Introduction

This guide describes the Eco-friendly feature which reduces a switch’s power consumption by:

- Turning off power to port LEDs when they are not in use
- Implementing IEEE 802.3az to put ports into a Low-Power Idle mode

Products and software version that apply to this guide

This guide applies to all AlliedWare Plus™ products, running version 5.4.1 or later.

However, feature support and implementation varies between products. To see whether a product supports a particular feature or command, see the following documents:

- The product’s Datasheet
- The AlliedWare Plus Datasheet
- The product’s Command Reference

These documents are available from the above links on our website at alliedtelesis.com. Feature support may change in later software versions. For the latest information, see the above documents.

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The Eco-friendly LED Feature

You can conserve power by enabling the eco-friendly LED (Light Emitting Diode) feature.

To do this, either:

- press the eco button on the front panel, on products that have an eco button, or
- enter the `ecofriendly led` command, as follows:

```
awplus# configure terminal
awplus(config)# ecofriendly led
```

The eco-friendly feature disables power to the port LEDs.

On products that have a seven-segment LED, one of the horizontal segments of the seven segment display will glow permanently in eco-friendly mode. If the device is a VCStack master, the upper segment will glow; if the device is a VCStack member or a stand alone unit, the center segment will glow.

The eco-friendly feature does not turn off other LEDs, including LEDs for (depending on the product):

- power indicator
- system status
- SD card status
- stack management
- Power/Fault indicator
- NET MGMT port
- power supply and fan status

On SBx908 switches, the eco-friendly feature disables power to the port LEDs on XEMs installed in the switch, the stack ID LED on the XEM-STK and all port LEDs on the switch, except the NET MGMT eth0 port. Power to the fault, SD and PSU LEDs is not disabled, power to the stacking status LED is not disabled. On the XEM-1XP and XEM-2XP power to the XFP LED is not disabled.

On SBx8100 systems, the eco-friendly feature disables power to all LEDs on the switch except to the NET MGMT eth0 port and active/standby LEDs on the Control Fabric Cards, and to the LEDs on the PSUs and fan tray.

The eco button overrides the configuration set with the `ecofriendly led` command. When the eco-friendly LED feature is enabled, a port’s LED will not change if the port’s status changes. When the eco-friendly feature is disabled and power is returned to port LEDs, the LEDs will correctly show the current state of the ports.

In a stack environment, enabling the eco-friendly LED feature on the stack master will apply the feature to every member of the stack.
The Eco-friendly LPI (Low Power Idle) Feature

On products that support it, you can also conserve power by enabling the eco-friendly LPI feature.

This feature reduces the power supplied to the ports by the switch whenever the ports are idle and are connected to IEEE 802.3az Energy Efficient Ethernet compliant host devices. All ports configured for LPI must support LPI in hardware and must be configured to autonegotiate by default or by using the `speed` and `duplex` commands as needed.

The eco-friendly LPI feature does not affect the NET MGMT eth0 port. LPI is a feature of the IEEE 802.3az Energy Efficient Ethernet (EEE) standard. LPI lowers power consumption of switch ports during periods of low link utilization when connected to IEEE 802.3az compliant host devices. If no data is sent then the switch port can enter a sleep state, called Low Power Idle (LPI), to conserve power used by the switch.

To enable the feature for a switch port, or for a range of switch ports as in the example below, enter the commands:

```
awplus# configure terminal
awplus(config)# interface port1.0.2-port1.0.6
awplus(config-if)# ecofriendly lpi
```

To display the current eco-friendly LED and LPI configuration status of the switch, enter the command:

```
awplus# show ecofriendly
```

This feature is supported on the following products:

- AT-IX5
- x510 series
- x930 series
- x610 series
- x310 series
- SBx8100
- x230 series