

Reservation System Control Widget

User Guide

Contents

2	Contents
3	Introduction
3	Description
3	Control system requirements
3	Network infrastructure requirements
3	Settings
4	Using the Reservation System Control Widget
8	Properties
11	Functions
15	Events
16	Structure MeetingInfoStructure
17	Constants

Introduction

Description

Reservation system (RS) enables (with firmware 8.00 or higher) the integration of the RS panels with the Cue control system.

Reservation System Control Widget widget is a set of programming objects that allows easy implementation of basic functions of the reservation system on the control system panels.

The reservation system will transmit the information about the current state of the room (free/occupied, subject of the meeting etc.) to the control system. With the help of this widget it is possible to display this information on the control system panel and perform basic reservation operations (create, cancel, extend and confirm a meeting).

This widget consists of the ReservationSystemControlIntegration applet, a graphics collection ReservationSystemControlGUI and a link module with several commands. The functions and implementation of the ReservationSystemControlIntegration applet are described in a separate **Reservation System Control Integration** manual.

This document describes how to use the control widget and all the necessary settings for the widget to communicate properly with the reservation system panels.

Before you start, read setup guides **touchONE-manager On-premises Administration** and **Essential Setup**, chapter **Control system integration**. There you will find basic information about the reservation system and a description of the common settings of the panels.

Control system requirements

- You need at least one control system touch panel.
- Touch panel must have firmware 12.00 or newer.
- It is recommended to use unit with wired connection to LAN.

Network infrastructure requirements

For the correct operation of the RS unit and control system it is necessary to ensure the following:

- The control system touchpanel has to be connected to the same LAN as the reservation system panels.
- An open TCP port 53128 and UDP port 33333 within the local network for communication between RS panels and control system. Communication between panels is encrypted using AES-256.

Settings

In order to set the Control Integration, it is necessary to:

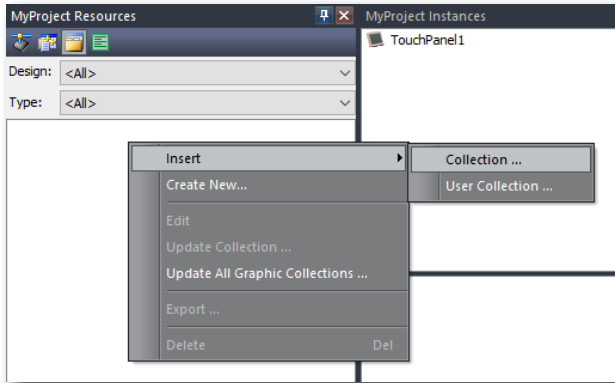
1. Add applet ReservationSystemControlIntegration to IDE resources and use this applet in selected touchpanel.
2. Add Graphic Object ReservationSystemControlGUI
3. Setup the applet Properties and use applet API in your program.
4. Setup the graphic object Properties
5. Upload program with this applet to the control system.
6. Configure the reservation system panels.

Using the Reservation System Control Widget

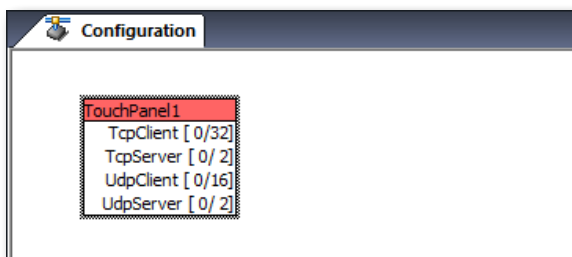
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How to use the Control Widget

