



ScheduleWorX Control

Quick Start



APPLICATION NOTE

September 2013

Description: A guide to configure ScheduleWorX Control to display information from ScheduleWorX64 Server.

OS Requirement: Vista x64/ Windows 7 x64/ Windows 8 x64/ Windows Server 2008 x64/ Windows Server 2008 R2 x64/ Windows Server 2012

General Requirement: A working ScheduleWorX64 Server configuration.

Introduction

This Application note provides guide on how to create and use ScheduleWorX Control in GraphWorX64, WebHMI and PortalWorX-SL. It also demonstrates how to monitor and update existing schedules. ScheduleWorX Control can also be used to override currently running schedules. Note that the control does not allow adding or deleting schedules. ScheduleWorX64 schedules can be created or deleted as well as maintained in Workbench. If you need to find more about ScheduleWorX64 please consult help files or other documentation.

ScheduleWorX Control in GraphWorX64

ScheduleWorX Control can be added to a GraphWorX64 display.

1. Open up **GraphWorX64**
2. In the GraphWorX64, click on Controls tab in the ribbon, and select **Schedule Control**
3. Drop it on the canvas, you can resize it to a suitable size

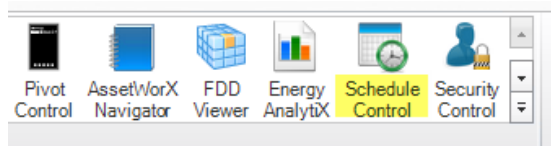


Figure 1 – ScheduleWorX Control in GraphWorX64

Configuring ScheduleWorX Control to Connect to ScheduleWorX64 Server

1. Click on the ScheduleWorX Control. You will see a new tab appears on the ribbon which is called **Schedule Control Configuration**. Click **Edit** to bring up the configuration dialog box

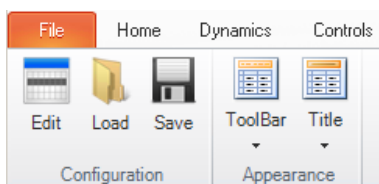


Figure 2 – ScheduleWorX Control Ribbon

2. Click **ScheduleWorX View** to show its properties on Right side. By default ScheduleWoX Control will show six tabs during Runtime. You can toggle these by clicking items under **Visible** column.

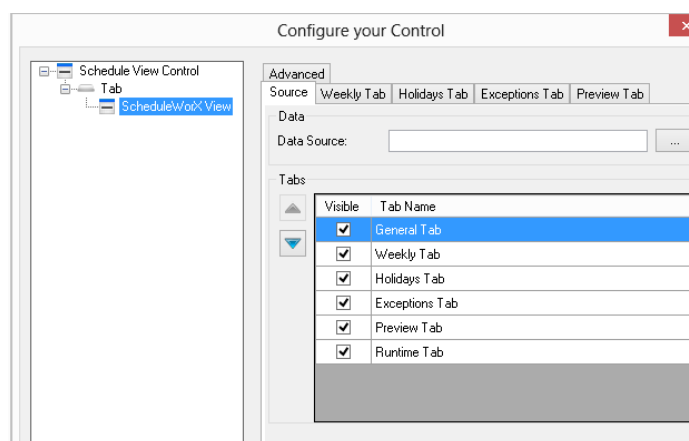


Figure 3 – ScheduleWorX Control Design Mode

3. On **Source** Tab connect to Schedule **Data Source**. Click on ... button next to Data Source and it will show Data Browser. Select a schedule to show in ScheduleWorX Control. Browse Home > OPC Classic Server > My Server > ScheduleWorX64 Schedules > ...

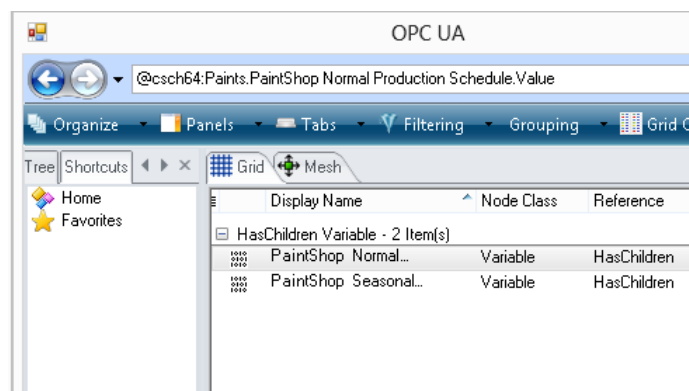


Figure 4 – Unified Data Browser Schedule Sources

Runtime Properties

After configuring basic properties of ScheduleWorX Control you can go into runtime. Once in runtime, it will allow you to View and update selected schedule on GraphWorX64 display. During runtime you can apply changes by clicking on **Apply Schedule** button on runtime ribbon.

