

AUDIT REPORT



CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF FINANCIAL AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on the Controls in the New York City Housing Authority's Data Center

7A05-118

June 30, 2005



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

WILLIAM C. THOMPSON, JR.
COMPTROLLER

To the Citizens of the City of New York

Ladies and Gentlemen:

Pursuant to Chapter 5, Section 93 of the New York City Charter, we performed an audit on the controls in the New York City Housing Authority's Data Center. The results of our audit, which are presented in this report, have been discussed with agency officials, and their comments have been considered in preparing this report.

Audits such as this provide a means of ensuring that City data centers are protected from unauthorized access and will continue to operate in the event of a disaster.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please contact my audit bureau at 212-669-3747 or e-mail us at audit@Comptroller.nyc.gov.

Very truly yours,

A handwritten signature in cursive script that reads "William C. Thompson, Jr.".

William C. Thompson, Jr.

WCT/gr

Report: 7A05-118
Filed: June 30, 2005

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*The City of New York
Office of the Comptroller
Bureau of Financial Audit
EDP Audit Division*

**Audit Report on Controls in the
New York City Housing Authority's
Data Center**

7A05-118

AUDIT REPORT IN BRIEF

We performed an audit on the controls in the New York City Housing Authority's (NYCHA) Data Center. NYCHA's Department of Operations is responsible for the planning, development, operations, and maintenance of all computer systems within the NYCHA network. The NYCHA Local Area Network (LAN) provides the connection between all of its computer systems and the Internet.

Audit Findings and Conclusions

NYCHA's computer operations and contingency plans generally comply with Comptroller's Internal Control and Accountability Directive 18. In addition, NYCHA has an Internet Connectivity Plan that conforms to the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement Policies. However, NYCHA does not have adequate controls to identify and eliminate the user IDs of inactive users. In addition, there is a lack of written program-change control procedures; computer hardware and software items on hand are not annually reconciled with inventory records; and NYCHA's disaster recovery plan does not include its LAN.

Recommendations

NYCHA should:

- Complete and implement procedures for security controls over user accounts.
- Terminate inactive accounts identified in this audit.
- Periodically identify and terminate inactive user accounts.

- Implement written procedures for making changes to computer applications and system software. These procedures should contain documentation requirements for user testing and acceptance of software changes.
- Reconcile its inventory of hardware and software on an annual basis, as required by Directive 18.
- Complete its draft LAN disaster recovery plan and incorporate it into the overall agency disaster recovery plan.

INTRODUCTION

Background

The New York City Housing Authority (NYCHA) provides decent and affordable housing in a safe and secure living environment for low- and moderate-income residents throughout the five boroughs. To fulfill this mission, NYCHA must preserve its aging housing stock through timely maintenance and modernization of its developments. NYCHA also administers a citywide Section 8 Leased Housing Program in rental apartments. In addition, NYCHA works to enhance the quality of life at its facilities by offering residents opportunities to participate in a multitude of community, educational, and recreational programs, as well as job readiness and training initiatives.

NYCHA's Department of Operations is responsible for the planning, development, operations, and maintenance of all computer systems within the NYCHA network. The NYCHA Local Area Network (LAN) provides the connection between all of its computer systems and the Internet.

Objectives

To evaluate whether NYCHA has:

- physical and system security controls and whether they are adequate to safeguard NYCHA data from unauthorized access or use;
- computer operations and contingency plans that comply with Comptroller's Internal Control and Accountability Directive 18; and
- an Internet Connectivity Plan that conforms to the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement Policies.

Scope and Methodology

We conducted fieldwork between February 2005 and April 2005. To achieve our audit objectives, we interviewed NYCHA officials and reviewed and analyzed system-related documentation. We also conducted walk-throughs at NYCHA work sites at which computer

systems were in use at Church Street in Manhattan and at Long Island City in Queens.¹ In addition, we reviewed and analyzed the following:

- Detailed descriptions of all business functions that rely on NYCHA computer systems;
- Policies and procedures related to computer operations and security;
- NYCHA's Internet Connectivity Plan to determine whether it conforms to the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement Policies.

To determine whether NYCHA has adequate controls to identify and eliminate user IDs of inactive users, we conducted a computer match of users listed in the NYCHA mainframe and network systems to the 12,374 NYCHA employees listed in the New York City Payroll Management System as of March 18, 2005.