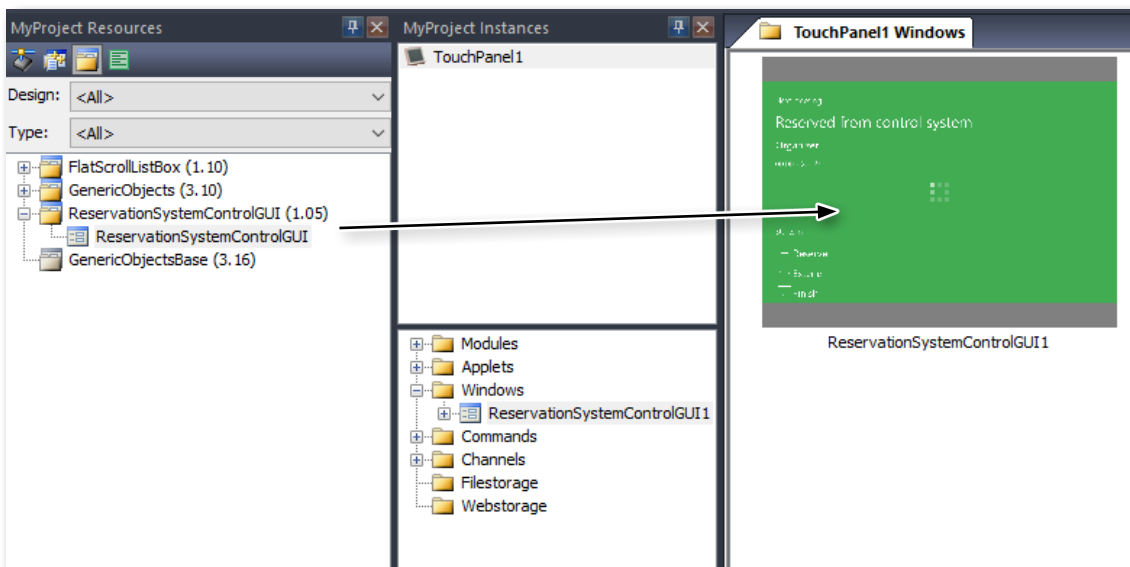
1. Open control system project in IDE.
2. Insert the graphic object ReservationSystemControlGUI to the project resources.



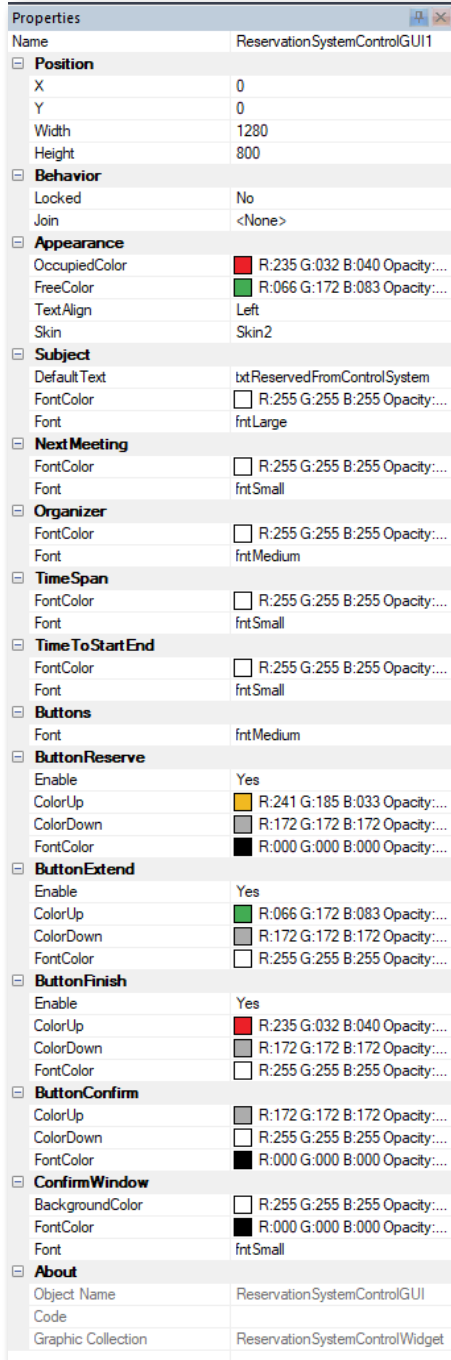
3. Instance of this graphic object must be created in touchpanel. Either insert into the project a new touchpanel or select existing one, where the graphic object will run.



