



After-hours HVAC scheduling made easy



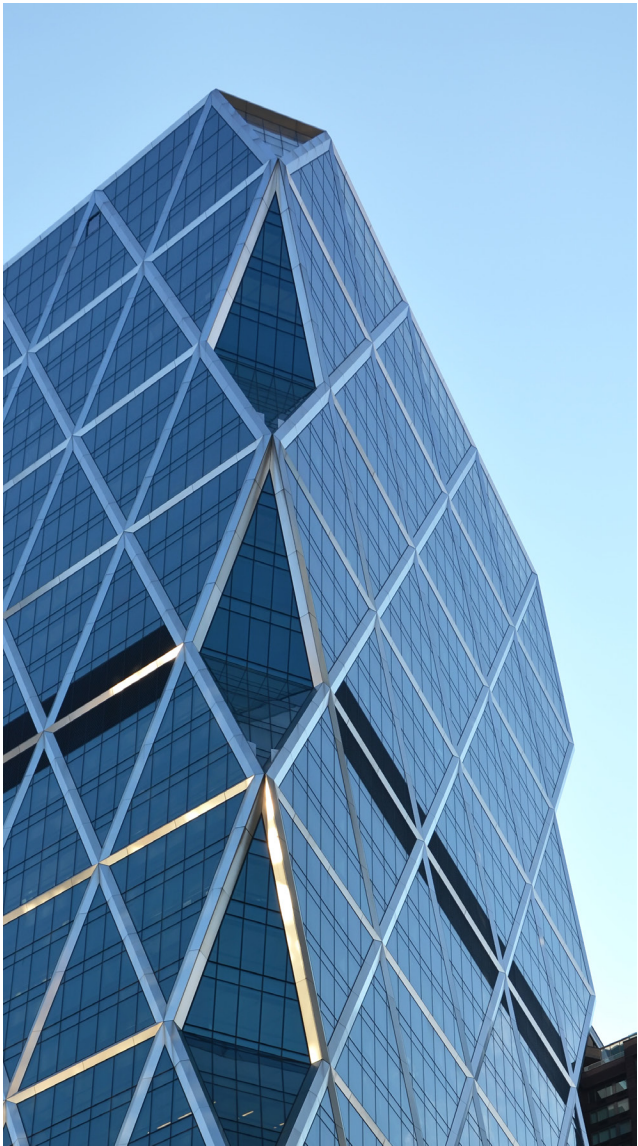
Document Revisions

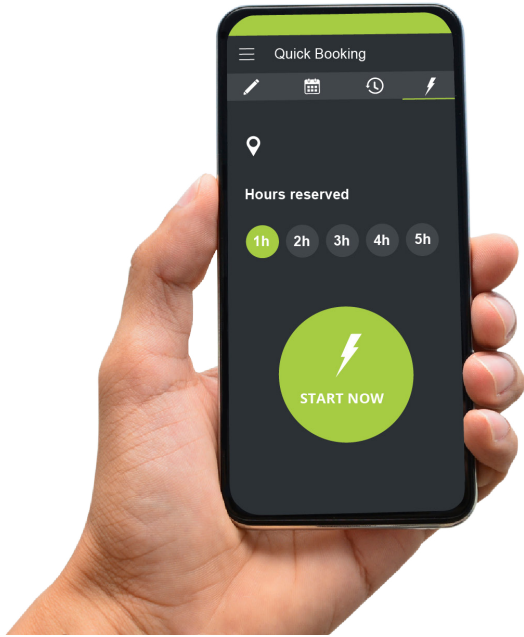
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Revision	Date	By	Comments
1	2/3/2023	OpSys Solution Ltd	Release 3.0

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Welcome to 7NOX!

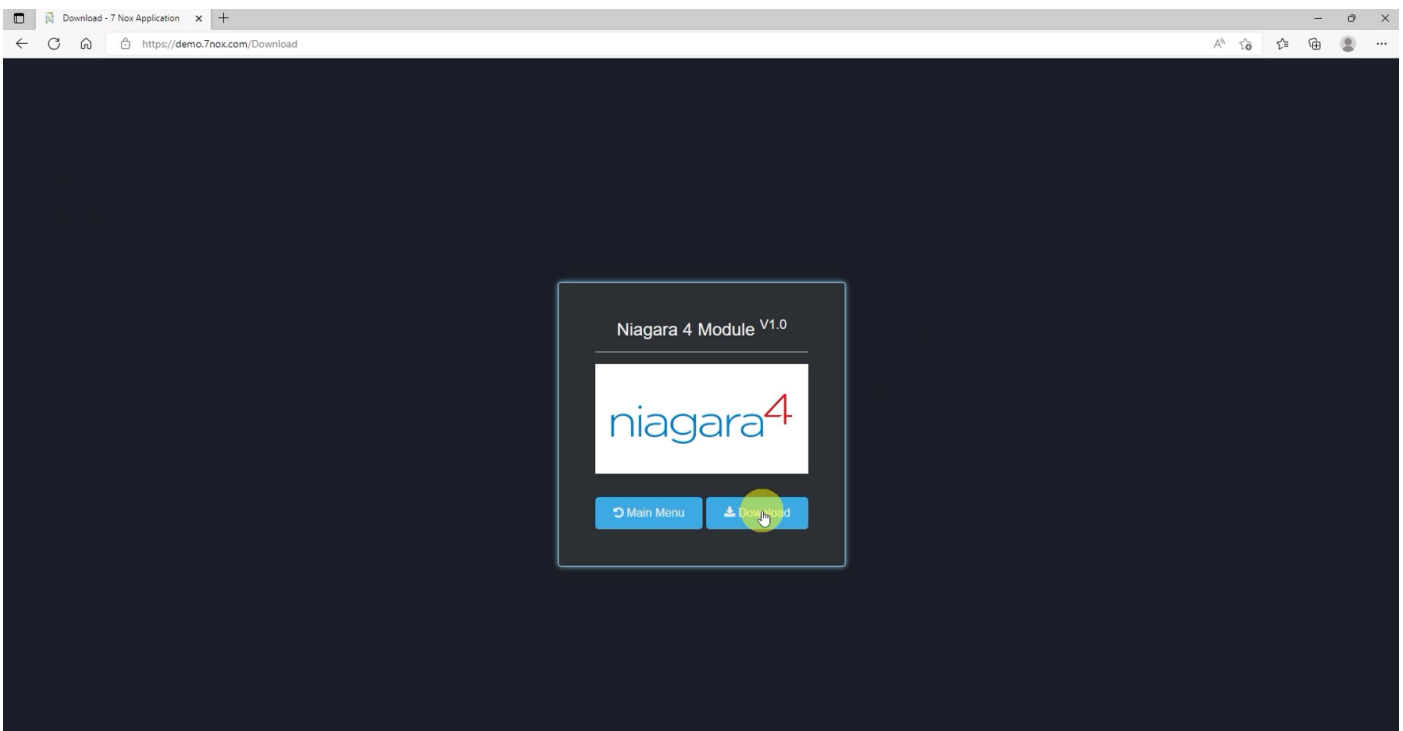
Thanks for choosing 7NOX as your after-hours booking solution! 7NOX is a web-based application you can access from any web browser, such as Google Chrome, Internet Explorer and Microsoft Edge. We also offer a mobile app, which you can install on iOS and Android devices. Download the 7NOX app on the [Apple Store](#) or on [Google Play](#).

We designed this manual to help the **System Integrator** quickly integrate their Niagara 4 system with the 7NOX platform. The manual explains how to interface Niagara® with the 7NOX platform using the new Niagara® module. We also suggest the [Niagara Integration Video](#) as a companion tool. The video covers all of the concepts covered within this manual.

