

# BoKS provides maximum security for your servers

## What is FoxT BoKS?

BoKS Access Control is a product of the Swedish firm FoxT (Fox Technologies), intended for the centralized management of user authentication and authorization (Role Based Identity Management and Access Control). The name is an abbreviation of the Swedish "*Behörighet och KontrollSystem*", which roughly translates as "Legitimacy and Control System".

Some key features of BoKS are:

- Centralized management of user accounts for server and desktop systems.
- Centrally defined access rules for servers, desktops and applications.
- BoKS revolves around the use of roles: RBIM and RBAC.
- Auditing and monitoring functionality which can assist in attaining SOx compliancy.
- Supports most commonly encountered protocols (Telnet, SSH, FTP, RDP and so on).
- Supports delegated superuser (root) access.
- Integrates with existing LDAP or NIS+ directory services.
- Excellent scalability and redundancy, leading to a guaranteed uptime.

Using BoKS you decide WHEN WHO gets to access WHICH servers, WHAT they can do there and HOW.

BoKS is a standalone application and requires no modifications of the server or desktop operating systems.

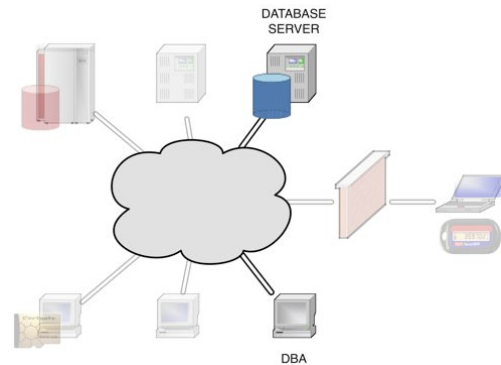
FoxT has chosen Unixerius as its official partner for the Benelux region.

## An example: Role Based Access Control

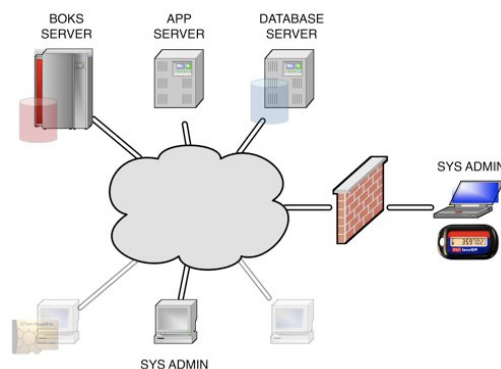
BoKS groups users accounts and computer systems based on their function within the network and the company. Each user will fit one or more role descriptions and each server will be part of different logical host groups. One could say that BoKS is a technical representation of your company's organization where everyone has a clearly defined role and purpose.

Let us discuss a very simple example, based on a BoKS server, an application server and a database server.

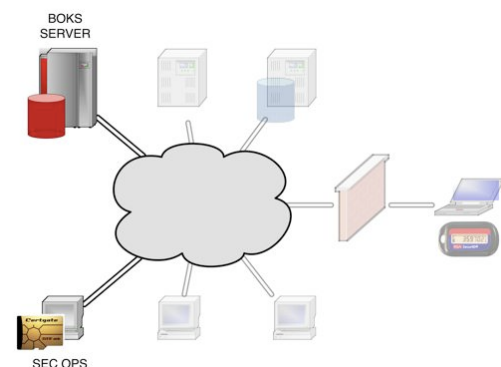
Your database admins will obviously need access to their own work stations. Aside from that they will be allowed to use SSH and SCP to access those servers in the network that run their Oracle database. Using the BoKS Oracle plugins your DBAs accounts will also be allowed to administer the actual databases running on the server.



The sysadmins will be allowed full SSH access from their work stations to all of the servers in the network. Because the system administrators are expected to provide 24x7 support they will also be allowed to create a VPN connection to the network, through which they can also use SSH, but only if they have authenticated themselves using an RSA token. System administrators will not be allowed access to any of the applications or databases running on the servers.



The actual users of BoKS, security operations, will gain SSH access to the BoKS security server. Aside from that they will also be allowed access to the BoKS web interface, provided that they've identified themselves using their PKI smart card.



## Key features of BoKS

### Centralized management of user accounts

BoKS manages all aspects of user accounts, including SSH certificates, secondary Unix groups and personal home directories.

### Centrally defined access rules

Access rules define permissible source and destinations systems as well as the (time of) day and the communications protocols to be used.

### Role based access control

By defining user classes you can create and apply sets of access rules for a whole team or department in one blow.

### Extensive audit logging

Every authentication request that's handled by BoKS is stored in the audit logs. It is also possible to log every keystroke performed by a superuser (root) account.

### Real-time monitoring

The BoKS auditing logs are updated and replicated in real-time. This allows you to use your existing monitoring infrastructure to monitor for undesired activities.

### Support for most common network protocols

BoKS provides authentication and authorization for the following protocols: login, su, telnet, secure telnet, rlogin, XDM, PC-NFS, rsh and rexec, FTP and SSH. The SSH protocol can be further divided into shell access, remote command execution, SCP, SFTP, X11 forwarding and port forwarding.

### Delegated superuser access

Using "suexec" BoKS allows your users to run a specified set of commands with the superuser (root) account.

### Integration with LDAP and NIS+

If so desired BoKS can be integrated into your existing directory services like LDAP and NIS+.

### Redundant infrastructure

Multiple BoKS servers provide properly load balanced services as well as swift disaster recovery.

BoKS works with:



Functionality	OpenLDAP	eTrust AC	BoKS AC
Centralized authentication management	✓	✓	✓
Centralized authorization management	✓	✓	✓
Role based access control	✗	✓	✓
SSH subsystem management	✗	✗	✓
Monitoring of files and directories	✗	✓	✓
Access control on files and directories	✗	✓	✗
Delegated superuser access	✓	✓	✓
Real-time security monitoring	✓	✓	✓
Extensive audit logging	✗	✓	✓
OS remains unchanged	✓	✗	✓
User-friendly configuration	✗	✓	✓
Reporting tools	✗	✓	✓
Password vault functionality	✗	✓	✓

## About Unixerius

Unixerius has expertise on the application of various Unix flavors in high end ICT environments. Our focus lies on data security and high availability.

Our specialists can be hired to both *build* and *maintain* your technical infrastructure. Our experience enables us to provide quality advice and to manage your projects. We also provide workshops and training on the subjects of FoxT BoKS, Nagios and Sun Cluster.

Unixerius is FoxT's official partner for the Netherlands, Belgium and Luxembourg.

[www.unixerius.nl](http://www.unixerius.nl)

**Do you have any questions? Please mail us at [info@unixerius.nl](mailto:info@unixerius.nl).**