



SecurID Ready Implementation Guide

Activ Server Professional Edition 2.0

Last Modified 02/22/01

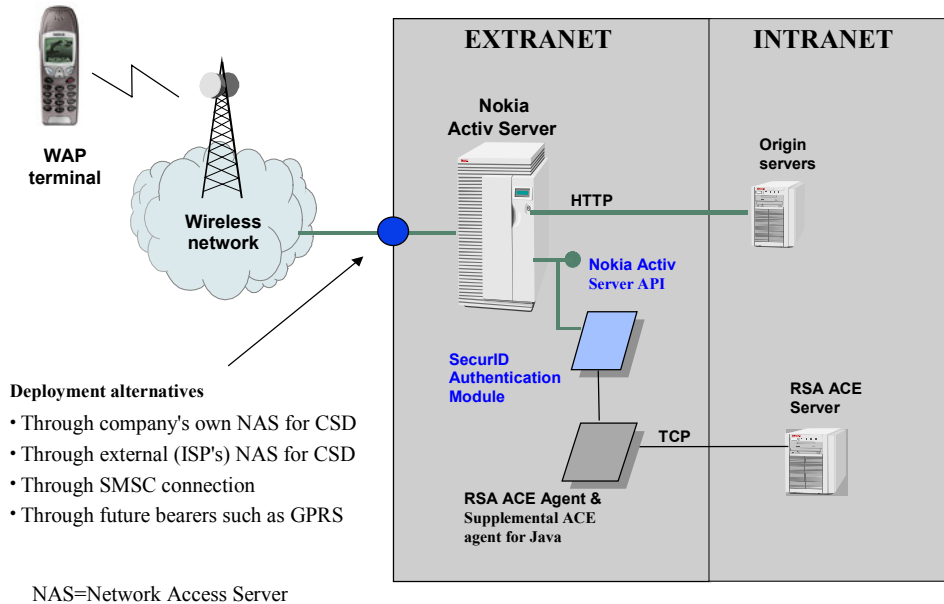
1. Partner Information

Partner Name	Nokia
Web Site	http://www.nokia.com/
Product Name	Activ Server Professional Edition
Version & Platform	2.0, Windows NT 4, Sun Solaris 7, HP-UX 11.00.
Product Description	The Nokia Activ Server is an open software platform that provides state of the art mobile connectivity for your company's existing information systems, Intranet, and Extranet services. The Nokia Activ Server offers a strong and secure architecture for deploying mobile connectivity. Connections from WAP enabled terminals to the Nokia Activ server can be arranged through bearers such as Short Message Service (SMS) and Circuit Switched Data (CSD). The Nokia Activ Server has both a graphical user interface and a command line interface. Remote monitoring and administration can be done via WAP terminals. The Nokia Activ Server Manager is specifically designed for user and user group security, as well as license, terminal, bearer, and servlet management. The Nokia Activ Server can also be monitored and administered via management tools supporting SNMP (Simple Network Management) protocol.
Product Category	Wireless Communications

2. Contact Information

	<u>Pre-Sales</u>	<u>Post-Sales</u>
E-mail	Wap.software@nokia.com	Wap.software@nokia.com
Web	http://www.nokia.com/	http://www.nokia.com/

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3. Solution Summary

A. SecurID Functionality:

Authentication methods supported: Native SecurID

New Pin Mode support: All

Next TokenCode Mode support: Yes

Secondary Server support: Slave ACE/Server

Location of Node Secret: \WINNT\System32 on WindowsNT, \Var\Ace on Unix

ACE/Server Client definition type: 'NetOS' on WindowsNT, 'Unix Client' for Solaris, HP-UX

SecurID user specification: All users

SecurID protection of Administrators: No

B. Key Features of the Nokia Activ Server Professional 2.0:

Full standard compliance

- WAP 1.1 compliant
- Wireless Protocol Stack implementation by Nokia
- Support for secure and non-secure, connectionless and connection-oriented sessions

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Server functionality

- Nokia Activ Server can act either as a gateway to web servers over HTTP or as a server to host applications and content independently
- User authentication and access control for user and user group level of control
- Open Application Programming Interface (API) for back-end integration

