

Planned Procurement Schedule Instructions

September 2010

Texas House Bill 1516 instructs the Department of Information Resources (DIR) to collect information on the planned IT commodity procurement schedules for state agencies and gives DIR the responsibility of approving data center and disaster recovery service and maintenance expenditures. DIR worked with state agencies and developed the Planned Procurement Schedule (PPS) to address both charges.

Due to Texas House Bill 1705 of the 81st Legislature, which amends Chapter 2054 of the Texas Government Code to allow DIR to require an agency to submit a planned procurement schedule for commodity items if DIR determines that the information provides a benefit to the state, DIR has **removed** the *IT Commodity Schedule* from the PPS worksheet for the September 2010 submission.

The information agencies provided in previous submissions has resulted in lower prices through contract negotiations with vendors for IT commodity goods and services. The September 2010 PPS process will focus on consolidated purchasing and adding value to future procurements.

The next PPS submission is due September 30, 2010. E-mail your completed schedule to DIR at pps@dir.state.tx.us.

For the September 2010 submission, you need your last approved PPS (March 2010 submission) and a blank Planned Procurement Schedule from the DIR Website at:

<http://www2.dir.state.tx.us/Pages/pps.aspx>

This document contains the following information:

- Submission Information
- September 2010 PPS Instructions
- Definitions
- Supplemental PPS Instructions for the DCS Schedule

SUBMISSION INFORMATION

DUE DATES

Submission of the Planned Procurement Schedule is based on a rolling 12-month reporting period.

- September 30, 2010: September 1, 2010 through August 31, 2011
- March 31, 2011: March 1, 2011 through February 29, 2012
- September 30, 2011: September 1, 2011 through August 31, 2012

SUBMITTING THE SCHEDULE

Final submission to DIR will be one MS Excel workbook containing two worksheets: *Agency*

Information and Data Center Schedule.

Exception: The state agencies that are participating in the data center consolidation effort will submit one MS Excel workbook with three worksheets: *Agency Information, Data Center Schedule, and DCS Schedule.*

Each agency's Information Resources Manager (IRM) is responsible for filing the schedule by the deadline and should consult other agency staff as necessary to provide complete information. The agency's CFO is responsible for reviewing the information for consistency with other documents submitted by the agency.

QUESTIONS AND CONTACTS

For questions regarding preparation or submission of the PPS or amendments, please e-mail pps@dir.state.tx.us

For questions about specific schedules:

Data Center Schedule and/or DCS Schedule: Wendy Mazzurana at wendy.mazzurana@dir.state.tx.us.

SUBSTANTIVE CHANGES / AMENDMENTS

House Bill 1516 requires that DIR, the Legislative Budget Board (LBB), and the State Auditor's Office (SAO) be notified if a state agency makes a substantive change to its planned procurement schedule. Agencies can e-mail their amended PPS to DIR, and DIR will notify the LBB and SAO.

Substantive change is defined as

- any change to *Data Center Schedule* items that increases or decreases the **Total Cost** of any row by 10% or more. The 10% threshold applies to all Data Center item categories.
- any change to *DCS Schedule* items that are an increase or decrease in the hardware or software resource units being tracked through this specific schedule.

Examples: Substantive Change in the Data Center Schedule

- If you planned to purchase less than \$100,000 on servers but change that plan and will purchase \$100,000 or more, add a row to reflect meeting the \$100,000 threshold.
- If you planned to purchase \$100,000 on personal computers, but change the plan to show a \$10,000 (10%) decrease in the projected purchase amount, add a row to reflect the reduction in the projected amount. Enter the reduction as -\$10,000 in dollars purchased with a corresponding reduction in quantity.
- If you planned to purchase \$140,000 on servers, but change the plan to show a \$14,000 (10%) increase in the projected purchase amount, add a row to reflect the increase in the projected amount. Enter the increase as \$14,000 in dollars purchased with a corresponding increase in quantity.

Examples: Substantive Change in Data Center Schedule

If your agency needs to proceed with any planned data center expenditure that has not been approved by DIR on a previous schedule, then you need to update the schedule and submit it to pps@dir.state.tx.us prior to the next regularly scheduled submission date.

Add a new row within the appropriate category for each change.

- If you planned to increase server instances by 2 servers, but change that plan to 5 servers, add a row to reflect the additional 3 server instances.
- If you planned to decommission 2 servers, add a row to reflect the reduction of 2 servers. Enter the units as -2.