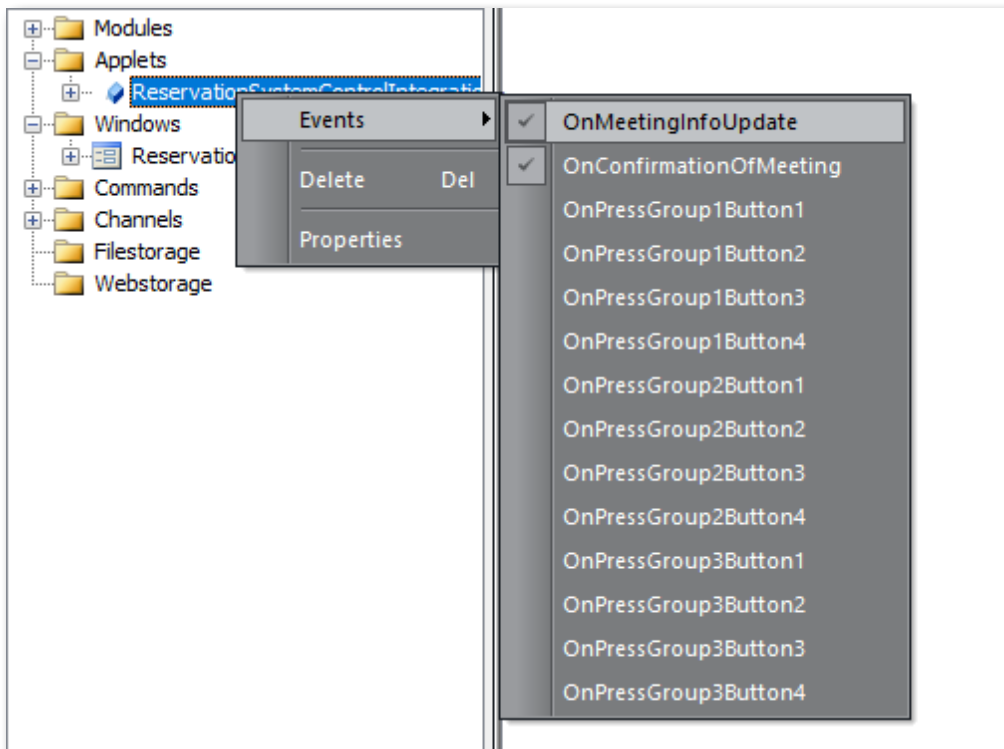
4. Create instance of the ReservationSystemControlGUI in selected touchpanel. ReservationSystemControlGUI is a window (container) type object.



- Set the graphic object properties. Detailed description of properties you can find in the next chapter.



6. Integrate the ReservationSystemControlIntegration applet with ReservationSystemControlGUI. Read **Reservation System Control Integration** manual for information how to use the applet.



Using right-click create skeleton of the processes started by OnMeetingInfoUpdate and OnConfirmationOfMeeting events and add commands to them according to the following example. **ReservationSystemControlGUI1** must be replaced with real name of the ReservationSystemControlGUI object instance.

```
Private Process ReservationSystemControlIntegration1_OnMeetingInfoUpdate (
newmeetinginfo As Namespace "CUE.Applet.ReservationSystemControlIntegration.1".
MeetingInfoStructure ) Link ReservationSystemControlIntegration1.
OnMeetingInfoUpdate

    ReservationSystemControlGUI1.SetActualMeeting (newmeetinginfo)

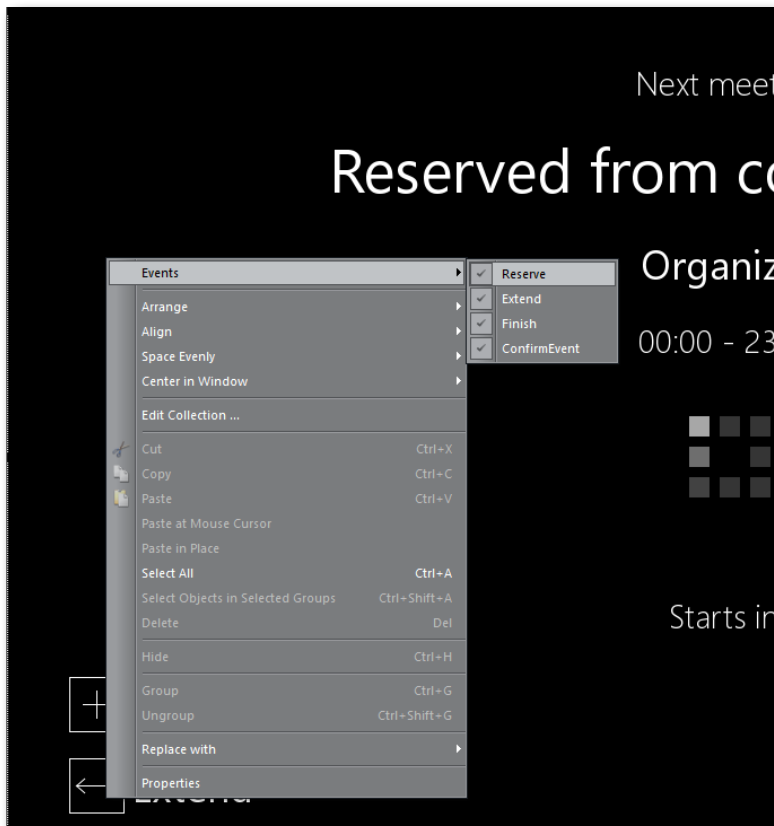
End Process

Private Process ReservationSystemControlIntegration1_
OnConfirmationOfMeeting( newconfirmationinfo As Namespace "CUE.Applet.
ReservationSystemControlIntegration.1".ConfirmationInfoStructure ) Link
ReservationSystemControlIntegration1.OnConfirmationOfMeeting

    ReservationSystemControlGUI1.SetConfirmationIsRequired (newconfirmationinfo.
ConfirmationIsRequired)

End Process
```

