

Statement of Work for Williamson County, Texas June 23, 2016

Enterprise Installation of VMWare Horizon View with Unidesk







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1 INTRODUCTION

This Statement of Work ("SOW") sets forth the Services (as defined herein) to be performed by Dell Marketing LP ("Dell") to ("Customer"). The Services shall be performed in accordance with this SOW and the State of Texas Department of Information Resources Contract DIR SDD-1951. All Customer use of software, online services, or software-enabled Services in connection with this SOW is pursuant to the terms of the individual license agreement distributed with the service or, in the absence of such an agreement, the Agreement. Confidentiality: All information supplied to customer for the purpose of this SOW is to be considered Dell Confidential.

The following appendices are attached hereto and incorporated by reference:

Appendix A - Supported Sites

2 TERM

The term of this SOW shall begin on the date of the last signature ("Effective Date") as set forth in the Signature Section of this SOW and unless terminated in accordance with this SOW or the Agreement, shall expire on the date that Dell completes the provision of Services in accordance with this SOW provided, however, in the event the Customer has not engaged Dell to perform such Services and three (3) months have passed since the later of the Effective Date and Dell's completion of the last requested Service-related deliverable, Dell may terminate this SOW by providing thirty (30) days prior written notice. Further, in the event the term of this SOW extends beyond one (1) year, Dell reserves the right to revisit the pricing on each anniversary of the Effective Date.

3 SUMMARY OF SERVICE

Dell will provide the services as specifically described herein (the "Services"), which include the following:

Enterprise Installation of VMware Horizon View with Unidesk

4 SCOPE OF SERVICE

4.1 Introduction

The purpose of this professional services scope of work is to outline the tasks that will be completed for Williamson County in regards to the Enterprise Installation of VMware Horizon View with Unidesk.

4.2 **Detailed Description**

Dell will provide the following Services:

VDI Host Preparation and Design

 Architect and Design network VLANs to support introduction of virtual desktop infrastructure networking dependencies.



- Architect and Design DHCP scopes to support distribution of IP addresses for additional virtual devices on network segments.
- Architect and Design Active Directory OU structure for VDI Management Servers and VDI virtual machines
- Architect and Design Active Directory Group Policy inclusions an exclusion to support VDI design for management servers and virtual machines clients
- Architect and Design Microsoft KMS license server solution to be distributed for all operating systems and Microsoft applications that require KMS or MAK key activation

Hardware Installation

- Installation and Configuration of 5 (five) Dell R730 PowerEdge Servers in server enclosure with adequate power and network access.
- Installation and Configuration of optimum RAID for 5 (five) Dell R730 PowerEdge Servers to optimize VDI performance
- Installation and Configuration of 5 (five) Dell R730 PowerEdge Servers with VMWare vSphere 6
- Installation and Configuration of networking teaming and assigning of multiple network VLANs to support VMware vSphere Management and segregated VDI networking.
- Installation and Configuration of VMware vSphere vCenter for management of 5 (five) Dell R730 PowerEdge Servers
- Installation and Configuration of dedicated 10GB ISCSI network switches, optimize for Dell Compellent SC4020 Array
- Installation and Configuration of 2 (two) Dell Compellent SC4020 Storage Arrays, present and create storage pools for shared storage
- Installation and Configuration of Dell Compellent SC4020 shared storage to 5 (five) Dell R730 PowerEdge Server for clustering
- Installation and Configuration of Dell Compellent Remote Instant Replay between primary and secondary site datacenters.
- Installation and Configuration of Dell Compellent Live Volume between primary and secondary site datacenters.
- Installing and Configuration of VMWare vSphere clustering on 5 (five) Dell R730 PowerEdge Servers to enable high availability

