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WeatherBug Driver Help

Help version 1.001

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[Data Types](#)

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Overview

The WeatherBug Driver is designed specifically for use with 32 bit OPC Server products running on Intel microprocessor based computers. Please refer to the OPC server help documentation for operating system (OS) requirements.

OPC Channel and Device Setup

General dialogs in the channel setup process are described in the main OPC server help file. Dialogs that are specific to the WeatherBug driver are described in the links below.

Channel Setup

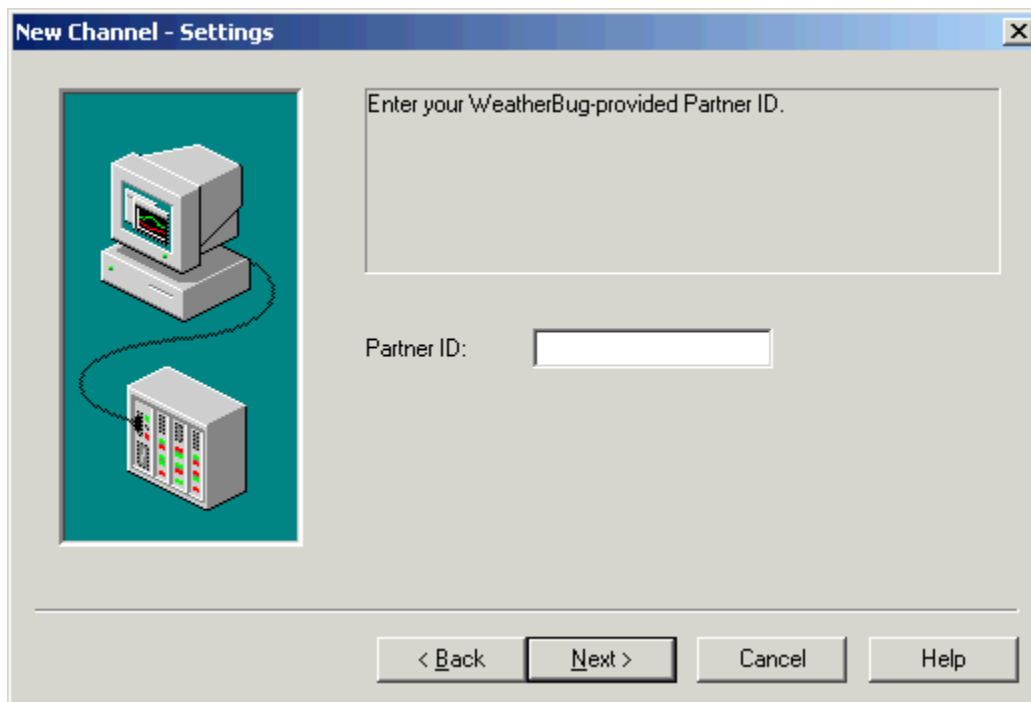
[Settings - Partner ID](#)

Device Setup

[Location - Zip Code and Station](#)

[Subscriptions](#)

Settings - Partner ID



In the Partner ID field, enter the ID number provided by WeatherBug.

Location - Zip Code and Station

The location for which you will be gathering data is identified by two fields: Zip Code and Station ID.

[Zip Code](#)

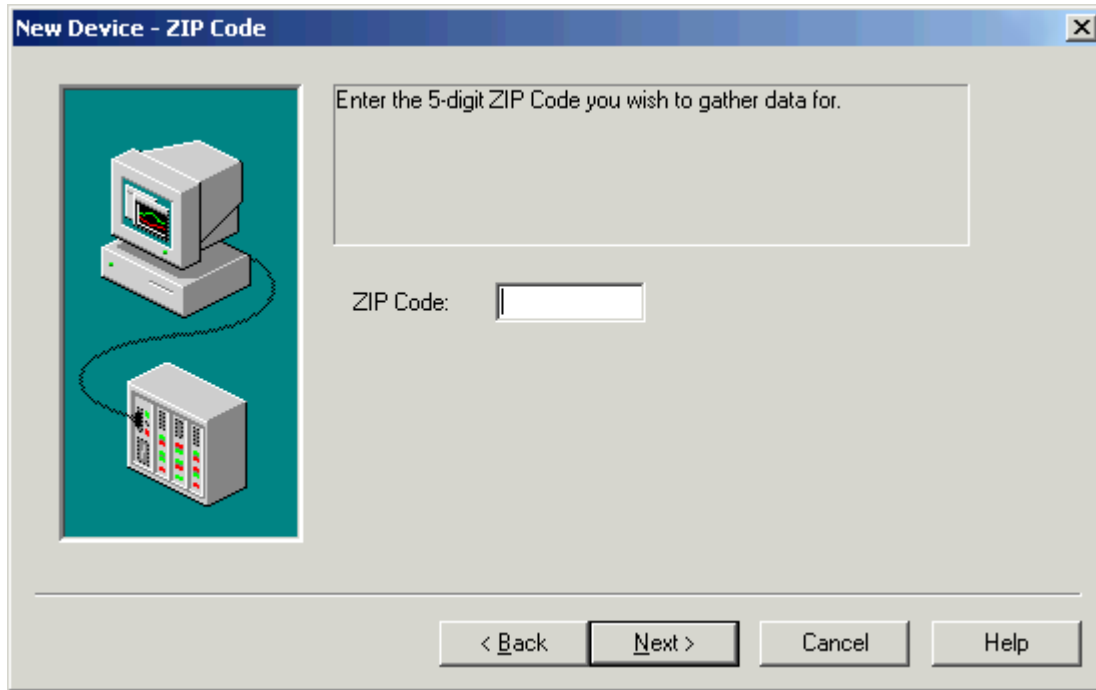
[Station ID](#)

[Location](#)

Zip Code


The Zip Code dialog prompts you to enter the 5-digit zip code for the location for which you are gathering

data.



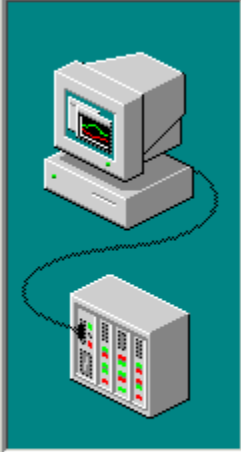
Station ID

The Station dialog prompts you to enter the ID of the WeatherBug station you want to work with. You can type in the station ID then click the green checkmark icon to check and verify your choice –or– use the Station ID wizard to search for the stations in or near the zip code you entered previously. To use the



wizard, click the wizard icon . The Station Wizard window will be displayed with stations in or near the zip code you entered previously (note: if the list of stations seems incomplete, click the Refresh button at the bottom of the window). To choose a station, scroll down to the station, click on it once then click OK.

The Name, Location and Type fields will be filled automatically. Verify that the fields show the station that you want to use.

New Device - Station



Enter the ID that identifies the Station you wish to gather data for or use the Station ID Wizard to search for Stations near the previously selected ZIP Code. Name, Location, and Type will be automatically populated based on the Station ID selected.

ID:  

Name:

Location:

Type:

< Back Next > Cancel Help

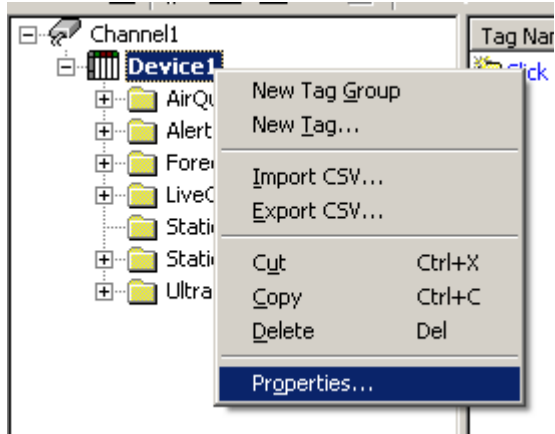
Station ID Wizard

ID	Name	Location	Type	Distance
LSNGN	Alexander Hamilton Senior HS	Los Angeles, CA 90034	WeatherBug	3.9732
NRTSH	Campbell Hall School	Valley Village, CA 91617	WeatherBug	4.5563
NRTHH	Oakwood ES	North Hollywood, CA 91602	WeatherBug	4.694
SHRMN	Notre Dame HS	Sherman Oaks, CA 91423	WeatherBug	4.9417
KSMO	Santa Monica Municipal Airport	Santa Monica, CA 90410	NWS	5.5521
CNTMN	Crossroads School	Santa Monica, CA 90404	WeatherBug	5.7112
SNTMN	Santa Monica HS	Santa Monica, CA 90405	WeatherBug	6.7739
LSNGM	Berendo MS	Los Angeles, CA 90006	WeatherBug	7.1141
LSNDP	Crenshaw SHS	Los Angeles, CA 90043	WeatherBug	7.1598
MRNDL	USC Information Sciences Institute	Marina Del Rey, CA 90292	WeatherBug	7.6668
KBUR	Burbank-Glendale-Pasadena Airport	Sun Valley, CA 91353	NWS	8.1036
SNVLL	Sun Valley MS	Sun Valley, CA 91352	WeatherBug	8.2177
KCQT	Los Angeles / USC Campus Downtown	Los Angeles, CA 90089	NWS	8.8332
LSNGP	Betty Plasencia ES	Los Angeles, CA 90026	WeatherBug	8.94
KVNY	Van Nuys Airport	Van Nuys, CA 91409	NWS	9.7084
LAJMS	John Muir MS	Los Angeles, CA 90044	WeatherBug	9.7735
SNVLY	Village Christian School	Sun Valley, CA 91352	WeatherBug	10.3223
KLAX	Los Angeles International Airport	El Segundo, CA 90009	NWS	10.4694
LENNX	Jefferson ES	Lennox, CA 90304	WeatherBug	10.8468
PCOIM	Pacoima MS	Pacoima, CA 91331	WeatherBug	11.4069
NHILC	Vintage Math, Science, Tech	North Hills, CA 91343	WeatherBug	11.9604
KHHR	Hawthorne Municipal Airport	Inglewood, CA 90310	NWS	12.277
NTTHR	Pinecrest School	Northridge, CA 91325	WeatherBug	12.9466
YSNGL	St. Aloysius School	Los Angeles, CA 90001	WeatherBug	13.0323