In a similar way, create events generated by the ReservationSystemControlGUI object. *ReservationSystemControlIntegration1* must be replaced with real name of ReservationSystemControlIntegration applet instance.



```
Private Process ReservationSystemControlGUI1_Reserve( subject As Text, durationtime
As Time ) Link ReservationSystemControlGUI1.Reserve
```

```
ReservationSystemControlIntegration1.ReserveNow(subject,durationtime)
```

```
End Process
```

```
Private Process ReservationSystemControlGUI1_Extend( extendtime As Time ) Link
ReservationSystemControlGUI1.Extend
```

```
ReservationSystemControlIntegration1.ExtendMeeting(extendtime)
```

```
End Process
```

```
Private Process ReservationSystemControlGUI1_Finish( ) Link
ReservationSystemControlGUI1.Finish
```

```
ReservationSystemControlIntegration1.FinishMeeting()
```

```
End Process
```

```
Private Process ReservationSystemControlGUI1_ConfirmEvent( ) Link
ReservationSystemControlGUI1.ConfirmEvent
```

```
MyLink.SetConfirmationIsRequired(ReservationSystemControlIntegration1.
ConfirmActualMeeting())
```

```
End Process
```

Properties

Property Name	Data Type	Allowed Values	Default Value	Description
Position				
X	Long	0 to screen resolution width		X position of left top corner of object
Y	Long	0 to screen resolution height		Y position of left top corner of object
Width	Long	Depends on the object	Depends on the object	Width of the object
Height	Long	Depends on the object	Depends on the object	Height of the object
Behavior				
Locked	Yes, No	No		By this property it is possible to lock position and size of object in IDE (while programming touch panel, not in runtime).
Join		One of the existing joins	Empty	It is used for joining more objects together (for example Radio Buttons or NavigationBars with Page).
Appearance				
OccupiedColor	Long	Any	COLOR_RED	Color of Occupied background. Occupiedcolor will be displayed in the background if the status is occupied.
FreeColor	Long	Any	COLOR_GREEN	Color of Free background. Freecolor will be displayed in the background if the status is free.
TextsAlign	Long	Left Center	Left	Horizontal align of all texts.
Skin	Long	Skin 1 Skin 2	Skin 2	Skin 1 – Only text in buttons Skin 2 – Icon and text in buttons. For Skin 2, the button colors are preset.
Subject				
DefaultText	Text	Any	“Reserved from control system“	This reservation subject will be entred, when booking a room.
FontColor	long	Any	_COLOR_WHITE	Color of Subject text
Font	AddressOf _Font	Any	fntLarge	fntLarge is Segou UI, Regular 72 pixels high
NextMeeting				
FontColor	long	Any	_COLOR_WHITE	Color of Next meeting text
Font	AddressOf _Font	Any	fntSmall	fntSmall is Segou UI, Regular 40 pixels high
Organizer				
FontColor	long	Any	_COLOR_WHITE	Color of Organizer text
Font	AddressOf _Font	Any	fntMedium	fntMedium is Segou UI, Regular 48 pixels high
TimeSpan				
FontColor	long	Any	_COLOR_WHITE	Color of TimeSpan text
Font	AddressOf _Font	Any	fntSmall	fntSmall is Segou UI, Regular 48 pixels high
TimeToStartEnd				
FontColor	long	Any	_COLOR_WHITE	Color of TimeToStartEnd text
Font	AddressOf _Font	Any	fntSmall	fntSmall is Segou UI, Regular 48 pixels high


