



United Technologies
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Weather Add-On v2.4

User Guide

The screenshot displays a weather widget with the following data:

Current Conditions		Forecast Conditions		High / Low	Precip
 Overcast		Today	Mostly Cloudy	27° / 14°	14 %
Temperature 12 °F		Thursday	Partly Sunny	30° / 20°	7 %
Feels Like 0 °F		Friday	Mostly Sunny	31° / 9°	5 %
Pressure 30.49 "		Saturday	Partly Sunny	28° / 24°	12 %
Wind Direction from Northeast		Sunday	Chance Rain Showers	42° / 28°	30 %
Wind Speed 8 mph		Monday	Partly Sunny	34° / 15°	10 %
Humidity 67 %		Tuesday	Partly Sunny	29° / ?°	? %
Dew Point 3 °F		Last Update 01/14/15 10:53 AM			
Info provided by		As Reported At Hartford-Brainard Airport			



Verify that you have the most current version of this document from www.hvacpartners.com or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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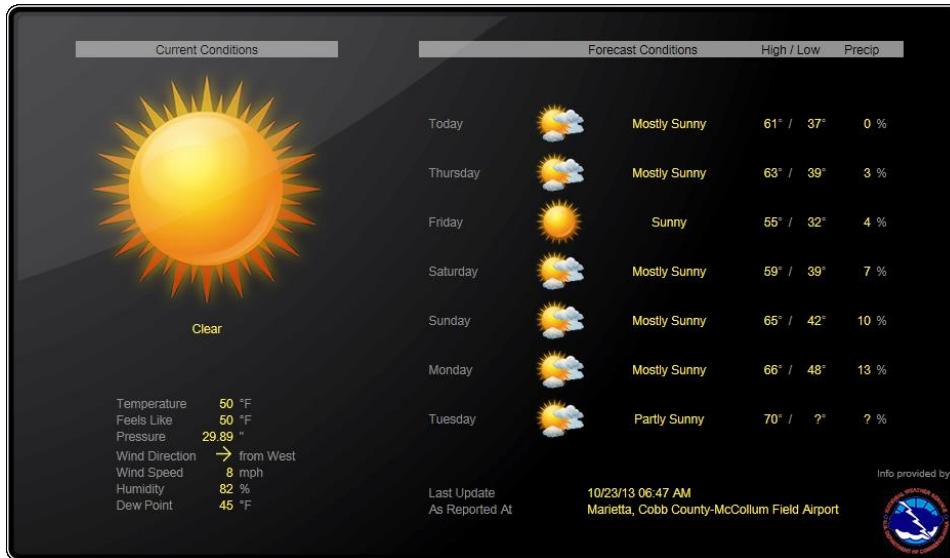
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What is the Weather add-on?

The Weather add-on retrieves current weather conditions and forecasts from a data source such as the National Weather Service. This weather information can be displayed on a graphic page as shown below or read from a control program for use in control logic.



ProxyConfig add-on

If your company's Internet access has a proxy set up, you must configure the proxy settings to allow the Weather add-on to access the weather data. You define these settings in the ProxyConfig add-on. If you need it, you must *install and configure the proxyconfig.addon* (page 3) before you configure the weather.addon file.

Weather data sources

The Weather add-on retrieves weather data from the 3 sources below. Each weather service provides different data and each weather station may provide different data from others in the same service. We encourage you to experiment with the different data services and stations to determine which provides the data you need.

- The US National Oceanic & Atmospheric Administration (NOAA) National Weather Service (NWS)
- Environment Canada
- AccuWeather Service

Graphics and control programs

To use the weather data in a graphic or control program, you can:

- Download a preconfigured graphic and control program from the *Carrier Commercial Controls website* (<http://www.hvacpartners.com>) (recommended)
- *Make a custom graphic or control program* (page 8)

You do not need a control program to display the weather data on the i-Vu® graphic. A control program is only necessary if the weather data is needed for a control algorithm.

