When dragging horizontally, then the visible start date of this allocation will optionally be snapping to date lines, calendar grids, and start or end dates of other allocations in same row, when dragging lets these dates get near the start date (see property PM_StartIsSnapTarget). The user can override an active snapping by pressing the ALT key while dragging.
PM_StartIsSnapTarget	Boolean	Optional, default: True – If set to True, then the visible start date of this allocation in the resources view is used as a snap target for a dragged bar (see properties PM_SnapTargetsForStart and PM_SnapTargetsForEnd)
PM_Status1Color	Text (CSS color value)	Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears. Only visible, when property PM_Status1Visible is True.
PM_Status1Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status1Color, then a predefined symbol is displayed to the right of the bar. 
PM_Status2Color	Text (CSS color value)	Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears. Only visible, when property PM_Status2Visible is True.
PM_Status2Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status2Color, then a predefined symbol is displayed to the right of the bar. 

Allocation Property Name	Type	Description
PM_Status3Color	Text (CSS color value)	Optional, default: " (empty string) – Color for the status symbol to the right of the bar. If undefined, no symbol appears. Only visible, when property PM_Status3Visible is True.
PM_Status3Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status3Color, then a predefined symbol is displayed to the right of the bar. 
PM_Status4Color	Text (CSS color value)	Optional, default: " (empty string) – Color for the status symbol to the left of the bar. If undefined, no symbol appears. Only visible, when property PM_Status4Visible is True.
PM_Status4Visible	Boolean	Optional, default: False – If set to True and the corresponding status color is set in property PM_Status4Color, then a predefined symbol is displayed to the left of the bar. Note: This property may be used with rectangle bar shapes only! 
PM_StatusFrameColor	Text (CSS color value)	Optional, default: value of setting PM_DefaultActivityStatusFrameColor – Color for the status frame that will be shown when property PM_StatusFrameVisible is set.
PM_StatusFrameVisible	Boolean	Optional, default: false – If set to true, then a frame is shown around the bar. See also property PM_StatusFrameColor.
PM_TextColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the texts of the bar. If undefined, the value of the corresponding activity, if available, will be used.
PM_TopLeftBarSymbolID	Text	Optional, default: " (empty string) – Identifier of the symbol to be shown at the top left side of the allocation bar. Please note: A symbol will be resized to an image with a width and height of 12 pixels each at a zoom level of 100%.
PM_TopRightBarSymbolID	Text	Optional, default: " (empty string) – Identifier of the symbol to be shown at the top right side of the allocation bar.

Allocation Property Name	Type	Description
		Please note: A symbol will be resized to an image with a width and height of 12 pixels each at a zoom level of 100%.
PredictedEnd	DateTime	Optional, default: ODT – A date that indicates the predicted end of the allocation. This date is used to display a bar between this date and the end of the allocation.
Progress	Decimal (in percent; $\geq 0, \leq 100$)	Optional, default: 0.0 – Used to display a completion layer.
ResourceID	Text	Optional, default: " (empty string) – Identifier of a Resource
SuitableResourceIDs	JsonArray of Text	<p>Optional, default: empty array – An array of IDs of those resources to which the allocation could be assigned.</p> <p>If the array is defined, then all rows of resources that are not listed in that array will be covered by a half-transparent curtain.</p> <p>If the array is empty, all resource rows will be covered.</p> <p>If the array is not defined, then all rows are displayed in the normal way without any covering.</p> <p>Also see settings PM_SuitableResourcesOverlayColor and PM_UnsuitableResourcesOverlayColor.</p>
TableText	Text	Optional, default: " (empty string) – Text to display in the table row (see also property PM_TableRowDefinitionID).

4.2.2 AllocationEntry

AllocationEntry Property Name	Type	Description
End	DateTime	Optional, default: ODT – End date of the allocation entry. This date itself is not(!) part of the interval described by this entry.
PM_Color	Text (CSS color value)	Optional, default: 'gray' – Color for the working time periods of the bar.
PM_Height	Integer ($\geq 0, \leq 1000$)	Optional, default: -1 = value in setting PM_DefaultAllocationBarHeight – Height of the entry in pixels.

AllocationEntry Property Name	Type	Description
PM_NonworkingTimeColor	Text (CSS color value or 'calculated')	Optional, default: " = value of property PM_NonworkingColor of allocation – Color for the nonworking time periods of the bar. If undefined, the value of the corresponding allocation, if available, will be used. If that one is also undefined, then the nonworking time periods of the bar will be colored with the same color as the working times (see PM_Color property). If set to 'calculated', a color will be calculated using the color defined by the PM_Color property.
PM_PatternColor	Text	Optional, default: "white" – Color for the pattern when this is visible by using property PM_PatternType.
PM_PatternType	Integer (see enum PatternType)	Optional, default: -1 – If set to a value ≥ 0 , then a pattern is shown on top of the fill color and behind the text. ATTENTION: Value ignored when using IE11!
PM_RelativeTopOffset	Integer	Optional, default: 0 – Offset of the entry in pixels relative to the upper side of the corresponding allocation. A negative number will shift the entry upwards, a positive number will shift the entry downwards.
Start	DateTime	Optional, default: ODT – Start date of the allocation entry.

4.3 Calendars

4.3.1 Calendar

A Calendar object defines working and non-working times to be used with resources and activities (see property CalendarID there).

Calendar Property Name	Type	Description
Entries	JsonArray of CalendarEntry	Optional, default: empty array – Array of calendar entry objects. The order of the entries inside the array is important!
ID	Text	Required – Identifier of the calendar

4.3.2 CalendarEntry

A CalendarEntry object defines a single time period. It has to be referenced in the Entries array of a Calendar object. If several calendar entries describe the same time period, then the last entry wins.

Property Name	Type	Description
End	DateTime	Optional, default: ODT – End of the working time period.
Start	DateTime	Optional, default: ODT – Start of the working time period.
TimeType	Integer	Optional, default: 1 0: NonworkingTime, 1: WorkingTime

4.4 ContextMenus

4.4.1 ContextMenu

A ContextMenu object is used to show one when the user clicks the secondary mouse button or holds the finger pressed on an object's representation on screen.

Attention: The interface has changed from 2.2 to 3.0: Items now hold an array of ContextMenuItem objects instead of texts. For AL users the older definition is still valid, but C/AL users will have to adapt their code!

Property Name	Type	Description
ID	Text	Required – Identifier of this context menu
Items	JSONArray of ContextMenuItem	Optional, default: Empty array – Items that will be shown in the context menu

4.4.2 ContextMenuItem

Property Name	Type	Description
Code	Text	Optional, default: index number in items list – Code that can be used to identify the selected menu item in the OnContextMenuItemClicked event. This helps identifying the item when the sort code is used.
SortCode	Text	Optional, default: value of property Code – The value will be used to sort the menu items within the shown context menu by using ascending string sort algorithm. This allows to dynamically add or remove items in the items list.
Text	Text	Optional, default: " (empty string) – Text that will be shown in the context menu item.

4.5 Curves

4.5.1 Curve

Curve objects serve to define values over time that can be shown as capacity or load inside resource and activity rows (see properties LoadCurveID and CapacityCurveID in Resource object). Additionally it

is possible to stack curves when using curve object of stack type. At the moment there are no curve types that calculate their values automatically.

Curve Property Name	Type	Description
CurveIDs	JsonArray of Text	Optional, default: empty array – Array of curve IDs (in case of CurveStack only)
CurvePointEntries	JsonArray of CurvePointEntry	Optional, default: empty array – Array of point entries (in case of PointCurve only)
ID	Text	Required – Identifier of the stacked curve
PM_FillColor	Text (CSS color value, e.g. '#ff0000', 'rgb(255, 0, 0)', or 'red')	Optional, default: " (empty string) – Color of the area below the curve
PM_InterpolationType	Integer (see enum CurveInterpolationType)	Optional, default: 0 – Type of interpolation. At the moment there are restrictions concerning putting curves of linear interpolation type into curve stacks. It is recommended to use this interpolation type only inside curve lists.
PM_OverloadColor	Text (CSS color value)	Optional, default: " (empty string) – Used, when the curve is used as the load curve that referenced directly by the property LoadCurveID at the Resource object. Then the area above the capacity curve will be colored by this color when the load is higher than the capacity.
PM_StrokColor	Text (CSS color value)	Optional, default: " (empty string) – Color of the curve line itself
Type	Integer	Optional, default: 0 – Type of the curve: 0: PointCurve (displayed curve is determined by interpreting the given curve points) 3: CurveStack (displayed curve is determined by summing up the curve points of the contained curves)

4.5.2 [CurvePointEntry](#)

CurvePointEntry Property Name	Type	Description
PointInTime	DateTime	Required – This property serves as an identifier of the point entry.
Value	Decimal	Optional, default: 0.0 – Value of the curve at the given point in time.

4.1 DateLine

A DateLine object is a pure presentation object and defines the properties of a single date line.

DateLine Property Name	Type	Description
Caption	Text	Optional, default: " (empty string) – Text for the caption of the date line.
CaptionColor	Text (CSS color value)	Optional, default: 'black' – Color of the caption.
CaptionOrientation	Integer (see enum DateLineCaptionOrientation)	Optional, default: 2 – Specifies whether the caption should be oriented vertically or horizontally.
CaptionPosition	Integer (see enum DateLineCaptionPosition)	Optional, default: 1 – Specifies where the caption should be positioned relative to the date line.
Color	Text (CSS color value)	Optional, default: 'black' – Color of the line.
DashArray	Text	Optional, default: 'none' – Pattern of dashes and gaps for drawing the date line. For further information, please see https://www.w3.org/TR/SVG11/painting.html#StrokeDasharrayProperty or https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/stroke-dasharray . The value 'none' indicates that no dashing is used. In this case, the link is drawn solid.
Draggable	Boolean	Optional, default: False – If set to True, then the date line is draggable and the event OnDrop is triggered, when dropping it at a new date.
ID	Text	Required – Identifier of this date line.
InFrontOfBars	Boolean	Optional, default: True – Determines how the date line is displayed. If set to False, the date line will be overlapped by the bars. Otherwise, the line will be displayed in front of the bars.
PointInTime	DateTime	Optional, default: ODT – Date, where the date line should become visible. The date line only gets visible, when the date is set and the date lies between the values of the widget options start and end.
Width	Integer (≥ 0)	Optional, default: 1 – Line width of the date line.

4.2 Entity

An Entity object defines the properties of a single entity. Entities are shown in a separate table on the right side.

Entity Property Name	Type	Description
AddIn_ContextMenuItemID	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.

Entity Property Name	Type	Description
AddIn_CustomText1	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText2	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText3	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_TableSortCode	Text	Optional, default: " (empty string) – If given, then the neighboring objects in the table in same level are sorted ascending using this value.
AddIn_TableText	Text	Optional, default: " (empty string) – Text to show in the table.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in the tooltip (formatted in HTML).
Duration	Integer (in milliseconds)	Optional, default: 0 – If Duration of the pure working time of the entity. This property is used, for example, when moving the entity from the entities table to the Gantt diagram to display a bar of correct length during interaction.
ID	Text	Required – Identifier of this entity
ParentID	Text	Optional, default: " (empty string) – Description of the entity (freely usable)
PM_AllowedRowDragModes	Integer (see enum RowDragModes)	Optional, default: -1 = value of setting PM_DefaultAllowedEntityRowDragModes – This option determines the allowed row drag modes for this entity when the entities table is visible (these can be overwritten using the callback canDrag).
PM_CollapseState	Integer (see option CollapseState)	Optional, default: -1 – Specifies whether the row of the entity should be expanded or collapsed when displayed the very first time.
PM_HasChildren	Boolean	Optional, default: False – If set to True, then the row representing this entity will be

Entity Property Name	Type	Description
		collapsible/expandable even when there are no children defined. This serves for lazy loading.
PM_MinimumRowHeight	Integer	<p>Optional, default: -1 = value in setting PM_DefaultMinimumEntityRowHeight – Minimum height of the entity row in pixels. This property is useful, when more than one line of text is shown inside the table cells. Proposal: For one line take 36*, for two lines 52, for three lines 68, and so on. In order to have the same height also, when no bar is placed in the row, take the maximum bar height adding 20 (e.g. 42) as minimum.</p> <p>For using word wrapping in table cells, it is necessary to use a table row definition by setting the property PM_TableRowDefinitionID and setting the property WrapMode in a contained table cell definition.</p>
PM_RowCollapsible	Boolean	<p>Optional, default: AL: value of setting PM_DefaultEntityRowCollapsible, C/AL: True – If set to True, then the row representing this entity will be interactively collapsible when children exist.</p>
PM_RowSelectable	Boolean	<p>Optional, default: AL: value of setting PM_DefaultEntityRowSelectable, C/AL: True – If set to True, then the row representing this entity will be selectable.</p>
PM_RowSymbolIDs	JsonArray of Text	<p>Optional, default: empty array – Array of identifiers of the symbols to be shown in the table symbol cell of the beginning of the table row.</p> <p>The symbols will be arranged one below the other. However, if the cell is not high enough to hold all symbols, then the remaining symbols are also arranged side-by-side. If this still does not fit, an additional 'show more' symbol will be displayed.</p> <p>An empty string ("") will cause an 'empty' symbol to be displayed. By this placeholder, you can reserve space for a symbol that may be shown at a later time.</p> <p>Please note: Each symbol will be resized to an image with a width and height of 16 pixels each at a zoom level of 100%.</p>
PM_RowTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a tooltip template.

