

# Weather

## Note on Weather Driver 2.0 and greater:

The newer versions of the Weather Driver execute a cloud hosted code module. The cloud is checked regularly for updated driver code and, when a newer version is found, the driver will switch to the new version. This should dramatically reduce the need to update the driver to accommodate problems with, or changes, in the API.

This driver provides weather data using an internet connection. The driver provides current condition and forecast data as well as satellite images.

### Location Setting

The driver supports several ways to specify the location configuration option. For cities in the US, the recommended format is zip code.

Examples:

Location: 55379

Location: 75008:FR (international postal codes must include country code separated by a colon.

Currently, only GB, FR, DE, and IT are supported)

Location: Shakopee, MN

Location: Paris, FR

Location: 45.3,93.2

### Unit Type Setting

This configuration options sets the default units to display (Standard, Metric, Metric SI, and Hybrid UK). The scale can be changed at any time using the driver function 'Set Unit Type'. For metric data there is one additional option: "Pressure in Millimeters of Mercury" to show pressure in mmHg

Long Name	Imperial (English)	Metric	Metric SI	Hybrid UK
Temperature	f (fahrenheit)	c (celsius)	c (celsius)	c (celsius)
Pressure	hg (inches of mercury)	mb (millibars)	mb (millibars)	mb (millibars)
Precipitation	in (inches) - rain/snow	mm (rain), cm (snow)	mm (rain), cm (snow)	mm (rain), cm (snow)
Distance	mi (miles)	km (kilometer)	m (meter)	mi (miles)
Visibility	mi (miles)	km (kilometer)	km (kilometer)	km (kilometer)
Wind Speed	mh (miles/hour)	km (km/hour)	m/s (meters/second)	mph (miles/hour)

### Localization Settings

The original Weather Driver returned data that would need to be localized as integers defaulted to their English equivalents. These variables were for the days of the week, and compass directions. Putting these variables on in a text field allowed you to change the integer list (in the button properties) to the values used in a particular language. The new driver allows those values to be entered into the configuration so that they will be used every time the variable is; you no longer have to change the list every time the variable is used. You can also use the Export Config option to save an Config setup and import it into another file on a different job

The driver can also return the weather data localized for over 70 countries/languages. There is a Language entry in the configuration that requires a language key available at the end of this document. This was not a feature of the original RTI Weather Driver so the data, when used to display condition text, is returned in separate variables called Localized Condition Text, or '(real weather)'. The [Text Forecast] Condition Text has always been more verbose so that has always been returned as text data which will now be in the language specified in the Config.

### **Use Personal Weather Station (PWS) Setting**

The new source of the weather feed used in Driver 2.0 and higher automatically incorporates PWS data when it is available and valid. The data feed promises accurate data on a 500-meter grid, allowing significantly greater accuracy than the old feed, even without the use of PWS data.

Personal Weather Stations can still be used to populate PWS system variables, however. The PWS data can be more relevant based on location but has less information available so a separate set of variables were provided. Once the box has been checked, a field for Station ID becomes available. These weather stations are part of the network of Weather Station on [weatherunderground.com](http://weatherunderground.com). If the field is left blank, the driver will choose the closest station to the set location.

AT THE TIME OF THE RELEASE OF WEATHER DRIVER 2.0 THERE IS NO SUPPORT FOR IMAGING/MAPS. THIS WILL BE RE-ENABLED IN A FUTURE VERSION. THE CURRENT VARIABLES AND COMMANDS REMAIN IN THE DRIVER FOR COMPATABILITY WITH EXISTING DESIGNS.

### **Satellite Images**

The driver provides two forms of satellite image data: infrared and visible. The driver also provides a mode dependent satellite image that can toggle between the two. Each image variable supports zoom levels from 1-10 where 10 is the maximum zoom level. The default zoom levels can be set in the driver configuration and through driver functions.

### **Radar Images**

To use animated radar and map data the remotes and in-walls must be running software version 2.1 or greater.

### **Condition Graphic Variables**

The condition graphic is represented as an integer that indexes into the condition graphic image list. The following table describes the indexes.

