



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

July 11, 2011

Motion 13511

Proposed No. 2011-0216.1

Sponsors Lambert

1 A MOTION relating to the executive response to the
2 proviso included in the 2011 Budget Ordinance, Ordinance
3 16984, Section 108, Proviso P1, requiring the executive to
4 submit a report on the Sabey data center server move.

5 WHEREAS, the executive has responded to the proviso by submitting a report
6 that includes a service level agreement between the office of information resource
7 management and agencies identifying specific customer service commitments by the
8 office of information resource management for the services it provides at the Sabey data
9 center, and

10 WHEREAS, the executive has responded to the proviso by providing a report that
11 includes moving process information, description of backup services provided at the
12 Sabey data center, and the process for agencies to access the Sabey data center, and

13 WHEREAS, the executive has responded to the proviso by providing a work plan
14 detailing when each county agency will move servers to the Sabey data center and how
15 many servers are projected to be moved by each agency, and

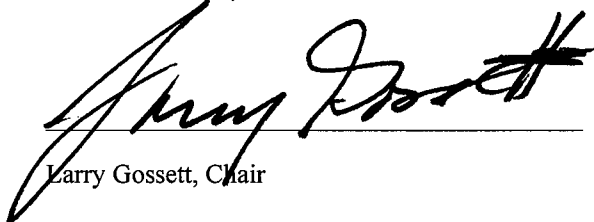
16 WHEREAS, the executive has responded to the proviso by providing a report
17 with a letter signed by the chief information officer and manager of facilities
18 management division explaining the reasons why some servers remain in the local data
19 center or data centers;

20 NOW, THEREFORE, BE IT MOVED by the Council of King County:
21 The King County Sabey Data Center Report - Response to Ordinance 16984,
22 Section 108, Proviso P1, Attachment A to this motion, has been received and the
23 executive has responded to the proviso.
24

Motion 13511 was introduced on 5/23/2011 and passed by the Metropolitan King County Council on 7/11/2011, by the following vote:

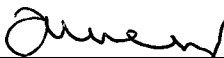
Yes: 9 - Mr. Phillips, Mr. von Reichbauer, Mr. Gossett, Ms. Hague,
Ms. Patterson, Ms. Lambert, Mr. Ferguson, Mr. Dunn and Mr.
McDermott
No: 0
Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



Larry Gossett, Chair

ATTEST:



Anne Noris, Clerk of the Council

Attachments: A. King County Sabey Data Center Report - Response to Ordinance 16984, Section 108, Proviso P1

Attachment A



King County

King County Sabey Data Center Report

Response to Ordinance 16984, Section 108, Proviso P1

Date: 04-27-2011

[Type text]

13511

This page is intentionally left blank

Table of Contents

Ordinance 16984, Section 108, Proviso P1	6
Proviso Response Component 1	8
Service Level Agreement – Data Center Hosting	10
Proviso Response Component 2	14
Data Center Relocation Phase 2 Move Packet	16
King County IT – Backup Service Description	41
King County Data Center Access Controls Standards.....	43
King County IT – Request Process for Data Center Services	51
Proviso Response Component 3	55
King County IT – Data Center Relocation Phase 2 Work Plan Overview	58
Data Center Relocation Phase 2 Scorecard.....	60
Proviso Response Component 4	63
Agency Justification for Devices Not Moving to KC Data Center at Sabey	66
Memorandum: PAO Servers and Sabey Center Migration	77

This page is intentionally left blank

King County Sabey Data Center Report

Ordinance 16984, Section 108, Proviso P1

Excerpt from Ordinance 16984, Section 108, Proviso P1:

1618 SECTION 108. OFFICE OF INFORMATION RESOURCE MANAGEMENT -
1619 From the information resource management fund there is hereby appropriated to:
1620 Office of information resource management \$4,039,792
1621 The maximum number of FTEs for office of information resource management
1622 shall be: 27.00
1623 P1 PROVIDED THAT:
1624 Of this appropriation, \$300,000 shall not be expended or encumbered until the
1625 executive transmits and the council adopts a motion that references the proviso's
1626 ordinance, section and number and states that the executive has responded to the proviso.
1627 This proviso requires the executive to complete a report which includes the following
1628 components: (1) a service level agreement that identifies specific customer service
1629 commitments to agencies by the office of information resource management for the
1630 services it provides at the Sabey data center; (2) information to assist agencies in
1631 relocating to the Sabey data center including details on the moving process, backup
1632 services, costs of services at the Sabey data center and the process for agency staff to gain
1633 access to the Sabey data center; (3) a work plan detailing when each county agency will
1634 move servers to the Sabey data center and how many servers are projected to be moved
1635 by each agency; and (4) for those agencies not moving servers to the Sabey data center,
1636 an explanation from the chief information officer and the manager of the facilities
1637 management division of why those servers are not moving.
1638 The executive should file the motion required to be submitted by this proviso May

King County Sabey Data Center Report

1639 1, 2011, in the form of a paper original and an electronic copy with the clerk of the
1640 council, who shall retain the original and provide an electronic copy to all
1641 councilmembers, the council chief of staff and the lead staff for the government
1642 accountability and oversight committee or its successor.

Proviso Response Component 1

This page is intentionally left blank

Service Level Agreement – Data Center Hosting



King County IT - Data Center Services
SLA

Purpose

The purpose of this Service Level Agreement (SLA) is to formalize an arrangement between KCIT Data Center (**Provider**) and [Customer Name] (**Customer**) for data center hosting services.

Facility and Service Description

King County's Tier 3 Data Center is located in Tukwila at the Sabey Data Center collocation facility. A Tier 3 facility is composed of multiple active power and cooling distribution paths, but only one path active, has redundant components, and is concurrently maintainable, providing 99.982% availability. The King County Data Center offers the following capabilities and services:

Services

- **24/7/365 IT staff support**
 - ✓ KCIT Data Center staff on site
 - ✓ Outage notifications
 - ✓ After hours problem escalation
- **24/7/365 systems monitoring**
 - ✓ Networks are monitored
 - ✓ Server monitoring tools available
- **Server build out area**
- **Operational Services – upon request**
 - ✓ Server inventory and cabinet layouts
 - ✓ Server checking and reboot
 - ✓ Tape handling activities
- Standard Server Configuration
 - ✓ 2 each, 1gb data network

Facilities

- **Redundant power**
 - ✓ 150 watts per square foot
 - ✓ Redundant Uninterruptible Power Supply (N+1 configuration)
 - ✓ 2.5MW generators (N+1 configuration)
 - ✓ 72 hours of on-site fuel with emergency fuel contract
- **Environmental controls**
 - ✓ 300 Ton Multi-stack Chillers
 - ✓ Air Handling Units with evaporative cooling and air-side economizers (115,000 cubic feet per minute)
 - ✓ Temperature – 70 Degree +/- 3
 - ✓ Humidity – 40 Degrees +/- 5
- **Safety**
 - ✓ Incipient Smoke detection (VESDA)

- interface
 - ✓ 2 each, redundant power connections
 - ✓ 1 each, IP KVM interface
 - ✓ Remote access to all servers
 - ✓ Standardized data cabinets
 - ✓ Preconfigured cabling
 - Redundant data network access
 - ✓ Dual fiber paths for access to KCWAN, internet
 - ✓ 4 gbit network bandwidth between KCWAN core sites
 - ✓ Dual interlocked Pre-action sprinkler system
 - 24/7/365 physical security
 - ✓ 24/7/365 security force
 - ✓ Closed circuit TV monitoring throughout the building and inside the Data Center space
 - ✓ Man traps with dual authentication access to building
 - ✓ Second layer biometric dual authentication access to data center
-

Service Response Expectations

- Network connectivity issues – Network Engineer will respond within 30 minutes between 8:00 and 5:00; respond within 60 minutes after hours
- Request for server reboot – Performed within 15 minutes, 24X7X365
- Lead time to schedule standard equipment hosting change – 3 days

Roles and Responsibilities

Provider:

- a. Provides current and future County Data Center policies, procedures and standards documentation to the customer.
- b. Monitors and maintains the computing environment, ensuring that all power, network and environmental components function as designed.
- c. Maintains the policy and procedure for access to the Data Center.
- d. Enforces Data Center security controls and procedures.
- e. Supports the planning, maintaining and changing of customer systems.
- f. 24X7X365 access to data center for pre-authorized agency representatives.
- g. Responsive to customer's needs by providing Incident logging and appropriate problem handling when requested by **Customer**
- h. Responsive to customer's needs by ensuring contact lists are updated.
- i. Responsive to customer needs by routing calls as directed by **Customer**.
- j. Works with Sabey facility management fostering good working relationship and proactive management on contracted service performance elements provided by Sabey.

Customer:

- a. Abides by all current and future County policies, procedures and standards related to the Data Center.
- b. Identifies all **Customer** contacts, including any technical contacts for systems support and management contact for liaison purposes.
- c. Acknowledges and follows all security controls and procedures.

King County Sabey Data Center Report

- d. Notifies Data Center of all adds, moves, and reductions to the agency's servers/devices stored in the Data Center.
- e. Documents escalation instructions.

Service Level Commitments

- 99.98 percent scheduled and unscheduled availability of the facilities, defined in the *Facility and Service Description* section, as measured by **Provider**. Performance metrics available on the Intranet.
- 99.99 percent scheduled availability of the core network, defined in the *Facility and Service Description* section, as measured by **Provider**. Performance metrics available on the Intranet.

Service Cost

Hosting rates are calculated annually. Current rates are posted at:
<http://kcweb.metrokc.gov/oirm/services/OIRMRateCardSummary.pdf>

Contact Information

For:	Incident Management	Overall Service Support	Escalation
Contact:	263-help (4347) or http://help	Data Center Manager Mark Van Horn, OIRM Mark.Vanhorn@kingcounty.gov (206) 263-8058	Chief Information Officer Bill Kehoe Bill.Kehoe@kingcounty.gov (206) 263-7887

Signatures

The signatures on this SLA indicate that the **Customer** and the **Provider** agree to its content, its validity, the adequate representation of the Customer's and the Provider's needs, and inclusion of achievable objectives.