Entity Property Name	Type	Description
		The template is used for the tooltip that appears on the entity table row.
PM_TableColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the table row. If " (empty string), a default value of the control add-in will be used.
PM_TableRowDefinitionID	Text	Optional, default: " = value of setting PM_DefaultEntityTableRowDefinitionID – Identifier of a TableRowDefinition object that defines the composition of the table row.
PM_TableTextColor	Text (CSS color value)	Optional, default: " (empty string) – Color for the table row texts. If " (empty string), a default value of the control add-in will be used.

4.3 Link

A Link object defines the properties of a single link between activities or allocations.

Links between activities are shown in activities view when the option pm_linksVisibleInActivitiesView is true. Additionally links between allocations are shown in activities view when the options pm_definedAllocationLinksVisibleInActivitiesView and pm_allocationRowsVisibleInActivitiesView are true additionally.

Links between allocations in resources view are shown when the option pm_linksVisibleInResourcesView is true. By default the links between activities are shown as allocation links, but when the option pm_definedAllocationLinksVisibleInResourcesView is true, then the defined allocation links are shown in resources view.

Link Property Name	Type	Description
AddIn_ContextMenuID	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.
AddIn_CustomText 1	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText 2	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText 3	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in

Link Property Name	Type	Description
		TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in the tooltip (formatted in HTML).
ID	Text	Required – Identifier of this link
PM_Color	Text (CSS color)	Optional, default: " (empty string) – Color for the link. If " (empty string), a default value will be used.
PM_DashArray	Text	Optional, default: 'none' – Pattern of dashes and gaps for drawing the line. For further information, please see https://www.w3.org/TR/SVG11/painting.html#StrokeDasharrayProperty or https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/stroke-dasharray . The value 'none' indicates that no dashing is used. In this case, the link is drawn solid.
PM_RoutingType	Integer (see enum LinkRoutingType)	Optional, default: -1 = value of setting PM_DefaultLinkRoutingType – type of the link routing. 1: Curved, 2: Orthogonal
PM_Selectable	Boolean	Optional, default: AL: value of setting PM_DefaultLinkSelectable, C/AL: True – If set to True, then the link will be selectable.
PM_TargetMarker	Integer (see enum LinkMarker)	Optional, default: 1 (FilledArrow) – allows to change the marker at the end (target) of a link.
PM_TooltipTemplateID	Text	Optional, default: " (empty string) – ID of a tooltip template. The template is used for the tooltip that appears on the link.
PM_Width	Integer (≥ 0)	Optional, default: 1 – Line width of the link. The link arrow is also affected by this property.
RelationType	Integer	Optional, default: 0 – The relation type is used for drawing: 0: Finish-Start, 1: Finish-Finish, 2: Start-Start, 3: Start-Finish, 4: SourceDate-Start, 5: SourceDate-Finish, 8: Finish-TargetDate, 10: Start-TargetDate, 12: SourceDate-TargetDate
SourceActivityID	Text	Optional, default: " (empty string) – Identifier of the source activity. This property or SourceAllocationID has to be set.
SourceAllocationID	Text	Optional, default: " (empty string) – Identifier of the source allocation. This property or SourceActivityID has to be set.

Link Property Name	Type	Description
TargetActivityID	Text	Optional, default: " (empty string) – Identifier of the source activity. This property or TargetAllocationID has to be set.
TargetAllocationID	Text	Optional, default: " (empty string) – Identifier of the target allocation. This property or TargetActivityID has to be set.

4.4 PeriodHighlighters

A PeriodHighlighter object is a pure presentation object and defines the properties of a series of time periods that can be shown on each resource row and activity row (see property PM_PeriodHighlighterID there). Each time period can be colored independently and can have a caption. Period highlighters also support the event OnDoubleClicked. In contrast to the grids created by Calendar objects, the time periods do not define work or non-working times, but only highlight time periods visually.

4.4.1 PeriodHighlighter

PeriodHighlighter Property Name	Type	Description
Entries	JsonArray of PeriodHighlighterEntry	Required – Array of entries that contain single time periods.
ID	Text	Required – Identifier of this period highlighter.

4.4.2 PeriodHighlighterEntry

PeriodHighlighterEntry Property Name	Type	Description
AddIn_ContextMenuItemID	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in a tooltip.
Caption	Text	Optional, default: " (empty string) – Text to show on the time period.
CaptionColor	Text (CSS color value)	Optional, default: 'white' – Color of the caption.
Color	Text (CSS color value)	Optional, default: 'rgba(0,0,0,0.1)' – Color of this time period.
End	DateTime	Required – End of the time period.
Start	DateTime	Required – Start of the time period.
PM_TooltipTemplateID	Text	Optional, default: " (empty string) – ID of a tooltip template.

Property Name	Type	Description
		The template is used for the tooltip that appears on the entry.

4.5 Resource

A Resource object defines the properties of a single resource.

Resource Property Name	Type	Description
AddIn_ContextMenuID	Text	Optional, default: " (empty string) – Identifier of a ContextMenu object. The strings in it will be shown as a context menu.
AddIn_CustomText1	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText2	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_CustomText3	Text	Optional, default: " (empty string) – Freely usable property best usable in C/AL where it is not possible to use freely defined properties like with JsonObject. The property name can then be used in TableCellDefinition.SymbolIDSource/TextSource and in TooltipTemplate objects.
AddIn_TableSortCode	Text	Optional, default: " (empty string) – If given, then the neighboring objects in the table in same level are sorted ascending using this value.
AddIn_TableText	Text	Optional, default: " (empty string) – Text to show in the table.
AddIn_TooltipText	Text	Optional, default: " (empty string) – Text to show in the tooltip (formatted in HTML). If the text is empty, then no tooltip is shown.
CalendarID	Text	Optional, default: " (empty string) – Corresponding calendar. If undefined, then the calendar specified by the option defaultCalendarID will be used.
CapacityCurveID	Text	Optional, default: " (empty string) – Identifier of any curve representing the capacity of this resource. If the identifier references a curve

Resource Property Name	Type	Description
		stack, then the summed curve is shown with the color settings of the curve stack.
ID	Text	Required – Identifier of the resource
LoadCurveID	Text	Optional, default: " (empty string) – Identifier of any curve representing the load of this resource. If the identifier references a curve stack, then all curves within the curve stack are shown with their individual color settings as a stack.
ParentID	Text	Optional, default: " (empty string) – Identifier of a parent resource this resource is assigned to. If this property is defined, the parent resource will become a resource group (if not yet a resource group) and it will keep its role as a resource with a capacity of its own. If this property is undefined the current resource will be considered as a root node of the resource hierarchy.
PM_AllocationRowsCollapseState	Integer (see enum CollapseState)	Optional, default: -1 – Specifies whether the allocation rows of the resource should be expanded or collapsed when displayed. See also event <code>OnCollapseStateChanged</code> and setting <code>PM_AllocationRowsVisibleInResourcesView</code> . -1: no change 0: display resource row in an expanded way for allocation rows. 1: display resource row in a collapsed way for allocation rows.
PM_AllocationRowsCollapsible	Boolean	Optional, default: AL: value of setting <code>PM_DefaultResourceAllocationRowsCollapsible</code> , C/AL: True – If set to true, then the row representing this resource row will be interactively collapsible when allocation rows exist.
PM_CollapsedRowDesign	Integer (see enum RowDesigns)	Optional, default: -1 = value in setting <code>PM_DefaultResourceCollapsedRowDesign</code> – Specifies how the time area is filled when the row is collapsed and visible. See enum RowDesigns in the Enumerations chapter for details.
PM_CollapseState	Integer Integer (see enum CollapseState)	Optional, default: -1 – Specifies whether the row of the resource should be expanded or collapsed when displayed in resources view and eventually in loads view (see property <code>PM_CollapseStateInLoadsView</code>). See also event <code>OnCollapseStateChanged</code> .

Resource Property Name	Type	Description
		<p>-1: do not change the way the resource row is displayed 0: display resource row in an expanded way 1: display resource row in a collapsed way</p> <p>See option CollapseState in the Enumerations chapter for details.</p>
PM_CollapseStateInLoadsView	number (see enum CollapseState)	<p>Optional, default: -2 – Specifies whether the row of the resource should be expanded or collapsed when displayed in the loads view. If -2, then the property PM_CollapseState is used for compatibility reasons.</p> <p>See also event OnCollapseStateChanged.</p> <p>-2: fallback to property PM_CollapseState -1: no change 0: display resource row in an expanded way 1: display resource row in a collapsed way</p>
PM_CurveCollapseState	Integer (see enum CollapseState)	<p>Optional, default: -1 – Specifies whether the curves in a resource row should be expanded or collapsed when displayed. See also event OnCurveCollapseStateChanged.</p> <p>-1: no change 0: display curves 1: hide curves</p>
PM_CurveTooltipTemplateID	Text	<p>Optional, default: " (empty string) – ID of a tooltip template.</p> <p>The template is used for the tooltip that appears on the curve area of a resource.</p>
PM_ExpandedRowDesign	Integer (see enum RowDesigns)	<p>Optional, default: -1 = value in setting PM_DefaultResourceExpandedRowDesign – Specifies how the time area is filled when the row is expanded and visible. See enum RowDesigns in the Enumerations chapter for details.</p>
PM_HasChildren	Boolean	<p>Optional, default: False – If set to True, then the row representing this resource will be collapsible/expandable even when there are no children defined. This serves for lazy loading.</p>
PM_HasCurves	Boolean	<p>Optional, default: False – If set to True, then the row representing this resource will be collapsible/expandable for curves even where there are no curves defined. This serves for lazy loading.</p>
PM_MinimumRowHeight	Integer	<p>Optional, default: -1 = value in setting PM_DefaultMinimumResourceRowHeight – Minimum height of the resource row in pixels.</p>

Resource Property Name	Type	Description
		<p>This option is useful, when more than one line of text is shown inside the table cells. Proposal: For one line take 36*, for two lines 52, for three lines 68, and so on. In order to have the same height also, when no bar is placed in the row, take the maximum bar height adding 20 (f.e. 42) as minimum.</p> <p>For using word wrapping in table cells, it is necessary to use a table row definition by setting the property PM_TableRowDefinitionID and setting the property WrapMode in a contained table cell definition.</p>
PM_PeriodHighlighterID	Text	<p>Optional, default: " (empty string) – Reference to a period highlighter object that contains colored time periods. This can be used to show shifts or exceptions to the calendar (see property CalendarID) that defines work and non-work times.</p>
PM_RowCollapsible	Boolean	<p>Optional, default: AL: value of setting PM_DefaultResourceRowCollapsible, C/AL: True – If set to True, then the row representing this resource will be interactively collapsible when children exist.</p>
PM_RowSelectable	Boolean	<p>Optional, default: AL: value of setting PM_DefaultResourceRowSelectable, C/AL: True – If set to True, then the row representing this resource will be selectable.</p>
PM_RowSymbolIDs	JsonArray of Text	<p>Optional, default: empty array – Array of identifiers of the symbols to be shown in the table symbol cell of the beginning of the table row.</p> <p>The symbols will be arranged one below the other. However, if the cell is not high enough to hold all symbols, then the remaining symbols are also arranged side-by-side. If this still does not fit, an additional 'show more' symbol will be displayed.</p> <p>An empty string ('') will cause an empty-symbol to be displayed. By this placeholder, you can reserve space for a symbol that may be shown at a later time.</p> <p>Please note: Each symbol will be resized to an image with a width and height of 16 pixels each at a zoom level of 100%.</p>
PM_RowTooltipTemplateID	Text	<p>Optional, default: " (empty string) – ID of a tooltip template.</p>

Resource Property Name	Type	Description
		The template is used for the tooltip that appears on the resource table row.
PM_TableColor	Text (CSS color)	Optional, default: " (empty string) – Color for the table row. If undefined, a default value of the control add-in will be used.
PM_TableRowDefinitionID	Text	Optional, default: " = value of setting PM_DefaultEntityTableRowDefinitionID – Identifier of a TableRowDefinition object that defines the composition of the table row.
PM_TableTextColor	Text (CSS color)	Optional, default: " (empty string) – Color for the table row texts. If undefined, a default value of the control add-in will be used.
PM_ViewArea	Integer (see enum ViewArea)	Optional, default: Default – If set to Top, then the resource and its children are shown in a separate top view area in the resources view. Only settable on resource with no ParentID set. See setting PM_TopViewAreaVisible.