Property Name	Data Type	Allowed Values	Default Value	Description
Buttons				
Font	AddressOf_Font	Any	fntMedium	Font of Buttons. fntMedium is Segou UI, Regular 48 pixels high
ButtonReserve				
Enable	Boolean	Yes No	Yes	If making of reservations is allowed, you can use the reserve button to create new meetings. If not, the reserve button is hidden.
ColorUp	long	Any	COLOR_YELLOW	Color of Reserve Button color in state up for Skin1. COLOR_YELLOW = �
ColorDown	long	Any	COLOR_GREY	Color of Reserve Button color in state down for Skin1. COLOR_GREY = �hffacac
FontColor	long	Any	_COLOR_BLACK	Color of Reserve text for Skin1.
ButtonExtend				
Enable	Boolean	Yes No	Yes	If this item is allowed, you can prolong the current meeting. If the item is not allowed, the extend button is hidden.
ColorUp	long	Any	COLOR_RED	Color of Extend Button color in state up for Skin1. COLOR_RED = �HFFeb2028
ColorDown	long	Any	COLOR_GREY	Color of Extend Button color in state down for Skin1. COLOR_GREY = �hffacac
FontColor	long	Any	_COLOR_WHITE	Color of Extend text for Skin1.
ButtonFinish				
Enable	Boolean	Yes No	Yes	If this item is allowed, you can finish the current meeting. If the item is not allowed, the finish button is hidden.
ColorUp	long	Any	COLOR_GREEN	Color of Finish Button color in state up for Skin1. COLOR_GREEN = ��hff42ac53
ColorDown	long	Any	COLOR_GREY	Color of Finish Button color in state down for Skin1. COLOR_GREY = �hffacac
FontColor	long	Any	_COLOR_WHITE	Color of Finish text for Skin1.
ButtonConfirm				
ColorUp	long	Any	COLOR_GREY	Color of Confirm Button color in state down for Skin1. COLOR_GREY = �hffacac
ColorDown	long	Any	COLOR_GREY	Color of Confirm Button color in state up for Skin1. COLOR_GREY = �hffacac
FontColor	long	Any	_COLOR_BLACK	Color of Confirm text for Skin1.
ConfirmWindow				
BackgroundColor	long	Any	_COLOR_WHITE	Color of background Confirm window.
FontColor	long	Any	_COLOR_BLACK	Color of Confirm text.
Font	AddressOf_Font	Any	fntSmall	fntSmall is Segou UI, Regular 48 pixels high

Next meeting

Reserved from panel

Demo room 2
18:00 - 18:15

Starts in 53 min


 Reserve

Next meeting

Reserved from panel

Demo room 2
18:00 - 18:15



Starts in 51 min

 Reserve

Reserved from control system

Demo room 2
16:54 - 17:24



Ends in 20 min

 Extend (30 min)
 Finish

Reserved from control system

Demo room 2
15:24 - 15:54



Ends in 30 min

 Extend (30 min)  Finish

Reservation from panel

demoroom1
15:20 - 15:50


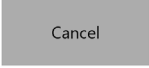
Confirmation of a meeting
If you do not confirm the meeting, reservation will be cancelled.

Reserved from panel

demoroom1
14:30 - 15:00

Confirmation of a meeting
If you do not confirm the meeting, reservation will be cancelled.

Functions

SetActualMeeting(newmeetinginfo As Namespace “CUE.Applet.ReservationSystemControlIntegration.1”.MeetingInfoStructure)

This function sets info of meeting.

ShowObject()

This function shows object. Visible is set to True.

HideObject()

This function hides object. Visible is set to False.