For [CUSTOMER NAME]:

_____ Date _____
 (Name/Director)

_____ Date _____
 (Name/Title)

For PROVIDER:

_____ Date _____
 John Heath – Manager, KCIT Operations (acting)

_____ Date _____
 William Kehoe – Chief Information Officer

Cc: BMC, TMB

This page is intentionally left blank

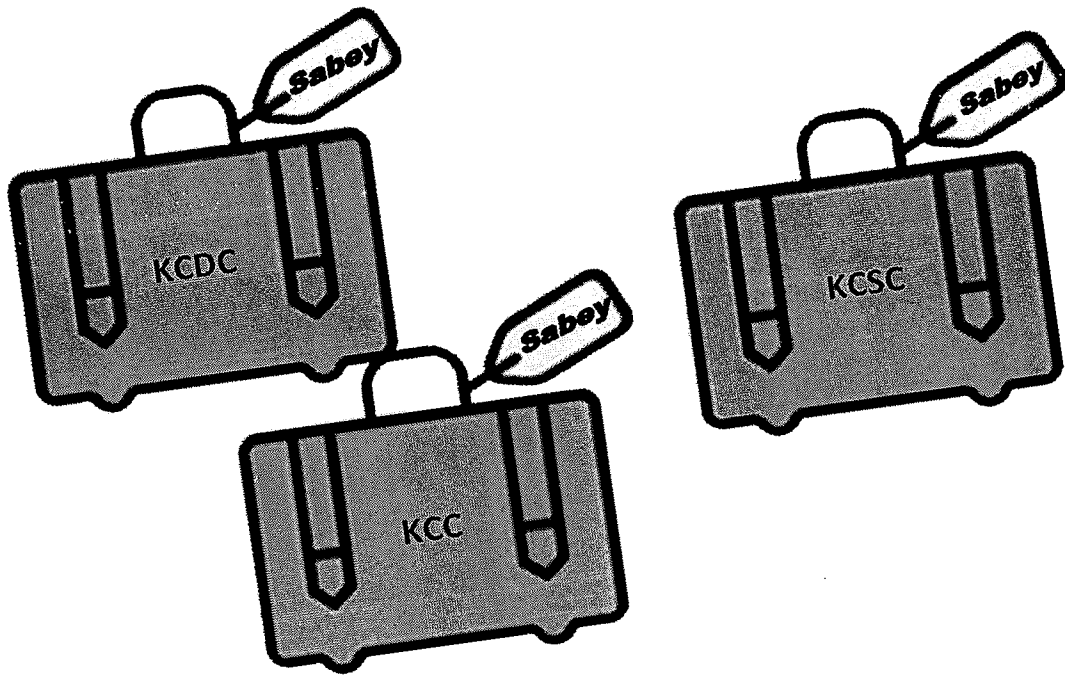
Proviso Response Component 2

This page is intentionally left blank

Data Center Relocation Phase 2 Move Packet

King County

Data Center Relocation Project Phase II



Move Packet Overview

The Data Center Relocation Project Phase II Move Packet is given to agency representatives at initial move planning meetings with the OIRM relocation project team. The Move Packet contains the following items:

- Move Event Checklist
- Data Center Relocation Announcement – Example
- Data Center Relocation Project – Interview Questions
- Virtualization Candidate Determination
- Roles and Responsibilities
- Move Day Timeline – Example
- Relocation Contact List – Example
- King County Data Center at Sabey Building Entrance Information
- King County Data Center at Sabey Driving Directions
- Sabey Facility Diagram
- Problem Reporting Overview
- Problem Reporting Template
- Device Selection Guideline
- Inventory Information Template Field Descriptions
- Inventory Information Template – Sample

The following items are not included in this Move Packet attachment as they appear in other sections of the Ordinance response.

- Service Level Agreement – Data Center Hosting
 - Included in Ordinance 16984 response Component 1
- Data Center Access Controls Standards
 - Included in Ordinance 16984 response Component 2

Move Event Check List

70 days before move date:	Meet at 70 days	√
• Present formal announcement of Agency move	PMO	
• Accept announcement	Agency	
• Create Agency move booklet	PMO	
• Confirm servers and processes on worksheet	Agency, PMO	
• Confirm priority servers for last in/first out of moving truck	Agency	
• Identify servers with 3 rd party support	Agency	
• Update server list	Agency, PMO	
• Sign off on worksheets 1A, 1B	Agency	
60 days before move dates:	Meet at 60 and 45 days	
• Present move list to relocation consultant	PMO	
• Complete worksheets 2-4	Agency, ADSS, OIRM	
• Complete plans for brownout testing	Agency	
• Get signatures on worksheets 2-4	Agency	
• Create Command Center day of move worksheet 5	PMO	
• Validate/Update/Sign off on Command Center worksheet 5	Agency	
• Notification of brownout/blackout test to all affected	PMO	
30 days before move date	Meet at 30 and 15 days	
• Confirm telecom requirements	Agency	
• Perform notifications, brownout test (process and durations), notification of resumption of services	Agency, PMO	
• Refrain from system changes	Agency	
• If system changes, re-perform brownout test	Agency	
• Sign off on brownout results, Provide brownout durations	Agency	
• Validate 60 day server list has not changed	Agency	
• Update list to relocation consultant if needed	PMO	
• Update move worksheet 5 as needed	Agency, PMO	
• Provide diagrams for all servers	Agency Engineering to PMO	
• Notification to Agencies of non move day outages	PMO	
• Notification to the Change Management Board & OIRM Communications	PMO	
Week of move	Meet at 5 days	
• Meet for final confirmation, go/no go.	Engineers, Apps Testers, Business Testers, PMO	
• Update documentation as needed, Confirm schedule	PMO	
• Label devices	Agency	
Weekend of move	Move	
• Notification of system outage to affected parties	Stakeholder	

King County Sabey Data Center Report

• Backups, sign off, call Comm. Center	Engineering	
• Power off, sign off, call Comm. Center	Engineering	
• Unload, transport, install at Sabey	Relocation Consultant	
• Power on, test devices, sign off, call Comm. Center	KC Engineering	
• Test Applications (as required), sign off, call Comm. Center	Applications	
• Test Applications (as required), sign off, call Comm. Center	Business	
• Notification of system resumption to affected parties	Stakeholder	
Week after move	Meet week after move	
• Monitor all applications in production (emphasis on Mon, Tues)	Agency to PMO	
• Resolve issues	Agency, PMO	
• Collect documentation	PMO	

Data Center Relocation Announcement – Example

The <Agency Name> IT devices will move on the weekend of <Move Event Date>. The list of servers moving is attached. Priorities need to be assigned. The moves involve careful preparation and involvement from the Agencies in both technical and business areas.

The plan is has been accepted by <Agency> management.

King County is moving devices on the following weekends (Friday/Saturday/Sunday).

- Q2, 2011 (Dates TBD)
- Q3, 2011 (Dates TBD)
- Q4, 2011 (Dates TBD)

The new consolidated location is the 2nd floor of the Sabey Data Center, 3355 South 120th Place, Seattle, WA 98168.

We are taking all appropriate steps to ensure little or no downtime, but there will be an interruption of service:

- Devices are being moved grouped by Agency and logical function
- Owing Agencies are full participants in the relocation project
- Devices are being moved over weekends for which the Agencies have identified the least impact
- Devices are being moved by professional IT movers after extensive internal planning
- Agencies will be informed if other move dates will cause them outages
- Agencies will be notified when the move is complete
- Every effort will be made to complete the move process on Saturday

Below is an example of Phase 1 server data collected for specific move

October 23-25, 2009

ME #	Server Name	Agency	Location	Device Type
ME6	HAWK	Dept of Adult and Juvenile Detention	SMT	SERVER
ME6	JEMS-CCS	Dept of Adult and Juvenile Detention	SMT	SERVER
ME6	SCAPPROD06A	Dept of Adult and Juvenile Detention	SMT	SERVER
ME6	SCAPPTST03	Dept of Adult and Juvenile Detention	SMT	SERVER
ME6	SCJUVYDATA02	Dept of Adult and Juvenile Detention	SMT	SERVER
ME6	SCJUVYDATA03	Dept of Adult and Juvenile Detention	SMT	SERVER

Data Center Relocation Project – Interview Questions

Can your servers move in one of the standard move events?

Do you have any servers you would like to consider virtualizing?

Do you have any critical applications?

Do you have any vendor applications?

How much downtime can you sustain during the move? (Ex. 5 AM Saturday to 6 PM Saturday)

Do you have any connections to external vendors, State of Washington, etc...?

Do you have any database servers supported by OIRM?

Do you have any servers connected to something else that will need to move together?

Do you have equipment that must be in the same cabinet or adjacent to each other?

IP addresses can only live in one place. Will you re-IP your servers or your users? (If users are currently on the same VLAN as your servers)

Are your servers running any apps on mainframe?

King County Sabey Data Center Report

Do you have any firewall considerations?

Remote access will, on the whole, replace activity at the data center.

- Do you have applications that are not KVM compatible?

- Do you have questions about the remote access policy?

For the move event, your business unit will

Validate all elements of the applications to be moved

Develop and execute testing scripts and procedures

Provide significant resources and efforts to identify and validate environment elements

Do you have any questions or issues with these tasks?

Who will witness shutdown, un-rack, move, re-rack, and startup?

How will you test your ADSS applications? Your non-ADSS supported applications? Test in test? Test in prod?

In the event of a failure:

- How will your business unit/function be affected if an application suddenly and without warning becomes unavailable?

- How much effort will be required to recreate/recover data that may be lost or destroyed if the application suddenly and without warning becomes unavailable?

- How will the core business function be affected if the application suddenly and without warning becomes unavailable?

- How much effort will be required to return to "business as usual" following an event which makes the application suddenly and without warning unavailable?

Virtualization Candidate Determination

To determine if your server is a candidate for virtualization, performance monitor will need to be run on the server for at least 48 hours or longer during peak times. Procedures for running perfmon on your server(s) can be found here: <\\its-farm\se-public\Perfmon>. There is a set of instructions for Windows 2000/2003 and a separate set of instructions for Windows 2008. While running perfmon on each server for 48 hours will be necessary in order to determine if it is a candidate for virtualization, below are some general guidelines to determine if your server is a virtualization candidate.

Virtualization Guidelines:

General Guidelines

1. **No Special Hardware** – Servers that have special hardware requirements such as a fax card, specialized PCI card, or USB attached device are not supported.
2. **Application Software vendor support** – A server is not a virtualization candidate if the application vendor denies support when using a virtual platform (**rare**)
3. **Supported OS's** – Microsoft Windows, Redhat Linux
4. **Isolated security zone** – Virtual machines must reside on an internal network.
5. **Partition Size** - The maximum virtual machine partition size is 2TB. If you have a partition larger than 2TB, you will need to split the partition into multiple drives.

Guidelines Determined through the use of Perfmon

6. **Disk I/O** –Disk Queue length and Read/Write I/O's per second will need to be measured to determine disk I/O using Perfmon.
7. **Memory** – Servers will need to be monitored for memory pages per second and page file usage. If a virtual machine has higher memory requirements than this, we will need to discuss whether or not we have enough resources available to accommodate more than 16GB of memory.
8. **CPU** - % Processor time will be monitored using perfmon.
9. **Network Usage** – Bytes Sent and Received will be monitored using perfmon.