To determine whether NYCHA's list of computer hardware inventory is accurate, we randomly chose 25 equipment items on the list of 292 pieces of equipment and observed whether that equipment was on hand. We also checked the accuracy of NYCHA's list of 120 software products by checking whether these products were actually on the mainframe and LAN servers. Conversely, we checked the inventory list for completeness by determining whether all actual equipment and software products that we observed and identified at the work sites were accounted for in the list.² The results of the above tests while not projected provided a reasonable basis for us to assess NYCHA's controls over computer inventory.

We reviewed Comptroller's Internal Control and Accountability Directive 18, *Guidelines for the Management, Protection and Control of Agency Information and Information Processing Systems* (Directive 18) to assess the Department's compliance with those standards.

This audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered necessary. This audit was performed in accordance with the audit responsibilities of the City Comptroller, as set forth in Chapter 5, §93, of the New York City Charter.

Discussion of Audit Results

The matters covered in this report were discussed with NYCHA officials during and at the conclusion of this audit. A preliminary draft report was sent to NYCHA officials and was discussed at an exit conference held on June 13, 2005. On June 14, 2005, we submitted a draft

¹We also inspected NYCHA equipment that was located at the Department of Information Technology and Telecommunications (DOITT) in Brooklyn.

²We physically checked all six equipment items at the Long Island City work site and all 25 equipment items at DOITT. In addition, of the 261 items of equipment at the Church Street work site, we physically checked 25 randomly selected items. We also determined whether software on both the mainframe and LAN servers at Church Street were on the list of software products.

report to NYCHA officials with a request for comments. We received a written response for NYCHA officials on June 20, 2005 which describe the steps that have been or will be taken to address the report's recommendations.

The full text of the NYCHA response is included as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

NYCHA's computer operations and contingency plans generally comply with Comptroller's Internal Control and Accountability Directive 18. In addition, NYCHA has an Internet Connectivity Plan that conforms to the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement Policies. However, NYCHA does not have adequate controls to identify and eliminate the user IDs of inactive users. In addition, there is a lack of written program-change control procedures; computer hardware and software items on hand are not annually reconciled with inventory records; and NYCHA's disaster recovery plan does not include its LAN.

These matters are discussed in greater detail below.

Inadequate Security Controls

NYCHA does not have adequate controls to identify and eliminate the user IDs of inactive users and individuals who leave City service. Specifically, the list of LAN users is not reviewed periodically to ensure that inactive user accounts are deactivated. NYCHA officials told us that they are in the process of establishing formal access-control procedures to identify and eliminate user IDs for inactive users. However, until those procedures are finalized and implemented, NYCHA's computer systems are at risk of being accessed by unauthorized users.

Comptroller's Directive 18, §8.1.2, states, "Active password management includes . . . deactivation of inactive user accounts and accounts for employees whose services have terminated." However, despite this requirement, NYCHA records indicate that 517 of 1,231 individuals who were terminated by NYCHA in 2004 still had active user IDs. Further, our match of NYCHA's mainframe and network systems user lists to PMS records identified 1,672 additional individuals who had log-on IDs but were not listed in PMS. NYCHA officials have not yet explained why a combined total of 2,189 individuals (1,672 plus 517) with user IDs who are not on the City payroll possess active user IDs.

Recommendations

NYCHA should:

1. Complete and implement procedures for security controls over user accounts.

NYCHA's Response: "An Access Control Policy and eForm Procedures for the User account lifecycle from user registration to final access removal is currently in final draft form and is expected to be completed during the 2nd Quarter of 2005. Due to the scope of this undertaking, the eForm procedures will be implemented in two phases, with an initial removal/suspension of access phase to be followed by request for access eForms, both during the 3rd Quarter 2005."

2. Terminate inactive accounts identified in this audit.

NYCHA's Response: "The inactive accounts identified in this audit were due to several factors and are listed in our response to the next recommendation. NYCHA is in the process of migrating from NT to a Windows 2003 operating system. During this transformation, information from the P1 & P0 Domain will be placed onto the NYCHA Domain. The findings in this recommendation will be reviewed and resolved upon completion of this migration during the 4th quarter of 2005."