SetObjectDimensions(newwidth As Long, newheight As Long) As Boolean

This function sets dimensions of object to newwidth and newheight values. The function returns True on success or False if an error occurs.

GetObjectDimensions(ByRef currentwidth As Long, ByRef currentheight As Long)

This function returns current size of object in parameters currentwidth and currentheight.

SetObjectPosition(newx As Long, newy As Long) As Boolean

This function sets the position of object to newx and newy values. The function returns True on success or False if an error occurs.

GetObjectPosition(ByRef currentx As Long, ByRef currenty As Long)

This function returns the current position of object in parameters currentx and currenty.

IsObjectVisible() As Boolean

This function returns value of property Visible. This function does not return real visibility of object (object should be hidden behind another object), it returns the information whether the object should be drawn or not.

SetOccupiedColor(newoccupiedcolor As Long)As Boolean

This function sets OccupiedColor to newoccupiedcolor. Occupied color will be displayed in the background if the status is occupied. Function returns True.

GetOccupiedcolor()As Long

This function returns OccupiedColor.

SetFreeColor(newfreecolor As Long)As Boolean

This function sets FreeColor to newfreecolor. Free color will be displayed in the background if the status is free. Function returns True.

GetFreeColor()As Long

This function returns FreeColor.

SetSubjectDefaultText(newtext As Text) As Boolean

This function sets SubjectDefaultText to newtext. The default reserve subject will be entered, when booking a room. Function returns True.

GetSubjectDefaultText() As AddressOf Text

This function returns SubjectDefaultText.

SetSubjectFontColor(newcolor As Long)As Boolean

This function sets SubjectFontColor to newcolor. Function returns True.

GetSubjectFontColor()As Long

This function returns SubjectFontColor.

SetSubjectFont(newfont As AddressOf _Font)As Boolean

This function sets SubjectFont to newfont. Function returns True.

GetSubjectFont()As AddressOf _Font

This function returns SubjectFont.

SetNextMeetingFontColor(newcolor As Long)As Boolean

This function sets NextMeetingFontColor to newcolor. Function returns True.

GetNextMeetingFontColor()As Long

This function returns NextMeetingFontColor.

SetNextMeetingFont(newfont As AddressOf _Font)As Boolean

This function sets NextMeetingFont to newfont. Function returns True.

GetNextMeetingFont()As AddressOf _Font

This function returns NextMeetingFont.

SetOrganizerFontColor(newcolor As Long)As Boolean

This function sets OrganizerFontColor to newcolor. Function returns True.

GetOrganizerFontColor()As Long

This function returns OrganizerFontColor.

SetOrganizerFont(newfont As AddressOf _Font)As Boolean

This function sets OrganizerFont to newfont. Function returns True.

GetOrganizerFont()As AddressOf _Font

This function returns OrganizerFont.

SetTimeSpanFontColor(newfonttimespancolor As Long)As Boolean

This function sets TimeSpanFontColor to newfonttimespancolor. Function returns True.

GetTimeSpanFontColor()As Long

This function returns TimeSpanFontColor.

SetTimeSpanFont(newfont As AddressOf _Font)As Boolean

This function sets TimeSpanFont to newfont. Function returns True.

GetTimeSpanFont()As AddressOf _Font

This function returns TimeSpanFont.

SetTimeToStartEndFontColor(newfonttimetostartendcolor As Long)As Boolean

This function sets TimeToStartEndFontColor to newfonttimetostartendcolor. Function returns True.

GetTimeToStartEndFontColor()As Long

This function returns TimeToStartEndFontColor.

SetTimeToStartEndFont(newfont As AddressOf _Font)As Boolean

This function sets TimeToStartEndFont to newfont. Function returns True.

GetTimeToStartEndFont()As AddressOf _Font

This function returns TimeToStartEndFont.

SetButtonsFont(newfont As AddressOf _Font)As Boolean

This function sets ButtonsFont to newfont. Function returns True.

GetButtonsFont()As AddressOf _Font

This function returns ButtonsFont.

SetButtonReserveFontColor(newcolor As Long)As Boolean

This function sets ButtonReserveFontColor to newcolor. Function returns True.

GetButtonReserveFontColor()As Long

This function returns ButtonReserveFontColor.

SetButtonExtendFontColor(newcolor As Long)As Boolean

This function sets ButtonExtendFontColor to newcolor. Function returns True.

