

bTank is a driver that retrieves information about your connected tank using Tank Utility's WiFi Enabled Propane Tank Monitor (sold separately) and enables your Control4 system to act based on those values.

This driver is a known as a "UI Button" driver. This class of drivers does not use Control4 's standard template as an interface but instead can use an icon or series of icons to communicate the driver's status and send commands.

SETUP

- 1) Within your Control4 project, install an instance of the bTank driver
- 2) Enter your Tank Utility username and password
- 3) Run the "Get Devices" Action to retrieve all devices associated with your account
- 4) Select the device to monitor in the "Devices" property
- 5) Enable Polling to keep your data current. *See Polling Notes for discussion

PROPERTIES

Username	Tank Utility username
Password	Tank Utility password
Devices	Dynamically populated list of devices associated with Tank Utility account
Polling Enabled	Enable/Disable polling. *See Polling Notes section for discussion

ACTIONS

Get Devices	Retrieve devices associated with Tank Utility account
Get Device Data	Retrieves data for device selected in "Devices" property

EVENTS

New Device Data	Fired when new tank data is received

VARIABLES

The following variables are available and updated after each "New Data Received" event. They are useful for constructing messages (Push or Email) as well as constructing logic flow within Composer.

Status	Driver activity status
Device Name	Tank's name
Capacity	Tank's total size
Remaining Percentage	Tank's current fill level
Remaining Quantity	Estimated remaining volume based on tank's "Remaining Percentage" and "Capacity"
Last Reading Timestamp	Timestamp of when tank data was captured

POLLING NOTES

My Tank Utility monitoring device consistently uploads data to the Tank Utility cloud every 24 hours. The current implementation of bTank uses the reported Last Reading Timestamp to align its polling with the Tank's data upload cycle. Specifically, it will poll every 24 hours starting 5 minutes (for buffer and processing time) after the Last Reading Timestamp to minimize polling frequency but get the most current tank information available.

STALE THRESHOLD

When the retrieved data is older than the Stale Threshold of 5 days, the driver's icon will change to "??". A Stale Data state indicates the driver is successfully communicating to the Tank Utility API but that Tank Utility has not received data from the meter hardware recently.

TANK ICON

The below table describes bTank's icon set:



UI BUTTON

As mentioned above, bTank is a driver of type "UI Button". Clicking on the bTank icon will force the driver to retrieve and show the latest data available from the Tank Utility API.

Sending commands via the driver icon works reliably on all connected Navigators (T3s, EA1,

etc.) and on the Control4 app when the current view is refreshed (not to be confused with a navigator refresh). That is, unless the app is opened directly to a view that contains the driver, Control4 does not always register a click. Instead, you may need to back out, then navigate back into the view containing the driver icon.

To help discern when Control4 successfully registers a click, the driver's icon changes to the 'dot-dot' icon when it receives a click event and then shows the updated tank fill percentage after the click window ends.

KNOWN ISSUES AND LIMITATIONS

- After the driver is updated via "Update Now", dynamically populated drop-down boxes may appear blank. Refresh the project (File/Refresh) or simply change focus away from then back to this driver to repopulate. This seems to be a Composer issue.

UPGRADE MODE

BNet Solutions drivers can automatically update themselves. New driver functionality or capability is typically packaged as an incremental "Major" version (v3, v4 etc). "Minor" versions (v2.3, v2.4) are typically maintenance releases that update underlying libraries, address a specific issue or usability concern.

Automatic
When "Automatic" is selected, the driver will upgrade/update itself when a new version is available. "Automatic" Upgrade Mode is strongly suggested.
Minor Only
Restricts the driver from upgrading between major versions but allows updates between minor versions.

Update Now Checks for and upgrades to any newer Major or Minor version.

TROUBLESHOOTING

All BNet Solutions products have an additional 'Submit' Debug Mode. With this mode selected, the driver creates a unique log file to capture the Lua output based on the selected Debug Level (usually set to "5 - Debug"). Once 'Submit' Debug Mode is deselected, either manually or when the Debug Timer expires, the Submit Debug Log is uploaded to the BNet Solutions Server for analysis.

The server notifies me when Submit files are uploaded but if you have not purchased a license, I will have no way to reach back out to you for troubleshooting so please email me your contact information.

TRIAL AND PURCHASE

All BNet Solutions drivers are fully functional for a 7-day Trial Period. To continue usage after the Trial Period, you will need to purchase a license. To do so, install the bLicense driver from <u>https://bnet4solutions.com</u> and follow the documented purchase steps. There are no refunds so please review the documentation for any limitations or known issues and determine acceptance during the Trial Period.

LEGAL

By using this driver, you are indicating that you have read and agree with the Policies and Terms that govern its usage as published <u>here</u>.

MY CONTACT INFORMATION

You can reach me at <u>blucas@bnet4solutions.com</u> for comments or questions.

CHANGE LOG

v1 - 10/19 Initial Release v2 - 11/19 Added driver auto-update functionality