Potentially Good Virtualization Candidates

- File servers after careful disk I/O and network analysis.
- Print servers after careful network analysis.
- Application servers taking into consideration network traffic and number of transactions per day.
- Database servers taking into consideration transaction counts and disk I/O.
- Domain controllers if the highest level DC remains physical and time is maintained through this system due to time synchronization.

Poor Virtualization Candidates

- Any server that cannot be analyzed with perfmon for at least 48 hours during peak times.
- Tape Backup servers; Tape drive library; Virtual tape library.
- True real-time monitoring (i.e. air/water quality control; scientific devices) using “one-processor clock cycle.”
- Applications driving high-end 3D Graphics (esp. those requiring GPU control).
- Network time server.

Roles and Responsibilities

Command Center Responsibilities (PMO)

- Focal point for move activity and communications
- Track status of the move
- Contact Leads upon completion of each cabinet turnover from relocation consultant that application testing can commence
- Provide a central point for problem reporting, logging, escalation and resolution
- Sign off on Notice of Apparent Completion (NACs)
- Update status line
- Issue status updates to Project Team Leads every two hours
- Issue status updates to management at various intervals
- Facilitate the Conference Bridge (every 2 hours)
- Escalate problems
- Coordinate plan and schedule changes as required
- Notify NOC to stop/start monitoring
- Notify Change Management of move event
- Provide logistics
 - Food
 - Access

Agency/Lead Support Responsibilities

- Support move remotely if possible
- Notify application and/or business testers (or Command Center) when hardware has been powered on successfully
- Notify Command Center at end of each stage of testing
- Report **ALL** problems to PMO.
- Ensure tracking sheets are complete, signed and returned to PMO
- Engineering lead calls the vendor directly if issues occur.

Move Day Timeline - Example

Data Center Relocation Phase 2: Move Event <#>, <Date>

This is the <#> of <#> moves and involves <#> agencies. Servers are located at: <list location(s)>

Phones:

(206) 205-0999 Bridge number; accessed remotely and from the command center (limit 30 ports)

(206) 263-8139 Internal status line for individual calls between leads and command center that is staffed by the Project on the move event weekend

(206) 263-8050 Public status line, updated after bridge calls or at significant turnovers

Agencies:

<List of agencies involved in move event>

Tuesday, <before move event>:

<Meeting time>, <building>/<room #> meeting. Conference phone is available <conf #>

Agenda: schedule, access, questions, Sabey directions, confirm Bridge line users (to ensure not more than 30), update contact info; confirm Sabey authorizations for those going to Sabey. Help Desk script to KC Help Desk with notice to stop monitoring Agency systems effective Friday COB

Friday, <of move event weekend>:

9 am: PMO meets with relocation consultant at Sabey

Final prep, check phones

Final arrangements for food, coffee for Saturday

<Meeting time>: Follow up to Tuesday call with relocation consultant for Tuesday participants, <building>/<room>, <conf call #>

Saturday, <of move event weekend>

4:00am: Agencies complete backups and start to turn off machines

5:00am: Conference Bridge call (205-0999)

- PMO
- Sabey facility staff
- Tech leads
- App leads
- Business leads
- check on backups, reschedule un-backed up servers, final questions

5:15 am: Status line updated

5:30 am: PMO to <server pick-up site>

6:00 am: Relocation consultants at <server pick-up site> for <move event #>

7:00 am: Truck on-site for <move event #>

7 am: Relocation consultant starts loading truck at <server pick-up site>

King County Sabey Data Center Report

- PMO monitors loads between <server pick-up site> staging area, loading dock, and truck
- All equipment to be observed by PMO at all times, with an Agency representative welcome

8 am: Bridge call (205-0999): status

8:15 am: Status line (263-8050) updated

- Upon completion of loading at <server pick-up site>, PMO to witness truck seals applied, Agency representative welcome
- Relocation consultant trucks from <server pick-up site> to Sabey
- PMO to witness truck seals cut at Sabey, Agency representative welcome
- Relocation consultant starts unloading trucks
- PMO monitors loads between Sabey facility loading dock and King County DC staging area. All equipment to be observed by PMO at all times, with an Agency representative welcome

10 am: Conference Bridge call (205-0999): status

10:15 am status line (263-8050) updated

Noon: KC agency employees arrive at Sabey Data Center (Arrival time should be adjusted based on progress of server installations.)

Noon, 2 pm, 4 pm, 6 pm, 8 pm, and 10 pm bridge call pattern continues until Saturday completion. Each call is followed by an update to the status line.

10 PM: If move is not complete on Saturday, Bridge call (205-0999) to plan time to complete or determine if Sunday follow-up is needed.

Engineering testing

PMO notifies Engineering lead that a rack is ready for Engineering testing

The Engineering Lead contacts the Engineering testers who test as indicated on Engineering worksheet 2 and report back to the Lead

Upon completion of testing or upon problem, the Lead Engineer calls 263-8139 to report

The PMO updates the (263-8050) status message.

Application testing

Note that some Agencies perform worksheet Application and Business testing worksheets 3 and 4, some only one set.

Engineering notifies Applications Lead that accepted rack is ready for Application testing

The Applications Lead contacts the Applications testers who test as indicated on worksheet 3 and report back to the Lead

Upon completion of testing or upon problem, the Application Lead calls 263-8139 to report

The PMO updates the (263-8050) status message at designated status line updates.

Applications notifies Business Lead that accepted rack is ready for Business testing

The Lead contacts the testers who test as indicated on worksheet 4 and report back to the Lead

Upon completion of testing or upon problem, the Application Lead calls 263-8139 to report

The PMO updates the (263-8050) status message at designated status line updates.

King County Sabey Data Center Report

Completion of testing

Upon completion of an Agency's testing, the PMO updates the (263-8050) status message
The final Agency Lead contacts the Agency as decided by the Agency

Upon completion of all testing for all Agencies, the Command Center contacts the KC Help Desk
(263-help) to announce completion of the move
The KC Help Desk resumes monitoring

If testing does not complete on Saturday, Sunday planning will be conducted at the final
Saturday bridge call (205-0999).

Sunday, <of move event weekend>

Testing continues if required

Monday, <after move event weekend>

Agencies continue to monitor applications, with errors reported to KC Help Desk (263-help)

Wednesday, <after move event weekend>

Lessons learned meeting for all participants, <building>/<room>, <time>, <conf bridge #>
Agencies turn in their signed worksheet for Audit posting

Relocation Contact List – Example

Conference/Contact Lines					
Command Ctr. Direct Line	(206) 263-8100				
KC 24hr Status Line	(206) 263-8050				
Operations Afterhours	(206) 296-0606				
Sabey	(206) 205-0562				
Core Project Team					
Name	Role	Contact #	NDA?	Onsite	Remote
Cheryl Boudreau	PMO - OIRM Program Manager	(206) 913-7812	X	TBD	TBD
Larry Hudacek	Acting Operations Supervisor	(206) 351-5970	X	TBD	TBD
Rick Gideon	DC Facility Engineer	(206) 427-5750	X	TBD	TBD
		Work Cell (206) 910-1757			
		Personal cell			
Mark Teller	Data Center Facilities Engineer	(206) 229-3204	X	TBD	TBD
Roger Kaiser	Network Services	(206) 799-6765	X	TBD	TBD
Tim Smith	System Engineering Rack Layout\Facilities Engineer	(206) 303-9017	X	TBD	TBD
Debbie Gladstone	Telecommunications Specialist	(206) 263-7865	X	TBD	TBD
Mike Fisher	PMO - IT Project Manager 1	(425) 269-1954	X	TBD	TBD
Adam Fufa	Network Services Engineer	(253) 670-0507	X	TBD	TBD
Bill Tuaua	Network Services Engineer		X	TBD	TBD
Relocation Consultant			NDA?	Onsite	Remote
Move Day Contacts TBD					
Agency ME Specific Contacts			NDA?	Onsite	Remote
Move Contacts Needed					
Vendor / Contacts			NDA?	Onsite	Remote
John Sasser	Sabey Operations Manager	(206) 730-2586	na	na	
Manager Contacts			NDA?	Onsite	Remote
Trever Esko	IT Projects Director	(206) 484-4908	X		X
John Heath	Operations Point Person	(425) 269-3284	X		X
Mark Van Horn	Data Center Operations Mgr.	(253) 229-1859	X		X

King County Data Center at Sabey Building Entrance Information

All participants onsite will need to fill out a Sabey non-disclosure agreement prior to the move event and provide the form to the PMO. If any of your move event staff do not have NDAs on file please contact Mike Fisher (206.263.9764).

Once at Sabey, you will need to check in with the Security Desk. They will have a list of names of the people who are expected to be onsite. If your name is not on the list, please contact the Command Center Direct Line at 206-263-8100.

The Security Desk will need a picture ID (e.g. driver's license, employee badge with photo and name on it) and they will then issue your temporary badge. Your temporary badges will limit you to the loading dock and the King County suite, 5201. Other access doors may be made available while onsite but access should be limited to King County owned spaces.

Upon completion of your activities at Sabey for the move event, you will need to turn in your temporary badge at the front Security Desk. Temporary badges will only work during the move event weekend and must be turned in and checked out each day.

King County Data Center at Sabey Driving Directions

Sabey Data Center LLC

3355 South 120th Place, Suite 5201A

Tukwila, WA 98168

206.263.8100

Conveniently located 10 miles south of Seattle

- From Interstate 90, State Route 520, or Interstate 405 (north of Interstate 90) connect to Interstate 5 and follow the southbound directions.
- From Interstate 405 (south of Interstate 90) or State Route 167 connect to Interstate 5 and follow the northbound directions.

Southbound on Interstate 5

- Exit 158, for Boeing Access Rd toward E Marginal Way
- Right onto Boeing Access Road, merge into the far left lane.
- Move into the far left turning lane at the first traffic signal, and turn sharp left onto East Marginal Way South.
- Follow East Marginal Way South for approximately $\frac{3}{4}$ mile; at the next traffic signal make a soft right.
- Follow East Marginal Way South for approximately $\frac{1}{4}$ mile; at the next traffic signal turn right on South 124th Street.
- Turn left at the end of South 124th Street – parking lot at the top of the hill.
- Entrance is located on the South East end of the building.

