Honeywell

Supervisor Advanced Menu
for Supervisor

Software Manual

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1. Document version

Date	Version	From	Description
2023-01	ENG05	M. Egner	Adaptations to v2.0 Honeywell Template

2. Description

The Advanced Menu is an HTML template that represents a home page with a freely configurable menu containing all possible views as well as PX pages, HTML pages from the Supervisor/Niagara. In addition, alarms can also be displayed according to priority.

The menu supports nesting on up to 4 levels. The approach means that a separate navigation menu can be created for each user within the Supervisor.

3. System requirements

List of the required software versions:

• Advanced Menu 2.0.0 | Niagara 4.11

• Browser:

  ◦ Google Chrome Version 99 or newer

  ◦ Mozilla Firefox Version 98.0 or newer

  ◦ Microsoft EDGE Version 99 or newer

4. Installation

Basically, the Advanced Menu is available for various languages.

For this purpose, the Advanced Menu contains its own Lexicon module, the installation of which is explained below. If a language is not available, the Advanced Menu is set to English by default.
The language depends on the settings that have been set for the respective user in the "UserService".

Copy the modules (.jar files) from the zip file into the "modules" folder of the installation directory of Niagara:

By default: "C:\Brand\ Niagara-4.xx.x.xxx\modules".

Note: The Platform service and Workbench should be restarted once after copying.

4.1 Incorporating a Advanced Menu in an existing project

The whole template can also be transferred directly to an already running station.

Copy the "Advanced Menu" folder from the "..\sbcDeviceTemplate21vX_X_X\shared\" folder to the system path of your station: "C:\ProgramData\Niagara4.xx\Brand\stations\yourStation\shared\"

The template can thus also be used in various previous versions of Niagara.
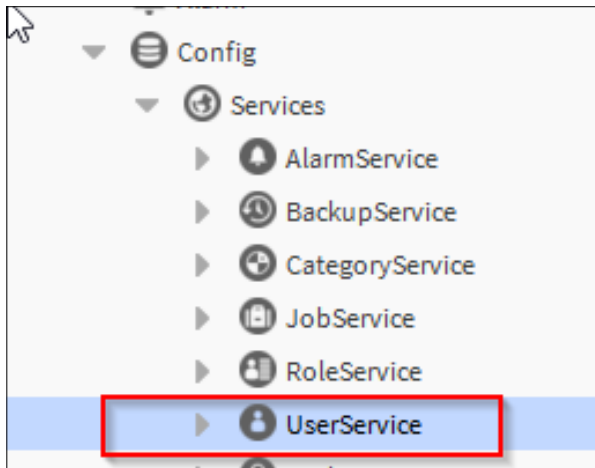
You will then find the "advancedMenu" folder in the station under Files (update if necessary):
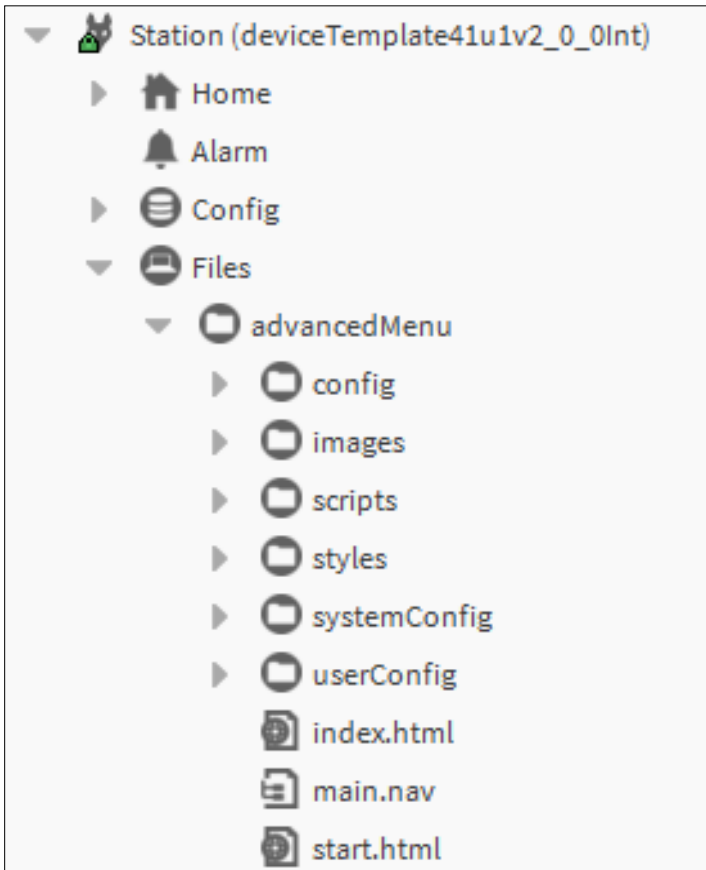
To use the menu, it is also necessary to place a service. Under "Service", place the "AdvancedMenuService" service from the "honAdvancedMenu" palette:
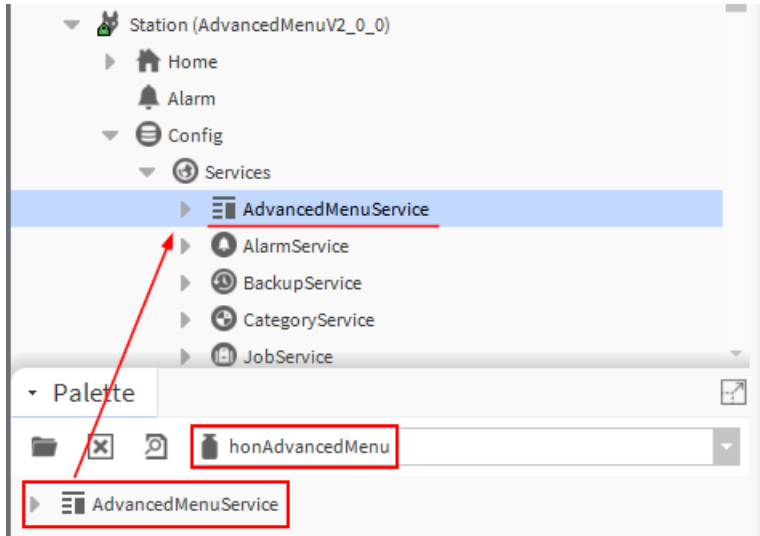
To ensure that the whole thing can be used, the main.nav file, the language and the time format must be specified for each user in the "User Service":

In addition, if necessary, the full name of each user can be specified, which will then be displayed in the menu:

5. Configuration

5.1 Configuration of the menu via Nav file

In the folder "userConfig/menu" you will find .nav files for configuring the menu.

The naming of the file must correspond to the user name (with upper & lower case).

This way the whole template can be customized for each user individually and in other languages if need.
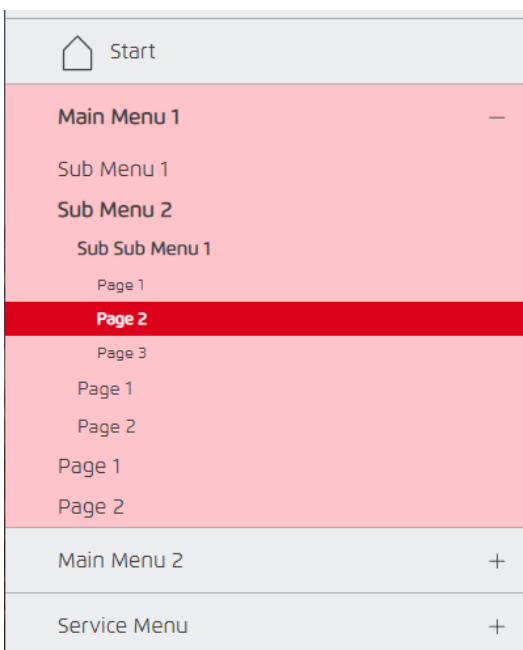
The default.nav can be used as a template.

If all users should have the same menu structure, then the default.nav can be used instead of a separate file for each user.