3. Investigate the 1,672 individuals who had log-on IDs but were not listed in PMS, and terminate those that are invalid.

NYCHA's Response: "Our analysis revealed the following reasons why 1,672 of the 7,716 NYCHA LAN users could not be found on the city PMS:

"1. Although a significant number of names were disabled from access to applications and the LAN, their records were kept intact for a period of time, in case their departments requested them.

"2. Consultants who had LAN access and did not receive a paycheck from the city.

"3. Different combinations of names from the same individual were in the system.

"4. Templates for various entities to facilitate receipt of their emails. (e.g. Housing Developments).

"5. Duplicate SMTP names in Outlook. After our SMTP names were modified in Outlook to show the employee's full name . . . , their old SMTP names were not removed . . . due to a request from the NYCHA Law Department, which was concerned that a 'transition period' was needed to reach us via email at our new addresses.

"6. Seasonal employees on the P1 and P0 domains who were not removed.

"To correct this problem, the following steps will be taken:

- The P0 and P1 domains will serve as a bridge until completion of their migration to the NYCHA domain during the 4th Quarter of 2005. Thereafter, all employees

will be on the NYCHA domain. At that time, the remaining anomalies on the NYCHA domain will be reviewed and removed, where necessary.

- Although the review and modification of our LAN accounts is an ongoing task, the date of completion for the aforementioned items will be by the 4th Quarter 2005.”

4. Periodically identify and terminate inactive user accounts.

NYCHA’s Response: “The following information is on the newly instituted NYCHA eForm used to Terminate/Suspend Access to IT Systems:

‘In accordance with NYCHA Access Control Policy (SP 003:05:1) it is the responsibility of Directors/Housing Managers to promptly notify NYCHA IT via THIS eForm when computer access should be removed or suspended, whenever an employee permanently departs from NYCHA’s employ, is transferred to another department, or will be on leave of absence for more than 30 calendar days. This eForm will be automatically routed to designated IT systems and application custodians for review and action upon submission.’

“An Access Control Policy and eForm Procedure for the user account lifecycle from user registration to final access removal is currently in final draft form and is expected to be completed during the 2nd Quarter of 2005. The eForm procedures will be implemented in phases, with an initial removal/suspension of access phase to be followed by a request for access eForm during the 3rd Quarter 2005. The newly instituted Access Control Policy and Procedures will enable us to identify and terminate the inactive user accounts in a timely and effective manner.”

Lack of Program Change Control Procedures

NYCHA has not established formal written procedures for changing or modifying software programs. While NYCHA’s files contain documentation of program changes and their approval, there is no documentation to indicate whether changes were ever tested and accepted by the users. Without effective procedures to manage program changes, NYCHA risks unauthorized or unnecessary changes to its system software. According to Directive 18, §9.3, “A change control policy is necessary to insure that only appropriate, authorized changes are made to application and system software.”

NYCHA officials informed us that it has developed draft procedures for making program changes.

Recommendation

5. NYCHA should implement written procedures for making changes to computer applications and system software. These procedures should contain documentation requirements for user testing and acceptance of software changes.

NYCHA's Response: "NYCHA has written procedures in place for changing or modifying software. These procedures were provided to your staff during the exit conference.

Auditor Comment: NYCHA officials provided these procedures to the auditors at the exit conference stating that these procedures had been implemented (the procedures had a 2005 copyright date). We reviewed these procedures and found them to be adequate.

Inventory Lists Not Reconciled Annually

According to NYCHA officials, the authority has not reconciled its hardware and software inventory on an annual basis, as required by Comptroller's Directive 18. Directive §7.6, states, "Physical inventories should, at a minimum, be conducted annually," and "Maintaining an accurate inventory requires that agencies ensure that inventory data is kept updated on an ongoing basis by carefully controlling additions, deletions and changes to installed equipment."

Our review of computer hardware verified that NYCHA's inventory list was complete and accurate and that all selected hardware was appropriately labeled with NYCHA identification tags. In addition, our review of software products verified that NYCHA's software list was complete and that all selected products were on hand. However, annual reconciliations are important to ensure that inventory lists are kept up to date.

