

IPDU Config Tool User Guide

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Product Overview

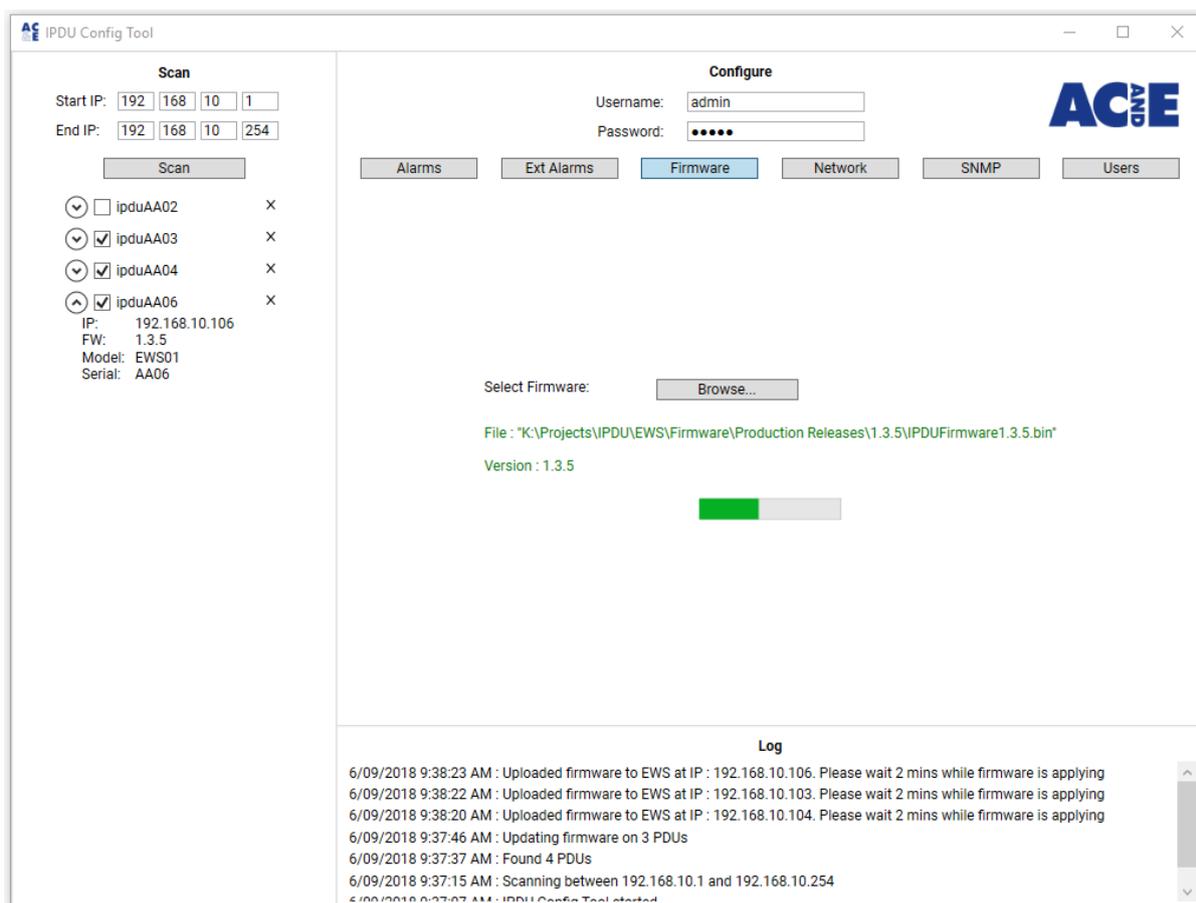
The IPDU Configuration tool is a standalone executable allowing the central discovery and configuration of AC&E IPDU's.

The tool is divided into 3 main panels:

Scan – Finds IPDU devices on the network without entering credentials

Configure – Configures settings on the IPDU(s) required for operation

Log – Records and displays status updates of the tool



System Requirements

The following system requirements are necessary for the IPDU Config Tool to run.

OS

32 or 64-bit Windows operating systems including:

- Windows 7 or later
- Windows Server 2008 R2 or later

Software

Microsoft .NET Framework 4.5.2 or later

Scan

The left-hand panel titled **Scan** in the IPDU Config Tool provides a quick method for searching for IPDUs on a network.

