

How to get free Weather Forecast from WeatherAPI.com

In Cortex, in the room a message is to be displayed or spoken add an API Client object, e.g.



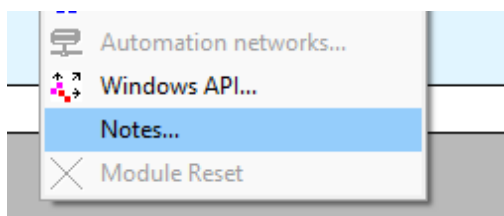
Open account with WeatherAPI.com



First SignUp to an account.

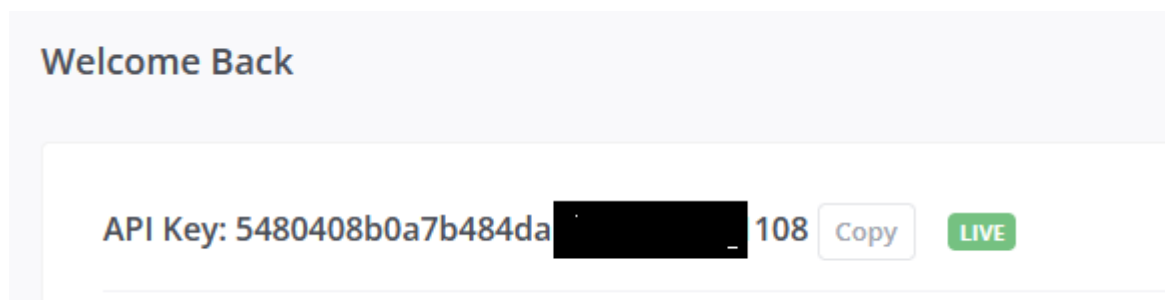
Having created an account Login if not already logged in.

In the Rooms API Client right click in plan view to get

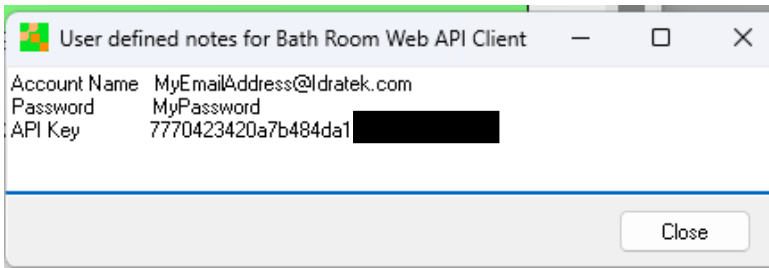


Click Notes. Enter the Username and password you used to create your WeatherAPI.com Account.

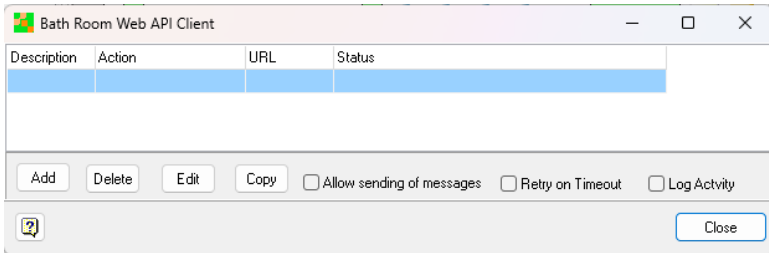
On the WeatherAPI.com site, in the account section copy you unique API Key.



Paste this also in your API client notes page. This is so you can keep your details in the database for future reference, e.g...