Recommendation

6. NYCHA should reconcile its inventory of hardware and software on an annual basis, as required by Directive 18.

NYCHA's Response: "To reconcile our inventory of hardware and software annually and comply with Directive 18, we are looking at automated web-based Asset Management software solutions to provide us with a comprehensive hardware and software inventory. The selected software will enable us to actively track our IT asset location, configuration, deployed versions, relationships and historical information. We are also seeking to actively track software and hardware usage for reallocation and proactively resolve incidents and problems to ensure asset and service availability. We project that the selected product will be in service at NYCHA by the 4th Quarter of 2005."

Incomplete Disaster Recovery Plan

Although NYCHA has a formal disaster recovery plan, the plan does not include details about recovering data from the LAN. According to Directive 18, "If the agency operates a local area or other network, a network recovery component is a critical element of the business

continuation plan.” During the course of our audit work, NYCHA officials provided us with a draft of a LAN disaster recovery plan.

Recommendation

7. NYCHA should complete its draft LAN disaster recovery plan and incorporate it into the overall agency disaster recovery plan.

NYCHA’s Response: “The LAN Disaster Recover (DR) is a priority project for IT and it is being actively tracked by the IT PMO. The goal of the Disaster Recovery Project is to allow a high level of accessibility and availability for the Authority as an organization, while maximizing service to the client community and minimizing costs. The Authority is working to develop a site in LIC which will be capable of supporting the recovery of our LAN processing capabilities.”



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June 20, 2005

Mr. Greg Brooks
Deputy Comptroller
Policy Audits, Accountancy and Contracts
The City of New York
Office of the Comptroller
1 Centre Street
New York, N.Y. 10007-2341

Subject: Draft Audit Report on the Controls in the
New York City Housing Authority's Data Center
Audit Number: 7A05-118

Dear Mr. Brooks:

Thank you for your draft report commenting on the New York City Housing Authority's (NYCHA's) controls in its Data Center.

We are pleased that your office has concluded that NYCHA's computer operations and contingency plans generally comply with the Comptroller's Internal Control and Accountability Directive 18. In addition, we are pleased with your conclusion that NYCHA has an Internet Connectivity Plan that conforms to the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement Policies.

NYCHA is proud of its information technology operations. Over the last few years, we have significantly upgraded our computer capabilities including successfully implementing a new Oracle-based budget and financial system as well as a construction management system. NYCHA has developed and implemented an information technology governance process for selecting and managing its Information Technology (IT) portfolio and has published an IT plan which insures information technology alignment with our business strategy. In addition, it is remarkable to recall that our current state-of-the-art Data Center located at 90 Church Street laid in ruins less than 4 years earlier as a result of the September 11 tragedy.

We believe that one of your recommendations -- NYCHA should implement written procedures for making changes to computer applications and system software -- Recommendation

Number 5 -- is not applicable since NYCHA has such procedures in place. Copies of those procedures were provided to your staff during the exit conference.

Our responses to all of your recommendations follow.

Comptroller's Recommendations and NYCHA's Responses

Inadequate Security Controls

Comptroller Recommendation Number 1

Complete and implement procedures for security controls over user accounts.

NYCHA Response

An Access Control Policy and eForm Procedures for the User account lifecycle from user registration to final access removal is currently in final draft form and is expected to be completed during the 2nd Quarter of 2005. Due to the scope of this undertaking, the eForm procedures will be implemented in two phases, with an initial removal/suspension of access phase to be followed by request for access eForms, both during the 3rd Quarter of 2005.

Comptroller Recommendation Number 2

Terminate inactive accounts identified in this audit.

NYCHA Response

The inactive accounts identified in this audit were due to several factors and are listed in our response to the next recommendation. NYCHA is in the process of migrating from NT to a Windows 2003 operating system. During this transformation, information from the P1. & P0 Domain will be placed onto the NYCHA Domain. The findings in this recommendation will be reviewed and resolved upon completion of this migration during the 4th quarter of 2005.

Comptroller Recommendation Number 3

Investigate the 1,672 individuals who had log-on IDs but were not listed in PMS, and terminate those that are invalid.

NYCHA Response

Our analysis revealed the following reasons why 1,672 of the 7,716 NYCHA LAN users could not be found on the city PMS:

1. Although a significant number of names were disabled from access to applications and the LAN, their records were kept intact for a period of time, in case their departments requested them.
2. Consultants who had LAN access and did not receive a paycheck from the city.
3. Different combinations of names for the same individuals were in the system.