Prerequisites to use the Weather add-on

You must have the following:

- The i-Vu® Plus or Pro v6 or later application
- The **Installer** role
- Weather.addon file
- ProxyConfig.addon
 - NOTE** This is only necessary if your company's internet access has a proxy set up.
- Weather .equipment and .view files for AccuWeather, NWS, and/or Canada weather services
- Any of the following:
 - AppController
 - MPC Open XP
 - UC Open XP
 - UC Open
 - i-Vu® Open Link
 - i-Vu® Link
 - i-Vu® CCN Router
 - Carrier® ChillerVu™

Installing and setting up the ProxyConfig add-on

If your company's Internet access has a proxy set up, you must configure the proxy settings to allow the Weather add-on to access the weather data. You define these settings in the ProxyConfig add-on. If you need it, you must *install and configure the proxyconfig.addon* (page 3) before you configure the weather.addon file.

Installing the ProxyConfig add-on

- 1 Do one of the following:

i-Vu® Plus Interface	Go to the Main Menu ▼ drop-down list, select System Options > Add-ons tab.
i-Vu® Pro interface	Go to the Main Menu ▼ drop-down list, select System Options > System Settings > Add-ons tab.

- 2 In **File to install**, browse to the proxyconfig.addon file on your desktop and click **Open**, then **Install** (or **Install Add-on**). After a few seconds, ProxyConfig add-on will appear in the **Installed** table and will be shown as running.
- 3 If the ProxyConfig add-on does not display the status **Running**, select the ProxyConfig add-on in the **Installed** table and click **Enable**.
- 4 In the **Details** section under the **Installed** table, click **Main page** to set up the proxy server information.

- 5 In the i-Vu® interface, click **Close** in the **Add-ons** dialog.

Using the ProxyConfig add-on

- 1 If you did not connect to the add-on through the **Main Page** link in the Weather add-on interface on the **Add-on** tab, you can use the following method to access the setup page:

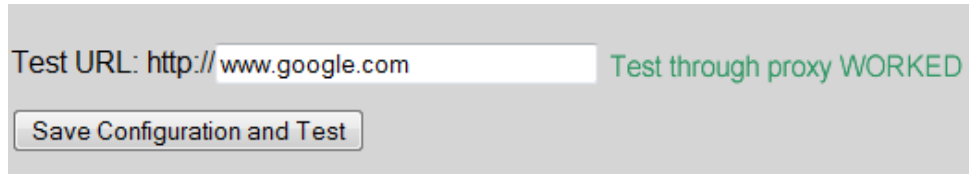
Go to `http://<system IP address>/proxyconfig`.

NOTE /proxyconfig is case sensitive.

- 2 When you installed ProxyConfig, it automatically tried to determine the proxy settings.
- 3 If it found the settings, the **Host** and **Port** information is filled in for you. If it could not find the proxy settings or, if you are using the i-Vu® Plus application, you need to enter them as follows:
 - a) Uncheck **Automatically determine proxy settings**.
 - b) Check **Use a proxy**.
 - c) Enter the **Host** and **Port** information. You can obtain these from your network administrator.

- 4 Check **Proxy requires authentication** if the proxy requires it, and then enter the **Username** and **Password**. You can obtain these from the network administrator.
- 5 Click **Save Configuration and Test**.

NOTE The **Test URL:http://** field has an external website address. If the proxy settings are correct, you will see the green text shown below.



- 6 Close the **Setup** page.

Installing and setting up the Weather add-on

To install the Weather add-on

Download and save the appropriate Weather add-on files from *Carrier Control Systems Support Site* <http://www.hvacpartners.com/>.

NOTES

- See *Getting a graphic or control program* (page 8) for more details.
- You can delete the files after you complete this procedure.

Weather .equipment files for a CCN device manager


The .equipment file defaults to **Open (non-PIC)**. When downloading the .equipment file to an i-Vu® Link or i-Vu® CCN Router, you must first tag the file as **CCN**.

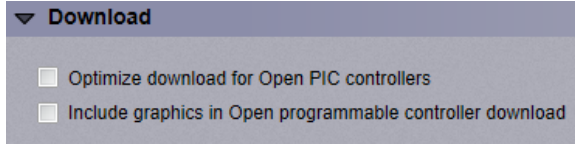
- 1 In Snap, open the .equipment file.
- 2 Click **Control Program**.
- 3 Select **CCN** from the drop-down list.
- 4 **Save** file.
- 5 Continue with the following installation procedure.