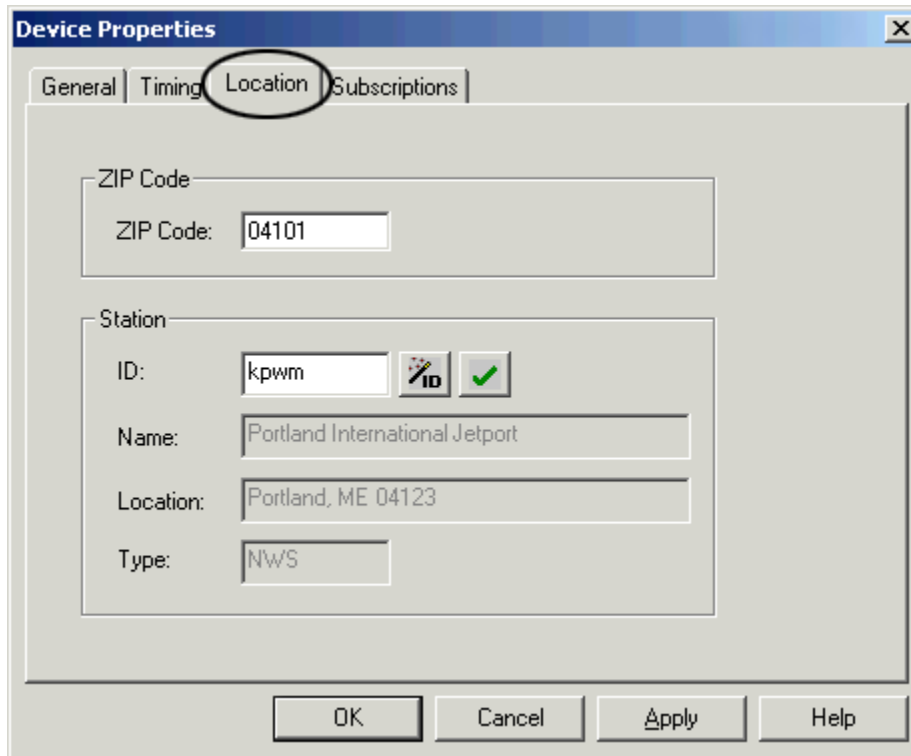
Refresh OK Cancel

Device Properties – Location

To call up the settings for a location that has already been added to your OPC project, right-click on the device and select Properties as shown here.



The Device Properties dialog will be displayed. Click the Location tab.



Subscriptions

The Subscriptions dialog enables you to control the OPC data settings for the WeatherBug subscription services you are using. By default, the [Live Observations](#) service is displayed first. When you choose a subscription service on the left, the settings fields for that service will be displayed on the right.

[Station List](#)

[Station Information](#)

[Live Observations](#)

[Forecast](#)

[Alerts](#)

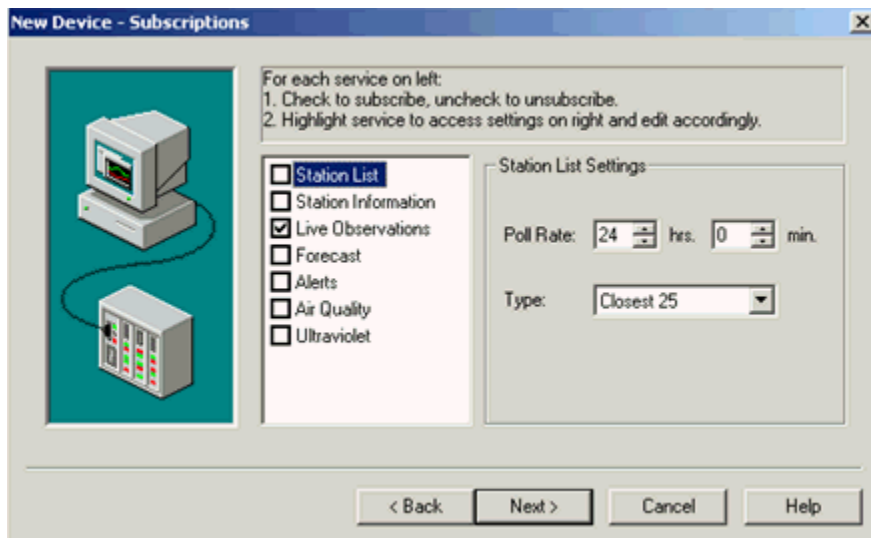
[Air Quality](#)

[Ultraviolet](#)

[Poll Rate and Driver Cache](#)

See also: [Automatic Tag Generation](#)

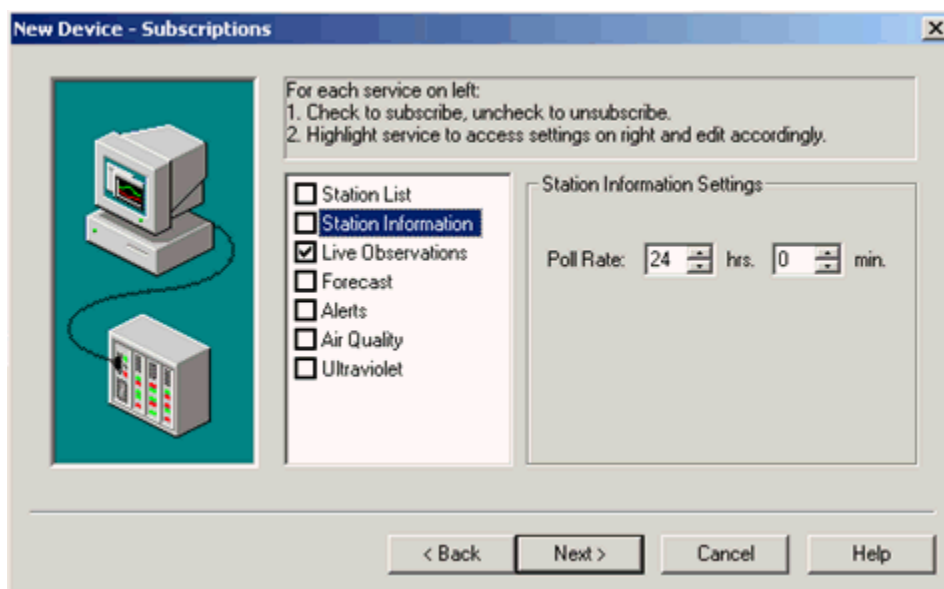
Station List



Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Station List data. The acceptable range is 0 - 240 hours. The default value is 24 hours (24 hrs, 0 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

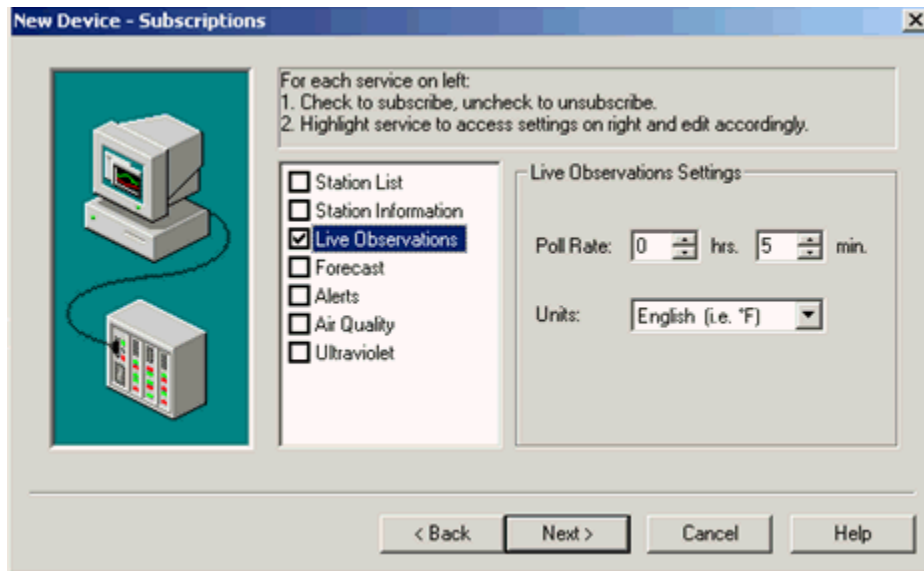
In the Type field, select the type of station list (Closest, Closest 25, etc.).