Niagara® 4 Integration

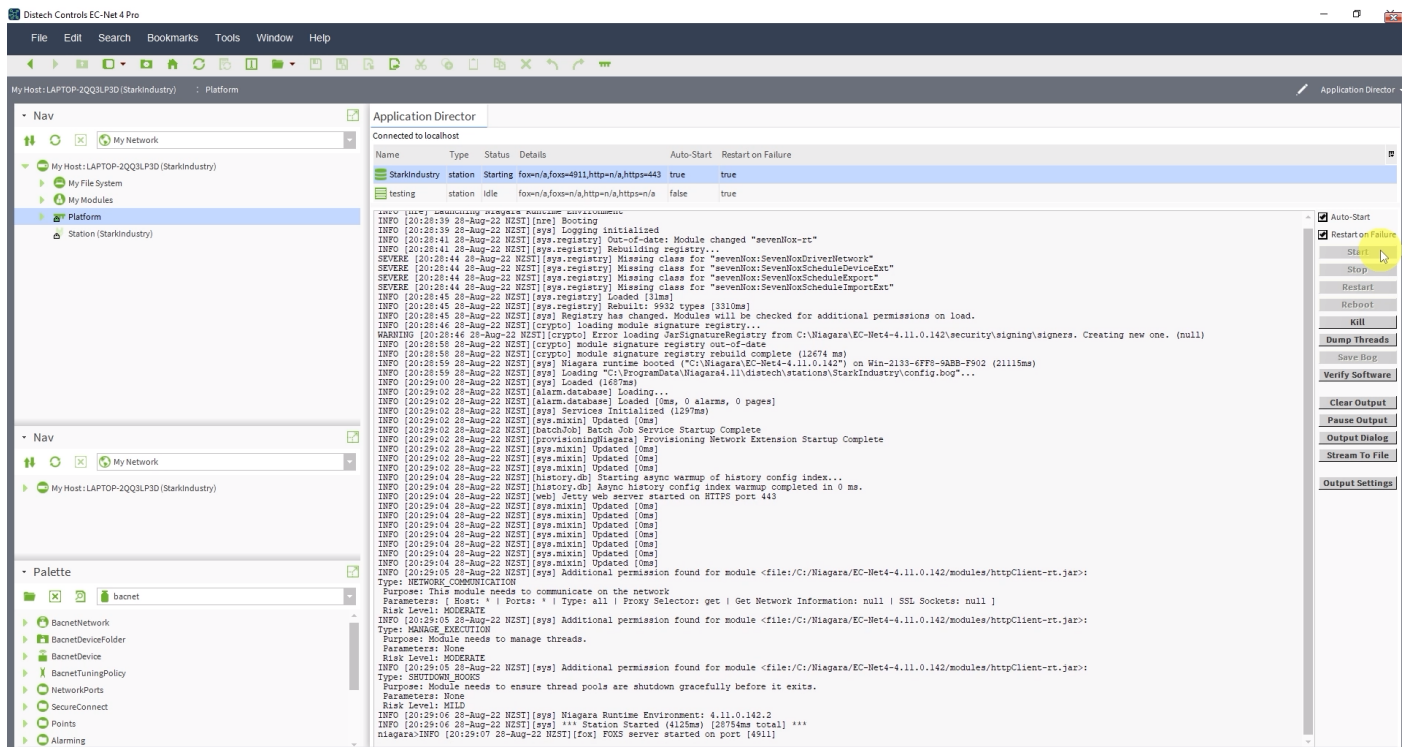
Step 1: Download the 7NOX Module

- 1.1. Before you begin, you'll want to **close your Niagara Workbench® supervisory app** and ensure that the station is not running in application director. If it is running, stop it and close Workbench.
- 1.2. Next, login into the 7NOX Portal. Navigate to the “Download Manager” under the settings menu. Click the download button. Once the module is downloaded, copy and paste the .jar files into the Niagara 4® modules folder. Now, start up Workbench again.



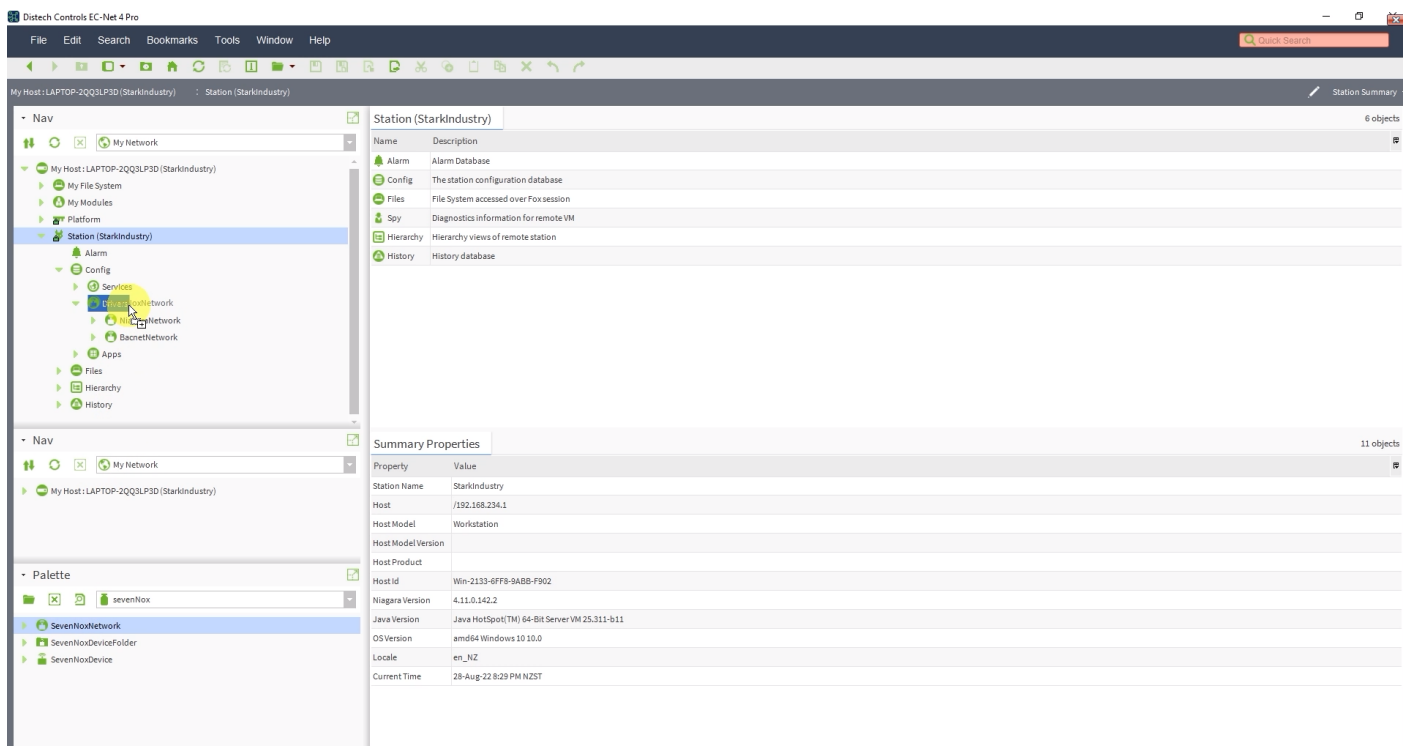
Step 2: Add 7NOX network to Niagara® Module and Discover Building/Site

2.1 Start “Station” under Application Director.



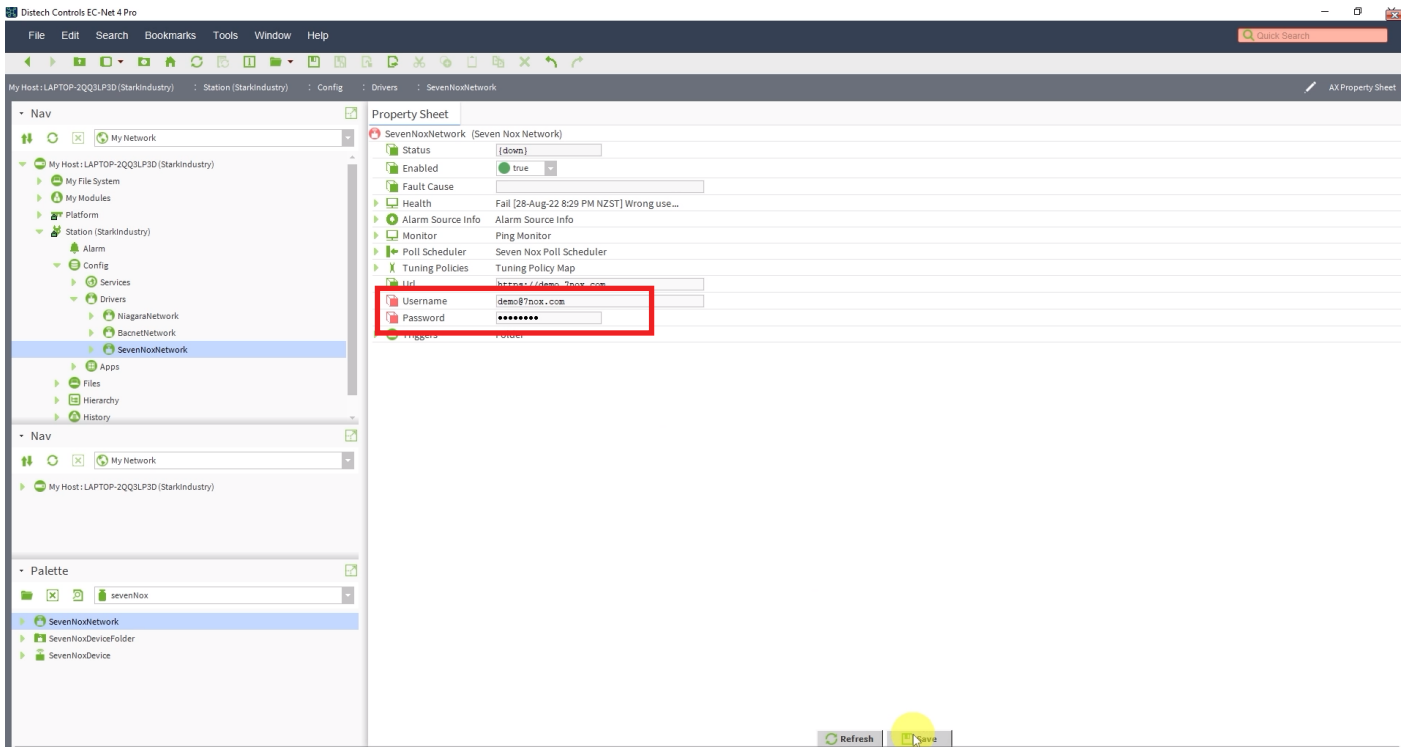
2.2 Locate the “sevenNox” module in the Palette