The default.nav is always used if no user-specific .nav file is available.
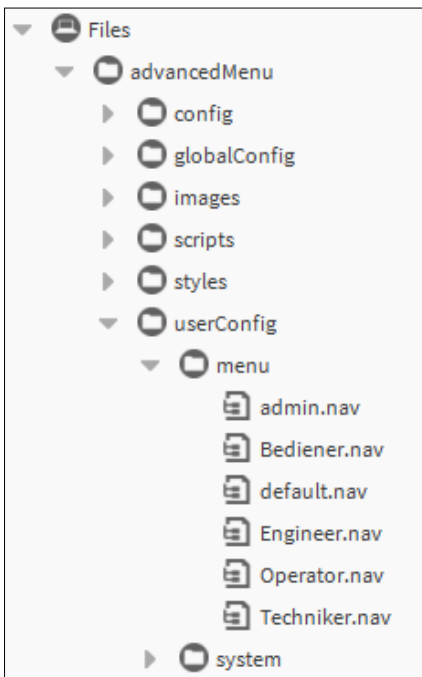
The entire menu structure is defined in the nav file.

The user nav file is fully customisable in terms of its structure and name.

The first entry is permanently defined as the home page in the menu and has no submenus.

The entries under "Start" define the structure of the menu below in hierarchical terms.

Up to 4 levels are possible! (See example above).

1. mainMenu

2. subMenu

3. subSubMenu

4. Pages

As is usual with all NAV files in Niagara, everything can be linked here.

Display Name	Ziel Ord
☐ 🏠 Start	station:|file:^sbcDevice/start.html
☐ ◯ mainMenu1	file:^px/mainMenu1/Overview.px
☐ ◯ subMenu1	file:^px/mainMenu1/subMenu1/Overview.px
☐ ◯ subSubMenu1	file:^px/mainMenu1/subMenu1/subSubMenu1/Overview.px
◯ Page1	file:^px/mainMenu1/subMenu1/subSubMenu1/Page1.px
◯ Page2	file:^px/mainMenu1/subMenu1/subSubMenu1/Page2.px
◯ Page3	file:^px/mainMenu1/subMenu1/subSubMenu1/Page3.px
◯ New	station:|slot:/
◯ Page1	file:^px/mainMenu1/subMenu1/Page1.px
◯ Page2	file:^px/mainMenu1/subMenu1/Page2.px
◯ Page3	file:^px/mainMenu1/subMenu1/Page3.px
⊞ ◯ subMenu2	null
◯ Page1	file:^px/mainMenu1/Page1.px
◯ Page2	file:^px/mainMenu1/Page2.px
⊞ ◯ mainMenu2	null
◯ Page1	file:^px/mainPage1.px
◯ Page2	file:^px/mainPage2.px
◯ Page3	file:^px/mainPage3.px
☐ ◯ System	null
◯ User list	station:|slot:/Services/UserService|view:webEditors:UserManager
◯ Backup	station:|slot:/Services/BackupService|view:backup:BackupManager
◯ Networks	station:|slot:/Drivers
◯ Alarm db maintenance	station:|slot:/Services/AlarmService|view:alarm:DatabaseMaintenance
◯ History db maintenance	history:|view:history:DatabaseMaintenance
◯ Audit history	history:/sbcDeviceTemplate21v1_0_1/AuditHistory
◯ Log history	history:/sbcDeviceTemplate21v1_0_1/LogHistory
◯ Search...	station:|slot:/Services/SearchService

Links can also contain additional information about the "view" (e.g. | view:alarm:DatabaseMaintenance)

!	ORDs in the user nav file can now contain *"?stationName"*, which is replaces with the station name. e.g. history*/?stationName/AuditHistory"*
!	It is also possible to specify *"|view:?fullScreen=false"* or *"?fullscreen=false"* in the nav file, so that the nav tree can be seen.

5.1.1. Editing the entries in the NAV file

If an entry is selected, it can be edited (2), moved (4 and 5) or deleted (3) using the buttons on the lower bar.
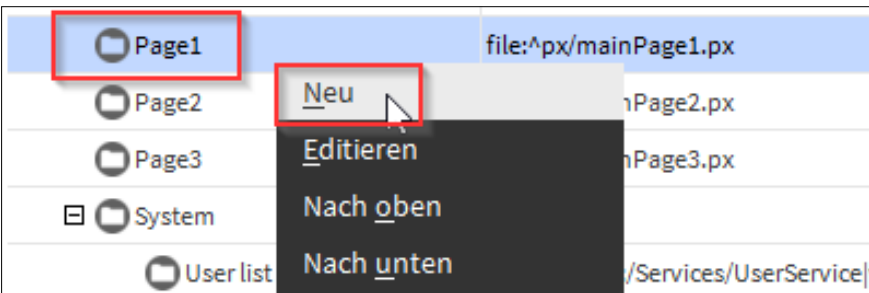
You can also double-click an entry to edit it.
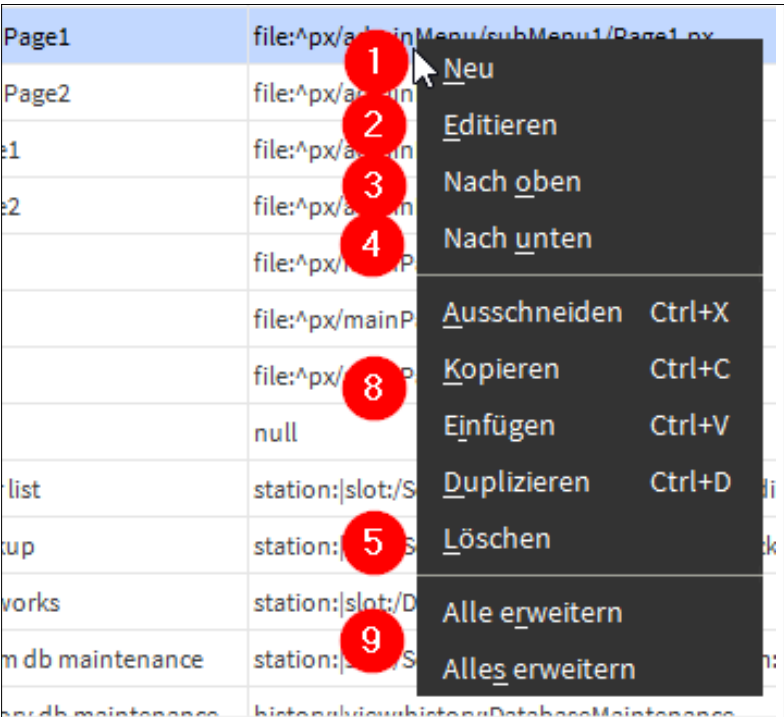
The same is also possible if you right-click to open the context menu at a particular point.

You also have the option of copying or reproducing points here (8).

You can also expand and collapse the view of the levels (9).

You can use the New (1) button to create a new entry.

You will then see this popup window.

The element can be given a name in the first field which is subsequently displayed in the menu for this purpose. In the second field you can save or select a folder for any component or file.
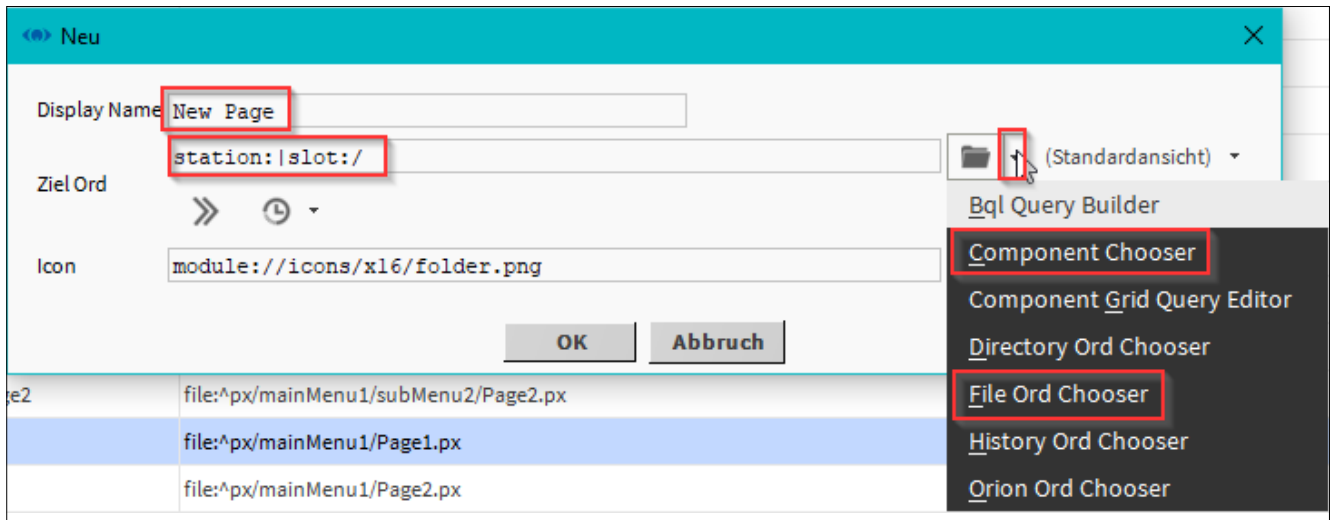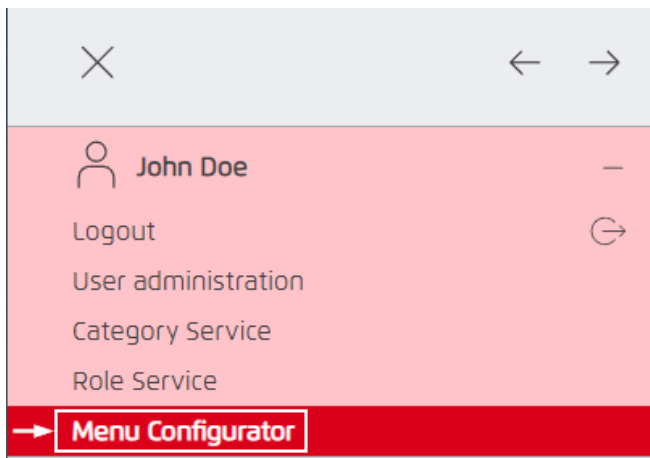