VMWare Horizon View Installation and Configuration

Installation and Configuration

- Installation of VMWare Horizon View 6 or later
 - Installation and Configuration of dedicated Microsoft SQL 2008 R2 or later on highly available virtual machine
 - Installation and Configuration of Microsoft SQL 2008 R2 or later Management Studio
 - Installation and Configuration of Windows 2012 R2 on 7(seven) highly available virtual machines
 - Installation and Configuration of 4 (four) highly available virtual machines with VMware
 Horizon View 6 Connection Servers with prerequisites required for installation
 - Installation and Configuration of 4 (four) highly available virtual machines with VMware Horizon View 6 Access Points in dedicated DMZ
 - Installation and Configuration of 4 (four) highly available virtual machines with VMware
 Horizon 6 Servers with prerequisites required for installation



- Installation and Configuration of 2 (two) highly available virtual machine for VMware Horizon View 6 Event Database
- Installation and Configuration of Dell Compellent SC9000 storage presentation to VMware cluster as VMware datastore for 2 (two) Dell FC430 3 (three) R720 PowerEdge Servers running VMware ESXi Hosts
- Installation and Configuration of storage load balanced for placement of template and virtual machines
- Installation and Configuration of VMware Horizon View Rapid Provisioning with appropriate cache demand on 2 (two) Dell FC430 3 (three) Dell R720 PowerEdge Servers
- Installation and Configuration of VIP for VMware Horizon View Connection and VMware Horizon Security redundant brokers, test load balancing capability
- Installation and Configuration of VMware Horizon View Desktop Pools to support number or groups that will receive VDI environment designated by physical building location, room number and method of connection entry access point
- Installation and Configuration of Managed Desktop Delivery Group to support number of groups that will receive VDI environment designated by physical building location, room number and method of connection entry access point
- Installation and Configuration of Windows Base image
 - Installation and Configuration of up to 2 (two) Windows Base image 7/8.1/10 with base application set determined prior to the installation. Base application list will be determined prior to base image build out and signed off for acceptance prior to build
 - Installation, Configuration and Optimization of Windows Base Image performance for VDI with native VMware Horizon View optimization toolkit and recommended best practice settings
 - Installation and Configuration of VMware Horizon View PCOIP Component for redirection of Flash, USB and multi-media support.
 - Performance tuning for VMWare Horizon View PCOIP Flash Redirection and multi-media support
 - Installation and Configuration of VMware Horizon View Rapid Provisioning feature specific to Operating System process architecture
 - Installation and Configuration of anti-virus policies and exclusions for VDI environment per recommended best practice methodology.
 - Installation and Configuration of printer scripts, OU published printers or any specific delivery method intended to assign printers per classroom/lab for the VDI environment
 - Installation and Configuration of Windows Server 2012 R2 highly available virtual machine
 - Installation and Configuration of Microsoft KMS license server for the distribution and allocation of Microsoft operating systems and applications.
- Installation and Configuration of VMware Horizon View 6 or later Client in kiosk mode for repurposed PCs
 - Inventory device settings which include serial number, MAC Address and device information into project database for reconfiguration and distribution of VMware Horizon View 6 Client Kiosk Mode
 - Architect and design VMware Horizon View 6 or later Client Kiosk Mode naming convention to reflect placement of thin client per physical building location and room number within the organization
 - Installation and Configuration of base "thin" image that supports VMware Horizon 6 Client in Kiosk Mode