4. Templates for various entities to facilitate receipt of their emails (e.g. Housing Developments).
5. Duplicate SMTP names in Outlook. After our SMTP names were modified in Outlook to show the employee's entire full name (Fname.Lname@nycha.nyc.gov), their old SMTP names were not removed (LnameFinitial@nycha.nyc.gov) due to a request from the NYCHA Law Department, which was concerned that a 'transition period' was needed to reach us via email at our new addresses.
6. Seasonal employees on the P1 and P0 domains who were not removed.

To correct this problem, the following steps will be taken:

- The P0 and P1 domains will serve as a bridge until completion of their migration to the NYCHA domain during the 4th Quarter of 2005. Thereafter, all employees will be on the NYCHA domain. At that time, the remaining anomalies on the NYCHA domain will be reviewed and removed, where necessary.
- Although the review and modification of our LAN accounts is an ongoing task, the date of completion for the aforementioned items will be by the 4th Quarter of 2005.

Comptroller Recommendation Number 4

Periodically identify and terminate inactive user accounts.

NYCHA Response

The following information is on the newly instituted NYCHA eForm used to Terminate/Suspend Access to IT Systems:

"In accordance with NYCHA Access Control Policy (SP 003:05:1) it is the responsibility of Directors/Housing Managers to promptly notify NYCHA IT via THIS eFORM when computer access should be removed or suspended, whenever an employee permanently departs from NYCHA's employ, is transferred to another department, or will be on leave of absence for more than 30 calendar days. This eFORM will be automatically routed to designated IT systems and application custodians for review and action upon submission."

An Access Control Policy and eForm Procedure for the user account lifecycle from user registration to final access removal is currently in final draft form and is expected to be completed during the 2nd Quarter of 2005. The eForm procedures will be implemented in phases, with an initial removal/suspension of access phase to be followed by a request for access eForm during the 3rd Quarter of 2005. The newly instituted Access Control Policy and Procedures will enable us to identify and terminate the inactive user accounts in a timely and effective manner.

Lack of Program Change Control Procedures

Comptroller Recommendation Number 5

NYCHA should implement written procedures for making changes to computer applications and system software. These procedures should contain documentation requirements for user testing and acceptance of software changes.

NYCHA Response

NYCHA has written procedures in place for changing or modifying software. These procedures were provided to your staff during the exit conference. Please see **Attachment 1** for copies of the related documentation.

There are basically two process flows that are followed depending on the size and scope of the change. Larger modifications that meet a list of criteria defined in the IT PMO are classified as projects and have to follow the documented IT PMO process. Requests that do not meet the project criteria are monitored using an internal software package called Task Tracker. The Task Tracker system documents the activities associated with a request from intake through implementation. The following is an outline of both processes.

1. Request process
 - IT staff receives development requests from end-users.
 - For the most part, these requests come in via email and have been approved by an authorized department manager.
 - The IT PMO checklist determines whether this request is classified as project or an activity.
2. Management impact review of changes and approval
 - If the development is classified as a project, the forms and documents included in the IT PMO allow for management impact review of changes and the approval of the requested development.
 - Non projects (activities) are entered and monitored as tasks in the Task Tracker system.
3. Testing
 - Testing for both projects and tasks is performed initially by IT staff in a Test environment and, upon a successful outcome, is performed in the Quality Assurance environment.
 - User acceptance testing takes place in the Quality Assurance environment.
 - Both end-users and IT managers must sign off on the tests before the modifications are scheduled to be moved to production.
4. Notification and timing of changes to affected users
 - A Change Management Meeting is held every Wednesday that schedules the most opportune time to introduce changes in the production environment.
 - As a result of this meeting, affected users are notified of the scheduling of these changes.
 - All IT groups are represented at this weekly meeting.

- Weekly, bi-weekly, or monthly meetings are held with each of the end-user departments to assess their current priorities, provide on-going status on development projects, and provide timeframes for upcoming production implementations.

End-users have access to both Task Tracker and IT PMO documentation. This enables the end-user departments to monitor the progress of their requests and to change priorities on an as needed basis.

The NYCHA Change Management flows were put in place to ensure that only authorized changes are worked on and moved to production. One of the main objectives is to include end-users in the initiation, design, development, and testing of software changes.