Please note that a new entry is always created below the element that you have selected.

6. Configurator menu

The configurator for system settings can be called up by default via the user menu of the "admin" user. There is the entry "Menu Configurator" for this.

The configurator is divided into several setting options:

1. Global configuration: for settings that are the same for every user.

2. System configuration: for settings, which depend on the actually logged in user.

The settings are explained in detail in the configurator.

6.1. Reading configuration files from an older 1.x.x version

You can also load a system configuration file from an older version of the Device Template.

Click on the "Load Leagacy NAV file" button.

In the following window, select a .nav file from the old system folder:
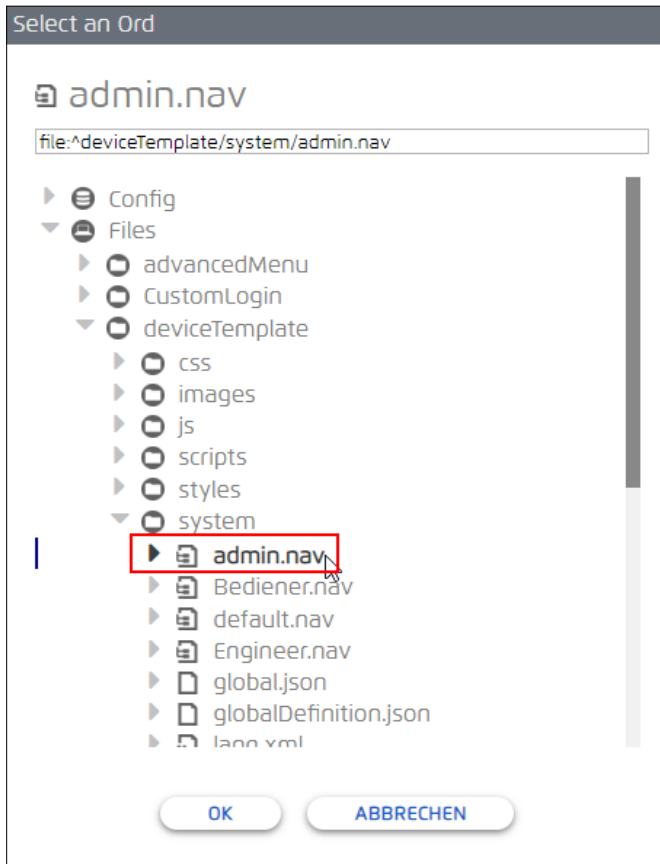
After confirming with "OK", the configuration is loaded.

Check the settings and adjust them if necessary.

Make sure that the correct user is selected and then save the configuration with the "Save" button:
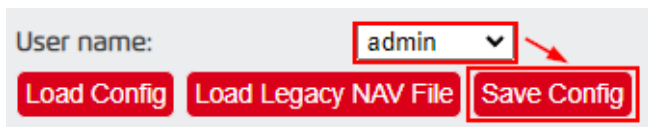
7. Special features regarding the rights of a user

Certain functionalities require that a user has the appropriate rights to use them.

Furthermore, the user should only have access via CategoryService and RoleService only to areas, which the user is allowed to see.

7.1. File system

Every user must have at least read access to the folder "advancedMenu" under Files.

7.2. Menu Configurator

The menu configurator can only be accessed by a user who has full admin read and write rights (e.g. the default "admin" user).

7.3. Alarm lists

The respective user must have at least read rights to the "AlarmService" and its "AlarmRecipients" as well as "AlarmClasses" to be able to display them in the header.

7.4. Weather, Temperature and Humidity Information

The respective user must have at least reading rights to the respective data points to be able to display them in the header.

7.5. User administration

Depending on the rights of a user, he can see additional contents in the user menu.

In this example, a "Category" with the name "UserConfig" is created in the "CategoryService" ("Config" -> "Services" -> "CategoryService"), which has access to the "UserService":

In the "RoleService" ("Config" -> "Services" -> "RoleService"), certain types of rights can now be granted to a certain role (which has been assigned to a user):

If the respective user has operator reading rights, then he can view his own user configuration in reduced form (e-mail, phone number, etc.) via the user menu.

In addition, the full name of the user is displayed, if one has been defined for this user:


If the respective user has operator write rights, then the user can make and save entries in addition to the read access, of his profile.

E.g. change his e-mail address, telephone number and his own password.

If the respective user has admin read rights, then he can view the configuration of all users in full form via the user menu.

In addition, he can call the menu configurator:
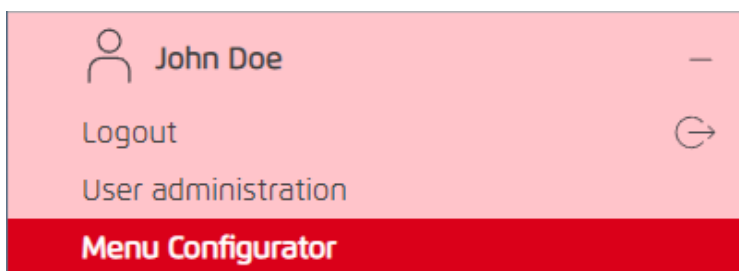
However, he can edit at most that for which he has operator ("Operator") or admin write rights.

With operator write rights, he can only edit his own user, as described above.

With admin write rights, he can edit all users.

8. Special features on PX pages

8.1. Use of buttons in connection with the device template

In order to navigate to a PX page in connection with the device template, navigation buttons must have an extra option: "|view:?fullScreen=true" or "?fullScreen=true".