4.6 Settings

The Settings object is given to the control add-in by using the method SetSettings.

Settings Property Name	Type	Description
AddIn_ActivitySortCodeSources	JsonArray of Text	Optional, default: ["AddIn_TableSortCode", "ID"] – Activity rows are sorted by comparing values of the named properties of the activity objects as following: If the compared activities have the same value of the first property, the values of the second one will be compared and so on. If a property name is prefixed by a minus sign, the activity rows are sorted in descending order concerning the value of this property.
AddIn_AllocationSortCodeSources	JsonArray of Text	Optional, default: ["AddIn_TableSortCode", "ID"] – Allocation rows are sorted by comparing values of the named properties of the allocation objects as following: If the compared allocations have the same value of the first property, the values of the second one will be compared and so on. If a property name is prefixed by a minus sign, the allocation rows are sorted in descending order concerning the value of this property.

Settings Property Name	Type	Description
AddIn_EntitySortCodeSources	JsonArray of Text	Optional, default: <code>["AddIn_TableSortCode", "ID"]</code> – Entity rows are sorted by comparing values of the named properties of the entity objects as following: If the compared entities have the same value of the first property, the values of the second one will be compared and so on. If a property name is prefixed by a minus sign, the entity rows are sorted in descending order concerning the value of this property.
AddIn_ForceFillOfPageSpace	Boolean	Optional, default: False – If set to True, a special function is enabled to resize the control add-in if there are also other control add-ins on the page. This option works for pages of type "Card", "Document", and "List". Due to the complexity of D365 BC's layout algorithm, it cannot be guaranteed that an optimal layout will be achieved in all situations.
AddIn_PingTimeInMilliseconds	Integer (≥ 0)	Optional, default: 0 – If set to a value greater than 0, then the event OnPing is triggered in an interval of the given value in milliseconds. If set to 0, then the event OnPing is not triggered. The timer events serve to hold the session active, so it cannot run into timeout.
AddIn_ResourceSortCodeSources	JsonArray of Text	Optional, default: <code>["AddIn_TableSortCode", "ID"]</code> – Resource rows are sorted by comparing values of the named properties of the resource objects as following: If the compared resources have the same value of the first property, the values of the second one will be compared and so on. If a property name is prefixed by a minus sign, the resource rows are sorted in descending order concerning the value of this property.
AllocationsSelectableOnlyOnOneResourceAtATime	Boolean	Optional, default: False – If set to True, then only allocations of one resource at a time can be selected.
CurrentDate	DateTime	Optional, default: ODT – When set to a valid date, then a darkened area is positioned from the timescale start up to this date. The darkened area can be attributed by using the settings PM_PastBackgroundFillColor/ LineColor/ LineWidth/ LineDashArray.

Settings Property Name	Type	Description
CursorDateLineVisible	Boolean	Optional, default: False – If this setting is set to True, an additional labeled date line will follow the mouse cursor.
CurvePanesVisibleInActivitiesView	Boolean	Optional, default: False – If this setting is set to True, a curve pane is displayed in the ActivitiesView for each activity row. In each pane the curves of the resource first found in an allocation related to the corresponding activity are displayed. Please note: This setting has to be set when instantiating the widget. If it is set later, it has no effect.
DateLineGridMode	Integer (see enum DateLineGridMode)	Optional, default: Weekly – This setting determines the distance of the date lines shown. See also settings PM_DateLineGridColor, PM_DateLineGridDashArray, PM_DateLineGridWidth.
DefaultCalendarID	Text	Optional, default: " (empty string) – Specifies a default calendar to be used in the control add-in. If calendars are defined on activities or resource they will override this calendar. If there is no calendar defined on an activity or a resource and if this default calendar ID is undefined, then the calendar is assumed to be one with constantly non-working time only.
Editable	Boolean	Optional, default: True – If set to False, nothing can be edited.
End	DateTime	Required – End date of the considered time area.
EntitiesTableViewWidth	Integer	Optional, default: -1 – This setting defines the width of the entities table view in pixels. When set to -1, then the control add-in determines the view width automatically.
EntitiesTableVisibleInActivitiesView	Boolean	Optional, default: False – This setting lets appear/disappear the entities table on the right side in the Activities View.
EntitiesTableVisibleInResourcesView	Boolean	Optional, default: False – This setting lets appear/disappear the entities table on the right side in the resources view.
EntitiesTableWidth	Integer	Optional, default: -1 – Not recommended when using TableRowDefinition objects!

Settings Property Name	Type	Description
		This setting defines the width of the entities table. -1 leaves the setting unchanged.
EntitiesTitleText	Text	Optional, default: " (empty string) – This text will be shown in the table header of the entities table. It will appear only when not using TableRowDefinition objects or the setting PM_TableRowDefinitionIDForTitleInEntititiesTable is not set.
FirstDayOfWeek	Integer (allowed values: -1, 0, 1, 2, 3, 4, 5, 6)	Optional, default: -1 – Specifies the first day of a week. 0 = Sunday, 1 = Monday, ... If set unequal -1, this value overwrites the implicit values of the settings WeekNumbering and LocaleId, respectively.
InteractiveActivationOfLoggingEnabled	Boolean	Optional, default: False – If set to True, the user can activate the logging by using the keyboard shortcut shift-ctrl-alt-L. The record symbol will appear, the current state of the widget is saved and from then on all calls to the API are recorded. Pressing shift-ctrl-alt-L once again will stop the recording and download a file with the recorded actions. See also setting LoggingEnabled .
LicenseKey	Text	Optional, default: " (empty string) – The license key has to be set on instantiation of the control add-in. The key itself is provided by NETRONIC. If the key is not set, not valid, or expired, this will be shown in a message on the screen.
Languageld	Text (possible values: see LocaleId)	Optional, default: value of setting LocaleId – This setting will be used for showing regional texts in the timescale. For an example see setting LocaleId .
LocaleId	Text (possible values: '1030' (da-DK), '1031' (de-DE), '2057' (en-GB), '1033' (en-US), '1034' (es-ES), '3082' (es-ES), '1035' (fi-FI),	Optional, default: '1033' – This setting will be used for formatting date and time values in the timescale and numbers in the numeric scales of curves. Sample for AL (including Languageld and TimeZone settings):

Settings Property Name	Type	Description
	'1036' (fr-FR), '1040' (it-IT), '1041' (ja-JP), '1043' (nl-NL), '1044' (nb-NO), '1045' (pl-PL), '1046' (pt-PT), '2070' (pt-BR), '1049' (ru-RU), '1053' (sv-SE), '1054' (th-TH), '2052' (zh-CN)	<pre> var _settings: JsonObject; _sessionSettings: SessionSettings; begin _sessionSettings.Init(); ... _settings.Add('LanguageId', _sessionSettings.LanguageId()); _settings.Add('LocaleId', _sessionSettings.LocaleId()); _settings.Add('TimeZone', _sessionSettings.TimeZone()); ... CurrPage.conVSControlAddIn. SetSettings(_settings); end;</pre>
LoggingEnabled	Boolean	Optional, default: False – If set to True, the record symbol will appear, the current state of the widget is saved and from then on all calls to the API are recorded. Resetting this setting to False will stop the recording and download a file with the recorded actions. See also setting InteractiveActivationOfLoggingEnabled .
MultipleBarDraggingEnabled	Boolean	Optional, default: False – If set to True, all selected bars are dragged at once. Also see events CanDrag , OnDragStart , OnDrop . Currently, the allocation/activity properties PM_EarliestDragStart and PM_LatestDragEnd are not supported when dragging multiple bars. The allocation property SuitableResourceIDs is supported. When dragging starts, the allowed drag modes are taken from the allocation/activity that is dragged directly as default. This is modifiable by using the event CanDrag or one of the settings PM_ForcedActivity/AllocationAllowedBarDragModes .
MultipleSelectionEnabled	Number (allowed values: 0, 1, 2)	Optional, default: 1 – If set to 1 multiple bars can be selected all at once. When using the selection rectangle, a bar is selected even if it is only partially inside the rectangle.

Settings Property Name	Type	Description
		Additionally, if set to 2, the behavior when dragging a selection rectangle from left to right is different from that when dragging from right to left. In the first case, a bar is only selected when it is completely inside the rectangle. In the latter case, it will be selected even if it is only partially inside the rectangle.
NonWorkingTimeVisible	Boolean	Optional, default: True – This option defines whether the common non-working time is visible. The common time is calculated by all calendar information that are relevant to the visualization. Therefore, in task mode the calendars of the activities, in resource mode the calendars of the resources are used.
PM_ActivityBaselineBarsVisible	Boolean	Optional, default: True – If set to False, no baseline bars are displayed for the activities.
PM_ActivityCalendarsEnabled	Boolean	Option, default: False – If set to True, calendars assigned to activities by setting the activity property CalendarID are displayed in the Activities View.
PM_ActivityTableRowDefinitionIDForTitle	Text	Deprecated, see renamed setting PM_TableRowDefinitionIDForTitleInActivitiesView.
PM_AllocationRowsVisibleInActivitiesView	Boolean	Optional, default: False – If set to True, then allocations are shown as own rows below the row of the referenced activity.
PM_AllocationRowsVisibleInResourcesView	Boolean	Optional, default: False – If set to True, then allocations are shown as own rows below the row of the referenced resource.
PM_BottomRowMarginInTimeArea	Integer (> 0)	Optional, default: 5 – Height of the margin between the bottom row border and bars above in pixels. The value is also used for the vertical margins of curve panes. See also settings PM_TopRowMarginInTimeArea and PM_SubRowDistanceInTimeArea.
PM_CalendarGridColor	Text (CSS color value)	Optional, default: '#f0f0f0' – Specifies a color used to color the vertical stripes representing the nonworking times inside the diagram. If a string is given, then the widget uses the color for all view types.

Settings Property Name	Type	Description
PM_CurvePanesCollapsibleInResourcesView	Boolean	Optional, default: True – Specifies whether the curve panes can be interactively collapsed or expanded.
PM_DateLineGridColor	Text (CSS color value)	Optional, default: '#505050' (on weekly or daily grid) and '646464' (on automatic grid) – Color of the date line grid (see also setting DateLineGridMode).
PM_DateLineGridDashArray	Text	Optional, default: '4,1' (on weekly or automatic grid) and '2,1' (on daily grid) – Pattern of dashes and gaps for drawing the date line grid. For further information, please see https://www.w3.org/TR/SVG11/painting.html#StrokeDasharrayProperty or https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/stroke-dasharray . The value "none" indicates that no dashing is used. In this case, the link is drawn solid (see also setting DateLineGridMode).
PM_DateLineGridWidth	Integer	Optional, default: 1 – Width of the date line grid in pixels.
PM_DefaultActivityAllowedBarDragModes	Integer (see enum ActivityBarDragModes)	Optional, default: ActivityBarDragModes.DragHorizontal ly – This setting holds the default for the property PM_AllowedBarDragModes of Activity objects.
PM_DefaultActivityBarHeight	Integer ($\geq 0, \leq 1000$)	Optional, default: 22 – Default height of the activity bars in pixels. See also Activity.PM_BarHeight .
PM_DefaultActivityBarSelectable	Boolean	Optional, default: True – This setting holds the default for the property PM_BarSelectable of Activity objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultActivityBarShape	Integer (see enum ActivityBarShape)	Optional, default: Regular – This setting defines which shape should be used by default for the visualization of activity bars.
PM_DefaultActivityBarTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when an activity object has set the property PM_BarTooltipTemplateID to " (empty string).
PM_DefaultActivityCollapsedRowDesign	Integer (see enum RowDesigns)	Optional, default: 11 – This setting holds the default for the property