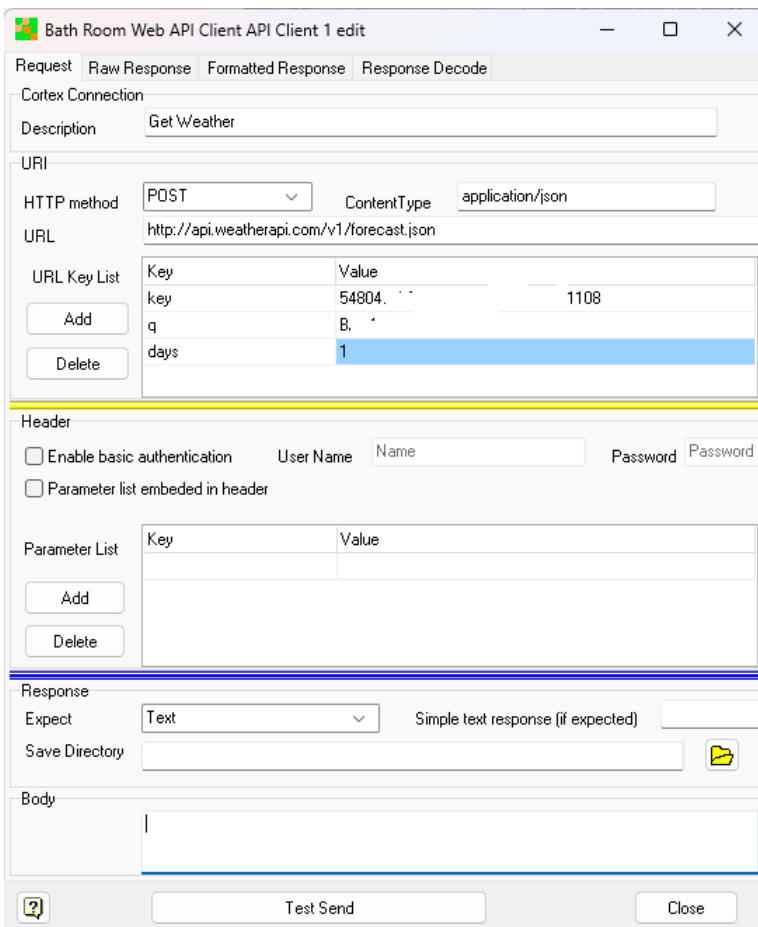


Double click your API client in plan view.



Click Add to create a new item.

Fill in the details as shown below substituting your own data (see below for explanation). Note: Case sensitive.



Change Description to meaningful name e.g "Get Weather".

Change HTTP method to 'Post'.

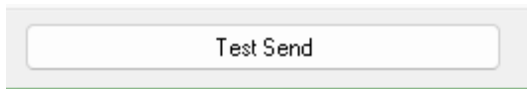
Change URL to <http://api.weatherapi.com/v1/forecast.json>

In URL Key List section click Add. Change Name1 to 'key' (all lower case). Change Value to your API Key provided from WeatherAPI.com and put in your Notes.

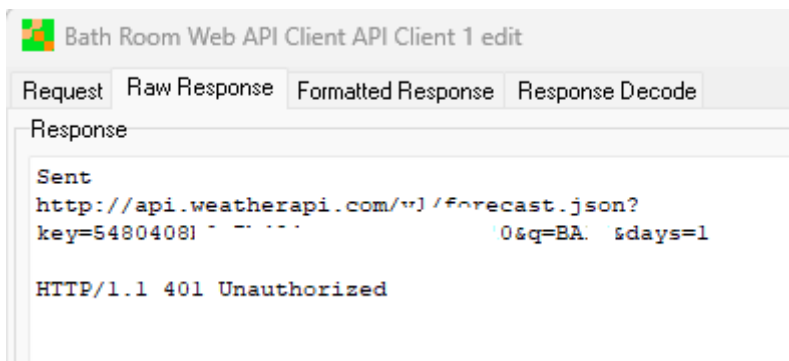
Click Add to create another new key item. Change its Key e.g. Name1 to 'q'. change its value to your own Post Code. This can be just the first part of your code. No space if all the post code.