2.3 Drag and drop the “SevenNoxNetwork” module into the “Drivers” folder (Station -> Config->Drivers).



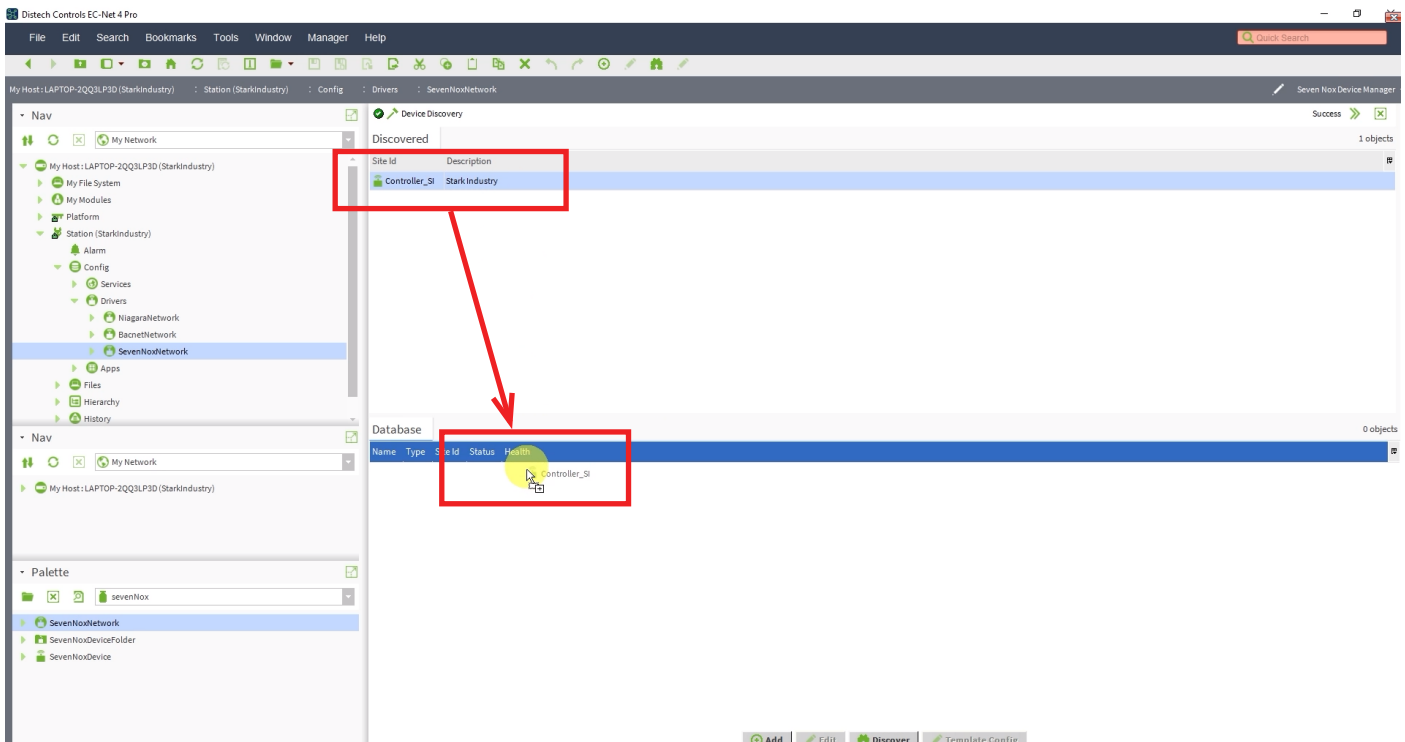
2.4. Right click on the “SevenNoxNetwork” module. Under “Views” choose the “AX Property Sheet”.

2.5. In the Property Sheet, enter your 7NOX username and password. Hit the “Save” button.



2.6. Ping the network by right clicking the “SevenNoxNetwork”>Actions>Ping. If correctly configured, the status will show “OK”.

2.7. Double click on the “SevenNoxNetwork” module. Hit the “Discover” button to discover the control points. Drag and drop the site into the “Database”.

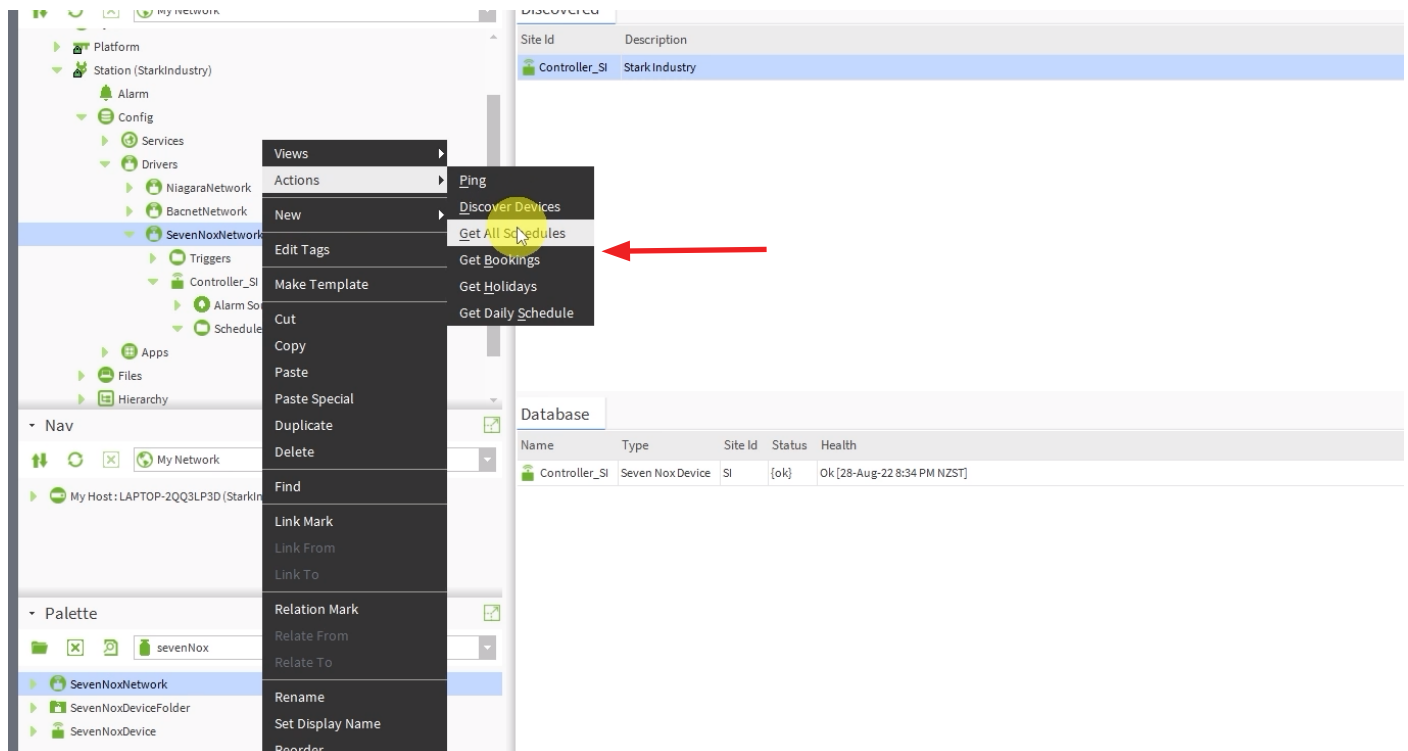


Step 3: Retrieve Data from 7NOX Using “Get” Functions

3.1. Right clicking on the “SevenNox” module and choosing the “Actions” menu will reveal four different “Get” functions for retrieving data from the 7NOX platform.