Wireless bearers

- UDP/IP for GSM, TDMA, CDPD, CDMA
- SMS Centers: Nokia CIMD, CMG UCP, Aldiscon SMPP
- Terminal bearer for GSM CSD and SMS

Content access

- WML and WMLScript
- HTML and text content conversion to WML

Authentication and Access control

- HTTP basic authentication for application level authentication
- HTTP proxy authentication for server level authentication
- URL access control
- Terminal identification with MSISDN number (Nokia Activ ID)
- Support for strong user authentication via RSA SecurID® support (Nokia Activ Security)

Administration

- Easy administration with command line interface, graphical user interface or WAP user interface
- Support for Simple Network Management Protocol (SNMP)

4. Product Requirements

Nokia Activ Server 2.0 Professional Edition for Windows NT ®

- Pentium processor, min.266 MHz 128 MB RAM, 256 MB RAM recommended, min.100 MB of free hard disk space
- Windows NT® 4.0 service pack 5
- Java™ Runtime Environment 1.2.2
- Java HotSpot™ 2.0

Nokia Activ Server 2.0 Professional Edition for HP-UX

- HP-UX B.11.00 (64 bit environment), 512 MB RAM, min. 200 MB of free hard disk space
- Java™ Runtime Environment 1.2.2
- Java HotSpot™ 1.0.1

Nokia Activ Server 2.0 Professional Edition for Sun Solaris ®

- Solaris™ 7 ,512 MB RAM, min. 200 MB of free hard disk space
- Java™ Runtime Environment 1.2.2
- Java HotSpot™ 1.0.1

5. Product Configuration

In order for SecurID authentication to be supported, you will need the appropriate ACE/Agents from RSA and Activ Security 2.0 from Nokia.

A. WindowsNT

1. Install Nokia Activ Server 2.0 Professional
2. Install Nokia Activ Security 2.0
3. Install ACE/Agent for the operating system the Nokia Activ Server is running on. You will need the sdconf.rec file from the ACE/Server.

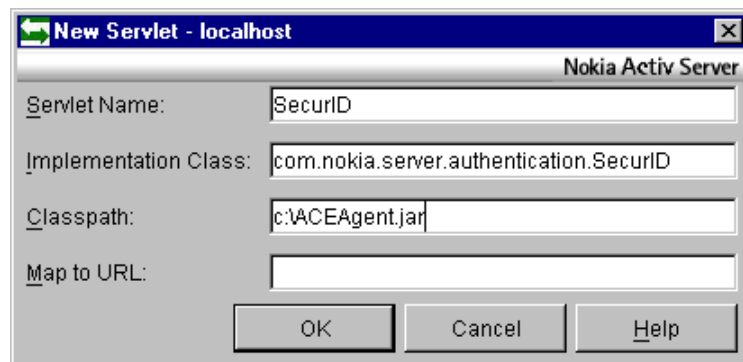
(Make sure you can successfully SecurID authenticate between the Nokia Activ Server and the ACE\Server before continuing. Please reference the ACE/Agent manual for more information).

4. Install ACE/Agent for Java.

(This will copy ACEAgentWrapper.dll to %Systems32% and ACEAgent.jar to a location that you choose)

5. Execute Nokia Activ Server from the NT's Start-menu.
6. Execute Nokia Activ Server Manager from the NT's Start-menu and log in.
7. Start Traffic from the Nokia Activ Server Manager:
8. Create Servlet from menu:

- Servlets->Configure->Create
- Servlet Name: SecurID
- Implementation class: com.nokia.wap.server.authentication.SecurID
- Class path: Full path to the directory where you installed the ACE/Agent for Java in Step 4. It is actually looking for a file called 'ACEAgent.jar'.