September 2010 PPS INSTRUCTIONS

The September 2010 submission is based on your last approved Planned Procurement Schedule. It will consist of an MS Excel workbook containing two worksheets: *Agency Information* and *Data Center Schedule*; these instructions pertain to the Data Center and DCS Schedules only. The agencies participating in the data center consolidation will additionally have a third worksheet, the *DCS Schedule*.

- Begin the submission process with your latest approved version (March 2010) of the PPS workbook.
- Review and edit the *Agency Information* worksheet as needed.
- On the *Data Center Schedule* worksheet, the approval history relating to the quarters being reported must be preserved. You must start with your last approved copy of the *Data Center Schedule* worksheet.
- Delete FY10 Q3 and Q4 columns from the last approved *Data Center Schedule* worksheet.
- Add FY11 Q3 and Q4 columns.
- Remove rows that are no longer relevant to the quarters being reported. To retain a line item for future use, clear the cells in **Capital v. Non-Capital Total** and the old approval information.
- All Schedules:
 - Each worksheet should include only four quarters FY11 Q1, Q2, Q3 and Q4.
 - Complete the Date, Agency Name, and Agency # / Acronym fields at the top of all schedules.
 - The Date field at the top of each worksheet should reflect the date of submission. For an amended schedule, this should be the amendment date.
 - Provide input in the blank cells only. Shaded cells are either computed automatically or are intended to be empty.
 - Column Descriptions with details for completing the *Data Center Schedule* follow this section.
- *Data Center Schedule*:
 - Requires the same content and format as the previous submissions. Refer to the following table for sample revision scenarios.
 - Do not edit or add to any line item that has already been approved.
 - New information that requires Data Center approval must be on a new line.

- Add rows as needed (Verify that formulas in the shaded cells extend to any added rows).

DCS Schedule:

- Requires the same content and format as the previous submission.
- Do not edit or add to any line item that has already been approved.
- New information that requires Data Center approval must be on a new line.
- Add rows as needed (Verify that formulas in the shaded cells extend to any added rows).
- Details on completing the *DCS Schedule* are provided in the section “Supplemental PPS Instructions for the DCS Schedule.

Sample Revision Scenarios (Data Center Schedule only)		
Data Center Schedule Scenario	Action	Change Indicator?
Line item only had quantities for FY11 Q1 & Q2	Delete the row if not needed. To keep the line item as a placeholder for future use, leave in, and clear the cells in columns H through N.	No
Existing line item with quantities in FY11 Q1 or Q2, and adding quantities to FY11 Q3 or Q4	Make no edits to existing row with Q1 and/or Q2 information already approved. Add information for FY11 Q3 and/or Q4 as a new row.	Yes
Purchase of approved items for FY11 Q1 or Q2 (the columns being deleted) moves to FY11 Q3 or Q4.	Enter the previously approved quantities in appropriate quarter(s) and note expenditure timing change in comments	Yes
Existing line item where quantities, costs, or timing is changing.	Make no edits to existing row. Add new row(s) and show the changes as reversing entries, using negative quantities to remove and positive quantities to add.	Yes
Old line items that cancel each other out (due to amendments).	If the net effect of the two lines is zero, delete both lines.	No
New line item	Add rows as needed.	Yes

Information regarding your agency’s estimated planned purchases will be used by DIR for planning and negotiation purposes only. Agencies will continue to submit purchase orders for actual purchases.

DIR may contact agency IRMs at a later date with targeted purchasing opportunities that result from the PPS schedule analysis.

ADDITIONAL NOTES

Zero Submissions – If you have no information to report on the *Data Center Schedule*, submit a PPS workbook with the *Agency Information* worksheet completed and a notation that it is a “zero submission” in the PPS Submission Log at the bottom. On the *Data Center Schedule* worksheets,

make sure the agency information (Agency Name, Agency # / Acronym) is completed at the top and include the notation “zero submission” in the **Additional Comments** section at the bottom. This does not apply to the *DCS Schedule*.

COLUMN DESCRIPTIONS – DATA CENTER SCHEDULE

Agency #

Required. Make sure each row contains your unique agency code in this column.

Agency Use

Optional. You can use this column to allocate / track each commodity line item to a given business area or department within the agency or for internal notes.

Line Code

Required. Each row with data must contain a line code. If you insert a new line item into the PPS, enter a code for the new item.