Note: Right click in the header region, you can refresh the schedule, apply changes, connect to a different configuration (i.e. a different schedule), save configuration, or show the toolbar.



ScheduleWorX Control

Quick Start



APPLICATION NOTE

September 2013

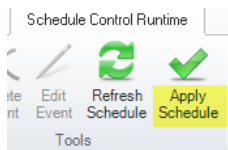


Figure 5 – ScheduleWorX Control Runtime Ribbon

General Tab

On this tab you can view general properties and perform following actions:

- The *Enable Schedule* checkbox gives you option to Activate/Deactivate a schedule.
- You can change the *Scan Rate* (default at 500ms). Scan rate is a rate in which the OPC tags are retrieved and refreshed for schedule changes.
- Select the *Effective Period* that you prefer. By default, it will be running forever unless you deactivate the schedule. If you want the schedule to start at specific date or to end at specific date (or to run in between those dates), you can set it up in this box.
- You can set the default *ValueSet* value from drop down list if there is no specific event described in your schedules.

Figure 6 – General Properties

Weekly Tab

On the Weekly tab you will be able to insert events in here by double-clicking on the timeslot you want and then fill in the details. You can also right-click on the desired timeslot to select the time span that you want and also add a new event. Note that every event that is inserted in the Weekly tab will reoccur automatically every week. You can also select the start/end time of the event if it is not exactly occur in 1-hour format.

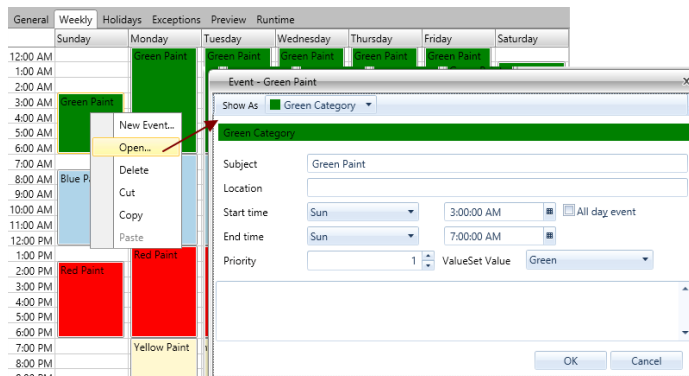


Figure 7 – Add/Update Schedules on Weekly tab

Event priority can also be set up to set different importance to events. For example, if on Sunday at 3 – 7AM there are two weekly events. The one with higher event priority setting will take precedence over the lower priority. After you added all of the required information, you can click Apply, and your schedule is set to run.

Holiday Tab

Click on the Holiday tab in your Schedule control to determine what do on each holiday date

- On Holiday list you will be able to view current Holidays associated with each Schedule. You can associate Holidays from ScheduleWorX64 inside Workbench. You must associate a Holiday List before you can apply any Schedules to it

	Holiday Name	Time Setting	Start Date	Duration	Recurring	Recurrence Rule
>	Boxing Day	Not Assigned	12/26/2010	1	☒	FREQ=YEARLY;BYMONTHDAY
	Christmas Day	Not Assigned	12/25/2010	1	☒	FREQ=YEARLY;BYMONTHDAY
	Queen's Birthday	Not Assigned	6/14/2010	1	☒	FREQ=YEARLY;BYDAY=MO;BY
	Anzac Day	Not Assigned	4/25/2010	1	☒	FREQ=YEARLY;BYMONTHDAY
	New Year's Day	Not Assigned	1/1/2010	1	☒	FREQ=YEARLY;BYMONTHDAY
	Australia Day	Not Assigned	1/26/2010	1	☒	FREQ=YEARLY;BYMONTHDAY

Figure 8 – View Holiday List

- On Holiday Time Settings tab create the Schedule Events that you would like to use on each/all holiday. Press button to add a Time Setting and then on the right side calendar add a new Event associated with a value set.