Northbound on Interstate 5

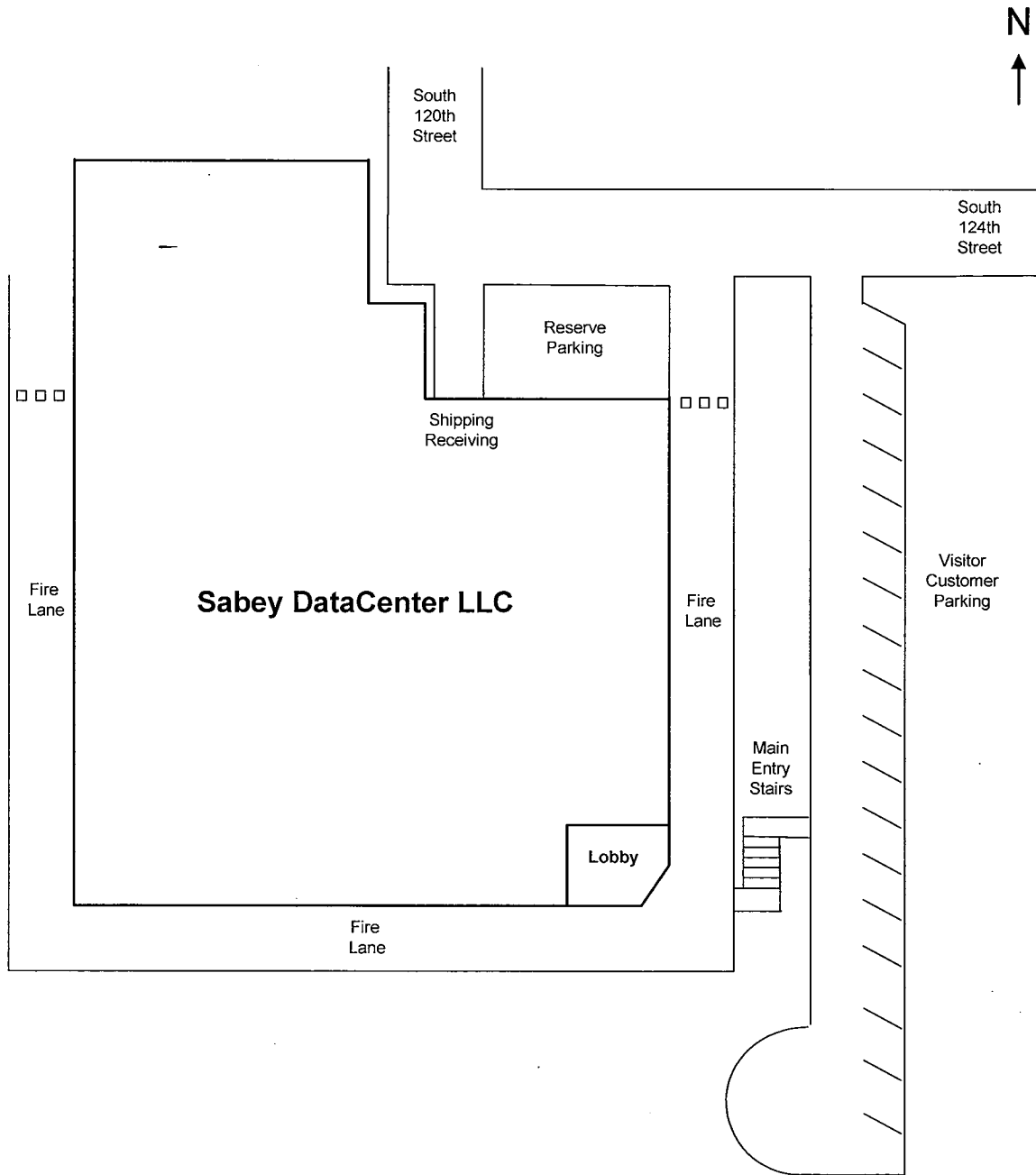
- Exit 156 onto State Route 599 North.
- Follow exit for Tukwila/West Marginal Way.
- Turn left onto Interurban Avenue South.
- Turn left onto East Marginal Way South.
- Follow East Marginal Way South for approximately $\frac{3}{4}$ mile; at the next traffic signal make a soft right.
- Follow East Marginal Way South for approximately $\frac{1}{4}$ mile; at the next traffic signal turn right on South 124th Street.
- Turn left at the end of South 124th Street – parking lot at the top of the hill.
- Entrance is located on the South East end of the building.

From Sea-Tac Airport

- Follow the exit signs for Pacific Highway South/International Boulevard or State Highway 99 South.
- International Boulevard becomes Pacific Highway South/State Highway 99 South.
- Turn right onto South 130th Street.
- Turn left onto East Marginal Way South.
- Follow East Marginal Way South for approximately $\frac{3}{4}$ mile; at the next traffic signal make a soft right.
- Follow East Marginal Way South for approximately $\frac{1}{4}$ mile; at the next traffic signal turn right on South 124th Street.
- Turn left at the end of South 124th Street – parking lot at the top of the hill.

- Entrance is located on the South East end of the building.

Sabey Facility Diagram



Problem Reporting Overview

King County DC Relocation Project Phase 2

Problem Reporting for Move Weekends

WHAT IS CONSIDERED A PROBLEM?

Any activity that does not occur as anticipated.

HOW TO REPORT A PROBLEM:

Notify the Command Center 263-8100, and tell them the problem – or- Fill out a Problem Report (copies attached) and give it to the Command Center.

(Cheryl Boudreau and Mike Fisher represent the Command Center.)

SHOULD A FIXED PROBLEM BE REPORTED?

Yes, documentation and communication of the incident is important and contractually required.

HOW WILL PROBLEMS BE TRACKED?

The Command Center has the responsibility to ensure that all open problems are routed to the appropriate Team Lead for resolution. The Command Center will also ensure that status of the problem is current. The problem log will be maintained by the Command Center.

Problem Reporting Template

King County DC Relocation Project
Move Event 1
PROBLEM REPORT
263-8100

Problem # _____

Date Assigned: _____

Time Assigned: _____

Affected Agency: _____

Rack ID#/U: _____

Assignee: _____

Problem Definition:

Problem Resolution:

Impact Install Schedule? Yes [] No []

Document As An Issue? Yes [] No []

Resolved by: _____

Date: _____

Approved by: _____

Date: _____

Device Selection Guideline

Information Technology Governance Policies, Standards and Guidelines

<p><small>Title</small> King County Data Center Device Selection Guidelines</p>	<p>Document Code No. ITG-G-11-01 Effective Date. 01/12/11</p>
---	--

1.0 PURPOSE:

To provide King County staff with guidance in selecting computing devices for residing in and hosted by King County data centers. This guideline provides recommendations for a cost effective physical model for computing systems within the county data center. Variables to these guidelines will occur in order to meet business need, but compliance with these guidelines is strongly encouraged.

2.0 APPLICABILITY:

These guidelines apply to the systems hosted within King County data centers.

3.0 DEFINITIONS:

- 3.1 **Information system:** Software, hardware and interface components that work together to perform a set of business functions.
- 3.2 **Organization:** Every county office, officer, institution, department, division, board, and commission.
- 3.3 **Workforce Member:** Employees, volunteers, and other persons whose conduct, in the performance of work for King County, is under the direct control of King County, whether or not they are paid by King County. This includes full- and part-time elected or appointed officials, members of boards and commissions, employees, affiliates, associates, students, volunteers, and staff from third-party entities who provide service to King County.
- 3.4 **Rack Management:** The management and placement of devices within the data center equipment racks to account for power, cooling, weight and access requirements, and functional alignment.
- 3.5 **Rack Unit:** A standard unit of measure within a data cabinet or equipment rack equal to 1.75 inches high. Commonly abbreviated as “U” (as in *2U server*).
- 3.6 **Blade Enclosure:** Also called a chassis, a blade enclosure is a rack mounted container which can hold multiple blade servers, provides services such as power, cooling, networking, various interconnects and management. Together, blades and the blade enclosure form the blade system.

- 3.7 **Computer Appliance:** A separate and discrete hardware component designed to provide a specific computing resource, which often resides on a dedicated hardware platform.

4.0 **GUIDELINES:**

4.1 **All devices**

- 4.1.1 Devices installed into data cabinets should be rack-mountable and fit a 28 inch (700mm) wide cabinet system.
- 4.1.2 Devices installed into a controlled network area (MDF or IDF) should be rack-mountable and fit a Two-Post 19 inch Universal Rack (MDF/IDF).

4.2 **Servers:**

- 4.2.1 Servers should be no more than four rack units in height.
- 4.2.2 Servers should have two power supplies.
- 4.2.3 Servers should have two network interfaces (NIC) capable of 1gbps
- 4.2.4 Servers should have up to two server management interfaces.

4.3 **Blade Enclosures:**

- 4.3.1 Chassis should be no more than 10 rack units in height.
- 4.3.2 Chassis should have no more than six power supplies, with a minimum of two.
- 4.3.3 Chassis should have four network interfaces, configured for 10gbps, with a minimum of two configured for 1gbps.
- 4.3.4 Chassis should have two server management interfaces.

4.4 **Storage:**

- 4.4.1 Data Storage comes in a variety of form factors, largely based on use, but in general, the three most common are Storage Area Network (SAN) devices, Network Area Storage (NAS) devices and direct-attached storage (DA).
- 4.4.1.1 Disk array enclosures should be no more than four rack units in height.
- 4.4.1.2 Disk array enclosures should have two power supplies.
- 4.4.1.3 Disk array enclosures should have two network interfaces.
- 4.4.1.4 Disk array enclosures should have two server management interfaces.

- 4.4.2 Chassis-based Storage: Some data storage devices are provided in a chassis configuration, similar to Blade Enclosures. Blade Enclosure guidelines will apply.
- 4.4.3 Other types of storage devices: Devices such as Virtual Tape systems or backup/recovery/archiving systems may not fit the above guidelines.

4.5 Computer Appliances:

- 4.5.1 Meet **Server** guidelines.