- Installation and Configuration of base "thin" image for 10 repurposed PCs
- Installation and Configuration of Wyse WTOS Thin Clients
 - Installation and Configuration of FTP Repository that will host WTOS configuration settings and firmware for each model thin client
 - Installation and Configuration of DHCP Scope Options per VLAN for Wyse Thin Client configuration settings
 - Installation and Configuration settings for WNOS.ini settings that will give customer look and feel that they expect and pointing thin clients to VMware Horizon View connection broker
 - Installation and Configuration of secondary FTP Repository that will host WTOS configuration settings and firmware for each model thin client.
 - Installation and Configuration of DHCP Scope Options per VLAN for Wyse Thin Client configuration settings for Disaster Recovery purposes
 - Installation and Configuration of Wyse Device Manager/Terradici Device Manager
- VDI Desktop Provisioning/ Desktop Pool user assignment
 - Installation and Configuration of user assignment to VDI desktop group via Active Directory
 user credentials, thin client hostname assignment and or connection entry access point.
 - Test VMware Horizon View Connection/Security Server load balancing fail-over feature and user assignment per Active Directory user credentials, thin client hostname and or connection entry access point.
 - Installation and Configuration of Rapid Provisioning Settings file which includes information for SYSPREP, license activation key, virtual machine naming convention and post installation procedures that are include but are not limited to domain join credentials, Active Directory placement, organizational information and virtual machine resource reconfiguration
- Unidesk Installation and Configuration
 - Assessment of existing Active Directory OU structure, recommendation of changes that need to be made to support VDI environment
 - Design Master Cache Point and Secondary Cache Point design
 - Designate number of secondary cache points per hosts, create storage requirements and networking
 - Install Unidesk Management Software on designated Windows Server 2012R2 virtual machine
 - Install Master Cache Point, Assign Cache Point repository, Assign Boot Disk Repository, Assign IP Address and validate communication
 - Install Secondary Cache Points two per server, assign Cache Point Repository, Assign Disk Repository, Assign IP Address and validate communication

Active Directory VDI Readiness and Configuration

Assessment and Remediation

- Assessment of existing Active Directory OU structure, recommendation of changes that need to be made to support VDI environment
- Assessment of existing Group Policies for VDI environment, recommend of changes that would support specific user types for document redirection and personal settings
- Assessment of existing software licensing method; recommend Microsoft KMS licensing for Windows Bases Operating Systems and Office



Knowledge Transfer (optional)

- Knowledge Transfer
 - Delivery of knowledge transfer over complete component installation and configuration for the duration of 1 (one) day for administrators that will include but will not be limited to Dell R720 PowerEdge Server configuration, Dell FC430 PowerEdge Servers, Microsoft Server 2012R2 configuration and administration, VMware Horizon View Security/Connection Server configuration and administration, repurposed PC configuration and deployment task list and Best Practice Recommendation and Methodology of building Windows Base image for a VDI environment.
 - Dedicated resource for the duration of 1 (one) day to field questions, troubleshoot and remediate any issues that are presented post installation of VDI environment.

4.3 Customer Responsibilities

Customer agrees generally to cooperate with Dell in its delivery of the Services. Customer agrees to the following responsibilities:

- 1) During the term of this SOW, Customer is responsible for promptly notifying Dell in writing of a) any changes Customer makes to its information technology environment that may impact Dell's delivery of the Services; and b) if Customer becomes aware that any of the Assumptions set forth herein are incorrect.
- 2) Customer will maintain a backup of all data and programs on affected systems prior to Dell performing the Services and during the term of the SOW. Dell will have no liability for loss or recovery of data, programs or loss of use of system(s) arising out of or in connection with the Services provided under this SOW.
- 3) Prior to the start of this SOW, Customer will indicate to Dell in writing a person to be the single point of contact, according to project plan, to ensure that all tasks can be completed within the specified time period. All Services communications will be addressed to such point of contact (the "Customer Contact"). Failure to do so might result in an increase in project hours and/or length in schedule.
- 4) Customer agrees to make available suitable resources, space, personnel, documentation, and systems.
- 5) Customer will provide technical points-of-contact, who have a working knowledge of the enterprise components to be considered during the Services ("Technical Contacts"). Dell may request that meetings be scheduled with Technical Contacts.
- 6) Customer Contact will have the authority to act for Customer in all aspects of the Service including bringing issues to the attention of the appropriate persons within Customer's organization and resolving conflicting requirements.
- 7) Customer Contact will ensure that any communication between Customer and Dell, including any scope-related questions or requests, are made through the appropriate Dell Project Manager.
- 8) Customer Contact will provide timely access to technical and business points of contact and required data/information for matters related to the scope of Service.
- 9) Customer Contact will ensure attendance by key Customer contacts at Customer meetings and deliverable presentations.
- 10) Customer Contact will obtain and provide project requirements, information, data, decisions and approvals within one working day of the request, unless both parties agree to a different response time.
- 11) Customer may be responsible for developing or providing documentation, materials and assistance to Dell and agrees to do so in a timely manner. Dell shall not be responsible for any



