OutBack-Inverter Documentation

Release 0.1.2

3C Solutions LLC

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This is the OutBack Inverter node server for Polyglot(Universal Devices ISY integration framework). This node server allows integration between the OutBack brand inverters using an AXS Port, and the ISY994i.

This document will document the usage of and development for Polyglot. For additional help, please reference the UDI Forum.

This NodeServer is written with Python 2.7.

James Milne(Einstein.42) - 2016

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CHAPTER 1

Usage

1.1 Installation

To run the current version you should pull the default branch of outback-inverter. The github page is here.

```
# Install the pyModbusTCP required package
sudo pip install pyModbusTCP
# Go to your Polyglot/config/node_servers/ folder
git clone https://github.com/Einstein42/outback-inverter.git
# Enter the repository directory
cd outback-inverter
# Edit the file outback-defs.py
nano outback-defs.py
# Change lines 5 and 6 as necessary
# IP Address of the AXS Port device
# 502 is the standard Modbus Port number
DEVICEIP = '10.1.1.3'
DEVICEPORT = '502'
# Restart Polyglot to recognize the new Node Server type.
sudo systemctl restart polyglot
```

Now that Polyglot is restarted. Login to your Polyglot admin page:

```
http://<ip address>:8080
```

1.2 Add Node Server

| Add Node Server | |
|---|----------|
| Configure new Node Server for Polyglot. These settings ca changed later. | innot be |
| Node Server Type | |
| Name | <u></u> |
| Node Server ID | |
| | AD |
| | |
| | |

Click on Add Node Server once you login to your Polyglot admin interface. Select the OutBack Inverter node server type. Name it something logical... like OutBack, and select a node server id between 1-10 that is currently unused in both Polyglot and the ISY.

| Add Node Server | |
|---|-----|
| Configure new Node Server for Polyglot. These settings cannot changed later. | be |
| Node Server Type OutBack Inverter | |
| Name OutBack | à |
| Node Server ID 1 | |
| | ADD |
| | |
| | |

Once the nodeserver is active you will see its status as 'running' in the top left corner. Under the name in bold, you will notice the node server number, in this case 4 and the Base URL. Click the down arrow icon to download the profile.zip to your desktop, which we will import into the ISY shortly. Copy the Base URL to your clipboard and remember the ID number then login to the ISY.

| Running | | | ž | φ | |
|----------------------------------|----------------------------------|---------------------------------------|------------|---------|---|
| | OutBac Node Server: 4 | ck Invert Base URL: /ns/W | er XVIt | | |
| Basic Inform | mation | | | | |
| Add OutBa | ck Modbus control to t | the ISY994. | | | |
| Instructions | 6 | | | | |
| Install | instructions | | | | |
| Pre-Requis | aites: | | | | |
| Python 2 | .7 | | | | |
| Credits | | | | | |
| OutBack Inve James Milne (Ein | rter: A Python libr stein.42) | ary for OutBac | k SunSpec | Devices | 6 |
| <u>Library Lic</u> Library So | <u>ense</u> urce Code | | | | |

In the ISY click on the **Node Servers** menu option, then configure and finally the ID number you remembered from the previous step and Network Connection.

Profile name does not have to be the same as the node server name in Polyglot, but it makes sense to make them match. UserID and Password are the login credentials of the Polyglot admin. Base URL we copied from Polyglot in the step above. Host name and port are the IP and port you used to connect to the Polyglot admin page. Leave SSL unchecked, Timeout and Isy User leave at 0.

Click the Upload Profile button at the bottom and select the profile.zip that we downloaded from Polyglot.

| Enabled | |
|--------------|-----------|
| Profile Name | Outback |
| User ID | admin |
| Password | |
| Base URL | /ns/MXVit |
| Host Name | 10.0.0.17 |
| | SSL |
| Port | 8080 🐳 |
| Timeout | 0 |
| lsvilser | 0 |

Now reboot the ISY by going to *Configuration > System > Reboot*.

Once the ISY is back up, restart Polyglot.

```
sudo systemctl restart polyglot
```

You should now see the OutBack devices start populating is the ISY for consumption in programs.

CHAPTER 2

Changelog

2.1 0.1.2

Resolved an issue where the ISY would reboot however the device fields would remain blank util changed. These are now refreshed automatically upon the ISY booting up. Also added automatic query every 30 seconds to update values.

2.2 0.1.1

Inital release.