1. First drag a HyperlinkButton from the kitPx palette to the PX page.
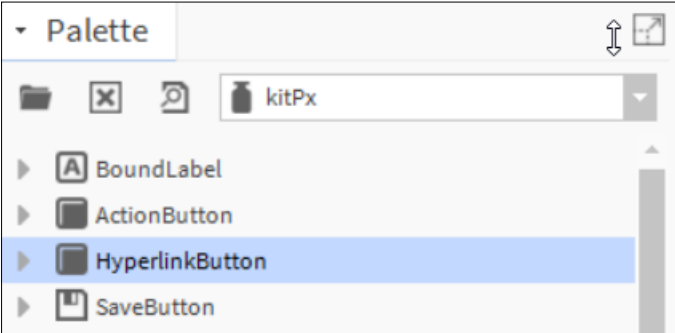
2.Secondly, we have to define a hyperlink to the target page in the properties:
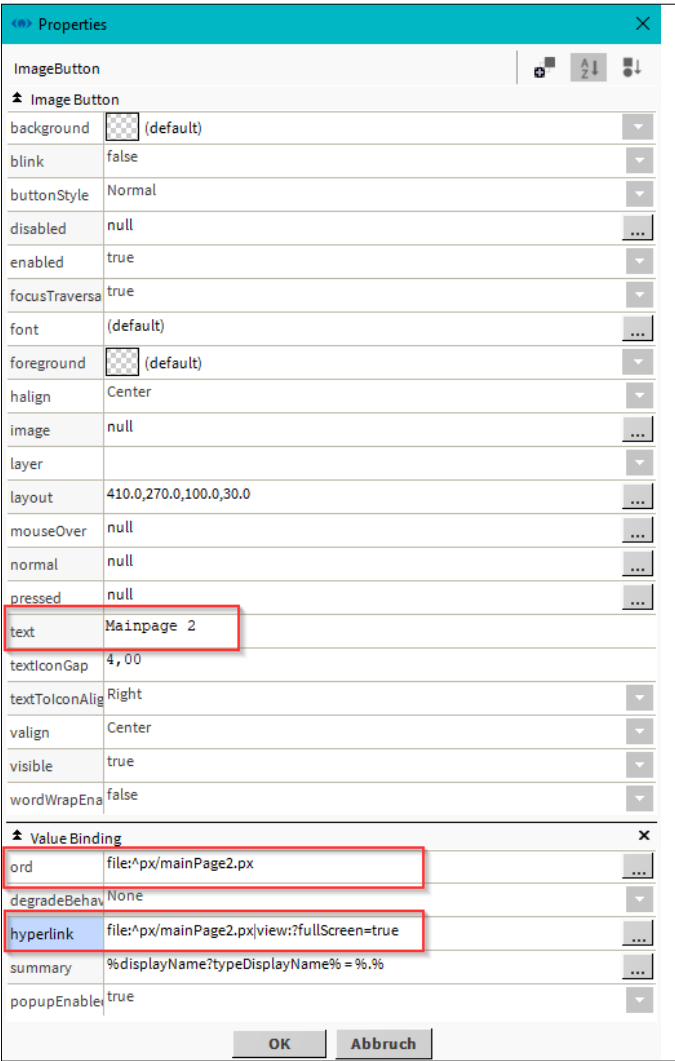
3. Open the "hyperlink" option:
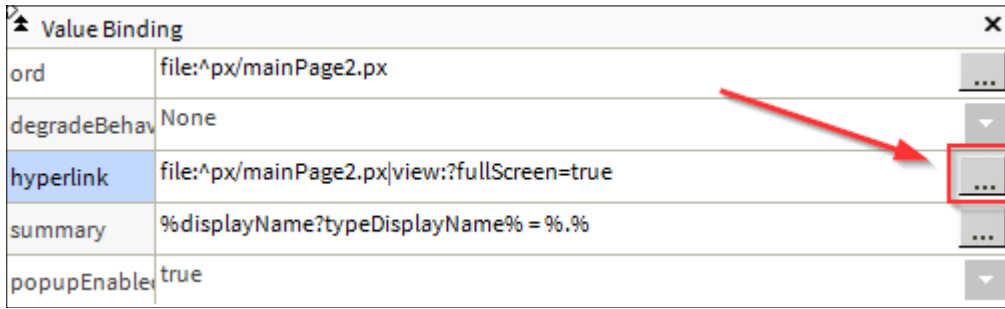
4. Then define the folder in the usual way (1).

Then click on the two arrows (2);
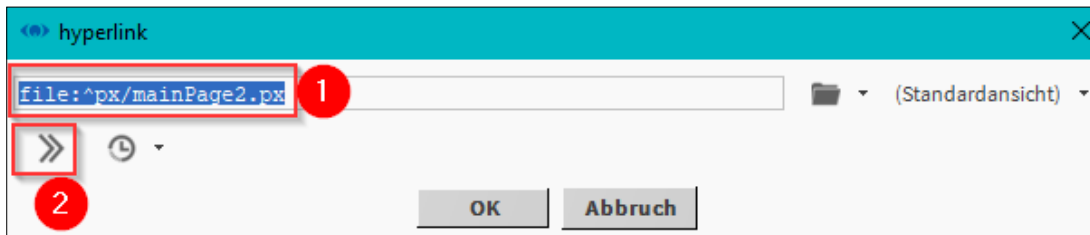
5. In the subsequent window enter "fullScreen" in the Key field and "true" in the Value field:
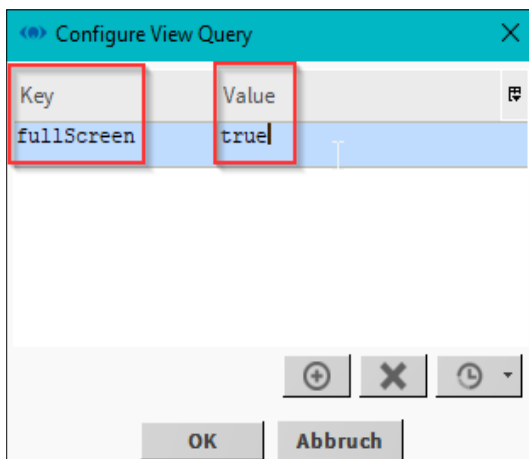
6. The window can now be confirmed with "OK"

You can then see the change here. Confirm again with "OK".
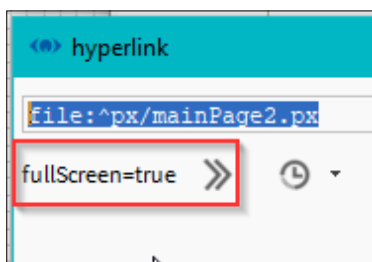
You will now also see the change in the "Hyperlink" field.
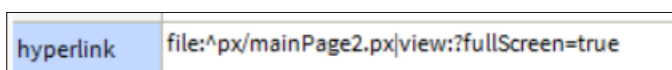
9. Connecting a weather station

