



STATE OF NORTH CAROLINA

INFORMATION SECURITY VULNERABILITY ASSESSMENT

NORTH CAROLINA OFFICE OF THE STATE CONTROLLER

RALEIGH, NORTH CAROLINA

NOVEMBER 2006

OFFICE OF THE STATE AUDITOR

LESLIE W. MERRITT, JR., CPA, CFP

STATE AUDITOR

INFORMATION SECURITY VULNERABILITY ASSESSMENT

NORTH CAROLINA OFFICE OF THE STATE CONTROLLER

RALEIGH, NORTH CAROLINA

NOVEMBER 2006



STATE OF NORTH CAROLINA
Office of the State Auditor

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

2 S. Salisbury Street
20601 Mail Service Center
Raleigh, NC 27699-0601
Telephone: (919) 807-7500
Fax: (919) 807-7647
Internet
<http://www.ncauditor.net>

AUDITOR'S TRANSMITTAL

The Honorable Michael F. Easley, Governor
Members of the North Carolina General Assembly
Mr. Robert Powell, State Controller
Mr. George Bakolia, State CIO

Ladies and Gentlemen:

At the request of the North Carolina Office of the State Controller, 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 Office of the State Controller.

In May and June 2006, 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 Office of the State Controller. 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 Office of the State Controller 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 security policies, network architecture, network vulnerability, and host vulnerability.

We wish to express our sincere appreciation to the staff of the North Carolina Office of the State Controller 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 black ink that reads "Leslie W. Merritt, Jr." in a cursive script.

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

OBJECTIVES AND SCOPE

At the request of the North Carolina Office of the State Controller, 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 Office of the State Controller.

In May and June 2006, the Office of the State Auditor used a private contractor to perform a comprehensive information security assessment of the North Carolina Office of the State Controller. The goal of the security assessment was to assist the North Carolina Office of the State Controller 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 four key areas:

- **Security Policy Review.** The Security Policy Review evaluates the existing and proposed security policies and procedures and provides guidelines for future development.
- **Network Architecture Assessment.** The Network Architecture Assessment is a detailed review of a network design from an information security perspective.
- **Network Vulnerability Assessment.** The Network Vulnerability Assessment provides a thorough understanding of security-related weaknesses and exposures in networks.
- **Host Vulnerability Assessment.** A Host Vulnerability Assessment reviews the current security configuration of deployed hosts.

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 ten high level weaknesses, seventeen medium level weaknesses, and eleven low level weaknesses.

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:

We have reviewed the confidential report, dated July 18, 2006, which resulted from the comprehensive information security assessment conducted by the Office of the State Auditor and a private contractor during the period of May 15, 2006 through June 16, 2006 under the authority granted by North Carolina General Statute §147-64.6(c)(18).

We are pleased that, overall, the private contractor performing the assessment found that our security program was “well-planned and mature,” and that our “strengths have resulted from a defense-in-depth approach to security.” Since the last comprehensive information security assessment, which was conducted in 2002, the Office of the State Controller has worked diligently to build a strong and secure foundation by achieving a “best practices” level of information security in order to protect our internal systems and data.

We have already taken appropriate measures to implement corrective action on many of the recommendations noted in the report – many of which were acted upon prior to the completion of the assessment. Other recommendations, some of which will require training on the part of our staff, as well as funding to purchase additional security-related infrastructure services, are also being considered. These recommendations will be prioritized, and implemented, based upon resource availability.

Please be assured that the Office of the State Controller takes an active role in security and is committed to doing our part in protecting the State’s investments in technology systems and data by maintaining a secure network. We appreciate the opportunity to have been included in this assessment, as well as the professional manner with which this assessment was conducted.

[This Page Left Blank Intentionally]

ORDERING INFORMATION

Audit reports issued by the Office of the State Auditor can be obtained from the web site at www.ncauditor.net. Also, parties may register on the web site to receive automatic email notification whenever reports of interest are issued. Otherwise, copies of audit reports may be obtained by contacting the:

Office of the State Auditor
State of North Carolina
2 South Salisbury Street
20601 Mail Service Center
Raleigh, North Carolina 27699-0601

Telephone: 919/807-7500

Facsimile: 919/807-7647