RECOMMENDATION

1) Approve the proposed Information Technology Infrastructure Plan;

2) Authorize the Mayor to execute the Microsoft Enterprise license and software assurance agreement included with the Information Technology Infrastructure Plan;

3) Authorize the purchase of the Dell virtual machine; and

4) Authorize staff to proceed with a bid process to replace desktop computers.

EXECUTIVE SUMMARY

(Author's Note: the Executive Summary is intended to provide the reader with 2 page overview of Staff's findings and recommendations; therefore, certain points may be repeated in the body of this Staff Report)

The majority of the City's servers and desktop computer hardware and software has reached the end of their useful life and requires replacement. The Equipment Replacement fund has accumulated sufficient funds for the orderly replacement of Information Technology ("IT") hardware and software in accordance with the Reserve Policy established by the City Council. Additionally, the replacement of the server equipment and desktop computers is essential to the successful implementation of a financial system with an integrated Enterprise Resource Planning ("ERP") system that would include permitting, work order, contract and grant management, and improve services with electronic processes.
The attached IT Plan has been developed through the collective effort of Staff, Palos Verdes on the Net ("PVNET"), engineers from Microsoft ("MS") and Cisco and has been independently reviewed and validated by Dyntek, a multi-national IT firm. A report published by Dyntek, dated October 26, 2011, is attached to this staff report.

The budgets for the Equipment Replacement fund – Computers for FY11-12 and 12-13 includes about $445,000 for the necessary replacement of hardware and software, hereafter referred to as the IT Infrastructure Plan (the "IT Plan"). The following is a bullet-point summary of the fiscal considerations:

- **Phase 1 (1st month):** The FY11-12 and FY12-13 budget in the Equipment Replacement fund – computer maintenance and services includes the provision for $46,000 for software licensing and support.
- **Phase 2 (1st – 3rd month):** The estimated cost of replacing dedicated server equipment with a Dell virtual machine is about $148,000, including a three-year 24/7 support and equipment warranty.
- **Phase 3 (3rd month):** The estimated cost of upgrading the telephone voice and messaging system is about $40,000.
- **Phase 4 (4th – 6th month):** The cost of replacement of about sixty (60) desktop computers is about $111,000 spread over two fiscal years.

Therefore, the total estimated cost for the implementation of the IT Plan is about $299,000 spread over FY11-12 and FY12-13, approximately $146,000 less than Staff expected when the City’s budget was approved by the City Council in June 2011.

The FY11-12 and FY12-13 operating budgets are sufficient to absorb the cost of the implementation of the IT Plan; therefore, no budget adjustments are necessary.

The potential energy savings that would result from the replacement of 10 servers with the Dell virtual machine is about $6,000 annually. Staff and PVNET expect that fewer servers to support will lead to a reduction of server support fees by about $27,600 annually. Based upon the combined savings, the investment in the replacement of the server equipment with a Dell virtual machine would have a complete pay-back in about 4 years. Additionally, Staff expects that desktop computer energy consumption will be reduced by about 30%.

The Quote presented by Dell for the virtual machine is based upon Dell government contract # WN99ABZ, the lowest sale price available to any government agency, as well as the public. The Quote presented by CompuCom for Enterprise Microsoft ("MS") licensing and software assurance is based upon government contract #01E69633, the lowest sale price available to any government agency, as well as the public. The goal of the competitive bid procedure, obtaining lowest cost, has been satisfied in accordance with RPVMC 2.44.050 - Use of vendors selected by another agency.

Several benefits that will result from the implementation of the IT Plan follows:

- Improve security and management of data across the network;
- Provide server failover (the transfer of the operation of a failing server to another server) for all virtualized servers and applications across the network;
Enable management of software updates to all workstations on the network from a centrally located control system;
Enable secure remote access to the City Hall network, email, voice calls and messaging from most anywhere;
Enable web conferencing that could originate from City Hall and remote sites, as well as participation in web conferences originated by other organizations;
The Software Assurance License for Windows allows the City to receive software patches and maintenance updates as well as service packs and major upgrades throughout the lifecycle of the contract;
Integration of voice and email messaging (commonly referred to as unified communication); and
A significant reduction of IT support costs for server management. Modernizing the IT infrastructure for further development of the IT System, including tools that will improve production of public information and the replacement of the Sungard accounting and business licensing system with an ERP.

In summary, the IT Plan will reduce the support effort, enable the City to maintain current versions of MS server and desktop user software and improve productivity. A more complete list of benefits is provided later in the staff report.

BACKGROUND AND DISCUSSION:

Brief Statement of Purpose - IT Infrastructure Plan (the “IT Plan”)

Like any other element of the City’s infrastructure, the IT Infrastructure needs to be periodically replaced. The core elements of the City’s IT Infrastructure: the primary server, the voice call manager and messaging servers and software and the majority of desktop computers have reached end of their useful life.

The City’s SunGard accounting and business license applications have also reached the end of their useful life. In its 2008 IT Study, Management Partners #3 Recommendation was to: “Plan and budget for the replacement of the financial system”. The replacement of the SunGard financial system is included in the FY11-12 budget and is currently in the selection stage.

The replacement of the server equipment and desktop computers is essential to the successful implementation of a financial system with an integrated Enterprise Resource Planning (“ERP”) system that would include permitting, work order, contract and grant management, and improve services with electronic processes.

Overview – Existing Information Technology System

The City’s Information Technology (“IT”) system is an array of data, video and voice information systems, operating with devices like servers, cabling, routers, switches, firewalls, desktop and laptop computers, printers, scanners, phone handsets and commercially licensed software that enable access to the City Hall network, other park sites, the public switched telephone network system and the world via the Internet. Most of
the IT system currently resides at the City Hall premises, while some equipment is in use at
Pointe Vicente Interpretive Center ("PVIC"), the RPVT studio, Hesse Park and Ladera
Linda. PVNET, the City's IT independent contractor, owns and manages certain hardware
and software (described later in this report) used to deliver services to the City. However,
al l City owned equipment is in the possession of the City pursuant to the recommendation
made by Management Partners in their 2008 IT study.

Categories of the IT System

The following is an overview of the IT System by category, including the IT Infrastructure,
which is the focus of the IT Infrastructure Plan attached to this report for approval.

Communication - Voice, email and the website

The City installed a Cisco voice over Internet protocol ("VOIP") system for phone call
management and voice messaging in 2002. The call manager and voice messaging
servers have reached the end of their useful life. A few City-owned cell phones are used
by field personnel. PVNET provides email, website and video-on-demand services to the
City using hardware and software it owns.

Desktop computers

The City owns desktop and laptop computers used by staff and independent contractors to
provide services to the City's residents. Laptop and desktop computers have an estimated
useful life that ranges between 2-4 years. Some desktop computers are dedicated for use
at public counters to serve residents and members of the public. Some desktop computers
are used by part-time staff and docent volunteers in park site offices. Most of the desktop
computers are running on the Microsoft ("MS") XP operating system and the Office 2003
productivity software suite. Certain desktop computers have Adobe Photoshop, Ascent for
computer aided drafting ("CAD"), Google Earth Pro, Cognos and Crystal report writer
software and MS Project to improve work productivity.

Data services

City staff and independent contractors use the following data systems in delivery of
services to the City's residents:

Geographic Information System ("GIS") mapping - PVNET provides GIS (mapping)
services to the City using ESRI state-of-the-art software PVNET licenses running on its
own dedicated server. The City owns all GIS aerial pictometry, videos and data files used
in the management of the City's infrastructure, project management and public
presentations. Staff expects to present a recommendation to the City Council soon to join
the countywide GIS consortium that will provide the upgrade of the GIS aerial pictometry
that is eight years old and facilitate future updates cost-effectively.

Emergency Incident Management System – PVNET developed and licenses to the City the
use of the Incident Management System that would be used during an emergency event
that requires deployment of the City's Emergency Operations Center located in the
Community Room at City Hall. The web-based system enables the data entry and process
management of each incident reported (i.e. road closure, structure fire, utility failures,
injuries), including prioritization and action required through resolution of each incident and the emergency event.

Inventory Management System – PVNET developed and licenses to the City the use of the Inventory Management System that is used to track asset inventory, location of the asset, and its disposition. The web-based system enables staff to access the system from their desktop or laptop computers.

Acella (a/k/a Tidemark) permit tracking – The City owns the server and licenses the Acella permit tracking system used by the Community Development Department for managing the building permit process. The system was acquired in 2001 and would likely be replaced with a new ERP system, subject to a future recommendation to the City Council and their approval.

Laserfiche Document Management System – The Office of the City Clerk is beginning the implementation of the Laserfiche electronic document management system. The system will establish a secure, reliable system for electronic document management of critical City documents and eventually reduce paper files.

Sungard accounting and business licensing – The City owns the server and licenses the Sungard accounting and business license system that runs on a legacy IBM platform. In its 2008 report, Management Partners recommended replacement of the Sungard system that is also used for purchasing, accounts payable and general ledger accounting. In its report, Management Partners stated that the current system is difficult to use and obtain reports easily and is difficult to support because it runs on an antiquated IBM platform. The City has retained the Government Financial Officers Association ("GFOA") to support the replacement of the current system with an integrated Enterprise Resource Planning ("ERP") system that would improve services with electronic processes (ex. facility rental, permit tracking, project management and scheduling). Staff expects to make a recommendation for the replacement ERP in early 2012.

Enterprise Project/Work Management ("EPM") Live project management – The Public Works Department has been implementing the EPM Live system for project management. EPM Live operates on a MS Sharepoint platform that provides collaboration and process development running on a dedicated server owned by the City. The EPM Live application allows engineers and other project managers to customize their data set and track project chronology, milestones and cost data.

ADP Payroll – The City utilizes the web hosted payroll services provided by ADP to fulfill the City's payroll needs. The City's plan is to continue using ADP in the future to assist in compliance issues with regard to new laws that affect payroll.

CoreLogic parcel data services – City staff and independent contractors utilize CoreLogic for accessing current parcel ownership information, including lot parcel shape files, easements and zoning data.

Cougar Mountain – software that is used for point-of-sale and inventory management at the Point Vicente Interpretive Center. Staff expects that this software will be replaced with
the acquisition of the ERP system.

**Video services**

Real and MS Media Player – PVNET owns and maintains a video server and software that enables on-demand video viewing of archived City Council and Planning Commission meetings that are linked to staff reports and select City events over the Internet. The City owns the video files.

Telvue – provides support for the digital broadcasting system used by RPVTV. Additionally, RPVTV utilizes several City-owned digital cameras and desktop computers for the production and broadcast of City programming and videos.

**IT Infrastructure**

Servers - Most of the City's IT Infrastructure is owned and operated at the City Hall facility. A temperature controlled room stores a rack of dedicated servers that operate the voice and data systems. Currently, fourteen (14) dedicated servers are used to access the network, store work product data files operate the phone and voice messaging systems, the Sungard accounting and licensing system, the Acella permit tracking system, the Public Works project management systems, manage access to all printers, create and broadcast RPVTV programming and remotely monitor the health and security of the entire IT system. One of the goals of the proposed IT Infrastructure Modification Plan (the IT Plan”) is to combine the operations of nearly all of the dedicated servers on to a virtualized high availability (redundant) server configuration. PVNET owns and maintains twelve (12) servers in the delivery of website, email, video-on-demand and GIS services to the City.

Local area network - As described previously, staff, independent contractors and the public connect to the IT system using software installed on desktop and laptop computers, phone handsets and mobile devices that are connected to servers through firewalls via switches, routers, cabling over the City Hall network or the Internet or public telephone system. The City Hall segment of the IT Infrastructure operates at about 1 GB speed.

Access to the Internet and other facilities - Users of the City Hall IT Infrastructure access the Internet with 3MBPS of bandwidth; although it is expected to be upgraded soon to as much as 150MBPS of bandwidth, with significant cost savings. PVIC is directly connected to the City Hall IT Infrastructure with a fiber cabling strung along utility poles between the two facilities. Hesse Park is connected to the Internet with 1MBPS of bandwidth, however, soon to be upgraded to 3MBPS of bandwidth. Free wireless access is provided to the public at PVIC and City Hall by PVNET. Free wireless is provided at Hesse Park by the City.

In 2009, the acquisition of a SonicWALL NSA E7500 high availability firewall was recommended by Staff, approved by the Council and implemented as a part of the IT Plan. Several benefits of the SonicWALL include:

- It performs deep file packet inspection while maintaining 1 GB network speed with little to no degradation in performance;
- The NSA firewall includes a sufficient number of ports to support intranet applications and allow for multiple secure web-based solutions in the future (i.e. accounting, email, customer/resident inquiry/complaint tracking);
IT Infrastructure Plan

November 1, 2011
Page 7 of 11

- Enables redundant access to the Internet via the City’s Internet Service Provider ("ISP") and PVNET’s T1 in the event the City’s ISP goes down; and
- The NSA firewall provides secure, redundant protection from intrusion over the Internet using real-time updates to protect the City’s network.

IT Infrastructure Modification Plan

Independent Review of the IT Plan

The proposed IT Infrastructure Modification Plan (the “IT Plan”) has been developed in accordance with the industry standard Information Technology Infrastructure Library ("ITIL") model through the collective effort of Staff, Palos Verdes on the Net ("PVNET"), engineers from Microsoft and Cisco and has been independently reviewed and validated by Dyntek, a multi-national IT firm. Dyntek is an industry “partner” with MS, Cisco and Dell products and have the expertise to conduct the independent review of the IT Plan. Dyntek has never performed any services to the City, PVNET or any of the City’s IT vendors. A report published by Dyntek, dated October 26, 2011, and is attached to this staff report. A biographical overview of the reviewer, Ion Gott, Managing Director, and an overview of the firm is attached to their review report.

Implementation Timeline of the IT Plan

Subject to approval of the IT Plan by the City Council, including various agreements, the proposed IT Plan would begin immediately and is expected to be completed in about six months with a four phase approach. The completion of the IT Plan facilitates the implementation of the replacement of the existing Sungard accounting system with an integrated ERP system that would improve services with electronic processes (ex. facility rental, permit tracking, project management and scheduling). Current versions of ERP systems under consideration are designed to operate on current versions of MS server and desktop software.

Cost Savings and Calculation of Payback Period from the IT Plan

Notwithstanding the fact that the majority of server equipment and desktop computers have reached the end of their useful life and are due for replacement, cost savings will be derived from the IT Plan from reduced energy consumption and a reduction of fees for maintaining the array of servers. Based upon IT industry research, it is estimated that a 65 – 80% reduction of server energy usage will result from combining all of the dedicated servers. Using an industry “Green Calculator”, it appears as though the City will experience approximately $6,000 of energy savings annually. Staff and PVNET expect that fewer servers to support will lead to a reduction of server support fees by about $27,600 annually. Based upon the combined savings, the investment in the replacement of the server equipment with the Dell virtual machine would have a complete pay-back in about 4 years and the return on investment is about 24%, based upon the following:
**IT INFRASTRUCTURE PLAN**  
November 1, 2011  
Page 8 of 11

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated cost of virtualized high efficiency (redundant) server configuration</td>
<td>148,340</td>
</tr>
<tr>
<td>Estimated annual savings:</td>
<td></td>
</tr>
<tr>
<td>Estimated reduction of server support fees</td>
<td>27,600</td>
</tr>
<tr>
<td>Estimated reduction of energy consumption</td>
<td>6,000</td>
</tr>
<tr>
<td>Estimated reduction of parts, materials</td>
<td>2,000</td>
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<tr>
<td>Total estimated annual savings</td>
<td>35,600</td>
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</table>

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. years pay-back (A divided by B)</td>
<td>4.2</td>
</tr>
<tr>
<td>Simple Return on Investment (B divided by A)</td>
<td>24%</td>
</tr>
</tbody>
</table>

**Summary of Benefits and Enhancements of IT Plan**

Several benefits that will result from the implementation of the IT Plan follows:

- Improve security and management of data across the network;
- Provide server and application failover for all virtualized servers and applications across the network;
- A significant reduction of IT support costs for server and desktop computer management;
- Improved disaster recover tools included at no additional cost because they are built-in to many of the server based software products as proposed;
- Provide a robust data backup system to replace the current system which has reached maximum storage and performance capacity and ability to perform backups;
- Enable management of software updates and problem resolution to all workstations on the network from a centrally located control system;
- The Software Assurance License for Windows allows the City to receive software patches and maintenance updates as well as service packs and major upgrades expected in 2012 throughout the lifecycle of the contract;
- Enable secure remote access to the City Hall network, email, voice calls and messaging from most anywhere;
- Integration of voice, video and email messaging (commonly referred to as unified communication);
Enable web conferencing that could originate from City Hall and remote sites, as well as participation in web conferences originated by other organizations;

Improved file search capability in Windows and Office, as well as improving alternatives for 3rd party file search and retrieval systems that could reduce time associated with PRA requests;

Improved desktop computer performance that will improve user efficiency;

Like all MS software, the support for Office 2003 will dissipate and eventually end. Enterprise licensing of Office Professional 2010 that will enable the following features:

- Improved email searches;
- Network data and document searches;
- Contact management capability necessary for workflow and calendaring, synchronizing with Personal Digital Assistants;
- The ability to edit Word, PowerPoint and Excel document files while in use by others;
- Collaborative work tools for updating and working on files between staff and departmentally through SharePoint; and
- Phone contact and communications access from the desktop integrated with voice in the Lync system for telephony, and voice bridging and conferencing.

Further implementation of MS Sharepoint will be used for development of electronic forms and databases that do not exist with current data systems (e.g. facility rentals and use forms); and

Modernizing the IT infrastructure for further development of the IT System, including applications and tools that will improve production of public information and the replacement of the Sun Gard accounting and business licensing system with an ERP.