Data Center Schedule

- DCEX - Data Center Facility Expenditures
- DR - Disaster Recovery
- EPRT - Enterprise Printers
- HARD - Server / Mainframe Hardware
- HRDM - Hardware Maintenance
- NOTD - Additional Comments (Data Center)
- OUTS - Outsourced Data Center Services
- PERI - Server Mainframe Peripherals
- OTHR - Other Major Commodity Items
- SOFT - Server / Mainframe Software

A - Chg* (Change)

(Required) Enter an “X” for any line item you change/insert in the PPS.

B - Category & Item

The most frequently procured items are listed. Use the Comments column (K) to provide more detailed information, if necessary. DIR evaluates the categories prior to each submission and determines if items should be added or removed from the schedule.

Agencies will be provided sufficient advance notice of any changes.

Data Center Schedule Add additional rows, as necessary. For servers or mainframes, describe the model, class, processor, speed, amount of memory, and number of processors in the server or mainframe.

- **C - Procurement Type**
Required. Use the following codes to indicate the type of procurement.
 - P - Purchase
 - LN - Lease / New Contract
 - LE - Lease / Existing Contract
 - SN - Seat Management / New Contract (Data Center Schedule only)
 - SE - Seat Management/ Existing Contract (Data Center Schedule only)
 - MN - Managed Service / New Contract (Data Center Schedule only)
 - ME - Managed Service / Existing Contract (Data Center Schedule only)

D - Units Purchased By Quarter

Report estimated number of units you will order in corresponding quarter(s).

Grand Total (E - G)

E - Total Qty

Computed automatically. Total Qty is sum of quarterly columns in area D.

F - Unit Cost

Enter the unit dollars for each row item in Unit Cost.

G - Total Cost

Computed automatically as a function of Total Quantity (E) x Unit Cost (F). Note: For the formulas to work properly, you must supply a quantity and unit cost for each row (item). In some cases the quantity will be 1 (placeholder to make the formula work) or the unit cost will be an average or mathematically derived factor (also a placeholder).

Capital v. Non-Cap Total (H - J)

Allocate the Total Cost (G) dollars between Capital Budget (H) and Non-Capital Budget (I) expenditures.

H - Capital Budget

Enter the capital budget expenditures.

I - Non-Cap Budget

Enter the non-capital budget expenditures.

J - Cap/NonCap Dollars

Computed automatically. Represents the total of capital and non-capital budget dollars. Cap/Non-Cap Dollars (J) should equal Total Cost (G).

K - Comments

(Labeled Justification/ Comments in Data Center Schedule)

Provide the start and end dates for all contracts (i.e., lease, seat management, and contracts for disaster recovery services and other outsourced data center services).

If there is a significant variance in the Method of Finance (MOF) from the percentages listed in the MOF chart in the Agency Information worksheet, provide the percentage for the IT commodity item in this column.

This column is also to be used for any comments. **Data Center Schedule** - Provide a justification for any line item exceeding \$5,000. Include explanation of what the purchase is for, why the purchase is required at this time, and what value/benefit the agency will receive.

Indicate if the item was previously included in the Inter-Agency Contract for Data Center Services.

COLUMN DESCRIPTIONS – DATA CENTER SCHEDULE ONLY

L - Approval Status

(DIR Use Only) DIR will indicate approval status (i.e., Approved, Open Item, Conditional Approval, or Disapproved) and return the form to your agency IRM within 30 days of receipt.

M - Approval Date

(DIR Use Only) DIR will enter the date associated with the Approval Status.

N - ITD Project Seq#

Enter the project sequence number from the Information Technology Detail (ITD) report submitted to the Legislative Budget Board (LBB).

CATEGORY-SPECIFIC INFORMATION

Reporting Variations of Machines

- **Data Center Schedule:** It is necessary to report the variations (models or configurations) of machines on a separate row.

Line Item Entry Guidelines

Use the following table as a guide for entering **Leased Items, Seat Management, and Managed Services.**

Guide for Entering Leased Items, Seat Management, and Managed Services		
Procurement Type (Code)	Required Details: D. (Units Purchased) Quarters	Required Details: K. Comments
Lease / New Contract (LN)	1. Input and/or insert a row for new units to be leased during the reporting period. 2. List the number of additional units in the quarter that the new lease contract will begin.	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually
Lease / Existing Contract (LE)	List the total number of units in the quarter that the contract started or the anniversary of the contract start date	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually
Seat Management / New Contract (SN)	1. Input and/or insert a row for new seats that will be added during the reporting period. 2. List the number of additional seats for each service category in the quarter that they will be added to the contract.	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually
Seat Management / Existing Contract (SE)	List the total number of seats for each service category in the quarter that the contract started or the anniversary of the contract start date.	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually
Managed Service / New Contract (MN)	1. Input and/or insert a row for new units that will be added during the reporting period. 2. List the number of additional units for each service category in the quarter that they will be added to the contract.	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually 3. indicate that these are additional units to the existing contract