Station Information



Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Station Information data. The acceptable range is 0 - 240 hours. The default value is 24 hours (24 hrs, 0 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

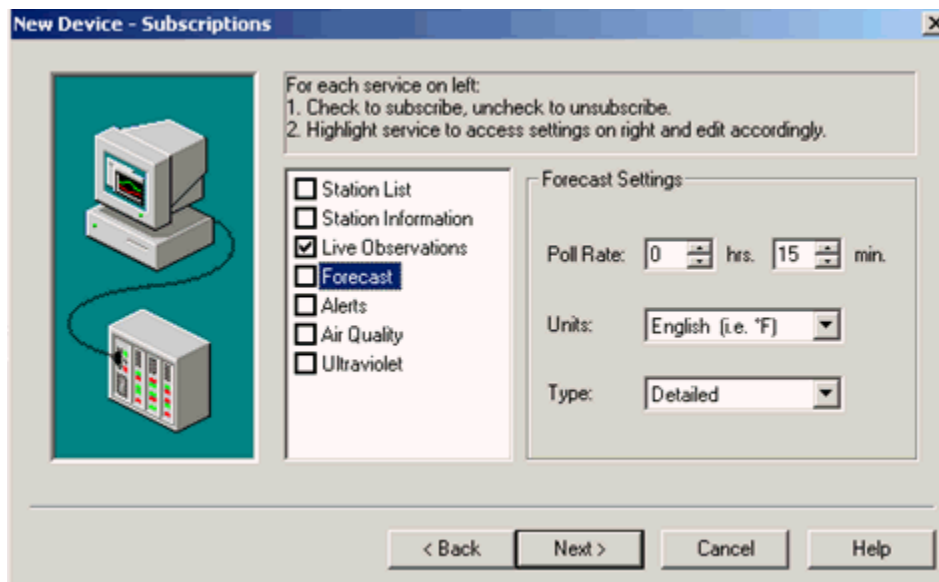
Live Observations



Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Live Observations data. The acceptable range is 0 - 240 hours. The default value is 5 minute (0 hrs, 5 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

In the Units field, select English (Fahrenheit) or Metric (Celsius).

Forecast

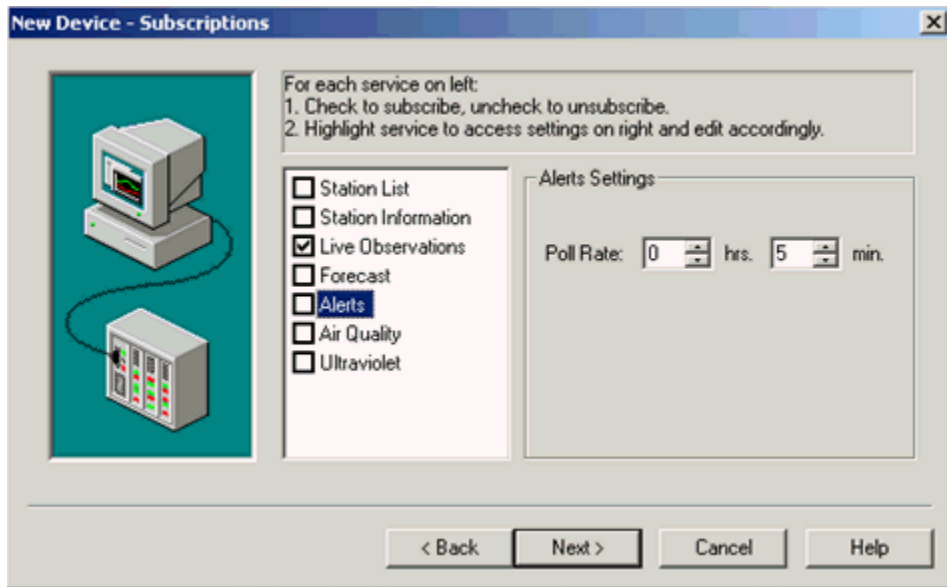


Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Forecast data. The acceptable range is 0 - 240 hours. The default value is 15 minutes (0 hrs, 15 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

In the Units field, select English (Fahrenheit) or Metric (Celsius).

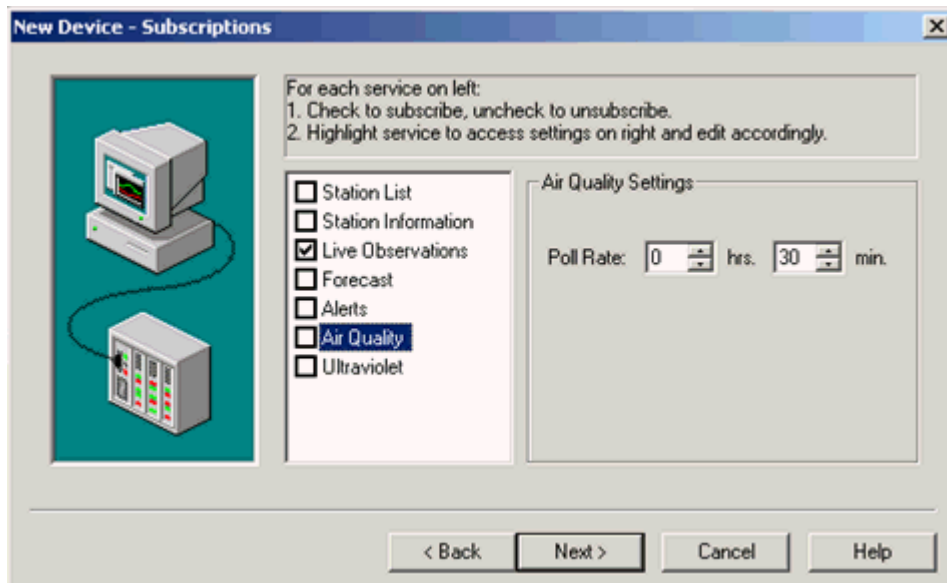
In the Type field, select the type of forecast (3 Day, Weekend, etc.).

Alerts



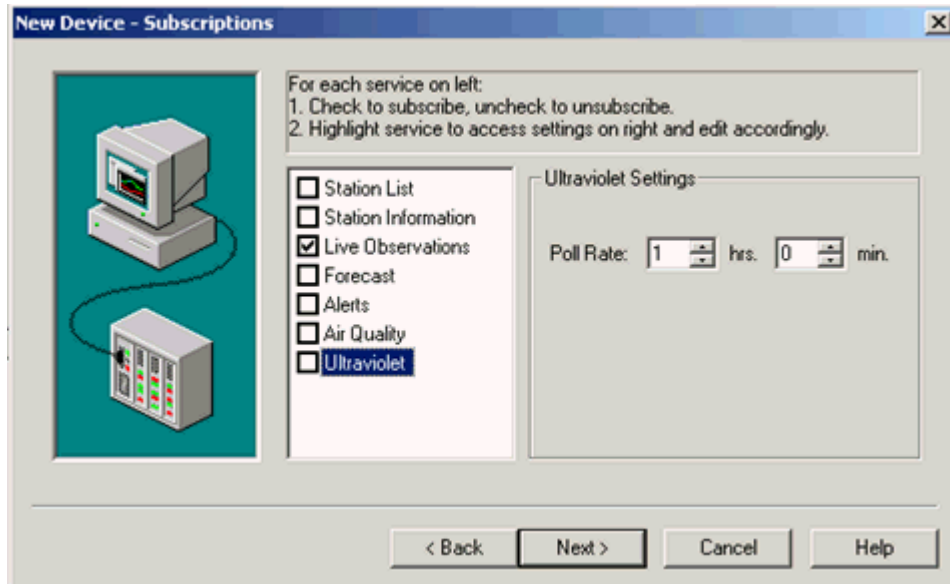
Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Alerts data. The acceptable range is 0 - 240 hours. The default value is 5 minutes (0 hrs, 5 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

Air Quality



Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Air Quality data. The acceptable range is 0 - 240 hours. The default value is 30 minutes (0 hrs, 30 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

Ultraviolet



Use the Poll Rate fields (hrs and min) to set the rate at which the driver will request data from the WeatherBug web service for Ultraviolet data. The acceptable range is 0 - 240 hours. The default value is 1 hour (1 hrs, 0 min). See "[Poll Rate and Driver Cache](#)" for a description of how the driver polls data, stores it in cache, and updates clients.

Poll Rate and Driver Cache

In the Subscriptions dialogs shown above, the Poll Rate fields determine the rate at which the driver will request data from the WeatherBug service. The driver stores the polled data in cache, where it is available for clients. For example, if the [Live Observations](#) poll rate is set to 5 minutes...