Overview of the IT Plan

The IP Plan will be implemented in phases over the next six months as follows:

1) **Phase 1 (1st month):** Purchase and execution of MS enterprise-wide license and software assurance agreements, followed by phased software and hardware deployment;

2) **Phase 2 (1st – 3rd month):** Migration of dedicated application servers to a virtualized high availability (redundant) server configuration with the purchase of a
Dell virtual machine ("V/M"). The Dell V/M will be clustered together to enable access to users at all times with no chance of downtime. The Dell V/M includes (3) three PowerEdge R710 servers, (2) two PowerConnect 6224 Switches and (1) one P6000E storage array;

3) **Phase 3 (3rd month):** Replacement of the Cisco call manager server and software in conjunction with the migration from the Cisco voice messaging system (commonly known as the City’s Cisco voice over Internet protocol phone system) to MS Exchange and Lync unified (voice, video conferencing and email) communication system. The upgrade was approved by the City Council in 2010. However, Staff deferred the upgrade to enable integration with the Dell V/M; and

4) **Phase 4 (4th – 6th month):** Replacement of about 60 desktop computers.

**FISCAL IMPACT**

The budgets for the Equipment Replacement fund – Computers for FY11-12 and 12-13 includes about $445,000 for the necessary replacement of hardware and software, hereafter referred to as the IT Infrastructure Plan (the “IT Plan”). The following is a bullet-point summary of the fiscal considerations:

- The estimated cost of replacing dedicated server equipment with a Dell virtual machine is about $148,000, including a three-year 24/7 support and equipment warranty.
- The estimated cost of upgrading the telephone voice and messaging system is about $40,000.
- The cost of replacement of about sixty (60) desktop computers is about $111,000 spread over two fiscal years.
- Therefore, the total estimated cost for the implementation of the IT Plan is about $299,000 spread over FY11-12 and FY12-13, approximately $146,000 less than Staff expected when the City’s budget was approved by the City Council in June 2011.
- Additionally, the FY11-12 and FY12-13 budget in the Equipment Replacement fund – computer maintenance and services includes the provision for $46,000 for software licensing and support.

The FY11-12 and FY12-13 operating budgets are sufficient to absorb the cost of the implementation of the IT Plan; therefore, no budget adjustments are necessary. Staff expects that the City will experience a significant cost savings resulting from its decision to defer the voice system upgrade. Migrating and operating the voice system to the Dell V/M will avoid the cost of purchasing dedicated licenses and hardware that would have been borne with the Cisco voice upgrade approved in late 2010.

A summary of the FY11-12 and FY12-13 budget for the IT Infrastructure Plan follows:
## IT Infrastructure Plan - Budget

<table>
<thead>
<tr>
<th>Description</th>
<th>Initial Cost Budgeted</th>
<th>On-Going Cost</th>
</tr>
</thead>
</table>
| Acquisition and implementation of redundant, high availability virtual server system and storage area network with (3) three-year warranty and support agreement would include 24/7 remote technical support, as well as on-site support for mission critical events within 4 hours. A brief overview of the performance specifications of the Dell VIM follows: (3) Dell PowerEdge710 servers with:  
  - (2) Intel Xeon X5660 six-core 2.6Ghz processors;  
  - 12M Cache, 1,333MHz maximum memory; and  
  - 96GB RAM, 1,333MHz dual ranked LV RDIMMs for 2 processors.  
(2) Dell PowerConnect 6224 managed switches with 24GB Ethernet ports to connect the servers to the storage array.  
Dell EqualLogic PS6100XS storage array with:  
  - 13TB capacity;  
  - 7 x 400 GB solid state drives;  
  - 17 x 600GB 10K SAS drive; and  
  - Dual controllers, HA with failover. | $121,914              |               |
| (1) Dell rack storage system for servers, switches and storage array with UPS, administrative console, including 24/7 support and extended warranties.                                                                 | $6,426                |               |
| Additional 3rd party implementation services for Dell VIM configuration                                                                                                                                          | $20,000               |               |
| Unified communication hardware, including servers, Cisco handset flash and implementation services (approved by the City Council on July 6, 2010)                                                                  | $40,000               |               |
| Replace 60 desktop computers (60@$1,850)                                                                                                                                                                     | $111,000              |               |
| MS Enterprise licenses and software assurance                                                                                                                                                                   | $46,583 $46,583       |               |
| **Total**                                                                                                                                                                                                     | **$299,340 $-**       | **$46,583 $46,583** |

### Attachments:
- Report of Dyntek - Independent Reviewer of the IT Infrastructure Plan
- IT Infrastructure Plan (including Microsoft licensing and software assurance agreements)
Dear Sir or Madam:

Having a technological roadmap in place that is cost effective, efficient and built on industry standard technologies that are manageable and provides value to a city such as yours is more critical than ever. After performing an independent review of your cities information technology implementation plan and speaking with several key individuals at your organization, I can confidently state that the proposed solution delivers a cost effective, efficient and manageable information technology roadmap built on leading industry standard technologies.

There were several key areas of the proposed information technology implementation plan that stood out during the review.

The first being the decision to standardize on Microsoft technologies that were encompassing of virtualization, unified communications, messaging, collaboration, systems management and current server and desktop operating systems. This decision will not only lead to a more manageable information technology platform that is built on industry proven technologies but will also provide enhanced information technology related services and increased productivity and resiliency at a reduced cost to the city. Through the chosen software assurance agreement presented in the plan, the city will not only have access to these current technologies but also the multitude of upcoming product releases slated for the coming years that will enhance the cities information technology services for years to come adding even more value. This also holds true in regard to the plan to standardize on server and workstation hardware platforms that will provide the computing power and storage resources necessary for current and future technology related initiatives.

The technology implementation plan also encompassed best practices in regard to the leveraging of these technologies in support of net new functionality but also leveraging current investments in technology where possible. The decision for example to integrate
Microsoft's Lync 2010 Unified Communications (UC) platform with the existing phone system where applicable, provides increased functionality through leveraging both new and existing resources. Lync as a UC platform enables a wider spectrum of communication channels from voice, instant messaging and conferencing that not only enhance day-to-day communications but also disaster recovery scenarios where real time communications can provide additional value in the event of an emergency.

Lastly, the city's decision to leverage Microsoft Hyper-V virtualization technologies and System Center systems management products is another integral component and well thought out component of the plan. This decision will help reduce costs through streamlined deployment, maintenance, reduced support time and increased high availability solutions that will keep the cities information technology systems up and running in an efficient and cost effective manner without compromise. Implementation of virtualization and system management solutions is a best practice in today's dynamic and well managed information technology infrastructures. The existing IT infrastructure appears to have been utilized and maintained very well and beyond its normal life expectancy. This migration plan and implementation timeline are well designed and timely with a sense of urgency to proceed now.

Given the level of detail and content present in the current plan, I can say with confidence that the City of Rancho Palos Verdes is on the path to delivering an encompassing, cost-effective, manageable and well thought out technology roadmap that will provide the city value for years to come.

Sincerely,

Ion Gott
Managing Director
DynTek Services, Inc.
4440 Von Karman Avenue, Suite 200
Newport Beach, CA 92660

Phone: 949.271.6943
Cell: 310.701.5775
Email: ion.gott@dyntek.com
Web: www.dyntek.com

ATTACHMENT 5-2
Corporate Overview
DynTek - What We Do

From virtualization and cloud computing to unified communications and collaboration, DynTek provides professional technology solutions across the three core areas of your technical environment: Infrastructure/Data Center, Application Platforms and End Point Computing.


Yes, we are those people. Serious fans of technology. The engineers up at 3 am learning about the latest release. The ones that answer the customer call at 10 pm. The people that think CCIEs are rock stars. The fanatics. The people that love what we do. In an industry like ours where change is accelerated, you have to really have a passion to stay ahead. And we honestly believe that helping our clients isn't work, it's pure fun.

What Sets Us Apart

Outstanding technical acumen? Amazing customer service? Yes, we have those things and much more.

Let's dive past the rhetorical statements to something that truly makes us unique. In the technology channel, manufacturer accreditations combined with deep real world experience are the golden ticket. They represent the third-party verification that an organization has the technical expertise, account manager knowledge, proven experience and customer service excellence required to truly be called the best. And whether we are diving into cutting edge technologies in the cloud or focusing on core networking, DynTek has certifications that are unparalleled in our core markets.

DynTek holds the top medallion levels across a broad range of industry-leading technology manufacturers.

When looking for a Cisco Gold, Microsoft Gold, VMware Premier, Citrix Platinum, McAfee Elite, Dell Certified, HP Preferred partner... you will find one – DynTek.

This means we have an unrivaled cross-section of technical expertise and real-world deployment experience, as well as competitive pricing on the technologies you need most.

Who We Work With

DynTek's client base is equally divided between public sector and commercial/enterprise organizations. We have extensive experience working with federal, state and local government clients, backed by a GSA Schedule and multiple state contracts. In addition, we have also worked extensively with the K-12 education sector, mastering programs like e-Rate that dramatically benefit our client base. Our commercial/enterprise clients cover a broad range of industries including finance, health care, hospitality, energy and more.
Ion Gott  
MANAGING DIRECTOR – MICROSOFT PRACTICE  
DYNTek SERVICES, INC.

PROFESSIONAL EXPERIENCE

- 14+ years of IT industry experience consulting
- Strong leadership and management skills
- Exceptional Communication skills to communicate efficiently and effectively with both IT and Executive Management.
- Advanced architectural design, technical writing, and implementation skills to successfully align technology with organizations business initiatives
- Experience consulting with clients from varying industry verticals
- Attention to system design with focus on functionality as well as physical security, logical security design and unique security requirements and scenarios.
- Extensive IT security knowledge and background
- Architect Level Design, Implementation, and Administration expertise:
  - Migrations from NDS eDirectory, Notes, GroupWise
  1. Deep knowledge of Microsoft and Quest Migration Toolsets
  - Unified Communications – LCS 2005, OCS 2007 R2, Lync 2010, Unified Messaging and Voice Communications,
  - Infrastructure Service – Hyper-V, IIS, and IP services (DNS, WINS, DHCP, ACL’s, IPSEC) ISA/TMG, and SQL Server 2000/2005/2008/R2
- Experienced in performing security audits of Information Systems to meet regulatory requirements imposed by Sarbanes Oxley, Health Insurance Portability and Accountability Act, and the Gramm-Leach Billey Act (GLB)
- Knowledge of cryptography, network captures, and various security tools and products
- Experience with various Firewall platforms/technologies, Intrusion Detection and prevention systems, and Data/Information Leakage Prevention.
- Knowledge of disaster recovery scenarios, RPO’s, RTO’s and high availability solutions such as Clusters, Load Balancers, and Replication Technologies.
- Advanced architect level design, implementation skills, and knowledge of virtualization platforms (VMware, MS Virtual Server, XenServer, and Hyper-V) and concepts.

TYPICAL ENGAGEMENTS, ASSIGNMENTS, AND AREAS OF RESPONSIBILITIES

- Large Executive Search Firm
  - Global SCCM 2007 R3 Design and Implementation encompassing over 40 countries and over 100+ remote sites in support of global initiative to rollout Windows 7.
  - Deployed SCCM 2007 R3 to support the client’s 2500 plus desktop environment and 500+ server environment
- Deployment MDT 2010, OSD, PXE Services Points, USMT, Branch DP’s, Standard DP’s, Remote Tools, Hardware/Software Inventory, Asset Management.

- **Large Document Imaging Company**
  - Architected and implemented migration plan to move organization from Lotus Domino 6/7 to Exchange 2007
  - Deployed Microsoft Transport Suite for Notes to provide coexistence during transition to Exchange 2007
  - Deployed regional Exchange 2007 CCR clusters throughout international hubs.
  - Designed Exchange 2007 environment with a high focus on availability and DR.

- **Large Retail Music Store Chain**
  - Designed and implemented OCS 2007 Enterprise Voice and Exchange 2007 Unified Messaging
  - Deployed SIP Gateways for integration with IP-PBX system and OCS call routing
  - Increased organizations ability to communicate effectively and efficiently in the virtual workplace with unified communications

- **Large Restaurant Chain**
  - Designed and implemented OCS 2007 Enterprise edition deployment with high availability and security in mind.
  - Deployed Web Conferencing, Presence, and Audio/Video Conferencing internally and externally using edge servers.
  - Deployed certificate services environment and ISA 2006 for secure remote access to OCS 2007 features and functionality.

- **Large Executive Search Firm**
  - Served as Project lead and Chief Architect during the design, planning and implementation phases of a 2500+ seat, 100+ site Global AD Migration from NT 4.0/Exchange 5.5 to Windows Server 2003 Active Directory and Exchange 2003
  - Provided global leadership and direction to various IT operations groups distributed around the world in Asia Pacific, South America, Europe/Middle East, and North America.
  - Created highly detailed migration plans and architectural documents in order to provide client with the capability to perform components of migration on their own.
  - Created redundant and highly available Active Directory infrastructure dispersed over 100+ geographically distributed sites located in 70+ countries around the world.
  - Designed and implemented highly secure and redundant Exchange Global routing infrastructure consisting of multiple clustered Exchange 2003 servers, and multiple load balanced Exchange 2003 bridgehead servers with redundant routing paths and failover capabilities.
  - Performed advanced configuration, maintenance, and troubleshooting of Exchange 5.5 directories, Exchange 2003, Windows Server 2003 Active Directory Services
- Designed and Implemented Global Enterprise Vault Archiving, Journaling, and Discovery Accelerator environment for compliance initiatives.
- Implementing security auditing products for event log consolidation and auditing
- Hardened various Microsoft Windows based hosts to increase security Windows environment.

- Florida Law Enforcement Agency
- Performed vulnerability assessment of network and application infrastructures using security assessment tools such as FoundStone and AppSec
- Reviewed current security posture in regards to technologies, as well as policies and procedures implemented within organization.
- Provided executive overview and presentation to management on findings
- Assisted with the remediated of identified risks

- Large Mortgage Lender
  - Performed security assessment of 500 server MetaFrame farm environment
  - Documented MetaFrame infrastructure and provided recommendations to increase stability and security of environment
  - Provided leadership in the support and uptime of MetaFrame and mission critical line of business application Empower
  - Provided support and assistance to security team during incident response when security issues arose
  - Provided leadership in Systems Engineering groups in regards to Sarbanes Oxley (SOX) requirements and documentation of processes and procedures
  - Created process and procedures for SOX project to meet audit requirements for minimum base line standards defined by Infosec
  - Created enterprise change control documentation and documentation of Windows, HP-UX, and RedHat Enterprise systems for section 404 SOX initiative

- Large Food/Services Client
  - Assessed and documented LAN/WAN network infrastructure, server environment, and security practices
  - Reported findings and made recommendations and presented findings to IT Director
  - Assessed security on Checkpoint NG firewall infrastructure and upgraded corporate firewall to Checkpoint NG
  - Implemented network based encryption and certificates to encrypt information between stores and corporate location.
  - Deployed VPN Dynamics V4/V6 and Checkpoint Edge appliances with Checkpoint integration at remote stores and configured VPN tunnels back to corporate locations
  - Upgraded clients messaging environment from Exchange 2000 to Exchange 2003 running on multiple 3 node Exchange 2003 clusters
  - Refined backup and restore procedures for Exchange environment and developed DR documentation and recovery procedures.

- Large City Emergency Operations Center
  - Designed a highly available Windows 2000 Active Directory and Exchange 2000 infrastructure around a primary site based in LA and a failover site that was deployed in Colorado
- Documented, designed and implemented migration plan to migrate and consolidate multi domain NT 4.0 environment to Windows 2000 Active Directory
- Migrated Exchange 5.5 environment to multi node Exchange 2000 Enterprise clusters
- Migrated SQL 7.0 environment to multi node SQL 2000 Enterprise clusters
- Migrated 500+ workstation environment to new Windows 2000 domain via automated scripting process

• Large Utilities Company
  - Assisted with design and early implementation and adoption of Windows 2003 Active Directory based services into current multi domain Windows 2000 Active Directory
  - Designed and implemented patch management solution based on WSUS and Group Policy
  - Assessed security posture in relation to patching of Windows based servers and workstations
  - Implemented change control policies in relation to patch management
  - Designed group policy templates to aid in the hardening of Windows based systems.