Click Add to create another new key item. Change its Key to 'days' and Value to 1, or for example 2 if you also require the next day forecast (note: more days = more data to receive and process)

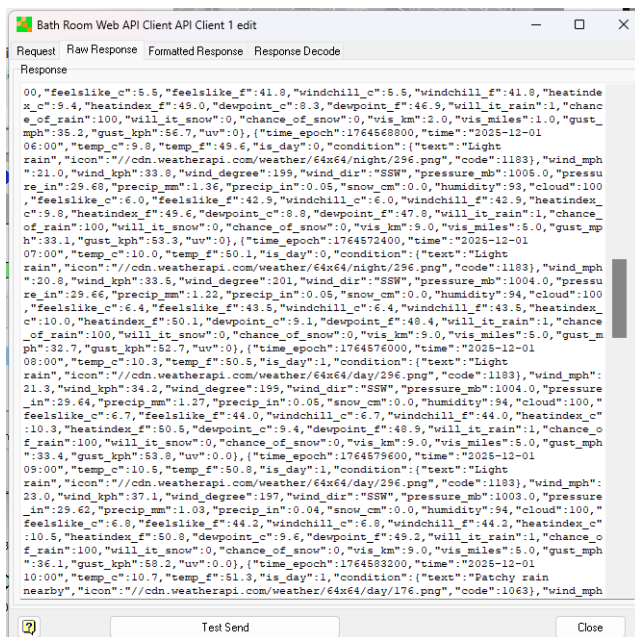
With network running click Test Send at bottom of menu.



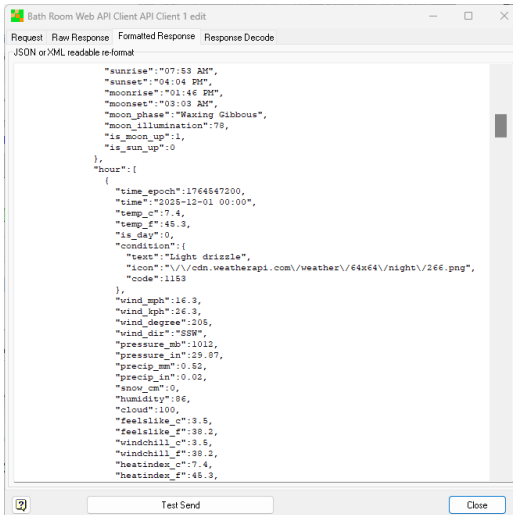
Click on Raw Response tab. If you got...



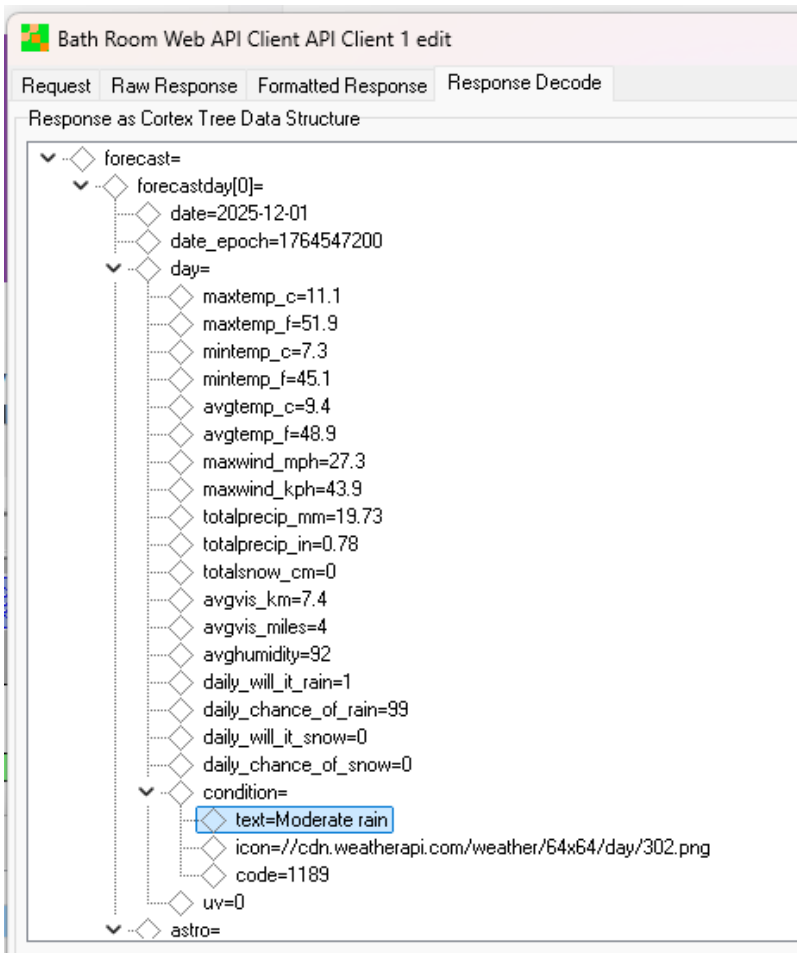
You have the wrong API Key. If all is good expect to see something like



