# HBOS (Halifax Bank of Scotland)

## Adder?s KVM Solutions Fuel Management of the Largest Financial Data Center in Europe



AdderLink IP

**HBOS (Halifax Bank of Scotland)**

***CHALLENGE***

Managing Europe?s largest financial data center is no easy feat ? couple this with the fact that this data center (which has doubled in size over the last two years) belongs to HBOS plc (Halifax Bank of Scotland), a renowned financial institution that has tens of thousands of assets under management - and the mission becomes even more vital.

HBOS provides retail, business and corporate banking, and insurance and investment services.Adder?s KVM solutions have been a key component in managing and securing HBOS? two data centers based in the U.K.The Adder/HBOS relation-ship goes back several years.According to Dave Bevan, HBOS? Team Leader, Data Center Management, ?By the time KVM solutions came into the spotlight, we already had a huge investment in standalone Adder switches.We needed to protect that investment.The scale of our operation made the viability of changing the solution problematic.Rather than introduce a risk to our existing systems, we decided to enhance the deployment we already had.Adder had both the products and the expertise to make this happen without introducing the risks associated with rebuilding our entire infrastructure.?

***SOLUTION***

HBOS today deploys over 700 pieces of Adder equipment ? many of which are KVM switches. Most recently, HBOS has leveraged Adder?s KVM over IP hardware solution.With demands from internal IT security teams, the bank had to reduce the physical access to the computer suites.?We tried a couple of the early Adder switches which showed that a remote KVM solution was the way forward.The introduction of the little AdderLink IP unit was the ?Eureka? moment for us, we?ve been using them ever since.?At the same time, HBOS also began a cluster-based model where it banks KVM switches together to control 128 servers at a time.However, in the past year, HBOS has moved to AdderView CATx switches because it enables cabinets to accept 24 servers which are essential in accommodating HBOS? growth projections.

HBOS has Adder SmartViewPro, SmartViewXPro and AdderViewCATx switches in place as well as a substantial number of AdderLink IP units in use.They are customized for HBOS use, both at a firmware level and at a client level.The whole population is controlled by a web based front-end which is unique to HBOS.The customized solution is due in large part to Adder?s open architecture.Adder was also able to fulfill their request to add extra security by reprogramming Adder?s firmware.

At the heart of HBOS? data center operations is a customized inventory management system.The system was specifically created to protect the tens of thousands of assets under management.The KVM solutions are critical in that they control remote access to HBOS? server base.The access varies depending on who needs it.Physical presence is impossible to control once someone?s inside the Data Center door.A robust set of remote controls is the preferred option.A remote KVM solution is ideal as it remains active through the reboot cycle or in the case of a system crash.These solutions don?t need a software agent on the target server and they can be used across a wide range of operating systems.



***RESULT***

The Adder KVM over IP solution has enabled HBOS to leverage remote management functions and greatly reduce physical access to the servers.In fact, the company estimates that over 25,000 hits (or log-ins) to the KVM over IP system have replaced what would have been 25,000 physical visits to the computer rooms.?We wouldn?t have any commercial advantage without these remote access systems,? said Dave Bevan.

?The bottom line is cost.? According to Bevan, ?We?ve been able to protect our investment in Adder equipment and bring its use in-line with current IT security requirements.The hidden cost in any KVM over IP solution is the cost of the connectivity.The Adder range is quite light in network traffic; as a result, our current model uses just a single network port per 1000 servers for management (KVM over IP requirements, not data connectivity).?HBOS has plans to continue its partnership with Adder as it grows.The institution estimates that it will have approximately 20,000 servers by the year 2008.

***QUICK FACTS:***

- Approximately 700 pieces of Adder KVM equipment are deployed within HBOS?s data centers
- 25,000 remote access computer visits have replaced 25,000 physical visits, eliminating security risks
- Over 10,000 servers are controlled through the KVM over IP system (12,000 active servers are deployed within the two data centers)
- HBOS deploys a single network port per 1000 servers for management (KVM over IP requirements, not dataconnectivity).
- Adder provides HBOS with 12,300 ports of KVM over IP connectivity

**ABOUT HBOS**

HBOS is a major UK company. The Group provides retail, business and corporate banking, and insurance and investment services through its multi-brand strategy in the UK and internationally. About 72,000 people are employed across the Group.HBOS has the biggest private shareholder base in the UK.

HBOS is the UK?s largest mortgage and savings provider and the number one provider of new investment products.The Group is one of the UK?s leading general

insurers and has a reputation for excellence in the provision of business banking and corporate finance, delivering innovative funding solutions across a range of markets.