• Industrial Manufacturer
  - Integrated companies existing Microsoft infrastructure with several geographically dispersed company acquisitions. Included but not limited to multiple NT trusts, connectivity of multiple Exchange 5.5 and Exchange 2000 Organizations and the eventual consolidation of the environment
  - Migrated multi site WAN environment from legacy 3COM based routers to Cisco 2600 series routers with integrated CSU/DSU
  - Designed and implemented migration plan to move customers frame relay network from one service provider to another with minimized down time
  - Implemented VPN solution and internal certificate hierarchy

• Application Service Provider
  - Designed and implemented highly available hosted Exchange, Active Directory, and IIS 5.0 and 6.0 environments (WWW, FTP, SSL).
  - Implemented a Unisys ES7000 server environment for hosted Exchange resources
  - Implemented load balancers and clusters for high availability
  - Implemented provisioning solutions to aid in the management and configuration of hosted resources
  - Designed security processes and procedures, and implemented baseline security for server environment.
  - Performed vulnerability scans and routine assessments of the server environment in relation to industries best practices and SAN's Institute recommendations

EDUCATION, CERTIFICATIONS, AND PROFESSIONAL ORGANIZATIONS
  • Certified Information Systems Security Professional – CISSP
  • Certified Information Systems Auditor – CISA
  • Certified Information Systems Manager – CISM
• Microsoft Certified Professional in SCCM 2007, Operations Manager 2007, and Windows 7
• Microsoft Certified System Engineer on Windows 2000/2003 + Security/Messaging Specialization
• Skilled in Microsoft Solutions Framework (MSF) and Microsoft Operations Framework (MOF)
• Trained at Carnegie Mellon in Virginia, to perform Operationally, Critical, Threat, Asset, Vulnerability Evaluation’s (OCTAVE) security assessments and certified trainer on OCTAVE methodology
• Symantec Certified Security Practitioner - SCSP
• Network+, Security+, and A+ Certifications
• Citrix Certified Administrator – CCA MetaFrame XP, XenServer 4.x
• Cisco CCNA
• Orange County NT User Group Director of Certification SIG (1996-2002)
• Orange County Computer Club Member (1992-Present)
• International Information Systems Security Certification Consortium (ISC)² Member
• Information Systems Audit and Control Associated (ISACA), Los Angeles Chapter Member
• Invited to Microsoft Redmond, WA campus to develop Exchange 2007 certification exams (70-237 and 70-238)
• Bachelor of Science in Business Administration
Rancho Palos Verdes

Information Technology Infrastructure Plan

October 2011
# Table of Contents

**Overview** ........................................................................................................... 1  
**Current IT System** ............................................................................................... 1  
**IT Infrastructure Modification Plan** ................................................................. 5  
  Summary of Benefits and Enhancement of the IT Plan  
**Overview of the IT Plan** .................................................................................... 7  
  Phase 1 ................................................................................................................. 8  
  Phase 2 ................................................................................................................. 13  
  Phase 3 ............................................................................................................... 14  
  Phase 4 ............................................................................................................... 16  
**Fiscal Overview of the IT System** ...................................................................... 17  
**IT Infrastructure Plan – Budget** ......................................................................... 18  
**Exhibits**  
  Server Upgrade and Visualization Plan .............................................................. A  
  Microsoft Enterprise Signature Form ................................................................. B1  
  Microsoft Enterprise Agreement ...................................................................... B2  
  Microsoft Supplemental Contact Information Form ......................................... B3  
  CompuCom Software Quote ............................................................................. B4  
  Dell PowerConnect Reference Configuration .................................................. C1  
  Dell Quotation .................................................................................................... C2  
  Dell Quotation .................................................................................................... C3  
  Dell Service Description .................................................................................... C4
Rancho Palos Verdes

Information Technology Infrastructure Plan

October 2011

Overview – Existing Information Technology System

The City’s Information Technology ("IT") system is an array of data, video and voice information systems, operating with devices like servers, cabling, routers, switches, firewalls, desktop and laptop computers, printers, scanners, phone handsets and commercially licensed software that enable access to the City Hall network, other park sites, the public switched telephone network system and the world via the Internet. Most of the IT system currently resides at the City Hall premises, while some equipment is in use at Pointe Vicente Interpretive Center ("PVIC"), the RPVTV studio, Hesse Park and Ladera Linda. Palos Verdes on the Net ("PVNET"), the City’s IT independent contractor, owns and manages certain hardware and software (described later in this report) used to deliver services to the City. None of the City’s hardware is owned by PVNET.

Categories of the IT System

The following is an overview of the IT System by category, including the IT Infrastructure, the focus of the IT Infrastructure Plan attached to this report for approval.

Communication – Voice, email and the website

The City installed a Cisco Voice over Internet Protocol ("VoIP") system for phone call management and voice messaging in 2002. The call manager and voice messaging servers have reached the end of its useful life. A few City-owned cell phones are used by field personnel. The city also owns a File Transfer Protocol ("FTP") server which is used for transferring and sharing files that are too large to email. Because the FTP server is connected to the Internet, it will continue to remain separate from the proposed virtual server environment for security purposes. PVNET provides email, website and video-on-demand services to the
City using hardware and software they own.

**Desktop computers**

The City owns desktop and laptop computers used by staff and independent contractors to provide services to the City's residents. Laptop and desktop computers have an estimated useful life that ranges between 2-4 years. Some desktop computers are dedicated for use at public counters to serve residents and members of the public. Some desktop computers are used by part-time staff and docent volunteers in park site offices. Most of the desktop computers are running on the Microsoft ("MS") XP operating system and the Office 2003 productivity software suite. Certain desktop computers have Adobe Photoshop, Ascent for computer-aided drafting ("CAD"), Google Earth Pro, Cognos and Crystal report writer software and MS Project to improve work productivity.

**Data services**

City staff and independent contractors use the following data systems in the delivery of services to City's residents:

Geographic Information System ("GIS") mapping - PVNET provides GIS (mapping) services to the City using ESRI state-of-the-art software it licenses running on its own dedicated server. PVNET, City staff and independent contractors continue to develop City-owned GIS aerial pictometry, videos and data files for management of the City's infrastructure, project management and public presentations. Staff expects to present a recommendation to join the countywide consortium for the upgrade of the GIS aerial pictometry that is eight years old.

Emergency Incident Management System – PVNET developed and licenses to the City the use of the Incident Management System that would be used during an emergency event that requires deployment of the City's Emergency Operations Center located in the Community Room at City Hall. The web-based system enables the data entry and process management of each incident reported (i.e. road closure, structure fire, utility failures, injuries), including prioritization, action required through resolution of each incident, and the emergency event.

Inventory Management System – PVNET developed and licenses to the City the use of the Inventory Management System that is used to track asset inventory, location of the asset, and its disposition. The web-based system enables staff to access the system from their desktop or laptop computers.
Acella (a/k/a Tidemark) permit tracking – The City owns the server and licenses the Acella permit tracking system used by the Community Development Department for managing the building permit process. The system was acquired in 2001 and would likely be replaced with a new ERP system if approved by City Council in a future action.

Sungard accounting and business licensing – The City owns the server and licenses the Sungard accounting and business license system that runs on a legacy IBM platform. In its 2008 report, Management Partners recommended replacement of the Sungard system that is also used for purchasing, accounts payable and general ledger accounting. The City has retained the Government Financial Officers Association (“GFOA”) to support the replacement of the current system with an integrated Enterprise Resource Planning (“ERP”) system that would improve services with electronic processes (ex. facility rental, permit tracking, project management and scheduling). Staff expects to make a recommendation for the replacement ERP to the City Council in early 2012.

Enterprise Project/Work Management (EPM) Live – The Public Works department has been implementing the EPM Live system for project management. EPM Live operates on a MS Sharepoint platform that provides collaboration and process development running on a dedicated server owned by the City.

ADP Payroll – The City utilizes the web hosted payroll services provided by ADP to fulfill the City’s payroll needs. The City’s plan is to continue using ADP in the future to assist in compliance issues with regards to new laws that will affect payroll.

CoreLogic parcel data services – City staff and independent contractors utilize the parcel data services provided by CoreLogic.

Cougar Mountain – software that is used for point-of-sale and inventory management at the Point Vicente Interpretive Center. Staff expects that this software will be replaced with the acquisition of the ERP system.

Video services

Real and MS Media Player – PVNET owns and maintains a video server, video and audio editing and conversion equipment and software that enables viewing of archived City Council and Planning Commission meetings and select City events over the Internet. The City owns the video files.

Telvue – provides support for the digital broadcasting system used by RPVTV. Additionally, RPVTV utilizes a production studio, several City-owned digital
cameras and desktop computers for the production and broadcast of City programming and videos.

**IT Infrastructure**

Servers - Most of the City's IT Infrastructure is owned and operated at the City Hall facility. A temperature controlled room stores a rack of dedicated servers that operate the voice and data systems. Currently, fourteen (14) dedicated servers are used to access the network, store work product data files, operate the phone and voice messaging systems, as well as the Sungard accounting and licensing system, the Acella permit tracking system, the Public Works project management systems. The servers are also used to manage access to all printers and remotely monitor the health and security of the entire IT system. One of the goals of the proposed IT Infrastructure Modification Plan ("the IT Plan") is to combine the operations of nearly all of the dedicated servers on to a virtualized high availability (redundant) server configuration. PVNET maintains four (4) servers that it owns that are used in the delivery of its website, public wireless, email, video-on-demand, and archival and GIS services.

Local area network - As described previously, staff, independent contractors and the public connect to the IT system using software installed on desktop and laptop computers, phone handsets and mobile devices that are connected to servers through firewalls via switches, routers and cabling over the City Hall network, the Internet, or the public telephone system. The City Hall segment of the IT Infrastructure operates at 1GBPS speed.

Access to the Internet and other facilities - Users of the City Hall IT Infrastructure access the Internet with 3GBPS of bandwidth; although it is expected to be upgraded to 25-150GBPS (check our numbers) of bandwidth soon with cost savings. PVIC is directly connected to the City Hall IT Infrastructure by fiber cabling strung along utility poles between the two facilities. Hesse Park is connected to the Internet with 1.5GBPS of bandwidth, however, soon to be upgraded to 3GBPS of bandwidth. Free wireless access is provided to the public at PVIC and City Hall by PVNET and Hesse Park by the City.

In 2009, the SonicWALL NSA E7500 was recommended by Staff, approved by the Council, and implemented as a part of the IT Plan because:

1) It performs deep file packet inspection while maintaining 1 GBPS network speed with little to no degradation in performance;
2) The NSA firewall enables maintenance of 1GBPS speed, includes a sufficient number of ports to support intranet applications, and allows for multiple secure web-based solutions in the future (i.e. accounting, email, customer/resident inquiry/complaint tracking);
3) Enables redundant access to the Internet via the City’s Internet Service Provider (“ISP”) and PVNET’s T1 in the event the City’s ISP goes down;

4) Supports the future migration to the Simple Internet Protocol (“SIP”) that is expected in the VOIP segment of the telephony and/or unified communications industry; and

5) The NSA firewall provides secure, redundant protection from intrusion over the Internet using real-time updates to protect the City’s network.

A schematic of the City’s existing IT Infrastructure has been confidentially provided to the independent reviewer. It will not be made public in order to preserve its security of its design and configuration.

**IT Infrastructure Modification Plan**

*Independent Review of the IT Plan*

The proposed IT Plan has been developed in accordance with the industry standard Information Technology Infrastructure Library (“ITIL”) model through the collective effort of Staff, PVNET, engineers from Microsoft and Cisco, as well as having been independently reviewed and validated by Dyntek, a multi-national IT firm. Dyntek is an industry “partner” with MS, Cisco and Dell products, and have the expertise to conduct the independent review of the IT Plan. A report published by Dyntek, dated October 26, 2011, will be available for public view with the staff report provided to the City Council.

*Implementation Timeline of the IT Plan*

Subject to approval of the IT Plan by the City Council, including various attached agreements, the proposed IT Plan would begin immediately and is expected to be completed in approximately six months. The completion of the IT Plan facilitates the implementation of the replacement of the existing Sungard accounting system with an integrated ERP system that would improve services with electronic processes (ex. facility rental, permit tracking, project management and scheduling).

*Cost Savings and Calculation of Payback Period from the IT Plan*

Notwithstanding the fact that the majority of server equipment and desktop computers have reached the end of their useful life and are due for replacement, cost savings will be derived from the IT Plan from reduced energy consumption and a reduction of fees for maintaining the array of servers. Based upon IT industry research, it is estimated that a 65 – 80% reduction of server energy usage will result from combining all of the dedicated servers. Using an industry “Green Calculator”, it appears as though the City will experience approximately
$6,000 of energy savings annually. Staff and PVNET expect that fewer servers to support will lead to a reduction of server support fees by about $27,600 annually. Based upon the combined savings, the investment in the replacement of the server equipment with the Dell virtual machine would have a complete payback in about 4 years and the return on investment is about 24%, based upon the following:

<table>
<thead>
<tr>
<th>No. years pay-back and simple return on investment - virtualized high efficiency (redundant) server configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Estimated cost of virtualized high efficiency (redundant) server configuration</td>
</tr>
<tr>
<td>B Total estimated annual savings</td>
</tr>
<tr>
<td>C No. years pay-back (A divided by B)</td>
</tr>
<tr>
<td>D Simple Return on Investment (B divided by A)</td>
</tr>
</tbody>
</table>

Summary of Benefits and Enhancements of IT Plan

Several benefits that will result from the implementation of the IT Plan follows:

- Improve security and management of data across the network;
- Provide server failover for all virtualized servers and applications across the network;
- Provide a robust data backup system to replace the current system which has reached maximum storage, performance capacity and ability to perform backups;
- Provide technology to support human resource management of personnel access to data;
Enable management of software updates to all workstations on the network from a centrally located control system;

Enable secure remote access to the City Hall network, email, voice calls and messaging from most anywhere;

Enable web conferencing that could originate from City Hall and remote sites, as well as participate in web conferences originated by other organizations;

Integration of voice and email messaging (commonly referred to as unified communication);

A significant reduction of IT support costs for server management;

Improved desktop computer performance that will improve user efficiency;

Further implementation of MS Sharepoint will be used for development of electronic forms and databases that do not exist with current data systems (e.g. facility rentals and use forms); and

Modernizing the IT Infrastructure for further development of the IT System, including tools that will improve production of public information and the replacement of the Sungard accounting and business licensing system with an ERP system.

Overview of the IT Plan

The IT Plan will be implemented in phases over the next 6 months as follows:

1) Purchase and execution of MS enterprise-wide license and software assurance agreements, followed by phased software and hardware deployment;

2) Migration of dedicated data servers to a virtualized high availability (redundant) server configuration with the purchase of a Dell virtual machine ("V/M"). The Dell V/M will be clustered together to enable access to users at all times with no chance of downtime. The Dell V/M includes (3) three PowerEdge R710 servers, (2) two PowerConnect 6224 Switches and (1) one P6000E storage array;

3) Replacement of the Cisco call manager server and software in conjunction with the migration from the Cisco voice messaging system (commonly known as the City's Cisco Voice over Internet Protocol phone system) to
MS Exchange and Lync unified (voice, video conferencing and email) communication system; and

4) Replacement of most desktop computers

A schematic of the IT Infrastructure Plan provides a pictorial view of the migration of the Plan (see Exhibit A)

**Phase 1 (1st month):** Purchase and Execution of MS Enterprise-Wide License And Software Assurance Agreements

With the purchase and execution of the MS enterprise-wide license and software assurance agreements (see Exhibits B1-3), the City will begin paying annual license fees based upon the number of licenses used for server and desktop computers. Until now, software licenses have been paid for as new servers and desktop computers are replaced or upgraded, generally ranging between 2-7 years. This has led to the simultaneous use of different versions of server and desktop software, sometimes causing incompatibilities and delayed deployment of component IT systems. The software assurance licensing ("SA") concept provides automatic updating to the most current version of suite of application software, service packs, and patches. The SA annual license fee model is considered a "best management practice" within the IT industry and has been proven to be the most cost-effective approach. The client access license ("CAL") concept enables each user to access all servers and Office productivity software, even remotely if authorized.

A brief overview of the MS enterprise-wide license and software assurance plan is described below:

*Windows Pro Enterprise License ("Lic"). SA with Microsoft Desktop Optimization Pack ("MDOP")*

This license enables every desktop computer and laptop to utilize the following:

- The Software Assurance License for Windows that provides software patches and maintenance updates, as well as service packs and major upgrades throughout the lifecycle of the license agreement;
- Allows the City to always have access to the most recent version of Windows;
- This license also includes MDOP desktop support service tools that help to improve compatibility and management, reduce support costs and improve policy control. The following is a brief overview of the benefits of
the MDOP tools:

- With App-V, users simply click to launch applications that are available, anytime. They don’t have to wait for applications to install and reboot to start using new applications. Simply sign on to your new computer and your applications are available on demand;

- Group Policy objects (GPOs) play a powerful role in how your network is managed and secured. They enable IT staff to manage user and desktop settings on many computers at once, saving time and IT support fees; and

- Microsoft Diagnostics and Recovery Toolset is a core component of the MDOP that helps IT make PCs safer to use, keeps employees productive, and enables desktops to be easier and less expensive to manage. Administrators can easily recover PCs that have become unusable, rapidly diagnose probable causes of issues, and quickly repair unbootable or locked-out systems, all faster than the average time it takes to reimage the machine. When necessary, you can also quickly restore critical lost files.

**Enterprise Client Access License (“CAL”) Suite - including software assurance (“SA”)**

This license enables every desktop computer and laptop to have access to the following:

- Windows installed on their computer;
- Connection to all network servers;
- Utilization of email from the Microsoft Windows exchange server;
- Utilization of the Microsoft Lync voice and telephone (unified communications) system;
- Connection to and utilization of the SharePoint server for calendaring and collaborative document workgroup sharing;
- Access to the Forefront Antivirus network server; and
- Workstation antivirus software throughout the entire infrastructure.

**Office Professional Plus Lic and SA**
This enterprise solution provides a license for every desktop computer and laptop to provide the following:

- The Software Assurance License for Office allows the City to receive the most recent version of Office suite of applications, service packs, and patches;
- This suite of applications is required to enable staff to utilize work productivity tools in Microsoft Windows including capability for:
  - Improved email searches;
  - Network data and document searches;
  - Contact management capability necessary for workflow and calendaring, synchronizing with Personal Digital Assistants;
  - Collaborative work tools for updating and working on files between staff and departmentally through SharePoint; and
  - Phone contact and communications access from the desktop integrated with voice in the Lync system for telephony, and voice bridging and conferencing.

With this enterprise-wide license, the City would migrate from Office 2003 to Office 2010. Additional features include:

- The ability to edit Word, PowerPoint and Excel document files while in use by others;
- Improved photo editing in Word and PowerPoint;
- Embed videos and special effects in PowerPoint;
- Improved scheduling in Outlook; and
- Improved photo editing and design layout in Publisher.

*Lync Plus CAL Lic and SA*

Client Access Licenses for staff to access voice telephony in Lync.

*Windows Datacenter Server Lic and SA*
The City will obtain six licenses for Windows Datacenter Server that allows running virtual machines. The licenses will allow City Hall to always have access to the most recent version of Windows Server on the virtualized high availability (redundant) server configuration. As described later in the Plan, staff proposes that three servers will be acquired and configured to operate in a virtualized high availability (redundant) server configuration.

**System Center Management Suite Datacenter Lic and SA**

The System Center Management Suite Datacenter license is necessary for the Windows Server operating on the virtualized high availability (redundant) server configuration. The license enables the use of the Operations Manager, Configuration Manager, Data Protection, Virtual Machine Manager; Service Manager 2010; Virtual Machine Manager 2008 R2; Data Protection Manager 2010.

**System Center Operations Manager Server w/SQL Lic and SA**

System Center Operations Manager is a data center management server for multiple operating systems and hypervisors (the virtual server manager). It utilizes a single interface that shows state, health and performance information of computer systems. It also provides alerts generated according to availability, performance, configuration or security situation being identified. It works with Microsoft Windows Server and Unix-based hosts.