ScheduleWorX Control

Quick Start



APPLICATION NOTE

September 2013

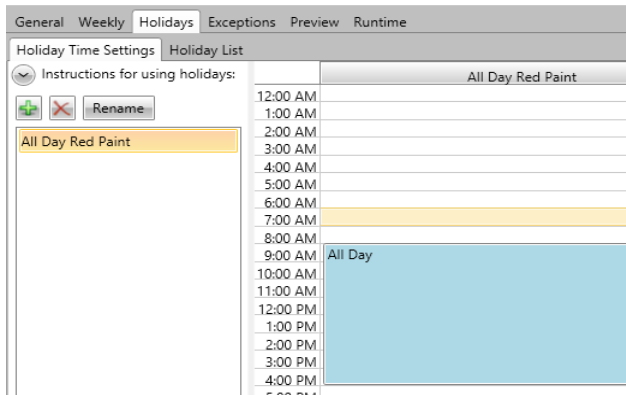


Figure 9 – Manage Holiday Time Settings

Click on Holiday list tab again and associate Time Settings created in previous step with each holiday. You can do this by clicking on dropdown list under Time Setting column.

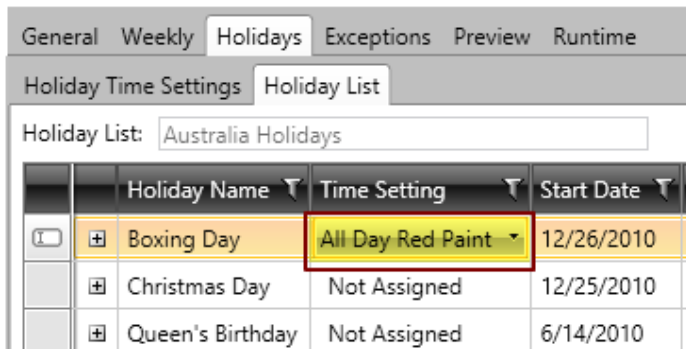


Figure 10 – Associate Holiday time with Holiday

Exceptions Tab

Exception events work similar to events inserted in Weekly tab but exceptions have a higher priority. If in a timeslot exists an exception event and weekly event, the one that will run will be exception event since it is a higher priority. The other difference is that Exception by default will not recur weekly unless you set it up yourself.

Exception gives greater flexibility by allowing the events to be set to reoccur daily, weekly, monthly, annually, or any of those combinations (occur on the third Friday every October, occur on the first week of Monday every 2 months, etc). Exception also gives the option to set the start/end date of the recurrence of a particular exception event (example: Annual meeting on the third week of August occur until August 2015)

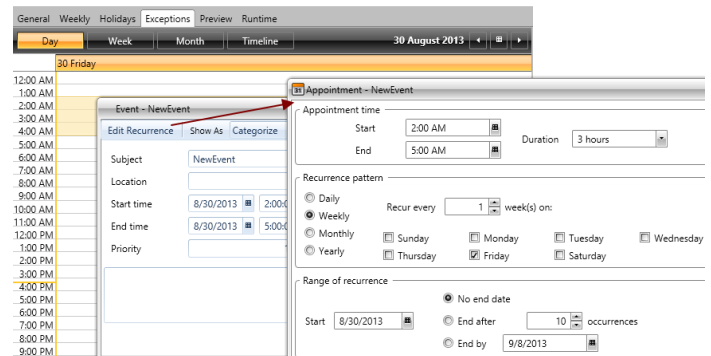


Figure 11 – Adding Exceptions

Preview Tab

Preview Tab allows us to view all Scheduled events in Daily, Weekly, Monthly and Timeline view. This is view only mode and does not allow editing of Events.

Runtime Tab

This Tab allows us to view which Event is currently running and it also allows us to override the event with another value.

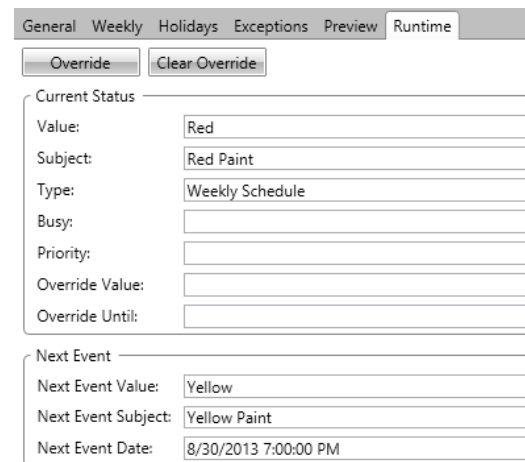


Figure 12 – View current Events and Overrides

Click on Override button to select another Value. You can also override an event temporary for a certain period of time.