Scan

Start IP:

End IP:

To discover all IPDUs on a subnet, enter a valid start and end IP, then press the scan button. If an invalid IP is entered, or a field left blank, a red warning message will display.

The IPDU Config Tool discovers IPDUs on port 443. Telnet may be used to ensure network connectivity is available on this port.

To display basic information about an IPDU that has been found, click the button with the arrow pointing downward arrow button. This  displays the IP, Firmware Version (FW), Model and Serial.

	<input checked="" type="checkbox"/>	ipduAA02	
	<input checked="" type="checkbox"/>	ipduAA03	
		IP: 192.168.10.103	
		FW: 1.3.5	
		Model: EWS01	
		Serial: AA03	

To remove a discovered IPDU from the config tool click the cross  button.

Once you have found one or more IPDU's, it is possible to configure them using the **Configure** panel. Configuration will apply to each device which is ticked in the **Scan** panel.

Configure

For an IPDU to be configured, an IPDU administrator username and password must be entered in their respective fields.

Warning

Programming devices in the IPDU Config Tool overwrites the existing configuration on the IPDU. For example, programming Alarms in the IPDU Config Tool will overwrite any existing Alarms on the IPDU.

Alarms

The alarms fields match the configuration options available on the IPDU under Alarms. To program alarms on an IPDU:

1. Enter a feed description for each feed.

Description

Feed A Description

2. Enter the required thresholds (Low(A), High(A)) for each circuit breaker or fuse. If your IPDU has less than 12 circuit breakers or fuses, the alarm configuration will be ignored. Leave the thresholds blank if no alarm is required. Check the required outputs that will trigger when the thresholds are exceeded. Outputs include LED, Relay and SMTP.

Circuit Breaker and Fuses					
CB/FS	Low(A)	High(A)	LED	Relay	SMTP
1	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="text" value="1"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="text" value="20.1"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	<input type="text" value="1.1"/>	<input type="text" value="20.2"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	<input type="text" value="1.2"/>	<input type="text" value="20.3"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	<input type="text" value="1.3"/>	<input type="text" value="20.4"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3. Enter the required thresholds for the feed sensors or leave them blank if no thresholds are required. Check the required outputs.

Sensors					
Name	Low	High	LED	Relay	SMTP
Voltage(V)	<input type="text" value="1"/>	<input type="text" value="50"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Current(A)	<input type="text" value="2.1"/>	<input type="text" value="130"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Busbar(°C)	<input type="text" value="3.2"/>	<input type="text" value="75"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Core(°C)	<input type="text" value="4.3"/>	<input type="text" value="50"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Click the update button and review the log to confirm all devices programmed correctly.

Ext Alarms

The Ext Alarms fields match the configuration options available on the IPDU under External Alarms. To program external alarms on an IPDU:

- Select whether you want to be notified via LEDs, Relay or SNMP when and input is unenergised.

Inputs			
Name	LED	Relay	SMTP
IN1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IN2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IN3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IN4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Enter the required thresholds for the feed sensors or leave them blank if no thresholds are required.
- Check the required outputs.

Sensors					
Name	Low	High	LED	Relay	SMTP
Temp1(°C)	<input type="text" value="0"/>	<input type="text" value="75"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Humidity1(%)	<input type="text"/>	<input type="text" value="90.5"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temp2(°C)	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humidity2(%)	<input type="text"/>	<input type="text" value="90.5"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Click the update button and review the log to confirm all devices programmed correctly.

Firmware

IPDU firmware can be downloaded from <https://www.acande.com/support/>. The firmware 'bin' file must be unzipped before it can be used by the IPDU Config Tool. To update the firmware on an IPDU perform the following actions:

1. Click Browse and find the firmware BIN file.

An invalid firmware file will result in an error. A valid firmware will display the file path and version of the firmware.

Select Firmware:

File : "C:\firmware\IPDUFirmware1.3.5.bin"

Version : 1.3.5

2. Click the update button and review the log to confirm all IPDUs programmed correctly.

Network

Unlike all other configuration options, only a single PDU may have its settings updated at a time.