- delays in completing its assigned tasks to the extent that they result from Customer's failure to provide such timely documentation, materials and assistance.
- 12) Customer Contact will ensure the Services personnel have reasonable and safe access to the Project site, a safe working environment, an adequate office space, and parking as required.
- 13) Customer will inform Dell of all access issues and security measures, and provide access to all necessary hardware and facilities.
- 14) Customer is responsible for providing all hardware, software, internet access, and facilities for the successful completion of the Services. Facilities and power must meet Dell's requirements for the products and Services purchased.
- 15) Customer is responsible for any and all software licensing requirements. Unless otherwise directed by Customer in writing, during the installation process, Technician will "accept" on Customer's behalf any and all electronic agreements provided with the installed hardware and/or software, including without limitation licenses, terms of sale, and other terms and conditions. Customer agrees that its purchase, license, and/or use of any hardware or software installed by Technician under this SOW shall be subject to and governed by such electronic agreements to the same degree as if Customer had itself accepted the electronic agreements.

4.4 Assumptions

Dell has made the following specific assumptions while specifying the Services detailed in this SOW:

1) The provision of the Services does not include the development of any intellectual property created solely and specifically for the Customer under this SOW.

4.5 Out of Scope

For the avoidance of doubt, the parties acknowledge that the following activities are not included in the scope of this SOW.

- 1) Any services, tasks or activities other than those specifically noted in this SOW.
- 2) Any Dell training or certification services not specifically described in this SOW.
- 3) Except as set forth herein, Dell is not responsible (including financial responsibility) for any Customer and/or third party personnel, hardware, software, equipment or other assets currently utilized in the Customer's operating environment.

Upon request by Customer, Dell will provide a proposal for such out of scope services pursuant to the Change Management Process as defined in Section 6.

4.6 Schedule / Timeline / Milestones

Dell anticipates the Services will span an estimated period of 3 contiguous business weeks.

The table below is an estimate of the general project duration by phase and is intended for planning purposes only. The actual schedule may change as the project progresses.

Estimated Duration Table

Phase	Estimated Duration	Onsite/Offsite
VMware Certified Professional	3 Weeks	Onsite



Total	3 Weeks	Onsite

Once this Service has been scheduled, any changes to the schedule must occur at least 8 business days prior to the scheduled date. If Customer reschedules this service within 7 business days of the scheduled date, this may necessitate invoking the Change Control Process to determine the impact, if any, and any related price adjustments.

4.7 Service Hours

Dell intends to provide the Services during the scheduled hours stated below (the "Service Hours").

This Service will be performed during normal business hours typically 8:00 a.m. to 5:00 p.m., Monday through Friday, Customer local time and will include travel time to and from the Customer location and excludes local holidays, unless other arrangements have been made in writing between Dell and Customer.

4.8 Deliverables

The following is a list of tangible material provided as part of the Service performed by Dell for Customer under this SOW.

- 1) Design Document
 - a) Written document in PDF format which details the design of the Solution
- 2) As-Built Document
 - a) Written document in PDF format which details the settings used when building the Solution

4.9 Personnel Skills and Qualifications

Dell, will, at its sole discretion, determine the number of personnel and the appropriate skill sets necessary to complete the Services.

5 PRICING

This section describes the methodology for determining invoice amounts (the "Charges") for the Services provided under this SOW. Customer hereby agrees to pay the Charges in accordance with the Invoicing and Payment terms of the Agreement and as further supplemented within this SOW.