5.0 Decision Making for Devices Moving to King County Data Center

- 5.1 If devices are within these guidelines, no action is needed.
- 5.2 If a device does not fall within these guidelines, consider:
 - 5.2.1 Can the application supported by the device be “virtualized?”
 - 5.2.1.1 If yes, then consider the cost and benefits of virtualizing before moving devices “as is” into the Data Center.
 - 5.2.1.2 If not, then consider:
 - 5.2.2 Are there Equipment Replacement funds available to upgrade device to meet guidelines?
 - 5.2.2.1 If yes, then consider the cost and benefits of upgrading the device prior to moving it into the Data Center.
 - 5.2.2.2 If not, then:
 - 5.2.3 Move device to Data Center as is, and place on an Equipment Replacement plan

Inventory Information Template Field Descriptions

COLUMN NAME	DESCRIPTION
Server(Device) Name	NETBIOS name of the server or device
Division\Agency	Agency or division responsible for the device
Current Location (building/floor/room)	Building, floor, and server room or server closet where the device currently resides
Virtualize? (Y/N)	Can the server be converted to a virtual machine rather than moving the physical device
If Virtualizing, indicate planned completion date	Date when conversion to VM will be performed
Disposition	<p>The plan-of-record for the server or device:</p> <ul style="list-style-type: none"> • D – Decommission in place • M – Move physical device • I – Inventory device (save for future use but not in production or powered up) • R – Remain in current location (justification will be needed to explain WHY the server needs to remain outside of Sabey)
Number of RUs	The number of rack units the device will occupy in the server cabinet
Comments	General information about the server, special move requirements, etc...
Make	The name of the manufacturer of the server or device (HP, Dell, EMC, etc...)
Model	The model number of the server or device

King County Sabey Data Center Report

Number of NICs	The number of NICs the server or device has installed (generally also the number connected to the switch)
For each NIC, list the IP Address, VLAN, and MAC Address	IP address, VLAN (or subnet), and the MAC address of each NIC connected to the switch
Network Cabling requirements	NIC, ILO, KVM, and Fiber network connections required for the server or device
Interconnect requirements	Does the device need to connect to another device or does it need to be in the same rack
Serial Number	The manufacturer supplied serial number of the device
Replacement Value	Dollar value of the server or device – required for transport insurance purposes
Weight of non-HP or non-Dell	Required movers to transport any non-HP or non-Dell servers or devices
Is a shelf required? (Yes or No)	If the server or device is not rack mountable a cabinet shelf will be required
Maintenance provider	Company, Contact Person, and Phone Number or any vendor who provides server or device maintenance\service
What quarter in 2011 is move planned	The quarter or move event the server or device be relocated to Sabey
Dial-up access line required	Will a POTS line be needed for the server or device in Sabey (sometimes needed for vendor maintenance provider dial-in access)

King County IT – Backup Service Description

Purpose

The purpose of this document is to describe the backup services provided by KCIT Data Center – Systems Engineering (Provider) for [Customer Name].

Service Description

- Scheduled nightly backup window from 17:00 to 05:00
- Backup reporting available upon request
- Backups are available on-site for one month to facilitate rapid recovery in the event of data loss
- Daily differential backups with 3 month retention standard
- Weekly backups with 12 months retention standard
- Copies of backups completed within the backup window are transferred offsite within 18 hours of completion and stored offsite for the duration of the specified retention period
- Support for data restorations is available 24 x 7
- Vendor and contract management
- Tier 2 level support
- Long term storage is also available to meet your extended retention requirements

Technical Services also provides other services for requesting KCIT groups (Executive and Elected).

Further descriptions of all services offered can be found on the OIRM.KCIT website:

http://kcweb.metrokc.gov/oirm/services/nso/technical_services.aspx

Service Response Expectations

- Incident response – Technical Services 2nd and 3rd tier support will respond within 30 minutes between 9:00 and 5:00 weekdays; and respond within 60 minutes after hours
- PO incidents reported to KCIT Helpdesk will be escalated to Technical Services 2nd and 3rd tier support, who will respond within the assigned timeframes.
- Problem requests are routed thru the KCIT Helpdesk.

Roles and Responsibilities

Provider responsibilities and/or requirements in support of this Agreement include:

- a. Appropriate and timely notification to Primary Client Liaison or designee prior to all scheduled maintenance
- b. Services provided following Technical Services standards, policies and best practices.
- c. Monitors and maintains the computing environment, ensuring that all components are functioning as designed.
- d. Enforces KCIT Security policies and procedures.
- e. Supports the planning, maintenance and changes of customer systems.
- f. 24X7 response
- g. Responsive to customer's needs by providing Incident logging and appropriate problem handling when requested by **Customer**

- h. Responsive to customer’s needs by ensuring contact lists are updated.
- i. Facilitation of all service support activities involving incident, problem, change and configuration management
- j. Works with KCIT Data Center staff to foster good working relationship and proactive management on contracted services to our **Customers**.

Customer responsibilities and/or requirements in support of this Agreement include:

- a. Identifies all customer contacts, including any technical contacts for systems support and management contact for liaison purposes.
- b. Notifies Technical Services of all adds, moves, and reductions to the agency’s servers/devices managed thru the SLA.
- c. Documents escalation instructions.
- d. Submit all requests to KCIT Helpdesk for triage and support
- e. Submit requests for new services to the KCIT Helpdesk
- f. Business and or Application representative will collaborate with Technical Services staff when resolving a service related incident or request.

Contact Information

For:	Overall Service Support	Escalation
Contact:	Systems Engineering Supervisor Diana Chism, OIRM Diana.Chism@kingcounty.gov (206) 263-7843	IT Operations Manager John Heath John.Heath@kingcounty.gov (206) 263-7875

King County Data Center Access Controls Standards

Information Technology Governance Policies and Standards

Title		Document Code No.
Data Center Access Controls Standards		ITG-S-11-03
Chief Information Officer Approval	Date	Effective Date.

1.0 **PURPOSE:**

The purpose of this standard is to provide an overview of the security control functions governing King County’s Data Center, assign responsibilities for these functions, and establish standard processes, operating procedures and guidelines that enable the KCIT Data Center to properly secure and maintain physical access to the County’s computing and communications infrastructure .

2.0 **APPLICABILITY:**

This standard is applicable to all King County Organizations and Workforce Members desiring physical access to the King County data center.

3.0 **REFERENCES:**

- 3.1 ITG-P-03 , King County Sabey Data Center Policy, 09/14/2009
- 3.2 ISO/IEC 27002:2005, Code of Practice for Information Security Management
- 3.3 NIST SP800-14, Sept 1996: Generally Accepted Principles & Practices for Securing Information Technology Systems
- 3.4 NIST SP800-53 rev 3, August 2009: Recommended Security Controls for Federal Information Systems & Organizations
- 3.5 Information Technology Policy and Standards Exception Request Process

4.0 **DEFINITIONS:**

- 4.1 **Access Card:** A card with some level of electronic authorization.
- 4.2 **Access Control:** The management of admission to system and Network resources. The first part of Access Control is authenticating the user, which proves the identity of the user or client machine attempting to log on. The second part is granting the authenticated user access to specific system and Network resources based on county policies and the permission level assigned to the user or user group.
- 4.3 **Authorization:** A security procedure designed to verify that the Authorization credentials entered by a user to gain access to a Network or system are valid.
- 4.4 **Authorized User:** A user with the right or permission to use a computer resource.

- 4.5 **Organization:** Every county office, every officer, every institution, whether educational, correctional or other, and every department, division, board and commission.
- 4.6 **System Owner:** The King County management person responsible for the overall development, integration, modification, or operation and maintenance of a system. This is the person responsible for authorizing access to their system(s).
- 4.7 **System:** Software, hardware and interface components that work together to perform a set of business functions.
- 4.8 **Visitor Badge:** A clip-on badge (with no electronic authorization capabilities) issued to visitors. No access authorization implied for the wearer, who can only enter the building when escorted by someone with an appropriate authorized level.
- 4.9 **Workforce Member:** Employees, volunteers, and other persons whose conduct, in the performance of work for King County, is under the direct control of King County, whether or not they are paid by King County. This includes full- and part-time elected or appointed officials, members of boards and commissions, employees, affiliates, associates, students, volunteers, and staff from third-party entities who provide service to King County.

Note: the term "workforce member" is used in the general sense and is not intended to imply or convey to an individual any employment status rights, privileges, or benefits.

5.0 **STANDARDS**

5.1 **Access Security**

KCIT Data Center hosts the data, systems and hardware supporting the business and services of multiple departments, divisions and agencies within county government. The security of these assets is managed under a set of policies and procedures designed to minimize the risks to the confidentiality, integrity and availability of these systems and data. Operational controls are required for the county to maintain compliance with appropriate security rules, including PCI (Payment Card Industry) and HIPAA (Health Insurance Portability and Accountability Act), among others. The following sections discuss these operational controls in detail.

5.1.1 **Layers of Physical Security Controls**

To enter the King County Data Center, one must pass through Sabey building security and then through Data Center security.

5.1.1.1. **Building Access Security**

Sabey Inc. provides access to the building. Sabey provides professional guards on a 7/24/365 basis. There is real time video surveillance of both the exterior of the building and the interior hallways. There is a "common area" defined within the building where authorized tenants and guests may move freely to get to their tenant location. All other

areas are restricted to those who are specifically authorized, whether tenant locations or service areas.

Sabey (Landlord) Levels of Access

Sabey Inc. will grant access to the building based on tenant authorization and approval. The access authorization covers only that part of the building designated as a “Common Area”. This common area consists of corridors, hallways or designated areas in the building that are common to all tenants.

Sabey Inc. grants three levels of access. They are:

1. Permanent Access: Persons with permanent access receive an access-card with photo ID. These do not have a set expiration date, but must be renewed annually. The County, as a tenant, can authorize issuing this card. Authorization is provided by KCIT Data Center Management.
2. Temporary Access: Persons with temporary access receive an access card with no distinguishing characteristics. Temporary access has a defined duration (less than one year). The County, as a tenant, can authorize issuing this card. This card is issued to tenant-authorized people for each individual visit. Authorization is provided by KCIT Data Center Management. Sabey Inc. will issue this card only in exchange for a valid driver’s license, verifying the identity of the person entering the premises. The driver’s license is returned in exchange for the card when the person exits the building.
3. Visitor Access: This access level is granted to someone who does not have any direct support role within the Data Center, and is considered to be a visitor or guest of Sabey Inc. or an authorizing tenant. Persons with this access level are issued a visitor badge with no access capabilities and must be escorted at all times by King County staff authorized with at least Temporary Access.

5.1.1.2. Data Center Access Security

KCIT Data Center management controls access to the KCIT Data Center tenant space. Access is controlled with an electronic/biometric system operated by King County FBOD Physical Security services. This system is separate and independent from Sabey security controls. Data Center staff is on-site in the Data Center on a 7/24/365 basis. There is real time video surveillance of both the interior area of the data center and the exterior access doors. Access to different areas within the data center space is restricted based on authorization.

Each System hosted in the Data Center has a System Owner. This is the only person who can authorize direct physical access to specific systems.

King County Data Center (Tenant) Levels of Access

KCIT Data Center Management will grant access to King County's Tenant space (the Data Center) based on County security policy and controls, and on departmental and agency requirements and authorization.