Settings Property Name	Type	Description
		PM_CollapsedRowDesign of Activity objects.
PM_DefaultActivityConstraintSymbolColor	Text (CSS color value)	Optional, default: '#646464' – Specifies the color used by default for the symbols visualizing the constraint dates (EarliestStart/End, LatestStart/End, MustStart/EndOn).
PM_DefaultActivityExpandedRowDesign	Integer (see enum RowDesigns)	Optional, default: 11 – This setting holds the default for the property PM_ExpandedRowDesign of Activity objects.
PM_DefaultActivityProgressBackgroundColor	Text (CSS color value)	Optional, default: 'transparent' – Color for the background of the progress bar region for activities.
PM_DefaultActivityRowCollapsible	Boolean	Optional, default: True – This setting holds the default for the property PM_RowCollapsible of Activity objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultActivityAllocationRowsCollapsible	Boolean	Optional, default: True – This setting holds the default for the property PM_AllocationRowsCollapsible of Activity objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultActivityRowSelectable	Boolean	Optional, default: True – This setting holds the default for the property PM_RowSelectable of Activity objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultActivityRowTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when an activity object has set the property PM_RowTooltipTemplateID to " (empty string).
PM_DefaultActivitySnapTargetsForEnd	Integer (see enum SnapTargets)	Optional, default: 8 – This setting holds the default for the property PM_SnapTargetsForEnd of Activity objects.
PM_DefaultActivitySnapTargetsForStart	Integer (see enum SnapTargets)	Optional, default: 8 – This setting holds the default for the property PM_SnapTargetsForStart of Activity objects.
PM_DefaultActivityStatusFrameColor	Text (CSS color value)	Optional, default: "red" – This option holds the default color for the property

Settings Property Name	Type	Description
		PM_StatusFrameColor of Activity objects.
PM_DefaultActivityTableRowDefinitionID	Text	Optional, default: " (empty string) – ID of a TableRowDefinition object that will be used when an activity object has set the property PM_TableRowDefinitionID to " (empty string).
PM_DefaultAllocationAllowedBarDragModes	Integer (see enum AllocationBarDrag-Modes)	Optional, default: DragAutoHorOrVer – This setting holds the default for the property PM_AllowedBarDragModes of Allocation objects. See also setting PM_ForcedAllocationAllowedBarDrag-Modes.
PM_DefaultAllocationAllowedBarDragModesInActivitiesView	Integer (see enum AllocationBarDrag-Modes)	Optional, default: DragHorizontally – This option holds the default for the attribute PM_AllowedBarDragModesInAllocationView of Allocation objects. See also setting PM_ForcedAllocationAllowedBarDragModesInActivitiesView.
PM_DefaultAllocationBarHeight	Integer ($\geq 0, \leq 1000$)	Optional, default: 22 – Default height of the allocation bars in pixels. See also Allocation.PM_BarHeight.
PM_DefaultAllocationBarSelectable	Boolean	Optional, default: True – This setting holds the default for the property PM_BarSelectable of Allocation objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultAllocationBarShape	Integer (see enum AllocationBarShape)	Optional, default: Regular – This setting defines which shape should be used by default for the visualization of allocation bars.
PM_DefaultAllocationBarTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when an allocation object has set the property PM_BarTooltipTemplateID to " (empty string).
PM_DefaultAllocationConstraintsSymbolColor	Text (CSS color value)	Optional, default: '#646464' – Specifies the color used by default for the symbols visualizing the constraint dates (EarliestStart/End, LatestStart/End, MustStart/EndOn).
PM_DefaultAllocationMinimumRowHeight	Integer	Optional, default: 42 – Default minimum height of the allocation rows in pixels. See also Allocation.PM_MinimumRowHeight.
PM_DefaultAllocationProgressBarBackgroundColor	Text (CSS color value)	Optional, default: 'transparent' – Color for the background of the progress bar region for allocations.

Settings Property Name	Type	Description
PM_DefaultAllocationRowDesign	Integer (see enum RowDesigns)	Optional, default: 9 – This setting holds the default for the attribute PM_RowDesign of Allocation objects.
PM_DefaultAllocationRowSelectable	Boolean	Optional, default: True – This setting holds the default for the property PM_RowSelectable of Allocation objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultAllocationRowTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when an allocation object has set the property PM_RowTooltipTemplateID to " (empty string).
PM_DefaultAllocationSnapTargetsForEnd	Integer (see enum SnapTargets)	Optional, default: 11 – This setting holds the default for the property PM_SnapTargetsForEnd of Allocation objects.
PM_DefaultAllocationSnapTargetsForStart	Integer (see enum SnapTargets)	Optional, default: 11 – This setting holds the default for the property PM_SnapTargetsForStart of Allocation objects.
PM_DefaultAllocationTableRowDefinitionID	Text	Optional, default: one table cell with value of property TableText of the referenced allocation object in it – ID of a TableRowDefinition object that will be used in allocation rows when an allocation object has set the property PM_TableRowDefinitionID to "". See setting PM_AllocationRowsVisibleInActivitiesView.
PM_DefaultAllocationStatusFrameColor	Text (CSS color value)	Optional, default: "red" – This option holds the default color for the property PM_StatusFrameColor of Allocation objects.
PM_DefaultEntityAllowedRowDragModes	Integer (see enum RowDragModes)	Optional, default: RowDragModes.DragOutside – This setting holds the default for the property PM_AllowedRowDragModes of Entity objects.
PM_DefaultEntityRowCollapsible	Boolean	Optional, default: True – This setting holds the default for the property PM_RowCollapsible of Entity objects. Attention: Not available in C/AL version! Here always True.

Settings Property Name	Type	Description
PM_DefaultEntityRowSelectable	Boolean	Optional, default: True – This option holds the default for the property PM_RowSelectable of Entity objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultEntityRowTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when an entity object has set the property PM_RowTooltipTemplateID to " (empty string).
PM_DefaultEntityTableRowDefinitionID	Text	Optional, default: " (empty string) – ID of a TableRowDefinition object that will be used when an entity object has set the property PM_TableRowDefinitionID to " (empty string).
PM_DefaultLinkRoutingType	Integer (see enum LinkRoutingType)	Option, default LinkRoutingType.Curved – This setting holds the default for the property PM_RoutingType of Links objects.
PM_DefaultLinkSelectable	Boolean	Optional, default: False – This setting holds the default for the property PM_Selectable of Link objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultLinkTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when a link object has set the property PM_TooltipTemplateID to " (empty string).
PM_DefaultLoadCurvePaneColor	Text (CSS color value)	Optional, default: 'rgba(43,86,158,0.2)' – Color for the background of the load curve pane.
PM_DefaultMinimumActivityRowHeight	Integer	Optional, default: 42 – Default minimum height of the activity rows in pixels. See also Activity.PM_MinimumRowHeight.
PM_DefaultMinimumEntityRowHeight	Integer	Optional, default: 42 – Default minimum height of the entity rows in pixels. See also Entity.PM_MinimumRowHeight.
PM_DefaultMinimumResourceRowHeight	Integer	Optional, default: 42 – Default minimum height of the resource rows in pixels. See also Resource.PM_MinimumRowHeight.
PM_DefaultResourceCollapsedRowDesign	Integer (see enum RowDesigns)	Optional, default: 11 – This setting holds the default for the property PM_CollapsedRowDesign of Resource objects.

Settings Property Name	Type	Description
PM_DefaultResourceExpandedRowDesign	Integer (see enum RowDesigns)	Optional, default: 11 – This setting holds the default for the property PM_ExpandedRowDesign of Resource objects.
PM_DefaultResourceRowCollapsible	Boolean	Optional, default: True – This option holds the default for the property PM_RowCollapsible of Resource objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultResourceRowSelectable	Boolean	Optional, default: True – This setting holds the default for the property PM_RowSelectable of Resource objects. Attention: Not available in C/AL version! Here always True.
PM_DefaultResourceRowTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when a resource object has set the property PM_RowTooltipTemplateID to " (empty string).
PM_DefaultResourceTableRowDefinitionID	Text	Optional, default: " (empty string) – ID of a TableRowDefinition object that will be used when a resource object has set the property PM_TableRowDefinitionID to empty string.
PM_DefaultResourceCurveTooltipTemplateID	Text	Optional, default: " (empty string) – ID of a TooltipTemplate object that will be used when a resource object has set the property PM_CurveTooltipTemplateID to " (empty string).
PM_DefinedAllocationLinksVisibleInActivitiesView	Boolean	Optional, default: False – If set to True and the settings PM_LinksVisibleInActivitiesView and PM_AllocationRowsVisibleInActivitiesView are also True, then links that are defined between allocations are shown additionally.
PM_DefinedAllocationLinksVisibleInResourcesView	Boolean	Optional, default: False – If set to True and the setting PM_LinksVisibleInResourcesView is also True, then links that are defined between allocations are shown instead of calculated allocation links defined by activity links.
PM_DetailedActivityConstraintSymbolsEnabled	Boolean	Optional, default: True – If set to True, there will be shown different symbols

Settings Property Name	Type	Description
		<p>for the constraint dates depending on their constraint types:</p> <ul style="list-style-type: none"> • EarliestStart:  • LatestStart:  • MustStartOn:  • EarliestEnd:  • LatestEnd:  • MustEndOn:  <p>Otherwise, a simple down arrow will be shown: .</p> <p>Please consider to set the setting PM_TopRowMarginInTimeArea when using detailed symbols.</p>
PM_DetailedAllocationConstraintSymbolsEnabled	Boolean	<p>Optional, default: True – If set to True, there will be shown different symbols for the constraint dates depending on their constraint types:</p> <ul style="list-style-type: none"> • EarliestStart:  • LatestStart:  • MustStartOn:  • EarliestEnd:  • LatestEnd:  • MustEndOn:  <p>Otherwise, a simple down arrow will be shown: .</p> <p>Please consider to set the setting PM_TopRowMarginInTimeArea when using detailed symbols.</p>
PM_DragDatesLimitingInteraction	Boolean	<p>Option, default: False – If set to True, then bars cannot be dragged before the value in the property PM_EarliestDragStart and later than PM_LatestDragEnd, respectively.</p>
PM_EntitiesTableHeaderBackgroundColor	Text	<p>Deprecated. Renamed to PM_EntitiesTableTitleBackgroundColor.</p>
PM_EntitiesTableHeaderColumnSeparatorColor	Text	<p>Deprecated. Renamed to PM_EntitiesTableTitleColumnSeparatorColor.</p>
PM_EntitiesTableHeaderHighlightingColor	Text	<p>Deprecated. Renamed to PM_EntitiesTableTitleHighlightingColor.</p>
PM_EntitiesTableHeaderTextColor	Text	<p>Deprecated. Renamed to PM_EntitiesTableTextColor.</p>

Settings Property Name	Type	Description
PM_EntityTableRowDefinitionIDForTitle	Text	Deprecated, see renamed setting PM_TableRowDefinitionIDForTitleInEntitiesTable.
PM_EntitiesTableSymbolColumnBackgroundColor	Text (CSS color value)	Optional, default: 'white' – If set then the symbol column of the entities table will show this color in the background.
PM_EntitiesTableSymbolColumnTitleSymbolIDs	JsonArray of Text	<p>Optional, default: empty array – Array of identifiers of the symbols to be shown in the entities table in the title cell of the symbol column. They will only appear when the setting PM_EntitiesTable-SymbolColumnTitleVisible is set to True.</p> <p>The symbols will be arranged one below the other. However, if the cell is not high enough to hold all symbols, then the remaining symbols are also arranged side-by-side. If this still does not fit, an additional "show more" symbol will be displayed.</p> <p>An empty string ("") will cause an "empty" symbol to be displayed. By this placeholder, you can reserve space for a symbol that may be shown later.</p> <p>Please note: Each symbol will be resized to an image with a width and height of 16 pixels each at a zoom level of 100%.</p>
PM_EntitiesTableSymbolColumnTitleVisible	Boolean	Optional, default: False – If set to True, the symbols specified in the setting PM_EntitiesTableSymbolColumnTitleSymbolIDs will be displayed in the title cell of the symbol column. Otherwise, the title cell will have the same color as defined in the setting PM_Entities-TableHeaderBackgroundColor .
PM_EntitiesTableSymbolColumnVisible	Boolean	Optional, default: False – If set to True, a special column at the left of the entities table will be displayed to show the row symbols of the entities.
PM_EntitiesTableSymbolColumnWidth	Integer	Optional, default: 22 – Width of the symbol column in the entities table in pixels. If set to a value less than the default, it will be set to the default automatically.
PM_EntitiesTableTitleBackgroundColor	Text (CSS color value)	Optional, default: '#646464' – Specifies a color used to color the background of

Settings Property Name	Type	Description
		the entities table header. If a string is given, then the widget uses the color for all view types.
PM_EntitiesTableTitleColumnSeparatorColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the column separators in the entities table header. If a string is given, then the widget uses the color for all view types.
PM_EntitiesTableTitleHighlightingColor	Text (CSS color value)	Optional, default: '#f7c365' – Specifies the color to be used during the interaction, e.g. to highlight the separation line between two adjacent columns when altering the column widths.
PM_EntitiesTableTitleTextColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the text in the entities table header. If a string is given, then the widget uses the color for all view types.
PM_ForcedActivityAllowedBarDragModes	Integer	Optional, default: -1 – If set to a number ≥ 0 , then this value overrides any setting in PM_DefaultActivityAllowedBarDragModes and Activity property PM_AllowedBarDragModes. See also event CanDrag.
PM_ForcedAllocationAllowedBarDragModes	Integer	Optional, default: -1 – If set to a number ≥ 0 , then this value overrides any setting in PM_DefaultAllocationAllowedBarDragModes and Allocation property PM_AllowedBarDragModes. See also event CanDrag.
PM_ForcedAllocationAllowedBarDragModesInActivitiesView	Integer	Optional, default: -1 – If set to a number ≥ 0 , then this value overrides any setting PM_DefaultAllocationAllowedBarDragModesInActivitiesView, Allocation property PM_AllowedBarDragModesInActivitiesView. See also event CanDrag.
PM_IgnoreCalendarOnActivityBarInteractions	Boolean	Optional, default: False – If set to True, then the activity calendar is not taken into account when dragging an activity bar.
PM_IgnoreCalendarOnAllocationBarInteractions	Boolean	Optional, default: False – If set to True, then the resource calendar is not taken into account when dragging an allocation bar.
PM_LinksVisibleInActivitiesView	Boolean	Optional, default: True – If set to False, the activities view does not show links.