Charges shall be as follows:

5.1 Purchase Order Amount

Except as otherwise provided below, the Total amount to be noted on the Purchase Order provided to Dell for this SOW is: USD \$28,487.00. If this SOW includes estimates, invoices will be based on actuals usage or expenses incurred.

5.1.1 One-Time Charge Upon Service Completion

Dell will invoice Customer the One-Time Charge following performance of the Service.

One-Time Charge: USD \$28,487.00.



Payment of such invoice shall be governed by Chapter 2251 of the Texas Government Code. An invoice shall be deemed overdue the 31st day after the later of (1) the date The County receives the goods under the contract; (2) the date the performance of the service under the contract is completed; or (3) the date the Williamson County Auditor receives an invoice for the goods or services. Interest charges for any overdue payments shall be paid by The County in accordance with Texas Government Code Section 2251.025. More specifically, the rate of interest that shall accrue on a late payment is the rate in effect on September 1 of The County's fiscal year in which the payment becomes due. The said rate in effect on September 1 shall be equal to the sum of one percent (1%); and (2) the prime rate published in the Wall Street Journal on the first day of July of the preceding fiscal year that does not fall on a Saturday or Sunday.

5.1.2 Expenses

Expenses are included in the Charges under this SOW. In the event of Scope changes, pursuant to the Change Management Process, expenses shall be included in any additional Charges.

5.2 Pricing Clauses:

- 1) Pricing The terms of this SOW (including but not limited to the pricing) shall be valid for thirty (30) days following initial delivery date ("Initial Delivery Date") of this SOW to Customer. In the event this SOW is executed by Customer and returned to Dell after such thirty (30) day period, Dell may, in its sole discretion, (i) accept the SOW on the stated terms or (ii) reject the SOW and provide Customer with a revised SOW setting forth any necessary updates to the terms of the previous SOW.
- 2) The price for the Service is based on Customer's environment as disclosed to Dell. If the assumptions, Customer responsibilities and parameters within the scope of the Service used to develop the SOW are found to be incorrect or have changed, the parties agree to pursue resolution through the Change Management Process set forth in this SOW.
- 3) If any of the volumetric assumptions used in this SOW (including, time on task, locations, service consumption, and/or configuration factors and excluding estimated hours or expenses) relied upon by Dell vary by +/- five (5%) percent, Dell has the right to adjust the pricing to reflect such changes.
- 4) Taxes All prices are in USD and are exclusive of all applicable taxes

6 CHANGE MANAGEMENT PROCESS

The Change Management Process ("Change Management Process") is the process that governs changes to the scope of the Service during the Term of this SOW, as described below. The Change Management Process may be used to modify the Service described in this SOW, then, if required, a subsequent Contract Modification.

Changes permitted to be made pursuant to this Change Management Process will be limited to changes to Section 3 (Summary of Service) and Section 4 (Scope of Service) and adjustments in Section 5 (Pricing) associated with changes to Sections 3 and 4 of this SOW.

Either party may request a permitted change in the Scope of the Service by completing a Change Order Form at

www.dell.com/servicecontracts/RFC



The receiving party will review the proposed Change Order and will (i) approve it, (ii) agree to further investigation, or (iii) reject it. Changes agreed pursuant to the Change Management Process will not be effective until mutually executed by both parties.

Any desired modifications to this SOW which are not permitted above in this Section 6, will require that a written amendment to this SOW or a new SOW be mutually executed by the parties.