1. **Controlling Access**: This access level is for those King County employees who are responsible for monitoring and controlling data center access and support data center operations. Normally, the person receiving Controlling Access will receive Permanent Access from Sabey Inc., requested by the Data Center manager acting as the Tenant authority.
2. **Standard Access**: This access level is for County staff with a direct supporting role of systems and/or services housed within the Data Center. Normally, any staff granted Standard Access will be granted Permanent Access from Sabey Inc., requested by the Data Center manager acting as the Tenant authority.
3. **Visitor Access**: Access can be granted to guests within restricted conditions. Visitors can enter the Data Center only if they are sponsored by a King County agency with systems housed in the data center or by Data Center management. Any visitor entering the data center must be escorted at all times by someone representing the sponsoring agency and having at least Standard Access authorization.

5.2 Procedures

5.2.1 Acquire Data Center Access Authorization

5.2.2 Non-Disclosure: All individuals receiving access to the Sabey facility are required to sign a Non-Disclosure Agreement form for Sabey Inc. This can be done on the first visit at the Security station or the Manager, Data Center/Computer Operations can provide a form to be completed and signed at the time the request is submitted.

5.2.2.1 **Controlling Access**: the King County Data Center manager, or designated backup, is the only person who can authorize Controlling Access. This access level is restricted to Data Center staff fitting the description above.

5.2.2.2 **Standard Access**: the King County manager responsible for the system or function within the Data Center (System Owner) must

make a request via email, subject titled "Data Center Access Request," to the King County Data Center Manager, authorizing access to the Data Center for specific staff. The email must include:

- a. The name of the person(s) needing access;
- b. The statement that the request is for Standard Access to the data center;
- c. The reason for access (e.g., supporting system "x") and;
- d. The length of time the access is needed (for most people in support roles, the length of time can be stated as "ongoing").

A list of all those with Standard Access is maintained by Data Center management and used to verify access privilege when being admitted to the Data Center.

All people granted Standard Access will need to complete all appropriate forms and receive electronic biometric access cards. There are two cards issued. One is the Sabey Permanent Access card, for building access. The second is a King County access card providing entry to the King County Data Center.

5.2.2.3 Visitor Access: visitors must present themselves to the Sabey Inc. Security station to verify their identity. Any visitor must read and sign a Sabey Non-Disclosure Agreement. Upon verification, the visitor will only be allowed into the building with the appropriate escort as discussed above.

5.2.3 Time Limits: For those with Standard Access, access is allowed on a 24/7 basis.

5.2.4 Entering the Facility:

5.2.4.1 Standard Access: Persons with King County Standard Access will normally have been given Sabey Permanent Access privileges. This allows direct access to the building common area. The individual would proceed directly to the King County Data Center. The King County access card provides access through the main Data Center doors. Once through the main Data Center doors, they will be required to establish their access authorization with Operations staff, then log into the Data Center Sign-in Log with Data Center Operations. At that point they will be escorted into the secured server room.

5.2.4.2 Visitor Access: Individuals with Visitor Access must also present themselves at the Sabey Inc. security station. Once identity is

verified, they will be issued a VISITOR card. This card must be worn visibly at all times within the facility. No visitors are allowed into the building or the Data Center without an authorized escort. All visitors must be escorted throughout the building by a person holding at least Standard Access. Visitors must be logged into the Data Center Sign-in Log by their escort before they are allowed into the secured server room accompanied by their escort.

5.2.5 Vendors or other non-County service providers:

In any Data Center, there is always a need for hardware, software, and systems vendors or other service providers (couriers, pickup & delivery, consultants, etc.) to have access to systems or devices housed within the Data Center. These people will normally have Visitor Access only and must be escorted by an individual who has authorized access to the specific devices being serviced.

In some cases, where there is a critical need for a service provider to have frequent and immediate access to a contracted system, Standard Access can be granted. This can be done using the method described above, with an email request initiated by the King County manager (System Owner) responsible for the system. The service provider being granted this access must be a specific named individual.

5.2.6 Exiting the Facility:

5.2.6.1 When exiting the King County Data Center, all individuals with either Standard Access or Visitor Access must log out with Data Center Operations.

5.2.6.2 Upon exiting the building, those with Visitor Access cards must surrender those cards at the Sabey Security station and log out of the building.

5.2.7 Removing Access Authorization: It is the responsibility of the System Owner to notify the Data Center Manager of any change in the status of any individual having access to the Sabey Inc, facility, the King County Data Center or specific systems. The System Owner must send an email, subject titled "Data Center Access Removal," to the Manager, Data Center/Computer Operations, detailing what that access privileges are to be removed for the individual.

5.2.8 Reviews: The Data Center Manager performs a quarterly review of all access authorizations.

5.3 Security Controls Within the King County Data Center

5.3.1 Requirements for Access

No one, whether King County staff, vendor staff, or any others, is allowed any physical access to any device within the King County Data Center without the proper authorization and supporting documentation. This documentation, in association with the Access Control list showing appropriate Access authorization, will be one of four types:

- 5.3.1.1 An approved DCCHANGE form (this form is used for “new adds” or removals).
- 5.3.1.2 An approved Request for Change (RFC) showing the work to be performed and the devices that work is affecting.
- 5.3.1.3 A LANDesk Trouble Ticket, documenting the problem being addressed.
- 5.3.1.4 Appropriate authorization established between Data Center and customer when customer does not normally use the above three supporting documentation.

5.3.2 Procedures for Gaining Access to Devices

All equipment within the King County Data Center is secured within locked data cabinets. Data Center Operations maintains keys to such data cabinets. Only Data Center Operations staff can open these cabinets to allow access to the equipment. They can unlock and open only the cabinet(s) containing the device(s) in the authorizing documentation.

The following steps will be taken for authorized access to Data Cabinet(s):

- 5.3.2.1 The person performing the work will present the authorizing documentation to the Data Center Operations staff and sign in on the Visitors’ Log.
- 5.3.2.2 Data Center Operations staff will verify the authorizing documentation, and the authorization of the person presenting such documentation.
- 5.3.2.3 If authorization is correct, the Data Center Operations staff will sign out the appropriate key(s), escort the person to the appropriate cabinet(s) and unlock appropriate cabinet(s).
- 5.3.2.4 The authorized person will perform his/her tasks, notifying Data Center Operations staff when work is complete.
- 5.3.2.5 The Data Center Operations staff will return, inspect and lock the cabinet(s) when the work is completed.
- 5.3.2.6 Data Center Operations staff will return the key(s) to the lockbox and sign them back in.
- 5.3.2.7 The person who performed the work will verify completion of the tasks performed, sign out on the Visitors’ Log, and leave the Data Center.

6.0 EXCEPTIONS:

Any Organization seeking an exception to this standard must follow the Information Technology Policy and Standards Exception Request Process using the Policy and Standards Request form. This form can be found on the Office of Information Resource Management policies and procedures Web page at <http://kcweb.metrokc.gov/oirm/policies.aspx>.

7.0 RESPONSIBILITIES:

7.1 System Owner

7.1.1 This is the only person who can authorize direct physical access to specific systems. Each department or agency with computing equipment located in the Data Center must have a responsible manager delegated to this role, to authorize access to that group's computing equipment.

7.2 King County Data Center Manager

7.2.1 This is the person responsible, with a designated backup, for the administration of access control process and procedures for the King County Data Center.

King County IT – Request Process for Data Center Services

For customers needing services from the Data Center, such as adding new hardware, removing old systems, upgrading systems or doing “Equipment Replacement,” please follow the procedures described below. The process begins by filling out a **Data Center Change Request** (DCCR) form, available at the following location.

(<http://kcweb.metrokc.gov/oirm/services/nso/datacenter/DataCenterChangeRequest.docx>)

- The Customer starts by submitting the **DCCR to: DCCHANGE@kingcounty.gov**. Once the Data Center staff receives the DCCR, they will log the change, assign a tracking number and send an acknowledgement to the customer within 1 business day.

Requests for Standard Equipment Setup

Standard Equipment is defined as computing devices that arrive at the Data Center ready for installation, being rack-mountable, and needing only standard power, network and management connections. The current server standards guidelines are available at the following location.

(http://kcweb.metrokc.gov/oirm/governance/policies/King_County_Data_Center_Device_Selection_Guidelines.pdf)

- Space will be prepared and ready to receive equipment within 3 business days from the DCCR acknowledgement. Equipment will be installed and in a Production ready state for customer use within 3 business days of the equipment’s arrival.

Requests for Non-Standard Equipment Setup

Non-standard Equipment is defined as computing devices that are (1) delivered to the Data Center directly from the seller/manufacturer, needing to be uncrated, assembled and configured prior to installation; or (2) computing devices which require additional planning, connectivity and setup activity to meet performance requirements.

- Equipment arriving at the Data Center in original shipping packages will be uncrated, assembled, and installed in prepared cabinets to the extent possible within 5 business days of its delivery.
 - "Extent possible" means that completing this work requires that all the correct components are delivered. Missing components or incorrect components will cause a delay.
- Requests for non-standard setups requiring additional planning and setup activities will vary depending on the complexity of the setup. Completion date will be negotiated, based on circumstances. Some elements that make up non-standard setups are:
 - Requirement for Firewall access
 - Special IP addressing needed (usually for web access)
 - SSL Certifications needed
 - Complex network setups

Every effort will be made to ensure a quick and straight-forward implementation of any customer computing equipment. In those cases where a customer’s requirements are complex and require

planning between the Data Center team and the customer, the customer's needs are paramount for any agreed-upon configuration or architecture changes.

Data Center Address

For those departments and agencies that have equipment delivered to the Data Center directly from the vendor/manufacturer, it is important the shipper have the correct "Ship To" address.

King County Data Center
3355 S. 120th Place, Suite 5201A
Tukwila, WA 98168
206.263.8100

Customer Responsibilities

The customer agency is responsible for the delivery of the computing devices to the Data Center. Data Center staff can offer assistance to customers if requested.

All devices installed at the Data Center must have a **King County Asset Tag** and be entered into the King County Asset Management system. The customer agency is responsible for the registration of the devices into the system and providing tags for the devices.

Alternate Data Center (ADC)

Data Center staff schedule activity at the ADC on the second and fourth Thursdays of each month. Customers needing work done at the ADC should schedule their activity with Data Center staff on these dates. Any installation, removal or upgrade activity needs to be scheduled prior to any work being done.

This page is intentionally left blank

Proviso Response Component 3

This page is intentionally left blank

King County IT – Data Center Relocation Phase 2 Work Plan Overview

Scorecard Overview

The Data Center Relocation Phase 2 Scorecard is a roll-up view of inventory data received from the Executive Branch and Separately Elected agencies, overall relocation status, planned move quarter, and server plan numbers.