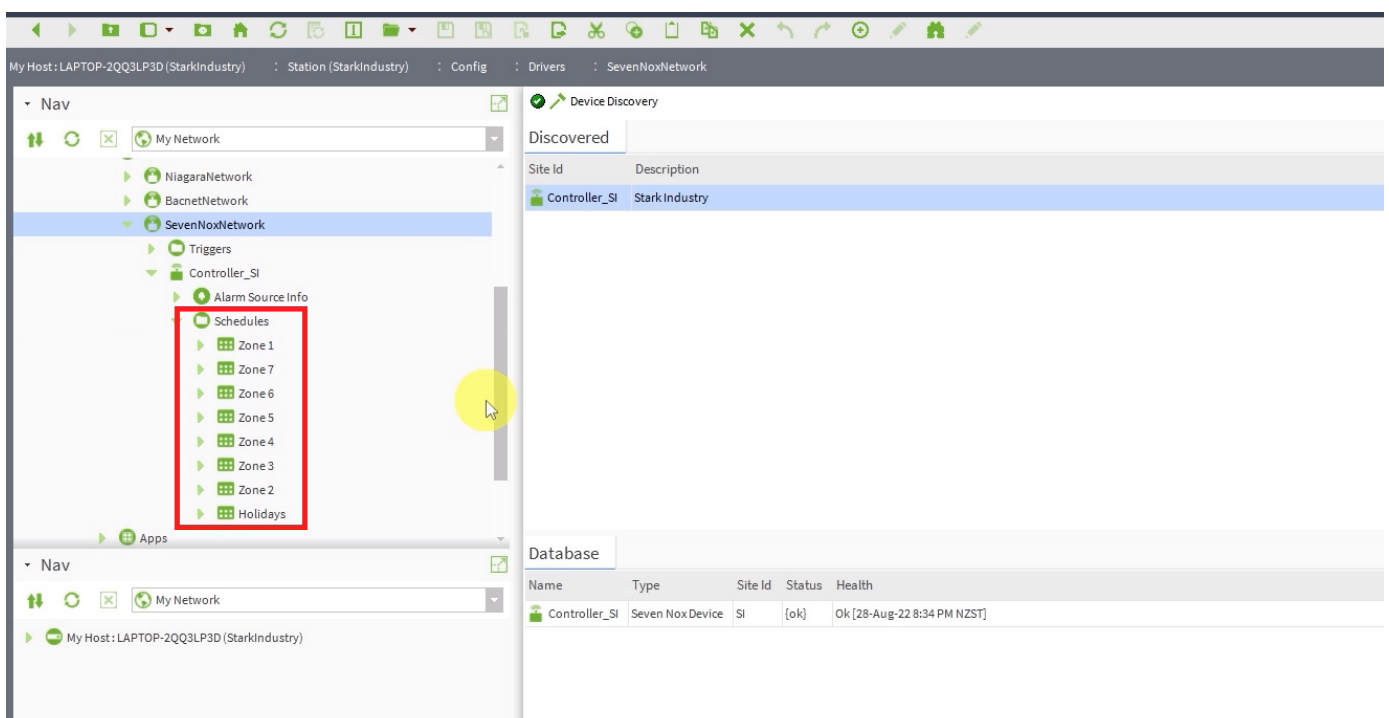
3.2. Get All Schedules

The “Get All Schedules” function will retrieve data from the 7NOX Floor Manager. Executing this function populate all zones under the “Schedules” section of the “Controller” folder.



The screenshot shows the 7NOX interface with the 'SevenNoxNetwork' module selected in the left-hand navigation pane. A right-click context menu is open, and the 'Actions' sub-menu is displayed. The 'Get All Schedules' option is highlighted with a red arrow. The 'Database' tab is also visible, showing a table with the following data:

Name	Type	Site Id	Status	Health
Controller_SI	Seven Nox Device	SI	[ok]	Ok [28-Aug-22 8:34 PM NZST]

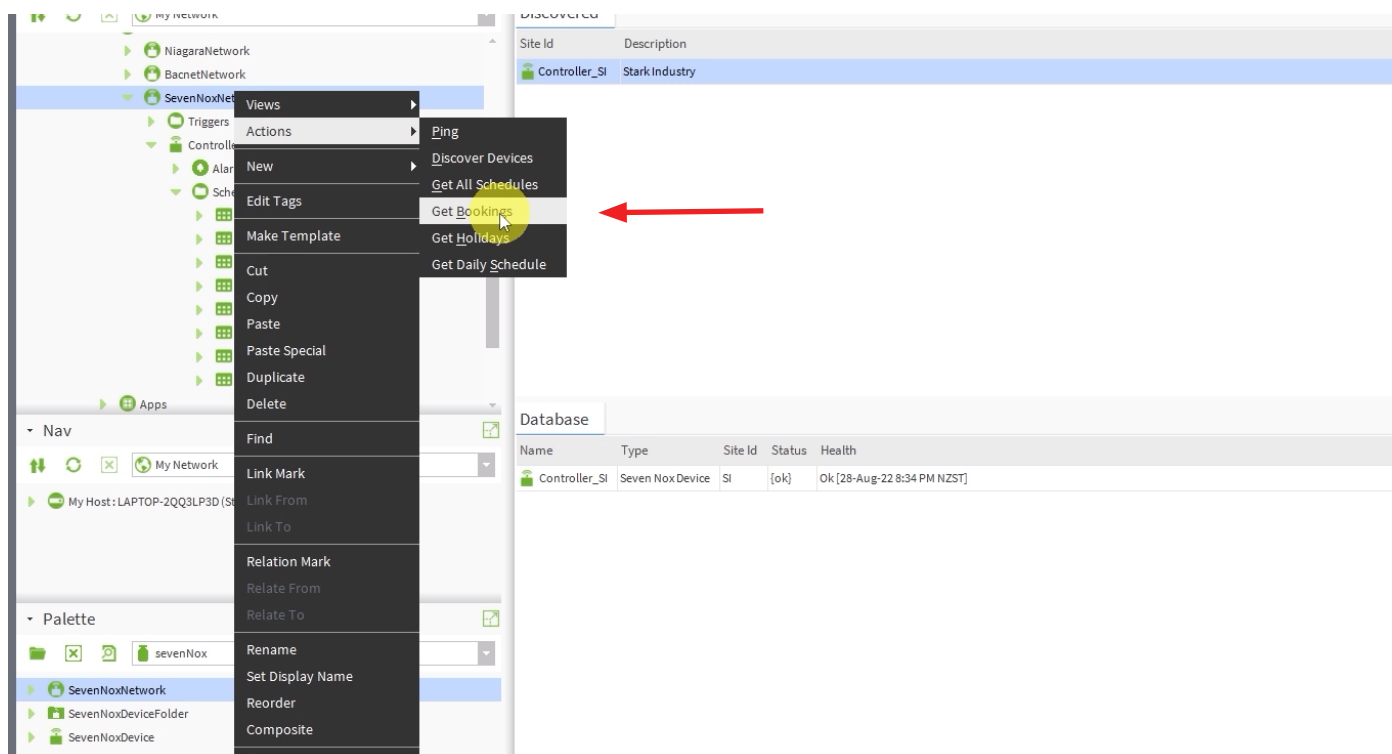


The screenshot shows the 7NOX interface with the 'SevenNoxNetwork' module selected in the left-hand navigation pane. The 'Schedules' section under the 'Controller_SI' folder is highlighted with a red box. A yellow circle highlights the 'Zone 1' through 'Zone 7' and 'Holidays' sub-items. The 'Database' tab is also visible, showing a table with the following data:

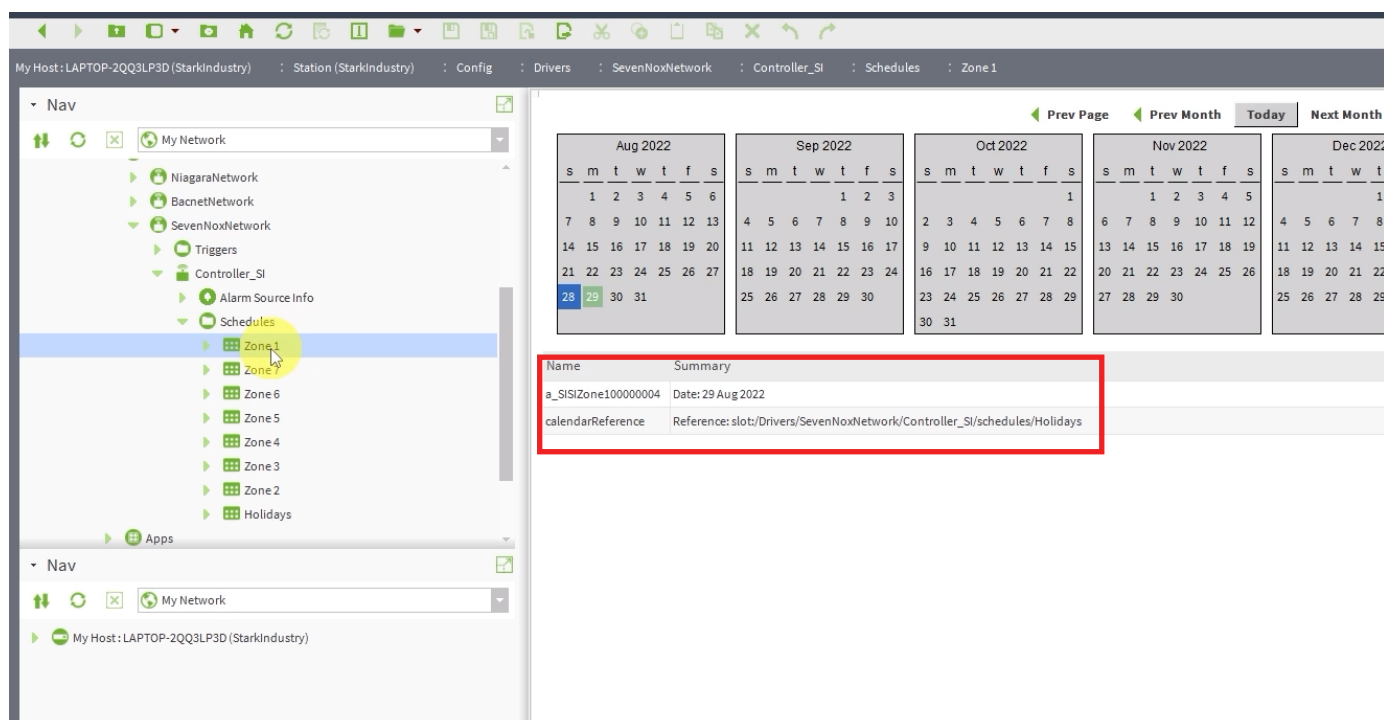
Name	Type	Site Id	Status	Health
Controller_SI	Seven Nox Device	SI	[ok]	Ok [28-Aug-22 8:34 PM NZST]

3.3. Get Bookings

The “Get Bookings” function retrieves data from the “Create a Single Booking” section of the 7NOX portal.