**System Center Configuration Manager Server w/SQL Lic and SA**

The software comprehensively assesses, deploys, and updates information between servers, client computers, and devices across physical, virtual, and mobile environments. This license permits all computer equipment on the network to be managed by the configuration manager server.

**Exchange Enterprise Server Lic and SA**

Allows all users to connect to the primary email server, email access through the web, as well as Smartphone syncing of email, calendars, and contacts, Email Archiving, Retention and Discovery, Voicemail with Unified Messaging, and large mailbox support.

**Lync Enterprise Server Lic and /SA**

This software serves as the primary telephone communication system and communicates with MS Exchange mail server for messaging management and
advanced communications features. It is an enterprise real-time communications server, providing the infrastructure for enterprise instant messaging, presence, file transfer, peer-to-peer and multiparty voice and video connectivity, ad hoc and structured conferences (audio, video and web), and through a 3rd party gateway or SIP trunk, is capable of traditional PSTN (public switched telephone network) connectivity phone calls. These features would be available within the organization, between organizations, and with external users on the public internet, or standard phones, on the PSTN as well as SIP trunking (connections between other compatible phone systems thereby bypassing the bells without incurring telecommunications fees).

**Sharepoint Server Lic and SA**

The license is required for continued use by the Public Works Department for the EPM Live Project management system, and by other staff members for data development and management. This is multi-purpose platform that allows for the management and creation of data content, collaborative document and file management, departmental and staff collaboration spaces, enterprise data and content searches, business intelligence tooling, and process/information integration. This license allows for network-wide use by all users.

**MS Visio Lic and SA**

MS Visio is a diagramming program for MS Windows that uses vector graphics to create diagrams. Specifically, MS Visio would be used to develop technical drawings, flow charts, schematics, building layouts and locations, infrastructure diagrams, room layouts and is frequently attached to GIS data and accessed by users.

**MS Project Lic and SA**

MS Project is a project management software program which is designed to develop a plan, assign resources to tasks, track progress, manage a budget and analyze workloads, usually displayed on a Gantt Chart. Specifically, MS Project would be used by Administration, Public Works and Recreation and Parks for project management, and to coordinate with vendors and contractors on major projects.

**Forefront UAG Server Lic and SA**

A Virtual Private Network ("VPN") solution that provides secure remote access to the City’s IT System by limited, authorized users from home, other city locations such as Hesse Park or other remote locations. Additionally, the Emergency Operations Center is configured to enable users to access their desktop
computers during disasters. This license includes various important remote access technologies such as reverse proxy, SSL VPN, DirectAccess and Remote Desktop Services.

**SQL Server Standard Edition Lic and SA**

One SQL Server license is required for the operation of the City's primary database engine. A SQL Server is the primary database used by the Public Works Department's EPM Live project management system, the Community Development Department's permit tracking system, the EOC Incident Management System, the asset inventory management system, and will support the ERP system in the event that the ERP system is based on the SQL Server.

**SQL Server CAL Lic and SA User CAL**

CALs can access the SQL server from any desktop computer on the IT System.

A summary of the annual license fees quoted by CompuCom, the selected MS Enterprise license provider, is attached (see Exhibit B4).

**Phase 2 (1st - 3rd months): Migration from multiple dedicated data servers to a virtualized high availability (redundant) server configuration**

Except for the SunGard Naviline IBM server currently operating the City's accounting and business licensing applications, all dedicated servers would be systematically migrated to the virtualized high availability (redundant) server configuration (sometimes referred to as a "virtual machine" or "V/M") (see Exhibit C1). Staff, PVNET and the team of engineers (the "V/M team") have participated in the design and selection of the virtualized high availability (redundant) server configuration.

**Purchase and Deployment of Dell EqualLogic Array**

The V/M Team selected the Dell EqualLogic Array virtualized high availability (redundant) server configuration (the selected "Dell V/M"). Prior to the selection, staff and PVNET considered server systems offered by HP & IBM, talked with peers, considered industry trade reviews and considered its own success with dedicated Dell servers currently in use. The entire V/M team participated in the development of specifications of the Dell V/M that would be suitable for the applications currently in use, as well as the ERP under consideration, with sufficient allowance for processing and storage growth.

The Dell V/M includes (3) three PowerEdge R710 servers, (2) two PowerConnect 6224 Switches and (1) one P6000E storage array. The Quote provided by Dell
for the Dell VIM (see Exhibit C2-3) offers a comprehensive itemization of the component equipment and specifications for the servers, switches, and the storage array. A (5) five-year warranty and support agreement would include 24/7 remote technical support, as well as on-site support for mission critical events within four hours. The total cost of the Dell VIM is $121,914, including warranty and support for five years. A brief overview of the performance specifications of the Dell VIM follows:

(3) Three Dell PowerEdge710 servers with:

- (2) Two Intel Xeon X5660 six-core 2.8Ghz processors;
- 12M Cache, 1,333MHz maximum memory; and
- 96GB RAM, 1,333MHz dual ranked LV RDIMMs for (2) two processors.

(2) Two Dell PowerConnect 6224 managed switches with 24GB Ethernet ports to connect the servers to the storage array.

Dell EqualLogic PS6100XS storage array with:

- 13TB capacity;
- 7 x 400 GB solid state drives;
- 17 x 600GB 10K SAS drive; and
- Dual controllers, HA with failover.

**Implementation Process for Dell VIM**

The implementation would be performed by PVNET with the support of Dell, MS and a third party integrator. The installation of the Dell VIM will be performed in accordance with the service description detailed in the Remote Implementation of a Dell EqualLogic Array (see Exhibit C4). With the assistance of Dell, MS and the third party integrator, PVNET will systematically transfer the functions of Pacific, the primary server, Tidemark, the permit tracking application, the DocImaging server, the Laserfiche document management application and the print server to the Dell VIM. With the assistance of Dell, MS and the third party integrator, PVNET will configure Operations Manager, Configuration Manager, Data Protection, Virtual Machine Manager; Service Manager 2010; Virtual Machine Manager 2008 R2; Data Protection Manager 2010. Although the cost of the remote support is included in the total cost of the Dell VIM, a provision of $20,000 has been included in the Budget for the IT Plan presented at the end of this document.

**Phase 3 (3rd Month):** Migration from the Cisco Call Manager and Voice Messaging System to MS Exchange and Lync Unified (Voice, Video Conferencing and Email) Communication System
Phase 3 includes the migration from email services currently provided by PVNET to a unified communication platform running on the Dell VIM. Once the Dell VIM has been installed and configured in a HA hyper-v cluster and tested, NexusIS, the City's VoIP Cisco partner, will assist PVNET with reconfiguring Cisco handsets and test to confirm compatibility with Lync. NexusIS will configure Lync and MS Exchange, install new voice gateway hardware and test. NexusIS will assist Staff and PVNET with the development of the call tree, configuration of Cisco handsets and administrator and user training of Lync. Once configured for MS Exchange and tested, with the assistance of Dell, MS and the third party integrator, PVNET will systematically transfer email from its own email server system.

The Cisco call manager and voice messaging servers have reached the end of their useful life. Although purchased eight years ago for a cost of about $40,000, the Cisco handsets can be reconfigured and used with the MS Lync to provide telephonic voice connectivity for users over a unified communications system. Lync will provide users with telephony, email, messaging and video conferencing experiences from desktop and laptop computers at City Hall, other City facilities or remote sites (e.g. home or during travel) most anywhere around the world.

The voice gateway equipment purchased with the approval of the City Council in 2010 will be used to operate the MS Exchange and provide connection to the public telephone system. The FY11-12 budget for the Equipment Replacement fund – Computers includes an appropriation totaling $40,000 for the migration of the voice and messaging systems to MS Exchange, MS Lync, connection to the public telephone system and the VIM and reconfiguration of the Cisco handsets for the unified communications system.

MS Exchange provides "Unified Messaging" that lets users receive voice mail, email, and faxes in their email inboxes, and lets them access their email remotely from desktop computers, laptops, cell phones and other wireless devices. Voice commands can be given to control and listen to email over the phone (and also send some basic messages, like "I'll be late"). The compliance and legal search features include the Recoverable Items folder. If configured, the Recoverable Items folder allows for a "tamper proof" storage area (users cannot circumvent the Recoverable Items folder to bypass legal discovery), which also provides a revision history of any modified items. The migration to MS Exchange will enable the choice of retention of all emails or deletion after a certain number of days, as well the integration of third party email archival systems that could improve email search requests, and ultimately improve public record act requests and legal discovery.
Staff expects that the City will experience a significant cost savings resulting from its decision to defer the voice system upgrade. Migrating and operating the voice system to the Dell V/M will avoid the cost of purchasing dedicated licenses and hardware that would have been borne with the Cisco voice upgrade approved in late 2010.

Several of the advanced features are related to integration with other MS software such as:

- Availability to view contacts, user status (e.g. available, busy, do not disturb);
- Office can show if other people are working on the same document;
- The main new features of this version are the addition of real-time multi-client collaborative capabilities, which allow teams of people to see and simultaneously work on the same documents and communications session. These features are implemented as follows:
  
  - Collaboration through Whiteboard documents, where the participants have great freedom to share text, drawing and graphical annotations;
  - Collaboration through PowerPoint documents, where the participants can control and see presentations, as well as allow participants to add text, drawing and graphical annotations;
  - Desktop sharing, usually by allowing participants to see and collaborate on your windows screen;

**Phase 4 (4th - 6th month): Replacement Desktop Computers with MS Windows 7 Pre-Installed and Migration to the Office Professional 2010**

Most all of the desktop computers in use have reached the end of their life and are running on the MS XP operating system that was originally released in 2001 and discontinued in 2009. All desktop computers are using the MS Office Professional 2003 productivity suite, including Word, Excel and PowerPoint.

Although replacement desktop computers have not been selected at this time, the performance specifications will include the following:

1) Dual core Intel processors;
2) 8GB RAM memory; and
3) Dual solid state drives.
The replacement of the current desktop computers is essential, especially in anticipation of the replacement of the Sungard accounting application with an ERP platform. The performance specifications described above will be necessary to run software applications such as the ERP, CAD, Adobe Photoshop, InDesign, GIS and Office 2010. The migration to MS Windows 7 is also essential to ensure compatibility and performance while running more demanding application software previously described. Windows 7 will improve file transfer speed, desktop management of multiple applications and files that are open, significantly improved cache memory management, and even save time on start up and shut down.

Approximately 30 desktop computers that are currently deployed will be upgraded to enterprise versions of Windows 7, Office 2010 and other applications required to connect to unified communications and the applications running on the Dell V/M. Approximately 60 desktop computers in total are expected to be replaced. The desktop computers would be purchased in accordance with the City's purchasing ordinance, likely via a bid process or the lowest government contract bid available.

Laptops will be installed with enterprise versions of Windows 7, Office 2010 and other applications required to connect to unified communications and the applications running on the V/M. Reconfiguration of the laptops will enable remote use while traveling as if the user was at City Hall.

**Fiscal Overview of the IT System**

The FY11-12 budget in the Equipment Replacement Fund – Computers includes about $445,000 for the IT Infrastructure Plan (the "IT Plan"), including necessary equipment replacement that has reached its end of life. The budget for the implementation of the IT Plan includes $299,000 in FY11-12, approximately $146,000 less than expected when the City's budget was approved by the City Council in June 2011.

Additionally, the FY11-12 and FY12-13 budget in the Equipment Replacement Fund – Computer Maintenance and Services includes the provision for $46,000 for software licensing and support. The total amount included in the FY11-12 and FY12-13 budget in the Equipment Replacement Fund – Computer Maintenance and Services is $145,000 and $211,000 respectively. Therefore, no budget adjustments are necessary. The FY11-12 and FY12-13 operating budgets are sufficient to absorb the cost resulting from the implementations of the IT Plan. A summary of the budget for the IT plan follows:
Acquisition and implementation of redundant, high availability virtual server system and storage area network with (3) three-year warranty and support agreement would include 24/7 remote technical support, as well as on-site support for mission critical events within 4 hours. A brief overview of the performance specifications of the Dell VIM follows:

(3) Dell PowerEdge710 servers with:
- (2) Intel Xeon X5660 six-core 2.8Ghz processors;
- 12M Cache, 1,333MHz maximum memory; and
- 96GB RAM, 1,333MHz dual ranked LV RDIMMs for 2 processors.

(2) Dell PowerConnect 6224 managed switches with 24GB Ethernet ports to connect the servers to the storage array.

Dell EqualLogic PS6100XS storage array with:
- 13TB capacity;
- 7 x 400 GB solid state drives;
- 17 x 600GB 10K SAS drive; and
- Dual controllers, HA with failover.

(1) Dell rack storage system for servers, switches and storage array with UPS, administrative console, including 24/7 support and extended warranties.

Additional 3rd party implementation services for Dell VIM configuration

Unified communication hardware, including servers, Cisco handset flash and implementation services (approved by the City Council on July 6, 2010)

Replace 60 desktop computers (60@$1,850)

MS Enterprise licenses and software assurance

Total
Enterprise Signature Form

This signature form sets out the documents entered into under this signature form and together along with the terms and conditions contained therein are part of the contract(s) identified above. This program signature form and all attachments identified are entered into between the Customer and Microsoft Affiliate signing, as of the effective date identified below.

<table>
<thead>
<tr>
<th>Document Description</th>
<th>Document Number or Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Agreement</td>
<td>X20-00033</td>
</tr>
<tr>
<td>Enterprise Agreement Amendment</td>
<td>CTM-001-fsilver-CORIVEA02</td>
</tr>
<tr>
<td>EA Attachment A</td>
<td>001-fsilver-CORIVEA042</td>
</tr>
</tbody>
</table>

Representations and warranties. By signing below, Customer attests they have received copies of the contract document(s) listed above, and the parties agree to be bound by the terms of the contract(s) and document(s) identified above, and Customer represents and warrants that (1) Customer has read and understands the terms therein, including all documents it incorporates by reference and any amendments to those document(s) and (2) agrees to be bound by those terms.

Customer

Name of Entity * County Office: Riverside
Signature: ________________________________
Printed Name: Ritha Hai
Printed Title: Procurement Contract Specialist
Signature Date: 05/14/08

Contracting Microsoft Affiliate

Microsoft Licensing, GP
Signature: ________________________________
Printed Name: Mesfin Felleke
Printed Title: Program Manager, Compliance
Signature Date: SEP 08 2008
Effective Date: 9/10/2008

* indicates required field

FORM APPROVED  COUNTY COUNSEL
BY NEAL R. KIPNIS  DATE

Volume Licensing Programs Signature Form
(North America) State and Local (English) September 3, 2007  Page 1 of 2

ATTACHMENT 5-30
Optional 2nd Customer signature or Outsourcer Signature (if applicable)

<table>
<thead>
<tr>
<th>Customer</th>
<th>Outsourcer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Entity</td>
<td>Name of Entity</td>
</tr>
<tr>
<td>Signature *</td>
<td>Signature *</td>
</tr>
<tr>
<td>Printed Name *</td>
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</tr>
<tr>
<td>Printed Title *</td>
<td>Printed Title *</td>
</tr>
<tr>
<td>Signature Date *</td>
<td>Signature Date *</td>
</tr>
</tbody>
</table>

If Customer requires physical media, additional contacts, or is reporting multiple previous Enrollments, include the appropriate form(s) with this signature form. If no media form is included, no physical media will be sent.

After this signature form is signed by the Customer, send it, along with completed documents, to Customer's channel partner or Microsoft account manager who must submit them to the following address. When the signature form is fully executed by Microsoft, Customer will receive a confirmation copy.

Microsoft Licensing, GP
Dept. 551, Volume Licensing
6100 Neil Road, Suite 210
Reno, Nevada USA 89511-1137

Prepared By: Forrest Silverman
Enterprise Agreement

Not for Use with Microsoft Business Agreement or Microsoft Business and Services Agreement

Contents

Enterprise Agreement.......................... 1
1. Definitions...................................... 1
2. How the Enterprise program works........... 3
3. How to establish price level.................. 4
4. License grant — what Enrolled Affiliates are licensed to run............. 4
5. How to know what Product use rights apply.................. 6
6. How to order Product Licenses................. 6
7. Making copies of Products and re-imaging rights.................. 8
8. Transferring and reassigning Licenses.................. 9
9. Term and termination.......................... 10
10. How to renew an Enrollment.................... 11
11. Restrictions on use......................... 12
12. Confidentiality............................... 12
13. Warranties.................................... 13
14. Defense of infringement and misappropriation claims............. 13
15. Limitation of liability....................... 15
16. Verifying compliance......................... 15
17. Miscellaneous................................. 16

This Microsoft Enterprise Agreement is entered into between the entities identified on the program signature form.

Effective date. The effective date of this agreement is the effective date of the first Enrollment or the date Microsoft accepts this agreement, whichever is earlier.

This agreement consists of (1) these agreement terms and conditions and the signature form and all attachments identified therein, (2) the Product List, (3) the Product use rights applicable to Products licensed under this agreement, (4) any Affiliate Enrollment entered into under this agreement, and (5) any order submitted under this agreement.

Terms and Conditions

A Note on Section Summaries: Some sections of this agreement have a summary at the beginning. These summaries are intended for ease of reference and are not part of the agreement. If any summary conflicts with the section it is summarizing, the section of the agreement, and not the summary, controls.