Installing the .equipment file, .view file, and add-on

- 1 Log in to the i-Vu® application using the Installer role.
- 2 In your i-Vu® system, on the **Installer** navigation tree, select the desired device.
 - i-Vu® Open controllers - go to the **Devices > Manage** tab and click **Add Control Program**
 - i-Vu® CCN device managers - go to the **Devices** page and click **Add Control Program**
- 3 Enter a **Display Name**, and select your controller from the drop-down list.
- 4 Under **Control Programs**, click **Add New**.
- 5 Browse to the .equipment file on your desktop, click **Open**, then **Continue**.
- 6 When you see **File Added Successfully**, click **Close**.

- 7 Under **Views**, click **Add New**.

 **CAUTION** Due to the large size of the preconfigured graphics, we do **not** recommend that you store them in the controller. Go to **System Options** (or **System Settings**) > **General** tab > **Download** section and verify that **Include graphics in Open programmable controller download** is unchecked.



- 8 Browse to the .view file you saved, click **Open**, then **Continue**.
- 9 When you see **File Added Successfully**, click **Close**.
- 10 In the i-Vu® Pro application only, select the .view file under **Available** and click **Attach**.
- 11 Click **Accept**.
- 12 Download:
- i-Vu® Open controllers: On the **Devices > Manage** tab, select the weather control program in the list and click **Download**.
 - i-Vu® CCN device managers: On the **Devices** tab, click **Download CCN**.
- 13 Click **OK** to close the dialog box.
- 14 Do one of the following:

i-Vu® Plus interface	Go to the Main Menu ▼ drop-down list, select System Options > Add-ons tab.
i-Vu® Pro interface	Go to the Main Menu ▼ drop-down list, select System Options > System Settings > Add-ons tab.

- 15 In **File to install**, browse to the weather.war file you saved and click **Open**, then **Install** (or **Install Add-on**). After a few seconds, the Weather add-on will appear in the **Installed** table and will be running.
- 16 If the Weather add-on does not display the status **Running**, select the Weather add-on in the **Installed** table and click **Enable**.
- 17 In the **Details** section under the **Installed** table, click **Main page** to set up the weather information to display. See *To set up the Weather add-on* (page 6).
- 18 In the i-Vu® interface, click **Close** in the **Add-ons** dialog.

To set up the Weather add-on

- 1 If you did not connect to the add-on through the **Main Page** link in the i-Vu® interface on the **Add-on** tab, you can use the following method to access the setup page:
 In a web browser, type the address of your i-Vu® system followed by `/weather`.
NOTE `/weather` is case sensitive.
- 2 In the **Weather Service** field, select which service you want to get data from.
- 3 Under **Refresh Rates**, enter how frequently you need updated information. Minimum rate is 5 minutes for all data.
- 4 Under **Service Options**, select an available option, depending on which service you selected:
 - **National Weather Service** – whether you want data in US Customary units or Metric units
 - **AccuWeather Service** - whether you want data in US Customary units or Metric units
 - **Environment Canada** – whether you want results in English or French
- 5 Click **Apply**.
- 6 To add a weather station, click **Add New Location**.
- 7 In the **Database Path** field, enter the path to the equipment where the weather data will be used in a graphic or control program.
NOTES
 - The **Database Path** can be a global reference name. For example, `#outside_air_forecast`.
 - To get the path, right-click on the equipment in the i-Vu® **Installer** navigation tree, then select **Copy Path**. Paste that path into the **Database Path** field.
- 8 Type in the **Zip Code**. For Environment Canada service, enter the **City**.
- 9 Click **Find Station**. For Environment Canada service, click **Find City**.
- 10 When the list populates, select a station to receive data from.
NOTE This could take a couple minutes.
- 11 Click **OK**.
- 12 To verify data can be retrieved from the weather station, click **Show Data**.
- 13 Repeat steps 7 – 10 for every other equipment on the i-Vu® navigation tree where weather data will be used.
- 14 Close the setup page.

Each location that you defined in steps 7 - 11 are listed at the bottom of the Weather setup page. The results from the **Show Data** button are only needed to *make a custom graphic or control program* (page 8). If you are using the preconfigured graphic and control program (which we recommend), you are now finished.



TIPS Click the **Diagnostic Logs** tab for errors.


