

bPing is a driver that tests network connectivity of one or more configurable hosts.

SETUP

- 1) Within your Control4 project, install an instance of the bPing driver
- 2) Using the Hosts tab, add and configure each ping target

PROPERTIES

DRIVER SETUP

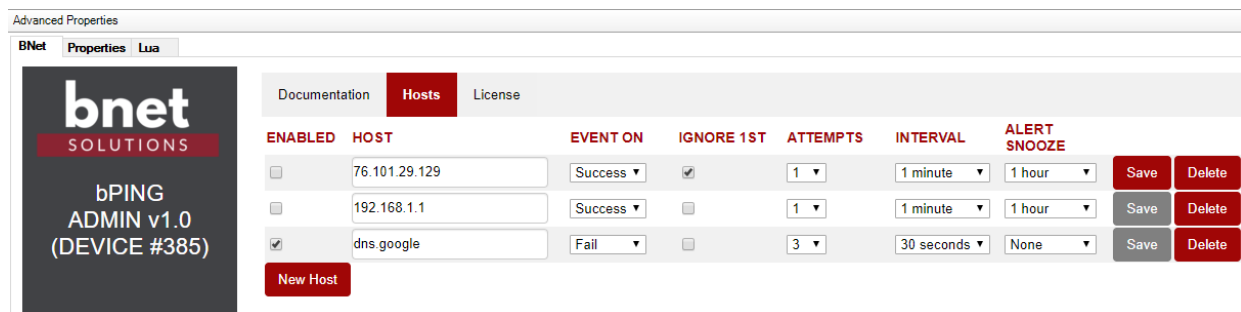
Driver Version	Installed driver version
MAC Address	Unique network interface identifier for the Controller
Upgrade Mode	BNet Solutions drivers automatically update themselves. Options are "Automatic", and "Upgrade Now". See "Upgrade Mode" section below
Admin Token	Token required to access the driver's Admin Portal

DEBUG SETTINGS

Debug Mode	Sets where the driver outputs debug information. See "Troubleshooting" section below for more information
Debug Level	Sets how much debug detail the driver outputs

HOSTS TAB

Use the Hosts tab to add and configure ping targets



ENABLED	HOST	EVENT ON	IGNORE 1ST	ATTEMPTS	INTERVAL	ALERT SNOOZE		
<input type="checkbox"/>	76.101.29.129	Success	<input checked="" type="checkbox"/>	1	1 minute	1 hour	Save	Delete
<input type="checkbox"/>	192.168.1.1	Success	<input type="checkbox"/>	1	1 minute	1 hour	Save	Delete
<input checked="" type="checkbox"/>	dns.google	Fail	<input type="checkbox"/>	3	30 seconds	None	Save	Delete

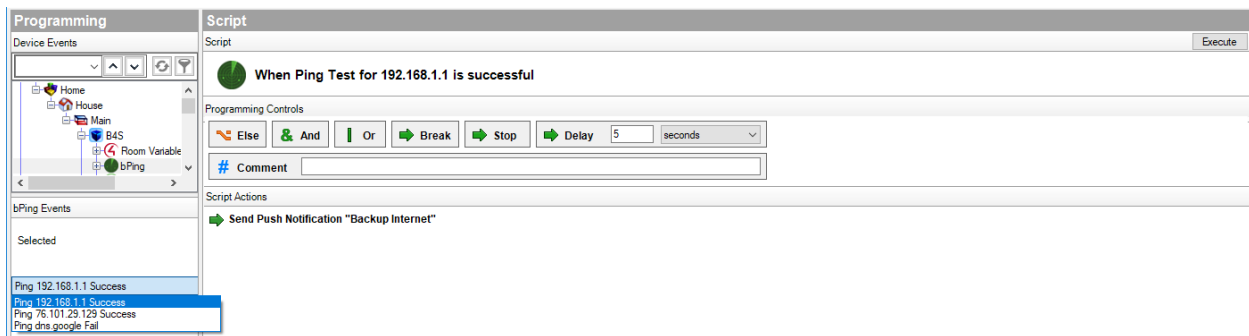
Enabled	Enables or disabled the host for ping tests
Host	Name or IP of a ping target. A DNS name must be resolvable from controller hosting bPing
Event On	Ping result that will trigger an event
Ignore 1 st	Ignore the first ping result that matches Event On criteria. Useful when the host is currently on (reachable)

bPing Driver

Attempts	but you would like events when the host cycles off (unreachable) then returns to on (reachable) How many times bPing will try to reach a Host. The interval between each attempt is set by Control4 at 5 seconds
Interval	How often bPing should repeat a Host test
Alert Snooze	After an event is fired, how long should bPing wait before sending an event for the next Event On criteria. Useful to minimize events when a Host alternates between reachable and unreachable
Save / Delete	Saves or Deletes a Host configuration

