

# ADVANCE AUTHENTICATION – The CJIN-MDN Approach

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# OVERVIEW

- History of the CJIN-MDN
- CJIS Requirements
  - Password
  - Advanced Authentication

# CJIN-MDN

## Yesterday, Today and Tomorrow

- Proof of Concept
- eCitation
- XFILES
- FIPS 140-2 Encryption
- Radio Infrastructure End-of-Life
- Wi-Fi and Commercial Carrier Support
- Pending CJIS Requirements

# CJIS CHANGES

- Password
- Advance Authentication (Two-Factor)
  - Something you know
  - Something you have

# CJIN-MDN ENHANCEMENT

- Omnixx Enterprise Platform
  - Omnixx Force Client
    - Mobile Application
  - Omnixx Force Server
    - Management Console
- Combine to create a Risk-Based Advance Authentication.

# RISK-BASED AUTHENTICATION

- Four step process
  - Administrative Setup
  - User Setup
  - User Login
  - Maintenance

# OMNIXX FORCE CONSOLE

5 - NCHPXXOFM00 - Windows Internet Explorer provided by the NC State Highway Patrol

20/private/vnc\_only.php

The screenshot displays the Omnixx Console web application interface. At the top, a navigation bar includes a 'Main Menu' with options like 'Omnixx Analytics & DMXLive', 'Select Subject', 'Agencies', 'Subagencies', 'Devices', and 'Users'. The 'Users' menu is expanded, showing sub-options such as 'Select User', 'Add New User', 'Modify User', 'Change Subagency', 'Delete User', 'Copy User', 'Security Policy', 'Modify User Information', 'Reset User Password', 'Modify User POC', 'Modify User Aliases', 'Modify User Application', 'Modify User Certification', and 'Modify User Group'. The 'Security Policy' option is selected, leading to the 'User Security Policy' configuration page.

The 'User Security Policy' page features a header with the following information:

- Agency: NCSHP
- Subagency: DMXS--Subagency Standard Authentication
- User: RSPELL - (RODNEY SPELL)
- Device:
- Certification: SHP\_CAD

The main content area is titled 'User Security Policy' and contains the instruction: 'Modify the security policy parameters and click NEXT'. Below this, there is a checkbox for 'Default Security Policy (Subagency)'. The 'Authentication Scheme' dropdown menu is open, showing options: 'Advanced Authentication', 'Standard Authentication', 'VASCO Authentication', and 'Advanced Authentication' (highlighted). The 'Advanced Authentication' option is selected.

Other configuration fields include:


- Maximum Duration of Session (Minutes): 10000
- Maximum Period of Inactivity (Minutes): Unlimited
- Maximum Period Between Logons (Days): Unlimited
- Maximum Logons per User: Unlimited
- Allow Use on Holidays: checked
- Lockout After Failed Logons: unchecked
- Maximum Failed Logons: [empty field]
- Lockout Duration (Minutes): [empty field]
- Allow user to reset expired password: unchecked

At the bottom of the page, there are 'Help' and 'Next' buttons. The footer of the application includes the 'Datamaxx' logo and the text 'Leading Law Enforcement Technology'.



# USER SETUP

Log on x



## Omnixx™ Force Mobile

LOGON


PID/Badge:  (PID = Person ID)

Unit:

Sector:

2nd PID/Badge:

Message:

Back      OK      Exit      



# UNAUTHORIZED USER

Log on

## Omnix™ Force Mobile

LOGON


PID/Badge:  (PID = Person ID)

Unit:

Sector:


2nd PID/Badge:

Message:

Back OK Exit 

Authentication Failed

SUMMARY: \_AALN:

 CODE: 1400

Omnix Server not available.

ok

# USER SETUP

Log on

## Omnix™ Force Mobile

LOGON ADVANCED AUTH

Enter your current Password and a

User ID: H7503

Password: [ ]

New PIN: [ ]







Verify PIN: [ ]

Agency: NCSHP

Phrase: [ ]

Select an image and enter a short phrase to serve as your site key.

Register machine?

Back OK Exit

### User Info

Welcome to Omnix.

You need to complete your security profile.

Please enter the following in order to continue.

- PIN
- Site Key Phrase
- Site Key Image
- Challenge Questions and Responses

Please note that your PIN is case sensitive.

OK

# INITIAL LOGON

Log on

## Omnixx™ Force Mobile

LOGON | **ADVANCED AUTHENTICATION**

Enter your current Password and a new PIN.

User ID: H7503

Password:

New PIN:






Verify PIN:

Agency: NCSHP

Phrase:

Select an image and enter a short phrase here to serve as your site key.

Register machine?

Challenge Question(s)

-- Select a Challenge Question --

-- Select a Challenge Question --

-- Select a Challenge Question --

Back OK Exit 

Advanced Authentication Tab

# ADVANCED AUTHENTICATION

Log on

## Omnix™ Force Mobile

LOGON | **ADVANCED AUTHENTICATION**

Enter your current Password and PIN.