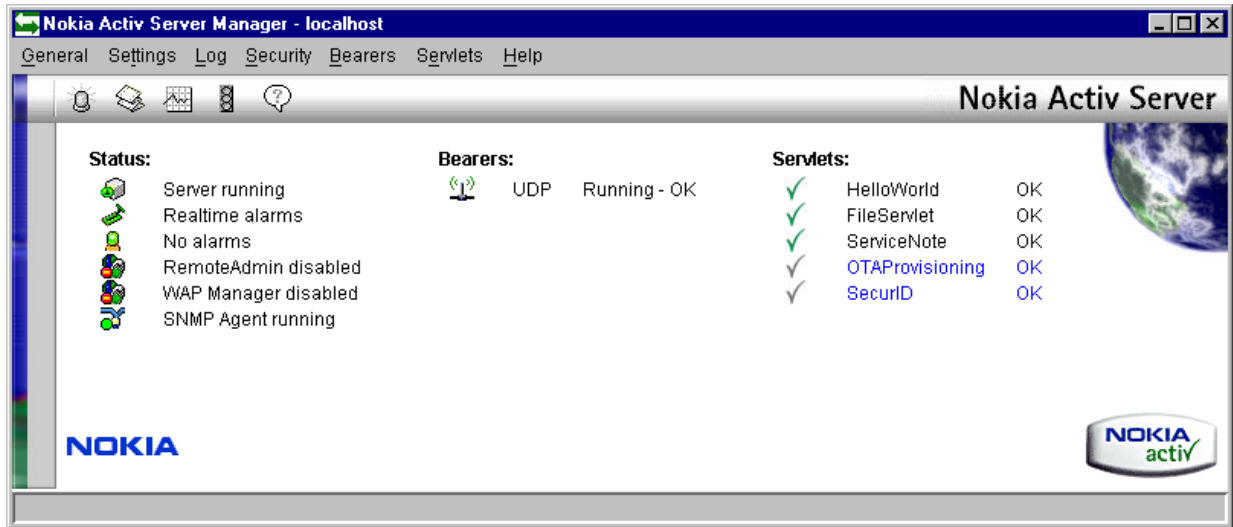


NOTE: All entries are case sensitive.

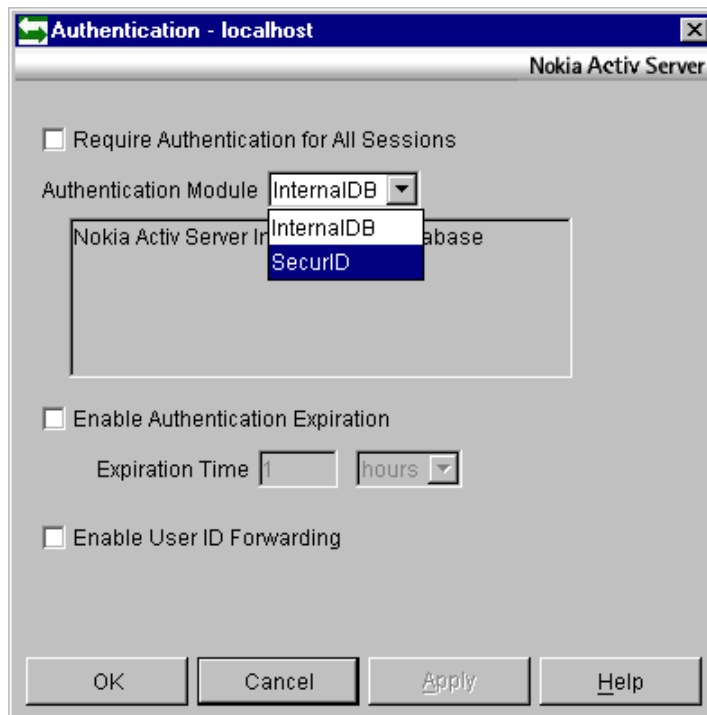
9. Press OK

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10. The main window will list the SecurID servlet you just created:

