



# Yorkshire & Humber Grid for Learning Case Study

## The Customer

Yorkshire & Humber Grid for Learning (YHGfL) is a regional body consisting of 12 Local Authority members which in turn consist of over 2000



schools and their partners in learning. Along with the other nine Regional Broadband Consortia, YHGfL, based in Scunthorpe, was created to meet the Government target of providing all schools in the region with secure and reliable broadband connections, providing access to licensed content and free resources to schools.

## The Business Need

YHGfL offer Local Authorities and Schools within their region a full suite of value-added services including internet access, VPN, webmail, email domains, anti-virus, content filtering and access to school backend systems. Crucially, the Grid also provides access to key central government systems and applications which provide the standard tools for education professionals and students and are increasingly becoming a key requirement for parental access.

YHGfL realised that standard passwords and usernames, the traditional form of user authentication, were not enough to ensure the safety of the data and transactions the Grid provides access to.

## The Solution

### Effective forward planning

YHGfL decided to implement two-factor authentication and challenged CRYPTOCard with the task of providing a solution. This decision proved to be the right strategy, because within 12 months, the Government implemented

Code of Connection and Becta standards which dictated the use of two-factor authentication for access to Government held data.

YHGfL chose CRYPTO-Shield, a complete solution that consists of a suite of applications designed for implementing and operating strong passwords using two-factor authentication and provides everything required for securing remote access, domain and desktop logon or web portal access with two-factor authentication. The solution also integrated seamlessly with the YHGfL infrastructure.

## Scalability

The solution secures VPN access to the YHGfL infrastructure for over 500 users across 60 schools within the region. This number is expected to grow rapidly due to the Government's mandating of compliance to the Becta standards

## Flexible administration

The lead administrator at YHGfL manages all users and their tokens, but features within the system allow local groups to be set up, allowing for local administration should the Grid wish to extend this capability. This allows the local administrator to add and remove users, and in turn create their own sub-groups to represent, for example, different levels of authority to which access permissions can be granted.



“ We found the solution CRYPTOCard offers to be 50 per cent less expensive than the competitors. It does exactly what we need it to for half the cost.”

Andrew Yoward, Head of Support Services, YHGfL

**CRYPTOCard**  
Secure Your World.



# YHGfL case study

## The benefits

### Full functionality, low cost

YHGfL found CRYPTOCard's solution offered unrivalled levels of security and usability at highly competitive costs. "We found the solution CRYPTOCard offered 50 per cent less expensive than the competitors," says Andrew Yoward, Head of Support Services for YHGfL. "It does exactly what we need it to for half the cost. It protects everything – the network infrastructure (routers, switches, firewalls) and the services infrastructure (remote access servers etc.). It eliminates having to rely on insecure and difficult to manage static passwords. It also ensures that all access within our network conforms to the latest Government compliance regulations."

### Unique benefits

YHGfL found the ability to authenticate against multiple active directories a key benefit, allowing them to meet the needs of their many schools, regardless of what directory they were running.

By 2009, 500 tokens KT-1 were assigned to staff including 70% of YHGfL staff, Local Authority staff including IT helpdesk and education staff, and teachers and third party support staff within schools, all of whom need access to central systems and applications holding confidential data. It is against policy to download this data to desktop or laptop computers, now that a solution is in place to ensure staff can access this information anytime, from anywhere.

## The future

### Meeting the needs of diverse audiences

There are nearly 250,000 potential users within the YHGfL region, 75,000 of whom are teachers. Gaining a significant share of this audience will achieve the levels of security and risk reduction, as well as economies of scale and cost savings, that YHGfL are targeting. Having initially deployed 500 KT-1 keychain tokens, YHGfL is now planning to deploy future tokens in keychain, soft and SMS formats, allowing users to select the token format that best fits their mobility needs.

## Becoming an Identify Provider

One of the key strategies that YHGfL are adopting is to ensure that the many systems and applications that are delivered and mandated by various Government organizations are authenticated by the same system. Essential to achieving this, YHGfL are looking to become an 'Identity Provider' (IdP), enabling them to authenticate individual users across multiple applications from multiple public sector divisions. One of the conditions of gaining IdP status is to have a credible authentication solution in place, a criteria YHGfL have met by implementing CRYPTOCard's authentication solution.

## Technical summary

YHGfL's network is primarily Cisco based with Sophos anti-virus. They have an open source back end infrastructure, but while they are introducing MS Active Directory services they are maintaining the Open LDAP. BlackShield ID is unusual in its ability to work with this dual infrastructure. CRYPTOCard is unique in the industry in their commitment to ensuring their products and services work with any common network architecture including OS compatibility (Windows, Linux, Mac OS X), webserver flexibility (IIS, Apache) and database options (Active Directory, LDAP, Open Directory etc). Add to that the outstanding 'out of the box' interoperability with many top industry network solutions including Citrix, Checkpoint, Cisco and many more,

"Network security is not just important to e-commerce and big business," says Jason Hart, CEO of CRYPTOCard Europe. "The YHGfL is a network for local authorities and schools that contains private information meant only for authorized users. You wouldn't let a stranger wander around a school – nor should they have access to a school's private network."

**CRYPTOCard**  
Secure Your World.

### CRYPTOCard Europe

Eden Park  
Ham Green, Bristol  
BS20 OEB  
UK

Tel: +44 870 7077 700  
Fax: +44 870 7077 711

### CRYPTOCard North America

340 March Road  
Suite 600, Ottawa  
Ontario, K2K 2E4  
Canada

Toll Free: 800-307-7042  
Tel: +1-613-599-2441  
Fax: +1-613-599-2442

[www.cryptocard.com](http://www.cryptocard.com)