ScheduleWorX Control

Quick Start



APPLICATION NOTE

September 2013

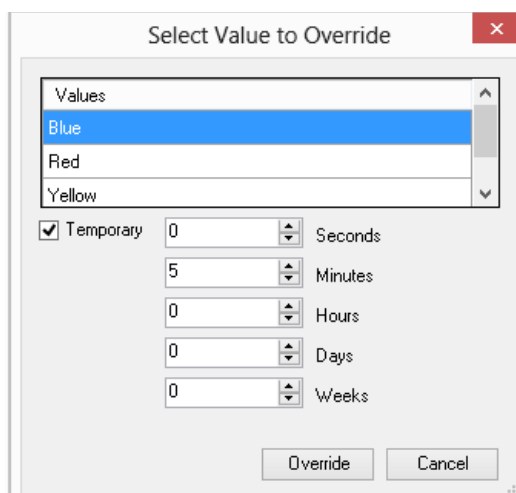


Figure 13 – Apply Overrides

You can clear any overrides by clicking on Clear Override button.

Configuring ScheduleWorX Control to Connect to BACnet Schedule Object

You can use Schedule control to connect to schedule object exposed by BACnet.

1. Insert the control and start editing the configuration as you did in the first section, however, instead of editing the existing ScheduleWorX View right click on Tab and add a new BACnet Schedule View.
2. In the Source tab you can Browse for a schedule via connected BACnet devices. You can also select a data source by entering the desired BACnet device's Device ID and Schedule Instance.

Note: In case you want to connect to a remote FrameWorX Server you can Specify FrameWorX Server Location in the appropriate field.

3. When you enter runtime you may edit the schedule object the same as in Workbench-SL. For more information see the application note called Platform Services – BACnet Schedules.

Configuring ScheduleWorX Control to Connect to BACnet Calendar Object

You can use Schedule control to connect to Calendar object exposed by BACnet.

1. Insert the control and start editing the configuration as you did in the first section, however, instead of editing the

existing ScheduleWorX View right click on Tab and add a new BACnet Schedule View.

2. In the Source tab you can Browse for a calendar via connected BACnet devices. You can also select a data source by entering the desired BACnet device's Device ID and Calendar Instance.

Note: In case you want to connect to a remote FrameWorX Server you can Specify FrameWorX Server Location in the appropriate field.

3. When you enter runtime you may edit the schedule object the same as in Workbench-SL. For more information see the application note called Platform Services – BACnet Schedules.

ScheduleWorX Control in PortalWorX-SL

The following steps show you how to add the control into PortalWorX-SL. Nevertheless ScheduleWorX Control configuration is the same as GraphWorX64 and you can follow the steps in previous sections to configure your ScheduleWorX Control.

1. Launch **PortalWorX-SL**
2. On the new screen, click **ScheduleWorX Viewer** link.

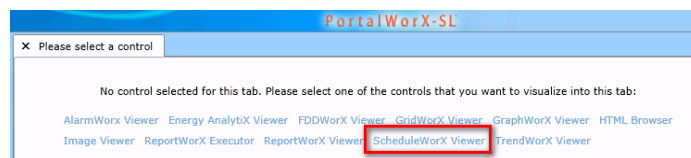


Figure 14 - Add ScheduleWorX Viewer

3. A popup comes up. You will be asked to define the configuration file. By default it will use Default.schxs to connect to the "Facility Management/Floor 1 Lighting" schedule in the sample database. You may browse for another file.

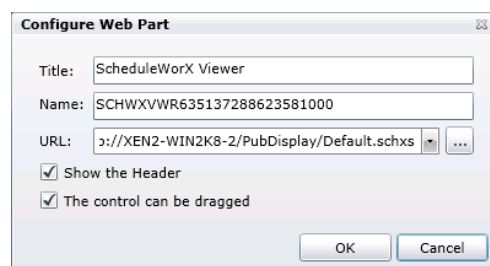


Figure 15 - Configure ScheduleWorX Viewer Connection

4. Press OK. It may take a few seconds to load and then you will see the schedule in PortalWorX-SL.