1. The driver will request Live Observations data from the WeatherBug service every 5 minutes.
2. The driver writes the data to cache. Note: If a request is not successful, for example, if the WeatherBug service cannot respond, then the driver will send another request at the next 5-minute interval.
3. During this ongoing process, clients are accessing data in the driver cache. Each client will request data at the client's own update rate. If the data in the driver cache has not been updated since the last client request (for example, because of a non-response from the WeatherBug service or because the client's update rate is faster than the driver poll rate) then the data returned by the driver will be unchanged from the last client request.

Data Types Description

DWord	Unsigned 32 bit value bit 0 is the low bit bit 31 is the high bit
Long	Signed 32 bit value bit 0 is the low bit bit 30 is the high bit bit 31 is the sign bit
String	Null terminated ASCII string
Float	32 bit floating point value

Automatic Tag Generation

The WeatherBug driver automatically creates a full set of tags when a device is added to an OPC channel. All tags are created, regardless of the user's WeatherBug subscriptions, however only the data that the user has subscribed to will be available.

Tags are described in the [Address Descriptions](#).

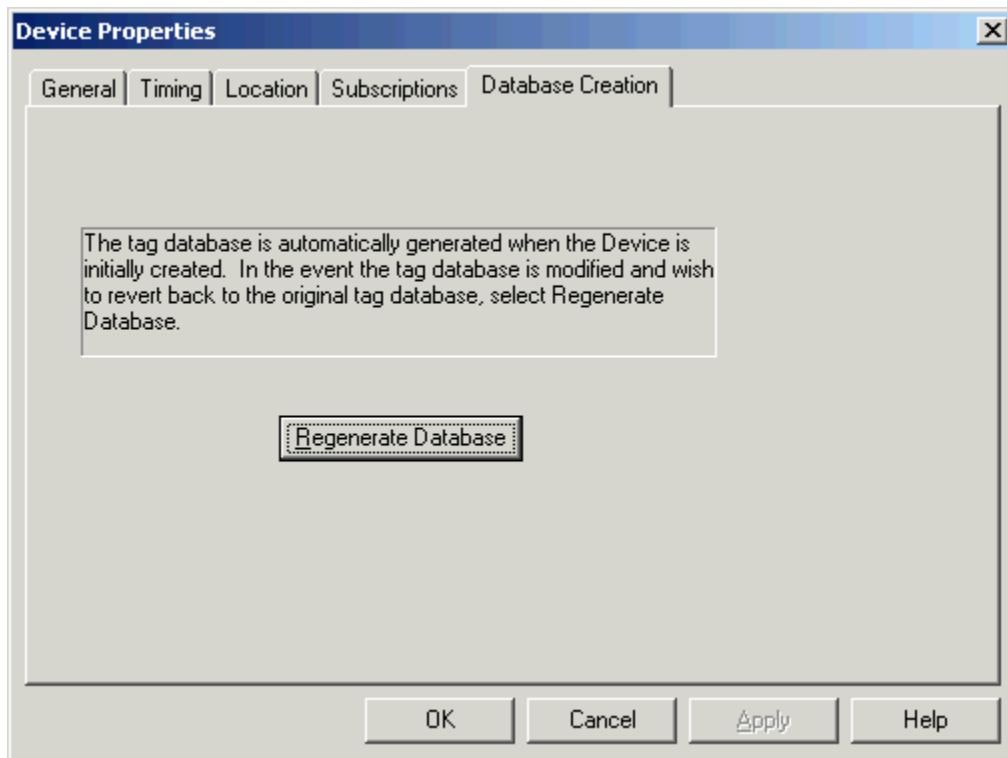
See also: [OPC Channel and Device Setup](#)

Database Creation

The WeatherBug driver automatically creates a database of tags when a device is added to an OPC channel.

If you want to regenerate the default tags for that device, perform these steps:

1. In the main OPC project, right-click on the device and select Properties.
2. Select Database Creation tab as shown below.
3. Click Regenerate Database. Any of the default tags that were deleted for that device will be automatically recreated.



Address Descriptions

[Air Quality Addressing](#)

[Alerts Addressing](#)

[Forecast Addressing](#)

[Live Observations Addressing](#)

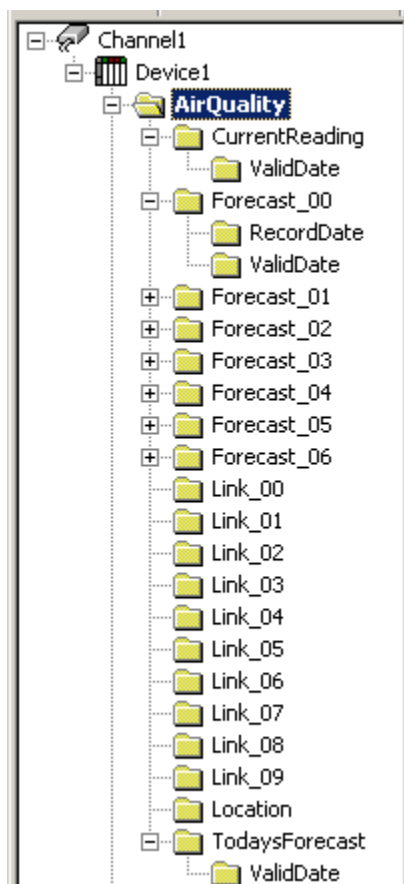
[Station Info Addressing](#)

[Station List Addressing](#)

[Ultraviolet Addressing](#)

See also: [Subscriptions](#) and [Automatic Tag Generation](#)

Air Quality Addressing



AirQuality

Address	Data Type	Description
AirQuality.airquality.location	String	Location for the specified zip code

AirQuality | CurrentReading

Address	Data Type	Description
AirQuality.airquality.current-reading.city	String	Location (City) for this current reading
AirQuality.airquality.current-reading.state	String	Location (State) for this current reading
AirQuality.airquality.current-reading.action-day	String	Whether or not voluntary action is being requested of the public
AirQuality.airquality.current-reading.aqi-value	Long	Current air quality index
AirQuality.airquality.current-reading.aqi-category	String	Category air quality index fits into. Ex. Unhealthy
AirQuality.airquality.current-reading.pollutant-name	String	Most major pollutant that is responsible for the air quality index
AirQuality.airquality.current-reading.color-code	String	Color coding for the current air quality index
AirQuality.airquality.current-reading.no2	String	Text description of what Nitrogen Dioxide means to the current air quality index
AirQuality.airquality.current-reading.so2	String	Text description of what Sulfur Dioxide means to the current air quality index
AirQuality.airquality.current-reading.co	String	Text description of what Carbon Monoxide means to the current air quality index
AirQuality.airquality.current-reading.pm	String	Text description of what Particulate Matter means to the current air quality index
AirQuality.airquality.current-reading.ozone	String	Text description of what Ozone means to the current air quality index
AirQuality.airquality.current-reading.valid-date	String	The date/time from which the reading is valid. This isn't the date/time that the data is for.

AirQuality | CurrentReading | ValidDate

Address	Data Type	Description
AirQuality.airquality.current-reading.valid-date.year.number	Long	The date (Year in numerical form) from which the reading is valid. This isn't the date that the data is for.
AirQuality.airquality.current-reading.valid-date.month.number	Long	The date (Month in numerical form) from which the reading is valid. This isn't the date that the data is for.
AirQuality.airquality.current-reading.valid-date.month.text	String	The date (Month in full text form) from which the reading is valid. This isn't the date that the data is for.
AirQuality.airquality.current-reading.valid-date.month.abbrev	String	The date (Month in abbreviated text form) from which the reading is valid. This isn't the date that the data is for.
AirQuality.airquality.current-reading.valid-date.day.number	Long	The date (Day in numerical form) from which the reading is valid. This isn't the date that the data is for.

AirQuality.airquality.current-reading.valid-date.hour.number	Long	The time (Hour in numerical form) from which the reading is valid. This isn't the time that the data is for.
AirQuality.airquality.current-reading.valid-date.hour.hour24	Long	The time (Hour in 24-hour format) from which the reading is valid. This isn't the time that the data is for.
AirQuality.airquality.current-reading.valid-date.ampm.abbrv	String	The time (AM/PM) from which the reading is valid. This isn't the time that the data is for.