Click the Formatted Response and it should be more ordered in the form...




Then check the response decode tab and select the line with the weather forecast you are interested in e.g. The 'forecast=', 'forecastday[0]=', 'day=', 'condition='.



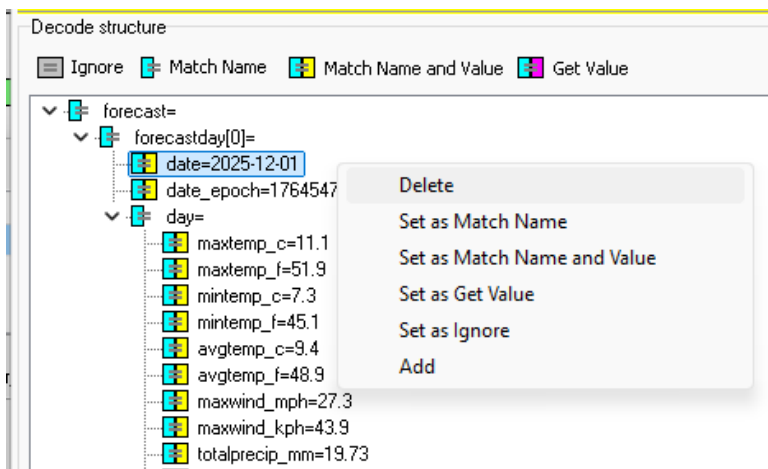
You can create multiple decodes by selecting and clicking 'Add selected item'.

So the decode for this example is...



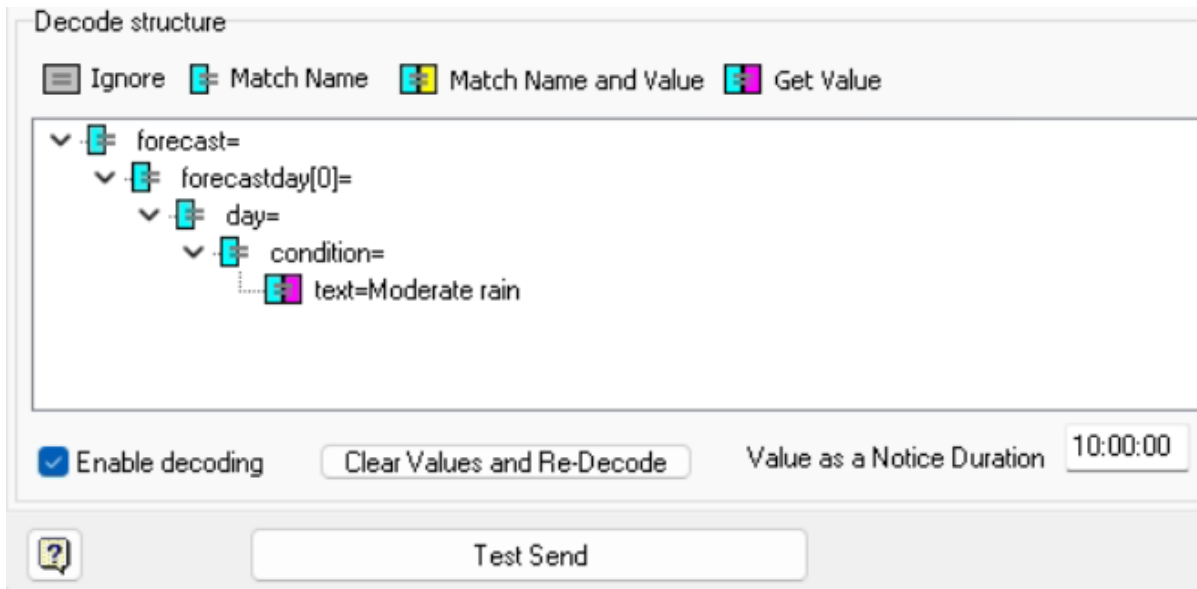
The item of interest is already highlighted  text=Moderate rain