1. Definitions.

"Affiliate" means (1) with regard to Customer, (a) any government agency, department, office, instrumentality, division, unit or other entity of the state or local government that is supervised by or is part of Customer, or which supervises Customer or of which Customer is a part, or which is under common
supervision with Customer; (b) any county, borough, commonwealth, city, municipality, town, township, special purpose district, or other similar type of governmental instrumentality established by the laws of Customer’s state and located within Customer’s state jurisdiction and geographic boundaries; and (c) any other entity in Customer’s state expressly authorized by the laws of Customer’s state to purchase under state contracts; provided that a state and its Affiliates shall not, for purposes of this definition, be considered to be Affiliates of the federal government and its Affiliates, and (2) with regard to Microsoft, any legal entity that Microsoft owns, that owns Microsoft, or that is under common ownership with Microsoft;

"Additional Product" means any Product other than an Enterprise Product that an Enrolled Affiliate chooses to license under its Enrollment;

"available" means Microsoft has made licenses for that Product available on the Product List for ordering under a particular licensing program;

"CAL" means a Client Access License,

"Commercial Product" means any Product Microsoft makes available for license for a fee;

"Customer" means the entity that has entered into this agreement and its Affiliates;

"Device-based Licenses" means Licenses that are calculated based on the number of Qualified Desktops that allow a single device to run a Product.

"Enrolled Affiliate" means an entity, either Customer or any one of Customer’s Affiliates, that has entered into an Enrollment under this agreement;

"Enrollment" means the document that an Enrolled Affiliate submits under this agreement to place its initial order;

"Enterprise" means the Enrolled Affiliate and the Affiliates it chooses on its Enrollment to include in its enterprise;

"Enterprise Product" means any Product that Microsoft designates as an Enterprise Product and that an Enrolled Affiliate chooses to license under its Enrollment (Enterprise Products may only be licensed on an Enterprise-wide basis under this program),

"Fixes" means Product fixes, modifications or enhancements or their derivatives that Microsoft releases generally (such as Commercial Product service packs);

"Free Product" means any Product Microsoft makes available for license without charge;

"License" means, for any one of the Products identified in the Product List (including standard Licenses and upgrades for desktop operating systems), the right to run the version of the Product ordered;

"L&SA" means a License and Software Assurance for any Product ordered;

"Microsoft" means the Microsoft Affiliate that has entered into this agreement or an Enrollment and its Affiliates;

"Online Service" means any software we license Enrolled Affiliate to run on Microsoft servers on a subscription basis;

"Pre-release" or "Beta" Products are Products provided prior to commercial release,

"Product" means all Commercial Products, Free Products, Pre-release Products and Beta Products, including any online services and other web-based services identified on the Product List,

"Product List" means, with respect to any licensing program, the statement published by Microsoft from time to time on the World Wide Web at http://microsoft.com/licensing/contracts, or at a successor site that Microsoft identifies, which identifies the Products that are or may be made available under the program (which availability may vary by region) and any Product-specific conditions or limitations on the acquisition of licenses for those Products;
"Qualified Desktop" means any personal desktop computer, portable computer, workstation, or similar device that is used by or for the benefit of an Enrolled Affiliate or any Affiliate included in its Enterprise and that meets the minimum requirements for running any of the Enterprise Products. Qualified Desktops do not include: (i) any computer that is designated as a server and not used as a personal computer, (ii) any device dedicated to run ONLY line-of-business software (e.g., an accounting or bookkeeping program used by an accountant or a computer-aided design program used by an engineer or architect), or (iii) any device running an embedded operating system (e.g., Windows Vista for embedded, Windows XP embedded).

"Qualified User" means a person who receives Online Services or who accesses any CAL server software licensed within an Enrolled Affiliate’s Enterprise. It does not include a person who accesses the software under an External Connector License. It also does not include a person who accesses the software in some other way that does not require a CAL.

"Qualifying Enrollment" means (1) an Enterprise Enrollment under a separate Microsoft Enterprise Agreement, (2) any Enterprise Subscription Enrollment under a separate Microsoft Enterprise Subscription Agreement, or (3) any other Enrollment submitted under the Microsoft Enterprise Agreement identified on the program signature form.

"Reseller" means a large account Reseller authorized by Microsoft to resell Licenses in an Enrolled Affiliate’s territory under this program.

"run" or "use" means to copy, install, use, access, display, run or otherwise interact with;

"Software Assurance" means an annuity offering that provides new version rights and other benefits for Microsoft software Products as set forth in the Product List, and

"User-based Licenses" means Licenses calculated based on the number of Qualified Users that allow named users to run a Product from any device.

2. How the Enterprise program works.

Enrolled Affiliate can order two general types of Products under this agreement. For “Enterprise Products,” Enrolled Affiliate must pay for a License for all Qualified Desktops and/or Qualified Users. For “Additional Products,” Enrolled Affiliate must pay for Licenses based on the actual number of copies used. To participate in this agreement, Enrolled Affiliate must order at least one Enterprise Product.

Where to submit orders. Enrolled Affiliate’s orders will be submitted directly to a Reseller. Online Services may have additional terms.

The Enterprise program gives Customers that wish to license one or more of Microsoft platform Products the means to ensure that their entire Enterprise will be licensed. Customer and Customer Affiliates can participate in this program by submitting one or more Enrollments under this agreement. On the Enrollment, the Enrolled Affiliate will designate the scope of its Enterprise and make the initial selection of Enterprise Products and any Additional Products it wishes to license. Each Enrollment must include at least one Enterprise Product. Microsoft may refuse to accept an Enrollment if it has a business reason for doing so. Notwithstanding any other provision of this agreement, only Enrolled Affiliates identified in an Enrollment will be responsible for complying with the terms of that Enrollment, including the terms of this agreement incorporated by reference in that Enrollment.

a. How Enrolled Affiliates acquire Licenses. An Enrolled Affiliate will acquire its Licenses through its chosen Reseller. Orders will be made out to and submitted to the Enrolled Affiliate’s Reseller. Microsoft will invoice that Reseller according to the terms in the applicable Enrollment. Throughout this agreement the term “price” refers to reference price. The Reseller and the Enrolled Affiliate will determine the Enrolled Affiliate’s actual price and payment terms.
b. Choosing and maintaining a Reseller. Each Enrolled Affiliate must choose and maintain a Reseller authorized in the Enrolled Affiliate's territory.

c. Online Services. The terms and conditions of the agreement apply to Online Services subscriptions throughout the entire term of the subscription except as provided here and in the Product List at http://microsoft.com/licensing/contracts. Online Services are provided as subscription services and may carry additional terms that are independent of the agreement terms as specified in the Product use rights. Billing terms for Online Services subscriptions may also differ from the terms of this agreement.

3. How to establish price level.

Generally, price levels for each category of Product are based on the number of Qualified Desktops or Qualified Users in the Enrolled Affiliate’s Enterprise. Prices are locked for a particular Product based on the price at the time Enrolled Affiliate first orders that Product.

a. Establishing Price Levels. Each Product is assigned to a Product pool (applications, systems, or servers). There are four price levels (A, B, C, and D). An Enrolled Affiliate’s price level for Enterprise Products is based on the initial number of Qualified Desktops or Qualified Users in its Enterprise and applies to Products ordered in each pool. The ability to order Device-based Licenses or User-based Licenses is determined by how the License is offered in the price list (e.g. Windows Vista is not offered as User-based License). If Enrolled Affiliate orders a platform Enterprise Product that contains both Device-based and User-based Licenses, prices will be based on the Qualified Desktop price level. Price levels are established separately for each Enrollment.

The price level for Additional Products in that pool will be level "D" throughout the term of the Enrollment.

b. Deriving prices from price levels. The Enrolled Affiliate’s prices, including true-up prices, are determined as follows.

For Products covered by the initial order. The Enrolled Affiliate’s price for Licenses for Products on its order will not change throughout the initial Enrollment term.

For Additional Products added after the initial order. The Enrolled Affiliate’s prices for Licenses for Additional Products ordered after acceptance of the Enrollment will be those prices in effect for its price level for that Product as of the date that it places its first order for that Product.

4. License grant — what Enrolled Affiliates are licensed to run.

Enrolled Affiliate can use the Enterprise Products on all Qualified Desktops (or, in the case of CALs and certain services), all Qualified Desktops or Qualified Users, as applicable, may access the specified server software. For Additional Products, Enrolled Affiliate can run as many copies as desired, provided Enrolled Affiliate submits orders for them. Enrolled Affiliate can use the latest version of the Products or choose to use any earlier version.

Generally, use rights become permanent once the Enrollment term ends and Enrolled Affiliate has completed all payments. At that time, Enrolled Affiliate will have perpetual Licenses for the number of desktops, users, or copies for which Enrolled Affiliate submitted orders during the term. In cases where the Enrollment is terminated prior to the end of the term, subsections entitled “Termination for breach” and “Early termination” describe Enrolled Affiliate’s rights.

Upon Microsoft’s acceptance of the Enrollment, the Enrolled Affiliate has the following rights during the term of its Enrollment. These rights apply to the Licenses obtained under an Enrollment and are not related to any order or fulfillment of software media. The ability to run current or later versions of a
Product licensed under this agreement could be affected by minimum system requirements or other factors (e.g. hardware or other software).

a. General. The Enrolled Affiliate may use the latest version (or any prior version) of any Product as permitted in the Product use rights, so long as it timely orders and pays for all required Licenses.

b. Use by Affiliates. The Enrolled Affiliate may sublicense the right to use the Products to any Affiliates covered under its Enrollment.

c. Special rule for Enterprise Products. So long as the Enrolled Affiliate places true-up orders as required, the Enrolled Affiliate may use the latest version (or any prior version) of each Enterprise Product on each of its Qualified Desktops as permitted in the Product use rights. In addition, for CALs, each Qualified Desktop (or, for CALs that are User-based Licenses, each Qualified User) covered by the Enrollment may access and use the associated server software.

d. When Licenses become perpetual. The right to run any Product licensed under an Enrollment is temporary until:

(i) the Enrolled Affiliate has paid all installments of the price for that Product License and the applicable initial Enrollment or renewal term during which that Product License was ordered has expired or been renewed, or

(ii) the Enrolled Affiliate is otherwise eligible for perpetual Licenses upon early termination as provided in this agreement.

Thereafter, the Enrolled Affiliate will have perpetual Licenses to run the Products ordered in the latest version available (or any prior version) as of the date of expiration, termination, or renewal. The number of perpetual Licenses will be equal to:

- For Enterprise Products other than CALs that are User-based Licenses, the total number of Qualified Desktops covered by the Enrollment;
- For CALs that are User-based Licenses, the total number of Qualified Users covered by the Enrollment; and
- For each Additional Product, the total number of Licenses ordered during the applicable initial Enrollment term or renewal term.

Subscription (Online Services) Licenses are not perpetual under any circumstances.

In the case of early termination of an Enrollment as provided in the subsection entitled "Early termination," if an Enrolled Affiliate chooses only to pay amounts due and payable as of the termination date then the Enrolled Affiliate will instead have perpetual Licenses for the number of Licenses specified in the subsection entitled "Early termination."

e. Perpetual Licenses through Software Assurance. Any perpetual Licenses received through Software Assurance supersede and replace the underlying perpetual Licenses for which that Software Assurance coverage was ordered. All perpetual Licenses acquired under this agreement remain subject to the terms of this agreement and the applicable Product use rights.

f. License confirmation. This agreement, the applicable Enrollment, the Enrolled Affiliate’s order confirmation, and any documentation evidencing transfers of Licenses, together with proof of payment, will be the Enrolled Affiliate’s evidence of all Licenses obtained under its Enrollment.
5. **How to know what Product use rights apply.**

Microsoft's Products and Fixes are licensed to Customer, not sold. The specific use rights for Products are contained in Microsoft's published Product use rights. Generally, the use rights in effect at the time Enrolled Affiliate signs the Enrollment will apply. Any changes Microsoft makes to the use rights for existing versions after Enrolled Affiliate signs the Enrollment will not apply to Enrolled Affiliate's use of those versions. For versions that were not yet released at the time of signing, the use rights in effect when that version is first released will apply. Even if Enrolled Affiliate chooses to run an earlier version of a Product than the one Enrolled Affiliate is licensing, the use rights for the latest version Enrolled Affiliate is licensed to use will still apply.

a. **Product use rights.** Microsoft publishes Product use rights for each Product and each new version of a Product. Unless otherwise specified in a license agreement, use of any Product that Customer licenses from Microsoft is governed by Product use rights specific to each Product and version and by the terms of the license agreement under which Customer licensed the Product. The latest version of the Product use rights is available at [http://www.microsoft.com/licensing/contracts](http://www.microsoft.com/licensing/contracts) or at a successor site. The use rights in effect for a Product and version on the effective date of an Enrollment or renewal term will apply to Enrolled Affiliate's use of the Product and version, except:

(i) earlier versions

If Enrolled Affiliate runs an earlier version of a Product that pre-dates both the Enrollment or renewal effective date and the current version of the Product as of that date, then the Product use rights for the version licensed apply. If the earlier version includes different components, any use rights for those components in the Product use rights that otherwise apply to the earlier version apply to Enrolled Affiliate's use of them.

(ii) versions of Products for which Microsoft revises Product use rights

If Microsoft revises the Product use rights for a particular version after an Enrollment or renewal effective date, the Product use rights applicable to that version without those revisions apply

(iii) later versions of Products Microsoft makes available after the Enrollment or renewal effective date

If a new version of a Product is made available during the Enrollment or renewal term and Enrolled Affiliate elects to run the newer version, the use rights in effect on the date that new version is first released will apply, subject to the subsection entitled "No detrimental use rights for Enterprise Products" below.

Upon renewal of an Enrollment, use rights for all Products for which Software Assurance is renewed are reset (e.g., the use rights in effect as of the renewal date will apply, not the use rights that were applicable during the preceding term)

b. **No detrimental use rights for Enterprise Products.** If a new version of an Enterprise Product has more restrictive use rights than the version that is current at the start of the applicable term, those more restrictive use rights will not apply to the Enrolled Affiliate's use of that Product during that term

c. **Reservation of rights.** All rights not expressly granted are reserved

6. **How to order Product Licenses.**

Enterprise Products must be ordered at the time the Enrollment is signed. In general, Software Assurance cannot be ordered without also ordering simultaneously underlying Licenses unless the Enrolled Affiliate is renewing unexpired Software Assurance coverage. Enrolled Affiliate can "step-up" to a higher Product edition of an existing Product by following the process described in this section.
Enrolled Affiliate must submit true-up orders annually to reflect Qualified Desktops, Qualified Users, and Additional Products added during the year.

a. Placing the initial order. Each Enrolled Affiliate must submit an initial order for the Enterprise Products and Additional Products it selects with its Enrollment. Except as provided in the following paragraph, the order must be for L&SA for all Products. When placing orders, an Enrolled Affiliate must specify the country or countries where the Enrolled Affiliate and its Affiliates will use the License.

b. Adding new Products not previously ordered. An Enrolled Affiliate may only add new Enterprise Products by entering into a new Enrollment. New Additional Products may be run provided an order for L&SA is placed in the month the Product is first run. For additional copies run after the first order, the Enrolled Affiliate must place true-up orders.

c. Stepping up to higher Product editions. If an already-ordered Product has multiple Product editions, an Enrolled Affiliate may migrate to the higher Product edition by ordering the applicable step-up License where available through Software Assurance. If step-up details are included in an initial Enrollment order, then the Enrolled Affiliate may step-up in accordance with the section entitled "True-ups and update statements." If the step-up details are not included in the initial Enrollment order, the Enrolled Affiliate may step-up by placing an order in the month the step-up is first run in accordance with the process set out in the section entitled "Adding new Products not previously ordered." 

d. Reorganizations, Consolidations, and Privatizations. If the number of Qualified Desktops or Qualified Users covered by an Enrollment changes by more than ten percent as a result of a reorganization, consolidation, or privatization of an Enrolled Affiliate, Microsoft will work with the Enrolled Affiliate in good faith to determine how to accommodate its changed circumstances in the context of this agreement. If an Enrolled Affiliate consolidates with a third party with an existing Qualifying Enrollment, Microsoft will work with the Enrolled Affiliate in good faith to accommodate its changed circumstances in the context of this agreement.

e. True-ups and update statements. Within 15 days following the anniversary of the effective date of the Enrollment (including the third-year anniversary before any renewal), or on expiration or termination, the Enrolled Affiliate must submit either:

(i) a true-up order to account for any increase in Qualified Desktops, Qualified Users, and/or Additional Products run since the last anniversary. To do this, the Enrolled Affiliate must determine the current number of Qualified Desktops, Qualified Users (if ordering User-based Licenses), and/or Additional Products run and submit a true-up order to account for any increase, or

(ii) an update statement using a form we provide to show there is no change to the number of Qualified Desktops, Qualified Users, and/or Additional Products run since the last anniversary.
In order to meet the annual true-up requirement, Enrolled Affiliate must report an annual true-up or update statement must be submitted within 60 days prior to or 15 days following the anniversary to meet the annual true-up requirement. However, an Enrolled Affiliate may also true-up multiple occasions and at any time during the term of the Enrollment. Except where Online Services are included as part of other Licenses, true-ups do not apply to Online Services.

f. How to confirm orders. Microsoft will publish information about orders placed by each Enrolled Affiliate, including an electronic confirmation of each order on a password-protected site on the World Wide Web at https://licensing.microsoft.com or a successor site. Upon Microsoft's acceptance of this agreement and Enrollments entered into under this agreement, the contact identified for this purpose will be provided access to this site.

7. Making copies of Products and re-imaging rights.

Enrolled Affiliate can make as many copies as it needs. The copies must be complete and from master copies obtained from an authorized source. If Enrolled Affiliate uses third parties to make copies, Enrolled Affiliate is responsible for them. Enrolled Affiliate can make a specified number of complimentary copies for training, evaluation, and back-up. In certain circumstances, Enrolled Affiliate can use the media that it obtains under this program to make copies of Products that it is licensing through some other channel. Generally, this is only allowed where the Product, version, language, type, and components that are being copied are identical to those licensed through that other channel.

a. General. The Enrolled Affiliate may make as many copies of the Products as it needs to distribute them within its organization. Copies must be true and complete (including copyright and trademark notices), from master copies obtained from a Microsoft approved fulfillment source. The Enrolled Affiliate may use a third party to make these copies, but the Enrolled Affiliate agrees that it will be responsible for that third party’s actions. The Enrolled Affiliate agrees to use reasonable efforts to make its employees, agents, and any other individuals that it allows to use the Products aware that the Products are licensed from Microsoft and subject to the terms of this agreement.

b. Copies for training/evaluation and back-up. The Enrolled Affiliate may (1) use up to 20 complimentary copies of any Product in a dedicated training facility on its premises, (2) use up to 10 complimentary copies of any Product for a 60 day evaluation period, and (3) use one complimentary copy of any licensed Product for back-up or archival purposes for each of its distinct geographic locations.

c. Right to re-image. Re-imaging is permitted using the Product media on the following conditions if the Microsoft Product(s) is licensed (1) from an original equipment manufacturer (OEM), (2) as full packaged Product through a retail source, or (3) under another Microsoft program, then media provided under this agreement may be used to create images for other licensed machines in place of copies provided through that separate source. This right is conditional upon the following:

   (i) A separate License must be owned from the separate source for each re-image.