Getting a graphic or control program

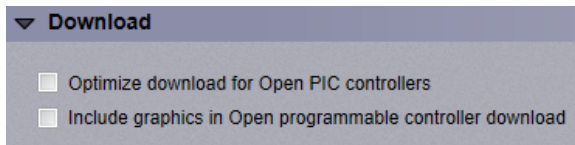
To download a preconfigured graphic and control program

- 1 Go to the *Carrier Control Systems Support Site* (<http://www.hvacpartners.com>).
- 2 Do one of the following:

If your data source is...	download the Control Program and Graphic for use with...
AccuWeather Service	AccuWeather
AccuWeather Service	AccuWeather Hourly*
National Weather Service	NWS
Environment Canada	Environment Canada

*To retrieve data hourly, you must use these files after purchasing and installing Weather's Hourly license.

 **CAUTION** Due to the large size of the preconfigured graphics, we do **not** recommend that you store them in the controller. Go to **System Options** (or **System Settings**) > **General** tab > **Download** section and verify that **Include graphics in Open programmable controller download** is unchecked.

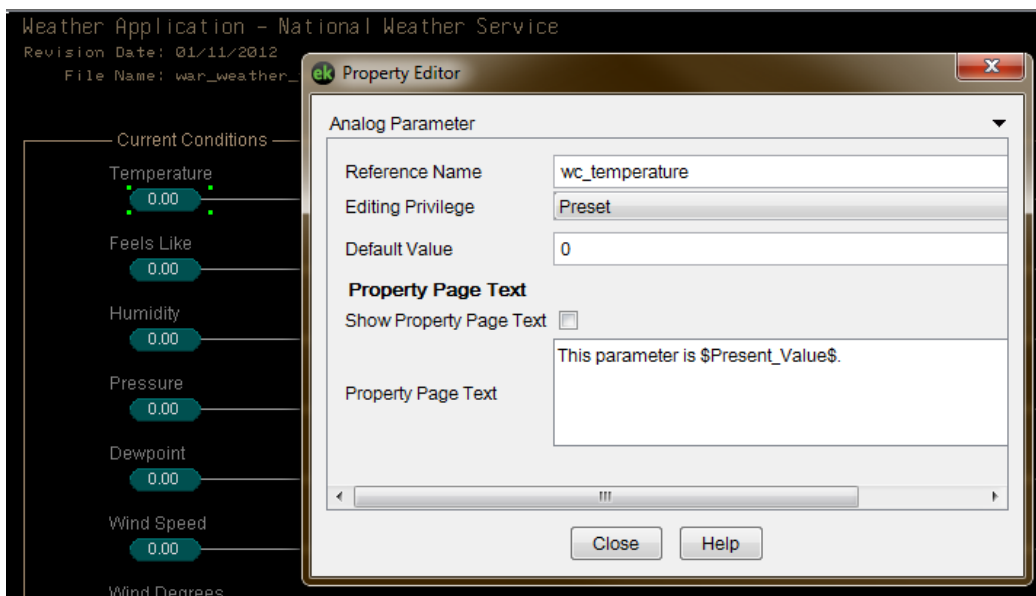


To make a custom graphic or control program

To use weather data in a custom graphic or control program, you need the name of each data field from your data source. To get field names, go to the Weather **Setup** page, and click the **Show Data** button beside the appropriate graphic or control program location.