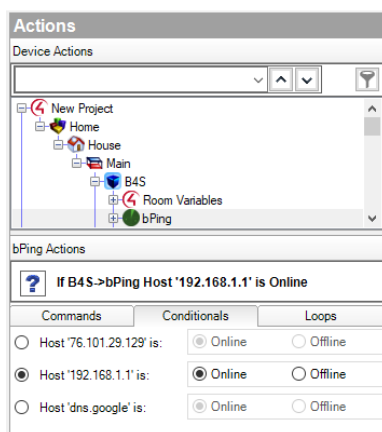
EVENTS

Events are dynamically created based on the Host name and Event On criteria. Given the above host configuration, the created events will be:



CONDITIONALS

Conditionals are dynamically created based on the Host configuration. Given the above host configuration, the conditionals will be:



ADMIN PORTAL

BNet Solutions drivers have a built-in Admin Portal that include an Information, Properties, Variables, Actions, Lua, Documentation and License tabs. Additionally, if the driver supports additional custom tabs, these are displayed as well.

bPing's Admin Portal can be reached at the following address template:
[https://\[controller ip\]/driver/bPing/admin.html](https://[controller ip]/driver/bPing/admin.html) where "controller ip" is the IP Address of your Control4 Director.

Because of the security model used by modern browsers, there are two configuration steps to successfully connect to the Admin Portal:

- 1) The Admin Portal communicates to the controller via a secured websocket. The BNet Certificate Authority that signed the Admin Portal's server certificate must be trusted for your browser to make the SSL/TLS websocket connection. The BNet CA bundle must be downloaded and install as a root certificate. The bundle can be found at https://ca.bnet4solutions.com/get_ca_bundle.php
- 2) Each Director uses a privately signed Control4 server certificate that must be trusted before your browser will allow you to navigate to the Admin Portal. On your first visit to the Portal, you will be asked to make a security exception and continue.

The Admin Portal is protected by a challenge page that requires a token to continue. By default, the token is "bPingAdmin". Once authenticated, the token is stored in a cookie (technically hashed, then stored) so you won't need to log in every time. The token is configurable via the driver's property page. The Admin Server is enabled by default but can be disabled entirely via the driver's property page.

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. This is currently the only available option. |
| Update Now | Checks for and upgrades to any newer Major or Minor version. |

KNOWN ISSUES AND LIMITATIONS

- Requires C4 OS v3.1.1 or greater

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.

bPing Driver

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. Purchase functionality is provided by the License tab that may be accessed in one of two ways:

- In Composer, on the System Design side panel, click on the driver. The License tab is displayed as a subtab of the BNet tab
- In the Admin Portal, the License tab is displayed as one of the main tabs

Once the required fields are filled in, select one of the PayPal payment options and follow the prompts to complete the purchase. Upon completion, the driver will auto-populate the license key and activate. You will receive a receipt from PayPal for the transaction.

An example License tab:

The screenshot displays the 'License' tab within the BNet Solutions interface. On the left, a sidebar identifies the user as 'bROOMBA ADMINv9.0 (DEVICE #402)'. The main panel features a 'License' sub-tab. It includes a 'LICENSE KEY' section with an input field and a 'Set Key' button. Below this is a 'LICENSE STATUS' table:

LICENSE STATUS	
Valid	False
Trial	False
Remaining	Trial Expired
Revoked	False

The 'DRIVER COST' is listed as \$75.00 *plus tax. The 'PURCHASER INFORMATION' section contains three input fields for 'Email', 'First Name', and 'Last Name'. At the bottom, there are three payment options: 'PayPal', 'venmo', and 'Debit or Credit Card'. A note at the bottom states 'Powered by PayPal'.

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 [here](#).

bPing Driver

CONTACT INFORMATION

You can reach me at blucas@bnet4solutions.com for comments or questions.

CHANGE LOG

v1 - 01/23 Initial Release