   (ii) The Product, language, version, and components licensed under its Enrollment must be identical to the Product, language, version and all components licensed from the separate source.

   (iii) Except for copies of an operating system and copies of Products licensed under another Microsoft program, the Product type (e.g. upgrade or full License) must be identical to the Product type from the separate source.
Re-images made under this subsection remain subject to the terms and use rights provided with the License from the separate source. This subsection does not create or extend any warranty or support obligation.

8. Transferring and reassigning Licenses.

Enrolled Affiliate can transfer perpetual Licenses to an Affiliate and to third parties in connection with a privatization, reorganization, or consolidation — Enrolled Affiliate only needs to provide notice to Microsoft. Enrolled Affiliate cannot transfer Licenses to third parties under other circumstances without Microsoft’s prior consent. Transferees must agree to be bound by applicable terms. License transfers must be permanent; Software Assurance cannot be transferred, but under certain conditions can be reassigned to another machine within the same Enterprise; all new version rights must be transferred together with their underlying licenses; desktop operating system upgrade Licenses must stay with the computer system on which they were first installed. Generally, Enrolled Affiliate can reassign Licenses internally from one user to another or from one device to another.

<table>
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<th>Transferring Licenses to third parties.</th>
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| (i) Right to transfer. Enrolled Affiliate may transfer fully-paid perpetual Licenses to (1) an Affiliate or (2) an unaffiliated third party in connection with a privatization of an Affiliate or of an operating division of the Enrolled Affiliate or one of its Affiliates, a reorganization, or a consolidation. To do so, the Enrolled Affiliate must complete and send to Microsoft a transfer notice in a form which can be obtained from [http://microsoft.com/licensing/contracts](http://microsoft.com/licensing/contracts) before the transfer. All other transfers require Microsoft's prior written consent. Guidance on what types of transfers are permissible can be found at [http://microsoft.com/licensing/contracts](http://microsoft.com/licensing/contracts). No License transfer will be valid unless the Enrolled Affiliate provides to the transferee, and the transferee accepts in writing, the applicable Product use rights, use restrictions, limitations of liability, and the transfer restrictions described in this section. Any transfer not made in compliance with this section will be void. The resale of Licenses is expressly prohibited.
| (ii) Certain transfers not permitted. The Enrolled Affiliate may not transfer any of the following:
| - Licenses on a short-term basis (90 days or less),
| - temporary rights to use Products,
| - Software Assurance coverage,
| - perpetual Licenses for any version of any Product acquired through Software Assurance separately from the underlying perpetual Licenses for which that Software Assurance coverage was obtained, or
| - an upgrade License for a desktop operating system Product separately from the underlying desktop operating system License or from the computer system on which the Product is first installed. |

b. Internal reassignment of Licenses and Software Assurance.

(i) For Products other than the desktop operating system upgrade. For Products other than the desktop operating system upgrade, the Enrolled Affiliate may reassign Licenses within its Enterprise. However, Enrolled Affiliate may not reassign Licenses on a short-term basis (90 days or less) or reassign Software Assurance or other upgrade coverage separately from the underlying License, except as otherwise provided in this agreement. The Enrolled Affiliate may not reassign desktop operating system upgrade Licenses from one computer to another.
(ii) For desktop operating systems. The Enrolled Affiliate may reassign Software Assurance coverage on desktop operating systems from the original computer to a replacement computer within its Enterprise, as long as (1) the replacement computer is licensed to run the latest version of that operating system and (2) the Enrolled Affiliate removes any desktop operating system upgrades from the original computer.

9. **Term and termination.**

This agreement stays in place until terminated. The term of each Enrollment is stated in the Enrollment. “Renewal” means the renewal of an Enrollment. Either party can terminate the agreement on notice — that will not affect any existing Enrollments. Generally, existing Enrollments may be terminated: (1) if either party breaches the agreement and does not cure the breach in the time allotted; or (2) for non-appropriation of funds. Generally, upon termination or expiration, Enrolled Affiliate must order Licenses for copies of Products it has been using but has not yet placed orders for, and pay for all Licenses in full.

a. **Term.** This agreement will remain in effect unless it is terminated by either party as described below. Each Enrollment or order will have the term provided in that Enrollment or order.

b. **Termination without cause.** Either party may terminate this agreement, without cause, upon 60 days written notice. Such termination will merely terminate either party’s and its Affiliates’ ability to enter into new Enrollments under this agreement. Such termination will not affect any Enrollment or order not otherwise terminated, and any terms of this agreement applicable to any Enrollment or order not otherwise terminated will continue in effect with respect to that Enrollment or order. An Enrolled Affiliate may terminate an Enrollment without liability, penalty or further obligation to make payments if funds to make payments under the Enrollment are not appropriated or allocated for such purpose.

c. **Termination for breach.** Either party to an Enrollment may terminate it if the other party materially breaches its obligations under this agreement, including any obligation to submit orders or pay amounts owed (even if such non-payment is caused by non-appropriation of funds). Except where the breach is by its nature not curable within 30 days, the terminating party must give the other party 30 days notice and opportunity to cure.

If Microsoft gives such notice to an Enrolled Affiliate, Microsoft will give Customer a copy of that notice as well and Customer agrees to assist in attempting to resolve the breach. If the breach also affects other Enrollments and cannot be resolved between Microsoft and Customer within a reasonable period of time, Microsoft may also terminate this agreement and all other Enrollments under it, unless the basis for termination of the enrollment is non-appropriation of funds to the Enrolled Affiliate, in which event Microsoft may only terminate the affected Enrollment(s). If an Enrolled Affiliate ceases to be Customer’s Affiliate, Customer must promptly notify Microsoft, and Microsoft may terminate its Enrollment.

d. **Early termination.** If (1) an Enrolled Affiliate terminates its Enrollment as a result of a breach by Microsoft, or (2) if Microsoft terminates an Enrollment because the Enrolled Affiliate has ceased to be an Affiliate of Customer, or (3) Enrolled Affiliate terminates an enrollment for non-appropriation of funds, or (4) Microsoft terminate an enrollment for non-payment due to non-appropriation of funds then the Enrolled Affiliate will have the following options:

(i) It may immediately pay the total remaining amount due, including all installments, in which case, the Enrolled Affiliate will have perpetual rights for all Licenses it has ordered;

or

(ii) It may pay only amounts due as of the termination date, in which case the Enrolled Affiliate will have perpetual Licenses for
• all copies of Products (including the latest version of Products ordered under SA coverage in the current term) for which payment has been made in full, and

• the number of copies of Products it has ordered (including the latest version of Products ordered under Software Assurance coverage in current term) that is proportional to the total of installment payments paid versus total amounts due (paid and payable) if the early termination had not occurred.

Nothing in this section shall affect perpetual License rights acquired either in a separate agreement or in a prior term of the terminated Enrollment.

e. **Effect of termination or expiration.** When this agreement expires or is terminated,

(i) Enrolled Affiliate must order Licenses for all copies of Products it has run for which it has not previously submitted an order. Except as provided in the subsection titled “Early termination,” all unpaid payments for Licenses immediately become due and payable.

(ii) Enrolled Affiliate’s right to Software Assurance benefits under this agreement ends if it does not renew Software Assurance.

10. **How to renew an Enrollment.**

Generally, an Enrolled Affiliate can renew Enrollments for an additional one-year or three-year term, at its option. The renewal must include an order for Software Assurance for all Enterprise Products previously ordered, for all Qualified Desktops, and/or Qualified Users previously covered. Price levels and prices are reset at the beginning of the renewal term.

Microsoft will provide each Enrolled Affiliate with 60 days prior written notice of expiration of its Enrollment or renewal term advising it of its renewal options. An Enrolled Affiliate may have the option to renew its Enrollment for one term of 12 or 36 full calendar months. Microsoft and its Affiliates will not unreasonably reject any renewal. However, Microsoft may make a change to this program that will make it necessary for Customer and its Enrolled Affiliates to enter into new agreements and Enrollments.

a. **Renewal option.** The renewal term will start on the day following expiration of the prior term. An Enrolled Affiliate may not add new Enterprise Products not previously ordered as part of its renewal; to license new Enterprise Products, it must submit a new Enrollment.

(i) **Consequences of non-renewal.** If the Enrolled Affiliate elects not to renew its Enrollment or Software Assurance for any Product under its Enrollment, and it otherwise allows Software Assurance for any Licenses acquired under its Enrollment to lapse, then the Enrolled Affiliate will not be permitted to order Software Assurance later without first acquiring L&SA

(ii) **Renewal price levels.** Prices and price levels for pools from which an Enterprise Product has been ordered will be reset for each renewal term based upon the Enrolled Affiliate’s total number of Qualified Desktops as of the date of the renewal order.

(iii) **Renewing User-based Licenses.** If user-based Enterprise Products are renewed as part of the platform, then price levels are reset based on the current Qualified Desktop count. However if the user-based Enterprise Product is renewed outside of a platform, then the price level for the applicable pool will be based on the Enrolled Affiliate’s total number of Qualified Users as of the date of the renewal order.

(iv) **For Products renewed in a renewal order.** For each Enterprise Product and each Additional Product being renewed, the Enrolled Affiliate’s renewal prices for all Licenses will be those prices in effect for its renewal price level for that Product as of the date of the renewal order.

(v) **For Additional Products added during a renewal term.** For each new Additional Product first added during a renewal term, the Enrolled Affiliate’s prices for all Licenses
will be those prices in effect for its renewal price level for that Product as of the date that it places its first order for that Product.

(vi) Placing renewal orders. To renew, the Enrolled Affiliate must submit a renewal order within 30 days after the previous term expired. The renewal order must be for Software Assurance for:

- all platform Products or device-based Enterprise Products previously ordered equal to the number of Qualified Desktops in the Enrolled Affiliate’s Enterprise as of the date of that renewal order,
- all user-based Enterprise Products equal to the number of Qualified Users covered by the Enrolled Affiliate’s Enrollment as of the date of that renewal order.

At renewal, where applicable, an Enrolled Affiliate can elect to exchange its Device-based Licenses for User-based Licenses or vice-versa. In that event, the Enrolled Affiliate’s renewal order must include L&SA for any number of Qualified Desktops or Qualified Users in excess of its current count. See the Product List for more information, and

- all Additional Product Licenses for which the Enrolled Affiliate elects to renew Software Assurance.

11. Restrictions on use.

This section describes several restrictions that apply generally to Customer’s use of any software Microsoft provides to Customer (e.g., prohibitions on renting or hosting the software, or reverse engineering it).

a. Enrolled Affiliate must not:

(i) separate and use the components of a Product on two or more computers, upgrade or downgrade components at different times, or transfer components separately, except as provided in the Product use rights;

(ii) reverse engineer, decompile or disassemble any Product or Fix, except where applicable law permits it despite this limitation; or

(iii) rent, lease, lend or commercially host to third parties any Product or Fix, except where Microsoft agrees by separate agreement.

b. U.S. export jurisdiction. Products and Fixes are subject to U.S. export jurisdiction. For additional information see http://www.microsoft.com/exporting.

12. Confidentiality.

To the extent permitted by applicable law this agreement is confidential and should not be disclosed to third parties except to third parties that need to know about the agreement. Such parties should be instructed to keep the agreement in strict confidence. The agreement and its terms and conditions may be shared with affiliates and agents.

To the extent permitted by applicable law, the terms and conditions of this agreement are confidential. Neither party nor any of its Affiliates will disclose such terms and conditions, or the substance of any discussions that led to them, to any third party other than such party’s Affiliates or agents, or to the Enrolled Affiliate’s designated or prospective resellers who (1) have a need to know such information to assist in carrying out this agreement; and (2) have been instructed by one of the parties that all such information is to be handled in strict confidence.
13. **Warranties.**

Microsoft warrants that its Commercial Products will work substantially as described in the accompanying documentation, subject to certain limitations. If not, Microsoft will provide replacement Commercial Product or a refund. Microsoft disclaims all other warranties.

a. **Limited Product warranty.** Microsoft warrants that each version of a Commercial Product licensed by Enrolled Affiliate will perform substantially as described in the applicable Microsoft user documentation. This warranty is subject to the following limitations:

   (i) the warranty applies for one year from the date Enrolled Affiliate first runs a copy of the Product;

   (ii) any implied warranties, guarantees or conditions last only during the term of the limited warranty, except where applicable law does not permit such a limitation;

   (iii) the warranty does not cover problems caused by accident, abuse or use of the Products in a manner inconsistent with this agreement or the Product use rights, or resulting from events beyond Microsoft's reasonable control,

   (iv) the warranty does not apply to components of Products that Enrolled Affiliate is permitted to redistribute; and

   (v) the warranty does not apply to problems caused by the failure to meet minimum system requirements.

b. **Remedies for breach of limited Product warranty.** If Customer notifies Microsoft within the warranty period that a Commercial Product does not meet the limited warranty, then Microsoft will, at its option, either (1) return the price paid for the Product, or (2) repair or replace the Product. These are Customer's only remedies for breach of the limited warranty, unless other remedies are required to be provided under applicable law.

c. **No warranty on Free and Beta Products.** To the maximum extent permitted by law, Free Products and Beta Products are provided "as-is," without any warranties. Customer acknowledges that the provisions of this paragraph with regard to pre-release and Beta Products are reasonable, among other things as these Products are being provided to Customer prior to commercial release and before Microsoft has fully tested them.

d. **DISCLAIMER OF OTHER WARRANTIES.** OTHER THAN THIS LIMITED WARRANTY, MICROSOFT PROVIDES NO OTHER EXPRESS OR IMPLIED WARRANTIES. MICROSOFT DISCLAIMS ANY IMPLIED REPRESENTATIONS, WARRANTIES OR CONDITIONS, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, TITLE OR NON-INFRINGEMENT. THESE DISCLAIMERS WILL APPLY UNLESS APPLICABLE LAW DOES NOT PERMIT THEM.

14. **Defense of infringement and misappropriation claims.**

Microsoft agrees to defend Customer against claims that Microsoft software infringes someone else's intellectual property rights, and pay any damages awarded by a court or in a settlement. There are several exceptions, which limit Microsoft's obligations in cases where Customer has contributed in some way to the claim. If something Customer has done caused the claim and Microsoft is damaged, Customer must reimburse Microsoft.

If Microsoft believes that it is necessary to avoid an infringement claim, Microsoft may replace or modify the Products Customer is using. If someone enjoins Customer use of a Product, Microsoft will, at its option, replace the Product, modify it to make it non-infringing, obtain the rights Customer needs to keep using it, or refund Customer's money.
a. Agreement to protect. Microsoft will defend Customer against any claims made by an unaffiliated third party that any Commercial Product or Fix infringes that party's patent, copyright or trademark or makes intentional unlawful use of its trade secret or undisclosed information. Microsoft will also pay the amount of any resulting adverse final judgment (or settlement to which Microsoft consents). This section provides Customer's and its Affiliate's exclusive remedy for these claims. The terms "intentional unlawful use" and "undisclosed information" are used as defined in Article 39.2 of the TRIPs agreement.

b. What the Customer must do. Customer must notify Microsoft promptly in writing of the claim and give Microsoft sole control over its defense or settlement. Customer must also provide Microsoft with reasonable assistance in defending the claim. Microsoft will reimburse Customer for reasonable out of pocket expenses that it incurs in providing that assistance.

c. Limitations on defense obligation. Microsoft’s obligations will not apply to the extent that the claim or award is based on

(i) Customer's or its Affiliate's use of the Product or Fix after Microsoft notifies it to discontinue that use due to a third party claim;

(ii) Customer's or its Affiliate's combination of the Product or Fix with a non-Microsoft product, data or business process,

(iii) damages attributable to the value of the use of a non-Microsoft product, data or business process,

(iv) modifications that Customer or its Affiliates make to the Product or Fix;

(v) Customer's or its Affiliate's redistribution of the Product or Fix to, or Customer's or its Affiliate's use for the benefit of, any third party;

(vi) Customer's or its Affiliate's use of Microsoft's trademark(s) without express written consent to do so; or

(vii) any trade secret or undisclosed information claim, where Customer or its Affiliates acquire the trade secret or undisclosed information (1) through improper means, or (2) under circumstances giving rise to a duty to maintain its secrecy or limit its use; or (3) from a person (other than Microsoft or Microsoft's Affiliates) who owed to the party asserting the claim a duty to maintain the secrecy or limit the use of the trade secret or undisclosed information.

Customer will reimburse Microsoft for any costs or damages that result from any of these actions.

d. Specific rights and remedies in case of infringement.

(i) Microsoft's rights in addressing possible infringement. If Microsoft receives information concerning an infringement claim related to a Product or Fix, Microsoft may, at its expense and without obligation to do so, either

• procure for Customer the right to continue to run the allegedly infringing Product or Fix, or
• modify the Product or Fix, or replace it with a functional equivalent, to make it non-infringing, in which case Customer will immediately stop using the allegedly infringing Product or Fix after receiving notice from Microsoft.

