appliansys

EDUGATEBOX - Everything a school needs to get online

CLASSROOM INTERNET

Connected learning promises rapid results, lowers the high cost of traditional teaching methods, and delivers better learning outcomes* in today's classrooms.

But for a school looking to deploy classroom internet, delivering a network capable of living up to the promise of e-learning is a considerable and complex challenge:

- When a school first connects, they often need to deploy everything at once

- Reasonably priced Wi-Fi access points only do part of the job and can leave students exposed to inappropriate content and their devices open to cyberattack

- Sophisticated networking kit is usually designed for more developed needs - over-specced, over-complicated and over-priced for developing schools

- There is no on-site technical support and bringing in engineers to deploy or support kit is simply not feasible.

Schools want to give all their students the chance to leap a digital generation, however remote they are. They need cost-effective classroom internet, even where bandwidth is scarce A school starting out needs:

- **Routers & switches** to control network traffic

- **DNS and DHCP** to allow devices to connect to the network and internet

- **A content filter** to protect students and keep web content relevant to learning

- **A firewall** to protect their devices

- **Caching and traffic shaping** to optimise limited bandwidth capacity

- **Network monitoring** to quickly identify and resolve issues and plan for future needs.

* World Development Report 2016: Digital Dividends. Washington, DC: World Bank, 2016. doi:10.1596/978-1-4648-0671-1

ALL-IN-ONE SOLUTION

With EDUGATEBOX, everything a developing school needs to access online content is available in one easy-to-deploy appliance from a trusted education vendor.

EDUGATEBOX offers just the right balance of features and functionality for a single classroom or anything up to 150 student devices.

With just one multi-function appliance all the devices in a school can be connected, protected and optimised in one go. If connecting 50 devices or less, **EDUGATE**BOX even includes the Wi-Fi access point needed.

With less to learn and less to know, schools don't need to rely on experienced technicians to install or manage the appliance. For even simpler deployment **EDUGATE**BOX can be pre-configured, so after taking delivery a school can simply plug it in.

And because operation is 'clientless', no student or teaching device will ever require additional software to connect.

Protect students from harmful content

EDUGATEBOX works with third party category and content lists to instantly stop access to inappropriate content. Lists can be modified at school or group level via simple user options.

Monitor and control your traffic

With the entire network managed in one place, schools won't need to access multiple appliances to monitor activity or make configuration changes.

Comprehensive reporting on each **EDUGATE**BOX function provides 'at-a-glance' overviews or 'in-depth' network performance reports. And because all traffic passes through **EDUGATE**BOX, detailed data about exactly who has done what on the network is available.

Save bandwidth, save money

EDUGATEBOX removes 20-40% of general web traffic by saving a local copy of requested content in its cache store from which it serves all further requests. For very large file downloads, such as software updates that can take over a small connection for an entire day, the saving is often over 90%.

As a result every school can spend less on bandwidth or avoid having to upgrade, leaving more funds for spending elsewhere.

Speed up classroom content

Content delivered from **EDUGATE**BOX's cache store is sent to students from within the classroom or building - at 'lightning' network speed. Important content not in the cache can be prioritised with Traffic Shaping whilst filtering can block chosen domains at set times, Together, these functions enable e-learning even where bandwidth is with severely limited.
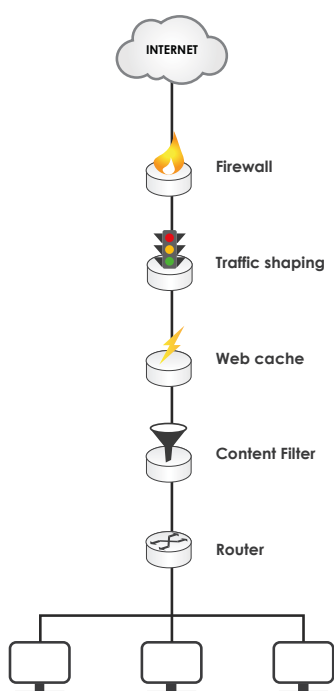
A solution that grows as schools grow