Managed Service / Existing Contract (ME)	1. Input and/or insert a row for new units that will be added during the reporting period. 2. List the number of additional units for each service category in the quarter that they will be added to the contract.	1. contract start and end dates 2. payment frequency: monthly, quarterly, annually 3. provide a brief description of how units are counted
--	---	--

For a refresh in any of these categories, insert a row for planned refresh of existing units. List the number of refreshed units for each category in the quarter that they will be refreshed under the existing contract. List changes to the annual contract amount, if applicable.

ADDITIONAL COMMENTS

Use this section to describe purchases of the above items that your agency will make if funding becomes available at a later date. Examples include additional purchases that might be made if unspent funds are available at fiscal year end, or if additional grant funds are received.

DEFINITIONS

These definitions are listed in order of appearance on the **Data Center Schedules**.

Data Center

The location where servers, mainframes, or systems reside.

Standard line item

Refers to the following items provided in the PPS.

HARDWARE

The physical technology used to process, manage, store, transmit, receive, or deliver information. The term does not include software.

Servers/Mainframes

A server is a hardware component consisting of a relatively powerful computer in a multi-tier networked hardware architecture that performs significant processing and persistence of data for multiple client computers. A mainframe computer is a very large and expensive computer capable of supporting hundreds, or even thousands of users simultaneously.

Hardware Maintenance Server/Mainframe

This is the contract with the vendor/manufacturer to provide repairs not necessarily within the warranty period.

Server/Mainframe Peripherals

These are hardware devices connected to servers / mainframes that comprise a system (e.g., disk arrays, storage area networks, tape drives or tape libraries and associated controllers, and communications controllers).

SOFTWARE

Commercially available programs that operate hardware. The term includes all supporting documentation and media on which the software may be contained or stored, licenses, related materials, modifications, version upgrades, enhancements, updates, or replacements.

Server/Mainframe Software

A software license is a license fee paid for access to a program by a number of users without restriction. The license can be a new purchase or an upgrade.

Software Maintenance – Server

This is the contract to provide applications support, bug fixes, and subscription services.

Managed Services

Relates to the specialized outsourcing of certain information technology services in an endeavor to maximize performance and/or improve productivity.

Managed Network Services

An approach designed to help control network infrastructure costs by providing design, implementation, operation and maintenance of networks as a single, coordinated service designed to support the core business mission. Instead of acquiring and maintaining each piece of equipment and expertise individually, it is supplied, maintained and supported under a single plan designed specifically to meet business needs as efficiently and cost-effectively as possible.

Disaster Recovery

A plan for duplicating computer operations after a catastrophe, such as a fire or earthquake. Includes routine off-site backup as well as a procedure for activating vital information systems in a new location.

Outsourced Data Center Services

Total Data Center Outsource

An approach designed to help control data center infrastructure and operations costs by providing design, implementation, operation and maintenance of a data center as a single, coordinated service designed to support the core business mission. Instead of acquiring and maintaining each piece of equipment and expertise individually, it is supplied, maintained and supported under a single plan designed specifically to meet business needs as efficiently and cost-effectively as possible.

Business Program Outsource

An approach designed to help control service delivery costs by providing design, implementation, operation and maintenance of the IT infrastructure supporting a business program (e.g., licensing and enforcement, financial, human resources).

Mainframe/Server Outsource

An approach designed to help control data center infrastructure and operations costs by providing for the acquisition / refresh and hosting of data center infrastructure. This form

of outsourcing may be limited, with the agency retaining some responsibility and control of systems and networking support and maintenance.

OTHER MAJOR COMMODITY ITEMS: Submit requests for other IT commodity items not listed above (e.g., acquisition and installation of additional CPUs or memory for mainframe/servers).

DATA CENTER FACILITY EXPENDITURES

This includes expenditures to improve or enhance data center facilities, such as floor space and relocation, not included in the definitions of Hardware, Software, or Technology Services.

Lease of Floor Space: Includes entering or renewing a lease or rental agreement for additional floor space or facilities to house data center or disaster recovery operations.

Improvement of Floor Space: Includes the creation, expansion, or improvement of floor space, conditioned power, or conditioned HVAC for housing data center or disaster recovery operations.