**User ID:** H7503


**Password**

**PIN:**

**Agency:** NCSHP


*The site key image and phrase you created at signup are displayed below. If you recognize them, then it is safe to enter your credentials, otherwise, do not continue.*

Register Machine?

Hello Rodney 

Challenge Question(s)

In what city did you meet your spouse/significant other?

Back OK Exit 



# INVALID PASSWORD

Log on

## Omnix™ Force Mobile

LOGON ADVANCED AUTHENTICATION

Enter your current Password and PIN.

**User ID:** H7503


**Password:** \*|

**PIN:** \*\*\*\*

**Agency:** NCSHP

*The site key image and phrase you created at signup are displayed below. If you recognize them, then it is safe to enter your credentials, otherwise, do not continue.*

Register Machine?


Hello Rodney 

Challenge Question(s)  
In what city did you meet your spouse/significant other?  
fayetteville

Authentication Failed

SUMMARY: \_AAEXT:  
 CODE: 1402  
Invalid Password

Ok

Back OK Exit 

# INVALID PIN

Log on

## Omnix™ Force Mobile

LOGON | ADVANCED AUTHENTICATION

Enter your current Password and PIN.

**User ID:** H7503

**Password:** [REDACTED]

**PIN:** [REDACTED]

**Agency:** NCSHP

*The site key image and phrase you created at signup are displayed below. If you recognize them, then it is safe to enter your credentials, otherwise, do not continue.*

Register Machine?

Hello Rodney 

Challenge Question(s)  
In what city did you meet your spouse/significant other?  
fayetteville

Authentication Failed

SUMMARY: \_AAEXT:

 CODE: 1428  
Invalid PIN

ok

Back OK Exit 

# INCORRECT CHALLENGE RESPONSE

The screenshot shows a Windows-style application window titled "Log on". The main content area features a banner for "Omnix™ Force Mobile" with a circular grid background. Below the banner are two tabs: "LOGON" and "ADVANCED AUTHENTICATION". The "LOGON" tab is active, displaying a form with the following fields and values:

- Enter your current Password and PIN.
- User ID: H7503
- Password: [masked with asterisks]
- PIN: [masked with asterisks]
- Agency: NCSHP

Below the form, there is a note: "The site key image and phrase you created at signup are displayed below. If you recognize them, then it is safe to enter your credentials, otherwise, do not continue." and a checkbox for "Register Machine?". A small image of an eagle is shown next to the text "Hello Rodney".

The "ADVANCED AUTHENTICATION" tab is also visible, showing a "Challenge Question(s)" section with the question "In what city did you meet your spouse/significant other?" and the response "florida" entered in the text box.

An "Error" dialog box is overlaid on the screen, displaying a red "X" icon and the message "The challenge question is incorrect." with an "Ok" button.

At the bottom of the window, there are four buttons: "Back", "OK", "Exit", and a button with a hand icon.



# SUCCESSFUL AUTHENTICATION

Omnix Force Mobile

File Edit View Actions Forms Links Tools Window Help

Vehicle Query Person Query Article Query Boat Query Gun Query Multi Vehicle Query Traffic Stop Query Shift Log Common Data Master View Archive Open Close

Query Responses

Sent Queues Mail Conf Status Keyboard

Query Responses

Status: DMAX H7503 Mail: 0 Msgs: 0 11/12/2012 9:30 NOT ACTIVE

# DCI LOGIN AND FORMS

The screenshot displays the Omnix Force Mobile application interface. At the top, the title bar reads "Omnix Force Mobile". Below it is a menu bar with options: File, Edit, View, Actions, Forms, Links, Tools, Window, and Help. The "Forms" menu is open, listing the following options:

- Login to NC LEMS (OPEN)
- Logout of NC LEMS (CLOS)
- Send Intrastate Text Message (SEND)
- Admin Message (ADMIN)
- Driver Inquiry (QDRV)
- Hazardous Materials (MQ)
- Missing Persons Inquiry (QM)
- Securities Inquiry (QS)
- Test QW
- Test QDRV

Below the menu bar, there is a toolbar with icons for "Multi Vehicle Query", "Traffic Stop", "Query Shift Log", "Common Data", "Master View", "Archive", "Open", and "Close". The main area of the application is currently blank. On the right side, there is a vertical toolbar with icons for "Send", "Queries", "Mail", "Conf", "Status", and "Keyboard". At the bottom left, there is a "Query Responses" section. The bottom status bar shows the following information:

- Status:
- DMAX
- H7503
- Mail: 0
- Msgs: 0
- 11/12/2012 9:35
- NOT ACTIVE (indicated by a red button)

# Maintenance

- Users can change password , PIN, and modify answers to the challenge questions.
- All other functions, including resetting forgotten passwords are handled at the Administrative level.
- Omnixx Server will enforce a password policy for field length, expiration period and use of special characters.

# Questions ?

## Contact Information

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