9.1. Connection via the standard Niagara WeatherService

In the palette "weather" you will find the "WeatherService", which can be placed under "Config -> Services" by drag&drop.
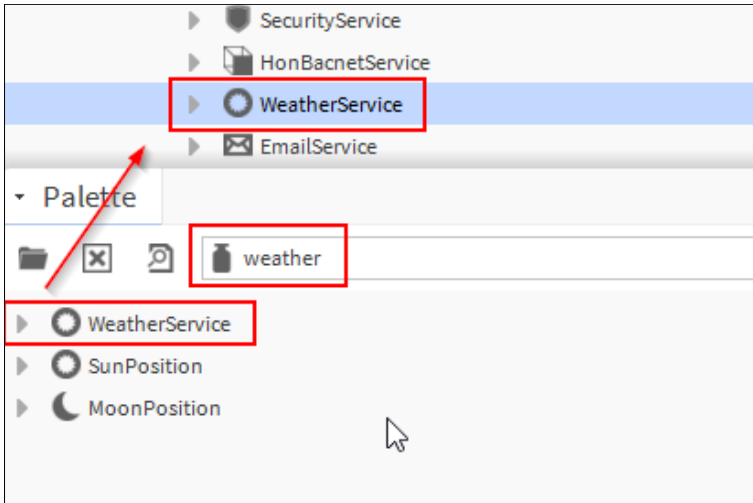
In the "WeatherService" a provider can be added over the button "New", from which the weather data should come:
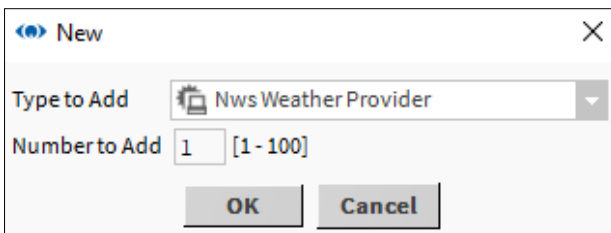
Depending on the provider, there are different settings in the following dialog, in which the location and, if necessary, an API key must be stored (can also be done later via the PropertySheet):
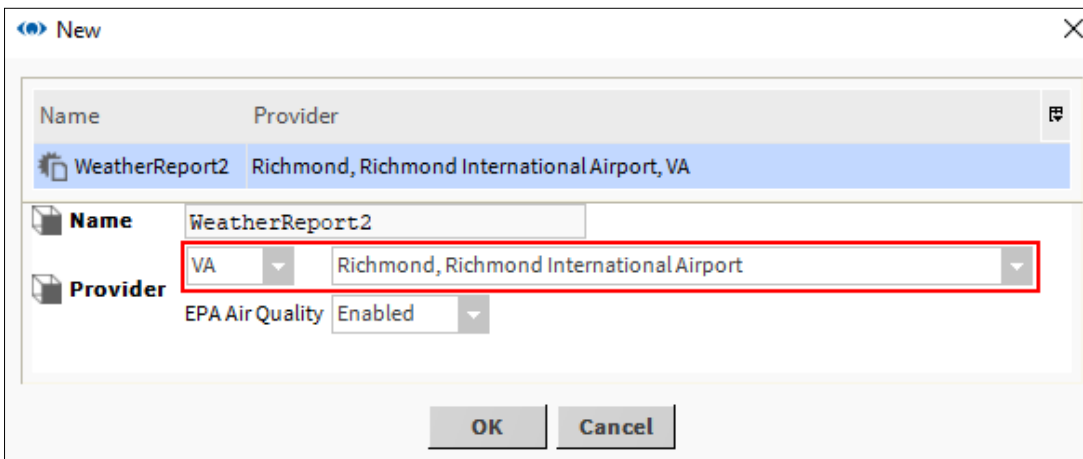
In the Wiresheet of the newly created report, the weather data can now be transferred:
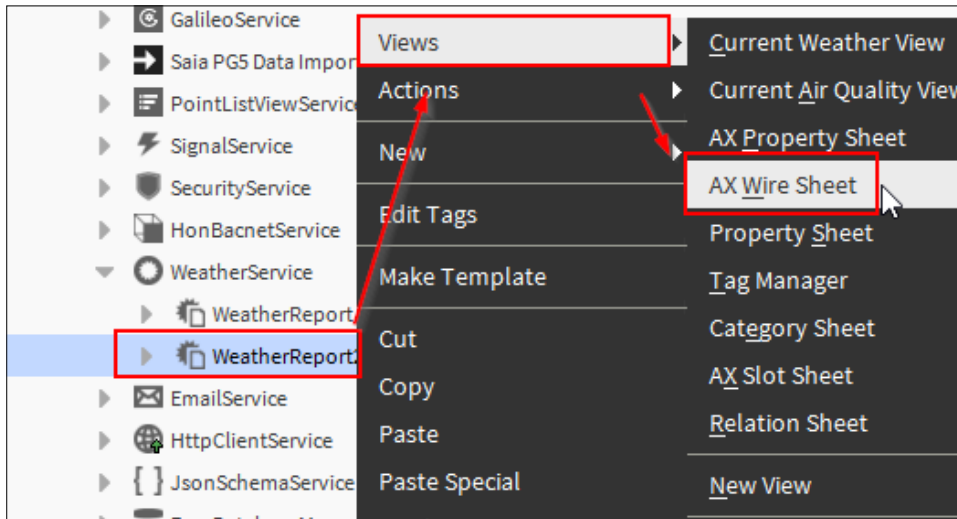
(Via right click on the block and then on "PinSlots" to add more slots).

Via right click -> "New" BooleanWritable etc. can be added.

The outputs of the block are linked according to the example:
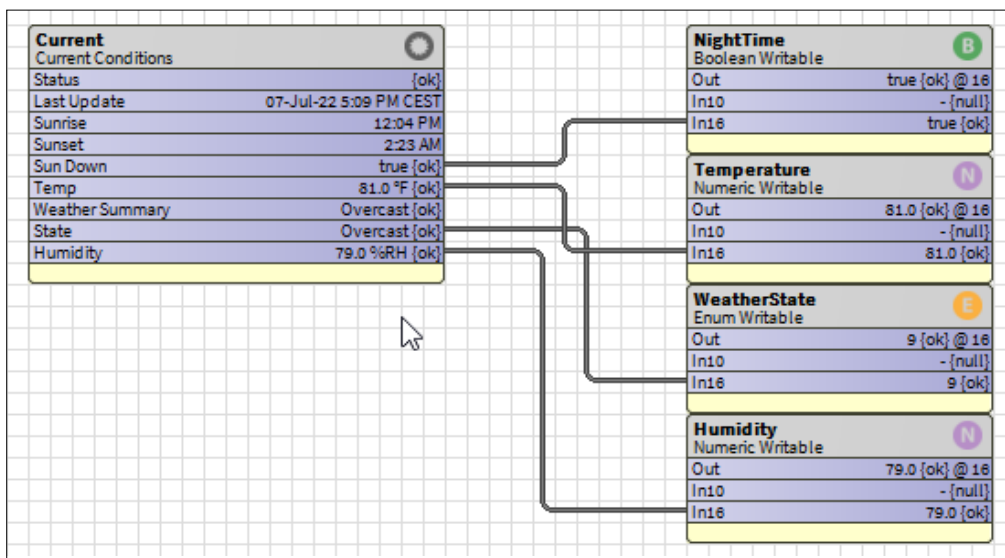
Note: In the "Facets" of the data points, can be defined for the temperature and relative humidity, a unit (Unit).
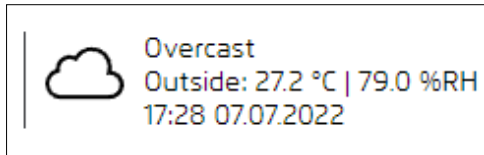
The data points can then be linked accordingly via the menu configurator in the global configuration:
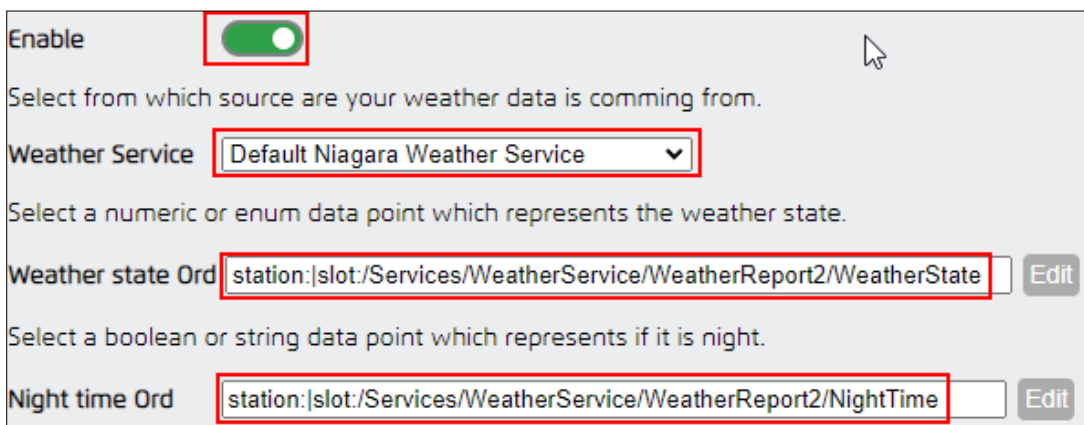
Respectively the same for temperature and relative humidity:
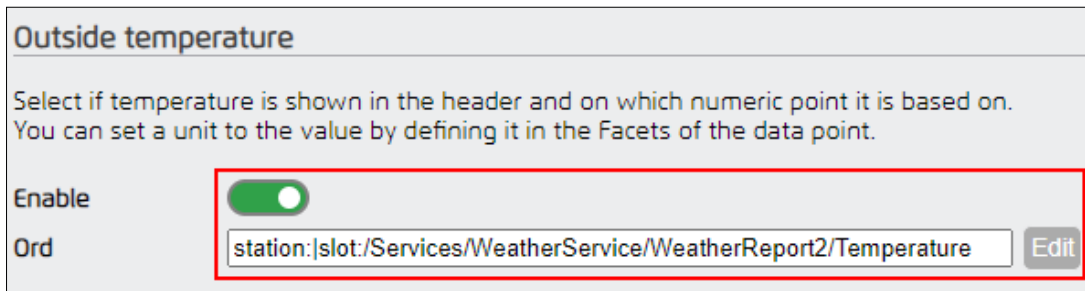
After saving the configuration and reloading the page, the weather should now be visible:

9.1.1. Conversion of the temperature to Celsius

The value of the WeatherService comes basically in the unit Fahrenheit.