AirQuality | Forecast_xx

Address	Data Type	Description
AirQuality.airquality.forecast[xx].city	String	Location (City) for this forecast
AirQuality.airquality.forecast[xx].state	String	Location (State) for this forecast
AirQuality.airquality.forecast[xx].action-day	String	Whether or not voluntary action is being requested of the public
AirQuality.airquality.forecast[xx].aqi-value	Long	Forecasted air quality index
AirQuality.airquality.forecast[xx].aqi-category	String	Category air quality index fits into. Ex. Unheathly
AirQuality.airquality.forecast[xx].valid-date	String	The date from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.forecast[xx].pollutant-name	String	Most major pollutant that is responsible for the air quality index
AirQuality.airquality.forecast[xx].color-code	String	Color coding for the current air quality index
AirQuality.airquality.forecast[xx].no2	String	Text description of what Nitrogen Dioxide means to the current air quality index
AirQuality.airquality.forecast[xx].so2	String	Text description of what Sulfur Dioxide means to the current air quality index
AirQuality.airquality.forecast[xx].co	String	Text description of what Carbon Monoxide means to the current air quality index
AirQuality.airquality.forecast[xx].pm	String	Text description of what Particulate Matter means to the current air quality index
AirQuality.airquality.forecast[xx].ozone	String	Text description of what Ozone means to the current air quality index
AirQuality.airquality.forecast[xx].record-date	String	The date for which the forecast is valid

AirQuality | Forecast_xx | RecordDate

Address	Data Type	Description
AirQuality.airquality.forecast[xx].record-date.year.number	Long	The date (Year in numerical form) for which the forecast is valid
AirQuality.airquality.forecast[xx].record-date.month.number	Long	The date (Month in numerical form) for which the forecast is

AirQuality.airquality.forecast[xx].record-date.month.text	String	valid The date (Month in full text form) for which the forecast is valid
AirQuality.airquality.forecast[xx].record-date.month.abbrev	String	The date (Month in abbreviated text form) for which the forecast is valid
AirQuality.airquality.forecast[xx].record-date.day.number	Long	The date (Day in numerical form) for which the forecast is valid

AirQuality | Forecast_xx | ValidDate

Address	Data Type	Description
AirQuality.airquality.forecast[xx].valid-date.year.number	Long	The date (Year in numerical form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.forecast[xx].valid-date.month.number	Long	The date (Month in numerical form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.forecast[xx].valid-date.month.text	String	The date (Month in full text form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.forecast[xx].valid-date.month.abbrev	String	The date (Month in abbreviated text form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.forecast[xx].valid-date.day.number	Long	The date (Day in numerical form) from which the forecast is valid. This isn't the date that the data is for.

AirQuality | Link_xx

Address	Data Type	Description
AirQuality.airquality.link[xx].type	String	Related information (type)
AirQuality.airquality.link[xx].title	String	Related information (title)
AirQuality.airquality.link[xx].url	String	Related information (URL)

AirQuality | Location

Address	Data Type	Description
AirQuality.airquality.location.zipcode	String	Location (Zip-Code) for the specified Zip-Code
AirQuality.airquality.location.city	String	Location (City) for the specified Zip-Code
AirQuality.airquality.location.state	String	Location (State) for the specified Zip-Code
AirQuality.airquality.location.aqi-city	String	Location (City) of the air quality sensors
AirQuality.airquality.location.aqi-state	String	Location (State) of the air quality sensors

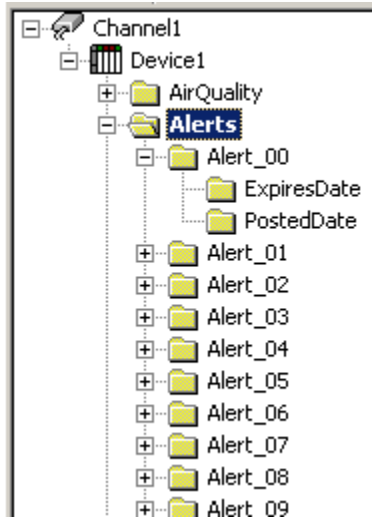
AirQuality | TodaysForecast

Address	Data Type	Description
AirQuality.airquality.todays-forecast.city	String	Location (City) for this forecast
AirQuality.airquality.todays-forecast.state	String	Location (State) for this forecast
AirQuality.airquality.todays-forecast.action-day	String	Whether or not voluntary action is being requested of the public
AirQuality.airquality.todays-forecast.aqi-value	Long	Forecasted air quality index
AirQuality.airquality.todays-forecast.aqi-category	String	Category air quality index fits into. Ex. Unheathly
AirQuality.airquality.todays-forecast.valid-date	String	The date from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.todays-forecast.pollutant-name	String	Most major pollutant that is responsible for the air quality index
AirQuality.airquality.todays-forecast.color-code	String	Color coding for the current air quality index
AirQuality.airquality.todays-forecast.no2	String	Text description of what Nitrogen Dioxide means to the current air quality index
AirQuality.airquality.todays-forecast.so2	String	Text description of what Sulfur Dioxide means to the current air quality index
AirQuality.airquality.todays-forecast.co	String	Text description of what Carbon Monoxide means to the current air quality index
AirQuality.airquality.todays-forecast.pm	String	Text description of what Particulate Matter means to the current air quality index
AirQuality.airquality.todays-forecast.ozone	String	Text description of what Ozone means to the current air quality index

AirQuality | TodaysForecast | ValidDate

Address	Data Type	Description
AirQuality.airquality.todays-forecast.valid-date.year.number	Long	The date (Year in numerical form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.todays-forecast.valid-date.month.number	Long	The date (Month in numerical form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.todays-forecast.valid-date.month.text	String	The date (Month in full text form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.todays-forecast.valid-date.month.abbrev	String	The date (Month in abbreviated text form) from which the forecast is valid. This isn't the date that the data is for.
AirQuality.airquality.todays-forecast.valid-date.day.number	Long	The date (Day in numerical form) from which the forecast is valid. This isn't the date that the data is for.

Alerts Addressing



Alerts

Address	Data Type	Description
Alerts.alerts.count	Long	Number of alerts currently posted
Alerts.alerts.state	String	Location (State) for this alert
Alerts.alerts.fips	String	Location (Fips) for this alert
Alerts.alerts.county	String	Location (County) for this alert
Alerts.alerts.zip	String	Location (Zip-Code) for this alert

Alerts | Alert_xx

Address	Data Type	Description
Alerts.alerts.alert[xx].expires-date	String	Date & time alert will expire (Custom format). Ex. 12/31/2007 11:59:59 PM EST
Alerts.alerts.alert[xx].html-msg-body	String	HTML formatted full text of the alert issued by the National Weather Service
Alerts.alerts.alert[xx].id	String	Alert ID number
Alerts.alerts.alert[xx].msg-summary	String	Plain-text summary of the alert text
Alerts.alerts.alert[xx].posted-date	String	Date & time alert was posted (Custom format). Ex. 12/31/2007 11:59:59 PM EST
Alerts.alerts.alert[xx].title	String	Alert title
Alerts.alerts.alert[xx].type	String	Alert type

Alerts | Alert_xx | ExpiresDate

Address	Data Type	Description
Alerts.alerts.alert[xx].expires-	Long	Date alert will expire (Year in

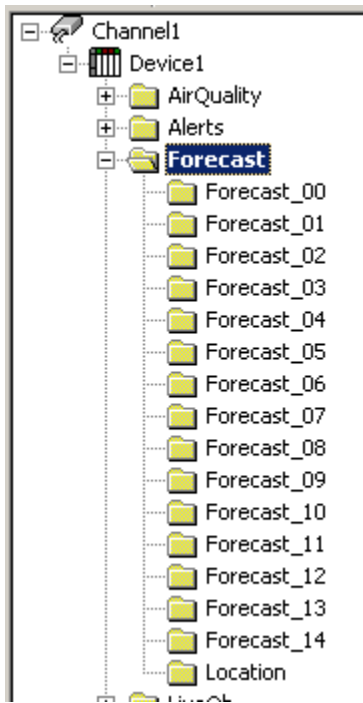
date.year.number			numerical form). Ex. 2007
Alerts.alerts.alert[xx].expires-date.month.number	Long		Date alert will expire (Month in numerical form). Ex. 12
Alerts.alerts.alert[xx].expires-date.month.text	String		Date alert will expire (Month in full text form). Ex. December
Alerts.alerts.alert[xx].expires-date.month.abbrev	String		Date alert will expire (Month in abbreviated text form). Ex. Dec
Alerts.alerts.alert[xx].expires-date.day.number	Long		Date alert will expire (Day in numerical form). Ex. 31
Alerts.alerts.alert[xx].expires-date.day.text	String		Date alert will expire (Day in full text form). Ex Monday
Alerts.alerts.alert[xx].expires-date.day.abbrev	String		Date alert will expire (Day in abbreviated text form). Ex. Mon
Alerts.alerts.alert[xx].expires-date.hour.number	Long		Time alert will expire (Hour). Ex. 11
Alerts.alerts.alert[xx].expires-date.hour.hour-24	Long		Time alert will expire (Hour in 24-hour format). Ex. 23
Alerts.alerts.alert[xx].expires-date.minute.number	Long		Time alert will expire (Minute). Ex. 59
Alerts.alerts.alert[xx].expires-date.second.number	Long		Time alert will expire (Second). Ex. 59
Alerts.alerts.alert[xx].expires-date.am-pm.abbrev	String		Time alert will expire (AM/PM). Ex. PM
Alerts.alerts.alert[xx].expires-date.time-zone.offset	Long		Time alert will expire (Time-zone as GMT numerical offset). Ex. -5
Alerts.alerts.alert[xx].expires-date.time-zone.text	String		Time alert will expire (Time-zone in full text form). Ex. Eastern Standard Time
Alerts.alerts.alert[xx].expires-date.time-zone.abbrev	String		Time alert will expire (Time-zone in abbreviated text form). Ex. EST