A developing school's needs are likely to grow quickly. **EDUGATE**BOX has been designed to offer a suitable upgrade path. Coming in two models to closely match traffic needs, upgrading from small to large is a 10 minute task, thanks to clever configuration storage.
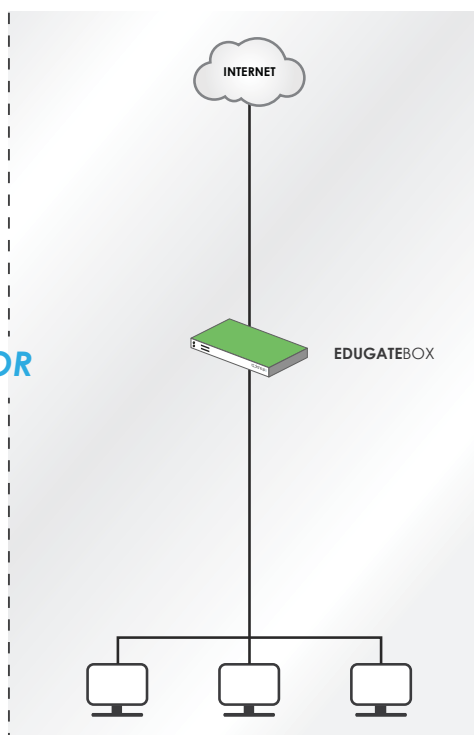
As needs expand further, 'dedicated' appliances may become more suitable. **EDUGATE**BOX's modular design mean services can be switched on and off independently so, when upgrading a single function with a new appliance, everything else continues working.

Increased use of online content will eventually bring slower web speeds. **EDUGATE**BOX's cache can be quickly enhanced with a feature-rich, dedicated **CACHE**BOX for a greater speed boost and bandwidth saving.

FEATURES

Networking

- Wireless access point with Open / WPA / WAP2 encryption modes (model 020)
- Authentication-granting network access via captive portal
- Clientless - no need to ever configure tablets and PCs for access

DNS and DHCP

- Serve DHCP settings to connected network (default route, DNS, WPAD, IP, DNS, NTP)
- DNS caching service to reduce latency
- Full support for IPv6

Web caching

- Fully featured HTTP/HTTPS caching software
- Load priority content via USB - guarantee availability of material when the internet connection is unreliable
- Software update caching (MS Windows, Google, Apple, Avast, Kaspersky, etc)
- Off-peak pre-caching of content
- Static storage - keep any specific object protected from cache deletion
- Permanent video storage with customisable viewing channel

Content Filtering

- Category filtering (adult, social media, etc)
- Build and share domain white- and blacklists

Firewall

- DNS, DHCP and Terminal Service firewall to prevent unauthorised access

Traffic Monitoring & Reporting

- Monitor and log all traffic flowing through the network (source/destination IPs, Ports, Protocols, etc)
- Report on top users (by source/destination, by protocol, by port number)
- Set threshold rules for defined traffic metrics (e.g. bytes per object of interest: IP, subnet, port, etc.) and send an alert if breached

Easy to deploy, operate and manage

- Intuitive, secure web admin interface
- Setup and caching assistants
- On-box real-time / scheduled reporting to monitor network performance
- Automated on-box/off-box backups
- Automated alerting
- SNMP support

COMBINED SIMPLICITY

Providing internet access in the classroom doesn't have to be difficult.

EDUGATEBOX integrates **all** the required functions into one appliance. By automatically routing traffic through all on-board functions and services, **EDUGATE**BOX keeps things simple.

From its easy to use interface, any school can safely connect devices to the internet without having to understand the complexities of each on-board function.

Schools can simply plug the appliance in to a power supply and an internet connection to get started. Quick and easy to deploy, for operation by non-technical staff, **EDUGATE**BOX starts delivering results instantly.

ONE BOX, MANY BENEFITS

Designed to deliver a host of value-added benefits for schools, at a price that fits their budgets, **EDUGATE**BOX is the cost-effective, all-in-one value solution for schools.

One appliance: All a school needs to get students safely online

One price: A school budget-friendly solution with no ongoing feature lisense coce

One point of control: Manage everything from one highly intuitive dashboard

One point of support: Just one friendly team to call, whatever the problem

One provider: One trusted vendor that you can rely on to keep schools up to date with changes in content delivery

RANGE

	Usage	Form Factor	Max Concurrent Devices / Throughput (Mbps)
EDUGATEBO X**020**	A school with a computer lab	Small Form Factor Desktop Unit	Up to 50 devices 25 Mbps
EDUGATEBO X**050**	A school with a lab and carts of portable devices	19" 1U Rack-mountable	50 - 150 Devices 50 Mbps
EDUGATEBO X**CMC**	A central IT team that manages **EDUGATE**BOXes at many school sites	19" 1U Rack-mountable	500 **EDUGATE**BOXes