AXTRINET

Ethernet Packet Generator
Getting Started Guide
Version 3.2

1. INSTALLATION

This section describes the driver, APG Control Interface and TCL API installation process on a host PC running Linux or Windows.

1.1 BOX CONTENTS

The shipping carton contains:

- APG Unit
- Universal Desktop 12Vdc 5A Power Supply & local mains lead
- 1m USB Type B lead
- Getting Started Guide
- 4x Rubber Feet
- Axtrinet Resource CD for Windows and Linux:
  - ➢ USB Drivers
  - ➢ APG Control Interface Application
  - ➢ APG TCL API
  - ➢ Documentation

Visit **www.axtrinet.com/documentation** for the latest documentation and software.

1.2 MINIMUM SYSTEM REQUIREMENTS

Processor	Pentium-class processor or equivalent
Memory	2GB (4GB recommended)
Disk Space	15MB
OS	64bit (x86_64) Linux systems Microsoft Windows 7 Microsoft Windows 8.x Microsoft Windows 10.x Microsoft Windows 11.x
Interfaces	Minimum: USB 2.0 Preferred: USB 2.0 & 10/100Base-T

1.3 LINUX INSTALLATION

The Axtrinet APG Linux package contains the GUI application and the system configuration file. The GUI requires X-Windows to be running.

There are 4 installation formats provided for convenience:

- Simple tar
- Pacman
- RPM
- Deb

Pick the one that suits the distribution and the package should install with the normal package handling tools or use the commands below.

Currently all packages are for 64bit (x86_64) linux systems. The package files may not have all package dependencies because package names vary between different linux distributions.

See the notes in the Dependencies section below for package dependencies.

Pacman

Install with

```
pacman -U apgcontrol-3.2-1-x86_64.pkg.tar.xz
```

Remove with

```
pacman -R apgcontrol
```

RPM

Install with

```
rpm -U apgcontrol-3.2-1.x86_64.rpm
```

or

```
yum localinstall apgcontrol-3.2-1.x86_64.rpm
```

Remove with

```
rpm -e apgcontrol
```

There are a set of MD5/SHA1/SHA256 sums for the package files.

The package includes a desktop link that should appear under Network tools.

If it doesn't work

Provided the package install worked, once installed there should be an executable 'apgcontrol' in /usr/bin. If it does not run then check for missing libraries with:

```
ldd /usr/bin/apgcontrol
```

Dependencies

The following base packages are required but will normally already be installed:

fontconfig, **libxft**, **libx11**

The following optional dependencies are also required for some functionality:

- To connect to USB ports **libusb** (libusb-1.0.so) is required. If it is not present, USB connected units will not appear.
- In addition to run the scripting interface you will require to have a **tcl** package (provide tclsh, libtcl8.6.so) installed and to run the test suite **tk** (provide wish) to run the UI and **texlive** or **texlive-bin** (provide pdflatex) to create the pdf report documents.

1.4 WINDOWS INSTALLATION

1. Insert the CD.
2. Locate "apg-install.exe" in the Windows directory
3. Run the installation file and follow the on-screen instructions to install the USB driver, APG Control Interface GUI and the APG TCL API.

> 🚫 **DO NOT CONNECT THE AXTRINET PACKET GENERATOR TO THE WINDOWS PC UNTIL THE INSTALLATION IS COMPLETE.**

4. Read and accept the software Licence Agreement:
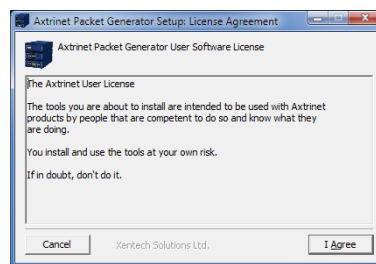
5. Select the components to install:
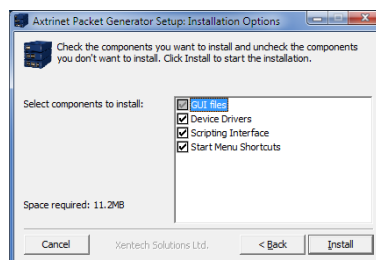
> ⚠️ **The installer will only update the installed components if a newer component is available.**

Click [Install] to start installing the selected components.

6. The window changes to display the installation progress.

7. ⬛ Close completes the installation process.

8. In addition, to run the scripting interface you will require to have a **tcl** package (provide tclsh) installed; to run the Test Suite GUI you will require **tk** (provide wish); and to generate test reports you will require **TexLive** or **MiKTex** (provide pdflatex).

1.5 CONNECTING THE HARDWARE

• Attach the ac mains supply lead to the power adapter, connect the adapter to the unit and apply power.
  ➢ The POWER LED will be illuminated ORANGE for ~60 seconds while the hardware configures.
 ➢ The POWER LED will turn GREEN after successful configuration, or RED if the hardware has failed to configure.

> **If the POWER LED turns RED after configuration, contact AXTRINET for further support.**

• Connect the management PC to the APG unit using the USB Type B lead (provided)

1.6 TESTING THE INSTALLATION

• Start the APG Control Interface:
  ➢ On Linux, click the **home / Axtrinet Control** icon or execute **user/bin/apg_control**
  ➢ On the Windows Start menu, locate the Axtrinet directory and click on the **APG Control** icon.
• The APG Control Interface management window will be displayed and the new unit will appear as a USB connection:

> **If the unit does not appear in the Control Interface, check that the unit is turned on and the USB lead is connected.**

> **If installing the drivers onto a PC for the first time, it may be necessary to re-run the installation process after the device has been connected as the USB drivers may not be enabled.**

• To connect to the unit, click on the Checkbox next to the device.

The unit port counters and unit Status button are displayed:

• The drivers and APG Control Interface have been successfully installed.

2. SETTING THE IP ADDRESS

The default settings are:

IP Address	**192.168.1.100**
Mask	**255.255.255.0**
Gateway	**0.0.0.0**

> **You may need to contact your Network Administrator to obtain the required IP and Gateway Addresses**

To change the IP Address of the unit:

• On the MENU BAR: Edit → Network Configuration. The IP Configuration Window opens:

• Set the IP Address, Mask and Gateway Address, then click APPLY