(ii) Customer's specific remedy in case of injunction. If, as a result of an infringement claim, Customer's use of a Commercial Product or Fix is enjoined by a court of competent jurisdiction, Microsoft will, at its option, either:

• procure the right to continue its use, or
• replace it with a functional equivalent, or
• modify it to make it non-infringing, or
• refund the amount paid and terminate the License for the infringing Commercial Product or Fix

15. Limitation of liability.

Microsoft limits its liability to Customer to the amount of money Customer has paid Microsoft for the Product giving rise to the claim. This limit does not apply, however, to Microsoft’s obligations under the section entitled “Defense of infringement and misappropriation claims,” or to damages Customer incurs because of Microsoft’s breach of its confidentiality obligations or because of Microsoft’s gross negligence or willful misconduct.

Each party agrees that it will not be liable to the other for consequential, indirect, punitive or special damages, except those that result from a breach of confidentiality or from one party violating the other’s intellectual property rights.

a. Limitation on liability. Except as otherwise provided in this section, to the extent permitted by applicable law, the liability of Microsoft and of Microsoft’s contractors to Customer and its Affiliates arising under this agreement is limited to direct damages up to the amount Customer paid for the Product giving rise to that liability. In the case of Free Product or code that Customer is authorized to redistribute to third parties without separate payment to Microsoft, Microsoft’s liability is limited to U.S. $5,000. These limitations apply regardless of whether the liability is based on breach of contract, tort (including negligence), strict liability, breach of warranties, or any other legal theory. However, these monetary limitations will not apply to:

(i) Microsoft’s obligations under the section titled “Defense of infringement and misappropriation claims”; or
(ii) liability for damages for gross negligence or willful misconduct caused by Microsoft or its agents and awarded by a court of final adjudication; or
(iii) liabilities arising out of any breach by Microsoft of its obligations under the section entitled “Confidentiality”; or
(iv) liability for personal injury or death caused by Microsoft’s negligence or that of its employees or agents or for fraudulent misrepresentation.

b. Exclusion of certain damages. To the extent permitted by applicable law, whatever the legal basis for the claim, neither party, nor any of its Affiliates or suppliers, will be liable for any indirect damages (including, without limitation, consequential, special or incidental damages, damages for lost profits or revenues, business interruption, or loss of business information) arising in connection with this agreement, even if advised of the possibility of such damages or if such possibility was reasonably foreseeable. However, this exclusion does not apply to either party’s liability to the other for violation of its confidentiality obligations or of the other party’s intellectual property rights.


Microsoft has the right to review Customer’s records or conduct an onsite audit through an independent auditor. Microsoft will pay for the costs of the audit unless it reveals a material noncompliance.
a. **Right to verify compliance.** Customer must keep records relating to the Products it and its Affiliates use under any license agreement. Microsoft has the right to verify compliance with the agreement, at Microsoft's expense, during the term of the applicable enrollment and for a period of one year thereafter.

b. **Verification process and limitations.** To verify compliance, Microsoft will engage an independent accountant from an internationally recognized public accounting firm, which will be subject to a confidentiality obligation. Verification will take place upon not fewer than 30 days notice, during normal business hours and in a manner that does not interfere unreasonably with Customer's operations. As an alternative, Microsoft can require Customer to complete Microsoft's self-audit questionnaire relating to the Products Customer and any of its Affiliates use under this agreement, but reserves the right to use a verification process as set out above.

If Microsoft undertakes verification and does not find material unlicensed use (License shortage of 5% or more), Microsoft will not undertake another verification of the same entity for at least one year. Microsoft and Microsoft’s auditors will use the information obtained in compliance verification only to enforce Microsoft's rights and to determine whether Customer is in compliance with the terms of this agreement. By invoking the rights and procedures described above, Microsoft does not waive its rights to enforce this agreement or to protect its intellectual property by any other means permitted by law.

c. **Remedies for non-compliance.** If verification or self-audit reveals any unlicensed use, Customer must promptly order sufficient licenses to cover its use. If material unlicensed use is found, Customer must reimburse Microsoft for the costs Microsoft has incurred in verification and acquire the necessary additional licenses at single retail license cost within 30 days.

17. **Miscellaneous.**

a. **Notices to Microsoft.** Notices, authorizations, and requests in connection with this agreement must be sent by regular or overnight mail, express courier, fax, or email to the addresses and numbers listed on the signature form and in this agreement. Notices will be treated as delivered on the date shown on the return receipt or on the courier, fax, or email confirmation of delivery.

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<th>Copies should be sent to:</th>
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<tbody>
<tr>
<td>Microsoft Corporation</td>
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<tr>
<td>Legal and Corporate Affairs</td>
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<tr>
<td>Volume Licensing Group</td>
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<tr>
<td>One Microsoft Way</td>
</tr>
<tr>
<td>Redmond, WA 98052 USA</td>
</tr>
<tr>
<td>Via Facsimile (425) 936-7329</td>
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</tbody>
</table>

b. **Assignment.** Either party may assign this agreement to an Affiliate only. Assignment will not relieve the assigning party of its obligations under the assigned agreement. If either party assigns this agreement, it must notify the other party of the assignment in writing.

c. **Severability.** If a court holds any provision of this agreement to be illegal, invalid or unenforceable, the rest of the document will remain in effect and this agreement will be amended to give effect to the eliminated provision to the maximum extent possible.

d. **Waiver.** A waiver of any breach of this agreement is not a waiver of any other breach. Any waiver must be in writing and signed by an authorized representative of the waiving party.
e. **Applicable law; Dispute resolution.** The terms of this agreement will be governed by the laws of Enrolled Affiliate's state, without giving effect to its conflict of laws. Disputes relating to this agreement will be subject to applicable dispute resolution laws of Enrolled Affiliate's state.

f. **This agreement is not exclusive.** Customer is free to enter into agreements to license, use or promote non-Microsoft software or services.

g. **Entire agreement.** This agreement, the Product List, all Enrollments under this agreement, and the Product use rights constitute the entire agreement concerning the subject matter and supersede any prior or contemporaneous communications. In the case of a conflict between any of these documents that is not resolved expressly in the documents, their terms will control in the following order: (1) these terms and conditions and the accompanying signature form; (2) the Product List; (3) the Product use rights; (4) all Enrollments under this agreement; and (5) all orders submitted under this agreement. The terms of any purchase order or any general terms and conditions Customer or Customer Affiliates maintain do not apply.

h. **Survival.** Provisions regarding ownership and License rights, fees, Product use rights, restrictions on use, evidence of perpetual Licenses, transfer of Licenses, warranties, defense of infringement and misappropriation claims, limitations of liability, confidentiality, compliance verification, obligations on termination or expiration and the other provisions in this section entitled "Miscellaneous" will survive termination or expiration of this agreement and of any agreement in which they are incorporated.

i. **No transfer of ownership.** Microsoft does not transfer any ownership rights in any licensed Product.

j. **Free Products.** It is Microsoft's intent that the terms of this agreement and the Product use rights be in compliance with all applicable federal law and regulations. Any Free Product provided to Enrolled Affiliate is for the sole use and benefit of the Enrolled Affiliate, and is not provided for use by or personal benefit of any specific government employee.

k. **Amending the agreement.** This agreement (except the Product List and the Product use rights) can be changed only by an amendment signed by both parties.

l. **Resellers and other third parties cannot bind Microsoft.** Resellers and other third parties do not have authority to bind or impose any obligation or liability on Microsoft.

m. **Customer's rights to privacy.** Microsoft and Customer will comply with all applicable privacy and data protection laws and regulations. Customer will not give any data to Microsoft containing personal information unless the owner of the data has specifically authorized Customer to do so for use as contemplated in the last sentence of this subsection. Customer agrees to allow Microsoft to use the contact information Customer gave to Microsoft to allow Microsoft, its Affiliates, and other parties to help Customer comply with this agreement. Any personal information Customer provides in connection with this agreement will be used and protected according to the privacy statement available at [https://licensing.microsoft.com](https://licensing.microsoft.com).

n. **Natural disasters.** In the event of a “natural disaster”, Customer may have special rights, please go to [http://www.microsoft.com](http://www.microsoft.com)

o. **Copyright Violation.** Except as set forth in the section above entitled “Transferring and reassigning Licenses”, the Enrolled Affiliate agrees to pay for, and comply with the terms of this agreement and the Product use rights, for the Products it uses. Except to the extent Enrolled Affiliate is licensed under this agreement, it will be responsible for its breach of this contract and violation of our copyright in the Products, including payment of License fees specified in this agreement for unlicensed use.
Supplemental Contact Information Form  State and Local

This form can be used in combination with Agreement, and Enrollment/Registration. However, a separate form must be submitted for each Enrollment/Registration, when more than one is submitted on a signature form. For the purposes of this form, "Entity" can mean the signing Entity, Customer, Enrolled Affiliate, Integrator, Institution, or other party entering into a Volume Licensing program agreement. Primary and Notices contacts in this form will not apply to Enrollments or Registrations.

Contact information.

Each party will notify the other in writing if any of the information in the following contact information page(s) changes. The asterisks (*) indicate required fields. If the Entity chooses to designate other contact types, the same required fields must be completed for each section. By providing contact information, entity consents to its use for purposes of administering the Enrollment by Microsoft and other parties that help Microsoft administer this Enrollment. The personal information provided in connection with this agreement will be used and protected according to the privacy statement available at http://licensing.microsoft.com.

1. Additional electronic contractual notices contact information:

This contact will receive electronic contractual notices in addition to the notices contact. This contact is required if Entity does not want a duplicate set of notices issued.

- Name of Entity* County of Riverside
- Contact name First* Rithy Last* Hai
- Contact email* rhai@co.riverside.ca.us
- Street address* 2980 Washington St.
- City* Riverside State/Province* California Postal code* 92504
- Country* US
- Phone* 951-955-4929 Fax 951-955-4946
- This contact is a third party (not the Entity)  Warning This contact receives personally identifiable information of the Entity.

2. Software Assurance benefits contact:

This contact will receive communications concerning Software Assurance benefits, and any additional TechNet subscriptions that have been ordered separately from Software Assurance under its Enrollment or Registration.

- Name of Entity* County of Riverside
- Contact name First* Rithy Last* Hai
- Contact email* rhai@co.riverside.ca.us
- Street address* 2980 Washington St.
- City* Riverside State/Province* California Postal code* 92504
- Country* US
- Phone* 951-955-4929 Fax 951-955-4946
3. **MSDN contact:**

This contact will receive communications concerning registration for MSDN products ordered under its Enrollment or Registration

- Name of Entity: County of Riverside
- Contact name: First* Rithy Last* Hai
- Contact email: rhai@co.riverside.ca.us
- Street address: 2980 Washington St.
- City: Riverside
- State/Province: California
- Postal code: 92504
- Country: US
- Phone: 951-955-4929
- Fax: 951-955-4946

4. **Online Services administrator:**

This person will receive communications concerning registration for Online Services ordered under its Enrollment or Registration

- Name of Entity: County of Riverside
- Contact name: First* Rithy Last* Hai
- Contact email: rhal@co.riverside.ca.us
- Street address: 2980 Washington St.
- City: Riverside
- State/Province: California
- Postal code: 92504
- Country: US
- Phone: 951-955-4929
- Fax: 951-955-4946

5. **Customer Support Manager (CSM) contact information:**

This person is designated as the Customer Support Manager (CSM) for support-related activities.

- Name of Entity: County of Riverside
- Contact name: First* Rithy Last* Hai
- Contact email: rhai@co.riverside.ca.us
- Street address: 2980 Washington St.
- City: Riverside
- State/Province: California
- Postal code: 92504
- Country: US
- Phone: 951-955-4929
- Fax: 951-955-4946

6. **Primary contact information:**

The Entity must identify an individual from inside its organization to serve as the primary contact. This contact is the default administrator for the agreement and receives all notices unless Microsoft is provided written notice of a change. The administrator may appoint other administrators and grant others access to online information.

- Name of Entity: County of Riverside
- Contact name: First* Rithy Last* Hai
- Contact email: rhai@co.riverside.ca.us
- Street address: 2980 Washington St.
- City: Riverside
- State/Province: California
- Postal code: 92504
- Country: US
- Phone: 951-955-4929
- Fax: 951-955-4946
7. Notices and online access contact information:

This will designate a notices and online access contact different than the primary contact. This contact will replace the default administrator (primary contact) for the Agreement and receive all notices. This contact may appoint other administrators and grant others access to online information.

- [x] Same as primary contact
- Name of Entity*
- Contact name* First Last
- Contact email*
- Street address*
- City* State/Province* Postal code*
- Country*
- Phone* Fax
CompuCom - software quote
Quoted by Sam Andrews, CompuCom 7171 Forest Lane Dallas
Phone 818-988-2195  sam.andrews@compucom.com

Please fax your POs to Client Assistance Center at 800-386-9994. You may call 800-400-9852, option 2, to check status on orders.

Quoted to: Rancho Palos Verdes
Ted Vegvari
tedv@palosverdes.com

Date 10/25/2011

Important: Please provide the email address of the recipient designated to receive a CompuCom "order confirmation"

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Prices good for 30 days total of 3 years of payments = $139,747.11

Pass-Through Warranty and Other Rights. As a reseller, end-user warranties and liabilities (with respect to any third party hardware and software products provided by CompuCom) shall be provided as a pass-through from the manufacturer of such products. All software products are subject to the license agreement of the applicable software supplier, as provided with the software packaging or in the software at time of shipment.
Certified EqualLogic – PowerConnect Reference Configurations

1 Gb Ethernet environment
3 Servers (i.e. R610)
2 PowerConnect 6224 switches
1 Storage Array (i.e. PS6000E)

Maximum configuration:
40 servers and 3 Arrays (See Switch Support tables below)

This environment is a typical virtualization design. It includes 3 Dell servers, redundant stackable switches for iSCSI storage connectivity, and 1 EqualLogic Storage array.

3-2-1 hardware combinations are the most commonly sold package for first time virtualization in the mid market.

This design is coupled nicely with
- Any VMware virtualization bundle. Includes support for 6 sockets of ESX managed by vCenter in a 3 node cluster
- 3 Licenses of Windows Server 2008 R2 Enterprise of Datacenter edition for a 3 node Hyper-V cluster

Any 1 Gb switch for LAN

PowerEdge R610
PowerEdge R610
PowerEdge R610

Front
Back

PowerConnect 6224
PowerConnect 6224
PowerConnect 6224

Front
Back

PS6000E

iDrac
LAN
iSCSI SAN
iSCSI Standby SAN
ISL (Stacking)

Replace with 6248 for additional capacity. See Support Matrix below

Support Matrix: PowerConnect 6224 Switch

1 Array
Servers: 1-10 with quad connections to SAN
Servers: 1-20 with dual connections to SAN

2 Arrays
Servers: 1-8 with quad connections to SAN
Servers: 1-16 with dual connections to SAN

3 Arrays
Servers: 1-6 with quad connections to SAN
Servers: 1-12 with dual connections to SAN

Support Matrix: PowerConnect 6248 Switch

1 Array
Servers: 1-22 with quad connections to SAN
Servers: 1-40 with dual connections to SAN

2 Arrays
Servers: 1-20 with quad connections to SAN
Servers: 1-40 with dual connections to SAN

3 Arrays
Servers: 1-18 with quad connections to SAN
Servers: 1-36 with dual connections to SAN
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<td>Monitor:</td>
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<td>Sound Card:</td>
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<td>Documentation Diskette:</td>
<td>Electronic System Documentation and OpenManage DVD Kit (330-3485)</td>
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<td>RAID 1 for H700, PERC 6i, H200 or SAS 6iR Controllers (341-8699)</td>
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<td>Feature:</td>
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<td>Documentation Diskette: EqualLogic array may not be returned (468-8817)</td>
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## SOFTWARE & ACCESSORIES

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<tr>
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**Number of S & A Items:** 7

**S&A Total Amount:** $4,836.98

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<tbody>
<tr>
<td>Email Address:</td>
<td><a href="mailto:samantha_spiers@dell.com">samantha_spiers@dell.com</a></td>
<td>Phone Ext:</td>
<td>513-8194</td>
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Please review this quote carefully. If complete and accurate, you may place your order online at www.dell.com/gto (use quote number above). POs and payments should be made to Dell Marketing L.P.

If you do not have a separate agreement with Dell that applies to your order, please refer to www.dell.com/terms as follows:

If purchasing for your internal use, your order will be subject to Dell's Terms and Conditions of Sale-Direct including Dell's U.S. Return Policy, at www.dell.com/returnpolicy#total. If purchasing for resale, your order will be subject to Dell's Terms and Condition of Sale for Persons or Entities Purchasing to Resell, and other terms of Dell's PartnerDirect program at www.dell.com/partner. If your order includes services, visit www.dell.com/servicecontracts for service descriptions and terms.

Quote information is valid for U.S. customers and U.S. addresses only, and is subject to change. Sales tax on products shipped is based on "Ship To" address, and for downloads is based on "Bill To" address. Please indicate any tax-exempt status on your PO, and fax your exemption certificate, with seller listed as Dell Marketing L.P, to Dell's Tax Department at 800-433-9023. Please include your Customer Number.

For certain products shipped to end-users in California, a State Environmental Fee will be applied. For Asset Recovery/Recycling Services, visit www.dell.com/assetrecovery.
Thanks for choosing Dell! Your quote is detailed below; please review the quote for product and informational accuracy. If you find errors or desire certain changes please contact your sales professional as soon as possible.