Now removed unwanted items but leave required condition items in order to select the correct item.



So for example the date should not be a condition of the decode because this is wanted every day.

In this case the decode structure can be reduced to...

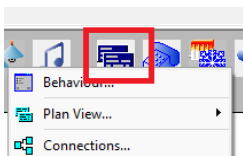


Ensure Enable decoding is **checked**.

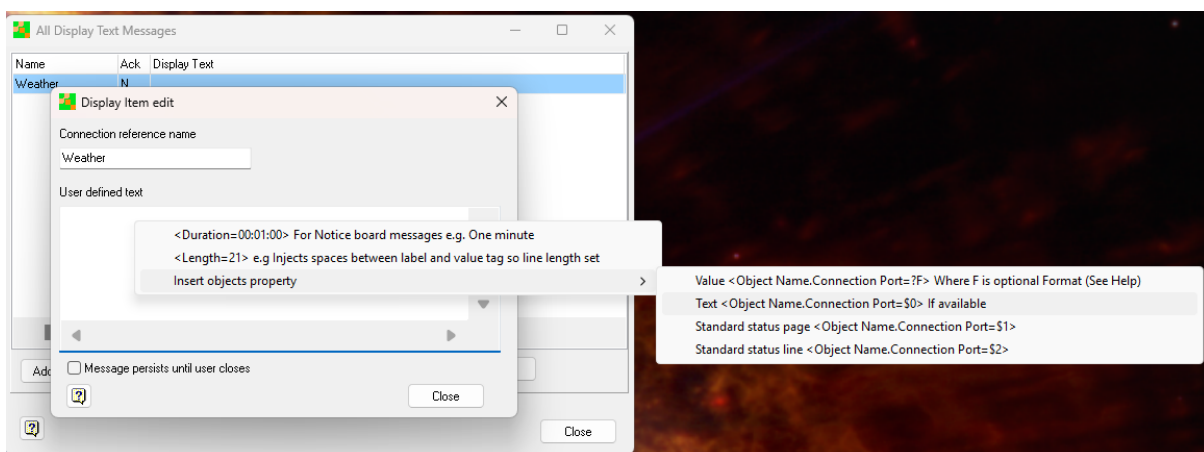
Close the API Client Send edit menu.

Close the API Client Behaviour menu. Suggest save database.