Relocating Equipment: Includes all costs associated with moving data processing equipment.

SUPPLEMENTAL PPS INSTRUCTIONS FOR THE DCS SCHEDULE

The supplemental PPS instructions have been developed based on the DCS Estimating tool to address the specific expenditure review and approval process pertaining to the state agencies involved in the Data Center Services (DCS) project with DIR and the Team for Texas (IBM, Unisys, Xerox).

Agency staff preparing the *DCS Schedule* are advised to work with their internal DCS Customer Representative for assistance in correctly reporting planned expenditures for data center services being acquired through the DCS Master Service Agreement.

Questions should be directed to your assigned DIR Service Representative (Jeff Amato, Leah Folgate, Jennifer Hamilton, Ellen Harper, Michael Kersey, Jerry Noble, Lorie Ramirez, Gil Weatherford, or Lynn Whitten).

DATA CENTER SCHEDULE WORKSHEET

*Use this worksheet for agency-retained expenditures that are **out of scope** of the DCS Project.*

Software Licenses / Maintenance

Software that is *out of scope* for the DCS project but that continues to be the responsibility of the agency should be reported on the *Data Center Schedule* (the same as prior PPS submissions) and should include all software licenses and maintenance agreements.

Software that is *in scope* for the DCS project is the responsibility of the DCS service provider (IBM). These specific software licenses and maintenance agreements should not be listed on the

agency's *Data Center Schedule*.

Hardware

Hardware that is *out of scope* for the DCS project but that continues to be the responsibility of the agency should be reported on the *Data Center Schedule* (the same as prior PPS submissions) and should include all maintenance agreements.

DCS SCHEDULE WORKSHEET

*Use this worksheet for expenditures that are **in scope** of the DCS Project.*

Mainframe Tower Section

- Resource Units should be reported on a projected growth or decline basis.
- Refer to Exhibit 4D of the DCS Master Service Agreement for items to be added or reduced.
- Resource Units reported each quarter should be based on the number of units (growth / decline) projected by the end of that quarter.
- Classes of MVS CPU Hours
 - Class 1 – Full Sysplex Data Sharing
 - Deployed on and exploiting latest, i.e., “N” technology
 - Significant DB2 or IMS workload
 - Significant production DB2 or IMS application data sharing
 - Significant OLTP cross-system workload parallelism
 - Significant usage of cross-system workload balancing utilizing zOS Workload Manager
 - Few or no application affinities that limit workload balancing
 - Class 2 – Basic Sysplex
 - Little or no application DB2 or IMS data sharing
 - Qualifying characteristics for Sysplex licensing from SW vendors
 - Class 3 – Non-Sysplex
 - Stand-alone environments that are not participating in a Sysplex
 - Class 4 – Non-z/OS
 - DIR Customers running DOS/VSE

- Note: This should be driven by application growth/decline, new applications, application retirement. It is not intended to be the normal fluctuation that occurs from month to month.

Server Tower

- Server Complexity is defined in Exhibit 4 Attachment 4E of the DCS Master Service Agreement.
- Resource Units should be reported on a projected growth or decline basis.
- Refer to Exhibit 4D of the DCS Master Service Agreement for items to be added or reduced.
- Resource Units reported each quarter should be based on the number of units (growth / decline) projected by the end of that quarter.
- LAN-Attached Devices are intelligent workstations, docking stations, and printers connected to the LAN. Note: This should be driven by application growth/decline, new applications, application retirement. It is not intended to be the normal fluctuation that occurs from month to month.

Software

- Non-Infrastructure Stack – License Acquisition (estimated)
- Resource Units should be reported on a projected growth or decline basis.
- Refer to Exhibit 12A [Software] of the DCS Master Service Agreement for items to be added or reduced. Examples are provided (note #3) at the end of these instructions.
- Estimated acquisition cost should be entered into Column C (Acquisition Cost).
- Enter the number of resource units required into the fiscal quarter that the resource is needed.
- Include the Software product name in Column J, along with the Justification/Comments.
- Non-Infrastructure Stack – License Maintenance (estimated)
- Resource Units should be reported on a projected growth or decline basis.
- Refer to Exhibit 12A [Software] of the DCS Master Service Agreement for items to be added or reduced. Examples are provided (note #3) at the end of these instructions.
- Estimated acquisition cost should be entered into Column C (Acquisition Cost).
- Enter the number of resource units required into the fiscal quarter that the resource is needed.

- Include the Software product name in Column J, along with the Justification/Comments.