GetButtonExtendFontColor()As Long

This function returns ButtonExtendFontColor.

SetButtonFinishFontColor(newcolor As Long)As Boolean

This function sets ButtonFinishFontColor to newcolor. Function returns True.

GetButtonFinishFontColor()As Long

This function returns ButtonFinishFontColor.

SetButtonConfirmFontColor(newcolor As Long)As Boolean

This function sets ButtonConfirmFontColor to newcolor. Function returns True.

GetButtonConfirmFontColor()As Long

This function returns ButtonConfirmFontColor.

SetButtonReserveColorUp(newcolor As Long)As Boolean

This function sets ButtonReserveColorUp to newcolor. Function returns True.

GetButtonReserveColorUp()As Long

This function returns ButtonReserveColorUp.

SetButtonReserveColorDown(newcolor As Long)As Boolean

This function sets ButtonReserveColorDown to newcolor. Function returns True.

GetButtonReserveColorDown()As Long

This function returns ButtonReserveColorDown.

SetButtonExtendColorUp(newcolor As Long)As Boolean

This function sets ButtonExtendColorUp to newcolor. Function returns True.

GetButtonExtendColorUp()As Long

This function returns ButtonExtendColorUp.

SetButtonExtendColorDown(newcolor As Long)As Boolean

This function sets ButtonExtendColorDown to newcolor. Function returns True.

GetButtonExtendColorDown()As Long

This function returns ButtonExtendColorDown.

SetButtonFinishColorUp(newcolor As Long)As Boolean

This function sets ButtonFinishColorUp to newcolor. Function returns True.

GetButtonFinishColorUp()As Long

This function returns ButtonFinishColorUp.

SetButtonFinishColorDown(newcolor As Long)As Boolean

This function sets ButtonFinishColorDown to newcolor. Function returns True.

GetButtonFinishColorDown()As Long

This function returns ButtonFinishColorDown.

SetButtonConfirmColorUp(newcolor As Long)As Boolean

This function sets ButtonConfirmColorUp to newcolor. Function returns True.

GetButtonConfirmColorUp()As Long

This function returns ButtonConfirmColorUp.

SetButtonConfirmColorDown(newcolor As Long)As Boolean

This function sets ButtonConfirmColorDown to newcolor. Function returns True.

GetButtonConfirmColorDown()As Long

This function returns ButtonConfirmColorDown.

SetSkin(newskin As Long)As Boolean

This function sets Skin to newskin. You can use the following predefined constants for skin:

- 1 = SKIN1
- 2 = SKIN2

The function returns True on success or False if an error occurs (i.e. parameter has wrong value).

GetSkin()As Long

This function returns Skin.

SetTextsAlign(newtextalign As Long)As Boolean

This function sets TextsAlign to newtextalign. You can use the following predefined constants for skin:

- TEXT_ALIGN_LEFT
- TEXT_ALIGN_CENTER

The function returns True on success or False if an error occurs (i.e. parameter has wrong value).

GetTextsAlign()As Long

This function returns TextsAlign.

SetButtonReserveEnable(newenable As Boolean)As Boolean

This function sets ButtonReserveEnable to newenable. Function returns True.

GetButtonReserveEnable()As Boolean

This function returns ButtonReserveEnable.

SetButtonExtendEnable(newenable As Boolean)As Boolean

This function sets ButtonExtendEnable to newenable. Function returns True.

GetButtonExtendEnable()As Boolean

This function returns ButtonExtendEnable.

SetButtonFinishEnable(newenable As Boolean)As Boolean

This function sets ButtonFinishEnable to newenable. Function returns True.

GetButtonFinishEnable()As Boolean

This function returns ButtonFinishEnable.

SetConfirmWindowBackgroundColor(newcolor As Long)As Boolean

This function sets ConfirmWindowBackgroundColor to newcolor. Function returns True.

GetConfirmWindowBackgroundColor()As Long

This function returns ConfirmWindowBackgroundColor.

SetConfirmWindowFontColor(newcolor As Long)As Boolean

This function sets ConfirmWindowFontColor to newcolor. Function returns True.

GetConfirmWindowFontColor()As Long

This function returns ConfirmWindowFontColor.

