

RSA SECURID[®] ACCESS
Standard Agent
Implementation Guide

Fox Technologies
BoKS ServerControl 7.0

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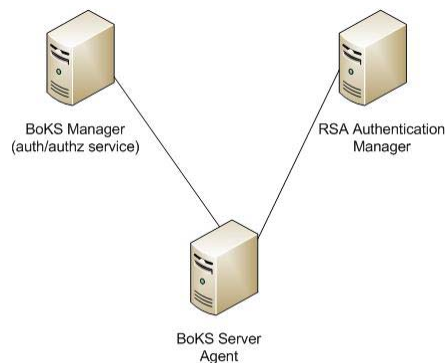
RSA
READY

Solution Summary

The required authentication method for users in a BoKS protected domain can be configured based on user, service (ssh, su, etc), to/from-host. To support SecurID authentication the BoKS Server Agent must be registered in the RSA Authentication Manager database and the corresponding SecurID configuration files must be installed on the BoKS Server Agent host. A typical login sequence for SecurID authenticated login includes the following steps:

1. The Server Agent queries the BoKS Manager for the authentication method to use for the tuple (service,user,host).
2. Response from BoKS Manager is SecurID.
3. The Server Agent runs a local command line tool to perform the SecurID authentication sequence against the RSA Authentication Manager.
4. The result from the SecurID authentication (success/fail) is sent to BoKS Manager, which responds with success/failed login.

RSA Authentication Manager supported features	
BoKS Server Agent 7.0	
RSA SecurID Authentication via Native RSA SecurID UDP Protocol	No
RSA SecurID Authentication via Native RSA SecurID TCP Protocol	Yes
RSA SecurID Authentication via RADIUS Protocol	No
RSA SecurID Authentication via IPv6	Yes
On-Demand Authentication via Native SecurID UDP Protocol	No
On-Demand Authentication via Native SecurID TCP Protocol	Yes
On-Demand Authentication via RADIUS Protocol	No
Risk-Based Authentication	No
RSA Authentication Manager Replica Support	Yes
Secondary RADIUS Server Support	No
RSA SecurID Software Token Automation	No
RSA SecurID SD800 Token Automation	No
RSA SecurID Protection of Administrative Interface	Yes



RSA Authentication Manager Configuration

Agent Host Configuration

To facilitate communication between the BoKS Server Agent and the RSA Authentication Manager / RSA SecurID Appliance, an Agent Host record must be added to the RSA Authentication Manager database. The Agent Host record identifies the BoKS Server Agent and contains information about communication and encryption.

RSA Authentication Manager 8.0 introduced a new TCP-based authentication protocol and corresponding agent API. RSA Authentication Manager 8.0 and newer also maintains support for the existing UDP-based authentication protocol and agents. The agent host records for TCP and UDP agents are configured similarly, but there are some important differences.

Include the following information when configuring a TCP-based agent host record.

- RSA agent name (in the hostname field)

! > Important: The RSA agent name is specified in the `rsa_api.properties` file.

Set the Agent Type to "Standard Agent" when adding the Authentication Agent. This setting is used by the RSA Authentication Manager to determine how communication with BoKS Server Agent will occur.

Partner Product Configuration

Before You Begin

This section provides instructions for configuring the BoKS Server Agent with RSA SecurID Authentication. This document is not intended to suggest optimum installations or configurations.

It is assumed that the reader has both working knowledge of all products involved, and the ability to perform the tasks outlined in this section. Administrators should have access to the product documentation for all products in order to install the required components.

All BoKS Server Agent components must be installed and working prior to the integration. Perform the necessary tests to confirm that this is true before proceeding.

All BoKS Server Agent hosts that should support SecurID authentication must be registered in the RSA Authentication manager database and the configuration file AM_Config.zip should be copied and extracted on each Server Agent host in the /var/ace directory.

Fox Technologies BoKS ServerControl Configuration

1. Create the /var/ace directory if it does not already exist. Verify that the directory is owned by root and has permissions of 0700.
2. Copy the RSA configuration file AM_Config.zip to each BoKS Server Agent host and place in the /var/ace directory.
3. Extract the AM_Config.zip file in the /var/ace directory. Verify that the /var/ace/sdconf.rec and /var/ace/failover.dat files are owned by root and has permissions of 0600.
4. Use the BoKS administration console to assign a SecurID authenticator to each BoKS domain user that should use SecurID authentication.

```
BoKS# authadm set -u <user> -t securid -m
```

RSA SecurID Login Screens

Login screen:

```
BoKS # ssh test_user@client70
```

```
Enter PASSCODE:
```

```
Total users logged in (via BoKS): 8 (1 on this host)
```

```
Last Login 05/18/16 10:07:37 - 05/18/16 10:07:49 (client70:pts/0)
```

```
***** BoKS 7.0 *****
```

```
Last login: Wed May 18 10:07:37 2016 from master70
```

```
-bash-4.1$
```