Settings Property Name	Type	Description
		When True, it shows at least activity links. See also setting PM_DefinedAllocationLinksVisibleInActivitiesView.
PM_LinksVisibleInResourcesView	Boolean	Option, default: False – If set to True, the resources view shows links. See also setting PM_DefinedAllocationLinksVisibleInResourcesView.
PM_MainViewAreaVisible	Boolean	Optional, default: True – When set to False, then in resources view the main view area is invisible. The main view area contains the rows for resources with PM_ViewArea set to Default. If PM_TopViewAreaVisible is also False, then the main view area will be visible nevertheless.
PM_MaximumSnapDistance	Integer (>= 0)	Optional, default: 8 – Maximum distance in pixels of a currently dragged bar to a snap target, within which a dragged bar will get snapped to the snap target.
PM_MaximumTopViewAreaHeightRatio	Decimal (0 ≤ n ≤ 0.8)	Optional, default: 0.5 – This value determines the maximum height of the top view area. If the resources shown in total are higher than the view then a vertical scroll bar is shown. See also option pm_topViewAreaVisible.
PM_PastBackgroundFillColor	Text	Optional, default: 'rgba(0,0,0,0.2)' – This setting defines the color of the darkened area between timescale start and value of the setting CurrentDate.
PM_PastBackgroundLineColor	Text	Optional, default: 'darkgrey' – This setting defines the color of the date line at the value of the setting CurrentDate.
PM_PastBackgroundLineDashArray	Text	Optional, default: '1,1' – This setting defines the dash array of the date line at the value of the setting CurrentDate.
PM_PastBackgroundLineWidth	Integer	Optional, default: 1 – This setting defines the width of the date line at the value of the setting CurrentDate.
PM_ProgressBarWidthCalculationMode	Integer (see ProgressBarWidthCalculationMode)	Option, default: ProgressBarWidthCalculationMode.ConsiderWorkingTimesOnly – This setting determines how the widths of the progress bars are calculated. Possible values: <ul style="list-style-type: none"> • ConsiderWorkingTimesOnly – If this value is used, it is assumed that there is no progress during non-working times.

Settings Property Name	Type	Description
		<ul style="list-style-type: none"> ConsiderWorkingAndNonworkingTimes – If this value is used, it is assumed that there is progress during both working and non-working times.
PM_ReleaseDueDateConnectionsVisible	Boolean	Optional, default: False – If set to True and an activity has set both a ReleaseDate and a DueDate, a line will be displayed to visually connect both dates: 
PM_ResourceTableRowDefinitionIDForTitle	Text	Deprecated, see renamed setting PM_TableRowDefinitionIDForTitleInResourcesView.
PM_ScrollToObjectAnimationEnabled	Boolean	Optional, default: False – If set to True, then scrolling to the target position is animated when using the method ScrollToObject.
PM_ScrollToObjectHighlightingEnabled	Boolean	Optional, default: True – Specifies whether or not the frame displayed around an object that has been scrolled to by using the ScrollToObject method should flash.
PM_ScrollToObjectHighlightingColor	Text (CSS color value)	Optional, default: '#7f0000' – Color of the frame displayed around an object that has been scrolled to by using the method ScrollToObject.
PM_SelectionColor	Text (CSS color value)	Optional, default: '#ffa000' – Specifies a color used to highlight selected bars, links or table rows. If a string is given, then the widget uses the color for all view types.
PM_SplitterHighlightingColor	Text (CSS color value)	Optional, default: '#ffa000' – Specifies a color used to highlight the splitters when a splitter is dragged. This refers to the splitters between the table or entities table and the Gantt area. If a string is given, then the widget uses the color for all view types.
PM_SubRowDistanceInTimeArea	Integer	Optional, default: 5 – Vertical distance between two bars in pixels. See also PM_TopRowMarginInTimeArea and PM_BottomRowMarginInTimeArea. Please have in mind that symbols are drawn inside this distance.
PM_SuitableResourcesOverlayColor	Text (CSS color value)	Optional, default: 'transparent' – This setting determines the color that is added to resource rows that are

Settings Property Name	Type	Description
		mentioned in the allocation property SuitableResourceIDs when dragging. See setting PM_UnsuitableResourcesOverlayColor.
PM_SymbolColumnBackgroundColor	Text (CSS color value)	Optional, default: 'white' – If set then the symbol column of the activities/resources table will show this color in the background.
PM_SymbolColumnTitleSymbolIDs	JsonArray of Text	<p>Optional, default: empty array – Array of identifiers of the symbols to be shown in the table in the title cell of the symbol column. They will only appear when the setting PM_SymbolColumnTitleVisible is set to True and setting TitleText is not set, so that the table title shows columns.</p> <p>The symbols will be arranged one below the other. However, if the cell is not high enough to hold all symbols, then the remaining symbols are also arranged side-by-side. If this still does not fit, an additional "show more" symbol will be displayed.</p> <p>An empty string ("") will cause an "empty" symbol to be displayed. By this placeholder, you can reserve space for a symbol that may be shown later.</p> <p>Please note: Each symbol will be resized to an image with a width and height of 16 pixels each at a zoom level of 100%.</p>
PM_SymbolColumnTitleVisible	Boolean	Optional, default: False – If set to True, the symbols specified in the setting PM_SymbolColumnTitleSymbolIDs will be displayed in the title cell of the symbol column. Otherwise, the title cell will have the same color as defined in the setting PM_TableHeaderBackgroundColor.
PM_SymbolColumnVisible	Boolean	Optional, default: False – If set to True, a special column at the left of the table will be displayed to show the row symbols of the activities in the Activities view and of the resources in the Resources or Loads view.
PM_SymbolColumnWidth	Integer	Optional, default: 22 – Width of the symbol column on the left side of the table in pixels. If set to a value less than

Settings Property Name	Type	Description
		the default, it will be set to the default automatically.
PM_TableHeaderBackgroundColor	Text	Deprecated. Renamed to PM_TableTitleBackgroundColor.
PM_TableHeaderColumnSeparatorColor	Text	Deprecated. Renamed to PM_TableTitleColumnSeparatorColor.
PM_TableHeaderHighlightingColor	Text	Deprecated. Renamed to PM_TableTitleHighlightingColor.
PM_TableHeaderTextColor	Text	Deprecated. Renamed to PM_TableTitleTextColor.
PM_TableRowDefinitionIDForTitleInActivitiesView	Text	Optional, default: value of setting PM_DefaultActivityTableRowDefinitionID – ID of a TableRowDefinition object that will be used to show the table title in the activities view. In parallel, it is currently only possible to interactively change the column widths for the TableRowDefinition object that is referenced here.
PM_TableRowDefinitionIDForTitleInEntitiesTable	Text	Optional, default: value of setting PM_DefaultEntityTableRowDefinitionID – ID of a TableRowDefinition object that will be used to show the table title in the entities table. In parallel, it is currently only possible to interactively change the column widths for the TableRowDefinition object that is referenced here.
PM_TableRowDefinitionIDForTitleInLoadsView	Text	Optional, default: value of setting PM_TableRowDefinitionIDForTitleInResourcesView or, when undefined, value of setting PM_DefaultResourceTableRowDefinitionID – ID of a TableRowDefinition object that will be used to show the table title in the resources view. In parallel, it is currently only possible to interactively change the column widths for the TableRowDefinition object that is referenced here.
PM_TableRowDefinitionIDForTitleInResourcesView	Text	Optional, default: value of setting PM_DefaultResourceTableRowDefinitionID – ID of a TableRowDefinition object that will be used to show the table title in the resources view. In parallel, it is currently only possible to interactively change the column widths for the TableRowDefinition object that is referenced here.
PM_TableTitleBackgroundColor	Text (CSS color value)	Optional, default: '#646464' – Specifies a color used to color the background of

Settings Property Name	Type	Description
		the table header of the Gantt diagram. If a string is given, then the widget uses the color for all view types.
PM_TableTitleColumnSeparatorColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the column separators in the table header of the Gantt diagram. If a string is given, then the widget uses the color for all view types.
PM_TableTitleHighlightingColor	Text (CSS color value)	Optional, default: '#f7c365' – Specifies the color to be used during the interaction, e.g. to highlight the separation line between two adjacent columns when altering the column widths.
PM_TableTitleTextColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the text in the table header of the Gantt diagram. If a string is given, then the widget uses the color for all view types.
PM_TimeAreaBackgroundColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the background of the time area. If a string is given, then the widget uses the color for all view types.
PM_TimeAreaPanningMode	Integer (see enum PanningMode)	Optional, default: 3 – Specifies, how the widget reacts to user interactions inside the empty space of the time area. Note: When panning with the mouse, this option is only considered if the setting MultipleSelectionEnabled is set to False.
PM_TimescaleBackgroundColor	Text (CSS color value)	Optional, default: '#646464' – Specifies a color used to color the background of the timescale. If a string is given, then the widget uses the color for all view types.
PM_TimescaleHighlightingColor	Text (CSS color value)	Optional, default: '#f7c365' – Specifies the color to be used during the interaction on the timescale, e.g. to highlight the time period under the mouse cursor.
PM_TimescaleInteractionsEnabled	Boolean	Optional, default: True – If set to False, the user cannot interact with the timescale. This means that the smart navigation mechanism and the mouse wheel functionality for spreading or compressing the time area are disabled.

Settings Property Name	Type	Description
PM_TimescaleTextColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the text in the timescale. If a string is given, then the widget uses the color for all view types.
PM_TimescaleTickColor	Text (CSS color value)	Optional, default: 'white' – Specifies a color used to color the ticks in the timescale. If a string is given, then the widget uses the color for all view types.
PM_TimescaleWeekendBackgroundColor	Text (CSS color value)	Optional, default: '#888888' – Specifies a color used to color the background of the weekend cells of the timescale. If a string is given, then the widget uses the color for all view types.
PM_TopBarSymbolsVisible	Boolean	Optional, default: True – If set to False, then no symbols are shown at the top left and top right of allocation bars and activity bars.
PM_TopRowMarginInTimeArea	Integer (> 0)	Optional, default: 10 – Height of the margin between the top row border and bars in pixels. See also settings PM_BottomRowMarginInTimeArea and PM_SubRowDistanceInTimeArea. Please have in mind that symbols are drawn inside this margin.
PM_TopViewAreaVisible	Boolean	Optional, default: False – If set to True, then resources in the resources view are shown in a separate top view area, that have the property PM_ViewArea set to Top. See also setting PM_MaximumTopViewArea-HeightRatio.
PM_UnsuitableResourcesOverlayColor	Text (CSS color value)	Optional, default: 'rgba(0,0,0,0.2)' – This option determines the color that is added to resource rows that are NOT mentioned in the allocation property SuitableResourceIDs when dragging. See setting PM_SuitableResourcesOverlayColor.
PM_WatermarkOpacity	Decimal (>= 0.0, <= 1.0)	Optional, default: 0.2 – Opacity of the watermark. See also setting PM_WatermarkSymbolID. ATTENTION: Setting not usable nor with IE11 neither with the Windows client. Setting not available in C/AL version of control add-in!
PM_WatermarkSymbolID	Text	Optional, default: " (empty string) – Identifier of the symbol to be shown in the time area of the Gantt chart. The symbol is stretched while maintaining the ratio between width and height of