The matrix below gives a brief description of each of the components of the scorecard:

Scorecard Component	Description
Agency	The Executive Branch or Separately Elected agency – these are the customers of the Data Center Relocation Phase 2 project.
Status	Red, Yellow, Green status with regards to move planning progress, inventory collection, etc...
Commitment to move to Sabey	Indicates if each agency has given a commitment to move candidate devices to the King County Data Center at Sabey in the Phase 2 relocation project.
Inventory Complete	Indicates if the agency has provided the Phase 2 project team a complete list of devices and required details for equipment not currently hosted at the King County Data Center at Sabey.
Planned Move Quarter	The quarter in 2011 the agencies devices are currently planned to be moved.
Move	The total number of servers that will be moved to the King County Data Center at Sabey in the Phase 2 relocation project.
Decom	The total number of servers that will be decommissioned by the agency rather than being moved to the King County Data Center at Sabey.
Virtualize	The total number of servers that will be converted to virtual machines by the agency. Once converted the physical servers will be decommissioned.
Remain\Inventory	The total number of servers the agency is not moving in the Phase 2 relocation project. Please see attachment 10 and 10a of the proviso response for justifications.
Complete To Date	The total number of servers moved, decommissioned, or virtualized during Phase 2 of the DC Relocation project to date.

King County Sabey Data Center Report

Phase 2 Total

The total number of servers under consideration for Phase 2 of the DC Relocation project. All known servers owned by agencies outside of Sabey.

Number at Sabey

The total number of servers currently hosted in the King County Data Center at Sabey. These servers were either moved in Phase 1 or Phase 2 of the relocation project or have been installed directly in the facility.

Data Center Relocation Phase 2 Scorecard

Agency	Status	Commitment to move to Sabey (Y/N)	Inventory Complete (Y/N)	Planned Move Quarter	Phase 2 Device Plan					Phase 2 Device Counts			
					Move	Decom	Virtualize	Remain	Inventory	Complete To Date	Phase 2 Total	# At Sabey ²	
Executive Branch													
OIRM	G	Y	Y	Qtr 1	0	0	0	0	0	2	2	284	
DAJD	G	Y	Y	Qtr 2/3	7	2	0	1	0	0	10	2	
DNRP	G	Y	Y	Qtr 3/4	65	2	0	88	0	0	155	3	
DCHS	G	Y	Y	N/A	0	0	0	0	0	0	0	29	
DDES	G	Y	Y	Qtr 1/2	0	4	8	0	0	7	19	8	
DPH	G	Y	Y	Qtr 2/3	15	1	0	5	0	0	21	103	
DOT	G	Y	Y	Qtr 3/4	42	68	0	73	0	0	183	13	
DES	G	Y	Y	Qtr 1/2	27	16	3	1	0	17	64	86	
Total Executive Branch					156	93	11	168	0	26	454	528	
Separately Elected													
KCSO/AFIS	G	Y	Y	Q2/3	0	2	1	0	0	11	14	31	
KCSO/non-AFIS	G	Y	Y	TBD	61	20	17	0	0	8	106	6	
KCSO/RCECC ²	Y	N	Y	NA	0	0	0	47	0	0	47	0	
DJA	G	Y	Y	Qtr 2/3	23	26	0	19	0	0	68	29	
KCSC	G	Y	Y	Qtr 3/4	10	0	12	5	0	4	31	1	
PAO	Y	N	Y	TBD	1	0	0	14	0	0	15	0	
KCDC	G	Y	Y	Qtr 1/2	11	1	0	3	0	2	17	23	
DOA	G	Y	Y	Qtr 2/3	5	0	2	0	0	6	13	1	
Elections	G	Y	Y	Qtr 1/2	2	2	0	8	0	0	12	6	
KCC	Y	Y	N	Qtr 1/2	4	2	0	3	0	0	9	2	
Total Separately Elected					117	53	32	99	0	31	332	99	
GRAND TOTAL					273	146	43	267	0	57	786	627	
1. Data Center inventory as of 03-25-2011 + Phase 2 Complete 2. Device count based on Nov 1 letter from Captain DJ Nesel to Sheriff Rahr (minus OEM, KVM, Monitor, Modem, Printer, and PC)													
				Proposed Move Quarter					Scorecard Quick View				
Status Legend				Q1/2 Move	44				Agency Inventory Complete		94.4%		
Green - Full Commitment = Yes, Inventory = Yes				Q2/3 Move	50				Devices Committed for Move to Sabey, Decom, or Virtualization		62.2%		
Yellow - Full Commitment = Y, Inventory = No (or reverse)				Q3/4 Move	117				Phase 2 Complete (Of Devices Committed to Move, Decom, or		13.2%		
Red - Full Commitment = No, Inventory = No				Move TBD	62								
				Phase 2 Complete	57								

This page is intentionally left blank

Proviso Response Component 4

This page is intentionally left blank



**King County
Office of Information
Resource Management**

King County Executive Office
CNK-EX-0600
401 Fifth Avenue, Suite 600
Seattle, WA 98104
206-263-7997 Fax 206.296.7608
TTY Relay: 711

July 11, 2011

TO: Dow Constantine, County Executive
Executive Office

FM: Bill Kehoe, CIO, Office of Information Resource Management
Kathy Brown, Director, Facilities Management Division

RE: Response to proviso component 4, Justifications for Servers not relocating to the King
County Data Center at Sabey (CIP Project Number 377219)

In an effort to implement King County policy regarding server consolidation and energy conservation, as well as to respond to a 2011 Budget proviso, the Office of Information Management (OIRM) and the Facilities Management Division (FMD) have embarked upon a joint effort to locate all decentralized servers in King County government, and make a determination whether or not there are sound technical reasons for making exceptions to the policy that calls for server consolidation. We have found that, although policy direction calling for centralization is clear, there are a multitude of reasons that various departments and agencies believe their servers cannot or should not be centralized.

Although the King County Data Center at Sabey was sized to fully house all servers centrally, and adopted policy envisions full server consolidation, there are some exception cases where technical considerations warrant continued decentralization of servers. Our team of experts has identified the following three general types of situations that support retaining servers outside of the King County Data Center:

1. Critical proximity-to-function requirements. For example, the 911 servers located at the Regional Communication and Emergency Coordination Center (RCECC) are physically tied to the Public Safety Answering Point (PSAP). Relocating these servers could jeopardize E-911 and Life Safety and support of Life/Safety.
2. Planned Move to the Alternate Data Center. As part of business continuity planning and emergency preparedness, King County has an Alternate Data Center currently located in

Olympia, WA. Servers with valid disaster recovery plans to move to the Alternate Data Center in the future have been granted an exemption.

3. Virtualization. We have allowed for exclusion of servers with decommissioning or virtualization plans in place, as those servers will be removed from current locations in the near future.

The enclosed matrix contains the agency name, device quantities, and justification provided by each agency for exclusion from the Phase 2 Data Center Relocation project. The matrix also indicates whether or not we believe the provided justification is sufficient for us to grant an exception to adopted policy, and justify such an exception to the County Council in our proviso response. In cases where we concur that servers should remain outside of the Data Center at Sabey, further evaluation will be done to determine whether or not these decentralized servers can at least be consolidated by facility to reduce energy costs.

For those cases where we do not feel there is adequate support for decentralized servers, but individual departments or separately elected entities wish to pursue the matter, we have created an appeal process. Department heads or separately elected officials will have an opportunity to make their cases to Fred Jarrett and Dwight Dively, prior to final Executive determination whether or not their request to retain decentralized servers will be approved.

The KCIT PMO team assigned to the relocation project will continue to work with each agency on solutions for the servers being left in place, but at this time the list above has been exempted as indicated from the scope of Phase 2 of the Data Center Relocation Project.

Sincerely,

Bill Kehoe,
CIO, Office of Information Resource Management

Kathy Brown
Director, Facilities Management Division

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
Department of Adult and Juvenile Detention	2	7	1	1	0	This server runs the voice mail/call transfer system for all public telephone calls to the jail. It is physically hardwired into the buildings telephone cabling and cannot be relocated. (Agree)
Department of Natural Resources and Parks	3	65	88	88	0	<p>88 not movable due to business operations requirements (connection to truck scales, wastewater plant operations, lab operations, etc.) detailed below.</p> <ul style="list-style-type: none"> 7 devices – Active Directory Domain Controllers: site specific, required for business continuity in the event of a network failure. In order for our sites to function in the event of a WAN outage, each site must contain an Active Directory domain controller that is both a global catalog server and running DNS. These requirements have been tested, and proven during a WAN outage at the West Point Treatment Plant. There are 3 domain controllers at King Street because we have separated the domain controller FISMO roles. (Agree) 10 devices – Environmental Lab Operations: connectivity to laboratory instrumentation. (Agree) 1 device – Parks Video Surveillance, server connected to video surveillance at the King County Aquatics Center. (Agree) 32 devices – Solid Waste Operations and Video Surveillance, operations servers are directly connected to the Transfer Station scale/cashiering system, and video surveillance systems are connected to cameras. (Agree) 3 devices – DNRP site specific, required for business continuity & hot spare recovery systems. (Agree – Based on

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
						<p>commitment to move Business Continuity\Disaster Recovery environment to the new ADC in 2012)</p> <ul style="list-style-type: none"> 35 devices – WTD Plant Operations: systems located at treatment plants. Of the 35 servers, 5 can be considered file/print. However, the treatment plants MUST operate 7x24x365, regardless of WAN connectivity (yes, it does go down, most recently at West Point). Therefore, we are not planning to move these servers; staff members working at the plants need access to their data. (Agree)
Department of Public Health	103	15	5	5	0	<p>Excluded devices are part of Disaster Recovery/ Business Continuity or are connected with T1.</p> <ul style="list-style-type: none"> 2 devices – Medical Examiner’s Office servers for X-rays and Autopsies. (Agree – Based on commitment to move Business Continuity\Disaster Recovery environment to the new ADC in 2012) 3 devices - File and Print servers are located at the 3 clinics that operate solely with a T1 data connection. Currently, upgrading the data connections to I-Net are not a financially viable priority for Public Health. (Agree)
Department of Transportation	13	42	73	73	0	<p>Justification of not moving:</p> <ul style="list-style-type: none"> 4 – Access Control Systems must reside locally to ensure emergency access capability during WAN outages. Currently no backup to these systems. (Agree) 67 Radio system related servers. Must be directly connected on site to radio antenna tower infrastructure. Would cost millions to reconfigure radio antennas to terminate at Sabey. (Agree)