SetConfirmWindowFont(newfont As AddressOf _Font)As Boolean

This function sets ConfirmWindowFont to newfont. Function returns True.

GetConfirmWindowFont()As AddressOf _Font

This function returns ConfirmWindowFont.

Events

Reserve As Process(subject As Text, durationtime As Time)

This event is generated when reserve button is pressed. Parameter subject is DefaultReserveSubject. Parameter durationtime is duration of the meeting.

Extend As Process(extendtime As Time)

This event is generated when extend button is pressed. Parameter extendtime is time of meeting extension.

Finish As Process()

This event is generated when finish button or cancel confirm event button is pressed.

ConfirmEvent As Process()

This event is generated when confirm button is pressed.

Structure MeetingInfoStructure

Name	Data Type	Allowed Values	Description
Subject	Text [MAX_STATUS_TEXT_LEGTH]*	Any	Subject of current event in the room managed by RS panel.
Organizer	Text [MAX_STATUS_TEXT_LEGTH]*	Any	Organizer of current event in the room.
StartTime	Time	Any	Start time of current or next event in the room. If it is 0:0, there is no scheduled event in the room until the end of the day.
EndTime	Time	Any	End time of current or next event in the room. If it is 0:0, there is no scheduled event in the room until the end of the day.
TimeToStart	Time	Any	Time interval to the beginning of the next event in the room. If it is 0:0, there is no scheduled event in the room until the end of the day or current meeting is in progress.
TimeToEnd	Time	Any	Time interval to the end of the current event in the room. If it is 0:0, there is no current event in the room.
IsOccupied	Boolean	True = Occupied False = Free	Indicates if the room is occupied (red main page, red LED indication on the side of RS panels) or free (green main page, green LED indication on the side of RS panels).
RoomState	Long	0 = ROOM_STATE_FREE_NO_UPCOMMING_MEETING 1 = ROOM_STATE_FREE_SOME_UPCOMMING_MEETING 2 = ROOM_STATE_OCCUPIED 3 = ROOM_STATE_OCCUPIED_BEFORE_MEETING 4 = ROOM_STATE_OCCUPIED_UNCONFIRMED 5 = ROOM_STATE_OCCUPIED_BEFORE_MEETING_UNCONFIRMED	Indicates the room state. Possible values are described in the left.
MaxExtendTime	Time	Any	It is the maximum possible time of event extension in the room, it means maximum allowed value of parameter extendtime in function ExtendMeeting. If it is 0:0, so the room is vacant (there is no event to extend) or there is no free time after current event, so extension is not possible.
OccupancySensorState	Long	0 = OCCUPANCY_SENSOR_STATE_UNKNOWN 1 = OCCUPANCY_SENSOR_STATE_FREE 2 = OCCUPANCY_SENSOR_STATE_OCCUPIED	Evaluation of the occupancy sensors in the room. Possible values are described on the left.

* MAX_STATUS_TEXT_LEGTH = 256

Constants

&hff42ac53 = COLOR_GREEN

&HFFeb2028 = COLOR_RED

&hfff1b921 = COLOR_YELLOW

&hffacacac = COLOR_GREY

1 = SKIN1

2 = SKIN2

_TEXT_ALIGNLEFT BitOr _TEXT_ALIGNVCENTER = TEXT_ALIGN_LEFT

_TEXT_ALIGNHCENTER BitOr _TEXT_ALIGNVCENTER = TEXT_ALIGN_CENTER

0 = SENSITIVITY_UNKNOWN

1 = SENSITIVITY_PUBLIC

2 = SENSITIVITY_PRIVATE

0 = ROOM_STATE_FREE_NO_UPCOMMING_MEETING

1 = ROOM_STATE_FREE_SOME_UPCOMMING_MEETING

2 = ROOM_STATE_OCCUPIED

3 = ROOM_STATE_OCCUPIED_BEFORE_MEETING

4 = ROOM_STATE_OCCUPIED_UNCONFIRMED

5 = ROOM_STATE_OCCUPIED_BEFORE_MEETING_UNCONFIRMED

0 = OCCUPANCY_SENSOR_STATE_UNKNOWN

1 = OCCUPANCY_SENSOR_STATE_FREE

2 = OCCUPANCY_SENSOR_STATE_OCCUPIED