Settings Property Name	Type	Description
		<p>the symbol so that it is as large as possible. See also setting PM_WatermarkOpacity.</p> <p>ATTENTION: Setting not usable nor with IE11 neither with the Windows client. Setting not available in C/AL version of control add-in!</p>
Start	DateTime	Required – Start of the considered time area.
TableViewWidth	Integer	<p>Optional, default: -1 – This setting defines the width of the table view. When set to -1, then the control add-in determines the view width automatically. A change to the vertical splitter is not changing this setting.</p>
TableViewWidthInActivitiesView	Integer	<p>Optional, default: null (means table width) – This setting defines the width of the table view in activities view. A change to the vertical splitter is not changing this setting.</p> <p>ATTENTION: Setting not available in C/AL version of control add-in!</p>
TableViewWidthInLoadsView	Integer	<p>Optional, default: null (means table width) – This setting defines the width of the table view in loads view. A change to the vertical splitter is not changing this setting.</p> <p>ATTENTION: Setting not available in C/AL version of control add-in!</p>
TableViewWidthInResourcesView	Integer	<p>Optional, default: null (means table width) – This setting defines the width of the table view in resources view. A change to the vertical splitter is not changing this setting.</p> <p>ATTENTION: Setting not available in C/AL version of control add-in!</p>
TableViewWidthsSynchronized	Boolean	<p>Optional, default: True – This setting defines whether an interactive change of the table view width sets the view width of all views or not.</p> <p>ATTENTION: Setting not available in C/AL version of control add-in!</p>
TableWidth	Integer	<p>Optional, default: -1 – Not recommended when using TableRowDefinition objects!</p>

Settings Property Name	Type	Description
		This setting defines the width of the table. When TableRowDefinition objects are not used, it is advisable to set this option to a value equal to or greater than the maximum sum of the column widths defined in the column definitions for the Gantt table (see also onDetermineColumnDefinitions).
TimeStepUnit	Text (one of 'second', 'minute', 'hour', 'day')	<p>Optional, default: 'second' – Unit for time steps on horizontal drag interactions of bars. See setting TimeStepUnitFactor.</p> <p>Attention! Currently, the dates of the bars as well as the dates in the calendar must not be defined more finely than this unit together with the TimeStepUnitFactor indicate. Otherwise, unexpected jumps will occur when moving bars.</p>
TimeStepUnitFactor	Integer (>= 1)	<p>Optional, default: 1 – Number of units for a single time step on horizontal drag interactions of bars. See setting TimeStepUnit.</p> <p>Attention! Currently, the dates of the bars as well as the dates in the calendar must not be defined more finely than this factor together with the TimeStepUnit indicate. Otherwise, unexpected jumps will occur when moving bars.</p>
TimeZone	Text	<p>Optional, default: " (empty string) – Time zone setting like in SessionSettings object of Dynamics 365 BC and Dynamics NAV. When set to an empty string, then the time zone of the machine is used (browser default).</p> <p>For an example see setting LocaleId.</p>
TitleText	Text	<p>Optional, default: " (empty string) – This text will be shown in the table header.</p> <p>It will appear only when not using TableRowDefinition objects or the property PM_TableRowDefinitionIDForTitleInActivities/Resources/LoadsView appropriate to the corresponding view type is not set.</p>

Settings Property Name	Type	Description
TooltipDelay	Integer > 0	Optional, default: 500 – This option determines a delay in milliseconds until a tooltip gets visible.
ViewType	Integer (see option ViewType)	Optional, default: ViewType.Resources – Determines the type of view. In the resources view and in the loads view the table shows resources, in the activities view the table shows activities. All views show the objects in hierarchical order.
VisualZoomFactor	Decimal	Optional, default: 1.0 – Factor used to zoom in (>1) and out (<1) the whole widget. Values <= 0 will be ignored.
WeekNumbering	Text (currently possible values: 'ISO8601', 'USA', '')	Optional, default: " (empty string) – This option determines the first day of the week (ISO8601: Monday, USA: Sunday) and the week numbering scheme. If set to undefined, then the implicit setting of the setting LocaleID is used.
WorkDate	DateTime	Optional, default: ODT – Date on which the work date line will be displayed (if outside of the time range between start and end of the time area, then no work date line will be displayed).
WorkDateLineCaption	Text	Optional, default: " (empty string) – Text to be displayed at the work date line.
WorldViewExtent	Integer	Optional, default: 150 – Defines the extent of the world view in pixels.
WorldViewPosition	Integer (see enum WorldViewPosition)	Optional, default: Bottom – Defines the position of the world view within the control add-in.
WorldViewVisible	Boolean	Optional, default: False – If set to true, then a world view is visible at the bottom of the Gantt chart. Only the table row background colors and bar colors are shown. Also date lines and separation lines between left table, timescale, top view area are shown. Additionally, selections are shown and frames for the visible parts shown in the widget (separately for table and time area). These frames can also be dragged to modify the visible parts.

4.7 Symbol

A Symbol object defines the properties of a single symbol. Symbols are used by resources, activities, and allocations. They can be displayed at different locations inside the table and the diagram area.

Please note: The symbols will be resized to an image with an appropriate width and height depending on their application. Therefore, when designing the symbols, you should ensure that they are clearly recognizable and visually distinguishable. For more details regarding the size, please see the descriptions of the properties related to symbols.

It is not possible to use paths in the property URL, but instead you have the possibility to use 'data URLs', that can be created using an online service (e.g. <https://websemantics.uk/tools/image-to-data-uri-converter/>) to convert your SVG file to a string containing the SVG.

One hint: If the symbol is not shown correctly scaled in the NAV/BC Windows client, maybe the SVG tag inside the symbol does not contain the property viewBox that has to be added in that case.

Another hint: If you want to use our method saveAsPDF, then you will have to ensure that your SVG image files do not contain <style> tags, since the contained selectors may change the appearance of the exported SVG content. In a case of existing <style> try to replace them by using style attributes on other tags. We can help if there are problems arising.

Symbol Property Name	Type	Description
ID	Text	Required – Identifier of this symbol
URL	Text	Required – URL of a SVG image containing the symbol. Two types of URLs are allowed: <ul style="list-style-type: none">• absolute URL (e.g. 'https://www.aaazzz.com/symbol.svg')• relative URL (e.g. 'images/symbol.svg') – In this case, the anchor path for the symbol directory is the application directory.• Data URI (e.g. 'data:image/svg+xml;base64,...'). See https://en.wikipedia.org/wiki/Data_URI_scheme

4.8 TableRowDefinitions

A TableRowDefinition object defines the composition of a table row containing one or more cells. You can reference these objects with the property PM_TableRowDefinitionID of Activity, Resource, and Entity objects. It is possible to declare one table row definition to provide the table title for the views and the entities table by using the settings PM_TableRowDefinitionIDForTitleActivities/Resources/LoadsView or PM_TableRowDefinitionIDForTitleInEntitiesTable.

4.8.1 TableRowDefinition

TableRowDefinition Property Name	Type	Description
BackgroundColor	Text (CSS color)	Optional, default: "" (empty string) – Background color of the table row. Would be overlayed by the background color of the table row defined in the property PM_TableColor of the row object.

Property Name	Type	Description
CellDefinitions	JsonArray of JsonObject (TableCellDefinition objects)	Optional, default: [{ Title: "", TextSource: 'TableText', Width: 200, HorizontalAlignment: HorizontalAlignment.Left }] – Array of TableCellDefinition objects.
ID	Text	Required – Identifier of this table row definition.
TextColor	Text (CSS color)	Optional, default: "" (empty string) – TextColor of the table row definition. Would be overlayed by the text color of the table row defined in the property PM_TextColor of the row object.

4.8.2 [TableCellDefinition](#)

Property Name	Type	Description
BackgroundColor	Text	Optional, default: " (empty string) – If set and property BackgroundColorSource is empty or the referenced property on a row object is empty, then this color overlays the background color of the table row defined in the property PM_TableColor of the row object.
BackgroundColorSource	Text	Optional, default: " (empty string) – If set to an object's property name and the value of the referenced property on a row object is not empty, then the value there overlays the background color defined by property BackgroundColor and property PM_TableColor of the row object.
HorizontalAlignment	Integer (see enum HorizontalAlignment)	Optional, default: Left – Horizontal alignment of the shown text. The first column is always shown with left alignment because of the tree symbols on the left side.
HorizontalTitleAlignment	Integer (see enum HorizontalAlignment)	Optional, default: Center – Horizontal alignment of the shown title text. In the entities table the last column is always shown with center alignment.
MaximumWidth	Integer	Optional, default: Infinity – Maximum width of the table cell, when cell width is interactively modified.
MinimumWidth	Integer	Optional, default: 3 – Minimum width of the table cell, when cell width is interactively modified.
TextColor	Text	Optional, default: " (empty string) – If set and property TextColorSource is empty or the referenced property on a row object is empty, then this color overlays the text color of the table row defined in the property PM_TextColor of the row object.
TextColorSource	Text	Optional, default: " (empty string) – If set to an object's property name and the value of the referenced property on a row object is not empty, then the value there overlays the text color

TableCellDefinition Property Name	Type	Description
		defined by property TextColor and property PM_TextColor of the row object.
TextSource	Text	Optional, default: 'TableText' – Property to take the text out of the referencing activity, resource, or entity object.
Title	Text	Optional, default: " (empty string) – When the table row definition, that contains this table cell definition, is referenced by one of the settings PM_TableRowDefinitionIDForTitleActivities/Resources/LoadsView, then the title defined here will be shown on the table title.
Width	Integer	Optional, default: 200 – Width of the table cell.
WrapMode	Integer (see enum TextWrapMode)	Optional, default: None – If set, then it is possible to show more than one line of text using newline characters ('\n').

4.9 TooltipTemplate

A TooltipTemplate object describes the appearance of a tooltip in the form of an HTML string. This string describes a DOM subtree and contains placeholders with references to the object properties to be displayed. At runtime, the placeholders are replaced by the values of the referenced object properties. This helps building tooltip texts as a replacement for the properties named AddIn_TooltipText at several objects.

You can use the properties PM_TooltipTemplateID, PM_BarTooltipTemplateID, PM_RowTooltipTemplateID, and PM_CurveTooltipTemplateID of the activities, resources, allocations, links, entities, and period highlighter entries.

TooltipTemplate Property Name	Type	Description
ID	Text	Required – Identifier of this tooltip template.
InnerHTML	Text	<p>Required – HTML string that describes the structure of a tooltip.</p> <p>This string contains the placeholders for object values surrounded by double curly braces {{ }}. For example, based on the following string a tooltip with a table containing three rows of key-value pairs is created, where the values are taken from the object properties "name", "firstName", and "age" (for C/AL free definition of object properties is not possible, please see properties AddIn_CustomText1/2/3 for this purpose):</p> <pre><table> <tr><td>Name: </td><td>{{name}}</td></tr> <tr><td>First name: </td><td>{{firstName}}</td></tr> <tr><td>Age: </td><td>{{age}}</td></tr> </table></pre> <p>As an escape, the use of three open curly braces {{ are displayed as {{.</p>

TooltipTemplate Property Name	Type	Description
		<p>Additionally, the property name can be extended to contain the desired property type as in {{Start:date}}. At the moment only the type 'date' is possible besides 'string' (other property types are converted automatically with <code>toString()</code>). The type 'date' converts date values using the same format as other dates in the timescale and at the dragging date line captions.</p> <p>It is possible to get associated objects by using the following keywords:</p> <ul style="list-style-type: none"> On activities: >Parent, >Calendar On resources: >Parent, >Calendar, >LoadCurve, >CapacityCurve On entities: >Parent On allocations: >Activity, >Resource On links: >SourceActivity, >TargetActivity <p>On associated objects, you can then receive a property by using a prefixed dot: <code>.propertyName</code>.</p> <p>On tooltips for allocations you can get the Entry object by using <code>#Entry</code> as a keyword. On tooltips for curves you can show current values by using <code>#Date</code>, <code>#Capacity</code>, <code>#Load</code>.</p>

5 Control Add-in

This is the central object that an application talks to. Here are methods to add, update and remove the data objects meant above and there also are many settings and events to refine the appearance of the control add-in.