Once “Get Bookings” is initiated and the transfer refreshed, all 7NOX bookings will appear in the “Special Events” tab.



3.4. Get Holidays

The “Get Holidays”. This function gathers data from the 7NOX “Holiday Manager.”

The screenshot shows the 7NOX interface with a context menu open over the 'SevenNoxNetwork' node. The menu includes options like 'Views', 'Actions', 'New', 'Edit Tags', 'Make Template', 'Cut', 'Copy', 'Paste', 'Paste Special', 'Duplicate', 'Delete', 'Find', 'Link Mark', 'Link From', 'Link To', 'Relation Mark', 'Relate From', 'Relate To', 'Rename', 'Set Display Name', 'Reorder', and 'Composite'. The 'Get Holidays' option is highlighted. In the background, there are calendar views for August, September, October, November, and December 2022. A 'Summary' table is also visible, showing a date of 29 Aug 2022 and a reference path: slot/Drivers/SevenNoxNetwork/Controller_SI/schedules/Holidays.

Aug 2022							Sep 2022							Oct 2022							Nov 2022							Dec 2022						
s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s
1	2	3	4	5	6							1	2	3						1														
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
22	23	24	25	26	27		18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
29	30	31					25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			25	26	27	28	29	30	31	

Summary
Date: 29 Aug 2022
Reference: slot/Drivers/SevenNoxNetwork/Controller_SI/schedules/Holidays

3.5. Get Daily Schedule

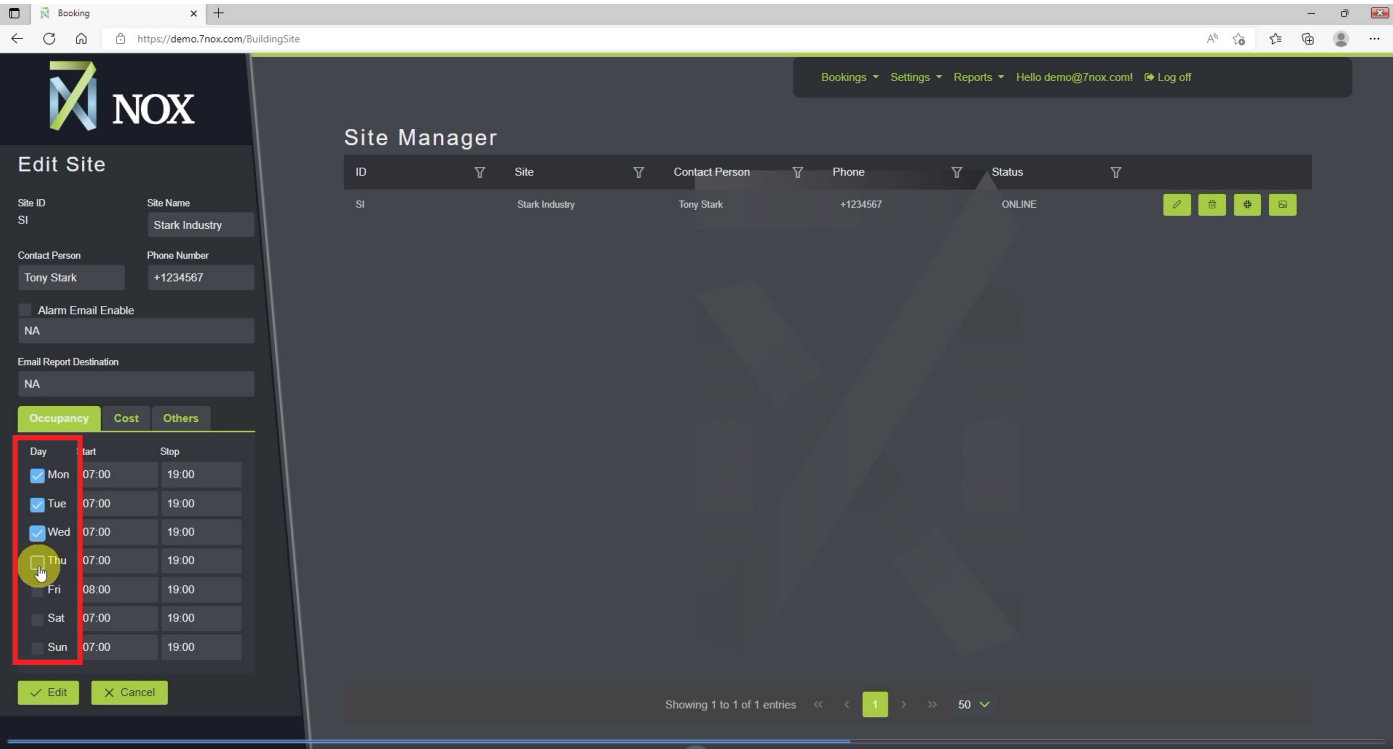
The “Get Daily Schedule” function retrieves information from the 7NOX Site Manager page. If you’re using 7NOX to schedule after hours services, then you would select the days and times which make up your normal business hours.

The screenshot shows the 7NOX interface with a context menu open over the 'SevenNoxNetwork' node. The menu includes options like 'Views', 'Actions', 'New', 'Edit Tags', 'Make Template', 'Cut', 'Copy', 'Paste', 'Paste Special', 'Duplicate', 'Delete', 'Find', 'Link Mark', 'Link From', 'Link To', 'Relation Mark', 'Relate From', 'Relate To', 'Rename', 'Set Display Name', 'Reorder', and 'Composite'. The 'Get Daily Schedule' option is highlighted. In the background, there are calendar views for August, September, October, November, and December 2022. A 'Summary' table is also visible, showing a date of 29 Aug 2022 and a reference path: slot/Drivers/SevenNoxNetwork/Controller_SI/schedules/Holidays.

Aug 2022							Sep 2022							Oct 2022							Nov 2022							Dec 2022						
s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s
1	2	3	4	5	6							1	2	3						1														
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
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29	30	31					25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			25	26	27	28	29	30	31	

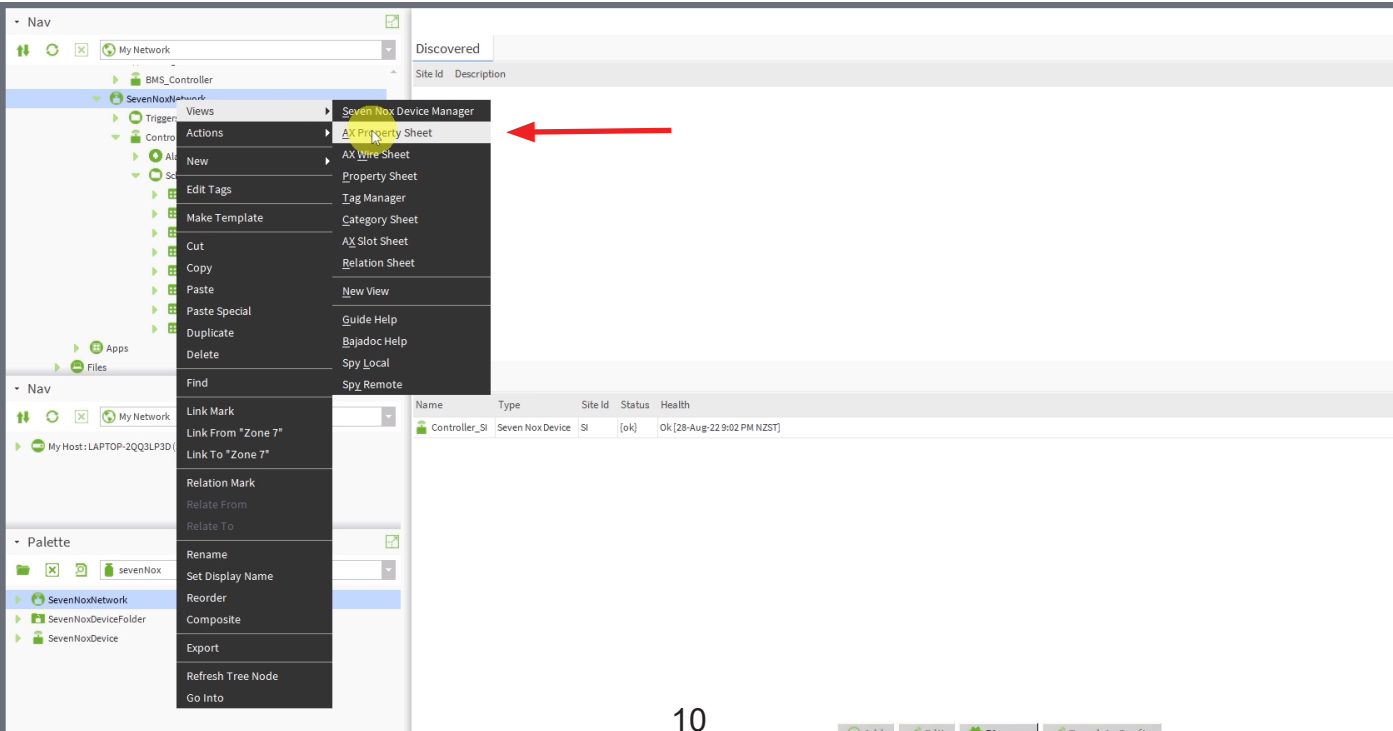
Summary
Date: 29 Aug 2022
Reference: slot/Drivers/SevenNoxNetwork/Controller_SI/schedules/Holidays