Alerts | Alert_xx | PostedDate

Address	Data Type	Description
Alerts.alerts.alert[xx].posted-date.year.number	Long	Date alert was posted (Year in numerical form). Ex. 2007
Alerts.alerts.alert[xx].posted-date.month.number	Long	Date alert was posted (Month in numerical form). Ex. 12
Alerts.alerts.alert[xx].posted-date.month.text	String	Date alert was posted (Month in full text form). Ex. December
Alerts.alerts.alert[xx].posted-date.month.abbrev	String	Date alert was posted (Month in abbreviated text form). Ex. Dec
Alerts.alerts.alert[xx].posted-date.day.number	String	Date alert was posted (Day in numerical form). Ex. 31
Alerts.alerts.alert[xx].posted-date.day.text	String	Date alert was posted (Day in full text form). Ex Monday
Alerts.alerts.alert[xx].posted-date.day.abbrev	String	Date alert was posted (Day in abbreviated text form). Ex. Mon
Alerts.alerts.alert[xx].posted-date.hour.number	Long	Time alert was posted (Hour). Ex. 11
Alerts.alerts.alert[xx].posted-date.hour.hour-24	Long	Time alert was posted (Hour in 24-hour format). Ex. 23
Alerts.alerts.alert[xx].posted-date.minute.number	Long	Time alert was posted (Minute). Ex. 59
Alerts.alerts.alert[xx].posted-date.second.number	Long	Time alert was posted (Second). Ex. 59

Alerts.alerts.alert[xx].posted-date.am-pm.abbrev	String	Time alert was posted (AM/PM). Ex. PM
Alerts.alerts.alert[xx].posted-date.time-zone.offset	Long	Time alert was posted (Time-zone as GMT numerical offset). Ex. -5
Alerts.alerts.alert[xx].posted-date.time-zone.text	String	Time alert was posted (Time-zone in full text form). Ex. Eastern Standard Time
Alerts.alerts.alert[xx].posted-date.time-zone.abbrev	String	Time alert was posted (Time-zone in abbreviated text form). Ex. EST

Forecast Addressing



Forecast

Address	Data Type	Description
Forecast.forecasts.date	String	Date & time forecast was last updated
Forecast.forecasts.location	String	Location for this forecast
Forecast.forecasts.type	String	Type of forecast (Detailed/Three-day/Two-day/Weekend/High/Low)

Forecast | Forecast_xx

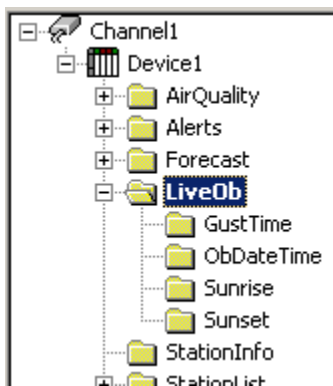
Address	Data Type	Description
Forecast.forecasts.forecast[xx].title	String	Description of the time period for this forecast

Forecast.forecasts.forecast[xx].short-title	String	Short description of forecast
Forecast.forecasts.forecast[xx].image	String	URL to image that represents the forecast
Forecast.forecasts.forecast[xx].image.icon	String	Image name that represents the forecast
Forecast.forecasts.forecast[xx].description	String	Very short forecast description
Forecast.forecasts.forecast[xx].prediction	String	Plain-text forecast. Not available on High/Low forecasts
Forecast.forecasts.forecast[xx].short-prediction1	String	Line 1 of the abbreviated plain-text forecast for High/Low forecasts only
Forecast.forecasts.forecast[xx].short-prediction2	String	Line 2 of the abbreviated plain-text forecast for High/Low forecasts only
Forecast.forecasts.forecast[xx].high	String	Forecasted high temperature
Forecast.forecasts.forecast[xx].high.unit	String	High temperature unit of measurement
Forecast.forecasts.forecast[xx].low	String	Forecasted low temperature
Forecast.forecasts.forecast[xx].low.unit	String	Low temperature unit of measurement

Forecast | Location

Address	Data Type	Description
Forecast.forecasts.location.city	String	Location (City) for this forecast
Forecast.forecasts.location.state	String	Location (State) for this forecast
Forecast.forecasts.location.zip	String	Location (Zip-Code) for this forecast
Forecast.forecasts.location.zone	String	Location (Zone) for this forecast

Live Observations Addressing



LiveOb

Address	Data Type	Description
LiveOb.ob.aux-temp	Float	Temperature at the auxiliary

LiveOb.ob.aux-temp.units	String	probe for the station Auxiliary temperature unit of measurement.
LiveOb.ob.aux-temp-rate	Float	Rate of change in temperature at the auxiliary probe
LiveOb.ob.aux-temp-rate.units	String	Auxiliary rate of change unit of measurement
LiveOb.ob.ob-date	String	Date & time of observation (Custom format). Ex. 12/31/2007 11:59:59 PM EST
LiveOb.ob.station-id	String	Station's ID
LiveOb.ob.station	String	Station's name
LiveOb.ob.city-state	String	Station's location (City/State)
LiveOb.ob.city-state.zip	String	Station's location (ZipCode)
LiveOb.ob.site-url	String	Web site for owner of station
LiveOb.ob.dew-point	Float	Temperature to which the air must be cooled to condense.
LiveOb.ob.dew-point.units	String	Dew-point unit of measurement
LiveOb.ob.elevation	Long	Elevation above sea level for this station
LiveOb.ob.elevation.units	String	Elevation unit of measurement
LiveOb.ob.feels-like	Float	Wind Chill (cold temps) or Heat Index (hot temps) temperature
LiveOb.ob.feels-like.units	String	Feels-Like unit of measurement
LiveOb.ob.gust-time	String	Date & time of strongest wind gust recently recorded (Custom format)
LiveOb.ob.gust-direction	String	Cardinal direction of strongest wind gust recently recorded
LiveOb.ob.gust-speed	Float	Speed of strongest wind gust recently recorded
LiveOb.ob.gust-speed.units	String	Gust speed unit of measurement
LiveOb.ob.humidity	Float	Current relative humidity
LiveOb.ob.humidity.units	String	Relative humidity (current) unit of measurement
LiveOb.ob.humidity-high	Float	Highest relative humidity measured today
LiveOb.ob.humidity-high.units	String	Relative humidity (high) unit of measurement
LiveOb.ob.humidity-low	Float	Lowest relative humidity measured today
LiveOb.ob.humidity-low.units	String	Relative humidity (low) unit of measurement
LiveOb.ob.humidity-rate	Float	Rate of change in relative humidity
LiveOb.ob.indoor-temp	Float	Indoor temperature at the facility that hosts the station
LiveOb.ob.indoor-temp.units	String	Indoor temperature unit of measurement
LiveOb.ob.indoor-temp-rate	Float	Rate of change in indoor temperature at the station's host facility
LiveOb.ob.indoor-temp-rate.units	String	Indoor temperature rate of change unit of measurement
LiveOb.ob.light	Float	Relative percentage of daylight currently at the station's location
LiveOb.ob.light-rate	Float	Rate of change in light at the

		station's location
LiveOb.ob.moon-phase	String	Phase of the moon
LiveOb.ob.moon-phase.moon-phase-img	String	Moon phase image URL
LiveOb.ob.pressure	Float	Current barometric pressure
LiveOb.ob.pressure.units	String	Barometric pressure (current) unit of measurement
LiveOb.ob.pressure-high	Float	Highest barometric pressure measured today
LiveOb.ob.pressure-high.units	String	Barometric pressure (high) unit of measurement
LiveOb.ob.pressure-low	Float	Lowest barometric pressure measured today
LiveOb.ob.pressure-low.units	String	Barometric pressure (low) unit of measurement
LiveOb.ob.pressure-rate	Float	Rate of change in barometric pressure
LiveOb.ob.pressure-rate.units	String	Barometric pressure rate of change unit of measurement
LiveOb.ob.rain-month	Float	Amount of rainfall so far this month
LiveOb.ob.rain-month.units	String	Month rainfall unit of measurement
LiveOb.ob.rain-rate	Float	Current rate at which rain is falling
LiveOb.ob.rain-rate.units	String	Rain rate (current) unit of measurement
LiveOb.ob.rain-rate-max	Float	Maximum rate at which rain has fallen today
LiveOb.ob.rain-rate-max.units	String	Rain rate (max) unit of measurement
LiveOb.ob.rain-today	Float	Amount of rainfall so far today
LiveOb.ob.rain-today.units	String	Rainfall unit of measurement
LiveOb.ob.rain-year	Float	Amount of rainfall so far this year
LiveOb.ob.rain-year.units	String	Year rainfall unit of measurement
LiveOb.ob.temp	Float	Current temperature
LiveOb.ob.temp.units	String	Temperature unit (current) of measurement
LiveOb.ob.temp-high	Float	Highest temperature measured today
LiveOb.ob.temp-high.units	String	Temperature unit (high) of measurement
LiveOb.ob.temp-low	Float	Lowest temperature measured today
LiveOb.ob.temp-low.units	String	Temperature unit (low) of measurement
LiveOb.ob.temp-rate	Float	Rate of change in temperature
LiveOb.ob.temp-rate.units	String	Temperature rate of change unit of measurement
LiveOb.ob.sunrise	String	Date & time of last/next sunrise (Custom format)
LiveOb.ob.sunset	String	Date & time of last/next sunset (Custom format)
LiveOb.ob.wet-bulb	Float	Temperature at which no evaporation occurs and temperature stops dropping