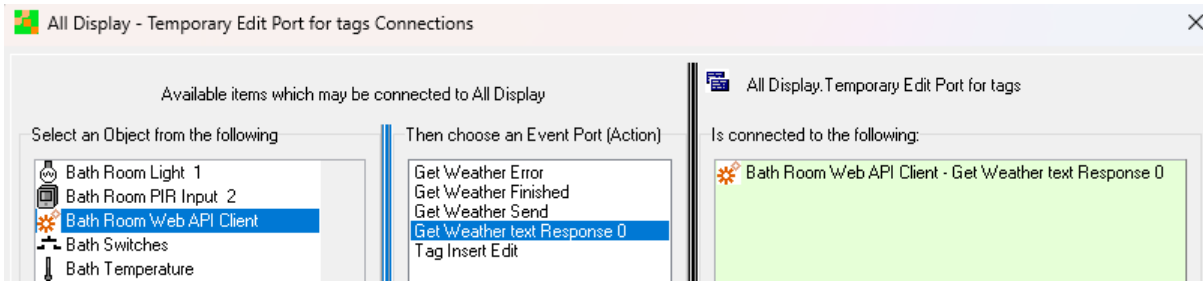
Next click on the All Display Behaviour



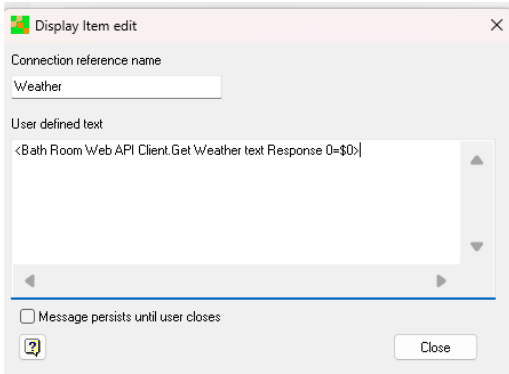
Click Add in menu. Change 'Item n' to Weather. Right click in User Defined text section and select the Text of an objects connection option.



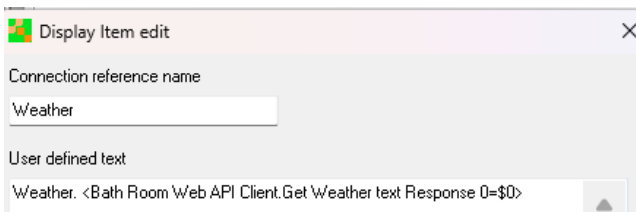
Find the API Client and select the appropriate connection in response to collecting the forecast.



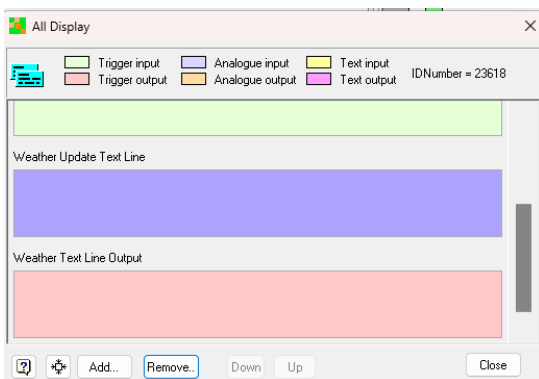
Close the Display item edit menu.



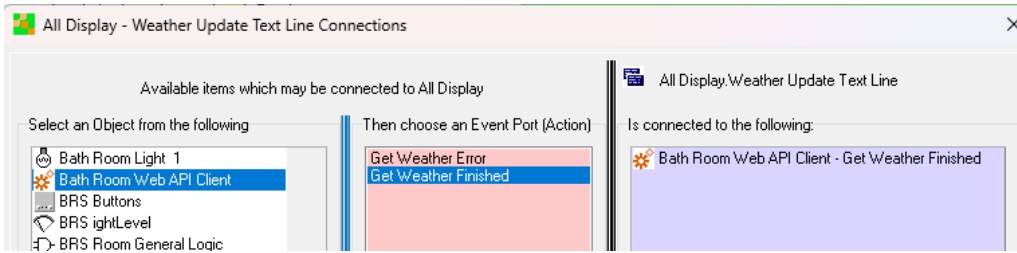
Next edit the user defined text to prepend the word 'Weather. ' that will form part of the announcement.



