



STATE OF NORTH CAROLINA

INFORMATION SECURITY VULNERABILITY ASSESSMENT

NORTH CAROLINA DEPARTMENT OF CORRECTION

RALEIGH, NORTH CAROLINA

JUNE 2007

OFFICE OF THE STATE AUDITOR

LESLIE W. MERRITT, JR., CPA, CFP

STATE AUDITOR

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AUDITOR'S TRANSMITTAL

The Honorable Michael F. Easley, Governor
Members of the North Carolina General Assembly
Mr. Theodis Beck, Secretary
Mr. George Bakolia, State CIO

Ladies and Gentlemen:

The Office of the State Auditor, in consultation and coordination with Information Technology Services, undertook a project to evaluate the network and computer security in place over computer operations at the North Carolina Department of Correction.

In April, May, and June 2007, the Office of the State Auditor used a private contractor to perform a comprehensive vulnerability assessment of the network and computer security at the North Carolina Department of Correction. This assessment was conducted under the authority granted by North Carolina G.S. 147-64.6(c)(18).

This report represents the general results of our assessment. A detailed report containing the conditions found and recommended corrective action was provided to the North Carolina Department of Correction at the conclusion of our fieldwork.

The primary objective of this assessment was to evaluate the security controls over the information network at the Agency. The scope of our assessment included network vulnerability, network architecture, security policy, secure build, war dial, application penetration, and wireless security.

We wish to express our sincere appreciation to the staff of the North Carolina Department of Correction for the exceptional courtesy, cooperation, and assistance provided to us during this audit.

North Carolina General Statutes require the State Auditor to make audit reports available to the public. Copies of audit reports issued by the Office of the State Auditor may be obtained through one of the options listed in the back of this report.

Respectfully submitted,

A handwritten signature in cursive script that reads "Leslie W. Merritt, Jr.".

Leslie W. Merritt, Jr., CPA, CFP
State Auditor

OBJECTIVES AND SCOPE

The Office of the State Auditor, in consultation and coordination with Information Technology Services, undertook a project to evaluate the network and computer security in place over computer operations within the North Carolina Department of Correction.

In April, May, and June 2007, the Office of the State Auditor used a private contractor to perform a comprehensive information security assessment of the North Carolina Department of Correction. The goal of the security assessment was to assist the North Carolina Department of Correction with achieving and maintaining a “best practices” level of information security in order to protect agency internal systems, data, and assets.

The comprehensive information security assessment focused on seven key areas:

- **Network Vulnerability Assessment.** The Network Vulnerability Assessment provides a thorough understanding of security-related weaknesses and exposures in networks.
- **Network Architecture Assessment.** The Network Architecture Assessment is a detailed review of a network design from an information security perspective.
- **Security Policy Review.** The Security Policy Review evaluates the existing and proposed security policies and procedures and provides guidelines for future development.
- **Application Penetration Assessment.** The Application Penetration Assessment provides a thorough understanding of security-related weaknesses and exposures in an application.
- **Secure Build Review.** A Secure Build Review is a security analysis in a non-production environment of the build procedure for a host.
- **War Dialing Assessment.** A War Dialing Assessment is used to identify modems deployed in a computing environment and test them for weak and default settings.
- **Wireless Site Assessment.** A Wireless Site Assessment reviews the current security configuration of deployed wireless infrastructure.

Our assessment identified security controls within each area above that were well defined and effective as well as controls that posed security risks and exposed the agency to possible internal or external attack. Control weaknesses were classified in relation to the level of risk as High, Medium, or Low. Our assessment identified forty-one high level weaknesses, twenty-seven medium level weaknesses, and twenty-two low level weaknesses. This provides the North Carolina Department of Correction with a benchmark for future assessments.

Due to the sensitive nature of the conditions found in these weaknesses, we have conveyed these findings to management in a separate report pursuant to the provision of the North Carolina General Statute 147-64.6(c)(18).

OBJECTIVES AND SCOPE (CONCLUDED)

Auditee's Response:



North Carolina Department of Correction

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Michael F. Easley
Governor

Theodis
Secret:

June 20, 2007

The Honorable Leslie W. Merritt, Jr., CPA, CFP
North Carolina State Auditor
20601 Mail Service Center
Raleigh, NC 27699-0601

Dear State Auditor Merritt:

We have reviewed the information security assessment of the North Carolina Department of Correction which was conducted during the period of April 3, 2007 through June 1, 2007. While the assessment identified several strengths associated with the Department of Correction's management of network security services, we concur that there are areas where improvement is warranted. Several findings were acted upon during the course of the assessment. We are actively investigating the other findings noted and, as resources permit, the areas of concern will be prioritized and addressed with appropriate remediation or mitigation plans.

Please be assured that the Department of Correction is committed to providing a secure environment for the State's information assets. We would like to thank the private contractor and the Office of the State Auditor for the professional manner with which the assessment was conducted. The assessment team was very thorough in their approach and provided valuable information regarding the security posture of the department.

If you have any questions regarding our response to the assessment, please do not hesitate to contact Bob Brinson at (919)-716-3501 or me.

Sincerely,

A handwritten signature in black ink that reads "Theodis Beck".

Theodis Beck

cc: Bill Stovall, DOC
Bob Brinson, DOC
Charles Williford, OSA

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