- 0 - Chance of Flurries
- 1 - Chance of Rain
- 2 - Chance of Sleet
- 3 - Chance of Snow
- 4 - Chance of Thunderstorms
- 5 - Clear
- 6 - Cloudy
- 7 - Flurries
- 8 - Fog
- 9 - Hazy
- 10 - Mostly Cloudy
- 11 - Mostly Sunny
- 12 - Partly Cloudy
- 13 - Partly Sunny
- 14 - Rain
- 15 - Sleet
- 16 - Snow
- 17 - Sunny
- 18 - Thunderstorms
- 19 - Unknown
- 20 - Night Chance of Flurries
- 21 - Night Chance of Rain
- 22 - Night Chance of Sleet
- 23 - Night Chance of Snow
- 24 - Night Chance of Thunderstorms

25 - Night Clear  
26 - Night Cloudy  
27 - Night Flurries  
28 - Night Fog  
29 - Night Hazy  
30 - Night Mostly Cloudy  
31 - Night Mostly Sunny  
32 - Night Partly Cloudy  
33 - Night Partly Sunny  
34 - Night Rain  
35 - Night Sleet  
36 - Night Snow  
37 - Night Sunny  
38 - Night Thunderstorms  
39 - Night Unknown

### **Language Codes**

ar-AE Arabic - (United Arab Emirates)  
az-AZ Azerbaijani - (Azerbaijan)  
bg-BG Bulgarian - (Bulgaria)  
bn-BD Bengali, Bangla - (Bangladesh)  
bn-IN Bengali, Bangla - (India)  
bs-BA Bosnian - (Bosnia and Herzegovina)  
ca-ES Catalan - (Spain)  
cs-CZ Czech - (Czechia)  
da-DK Danish - (Denmark)  
de-DE German - (Germany)  
el-GR Greek (modern) - (Greece)  
en-GB English (Great Britain)  
en-IN English - (India)  
en-US English - (United States of America)  
es-AR Spanish - (Argentina)  
es-ES Spanish - (Spain)  
es-LA Spanish - (Latin America)  
es-MX Spanish - (Mexico)  
es-UN Spanish - (International)  
es-US Spanish - (United States of America)  
et-EE Estonian - (Estonia)  
fa-IR Persian (Farsi) - (Iran)  
fi-FI Finnish - (Finland)  
fr-CA French - (Canada)  
fr-FR French - (France)  
gu-IN Gujarati - (India)  
he-IL Hebrew (modern) - (Israel)  
hi-IN Hindi - (India)  
hr-HR Croatian - (Croatia)  
hu-HU Hungarian - (Hungary)  
in-ID Indonesian - (Indonesia)  
is-IS Icelandic - (Iceland)  
it-IT Italian - (Italy)  
iw-IL Hebrew - (Israel)  
ja-JP Japanese - (Japan)  
jv-ID Javanese - (Indonesia)  
ka-GE Georgian - (Georgia)

kk-KZ Kazakh - (Kazakhstan)  
kn-IN Kannada - (India)  
ko-KR Korean - (South Korea)  
lt-LT Lithuanian - (Lithuania)  
lv-LV Latvian - (Latvia)  
mk-MK Macedonian - (Macedonia)  
mn-MN Mongolian - (Mongolia)  
ms-MY Malay - (Malaysia)  
nl-NL Dutch - (Netherlands)  
no-NO Norwegian - (Norway)  
pl-PL Polish - (Poland)  
pt-BR Portuguese - (Brazil)  
pt-PT Portuguese - (Portugal)  
ro-RO Romanian - (Romania)  
ru-RU Russian - (Russia)  
si-LK Sinhalese, Sinhala - (Sri Lanka)  
sk-SK Slovak - (Slovakia)  
sl-SI Slovenian - (Slovenia)  
sq-AL Albanian - (Albania)  
sr-BA Serbian - (Bosnia and Herzegovina)  
sr-ME Serbian - (Montenegro)  
sr-RS Serbian - (Serbia)  
sv-SE Swedish - (Sweden)  
sw-KE Swahili - (Kenya)  
ta-IN Tamil - (India)  
ta-LK Tamil - (Sri Lanka)  
te-IN Telugu - (India)  
tg-TJ Tajik - (Tajikistan)  
th-TH Thai - (Thailand)  
tk-TM Turkmen - (Turkmenistan)  
tl-PH Tagalog - (Philippines)  
tr-TR Turkish - (Turkey)  
uk-UA Ukrainian - (Ukraine)  
ur-PK Urdu - (Pakistan)  
uz-UZ Uzbek - (Uzbekistan)  
vi-VN Vietnamese - (Viet Nam)  
zh-CN Chinese - (China)  
zh-HK Chinese - (Hong Kong)  
zh-TW Chinese - (Taiwan)