Ticking these boxes will determine those hours. The “Get Daily Schedule” function would then pull those selected days and times into Niagara®. However, if you’re using 7NOX as a simple scheduler for booking rooms at any time, then you would leave these boxes unticked. This would essentially tell Niagara® that there are no “normal” business hours for your site and that tenants are open to book services at any time and day.

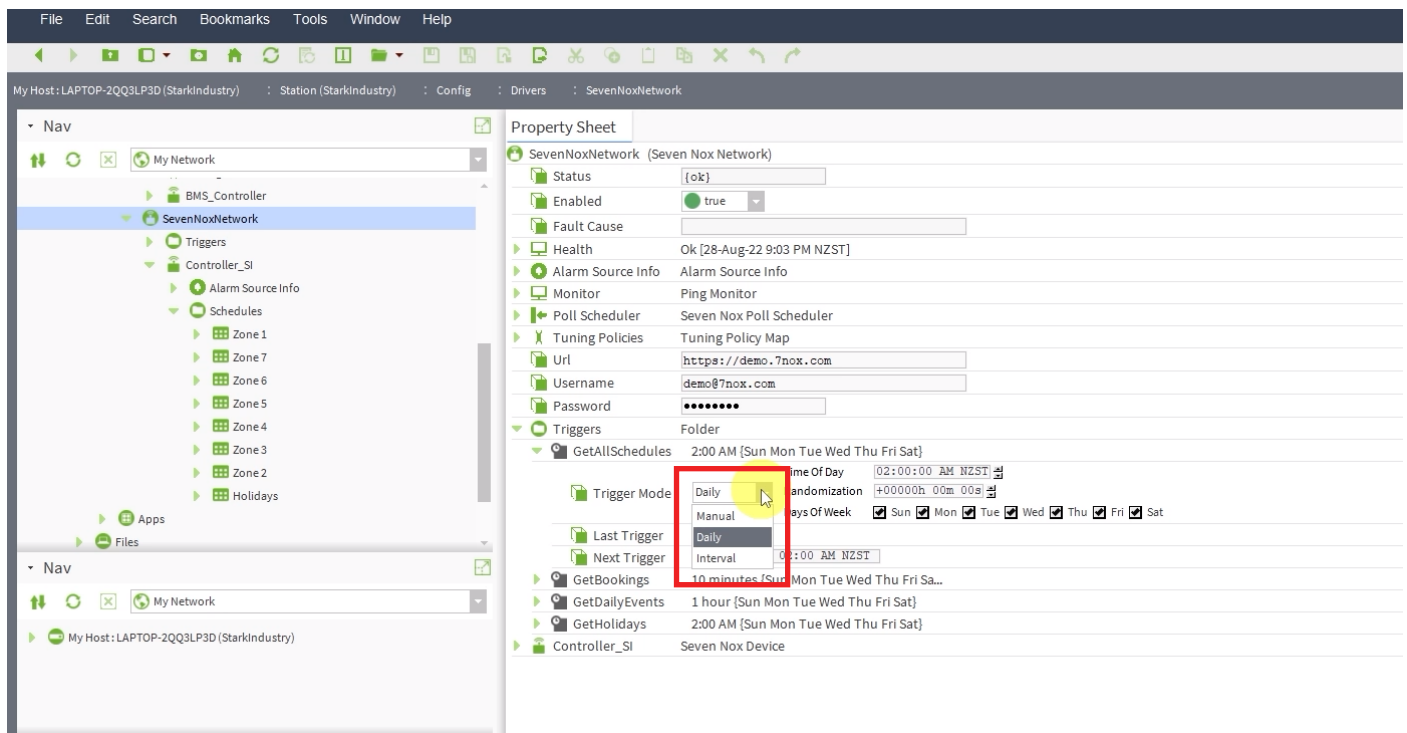


Step 4: Set up Triggers

4.1. All four of the “Get” functions have “Triggers,” which you can use to adjust the parameters of the data transfer. To access the triggers, right click on the SevenNoxNetwork module, click on the views tab, choose the AX Property Sheet. Then click on “Triggers”.



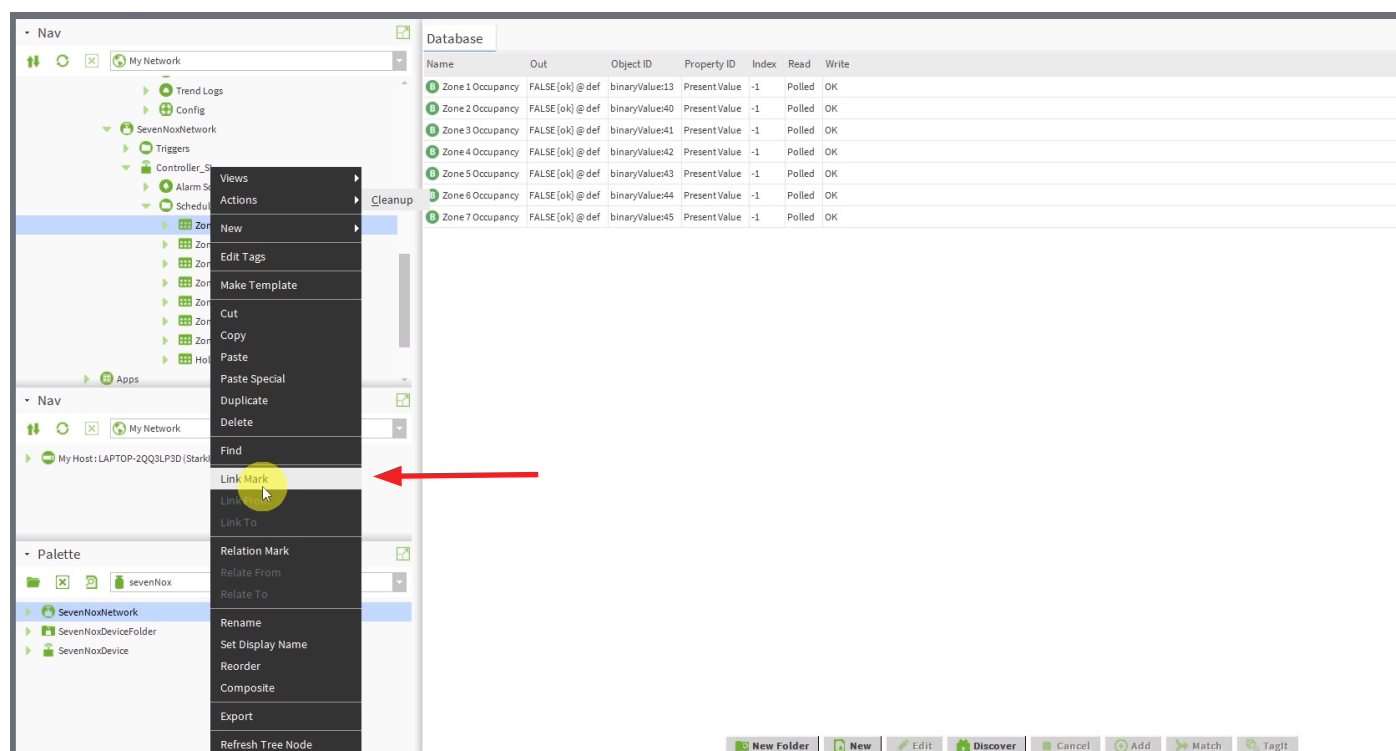
4.2. The Trigger Mode is set to “Daily” by default; however, you can reset this parameter to “Manual” or “Interval” and customize the transfer. The same adjustments can be made for GetBookings, GetDailyEvents, and GetHolidays.