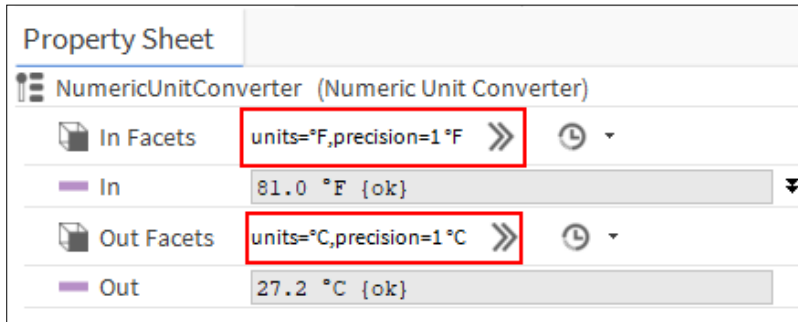To get degrees Celsius it needs a conversion unit.

In the palette "kitControl" there is the box "NumericUnitConverter" under "Conversion":
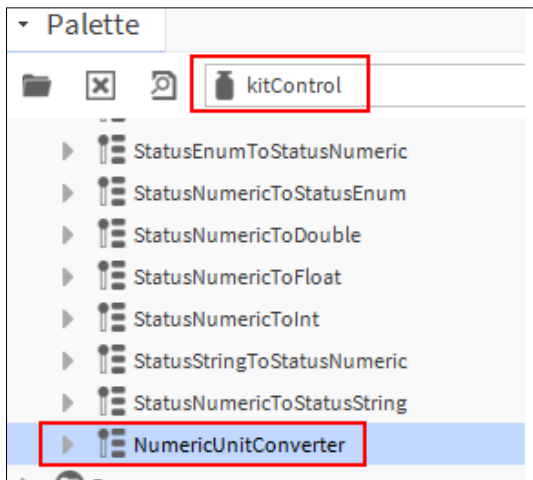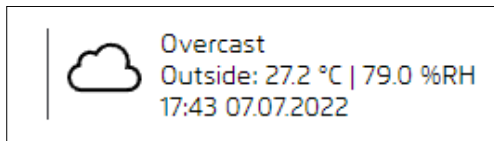

We place this between Weather Box and Temperature:
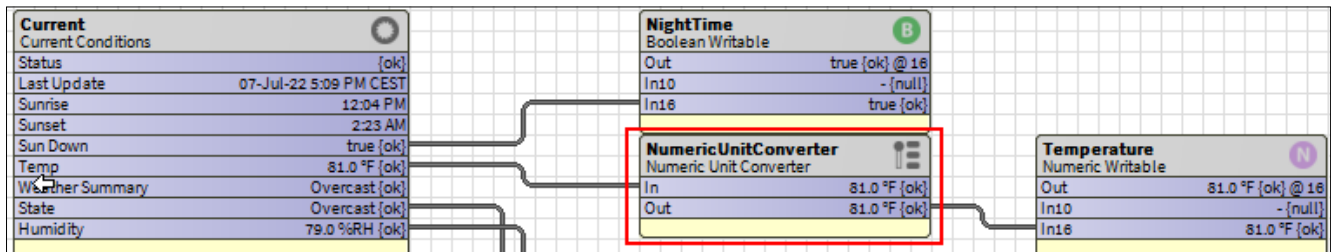
In the PropertySheet of the conversion box, the input and output format can now be defined via the "Facets"


That's it:

9.2. Connection via the HTTP Client Driver using the OpenWeatherMap API as an example

To use the Openweather API, an account must be created there and an API key generated, which can be used by the HTTP Client Driver.
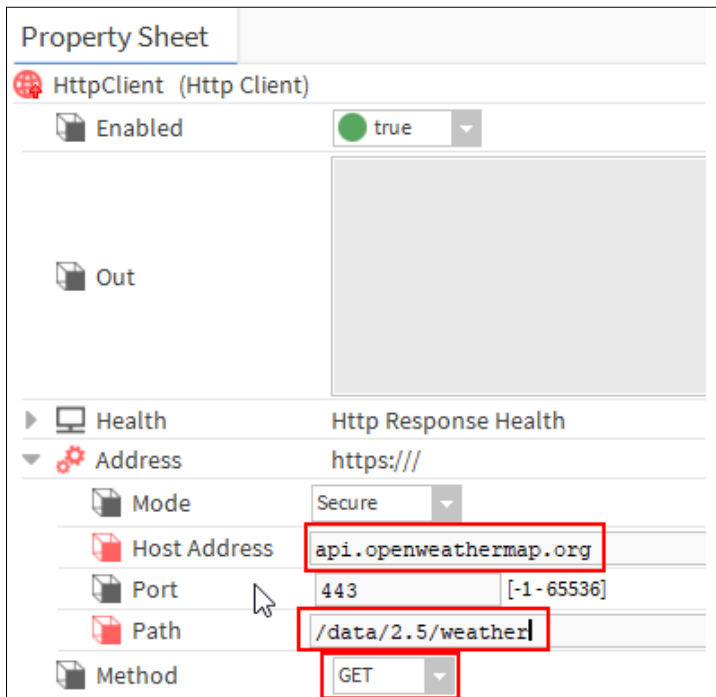
In the palette "httpClient" we find the "HttpClientService", which can be placed under "Config -> Services" by drag&drop.
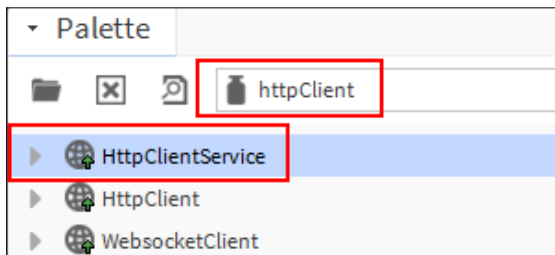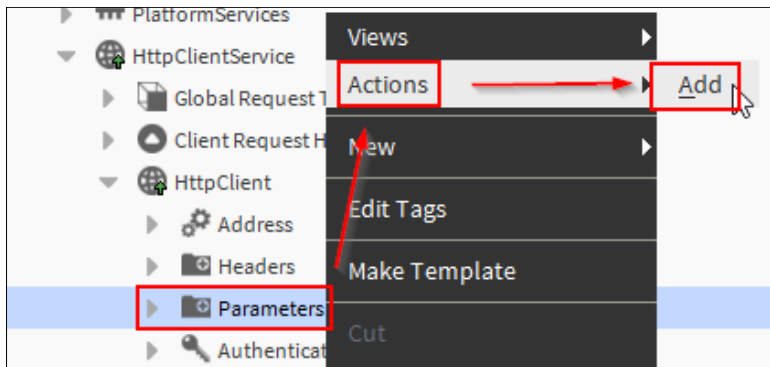

Then we drag&drop the "HttpClient" onto the "HttpClientService".
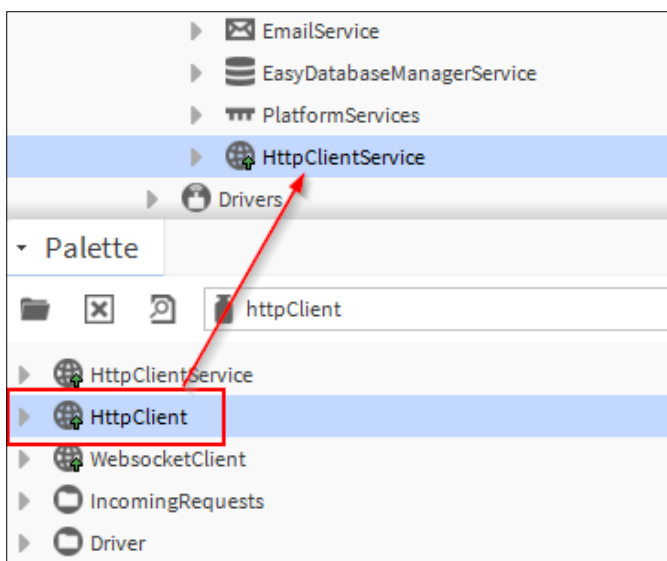
In the PropertySheet of the "HttpClient" we now enter the following information under "Address":
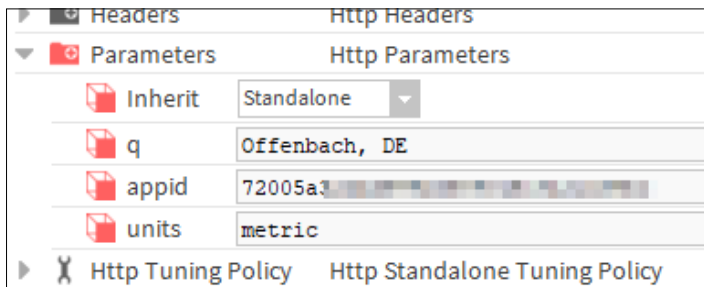