LiveOb.ob.wet-bulb.units	String	Wet-bulb unit of measurement
LiveOb.ob.wind-speed	Float	Current wind speed
LiveOb.ob.wind-speed.units	String	Wind speed (current) unit of measurement
LiveOb.ob.wind-speed-avg	Float	Average speed of the wind so far today
LiveOb.ob.wind-speed-avg.units	String	Wind speed (average) unit of measurement
LiveOb.ob.wind-direction	String	Current cardinal direction of the wind
LiveOb.ob.wind-direction-avg	String	Average cardinal direction of the wind so far today

LiveOb | GustTime

Address	Data Type	Description
LiveOb.ob.gust-time.year.number	Long	Date of strongest wind gust recently recorded (Year in numerical form).
LiveOb.ob.gust-time.month.number	Long	Date of strongest wind gust recently recorded (Month in numerical form).
LiveOb.ob.gust-time.month.text	String	Date of strongest wind gust recently recorded (Month in full text form).
LiveOb.ob.gust-time.month.abbrev	String	Date of strongest wind gust recently recorded (Month in abbreviated text form).
LiveOb.ob.gust-time.day.number	Long	Date of strongest wind gust recently recorded (Day in numerical form).
LiveOb.ob.gust-time.day.text	String	Date of strongest wind gust recently recorded (Day in full text form).
LiveOb.ob.gust-time.day.abbrev	String	Date of strongest wind gust recently recorded (Day in abbreviated text form).
LiveOb.ob.gust-time.hour.number	Long	Time of strongest wind gust recently recorded (Hour).
LiveOb.ob.gust-time.hour.hour-24	Long	Time of strongest wind gust recently recorded (Hour in 24-hour format).
LiveOb.ob.gust-time.minute.number	Long	Time of strongest wind gust recently recorded (Minute).
LiveOb.ob.gust-time.second.number	Long	Time of strongest wind gust recently recorded (Second).
LiveOb.ob.gust-time.am-pm.abbrev	String	Time of strongest wind gust recently recorded (AM/PM).
LiveOb.ob.gust-time.time-zone.offset	Long	Time of strongest wind gust recently recorded (Time-zone as GMT numerical offset).
LiveOb.ob.gust-time.time-zone.text	String	Time of strongest wind gust recently recorded (Time-zone in full text form).
LiveOb.ob.gust-time.time-zone.abbrev	String	Time of strongest wind gust recently recorded (Time-zone in abbreviated text form).

LiveOb | ObDateTime

Address	Data Type	Description
LiveOb.ob.ob-date.year.number	Long	Date of observation (Year in numerical form). Ex. 2007
LiveOb.ob.ob-date.month.number	Long	Date of observation (Month in numerical form). Ex. 12
LiveOb.ob.ob-date.month.text	String	Date of observation (Month in full text form). Ex. December
LiveOb.ob.ob-date.month.abbrev	String	Date of observation (Month in abbreviated text form). Ex. Dec
LiveOb.ob.ob-date.day.number	Long	Date of observation (Day in numerical form). Ex. 31
LiveOb.ob.ob-date.day.text	String	Date of observation (Day in full text form). Ex Monday
LiveOb.ob.ob-date.day.abbrev	String	Date of observation (Day in abbreviated text form). Ex. Mon
LiveOb.ob.ob-date.hour.number	Long	Time of observation (Hour). Ex. 11
LiveOb.ob.ob-date.hour.hour-24	Long	Time of observation (Hour in 24-hour format). Ex. 23
LiveOb.ob.ob-date.minute.number	Long	Time of observation (Minute). Ex. 59
LiveOb.ob.ob-date.second.number	Long	Time of observation (Second). Ex. 59
LiveOb.ob.ob-date.am-pm.abbrev	String	Time of observation (AM/PM). Ex. PM
LiveOb.ob.ob-date.time-zone.offset	Long	Time of observation (Time-zone as GMT numerical offset). Ex. -5
LiveOb.ob.ob-date.time-zone.text	String	Time of observation (Time-zone in full text form). Ex. Eastern Standard Time
LiveOb.ob.ob-date.time-zone.abbrev	String	Time of observation (Time-zone in abbreviated text form). Ex. EST

LiveOb | Sunrise

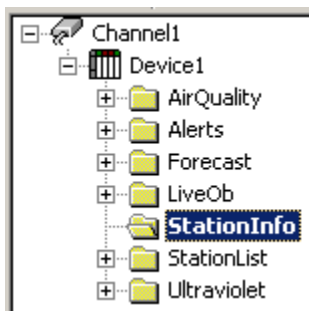
Address	Data Type	Description
LiveOb.ob.sunrise.year.number	Long	Date of last/next sunrise (Year in numerical form).
LiveOb.ob.sunrise.month.number	Long	Date of last/next sunrise (Month in numerical form).
LiveOb.ob.sunrise.month.text	String	Date of last/next sunrise (Month in full text form).
LiveOb.ob.sunrise.month.abbrev	String	Date of last/next sunrise (Month in abbreviated text form).
LiveOb.ob.sunrise.day.number	Long	Date of last/next sunrise (Day in numerical form).
LiveOb.ob.sunrise.day.text	String	Date of last/next sunrise (Day in full text form).
LiveOb.ob.sunrise.day.abbrev	String	Date of last/next sunrise (Day in abbreviated text form).
LiveOb.ob.sunrise.hour.number	Long	Time of last/next sunrise (Hour)
LiveOb.ob.sunrise.hour.hour-24	Long	Time of last/next sunrise (Hour in 24-hour format)
LiveOb.ob.sunrise.minute.number	Long	Time of last/next sunrise (Minute)
LiveOb.ob.sunrise.second.	Long	Time of last/next sunrise

number		(Second)
LiveOb.ob.sunrise.am-pm.abbrev	String	Time of last/next sunrise (AM/PM)

LiveOb | Sunset

Address	Data Type	Description
LiveOb.ob.sunset.year.number	Long	Date of last/next sunset (Year in numerical form).
LiveOb.ob.sunset.month.number	Long	Date of last/next sunset (Month in numerical form).
LiveOb.ob.sunset.month.text	String	Date of last/next sunset (Month in full text form).
LiveOb.ob.sunset.month.abbrev	String	Date of last/next sunset (Month in abbreviated text form).
LiveOb.ob.sunset.day.number	Long	Date of last/next sunset (Day in numerical form).
LiveOb.ob.sunset.day.text	String	Date of last/next sunset (Day in full text form).
LiveOb.ob.sunset.day.abbrev	String	Date of last/next sunset (Day in abbreviated text form).
LiveOb.ob.sunset.hour.number	Long	Time of last/next sunset (Hour)
LiveOb.ob.sunset.hour.hour-24	Long	Time of last/next sunset (Hour in 24-hour format)
LiveOb.ob.sunset.minute.number	Long	Time of last/next sunset (Minute)
LiveOb.ob.sunset.second.number	Long	Time of last/next sunset (Second)
LiveOb.ob.sunset.am-pm.abbrev	String	Time of last/next sunset (AM/PM)

Station Info Addressing

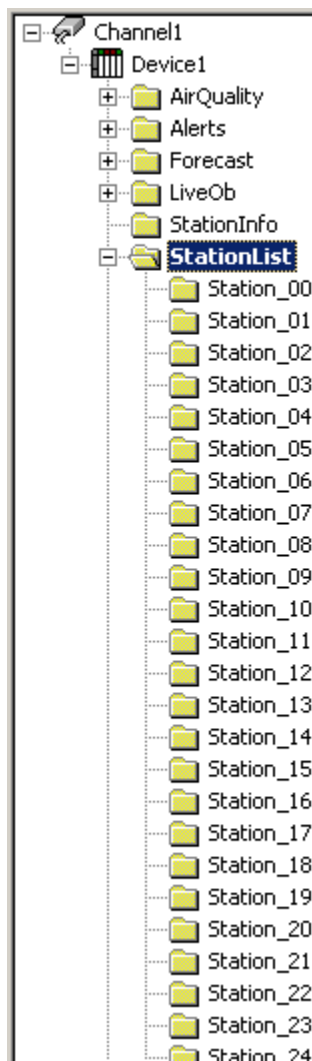


StationInfo

Address	Data Type	Description
StationInfo.station.id	String	Station's ID
StationInfo.station.name	String	Station's name
StationInfo.station.city	String	Station's location (city)
StationInfo.station.state	String	Station's location (state)