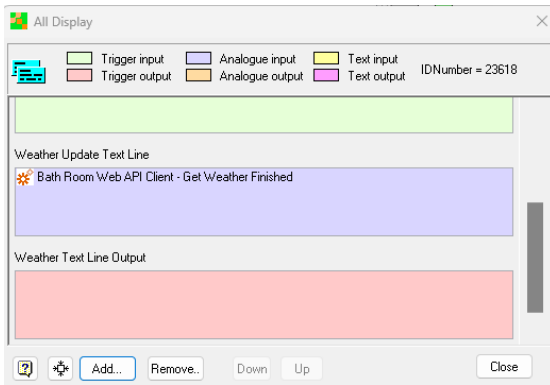
Next, to decide when this text is updated and where, if anywhere, it will be sent. In this case it can be the Bath Room. Right click the All Display object and select connections.



Find the item in the All Display list of connections. In this case the Weather update text line. Connect it to the API Client decoding of the weather when it has finished the decoding.



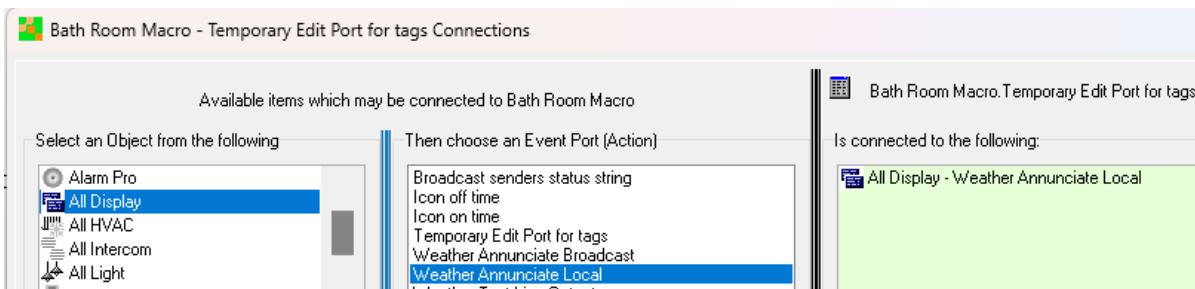
Close and the connection should be updated as



Next decide where the weather summary should go. It could be a Notice Board object or a line on a Display Function Panel (DFP) e.g..



To speak the weather forecast this could be from a menu or maco or scheduler. Essentially you need to trigger



Using similar principles to above, an extended example is illustrated below. This shows concatenation of multiple items to create a more detailed set of information for a noticeboard object (which could then also be transmitted to an Android tablet via the Noticeboard App). In this case a 2 day forecast has been configured for the Client item and the decoding is focussed on parameters under the forecastday[1]= heading (tomorrows weather):

The screenshot displays a software interface for configuring a noticeboard message. The main window, titled 'Web API Client WeatherFCst2 Send edit', shows a 'Response Decode' tab with a tree view of the response data. The 'forecastday[1]' node is expanded, showing parameters like 'maxtemp_c=8.8', 'mintemp_c=6', 'maxwind_mph=22.6', 'totalprecip_mm=0.04', and 'text=Partly Cloudy'. A 'Display Item edit' dialog box is open, showing the configuration for the 'Weather Tomorrow' message. The dialog includes a 'User defined text' field with the following content:

```

Tomorrow's Forecast:
Min Temp: <Web API Client.WeatherFCst2 mintemp_c Response 10=$0>C
Max Temp: <Web API Client.WeatherFCst2 maxtemp_c Response 9=$0>C
Max Wind: <Web API Client.WeatherFCst2 maxwind_mph Response 11=$0>mph
Rain: <Web API Client.WeatherFCst2 totalprecip_mm Response 12=$0>mm
General: <Web API Client.WeatherFCst2 text Response 13=$0>
    
```

The 'All Display Text Messages' window shows a table of configured messages:

Name	Ack	Display Text
WCond	Y	Today's forecast Min T
Weather Tomorrow	Y	Tomorrow's Forecast:...

In the bottom right corner, a 'Notice Board Screen' window displays the rendered message:

```

Tomorrow's Forecast:
Min Temp: 6C
Max Temp: 8.8C
Max Wind: 22.6mph
Rain: 0.04mm
General: Partly Cloudy
    
```