Inventory Lists Not Reconciled Annually

Comptroller Recommendation Number 6

NYCHA should reconcile its inventory of hardware and software on an annual basis, as required by Directive 18.

NYCHA Response

Spanning the 5 boroughs, NYCHA is the largest public housing authority in North America. NYCHA has approximately 15,000 employees serving about 175,159 families and approximately 419,606 authorized residents. We provide IT support for 240 sites containing 7,700 PCs and 1,500 network and personal printers with over 100 network connected applications running.

It should be noted that a comprehensive PC Tech Refresh was conducted at NYCHA during 2003 wherein all of our PCs were replaced. As of result of this initiative, we obtained an accurate accounting of all NYCHA PCs. Subsequent to the Tech Refresh, all of our equipment moves, additions and changes are now recorded into our Fixed Asset Inventory System Database.

Section 7.6 of Comptroller's Directive 18, (*"Guidelines for the Management, Protection and Control of Agency Information and Information Processing Systems"*), in part, states the following:

"Maintaining an accurate inventory requires that agencies insure that inventory data is kept updated on an ongoing basis by carefully controlling additions, deletions and changes to installed equipment, particularly PCs. Additions, deletions and changes must be promptly posted to the inventory records. The disposition of all equipment removed from service must be recorded. Physical inventories should, at a minimum, be conducted annually to insure that actual equipment matches the inventory records. All discrepancies must be resolved."

To reconcile our inventory of hardware and software annually and comply with Directive 18, we are looking at automated web-based Asset Management software solutions to provide us with a

comprehensive hardware and software inventory. The selected software will enable us to actively track our IT asset location, configuration, deployed versions, relationships and historical information. We are also seeking to actively track software and hardware usage for reallocation and proactively resolve incidents and problems to ensure asset and service availability. We project that the selected product will be in service at NYCHA by the 4th Quarter of 2005.

Incomplete Disaster Recovery Plan

Comptroller Recommendation Number 7

NYCHA should complete its draft LAN disaster recovery plan and incorporate it into the overall agency disaster recovery plan.

NYCHA Response

The LAN Disaster Recovery (DR) is a priority project for IT and it is being actively tracked by the IT PMO. The goal of the Disaster Recovery Project is to allow a high level of accessibility and availability for the Authority as an organization, while maximizing service to the client community and minimizing costs. The Authority is working to develop a site in LIC which will be capable of supporting the recovery of our LAN processing capabilities.

Since the LAN operates in real time, we will not be able to utilize the same 'boilerplate' DR Plan approach used for other areas of our IT Infrastructure. Pending receipt of equipment numbers, the NYCHA LAN Disaster Recovery Plan *Draft* will be completed in synch with the below mentioned components by the 4th Quarter 2005. Thereafter, it will be incorporated into the overall agency DR Plan by the 1st Quarter 2006.

This effort will implement the LIC portion of the Authority's Disaster Recovery Facility and include the following components:

1. Implement LAN D/R Infrastructure (to be completed by the week of December 12, 2005).
 - File and Print Services
 - Microsoft Exchange Services
 - Application/Web Services
 - Database Servers
 - EMC Implementation (SAN/NAS)
 - IBM Tape Library Implementation
2. Implement Network Components (this task has been completed).
 - Back-up Connectivity to Sun 15k at 11MTC or Sterling Forest
 - Back-up Connectivity to Mainframe at Sterling Forest
 - Back-up Connectivity to AS/400 at Sterling Forest
3. Implement Intranet Back-up Capability (to be completed by the week of September 5th, 2005).
 - Web Services

- DNS
- DHCP
- FTP

4. Implement Back-up DoITT Extranet Capability (to be completed by the week of September 25, 2005).

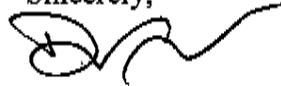
- CityShare Connectivity
- Firewall
- DMZ
- SMTP
- FTP

5. Implement Internet Back-up Capability (to be completed by the week of October 24th, 2005).

- NYCHA Internet Access (Via DoITT)
- Firewall
- DMZ
- FTP
- SSL/VPN

If you have any questions, please contact Tom Bittman, our Audit Coordinator, at (212) 306-3433.