On the slot "Parameters" we can now right click -> "Action" -> "Add".
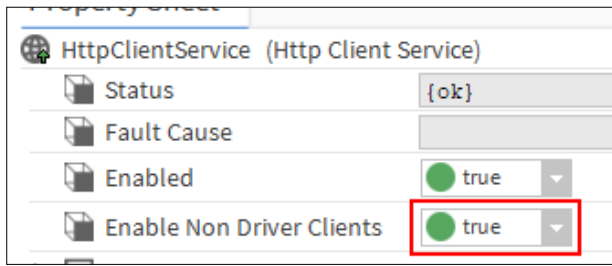

Here we add now the following slots (All of type String)

- q -> Location for the weather data
- appid -> API Key from Openweathermap
- units -> Specification to correct the unit

We now fill in the fields accordingly:

In the "HttpClientService" we still have to activate the following option:

Then with a right click on the "HttpClient" -> "Action" -> "Send" we request the first data. These are visible in the "out" field.
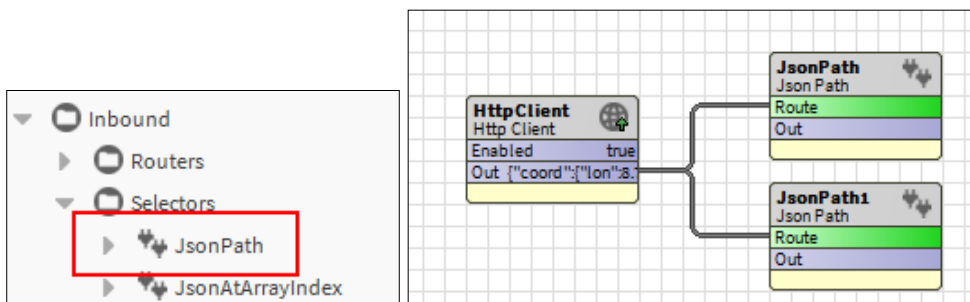
The data comes in JSON format and must now be broken down accordingly.

For this we first need the "JsonSchemaService" from the palette "jsonToolkit", which we drop under "Config -> Services" via drag&drop:
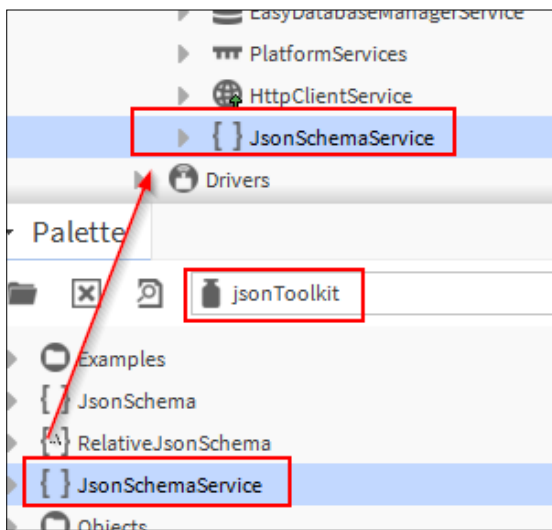
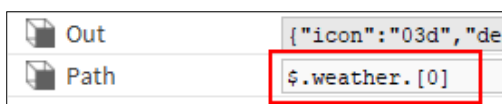Now we go to the "Wiresheet" view of the "HttpClientService".

Here we place 2x the "JsonPath" box from the "jsonToolkit" palette as follows:

In the PropertySheet of the "JsonPath" boxes, we now enter under "Path" in the upper box:
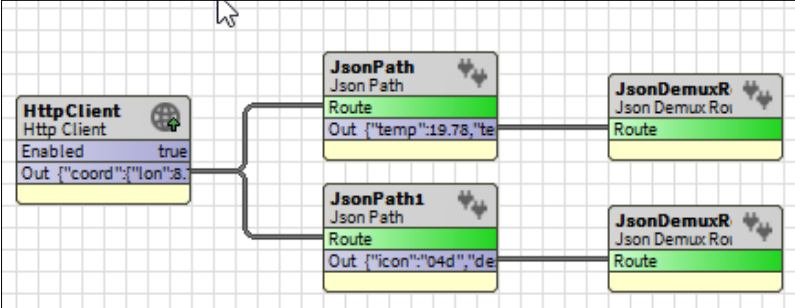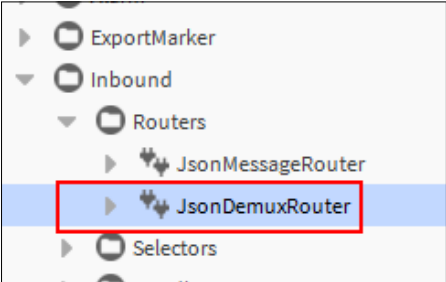

And into the lower one:

Thereby, now parts of the received data are extracted.

Now we place 2x the "JsonDemuxRouter" box from the "jsonToolkit" palette behind the "JsonPath" boxes
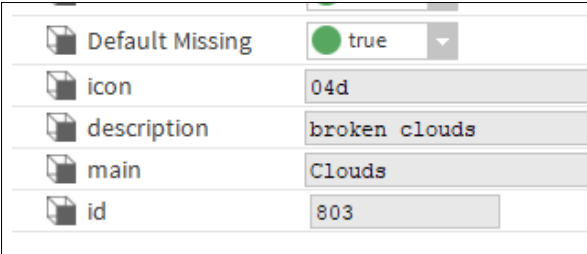
as follows:

Now we can add the following slots (Of type String) in the PropertySheet of the upper "JsonDemuxRouter" by right clicking -> "Action" -> "Add Slot":
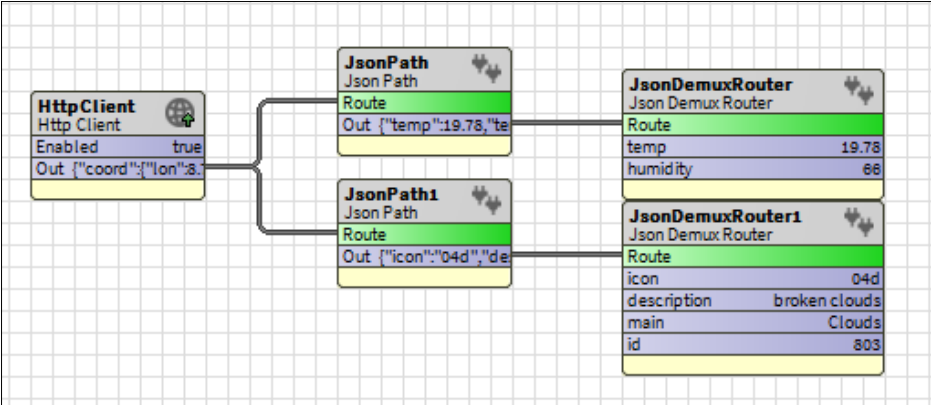

For the lower "JsonDemuxRouter" the same procedure and the following slots:

(Slots can also be generated automatically via Learn Mode when new data is received).
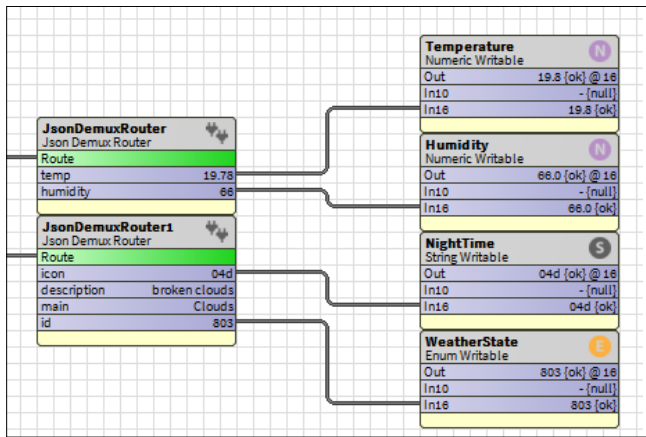
If now in the service again the "Send" action is executed, then we should see data in the fields.

Now we go back to the Wiresheet, where the new slots are now also visible:

Right click -> "New" to add NumericWritable, etc.