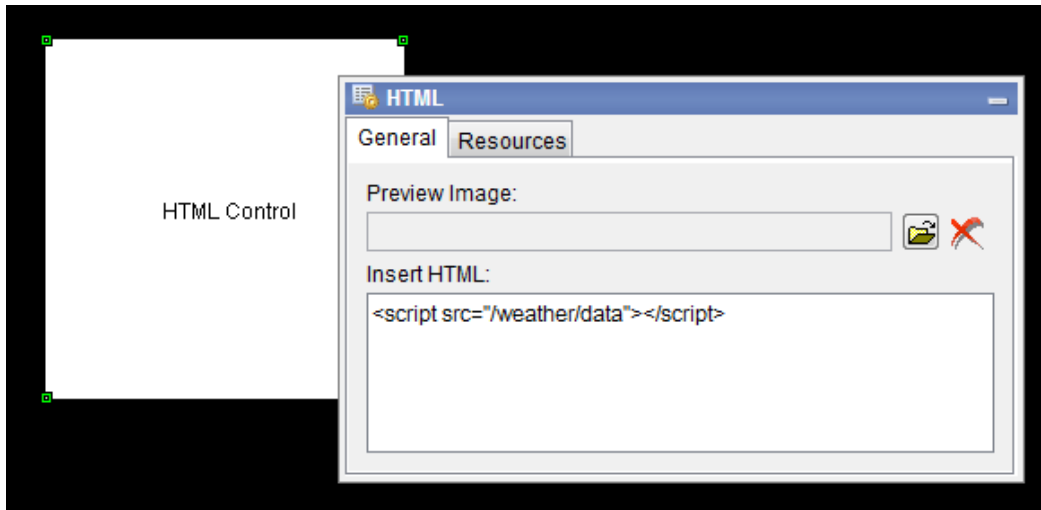
To make a custom control program

To use weather data in a control program, add an Analog Parameter or BACnet Analog Value Parameter microblock and enter the weather data field name as the **Reference Name**. Only weather data fields with numeric values (not text) can be used in a control program.



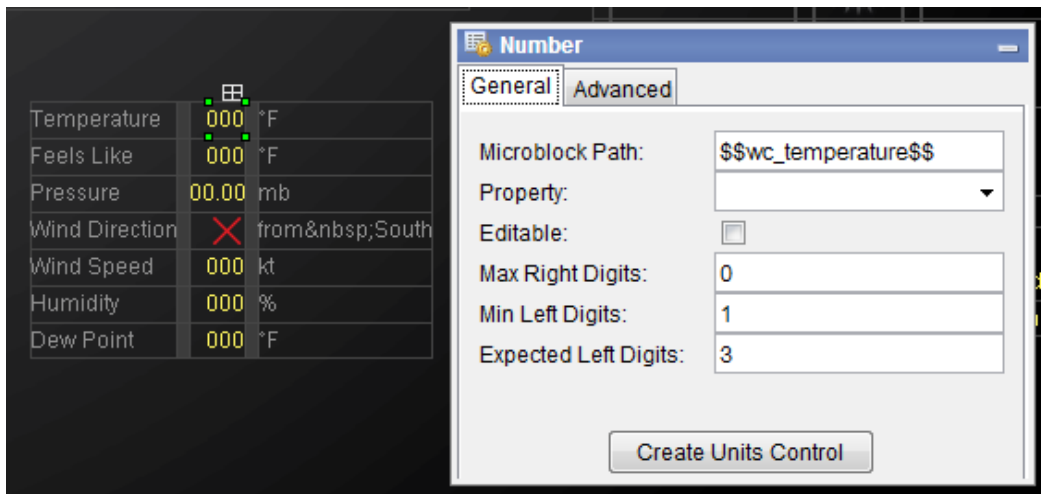
To make a custom graphic

To use the weather data in a graphic, you must place an HTML control in the graphic (.view) file before you add any other controls. In the **Insert HTML** field, type `<script src="/weather/data"></script>` as shown below.