Hardware Service Cost

In order to effectively reflect the total cost of an increase in server instances, the Hardware Services Charge is estimated based on historical acquisition and maintenance costs.

- Application Server Maintenance (estimated)
- For each Application Servers increase indicated in Application Servers – Data Center, Application Servers – Remote Location – Urban, and Application Servers – Remote Location – Rural, you will need to estimate the server maintenance cost based on your historical annual maintenance cost
- Estimated hardware maintenance cost should be entered into Column C (Acquisition Cost).
- Enter the number of resource units required into the fiscal quarter that the resource is needed.
- Application Server Hardware Purchase Cost (estimated)
- For each Application Servers increase indicated in Application Servers – Data Center, Application Servers – Remote Location – Urban, and Application Servers – Remote Location – Rural, you will need to estimate an acquisition cost based on your historical acquisition cost.
- Estimated acquisition cost should be entered into Column C (Acquisition Cost).
- Enter the number of resource units required into the fiscal quarter that the resource is needed.
- Column G has an embedded formula that will provide the estimated quarterly cost, based on a 60-month amortization.

Outsourced Data Center Services

- DCS project funds planned to be expended
- Interagency Contract (IAC) value for FY09

NOTE 1: DIR will populate column M with an assigned identifier for each resource unit. This assigned identifier should be included in the Remedy ticket information at the time the agency submits the change request for service.

NOTE 2: Resource Unit means a measurable device, unit of consumption, or other unit or resource utilization associated with the Services, as described in **Exhibit 4**, that is used for purposes of calculating Charges, including calculating ARCs and RRCs as described in **Exhibit 4**.

NOTE 3 (Examples)

Antivirus Software - Means Antivirus Software, as such term is defined in Exhibit 1 (e.g., McAfee, Symantec AV (aka Norton), Trend Micro).

Application Software - Means Application Software, as such term is defined in Exhibit 1.

Application Utilities - System Software that provides an addition to the capabilities of Application Software or COTS that allow for dynamic tailoring of the functionality (e.g., Cognos, SAS, Filenet, ERIS ARCxxx, Crystal Reports, Citrix, SQL Editor, Webtrends).

Compilers – System Software used to convert source code to executable code (e.g., Cobol, MicroFocus Cobol).

Database Management Software - System Software used to access structured data and usually provides functionality for ad-hoc queries, data retrieval and generating reports (e.g., Oracle, Informix, SQL Server, DB2, Sybase).

Development Tools - Means Development Tools, as such term is defined in Exhibit 1 (e.g., Front Page, test data generators, Visual Basic, .Net, ColdFusion, Rational).

E-mail / Collaborative Software - System Software that enables the exchange of electronic mail and facilitates the sharing and display of information among teams of people engaged in a cooperative task (e.g., Lotus Notes, Microsoft Exchange, Novell Groupwise).

Infrastructure Management Software - Management Tools used to provide an integrated tool to manage the entire Infrastructure (e.g., Tivoli Storage Manager, Veritas Netbackup, Veritas Backup Exec, Bakbone Netvault).

Middleware - Means Middleware, as such term is defined in Exhibit 1 (e.g., Weblogic, Websphere, Mqseries, Apache, BEA Tuxedo, IBM HTTP Server).

Network Software - Management Tools that enable multiple computers to communicate with one another (e.g., Process MultiNet, Attachmate, Fluke OpitView, Primesupport Sniffer, VPN, firewall software)

Operating Software - Means Operating Software, as such term is defined in Exhibit 1, excluding Application Utilities, Compilers, Database Management Software and E-mail / Collaborative Software (e.g., AIX, HP/UX, Solaris, Windows - including embedded functionality, Netware, Linux, AS400, GCOS).

Security Software - Management Tools that are used to restrict access to the data and files on a Server (e.g., ISA, SSH, Proxy, Radius, Websense, Surfcontrol, Tivoli Access Manager).

Utility / Monitoring & Management Software - Management Tools that facilitate the management, monitoring, and performance tuning of Equipment and Software, whether located in a Data Center or remote location (e.g., IBM Tivoli Distributed Monitor, Zenworks, Microsoft SMS, IBM Tivoli Configuration, Tivoli Software Distribution, Tivoli Enterprise Console, Tivoli Workload Scheduler, Remedy suite of Software, RMS Control, Remotely Anywhere, CA vShell, SMS).

CAL - Client Access License, referring to Microsoft Corporation's name for rights that must be purchased and enabled to allow for various email/collaboration functionality on Windows-based Servers.