The outputs of the block are linked according to the example:

Note: In the "Facets" of the data points a unit can be defined for the temperature and relative humidity.

The data points can then be linked accordingly via the menu configurator in the global configuration:

Respectively the same for temperature and relative humidity:
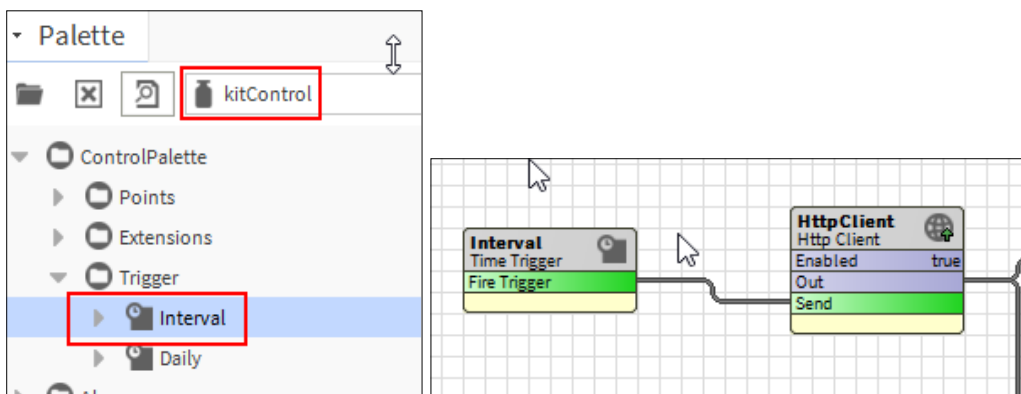

After saving the configuration and reloading the page, the weather should now be visible:


The HTTPClient can be extended with an "Interval" box from the palette "kitControl" to update the data in time intervals:

9.2.1 Using language-specific weather state texts from the OpenWeatherMap API

If the desired language of the weather texts is not available, the texts provided by the API can also be used.
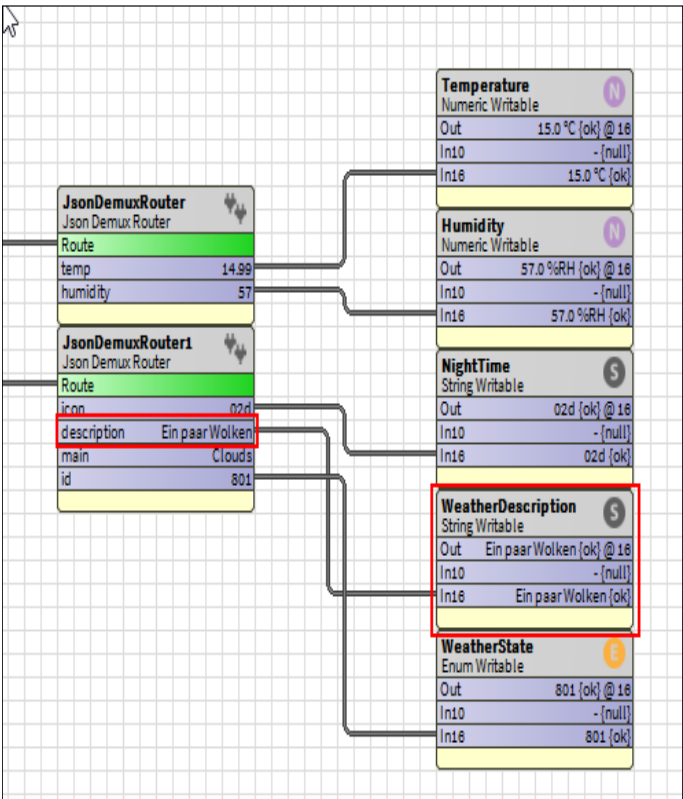
On the "Paramters" slot of the "HttpClient" you can add the slot "lang" by right-clicking -> "Action" -> "Add":
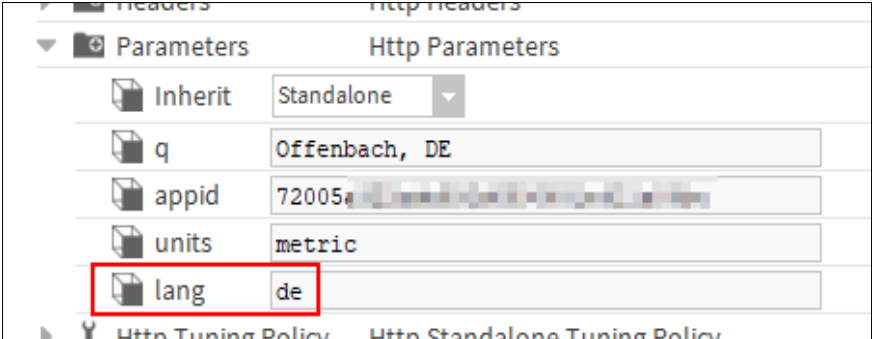
The respective language-specific abbreviation can be entered here (e.g. "es" for Spanish).

Now we go to the "Wiresheet" view of the "HttpClientService" and add a "StringWritable".

We link this to the field "description":

In the "Menu Configurator" we can now activate this option and add the new data point:

10. Updating the Advanced Menu from a version

The update process is relatively straightforward.

If a version 1.x.x was previously installed, then the installation can be performed normally according to the instructions in the chapter "Installation".

Afterwards existing .nav files for the user specific menu can be copied.

These are copied from the old folder "user" to the new folder "userConfig/menu" as shown in the picture:
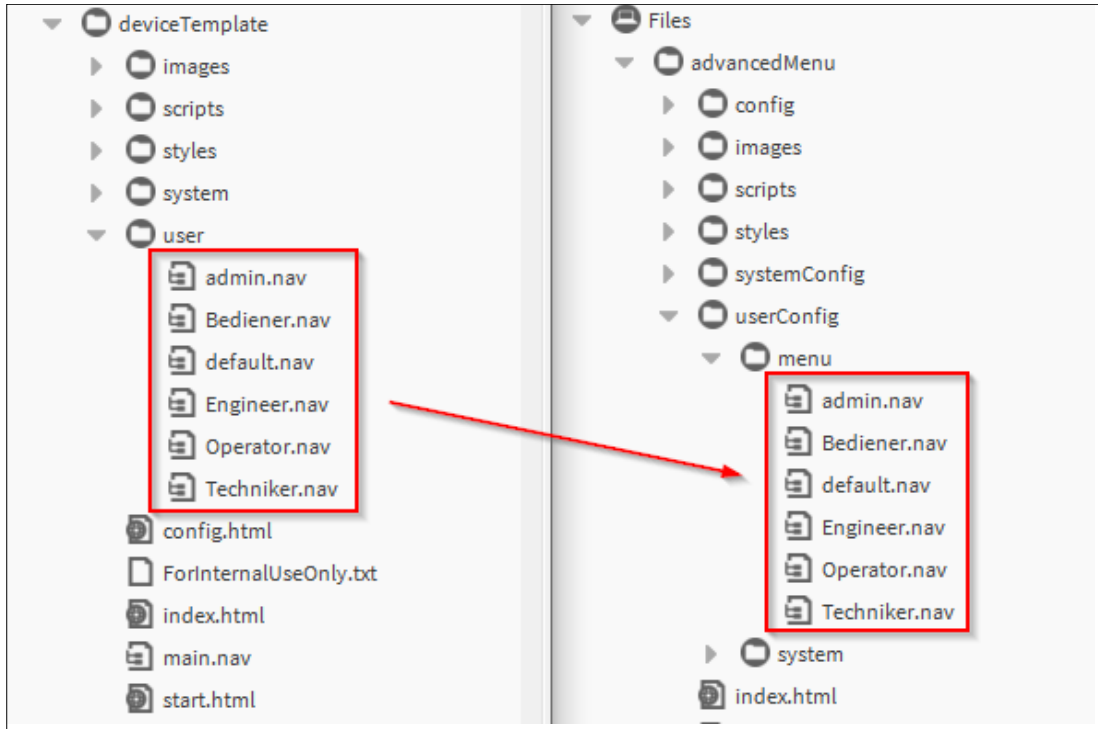
Remaining old configuration files can be read in via the configurator, as described in the chapter "Configuration".

For future updates, there will be update files, which only contain the overwriting of existing files, regardless of the configuration.