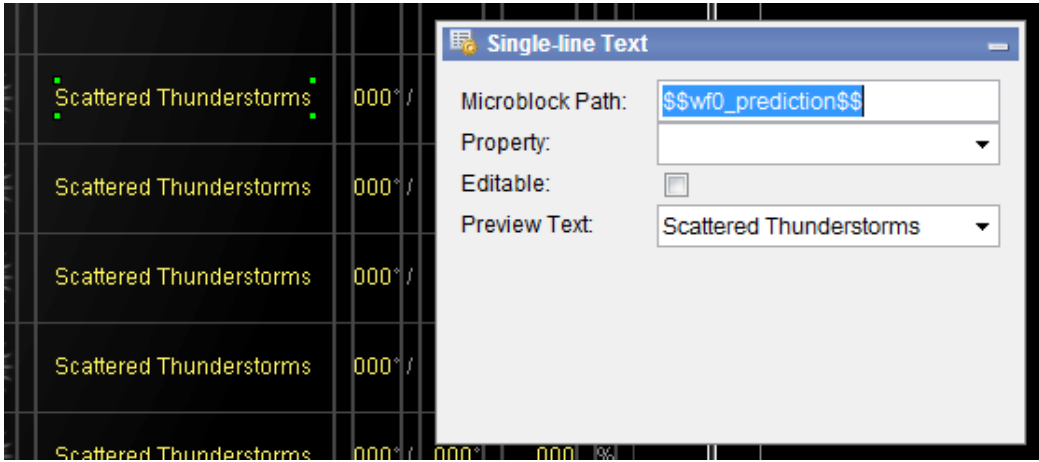


To display a field in a graphic, use a Number or Single-line Text control. In the **Microblock Path** field, enter the weather data field name (found using the **Show Data** button) surrounded by "\$\$" as shown below. Delete anything in the **Property** field. See examples below.

Use Number Controls to display numeric data.



Use Single-line Text Controls to display string data.



Troubleshooting the Weather add-on

To determine if the Weather add-on is working correctly

- **Verify the graphic has values**
 Navigate to the location of your weather graphic and see if it has values (not just a ?). Note that it is normal for the forecast value for the 7th day to sometimes have a ?. The weather services we use do not always have 7 full days of forecast data.

- **Verify the add-on can retrieve new weather data now**
 Navigate to the Weather setup page (<system>/weather) and click the **Show Data** button for a location. This should display a list of retrieved values on the bottom of the page.

- **Verify it has been retrieving data regularly**
 Navigate to the location of your weather control program and look at the "Update" trend. This trend records a transition each time the data is updated from the weather station. This historical record can show you intermittent communications problems between the i-Vu® application and the weather service you are using.

If the Weather add-on is not working

- **The weather service is down**
 Sometimes, the weather services go down temporarily. They are usually back up within a few hours. To determine if the problem is the weather service and not your network, open a web browser on a different network such as on a mobile device, then try loading the appropriate weather service below. If you cannot load it, the service is down.

If you are using National Weather Service, try loading:
http://w1.weather.gov/xml/current_obs/

1. Select the **State** and click **Find**.
2. From the **Observation Location** list, find the weather station and click **XML**.

If you are using Environment Canada, try loading:
http://dd.weatheroffice.ec.gc.ca/citypage_weather/xml/BC/s0000775_e.xml

- **Retrieve a list of errors**

i-Vu® Plus interface	<p>You can find the Weather error log (addon-weather.txt) as part of the i-Vu Plus application logfiles.</p> <ol style="list-style-type: none"> 1 Go to System Options > General tab. 2 In the Logs section, select a dated logfile and click Download. 3 Check this file if you are having errors. Include any error in a request for support.
i-Vu® Pro interface	<p>The Weather add-on logs errors to logs/<week>/addon-weather.txt log file. Check this file if you are having errors. Include any error in a request for support.</p>

- **If the add-on can retrieve new weather data, but the graphic does not work:**
 1. Verify that the Location Path specified on the Weather setup page matches the path to your graphic.
NOTE If the path is wrong, errors in the log file will contain this error message: **Invalid GQL location:**
 2. If the error message appears, clear your browser's cache.
- **If the add-on cannot retrieve new weather data**
Check the log file. An error like the following indicates a problem with the connection between the i-Vu® server and the weather service:
Error retrieving http://weather.gov/xml/current_obs/KRYX.xml

Try using Remote Desktop to log in to the server that is running the i-Vu® Pro application. Try using a web browser to manually get weather data from the server.

If you are using National Weather Service, try loading:
http://weather.gov/xml/current_obs/KRYX.xml

If you are using Environment Canada, try loading:
http://dd.weatheroffice.ec.gc.ca/citypage_weather/xml/BC/s0000775_e.xml

If you cannot load this data in a web browser, the add-on will not be able to load it. A firewall may be preventing the server from initiating connections to the internet. Check with your network administrator to see if they are intentionally blocking internet access. If so, see if they will allow access through a proxy that is configured to allow only the weather.gov and dd.weatheroffice.ec.gc.ca sites.

If you can get data from the browser, but cannot get it from the add-on, see if the browser is configured to use a proxy. If so, you need to install and configure the *ProxyConfig add-on* (page 3).

Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
5/10/18	Troubleshooting	Added instruction to delete cache if Invalid GQL location message.	AC-LO-E

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