5.1 Methods

Method Name	Parameters	Description
About	-	Shows a dialog with version and copyright information. The dialog can be made visible also directly by the user by pressing <code>Ctrl+Alt+Shift+F12</code> .
AddActivities	activities : JsonArray of Activity	Adds activities. ¹
AddAllocations	allocations : JsonArray of Allocation	Adds allocations. ¹
AddCalendars	calendars : JsonArray of Calendar	Adds calendars. ¹

Method Name	Parameters	Description
AddContextMenu s	contextMenus : JsonArray of ContextMenu	Adds context menus.
AddCurves	curves : JsonArray of Curve	Adds curves. ¹
AddDateLines	dateLines : JsonArray of DateLine	Adds date lines. ¹
AddEntities	entities : JsonArray of Entity	Adds entities. ¹
AddLinks	links : JsonArray of Link	Adds links. ¹
AddPeriodHighlighters	links : JsonArray of PeriodHighlighter	Adds period highlighters. ¹
AddResources	resources : JsonArray of Resource	Adds resources. ¹
AddSymbols	symbols: JsonArray of Symbol	Adds symbols. ¹
AddTableRowDefinitions	tableRowDefinitions: JsonArray of TableRowDefinition	Adds table row definitions. ¹
AddTooltipTemplates	tooltipTemplates: JsonArray of TooltipTemplate	Adds tooltip templates. ¹
CancelSaveAsPDF	-	Cancels the execution of the SaveAsPDF method.
FitTimeAreaIntoView	start : DateTime, end : DateTime	Fits the given time range into the visible area.
FitFullTimeAreaIntoView	-	Fits the whole defined time range into the visible area.
RemoveActivities	activityIDs : JsonArray of Text	Removes activities by putting their IDs into an array. ¹
RemoveAll	-	Removes all objects by putting their IDs into an array. ¹
RemoveAllocations	allocationIDs : JsonArray of Text	Removes allocations by putting their IDs into an array. ¹
RemoveCalendars	calendarIDs : JsonArray of Text	Removes calendars by putting their IDs into an array. ¹
RemoveContextMenu s	contextMenuIDs : JsonArray of Text	Removes context menus by putting their IDs into an array.
RemoveCurves	curveIDs : JsonArray of Text	Removes curves by putting their IDs into an array. ¹
RemoveDateLines	dateLineIDs : JsonArray of Text	Removes date lines by putting their IDs into an array. ¹

¹ After changing the data model, the changes will not become visible until the method "Render" is called. These calls should be made after all changes are made once. If forgotten, there is a timeout which calls the method "Render" automatically, but this eventually leads to flickering within the visualization of the Control Add-in.

Method Name	Parameters	Description
RemoveEntities	entityIDs : JsonArray of Text	Removes entities by putting their IDs into an array. ¹
RemoveLinks	linkIDs : JsonArray of Text	Removes links by putting their IDs into an array. ¹
RemovePeriodHighlighters	periodHighlighterIDs : JsonArray of Text	Removes period highlighters by putting their IDs into an array. ¹
RemoveResources	resourceIDs : JsonArray of Text	Removes resources by putting their IDs into an array. Resources have to be unused to be removable. ¹
RemoveSymbols	symbolIDs : JsonArray of Text	Removes symbols by putting their IDs into an array. ¹
RemoveTableRowDefinitions	tableRowDefinitionIDs : JsonArray of Text	Removes table row definitions. ¹
RemoveTooltipTemplates	tooltipTemplateIDs : JsonArray of Text	Removes tooltip templates. ¹
Render	-	Refreshes the view after changes to data objects. When the application forgets to call this method, then it is called automatically when the application goes idle (but this can lead to flickering in the control add-in's visualization).
SaveAsPDF	fileName : Text, options : JSONObject	<p>Saves the entire chart into a PDF document that is downloaded after creation. Possibly the browser asks whether to wait for completion or not.</p> <p>The optional file name has to be pure (without any path information), and the file will be saved to the downloads folder of the browser by default. If no file name is specified, a new one is generated automatically.</p> <p>The optional options object can be used to specify additional properties for the export. The following attributes are allowed:</p> <ul style="list-style-type: none"> • "BottomPageMargin": Decimal (>= 0.0; default 10.0; in millimeters) • "BottomTimescaleVisible": Boolean (default: False) • "CutMarksVisible": Boolean (default: False) • "HorPageCountLimit": Integer (default: 0=not active, if "zoomFactorInPercent" is 0, then 1) * • "LeftPageMargin": Decimal (>= 0.0; default 10.0; in millimeters) • "PageFormat": Text (default: "A4"; possible values "A0"/"A1"/"A2"/"A3"/"A4"/"A5"/"A6"/"Legal

Method Name	Parameters	Description
		<p>"/"Letter" or "w*h" with width and height in millimeters)</p> <ul style="list-style-type: none"> • "PageOrientation": Integer (default: Portrait; see enum PageOrientation) • "PrintingMode": Integer (default: Cutting, see enum PrintingMode) • "RightPageMargin": Decimal (>= 0.0; default 10.0; in millimeters) • "TopPageMargin": Decimal (>= 0.0; default 10.0; in millimeters) • "VerPageCountLimit": Integer (default: 0=not active, if "zoomFactorInPercent" is 0, then 1) * • "WatermarkSymbolID": Text (default: undefined) • "ZoomFactorInPercent": Decimal (default: 0=not active, else > 0) * <p>In printing mode Single the widget content is placed in one single page (ZoomFactorInPercent and Hor/VerPageCountLimit not respected). In printing mode Paging table and timescale are repeated on each page. In printing mode Cutting the pages are filled that way you can cut the pages and glue them.</p> <p>*If the zoomFactorInPercent is 0 and at least one of hor/verPageCountLimit are 0, then this limit value(s) will be set to 1. This way only a minimum of parameters have to be set to get the expected output. Without setting any parameter you will get a single page as output.</p> <p>When the command is finished asynchronously the event OnSaveAsPDFFinished is triggered.</p> <p>See also method CancelSaveAsPDF and event OnSaveAsPDFProgress.</p> <p>ATTENTION: Method not usable nor with IE11 neither with the Windows client!</p>
ScrollToDate	date : DateTime	Scrolls to the given date and time.
ScrollToDateWithOffset	date : DateTime, offset : Text	Scrolls to the given date and time. The view additionally will be scrolled back by the given offset to get a distance between the left margin of the time area view and the given date. The offset can be a string with <ul style="list-style-type: none"> • a number that specifies a number of pixels (e.g. "50px")

Method Name	Parameters	Description
		<ul style="list-style-type: none"> • a percent string that specifies the size of the offset as a percentage of the time area view width (e.g. "10%").
ScrollToObject	objectType : ObjectType , objectID: Text, targetPositionInView : Integer (see TargetPositions), highlightingEnabled : Boolean	<p>Scrolls to the object (activity/allocation/entity/resource). If the object is not visible, the corresponding rows are expanded automatically.</p> <p>The parameter determines the position of the object in the view after scrolling to it; if set to None, only it will be scrolled if necessary to get the object visible. If highlightingEnabled is set to True, then a (eventually blinking) frame is shown until another method is used or a user interaction takes place.</p> <p>When migrating from 3.x, the new additional two parameters default to 0, True.</p> <p>See also settings PM_ScrollToObjectHighlighting-Color, PM_ScrollToObjectHighlight-FlashingEnabled, PM_ScrollToObjectAnimation-Enabled.</p>
SelectObjects	objectType : ObjectType , objectIDs : JsonArray of Text, visualType: VisualType	<p>Selects the given objects or the objects addressed by the given IDs. In the activity mode only activities can be selected. In the resource mode only resources and allocations can be selected.</p> <p>The parameter visualType is only required in the activity mode if objects of type Activity are to be selected. In this case you can define whether the activity rows (VisualType.Row) or the activity bars (VisualType.Bar) should be selected.</p> <p>It is possible to select objects that are hidden in the collapsed parent object. The OnSelectionChanged event is not triggered by the control add-in.</p>
SetSettings	settings : Settings	Sets settings.
SetTimeResolutionForView	unit : Text ("seconds", "minutes", "hours", "days"), unitCount : number, start : Date	Sets the resolution in the time area view. If start is set to ODT, then the visible start remains unchanged.
UpdateActivities	activities : JsonArray of Activity	Update activities. Allowed changes are modification of all attributes besides ID. ¹
UpdateAllocations	allocations : JsonArray of Allocation	Updates allocations. Allowed changes are modification of all attributes besides ID. ¹

Method Name	Parameters	Description
UpdateCalendars	calendars : JsonArray of Calendar	Updates calendars visually. Allowed changes are modification of all attributes besides ID. ¹
UpdateContextMenus	contextMenus : JsonArray of ContextMenu	Updates context menus. It is allowed to modify all attributes except ID.
UpdateCurves	curves : JsonArray of Curve	Updates curves. Allowed changes are modification of all attributes but ID and Type. ¹
UpdateDateLines	dateLines : JsonArray of DateLine	Updates date lines. ¹
UpdateEntities	entities : JsonArray of Entity	Update entities. Allowed changes are modification of all attributes besides ID. ¹
UpdateLinks	links : JsonArray of Link	Updates links. Allowed changes are modification of all attributes besides ID. ¹
UpdatePeriodHighlighters	links : JsonArray of PeriodHighlighter	Updates period highlighters. ¹
UpdateResources	resources : JsonArray of Resource	Updates resources. Allowed changes are modification of all attributes besides ID. ¹
UpdateSymbols	symbols : JsonArray of Symbol	Updates symbols. Allowed changes are modification of all attributes besides ID. ¹
UpdateTableRowDefinitions	tableRowDefinitions : JsonArray of TableRowDefinition	Updates table row definitions. ¹
UpdateTooltipTemplates	tooltipTemplates : JsonArray of TooltipTemplate	Updates tooltip templates. ¹

5.2 Events

Events are triggered on the start of the control add-in and on user interactions.

Attention: Since there is an issue with the AL environment at least at the moment, dates have to be handled with extra effort. You can see examples in the demonstration app.

At page start-up, the first event sent is OnRequestSettings, followed by OnControlAddInReady after using the method SetSettings.

Event Name	Description
CanDrag(EventArgs)	Optional, default: undefined – This event is triggered when the user is moving the mouse cursor over an activity/allocation or touches an activity/allocation with a finger.

Event Name	Description
	<p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType, 'ObjectID' : Text, 'VisualType' : VisualType, 'EntryIndex'²: Fehler! Textmarke nicht definiert. : Integer, 'AllowedDragModes' : ActivityBarDragModes AllocationBarDragModes, 'SelectedObjectIDs' : JSONArray of Text 'StartPropertyName' : Text², 'EndPropertyName' : Text²</pre> <p>If the application sets the setting PM_ForcedActivity/AllocationAllowedBarDragModes to None. AllowedDragModes contains the value of the property PM_Allowed(Row/Bar)DragModes of the object to drag.</p> <p>If the setting MultipleBarDraggingEnabled is set to True and more than one bar is selected, the property SelectedObjects will contains all selected objects, so that the application can determine the value for AllowedDragModes.</p> <p>If the mouse touches a date symbol or bar of an activity, then the properties Start/EndPropertyName contain the name of the property to be modified when a dragging or dropping the symbol or bar, resp.</p> <p>This callback is called only once every time when the mouse enters the visual representation of the object (bar).</p>
OnClicked(EventArgs)	<p>This event is triggered when an object is clicked by the user.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'EntryIndex'³ : Integer 'Date'⁴ : DateTime 'PeriodHighlighterID'⁵ : Text 'PeriodHighlighterEntryIndex'⁵ : Integer 'CellIndex' : Integer⁶ 'SymbolIndex' : Integer⁷</pre>

² Only set if touching/dragging an activity bar.

³ Available only if ObjectType === ObjectType.Allocation

⁴ Available only if interaction in time area

⁵ Available only if VisualType === VisualType.PeriodHighlighter

⁶ Available only if VisualType === VisualType.Row

⁷ Available only if VisualType === VisualType.Row and symbol in symbol column is clicked

Event Name	Description
	<p>'SymbolID': String⁷</p> <p>On time area and timescale, the ObjectID is "" (empty string).</p>
OnCollapseStateChanged(EventArgs)	<p>This event is triggered when a group was expanded or collapsed either in the table of the Gantt diagram or of the entities table. This can happen:</p> <ul style="list-style-type: none"> • by the user clicking on the appropriate symbol in the group row • by automatic row expansion when dragging objects • by using the method ScrollToObject • by setting the property PM_CollapseState either on a resource, activity, or entity object <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'NewCollapseState' : CollapseState 'IsForAllocationRows' : Boolean 'Interactively' : Boolean</pre>
OnContextMenuItemClicked(EventArgs)	<p>This event is triggered when a context menu item was clicked by the user.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ContextMenuID' : Text 'ContextMenuIndex' : Integer 'ContextMenuCode' : Text 'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'Date' : DateTime</pre>
OnControlAddInReady()	<p>This event is triggered after the control add-in is instantiated and has received settings (at least start and end dates for the time area to show). The control add-in is ready to get data.</p>
OnCurveCollapseStateChanged(EventArgs)	<p>This event is triggered when a curves pane was expanded or collapsed table of the Gantt diagram. This callback is triggered by the user clicking on the appropriate symbol in the resource row.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'NewCollapseState' : CollapseState</pre>
OnDoubleClicked(EventArgs)	<p>This event is triggered when an object is double-clicked by the user.</p>