Sincerely,



Douglas Apple
General Manager

Attachment

cc: Susan Kupferman, Mayor's Office of Operations
T. Hernandez
A. Duvdevani
S. Schuh
T. Bittman
G. Davis
File

NEW YORK CITY HOUSING AUTHORITY'S RESPONSE TO

**NYC Comptroller's Draft Audit Report on the Controls in the
New York City Housing Authority's Data Center
Audit Number: 7A05-118**

ATTACHMENT 1

Support and Maintenance Activity Request

for

XXXX System

Produced by

Name

Activity Manager



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Helene Heller
Senior Director, Project & Information Management
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helene.heller@nycha.nyc.gov

SUPPORT AND MAINTENANCE PHASE

ADDENDUM
Page 10 of 14**Activity Request Template**

If you are requested to modify a system or sub-system already in production, you are required to complete this form if you are not using Task Tracker (all of the information below will be captured in Task Tracker for CIO reporting in ePMO view). Your department director or supervisor will advise you when additional PMO templates or deliverables may be required.

Activity Request Template	
A	<p>Preliminary Questions:</p> <ul style="list-style-type: none"> • For Requestor: <ul style="list-style-type: none"> ○ What is the request date? ○ Who is issuing request? ○ What is the requestor department? ○ Who is authorizing this change? (must be at least Director-level) (and date) ○ What is the user requesting – the activity? ○ What is the reason for the change? ○ What is the urgency of this change for the requestor (L/M/H)? • For IT Resource Assigned to the Activity: <ul style="list-style-type: none"> ○ If the production system has a project number in ePMO please state here. ○ What do I need to do to satisfy these activities? ○ What else will change as a result of the requested activity? ○ How long will this take? ○ What do I need to have completed before I can begin/complete this new work? ○ Given the other demands on my time, how soon can I reasonably expect to get this new work done? ○ Approval of ITI or AD Director and Date
B	Based on the answers to A Questions, prepare a set of tasks; assign an owner, indicate the system and subsystem from the approved NYCHA taxonomy, and completion date to each activity. Include the back-out plan if the requested activity is unsuccessful.
C	Make sure everyone involved in requesting and satisfying the activities and the tasks specified has a copy of B and agrees to it.
D	The IT resource assigned to satisfy the overall user request should call everyone who has a deliverable or task (as specified in section B) to complete and keep track of their status (options: A-B is still pending, task in progress and %).
E	At the conclusion of all activities, the IT resource should make sure that there is concurrence with the user and authorizers that the activity is complete. This concurrence should be reflected by return eMail to the IT resource activity manager by the user and retained in the SharePoint folder assigned to the system that was modified.

Revision #	Project Name Support and Maintenance Status Report
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Support and Maintenance Status Report

for

XXXX Project/Activity

Produced by

Name

Project/Activity Manager



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Revision #	Project Name Support and Maintenance Status Report
-------------------	---

Support and Maintenance Status Report

(For projects – please reference original project name and number. For activities include link to your Activity Request Template and please reference Activity ID#.)

Project /Activity Name		Week/Month Ending	
Requesting Dept and User		Status Code (green, yellow, red)	
Project /Activity Manager		Request Date for Activity and Work Commencement Date	

Accomplished this period

Please enter: 1) what major activities or accomplishments happened during this time period (this should be consistent with Item B on Your Activity Request Template). Please indicate 2) status of activity (Please use Issues Log Key – i.e., A – Accepted; D – Deferred; E – Escalated; M – Merged; C – Closed; R – Resolved - along with a 3) narrative in business terms)

- 1. x
- 2. x
- 3. x

Planned but not accomplished

Please enter: 1) what major activities were scheduled to take place during this time period but were not accomplished, 2) why they were not accomplished, 3) who owns the activity or task, and 4) when they are scheduled to take place.

- 1. x
- 2. x
- 3. x
- 4. x

Revision #	Project Name Support and Maintenance Status Report
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Major Issues or Concerns

Please enter 1) any major technical, application, functional, training, or policy issues which may have arisen. Also, please enter here 2) a list of all technical or functional issues for which a Remedy ticket was initiated (this should include Level 1 issues reported to the Help Desk or Application Support as well).

- 1. x
- 2. x

Major Activities, Upgrades or Outages Planned for next period

Please enter any 1) activities planned for the next period and any 2) known system outages planned.

- 1. x
- 2. x