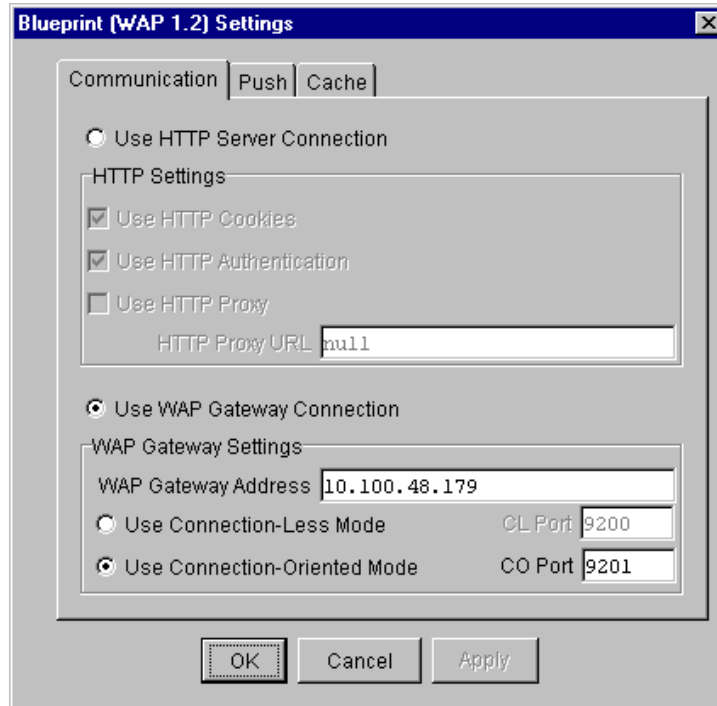


11. Select SecurID from menu: Security->Authentication



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- When testing with Nokia WAP Toolkit 2.0, you will need to use the 'Blue Print (WAP 1.2) compliant utility which allows you to configure the browser to use 'Connection Oriented' mode:



B. Sun Solaris

In the following instructions, assumption is that the package is uncompressed to /opt/ace/ directory.

1. Install Nokia Activ Server 2.0 Professional
2. Install Nokia Activ Security 2.0
3. Install ACE/Agent for the operating system the Nokia Activ Server is running on. You will need the sdconf.rec file from the ACE/Server.

(Make sure you can successfully SecurID authenticate between the Nokia Activ Server and the ACE\Server before continuing. Please reference the ACE/Agent manual for more information).

4. Install ACE/Agent for Java.

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5. Make the following additions to startNACSP file (described in setenv file provided by RSA):

```
#!/bin/sh
if [ `usr/ucb/whoami` = "root" ]; then
    echo "Do not run Nokia Activ Server using root rights"
    exit 1
fi
cd /opt/nacsp
VAR_ACE=/opt/ace
export VAR_ACE
LD_LIBRARY_PATH=/opt/nacsp/lib/sparc/security:/opt/nacsp/lib/sparc:/opt/ace:$LD_
LIBRARY_PATH
export LD_LIBRARY_PATH
java -XX:SurvivorRatio=8 -Xms256m -Xmx256m -XX:NewSize=86m -XX:MaxNewSize=86m -X
X:MaxTenuringThreshold=4 -Xconcurrentio -Dsun.rmi.dgc.cleanInterval=3000 -classp
ath lib/wapsrv.jar:lib/activation.jar:lib/jh.jar:lib/jndi.jar:lib/jsdk.jar:lib/l
dap.jar:lib/mail.jar:lib/provideutil.jar:lib/ssl3.jar:lib/ssl0.jar:lib/OTATool.j
ar:lib/OTAExt.jar:lib/solid30JBDC.zip:/opt/ace/ACEAgent.jar \
    com.nokia.wap.gw.manager.ServerLauncher
```

6. Start Nokia Activ Server
7. Add new servlet from Servlets – Configure – Create:
Servlet Name: SecurID
Implementation Class: com.nokia.wap.server.authentication.SecurId
Classpath:
Map to URL:
8. Choose SecurID Authentication module from Security – Authentication

C. HP/UX

In the following instructions, assumption is that the package is uncompressed to /opt/ace/ directory.

1. Install Nokia Activ Server 2.0 Professional
2. Install Nokia Activ Security 2.0
3. Install ACE/Agent for the operating system the Nokia Activ Server is running on. You will need the sdconf.rec file from the ACE/Server.

(Make sure you can successfully SecurID authenticate between the Nokia Activ Server and the ACE\Server before continuing. Please reference the ACE/Agent manual for more information).