Event Name	Description
	<p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'EntryIndex'³ : Integer 'Date' : DateTime 'PeriodHighlighterID'⁵ : Text 'PeriodHighlighterEntryIndex'⁵ : Integer 'CellIndex' : Integer⁶ 'SymbolIndex' : Integer⁷ 'SymbolID' : String⁷</pre> <p>On time area and timescale, the ObjectID is "" (empty string).</p>
OnDragEnd(EventArgs)	<p>This event is triggered when the user finishes a dragging action either by dropping the dragged object or by canceling the action.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'EntryIndex'³ : Integer 'DragMode' : ActivityBarDragModes AllocationBarDragModes 'StartPropertyName' : Text² 'EndPropertyName' : Text²</pre> <p>If a date symbol or bar of an activity was dragged, then the properties Start/EndPropertyName contain the name of the property to be modified when a dragging or dropping the symbol or bar, resp.</p>
OnDragStart(EventArgs)	<p>This event is triggered when the user starts a dragging action.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <pre>'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'EntryIndex'³ : Integer 'DragMode' : ActivityBarDragModes AllocationBarDragModes 'StartPropertyName' : Text² 'EndPropertyName' : Text²</pre> <p>If a date symbol or bar of an activity will be dragged, then the properties Start/EndPropertyName contain the name of the property to be modified when a dragging or dropping the symbol or bar, resp.</p>
OnDrop(EventArgs)	<p>This event is triggered when an activity/allocation is dropped by the user after dragging it.</p>

Event Name	Description
	<p>EventArgs object is a JSONObject with the following keys/values:</p> <pre> 'ObjectType' : ObjectType 'ObjectID' : Text 'VisualType' : VisualType 'EntryIndex'³ : Integer 'DragMode' : ActivityBarDragModes AllocationBarDragModes 'NewRowObjectType' : ObjectType 'NewRowObject' : Object 'NewStart' : DateTime 'NewEnd' : DateTime 'NewDate' : Date 'StartPropertyName' : Text² 'EndPropertyName' : Text² 'WorkingTimeDistance' : Integer, /*in milliseconds*/ 'CoupledObjectIDs' : JSONArray of Text, 'StartsAndEndsOfCoupledObjects' : JSONArray of JSONObject </pre> <p>NewStart/NewEnd are filled for dragged bars, while NewDate is filled for dragged date lines.</p> <p>When the setting MultipleBarDraggingEnabled is set to True and more than one object was dragged, then the properties CoupledObjectIDs and StartsAndEndsOfCoupledObjects are set. The latter one contains JSONObjects with the following properties:</p> <pre> 'ObjectID' : Text, 'NewStart' : DateTime, 'NewEnd' : DateTime </pre> <p>Remark: If one of the properties NewStart or NewEnd has a value of ODT, then the user dragged this object outside of the visible time area and there is no working time in the calendar to calculate the appropriate date.</p> <p>If a date symbol or bar of an activity is dropped, then the properties Start/EndPropertyName contain the name of the property to be modified when a dragging or dropping the symbol or bar, resp.</p>
OnPing()	<p>This event is triggered in an interval of number of milliseconds, where the number is given by the setting AddIn_PingTimeInMilliseconds.</p>

Event Name	Description
OnRequestSettings(EventArgs)	<p>This event is triggered after instantiation of the control add-in and only when the method SetSettings was not called before.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <p>'Version' : Text</p>
OnSaveAsPDFFinished()	<p>This event is triggered when the method SaveAsPDF has finished.</p>
OnSaveAsPDFProgress(EventArgs)	<p>This event is triggered constantly during the execution of the SaveAsPDF method. Especially when saving a diagram to a PDF with many pages, this callback is helpful for the application to be continuously informed about the progress of the processing.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <p>'PageCount' : Integer, 'CurrentPage' : Integer</p>
OnSelectionChanged(EventArgs)	<p>This event is triggered when the user selects/deselects an object solely or in addition.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <p>'ObjectType' : ObjectType 0, 'SelectedObjectIDs' : JSONArray of Text 'VisualType' : VisualType 'ObjectID' : Text</p>
OnTableCellDefinitionWidthChanged(EventArgs)	<p>This event is triggered when a table column width is changed interactively.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <p>'TableType' : TableType 'TableRowDefinitionID' : Text 'CellIndex' : Integer 'OldWidth' : Integer 'NewWidth' : Integer</p>
OnTimeAreaViewParametersChanged(EventArgs)	<p>This event is triggered when the time area view is changed, e.g. by scrolling, changes in the time resolution, view size.</p> <p>EventArgs object is a JSONObject with the following keys/values:</p> <p>'ScrollOffset' : Integer 'Width' : Integer 'Start' : DateTime 'End' : DateTime 'TimeResolutionUnit' : Text 'TimeResolutionUnitCount' : Decimal</p>

Event Name	Description
OnVerticalScrollOffsetChanged(EventArgs)	This event is triggered when the Gantt area or the entities table is scrolled vertically. EventArgs object is a JObject with the following keys/values: 'TableType' : TableType 'ScrollOffset' : Integer 'RowObjectTypeAtTop' : ObjectType 'RowObjectIDAtTop' : Text

6 Types

Note for AL developers: For the time being, we have not defined options or enumerations for the types. So you will have to use the number literals in your application.

Note for C/AL developers:

The types are defined in the .NET assembly NETRONIC.DNAV.VSDevToolbox.DataBuilder.

6.1 ActivityBarDragModes

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

None: 0
DragStart: 1
DragEnd: 2
DragHorizontally: 4
DragVertically: 8
DragAutoHorOrVer: 16



6.2 ActivityBarShape

Regular: 0
Summary: 1
Diamond: 2

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

None: 0
DragStart: 1
DragEnd: 2
DragHorizontally: 4
DragVertically: 8
DragAutoHorOrVer: 16

6.4 AllocationBarShape

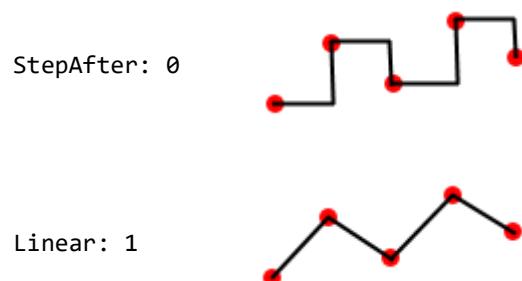
Regular: 0
Summary: 1 // Only to be used if the allocation has only one
// entry

Rectangle: 3 

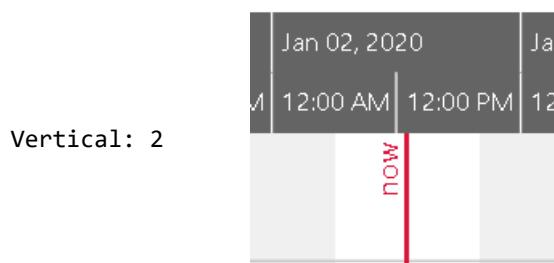
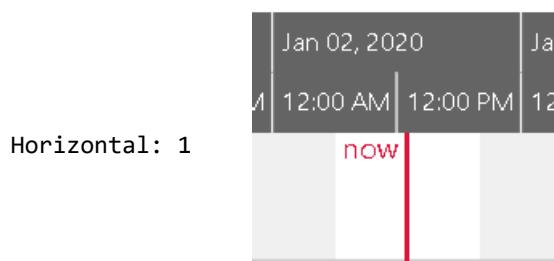
6.5 CollapseState

Unchanged: -1
Expanded: 0
Collapsed: 1

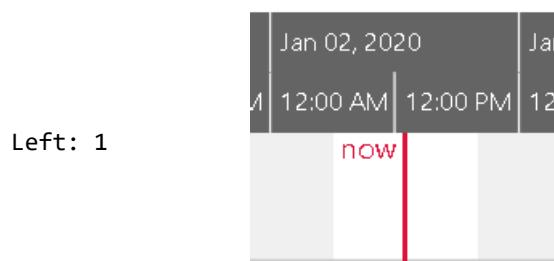
6.6 CurveInterpolationType

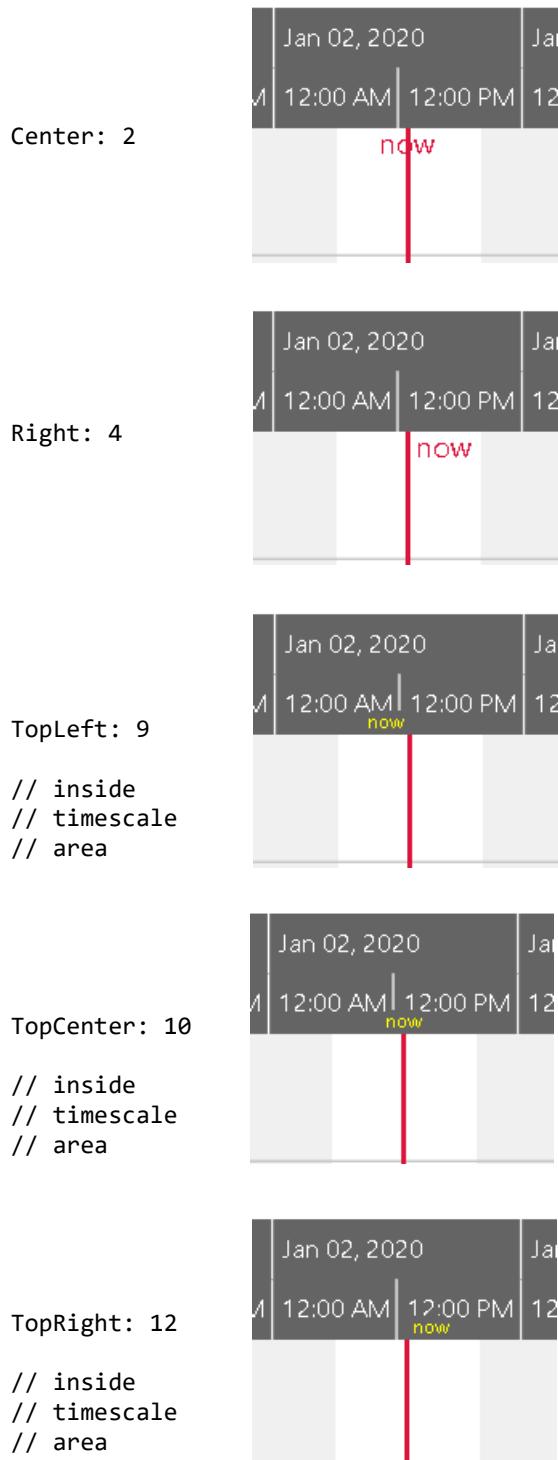


6.7 DateLineCaptionOrientation



6.8 DateLineCaptionPosition





6.9 DateLineGridModes

None: 0
Auto: 1
Weekly: 2
Daily: 4

6.10 HorizontalAlignment

Left: 0
Center: 1
Right: 2

6.11 LinkMarker

None: 0
FilledArrow: 1

6.12 LinkRoutingType

Curved: 1
Orthogonal: 2

6.13 ObjectType

TimeArea: -2
Timescale: -1
Activity: 1
Allocation: 2
Resource: 5
Link: 6
Curve: 7
Entity: 13

6.14 PanningMode

None: 0
HorizontallyOnly: 1
VerticallyOnly: 2
HorAndVer: 3
AutoHorOrVer: 4

6.15 PatternType

VerticalHatch: 0
ForwardHatch: 1
BackwardHatch: 2

6.16 ProgressBarWidthCalculationMode

ConsiderWorkingTimesOnly: 0
ConsiderWorkingAndNonworkingTimes: 1

6.17 RowDesigns

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

Empty: 0	
Bars: 1	// Shows bars assigned to row object directly
Optimized: 2	// Shows all bars without vertical overlapping

```
BarsInHiddenDescendantRows: 4           // Shows bars of other hidden descendant rows
CalendarGrid: 8                      // Shows calendar grid of row object
BarsInHiddenAllocationRows: 16          // Shows bars of allocation rows below
```

6.18 RowDragModes

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

```
None: 0
DragOutside: 32
```

6.19 SnapTargets

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

```
None: 0
Start: 1 // only valid for bars representing allocations
End: 2 // only valid for bars representing allocations
DateLines: 4
CalendarGrids: 8
DateLineGrids: 16
```

6.20 TableType

```
Gantt: 0
Entities: 1
```

6.21 TargetPositions

Note: Values are flags, i.e. they can be combined by using bitwise OR operators.

```
None: 0
Left: 1
HCenter: 2
Right: 4
Top: 8
VCenter: 16
Bottom: 32
```

6.22 TextWrapMode

```
None: 0 // no wrapping at all
Line: 1 // text is wrapped at \n
```

6.23 TimeType

```
WorkingTime: 1
NonWorkingTime: 2
```

6.24 ViewArea

Top: -1
Default: 0

6.25 viewType

Activities: 0
Resources: 1
Loads: 2

6.26 VisualType

Background: -1
Bar: 0
Row: 1
Curve: 2
Link: 3
PeriodHighlighter: 4
DateLine: 5

6.27 WorldViewPosition

Left: 1
Right: 2
Top: 3
Bottom: 4