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
						<ul style="list-style-type: none"> 2 – Servers not at a County facility or on County network. Jointly maintained with FAA in FAA data center located at SeaTac at no cost to the County. (Agree)
Department of Executive Services	86	30	1	1	0	1 device remaining. <ul style="list-style-type: none"> 1 OEM file/print server remaining at RCECC for access in case of emergency activation or disconnected from WAN. (Agree) 47 servers at RCECC.
King County Sheriff /RCECC and E-911	0	0	47	47	0	<ul style="list-style-type: none"> Servers housed within RCECC server room are integrated with the 911 telephone system and KC Radio System and are the core of what the Communications Center runs on. This is an operational necessity based on the critical nature of the functions they serve. (Agree – Justification accepted based on the list provided in the 11/1/10 letter from Capt DJ Neisel to Sheriff Rahr.) In the RCECC server room there are 33 servers and associated equipment. 9 of the servers and associated equipment are components of the countywide Enhanced 911 system that must be located on site at this Public Safety Answering Point (PSAP). The remaining servers and associated equipment are components of systems that are connected to the answering and handling of the 911 calls, and must be integrated and co-located with the Enhanced 911 system equipment in the PSAP equipment room. These systems include: the PBX telephone system that processes the 911 calls; the Computer Aided Dispatch system that coordinates the dispatch of emergency responders to the 911 calls; the reader boards that display the status of the 911 calls; and the network clocks that

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
						synchronize the times in the equipment at all of the PSAPs in the countywide Enhanced 911 system. In the Radio equipment room there are two servers and other equipment that are components of the countywide Regional Radio System, used for communication between the PSAPs and their police, fire and EMS responders. All of this equipment is part of the countywide public safety emergency response system, and is critical for the life safety of the citizens of King County. (Agree)
Department of Judicial Administration	29	23	19	19	0	19 Devices remaining in current location <ul style="list-style-type: none"> Disaster recovery environment is located in the Adler building (YSC Server Room). (Agree – Based on commitment to move Business Continuity\Disaster Recovery environment to the new ADC in 2012)
King County Superior Court	1	22	5	5	0	5 servers remaining in current locations for Disaster Recovery <ul style="list-style-type: none"> We plan to keep some servers in their current location for purposes of disaster recovery mitigation. We are uncomfortable putting all of our servers in one location this year but we will consider moving the remaining in future years. (Agree – Based on commitment to move Business Continuity\Disaster Recovery environment to the new ADC in 2012) We will be virtualizing and retiring physical servers as part of our preparation to move to Sabey this year, so it will be completed by November. (Agree)
Prosecuting Attorney's	0	1	14	0	14	<ul style="list-style-type: none"> See page 72 (Memorandum: PAO Servers and Sabey Center Migration) from David Ryan, PAO IT Director

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
Office						<ul style="list-style-type: none"> FMD and KCIT worked diligently with all King County departments and separately elected officials to come to an agreement as to whether or not servers should remain in their current locations or move to the King County Data Center. After extensive technical research and customer outreach, all departments and separately elected officials are in agreement with the Executive regarding which servers should remain decentralized, with the exception of the King County Prosecuting Attorney's Office (PAO). In the PAO, there are 14 servers where there remains disagreement regarding server centralization versus decentralization. The Prosecuting Attorney and the Executive have reached agreement on how to resolve this issue. <p>The 14 decentralized PAO servers that do not meet the KCIT/FMD justification for staying out of the King County Data Center are not going to be virtualized any time soon and they do not have to be physically connected to any operating system. The PAO is concerned about the risk of moving to the KCDC. The Executive is confident that the KCDC is safe; in fact, KCIT and FMD technical experts believe the servers are at greater risk where they currently are as their current space does not have the same dual fiber redundancy, redundant mechanical and electrical systems and closed circuit TV monitoring and biometric dual authentication access for security.</p> <p>As a compromise the Executive and Prosecutor have agreed to move one PAO server from the MRJC as a "pilot" move. Both entities will monitor the reliability and success of the server at the</p>

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
						<p data-bbox="422 189 584 945">new King County Data Center location. An email from Leesa Manion to CIO Bill Kehoe and FMD Director Kathy Brown, dated April 19, 2011, provided the following to be included in this proviso response:</p> <p data-bbox="617 231 990 861">The PAO has immediate plans to host its primary MRJC server at the Sabey Center, along with the mainframe that supports its PROMIS database. The PAO will consider a phased approach to hosting additional servers at Sabey, conditioned upon successful remote access to and maintenance of all essential PAO server functions by its computer services section, located primarily in the King County Courthouse.</p> <p data-bbox="974 315 1494 945">The PAO appreciates the efficiency goals surrounding centralized server storage at Sabey, and believes that it makes sense for this centralization to begin in the Executive Branch. As an office lead by separately elected official, Dan Satterberg and the PAO are directly accountable to the public. It is essential that the PAO maintains the operational autonomy necessary to ensure public safety, as set forth under state law and mandates. At the present time, keeping some of its 14 servers on-site at the King County Courthouse and at the King County Administration Building in two 6'x6'</p>

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
King County District Court	23	11	3	3	0	<p>(approximately) windowless closets ensures that the PAO's dedicated IT experts will be able to adequately support the PAO's priorities and business practices by maintaining the ability to instantly respond to any server malfunctions without driving to the Sabey Center. After the PAO has sufficient and successful experience maintaining its essential server functions remotely, then it will begin a phased approach to locating additional servers at Sabey.</p> <p>3 servers remaining in current locations</p> <ul style="list-style-type: none"> 2 Servers - We have our Disaster Recovery System for DCoR (Server and SAN) stored at MRJC. This is replicated from the primary data center (PDC) (Sabey) to this location and will be moved to an alternate data center in 2012. (Agree – Based on commitment to move Business Continuity/Disaster Recovery environment to the new ADC in 2012) 1 Server - The imaging server, is a standalone, non-networked server used to image their PCs, via direct connect. This is not a candidate for the Sabey Data Center. (Agree)
Elections	6	2	8	8	0	<ul style="list-style-type: none"> Five servers at King County Elections' facility must be located on site. These servers are part of our tabulation system and are not permitted to be connected to any external network. (Agree) One server (IVR support) located at the Admin building. This server is due for replacement. Elections and OIRM are in discussions on how best to replace this server. Future

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
King County Council	2	4	3	3	0	<p>location for new server dependent on ongoing discussions concerning telephone requirements. Intent is to locate at Sabey if at all possible but depends on ability to service with correct telephone service. (Agree)</p> <ul style="list-style-type: none"> Two old servers have been retained at King County Elections' facility for testing and development. These are servers that have been replaced at Sabey and are in unsupported mode and will be disposed of if they fail. (Agree) KCTV has 1 equipment room on the 10th floor that houses all of their production video equipment including 1 server that supports their SAN and backup system. The SAN cannot move as it is connected via fiber channel to hosts on the 10th floor. The server cannot move as it is used to manage the SAN and back up SAN data via fiber channel. The KCTV SAN provides storage for KCTV video files used in editing and broadcast. It is connected via fiber channel to KCTV editing workstations and other computers used in recording and broadcasting KCTV content. Fiber channel is needed to provide the speed necessary to quickly transfer large video files. Video and other KCTV files used in recording and broadcasting. The data is accessed by 8 computers connected via fiber channel. All our data is backed up to protect against loss. The data is retained for 3 weeks nominally. (Agree)
King County Sheriff's Office/non-AFIS	6	78	0	0	0	<ul style="list-style-type: none"> All devices planned to be moved or virtualized.
King County	31	1	0	0	0	<ul style="list-style-type: none"> 1 device being converted to VM and 2 devices to be

King County Sabey Data Center Report

Agency Name	# of Devices already at Sabey	# of Devices Moving or being Virtualized	# of Devices not Moving	# of Devices We Agree Can Stay	# of Devices We Disagree Can Stay	Agency Provided Justification
Sheriff's Office/AFIS						decommissioned.
DOA	1	7	0	0	0	<ul style="list-style-type: none"> All 7 devices planned to be moved or virtualized.
DCHS	29	0	0	0	0	<ul style="list-style-type: none"> All devices already at Data Center at Sabey.
DDES	8	8	0	0	0	<ul style="list-style-type: none"> Remaining 8 devices planned to be moved or virtualized.
OIRM	284	0	0	0	0	<ul style="list-style-type: none"> All devices already at Data Center at Sabey.
Total	627	316	267	253	14	

Memorandum: PAO Servers and Sabey Center Migration

DANIEL T. SATTERBERG
PROSECUTING ATTORNEY

Dave Ryan
IT Director



Office of the Prosecuting Attorney
W400 King County Courthouse
516 Third Avenue
Seattle, Washington 98104
(206) 296-9487
FAX (206) 296-9013

18 March 2011

MEMORANDUM

TO: Cheryl Boudreau, KCIT Project Manager - Sabey Center Server Migration

FROM: Dave Ryan, PAO IT Director

SUBJECT: PAO SERVERS AND SABEY CENTER MIGRATION

The PAO looks forward to KCIT's continued success at Sabey Center hosting many services critical to our office's operations, including: SQL Server, Mainframe (PROMIS), Outlook, KC Financials/PeopleSoft, and KC's Electronic Records Management System (ERMS – formerly CARMS). PAO will continue to internally maintain about a dozen smaller but nonetheless important servers performing such functions as Domain Controller, Print Server, customized Macro Library for formatting legal documents in Microsoft Word, and File Server. Several upcoming Enterprise Applications will take over many of the functions of current internal servers. For example, our aged mainframe Case Management System (CMS), PROMIS, has no document management capabilities. All of the leading CMS vendors now include document management functions on SQL or Oracle servers which KCIT would host at Sabey Center, relieving much of our use of PAO internal servers for case document files and macro libraries. Similarly our county continues work towards improvements to the ERMS system with a goal of reducing the PAO's reliance on internal file server storage.

The small remainder of internal servers are physically available to qualified PAO IT staff to instantly respond to malfunctions, such as a failed drive, according to the PAO's most immediate priorities. These take up very little secured space within our own Courthouse Complex and MRJC offices. On the other hand, moving them to Sabey Center does not provide any benefit to PAO. On the contrary, it adds a one to two hour round trip to any hands-on activity involving our technicians. Perhaps in the future, that could be mitigated by asking KCIT technicians to provide the same services on our behalf after demonstrating success in similar arrangements with other agencies over time. In the meantime, PAO acquired a rack mount server and would now like to set it up in Sabey Center to gain experience with running a server in the remote location to further evaluate future migration.