4. Install ACE/Agent for Java.

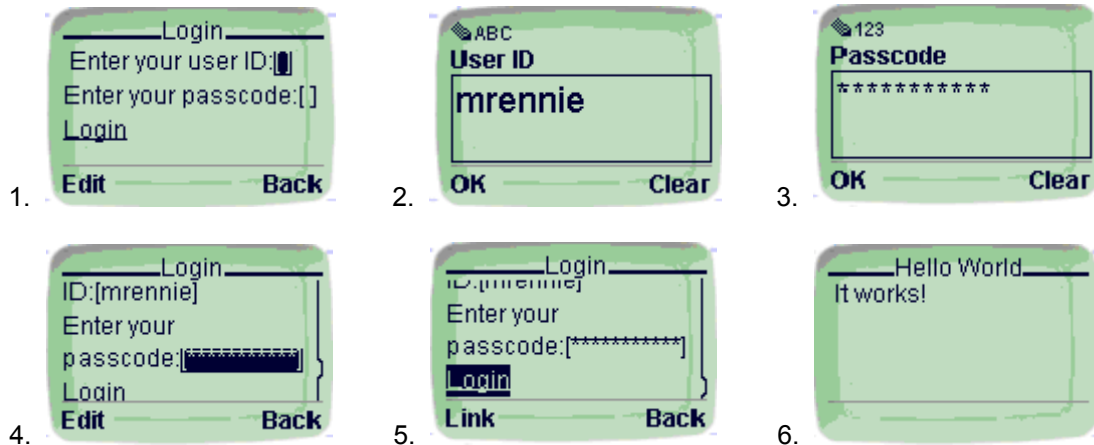
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5. Make the following additions to startNACSP file (described in setenv file provided by RSA):

```
#!/bin/sh
if [ `id -u` = "0" ]; then
echo Do not run Nokia Activ Server using root rights
exit 1
fi
cd /opt/nacsp
export VAR_ACE=/opt/ace
export SHLIB_PATH=/opt/nacsp/lib/hpux/security:/opt/nacsp/lib/hpux:/opt/ace
java -XX:SurvivorRatio=8 -Xms384m -Xmn96m -Xmx384m -Xss128k \
-XX:MaxTenuringThreshold=4 \
-Dsun.rmi.dgc.cleanInterval=3000 \
-Djava.library.path=/opt/nacsp/lib/hpux/security:/opt/nacsp/lib/hpux:/opt/ace \
-classpath lib/wapsrv.jar:lib/activation.jar:lib/jh.jar:lib/jndi.jar:lib/jsdk.
jar:lib/ldap.jar:lib/mail.jar:lib/provideutil.jar:lib/ssl3.jar:lib/ssl0.jar:lib/
OTATool.jar:lib/OTAExt.jar:lib/solid30JBDC.zip:/opt/ace:/opt/ace/ACEAgent.jar \
com.nokia.wap.gw.manager.ServerLauncher
```

6. Start Nokia Activ Server
7. Add new servlet from Servlets – Configure – Create:
Servlet Name: SecurID
Implementation Class: com.nokia.wap.server.authentication.SecurId
Classpath:
Map to URL:
8. Choose SecurID Authentication module from Security – Authentication

Examples of SecurID prompts via the WAP browser:



6. Certification Checklist

Test	Pass	Fail
1st time auth. (node secret creation)	<input type="checkbox"/> P	<input type="checkbox"/>
New PIN mode: System-generated		
Non-PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
New PIN mode: User-defined (4-8 alphanumeric)		
Non-PINPAD token	<input type="checkbox"/>	<input type="checkbox"/> F
Password	<input type="checkbox"/>	<input type="checkbox"/> F
New PIN Mode: User-defined (5-7 numeric)		
Non-PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
SoftID token	<input type="checkbox"/> N/A	<input type="checkbox"/>
Deny Alphanumeric	<input type="checkbox"/> P	<input type="checkbox"/>
New PIN Mode: User-selectable		
Non-PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
Next Tokencode mode		
Non-PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
PINPAD token	<input type="checkbox"/> P	<input type="checkbox"/>
Slave ACE/Server	<input type="checkbox"/> P	<input type="checkbox"/>
No ACE/Server	<input type="checkbox"/> P	<input type="checkbox"/>

7. Known Limitations

- Alphanumeric PINs are not allowed. If you choose to have ACE/Server generated PINs for your users instead of users generating their own, you will need to exclude alphanumeric PINs (Start Database Administration application, select System/Edit System Parameters menu item and uncheck 'Alphanumeric PINs allowed' checkbox).
- Sessionless mode (UDP bearer, connectionless, non secure connection without Radius proxy) cannot be used with SecurID authentication module.
- Prompts say 'passcode' instead of 'PASSCODE'