User-defined New PIN:

```
BoKS # ssh test_user@client70
```

```
Enter PASSCODE:
```

```
To continue you must enter a new PIN.
```

```
Are you ready to enter a new PIN? (y/n) [n] y
```

```
Enter a new PIN between 4 to 8 digits:
```

```
Re-enter new PIN to confirm:
```

```
PIN accepted. Wait for the tokencode to change,  
then enter a new PASSCODE
```

```
Enter PASSCODE:
```

```
Total users logged in (via BoKS): 8 (1 on this host)
```

```
Last Login 05/18/16 10:08:11 - 05/18/16 10:10:40 (client70:pts/0)
```

```
3 failed login attempt(s) since last login
```

```
***** BoKS 7.0 *****
```

```
Last login: Wed May 18 10:08:11 2016 from master70
```

```
-bash-4.1$
```

System-generated New PIN:

BoKS # ssh test_user@client70

Enter PASSCODE:

To continue, you must accept a new PIN generated by the system.

Are you ready to have the system generate your PIN? (y/n) [n] y

2115065 is your new PIN. Remember it and then hit <Enter>

PIN accepted. Wait for the tokencode to change,

then enter a new PASSCODE

Enter PASSCODE:

Total users logged in (via BoKS): 8 (1 on this host)

Last Login 05/18/16 10:12:44 - 05/18/16 10:16:44 (client70:pts/0)

***** BoKS 7.0 *****

Last login: Wed May 18 10:12:44 2016 from master70

-bash-4.1\$

Next Tokencode:

BoKS # ssh test_user@client70

Enter PASSCODE:

next Tokencode:

Total users logged in (via BoKS): 8 (1 on this host)

Last Login 05/18/16 10:20:12 - 05/18/16 10:21:01 (client70:pts/0)

3 failed login attempt(s) since last login

***** BoKS 7.0 *****

Last login: Wed May 18 10:20:12 2016 from master70

-bash-4.1\$

Certification Checklist for RSA Authentication Manager

Date Tested: November 2, 2016

Certification Environment		
Product Name	Version Information	Operating System
RSA Authentication Manager	8.2	Virtual Appliance
RSA Authentication API	8.5	Red Hat EL 6.7
RSA Software Token	5.0.0.292	Windows 10 x64
BoKS ServerControl	7.0	Red Hat EL 6.7

RSA SecurID Authentication

Date Tested: November 2, 2016

Mandatory Functionality	Native UDP	Native TCP	RADIUS Client
New PIN Mode			
Force Authentication After New PIN	N/A	✓	N/A
System Generated PIN	N/A	✓	N/A
User Defined (4-8 Alphanumeric)	N/A	✓	N/A
User Defined (5-7 Numeric)	N/A	✓	N/A
Deny 4 and 8 Digit PIN	N/A	✓	N/A
Deny Alphanumeric PIN	N/A	✓	N/A
Deny PIN Reuse	N/A	✓	N/A
Passcode			
16 Digit Passcode	N/A	✓	N/A
4 Digit Fixed Passcode	N/A	✓	N/A
Next Tokencode Mode			
Next Tokencode Mode	N/A	✓	N/A
On-Demand Authentication			
On-Demand Authentication	N/A	✓	N/A
On-Demand New PIN	N/A	✓	N/A
Load Balancing / Reliability Testing			
Failover (3-10 Replicas)	N/A	✓	N/A
No RSA Authentication Manager	N/A	✓	N/A

✓ = Pass ✗ = Fail N/A = Non-Available Function

Appendix

RSA SecurID Authentication Files

RSA SecurID Authentication Files	
TCP Agent Files	Location
rsa_api.properties	/var/ace/
sdconf.rec	/var/ace/
sdopts.rec	/var/ace/

Partner Integration Details

Partner Integration Details	
RSA SecurID UDP API	N/A
RSA SecurID TCP API	8.5
RSA Authentication Agent Type	Standard Agent
RSA SecurID User Specification	Designated Users – Default method per user or per service
Display RSA Server Info	Yes
Perform Test Authentication	No
Agent Tracing	No

API Details:

The `sdconf.rec` and the `sdopts.rec` as well as the `<hostname>` directory are stored by default in `/var/ace` on the BoKS Server Agent host. The location can be modified by specifying a different base directory with the BoKS environment variable `VAR_ACE`, see BoKS Administration Guide for details.

sdconf.rec:

`/var/ace/sdconf.rec`

sdopts.rec:

`/var/ace/sdopts.rec`

Appendix 2

FoxT SeverControl / BoKS Server Agent platform support	
AIX 7.1	PowerPC
AIX 6.1	PowerPC
Debian 7.0	x86_64
Red Hat EL 6.0	x86, x86_64
Red Hat EL 7.0	x86, x86_64
SuSE 11	x86, x86_64
SuSE 12	x86, x86_64
Solaris 10	I386, Sparc
Solaris 11	I386, Sparc
Ubuntu 12.04	X86_64
Ubuntu 14.04	X86_64