7 OTHER PROVISIONS

- 1) Dell may use affiliates and subcontractors to perform Services.
- 2) Dell may perform all or part of the Services off-site at a Dell or other location.
- 3) Services may be performed outside the country in which Customer and/or Dell is located. From time to time, Dell may change the location where Services are performed and/or the party performing the Services; provided however, Dell shall remain responsible to Customer for the delivery of Services.
- 4) Customer acknowledges that Dell will request Customer's participation in a Customer feedback survey. Additionally, Dell may approach Customer to serve as reference regarding Dell's performance of the Services. If Customer agrees to be a reference, Customer and Dell will agree in writing to the terms of such reference. The Infrastructure Consulting References Program has been developed to facilitate the confidential conversations between Dell customers and prospective accounts.
 - Customers are invited to join the program at the conclusion of their project for a period of one year.
 - b) We will only share your contact information to a potential customer who is interested in contacting you for a discussion on your previous experiences.
 - c) We limit usage of your reference to no more than once/month.
 - d) We will not publish your name, organization, or any customer identifiable details based on participation in this program.
- 5) If a conflict arises between the terms of the Purchase Order, SOW and Agreement, the following order of precedence shall be followed: first, the SOW; second, the Agreement; and third, the Purchase Order (if any). Provided, however, in no event will any terms and conditions contained in any Purchase Order apply irrespective of whether such terms and conditions are in conflict with or merely ancillary to any terms and conditions in the SOW or Agreement.
- 6) At Dell's request, Customer agrees to cooperate with Dell to provide the following marketing assistance to Dell.
 - Provide reference calls to potential Dell customers for similar Services with reasonable limits on the number of requested calls.
 - Participate in and approve a success story detailing business benefits Customer has derived from utilizing the Services provided by Dell. All content developed by Dell is subject to Customer's final approval.

8 **GENERAL**

Dell shall not be responsible for any delay or failure to provide Service to the extent caused by: (1) failures by Customer to perform its responsibilities under this SOW; (2) materially inaccurate assumptions; (3) a defect, deficiency or failure with respect to Customer's network, systems, software,



data or other equipment; or (4) modifications to Customer's network, systems, or other equipment made by a party other than Dell or its representatives. In the event that either party becomes aware of the occurrence of one or more of the foregoing events, they shall notify the other party accordingly. Notwithstanding such occurrence, Dell may, following discussion with Customer regarding the impact of such incident, continue to provide the Service and shall use commercially reasonable efforts to perform the Service under this SOW. Customer shall reimburse Dell for its reasonable additional costs of providing the Service and out of pocket expenses for such efforts and only to the extent attributable to the items defined above.

9 SIGNATURES

Dell and Customer have caused this SOW to be signed and delivered by their duly authorized representatives.

Dell Marketing LP

wiiiiaiiisu	n County, Texas	Dell Marke	etting EP
Ву:		Ву:	
Printed:		Printed:	
Title:		Title:	
Date:		Date:	

Please note that for administrative purposes only, Services may not be scheduled or commenced until Dell receives a Customer's purchase order that references this SOW. Upon receipt and acceptance of the Customer's purchase order, a Dell Project Manager will contact you to begin Services scheduling. Any additional and/or conflicting terms and conditions stated on Customer's purchase order shall be void and have no effect on this SOW.

Please fax a copy of your purchase order and this signed SOW (with all pages in full) to Fax: 512-283-7899, Attention: Intake Manager, RE: 12415113.

The purchase order amount should include estimated expenses, if they are billable.



Appendix A Supported Sites

The Services will be provided for the following supported sites during the term of this SOW. Additional supported sites may be included as mutually agreed using the Change Management process as defined in section 6.

Supported Site	Address	City	State	Zip	Qty
	301 SE Inner Loop Suite 105	Georgetown	TX		



Contact Summary

Customer	Williamson County, Texas		
	Contact Name: Otis Coufal		
	Phone: 512-943-1456		
	Email: ocaufal@wild	co.org	
Customer	Richard Semple, MPA, CGCIO		
	Director - Operations and Public Safety Technology		
	Williamson County ⁻	Technology Services	
	Phone: 512-943-1489		
	Employee Link: http	os://wilco365.sharepoint.com/ITS-Services	
	Public Link: www.wilco.org		
Initial Delivery Date	8/5/2016		
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Locations where work will be	301 SE Inner Loop Suite 105		
performed	Georgetown, TX		
Dell Opportunity Number	12415113		