Sales Professional Information
SALES REP: Casey Robin
Email Address: casey_robin@dell.com

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<th>QUOTATION</th>
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<td>Date: 10/24/2011</td>
<td>Customer Name: RANCHO PALOS VERDES CITY HALL</td>
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<tr>
<th>Base Unit</th>
<th>Dell 4220 42U Rack, No Doors No Side Panels, Ground Ship NOT for AK / HI (224-4838)</th>
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<td>1U KMM Console with Touchpad Keyboard and 17 LCD, Rapid Rails (310-9981)</td>
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<td>Port Expansion Module (8in/1out), includes 2x CAT5 cables (310-1918)</td>
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<tr>
<td></td>
<td>USB2 connection Server Interface Pod w Virtual Media, includes 2x CAT5 cable (330-0268)</td>
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<table>
<thead>
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<td>DECLINED CRITICAL BUSINESS SERVER OR STORAGE SOFTWARE SUPPORT PACKAGE-CALL YOUR DELL SALES REP IF UPGRADE NEEDED (928-4869)</td>
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<td>On-Site installation Declined (900-9997)</td>
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<tr>
<td>Port Expansion Module (8in/1out), includes 2x CAT5 cables (310-1918)</td>
<td>$70.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USB2 connection Server Interface Pod w Virtual Media, includes 2x CAT5 cable (330-0268)</td>
<td>$1,096.08</td>
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*Total Purchase Price: $6,425.62

Product Subtotal: $5,933.56
Tax: $492.06
Shipping & Handling: $0.00
State Environmental Fee: $0.00
Shipping Method: LTL 5 DAY OR LESS

(* Amount denoted in $)

Statement of Conditions
The information in this document is believed to be accurate. However, Dell assumes no responsibility for inaccuracies, errors, or omissions, and shall not be liable for direct, indirect, special, incidental, or consequential damages resulting from any such error or omission. Dell is not responsible for pricing or other errors, and reserves the right to cancel orders arising from such errors.
Dell may make changes to this proposal including changes or updates to the products and services described, including pricing, without notice or obligation.
This proposal is not intended to create a contractual relationship. Unless expressly agreed otherwise in a writing signed by the parties, all orders by RANCHO PALOS VERDES CITY HALL for Dell products and services shall be subject to Dell's Terms and Conditions of Sale-Direct, which can be found at www.dell.com/terms, and which incorporate Dell's U.S. Return Policy, at www.dell.com/returnpolicy#total. Please read those terms carefully and in their entirety, and note in particular that Dell EqualLogic and EqualLogic-branded products, Dell|EMC and EMC-branded products, PowerVault ML6000 tape libraries, non-Dell-branded enterprise products, enterprise software, and customized hardware or software products may not be returned at any time. Orders also shall be subject to the terms of any applicable service contract(s), which can be found at www.dell.com/servicecontracts.
All information supplied to RANCHO PALOS VERDES CITY HALL for the purpose of this proposal is to be considered confidential information belonging to Dell.

About Dell
Dell Inc. (NASDAQ: DELL) listens to customers and delivers innovative technology and services they trust and value. Uniquely enabled by its direct business model, Dell is a leading global systems and services company and No. 34 on the Fortune 500. For more information, visit www.dell.com.

Privacy Policy
Dell respects your privacy. Across our business, around the world, Dell will collect, store, and use customer information only to support and enhance our relationship with your organization, for example, to process your purchase, provide service and support, and share product, service, and company news and offerings with you. Dell does not sell your personal information.
For a complete statement of our Global Privacy Policy, please visit dell.com/privacy.
Service Description
Remote Implementation of a Dell EqualLogic Array

Service SKUs

See Appendix A

Service Overview

This service provides for the remote initial setup of a Virtual Environment (VMWare or Hyper-V) with Dell PowerEdge™ servers (the “Service” or “Services”) and Dell Storage, as set forth more specifically in this Service Description. This Service allows Dell Customers who will be performing the physical installation to work remotely with Dell by phone and secure internet access (except where prohibited by law). This Service includes phone support assistance to the Customer during the course of the following:

- Installation of the OS of ‘up-to’ 3 servers;
- Installation of the storage device;
- Configuration of two iSCSI switches;
- Configuration of HA in a Virtual Environment;
- Conversion of ‘up-to’ 10 Physical to Virtual Servers.

This Service will be provided during normal Dell business hours Monday through Friday (8:00am to 6:00pm Customer local time) unless specified otherwise in Appendix B. Any services beyond normal Dell business hours will be reflected on the Customer’s invoice. No service activities shall take place during local, state and/or country holidays unless other arrangements have been made through the sales team and the Dell project coordinator.

Key Service Steps

- Design:
  1. Review and obtain the site technical requirements with the Customer.
  2. Verify that the existing hosts meet the minimum hardware and software requirements.
  3. Create a valid design based on the Customer’s hardware and software configuration:
     a. Define/confirm that the configuration meets the minimum hardware and software requirements for the environment.
  4. Discuss the recommended local area network (“LAN”) configurations and security settings for all iSCSI hosts with the Customer.
- Planning:
  1. Review the site environmental and technical readiness requirements.
  2. Confirm readiness review and installation dates and highlight dependencies on complete Customer site readiness and product ship dates to meet the planned installation schedule.
  3. Ensure that the Customer reviews, accepts, and abides by the terms and conditions of this Service Description.
- Implementation and Testing:
  1. Server OS Setup
     a. Install the OS from a CD-ROM or USB Key.
     b. Configure Dell supported hardware devices.
     c. Configure and test TCP/IP networking (IP address, subnet, gateway and DNS client).
     d. Install directory Services, if applicable:
        i. Create up to 5 user accounts and groups.
     e. Integrate into existing domain, if applicable
     f. Create and install up to two virtual switches and up to two virtual machines (“VM”) and install OS on one VM.
        i. Configure VCenter Server or SCVMM depending on the environment.
2. Array setup:
   a. Configure the array(s) and create a group or multiple groups:
      i. Assign member name(s).
      ii. Assign network interface name(s) and IP configuration.
      iii. Create initial group name and assign IP address.
      iv. Select RAID set as defined by the Customer.
   b. Login to the Management GUI through the Web interface.
   c. Setup Event Notification:
      i. Assign SMTP server for email notifications.
      ii. Setup Email Home configuration.
      iii. Enter email address(s) for event notifications.
      iv. Configure Syslog host, if required.
   d. Configure challenge handshake authentication protocol ("CHAP") authentication, if required.
   e. Set initial group management and administration passwords:
      i. Create additional administrative accounts, if required.
   f. Volume Creation (up to nine initial volumes):
      i. Create initial volume(s) for test data set.
      ii. Restrict access via CHAP, IP, or iSCSI name.
   g. Set the time zone, time and NTP Server, if applicable.
   h. Create and secure volumes for additional hosts.
   i. Demonstrate Snapshots and creating Snapshot schedules.
   j. Configure additional network interfaces, up to three active redundant connections.

3. Host and initiator setup:
   a. Install the appropriate initiator.
   b. Install MPIO (if applicable).
   c. Install Auto Snapshot Manager, if applicable.
   d. Install Host Integration Tools, if applicable.
   e. Connect the initiator to the array by adding the target portal to the iSCSI initiator.

4. Initialize and bind all volumes:
   a. Login to, initialize and format all volumes:
      i. Login to all volumes from the MS initiator.
      ii. Mount, initialize, partition, and format the volume.
   b. Select the Bound Volumes/Devices tab on the MS Initiator and bind all volumes.
   c. Demonstrate read/write access by copying and reading Customer supplied data.
   d. Demonstrate growing a volume and expanding a file-system on the host OS.

5. iSCSI Ethernet Switch setup:
   a. Configure the switch, as set forth in the design (based on which options are chosen):
      i. Create Management port
      ii. Create up to two VLANs.
         (a) iSCSI Optimize for traffic
      iii. Configure switch redundancy
         (a) Create lag and/or
         (b) Configure stacking.
      iv. Upgrade the switch firmware to the latest version.

6. High Availability and Virtual Network configuration:
   a. Phone based assistance completing setup of server to allow remote access via remote access tool (except where prohibited by law).
   b. Install Base Operating System Remotely (systems must have DRAC or KVMoIP in order to install OS).
   c. Install and configure Management Station (VCenter for VMWare)
   d. Configure Virtual Networks.
      i. Management Network
      ii. iSCSI Network (where applicable)
   e. Virtual Machine Network
   f. Run latest updates on installed Host(s).
   g. Configure High-Availability (requires Shared Storage via FC or iSCSI)
i. Configure HA, DRS, VMotion, Clustering and/or SCVMM based on OS installed.

7. Physical to Virtual Conversion:

- **Product Awareness:**
  1. Conduct a brief product orientation session and review the associated documentation with Customer. This overview does not replace any available Dell education courses for this product.
  2. Demonstrate the failover capability, if implemented.

- **Project Closeout:**
  1. Provide documentation to the Customer, reflecting the Services performed.
  2. Obtain Customer acknowledgement of the Services performed.

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**Not Included with this Service**

- Physical installation of any hardware or software.
- Network cabling or any other environmental or power related activities.
- Configuration of any product not specifically noted in this Service Description.
- Performance tuning, system optimization, scripting or other similar Services.
- Installing or configuring any applications, such as Microsoft Exchange, SQL Server™, or file/print Services.
- No 3rd party software supported during conversion (**all conversion servers are subject to conversion availability**).
- Any activities other than those specifically noted in this Service Description.

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**Customer's Responsibilities**

- **Authority to Grant Access.** Customer represents and warrants that it has obtained permission for both Customer and Dell to access and use the Supported Product, the data on it, and all hardware and software components included in it, for the purpose of providing these Services. If Customer does not already have that permission, it is Customer's responsibility to obtain it, at Customer's expense, before Customer asks Dell to perform these Services.
- **Cooperate with Phone Analyst and On-site Technician.** Customer agrees to cooperate with and follow the instructions given by Dell phone analyst and its on-site technicians. Experience shows that most system problems and errors can be corrected over the phone as a result of close cooperation between the user and the analyst or technician.
- **Supported Releases.** Customer must maintain software and Supported Product(s) at Dell-specified minimum release levels or configurations as specified on PowerLink for Dell | EMC Storage or as specified on [www.support.dell.com](http://www.support.dell.com) for Supported Products. Customer must also ensure installation of remedial replacement parts, patches, software updates or subsequent releases as directed by Dell in order to keep the Support System(s) eligible for this Service.
- **Third Party Warranties.** These Services may require Dell to access hardware or software that is not manufactured by Dell. Some manufacturers' warranties may become void if Dell or anyone else other than the manufacturer works on the hardware or software. It is Customer's responsibility to ensure that Dell's performance of Services will not affect such warranties or, if it does, that the effect will be acceptable to Customer. DELL DOES NOT TAKE RESPONSIBILITY FOR THIRD PARTY WARRANTIES OR FOR ANY EFFECT THAT THE DELL SERVICES MAY HAVE ON THOSE WARRANTIES.
- **On-Site Obligations.** Where Services require on-site performance, Customer must provide free, safe and sufficient access to Customer's facilities and the Supported Product(s). Sufficient access includes ample working space, electricity, and a local telephone line. A monitor or display, a mouse (or pointing device), and keyboard must also be provided (at NO cost to Dell), if the system does not already include these items.
- Ensure the desired configuration meets the vendor's minimum system requirements for hardware and software configuration (such as Service packs, kernel versions and BIOS versions).
- Ensure that the technical and environmental requirements (such as adequate floor space, power outlets, cooling, and network connections) detailed in Dell's site checklist are completed prior to the delivery of this Service.
- Make at least one technical contact, with system administration responsibilities, available and provide appropriate facility/site/system/information access privileges as a resource to Dell during the performance of this Service.
- Provide access to the Internet from systems involved in the project in order to download any required software.
- Ensure that the existing network environment is properly setup to handle the bandwidth requirements of all iSCSI hosts and that the appropriate network drops are in place prior to the commencement of this Service.
- Ensure the availability of a system (can be a laptop or console terminal) that can establish a serial console connection between itself and the array. A Null modem cable with a standard nine-pin female connector is shipped with the array.
• Ensure the availability of a system, for initial management steps and ongoing administration, with a JAVA enabled web browser and connectivity into the array.
• Ensure that all hardware components (storage, servers and switches) are properly racked, cabled, powered up and error free prior to the commencement of this Service.

Customer Data Backup Responsibilities

Complete a backup of all existing data and programs on all affected systems prior to the delivery of this Service. DELL WILL HAVE NO LIABILITY FOR LOSS OR RECOVERY OF DATA OR PROGRAMS or loss of use of system(s) arising out of the services or support or any act or omission, including negligence, by Dell or a third-party service provider.

Terms & Conditions Overview

This agreement ("Agreement" Or "Service Description") is made between the customer ("you" Or "Customer") and the Dell entity indentified on Customer's invoice. In instances where Customer purchased this Service through a reseller or distributor, final prices and terms and conditions of sale will be as agreed between Customer and the third party from which Customer makes such purchases; however, the terms set forth herein are applicable to your use of the Service and the performance of Services by Dell. By purchasing these Services (as defined herein) from Dell, Customer agrees to be bound by all terms and conditions set forth in this document. Customer agrees that renewing, modifying, extending or continuing to utilize the Services beyond the initial term is subject to the then-current Service Description available for review at www.Dell.com/ServiceContracts.

This Service is provided pursuant to Customer's separate signed master services agreement with Dell or, in the absence of such agreement, Dell's standard Customer Master Services Agreement ("CMSA"), which can be obtained at www.Dell.com/ServiceContracts and incorporated by reference in its entirety herein.

Important Additional Information

A. Assignment. Dell may assign this Service and/or Service Description to qualified third party service providers.
B. Cancellation. Subject to the applicable product and services return policy for Customer's geographic location, Customer may terminate this Service within a defined number of days of Customer's receipt of the Supported Product by providing Dell with written notice of cancellation. If Customer cancels this Service within that period, Dell will send Customer a full refund less the costs of support claims, if any, made under this Service Description. However, if that period has transpired since Customer's receipt of the Supported Product, Customer may not cancel this Service except as provided by an applicable state/country/province law which may not be varied by agreement.

Dell may cancel this Service at any time during the Service term for any of the following reasons:
• Customer fails to pay the total price for this Service in accordance with the invoice terms;
• Customer refuses to cooperate with the assisting analyst or on-site technician; or
• Customer fails to abide by all of the terms and conditions set forth in this Service Description.

If Dell cancels this Service, Dell will send Customer written notice of cancellation at the address indicated on Customer's invoice. The notice will include the reason for cancellation and the effective date of cancellation, which will be not less than ten (10) days from the date Dell sends notice of cancellation to Customer, unless state law requires other cancellation provisions that may not be varied by agreement. IF DELL CANCELS THIS SERVICE PURSUANT TO THIS PARAGRAPH, CUSTOMER SHALL NOT BE ENTITLED TO ANY REFUND OF FEES PAID OR DUE TO DELL.

C. Support Limitations. Dell is not liable for any failure or delay in performance due to any cause beyond its control. Service extends only to uses for which the Supported Product was designed.
D. Service Parts Ownership. All Dell service parts removed from the Supported Product and returned to Dell become the property of Dell. Customer must pay Dell at the current retail price(s) for any service parts removed from the System and retained by Customer (except for hard drives from systems covered by Keep Your Hard Drive service) if Customer has
received replacement parts from Dell. Dell uses new and reconditioned parts made by various manufacturers in performing warranty repairs.

E. **Optional Services.** Optional services (including point-of-need support, installation, consulting, managed, and professional, support or training services) may be available for purchase from Dell and will vary by Customer location. Optional services may require a separate agreement with Dell. In the absence of such agreement, optional services are provided pursuant to this Agreement.

F. **Term and Renewal.** Customer will receive Services for the term indicated on Customer's Dell invoice. Prior to the expiration of the service term, Customer may be entitled to extend the term depending on available options then in effect and in accordance with Dell’s then-current procedures.

In addition, Dell may, at its option, propose to renew this Service by sending Customer an invoice to renew the Services. Customer may, at its option (where permitted by law), agree to such renewal of the Services by paying such invoice by the due date. Payment of renewal invoices shall indicate Customer's agreement to extend the term of this Service. By renewing this Service, Customer agrees that the then-current terms will apply to the renewal period. If Customer elects not to pay a renewal invoice, Services will be discontinued as of the expiration date set forth on the original or last paid Customer invoice.

G. **Geographic Limitations & Relocation.** This Service will be delivered to the site(s) indicated on the Customer's invoice. This Service is not available at all locations. Service options, including service levels, technical support hours and onsite response times will vary by geography and certain options may not be available for purchase in Customer's location. Dell's obligation to supply the Services to relocated Supported Products is subject to local service availability and may be subject to additional fees, and to inspection and recertification of the relocated Supported Products at Dell's then current time and materials consulting rates. Customer will provide Dell with sufficient and safe access to Customer's facilities at no cost to Dell for Dell to fulfill Dell's obligations.

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PowerEdge and EqualLogic are trademarks of Dell, Inc.
Microsoft is a registered trademark of Microsoft Corporation.
SQL Server is a trademark of Microsoft Corporation.
## Appendix A

### Service SKUs

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<th>SKU</th>
<th>Description</th>
<th>Partner</th>
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<td>990-0708</td>
<td>Remote Implementation of a Dell EqualLogic Array (to schedule, email <a href="mailto:US_Retem_Services@dell.com">US_Retem_Services@dell.com</a>)</td>
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<td>3 x 967-2649</td>
<td>Remote Installation of an Operating System on a Dell PowerEdge Server</td>
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<td>2 x 923-2669</td>
<td>Remote Implementation of an Ethernet Switch</td>
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<td>990-2858</td>
<td>Remote Advisory Service - Virtualization</td>
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<td>904-7199</td>
<td>REMOTE P2V CONVERSION,DELL</td>
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## Appendix B

### Exceptions to Dell Business Hours

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<th>Country</th>
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<tr>
<td>St. Kitts, St. Lucia, St. Vincent, Trinidad, Virgin Islands, Rest of English speaking Caribbean</td>
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</tr>
<tr>
<td>Barbados, Bahamas, Belize, Costa Rica, El Salvador, Gran Cayman, Guatemala, Honduras, Jamaica, Panama, Puerto Rico, Rep. Dominicana, Suriname, Turks and Caicos</td>
<td>8:00 AM to 5:00 PM</td>
</tr>
<tr>
<td>Australia, Bermuda, China, Haiti, Hong Kong, Japan, Korea, Malaysia, Netherland Antilles, New Zealand, Singapore, Taiwan, Thailand</td>
<td>9:00 AM to 5:00 PM</td>
</tr>
<tr>
<td>Argentina, India, Paraguay, Uruguay</td>
<td>9:00 AM to 6:00 PM</td>
</tr>
<tr>
<td>Bolivia, Chile</td>
<td>9:00 AM to 7:00 PM</td>
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