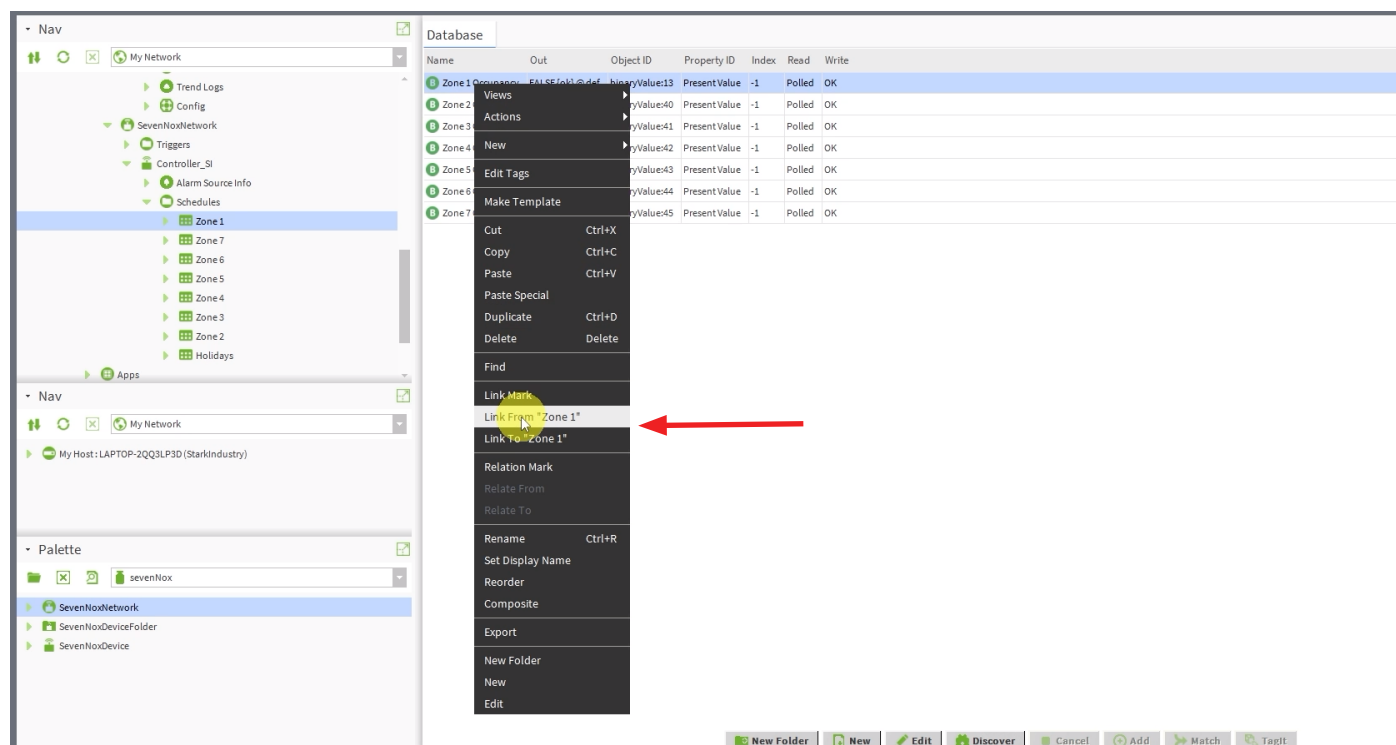
4.3. Generally, the GetBookings trigger is the most important because the other three are one-off transfers, while the bookings data is set to update every ten minutes. However, you can change this frequency if you like.

Step 5: Link Boolean Schedule to BMS Controller Points

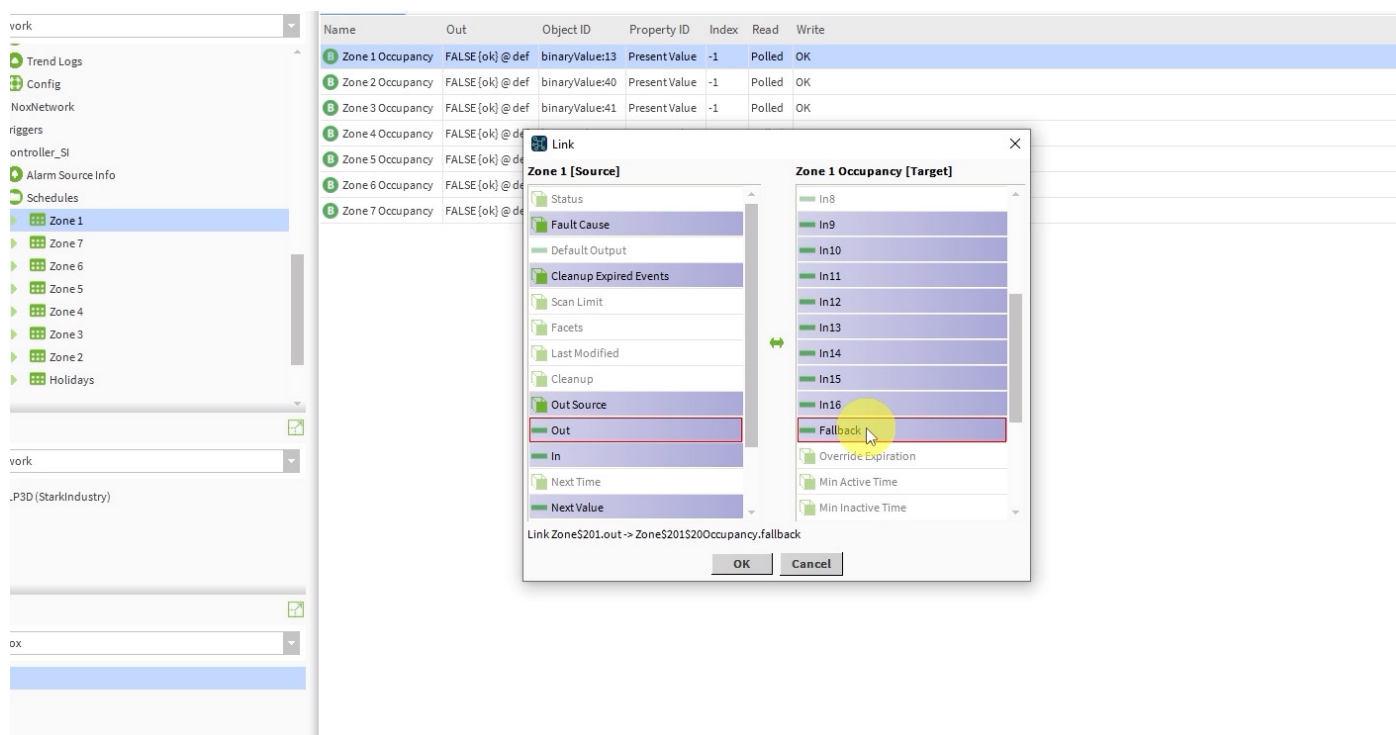
5.1.To link a schedule to a control point, right click on schedule zone and click “link mark”.



5.2. Right click on the corresponding BMS point and choose “Link From”.



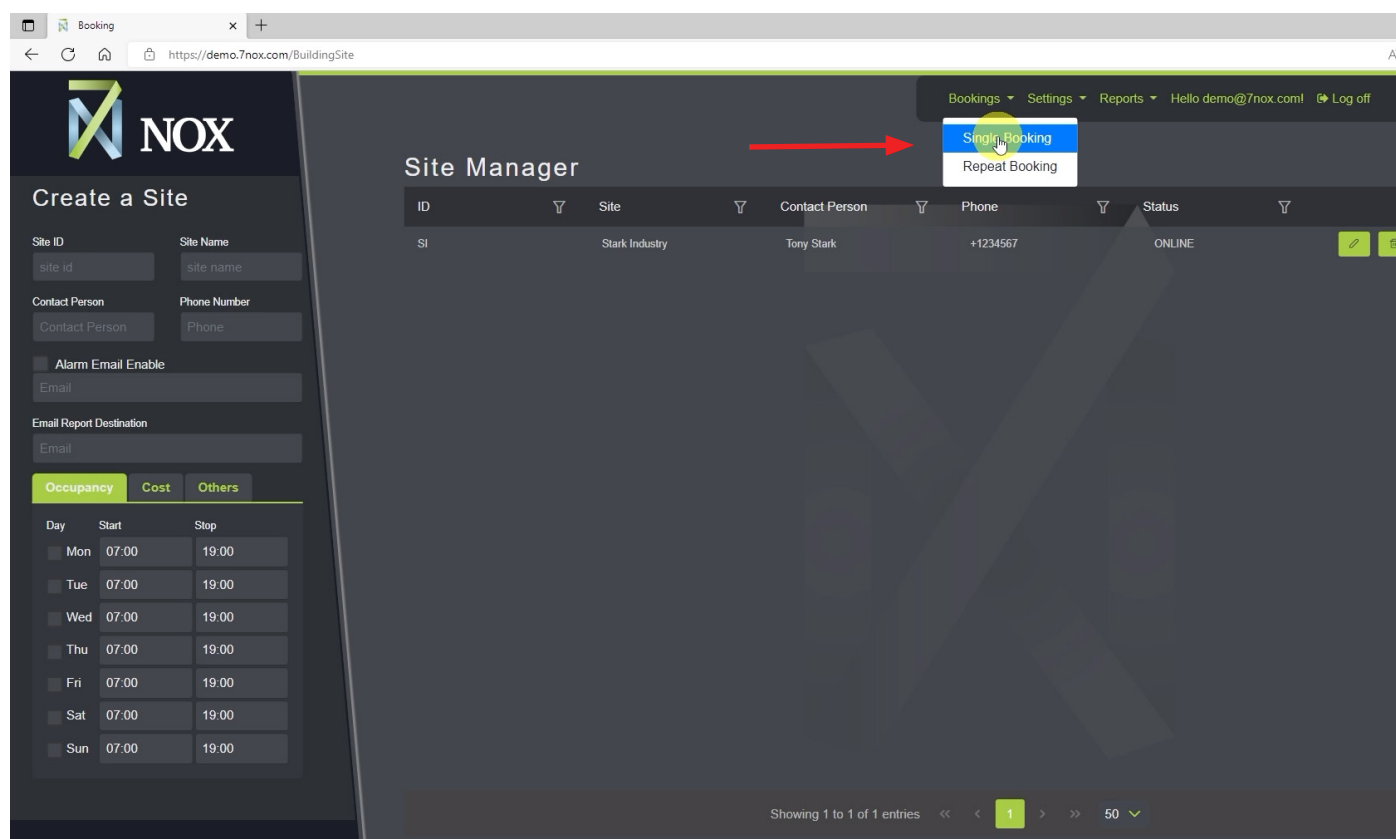
5.3. In the popup window, choose “Out” as your Zone source and “Fallback” as your Zone target.



