FINAL

City of Albuquerque

Office of Internal Audit

Martin Chavez, Mayor

Interoffice Memorandum

November 14, 2002

To: **Sandra Doyle, Director, Department of Finance and Administrative Services**
Clint Hubbard, Chief Information Systems Officer, Information Systems Division

From: **Debra Yoshimura, Director, Office of Internal Audit**

Subject: **FOLLOW-UP REVIEW OF AUDIT REPORT NO. 01-112, DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES, INFORMATION SYSTEMS DIVISION, NOVELL NETWORK SECURITY**

The Office of Internal Audit completed a follow-up review of Management Audit Report No. 01-112, Information Systems Division-Network Security. The purpose of our review was to determine whether the audit recommendations had been implemented. We determined the following:

RECOMMENDATION NO.1:

At the time of the audit, ISD did not have policies and procedures to manage:

- Novell Network password syntax
- The security of configuration sheets that list personal information used to identify users
- The tracking of configuration sheets that support the authorization and approval of user access rights and privileges
- Periodic review of user access rights
- Login privileges documentation and criteria
- Audit logs that track Novell Network access and attempted access violations

We recommended that DFAS/ISD establish written policies and procedures for general Novell Network control. DFAS/ISD should update and revise policies and procedures regularly. DFAS/ISD should obtain approval of the Information Services Committee to establish and implement written policies and procedures for general Novell Network control.

ACTION TAKEN

The recommendation has been partially implemented. ISD management (management) has developed a draft of policies and procedures that address some of the recommendation. The draft is waiting for:

- Input and feedback from ISD personnel and IT Users' Group.
- Approval by the Technical Review Committee and the Information Systems Committee.

Management wants to have the policies and procedures approved as soon as possible, but there is not a formal deadline.

EXECUTIVE RESPONSE FROM DFAS

Item Identified	Plan for Implementing the Recommendation	Timetable for anticipated Completion
Novell Network password Syntax	Establish "C2" as the standard for Novell Passwords. (C2 requires: one capital letter, one number, one special character (e.g., !, @, #), no vowels, and a length of at least 8 characters.)	Present to ISC for approval in December 2002 and implement. Additionally, implement Novell C2 enforcement software when it becomes available from Novell.
Configuration Sheets – copies maintained by departments outside of ISD. The security of configuration sheets that list personal information used to identify users	Establish a policy for shredding the configuration sheets. Under the Open Records Act, these documents are subject to inspection and are not private. There is no need to keep the configuration sheets once the Novell account is established in the new Help Desk software, Service Center, via a Service Request. (Configuration Sheets will not be used.) This software is scheduled to be in production in February 2003.	Present to ISC for approval in March 2003 and implement.
Configuration Sheets – Tracking.	Once the new Help Desk software, Service Center, is	Present to ISC for approval in March 2003 and

The Tracking of configuration sheets that support the authorization and approval of user access rights and privileges.	installed, the online Service Request that establishes a user's access rights and privileges will replace the paper Configuration Sheets. This software is scheduled to be in production in February 2003.	implement.
Periodic Review of User Access Rights	Upon receipt of the Employee Clearance Form, described in Reference 2, ISD will modify user access rights and privileges as appropriate. Additionally once the new Help Desk software, Service Center, is installed, the Service Request that establishes a user's access rights and privileges will be available on line. This software is scheduled to be in production in February 2003.	Immediately upon receipt of Employee Clearance Forms. Present to ISC for Approval in March 2003 and implement.
Login privileges – documentation and criteria	Include this as an option on the new Service Request. This software is scheduled to be in production in February 2003.	Present to ISC for approval in March 2003 and implement.
Monitoring audit logs that track Novell Network access and attempted access violations.	Disable the Novell logon screen after 3 unsuccessful login attempts	Present to ISC for approval in December 2002 and implement.

RECOMMENDATION NO. 2:

There was no process in place to ensure that ISD was notified when employees were terminated or transferred. In response to a 1998 audit, ISD stated that, "For the long-term, ISD is looking into the possibility of receiving automatic notification when an employee's record in ROSS or the PONE system is updated . . .."

We recommended that DFAS/ISD implement the alternative procedures that are discussed in their response to the 1998 audit on the Employee Termination Clearance Process.

ACTION TAKEN

The recommendation has been fully implemented. ISD help desk personnel receive a list of terminated employees every pay period. This list is reformatted into a Microsoft Excel spreadsheet, and is routed to all system administrators so the associated user accounts can be terminated.

RECOMMENDATION NO. 3:

There was no process in place to ensure that inactive network user accounts are disabled. We recommended that DFAS/ISD activate the Novell option that automatically disables user accounts that have been inactive for an excessive time period.

ACTION TAKEN:

The recommendation has been fully implemented. The Novell Network Security Administrators (Security Administrators) stated that Novell does not have an option to automatically disable user accounts. ISD is using utility software, called Bindview that works in conjunction with database applications. Bindview enables Security Administrators to generate a list of inactive Novell Network user accounts, which are analyzed, and terminated if it is determined that they are no longer appropriate.

DDY/njt
Enclosure

xc: Jay Czar, CAO
Irene Garcia, CFO