StationInfo.station.zipcode	String	Station's location (zip code)
StationInfo.station.station-type	String	WeatherBug or NWS (National Weather Service) weather station
StationInfo.station.latitude	Float	Station's location (Latitude coordinate)
StationInfo.station.longitude	Float	Station's location (Longitude coordinate)

Station List Addressing

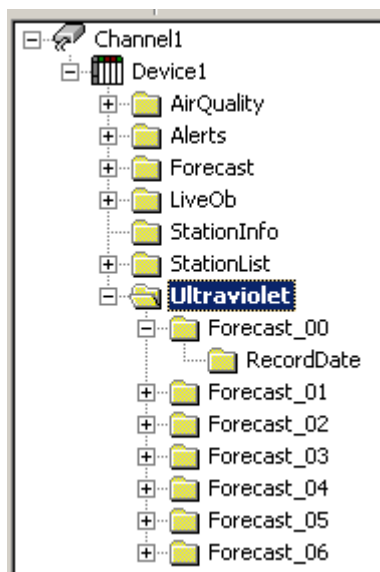


StationList | Station_xx

Address	Data Type	Description
StationList.station[xx].id	String	Station's ID
StationList.station[xx].name	String	Station's name
StationList.station[xx].city	String	Station's location (City)
StationList.station[xx].state	String	Station's location (State)

StationList.station[xx].zipcode	String	Station's location (Zip Code)
StationList.station[xx].station-type	String	WeatherBug or NWS (National Weather Service) weather station
StationList.station[xx].distance	Float	Station's location (Distance from target zipcode)
StationList.station[xx].latitude	Float	Station's location (Latitude coordinate)
StationList.station[xx].longitude	Float	Station's location (Longitude coordinate)

Ultraviolet Addressing



Ultraviolet

Address	Data Type	Description
Ultraviolet.ultraviolet.city	String	Location (City) of the cosrest UV sensor
Ultraviolet.ultraviolet.legend-url	String	URL to image that depicts the legend for the map image
Ultraviolet.ultraviolet.map-url	String	URL to image that depicts current UV Index across the nation
Ultraviolet.ultraviolet.state	String	Location (State) of the cosrest UV sensor

Ultraviolet | Forecast_xx

Address	Data Type	Description
Ultraviolet.ultraviolet.forecast[xx].uv-index	Float	The actual UV Index number for this forecast date
Ultraviolet.ultraviolet.forecast[xx].record-date	String	The date for which the forecast is valid

Ultraviolet | Forecast_xx | RecordDate

Address	Data Type	Description
Ultraviolet.ultraviolet.forecast [xx].record-date.year.number	Long	The date (Year in numerical form) for which the forecast is valid
Ultraviolet.ultraviolet.forecast [xx].record-date.month.number	Long	The date (Month in numerical form) for which the forecast is valid
Ultraviolet.ultraviolet.forecast [xx].record-date.month.text	String	The date (Month in full text form) for which the forecast is valid
Ultraviolet.ultraviolet.forecast [xx].record-date.month.abbrev	String	The date (Month in abbreviated text form) for which the forecast is valid
Ultraviolet.ultraviolet.forecast [xx].record-date.day.number	Long	The date (Day in numerical form) for which the forecast is valid

Error Descriptions

The following error/warning messages may be generated. The messages are listed here in alphabetical order.

[Invalid Partner ID specified. You will need to enter a valid Partner ID to access the WeatherBug services.](#)

[Invalid Station ID specified. You will need to enter a valid Station ID to access the Live Observations and Station Information services.](#)

[Invalid ZIP Code specified. Please enter a 5 digit ZIP Code with no letters or special characters.](#)

[Service '<subscription name>' \[Path=<url>\] failed on Device '<device>'. <Reason>](#)

Reason:

[Data provider not responding.](#)

[HTTP Status = '<status code>'. No data in response. Possible causes: 1\) Invalid parameter\(s\) provided. Verify the ZIP Code and Station ID are correct. 2\) Partner ID has improper credentials to access this service. Verify Partner ID.](#)

[Missing expected XML Element '<element name>'. Request invalid.](#)

[Timed out connecting to data provider.](#)

[Unable to connect to data provider.](#)

[XML parse error occurred. Description = '<error reason>'.](#)

[Unable to bind to adapter: '<adapter>'.](#)

[Winsock initialization failed \(OS Error = <number>\)](#)

[Winsock shut down failed \(OS Error = <number>\)](#)

[Winsock V1.1 or higher must be installed to use the WeatherBug driver.](#)

Invalid Partner ID specified. You will need to enter a valid Partner ID to access the WeatherBug services.

Error Type:

Fatal

Possible Cause:

A valid partner ID has not been entered.

Solution:

Right-click on the channel and select Properties. In the Properties dialog, click on the Settings tab and enter a valid partner ID.

See also: [Settings - Partner ID](#)

Invalid Station ID specified. You will need to enter a valid Station ID to access the Live Observations and Station Information services.

Error Type:

Warning

Possible Cause:

A valid station ID has not been entered.

Solution:

Right-click on the device and select Properties. In the Properties dialog, click on the Location tab and enter a valid station ID.

See also: [Location - Zip Code and Station](#)

Invalid Zip Code specified. Please enter a 5 digit zip code with no letters or special characters.

Error Type:

Fatal

Possible Cause:

A valid zip code has not been entered.

Solution:

Right-click on the device and select Properties. In the Properties dialog, click on the Location tab and enter a valid zip code (5 digits only, no letters or special characters).

See also: [Location - Zip Code and Station](#)

Service '<subscription name>' [Path=<url>] failed on Device '<device>'. <Reason>.

Error Type:

Warning

Reasons:

Data provider not responding.

Possible Causes

- WeatherBug service unable to respond to the request made, according to the transaction timeout specified.
Transaction timeout = Request Timeout * Fail after x successive timeouts
- PC not connected to the Internet.
- WeatherBug service temporarily unavailable.

Solutions

- Increase the Request Timeout and Fail After *count* values. Right-click on the device and select Properties. In the Properties dialog, click on the Timing tab.
- Verify Internet connection
- Try again later.

HTTP Status = '<status code>'. No data in response. Possible causes: 1) Invalid parameter(s) provided. Verify the ZIP Code and Station ID are correct. 2) Partner ID has improper credentials to access this service. Verify Partner ID.

Possible Causes

- No ZIP Code specified or format invalid.
- No Station ID specified.
- Partner ID specified does not have the privileges to access to '<subscription name>'.

Solutions

- Verify a valid 5-digit ZIP Code is specified.
- Verify a valid Station ID is specified. This Station ID must exist in the WeatherBug system. To ensure it is, use the Station ID Wizard to list Stations closest to the ZIP Code specified and choose accordingly.
- When the Partner ID was assigned from WeatherBug, it was given rights to either all or select subscriptions. Verify the Partner ID specified has rights to '<subscription name>'.

Missing expected XML Element '<element name>'. Request invalid.

Cause

Invalid response returned from WeatherBug service.

Solution

If this problem persists, contact Technical Support.

Timed out connecting to data provider.

Causes

- WeatherBug service unable to respond in the time specified in Connection Timeout.
- PC not connected to the Internet.
- WeatherBug service temporarily unavailable.

Solutions

- Increase the Connection Timeout.
- Verify Internet connection
- Try again later.

Unable to connect to data provider.

Causes

- Unable to bind to local network adapter.
- PC not connected to the Internet.
- WeatherBug service temporarily unavailable.

Solutions

- See "Unable to bind to adapter" solution.
- Verify Internet connection
- Try again later.

XML parse error occurred. Description = '<error reason>'.

Causes

- No XML Parser installed
- Incorrect XML Parser installed

Solution

- Install MSXML 4.0

Unable to bind to adapter: '<adapter>'

Error Type:

Warning

Possible Cause:

Since the driver was unable to bind to the network adapter specified, the driver will bind to the default network adapter as assigned by the operating system.

Solution:

Verify the settings for the network adapter specified.

Winsock initialization failed (OS Error = <number>)

Error Type:

Fatal

OS Error 10091

Indicates that the underlying network subsystem is not ready for network communication.

Wait a few seconds and restart the driver.

OS Error 10067

Limit on the number of tasks supported by the Windows Sockets implementation has been reached.

Close one or more applications that may be using Winsock and restart the driver.

Winsock shut down failed (OS Error = <number>)

Error Type:

Fatal

OS Error 10036

The network subsystem is still busy with unfinished processing. Wait a few seconds and restart the driver.

OS Error 10050

The network subsystem has failed. See your network administrator.

OS Error 10093

The network subsystem was not initialized before the shutdown was attempted. Wait a few seconds and try again.

Winsock V1.1 or higher must be installed to use the WeatherBug driver

This driver requires that you have Winsock V1.1 or higher installed.

Error Type:

Fatal

Possible Cause:

The version number of the Winsock DLL found on your system is less than 1.1.

Solution:

Upgrade your version of Winsock to 1.1 or higher.

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