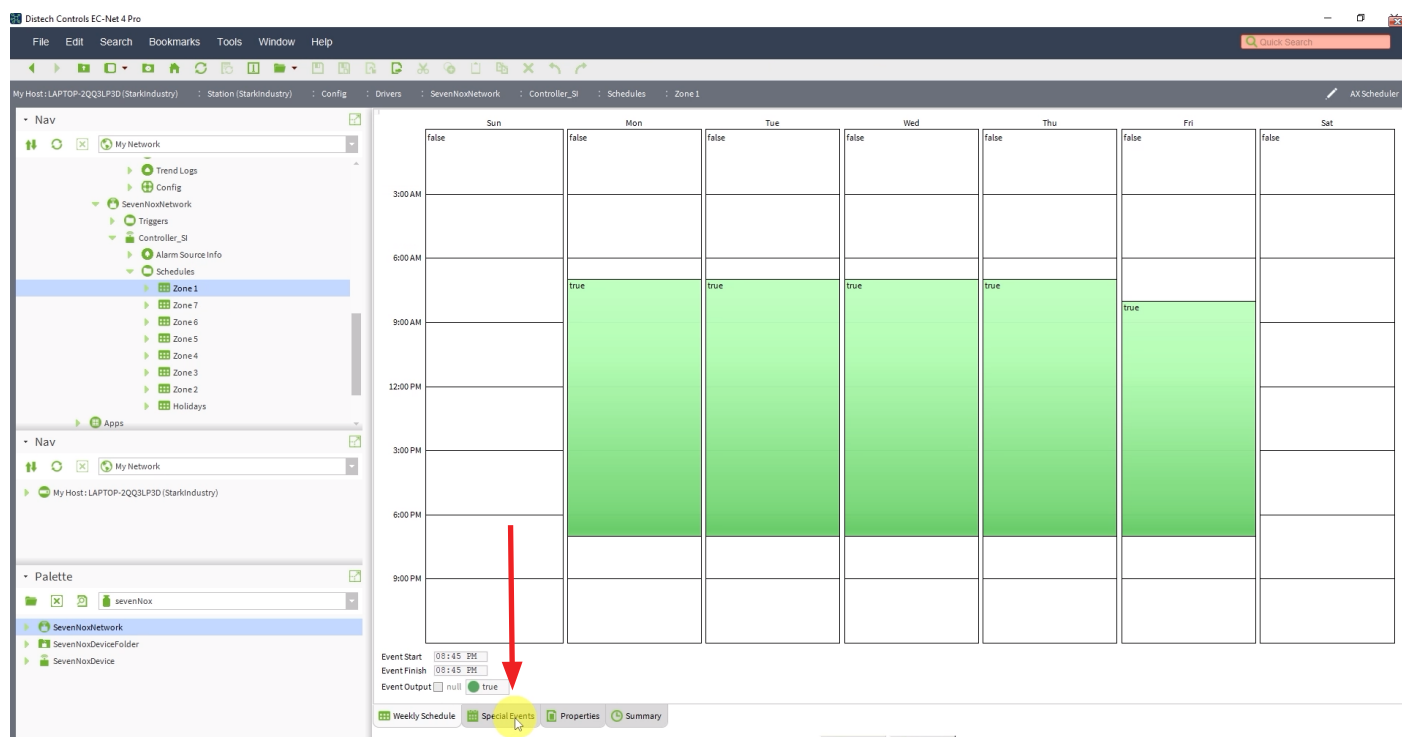
5.4. Finally, click Ok. Follow this process for the remaining schedules and points.

Step 6: Test the System

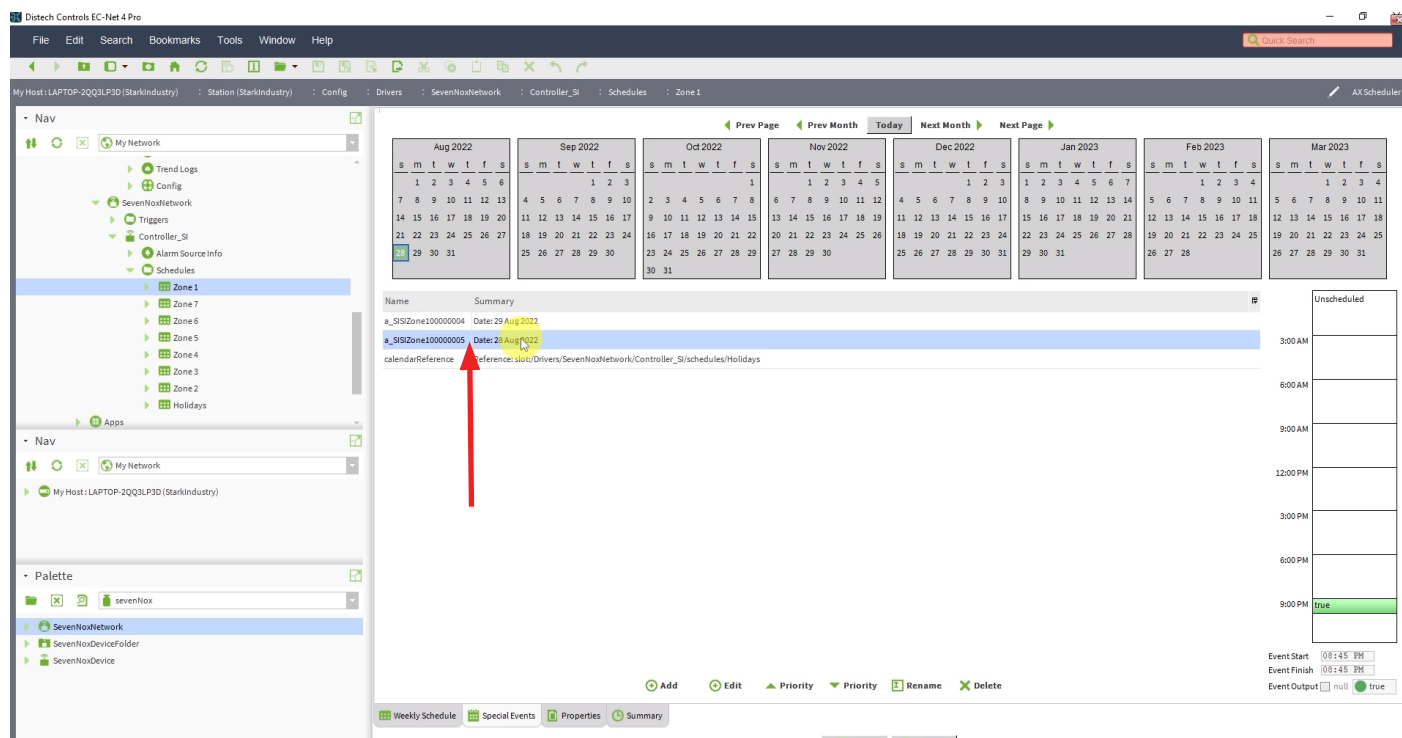
6.1. Test the system by making a booking in the 7NOX portal and checking to see if the Niagara schedule objects update in the Workbench.



6.2. Go to your Zone (e.g. Zone 1) and select the “Special Events” tab.



6.3. Trigger the GetBookings function once again. If the integration is working properly, the booking you created on the 7NOX portal will appear.



Additional Resources

- [7NOX Admin Guide Video Tutorials](#)
- [Ultimate Guide to After-Hours HVAC](#)
- [7NOX Blog](#)