DHCP

To set an IPDU to DHCP enabled:

1. Enter a hostname
2. Select DHCP
3. Click Update and review the log to confirm the IPDU was programmed correctly.

Hostname:

DHCP Status: DHCP Static

Static IP

To set a static IP address:

1. Enter a hostname
2. Select Static
3. Enter the desired IP Address and Subnet Mask
4. Optionally, enter a Default Gateway, Primary and Secondary DNS
5. Click Update

An invalid or incomplete IP address will not proceed and display a warning.

When an IPDU's IP address is changed, it is removed from the scan panel then a scan of the new IP is automatically performed.

Hostname:	<input type="text" value="ipduHOSTNAME"/>
DHCP Status:	<input type="radio"/> DHCP <input checked="" type="radio"/> Static
IP Address:	<input type="text" value="192"/> <input type="text" value="168"/> <input type="text" value="1"/> <input type="text" value="25"/>
Subnet Mask:	<input type="text" value="255"/> <input type="text" value="255"/> <input type="text" value="255"/> <input type="text" value="0"/>
Default Gateway:	<input type="text" value="192"/> <input type="text" value="168"/> <input type="text" value="10"/> <input type="text" value="1"/>
Primary DNS:	<input type="text" value="8"/> <input type="text" value="8"/> <input type="text" value="8"/> <input type="text" value="8"/>
Secondary DNS:	<input type="text" value="8"/> <input type="text" value="8"/> <input type="text" value="4"/> <input type="text" value="4"/>

SNMP

SNMP v1 and v2c

- Require a community string to be configured.

SNMP Version:	<input checked="" type="radio"/> v1 and v2c <input type="radio"/> v3
Community String:	<input type="text" value="public"/>

SNMP version 3

Allows increased security with authentication and encryption.

- Authentication must be enabled for encryption to be enabled
- Passwords and keys need to be at least 8 characters long.

SNMP Version:	<input type="radio"/> v1 and v2c <input checked="" type="radio"/> v3
Context:	<input type="text" value="normal"/>
Username:	<input type="text" value="admin"/>
Authentication Type:	<input type="radio"/> None <input checked="" type="radio"/> MD5 <input type="radio"/> SHA
Authentication Password:	<input type="text" value="••••••••"/>
Encryption Type:	<input type="radio"/> None <input checked="" type="radio"/> DES <input type="radio"/> AES
Encryption Key:	<input type="text" value="••••••••"/>

Users

Warning

All user accounts will be replaced by accounts entered here. Ensure you have the authority to perform sure an action. Take care with security storing passwords.

For an account to function it requires:

1. The enabled checkbox to be checked
2. A 4 character or longer username
3. A 4 character or longer password
4. Either Admin or Read-Only checked

A warning will be displayed when the update button is pressed if an enable account is entered with an invalid length.

#	Enabled	Username	Password	Admin	Read-Only
1	<input checked="" type="checkbox"/>	<input type="text" value="admin"/>	<input type="password" value="••••••••"/>	<input checked="" type="radio"/>	<input type="radio"/>
2	<input checked="" type="checkbox"/>	<input type="text" value="admin2"/>	<input type="password" value="••••••"/>	<input checked="" type="radio"/>	<input type="radio"/>
3	<input checked="" type="checkbox"/>	<input type="text" value="readonly"/>	<input type="password"/>	<input type="radio"/>	<input checked="" type="radio"/>

Log

Records and displays status updates of the tool. The log is coloured to indicate the category of the message

- Black – Informational
- Green – Success
- Red – Error

Log

6/09/2018 12:52:05 PM : Unable to connect to the EWS at IP : 192.168.10.104

6/09/2018 12:51:44 PM : Updating network settings on 192.168.10.104

6/09/2018 12:50:11 PM : Successfully updated network settings on device, new IP : 192.168.10.104

6/09/2018 12:49:51 PM : Network settings updated, awaiting reboot on EWS formerly at IP : 192.168.10.104

6/09/2018 12:49:51 PM : Updating network settings on 192.168.10.104

6/09/2018 12:49:05 PM : Successfully updated network settings on device, new IP : 192.168.10.104

6/09/2018 12:48:45 PM : Network settings updated, awaiting reboot on EWS formerly at IP : 192.168.10.104

