



STATEMENT OF WORK

Project Name:	Cisco ISE Deployment Services	Seller Representative: Rich Adams (847) 465-6000 richada@cdw.com
Customer Name:	CITY OF COSTA MESA	
CDW Affiliate:	CDW Government LLC	Solution Architect: Jack Wang
SOW Created Date:	September 30, 2020	
Drafted by:	Desiree Pagan	

This statement of work (“**Statement of Work**” or “**SOW**”) is made and entered into on the last date that this SOW is fully executed as set forth below (“**SOW Effective Date**”) by and between the undersigned, CDW Government LLC (“**Provider,**” and “**Seller,**”) and CITY OF COSTA MESA (“**Customer,**” and “**Client,**”).

This SOW shall be governed by that certain City of Mesa Agreement Number 2018011 Information Technology Solutions & Services between CDW Government LLC and City of Mesa, Arizona, administered by National IPA, effective March 1, 2018 (the “**Agreement**”). If there is a conflict between this SOW and the Agreement, then the Agreement will control, except as expressly amended in this SOW by specific reference to the Agreement.

PROJECT SCOPE

Customer would like Seller’s assistance with a pilot deployment of the Cisco Identity Services Engine (ISE) solution utilizing Virtual Servers. As part of the project, Seller will set up one Cisco ISE system for City of Costa Mesa.

Customer’s environment consists of HP access-layer switches and Net Motion as their VPN solution. The goal is to implement the Cisco ISE solution for the following network access methods and corresponding features:

Key Features	License Type	Wired	Wireless	VPN
AAA	Base	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Guest Services	Base	<input type="checkbox"/>	<input type="checkbox"/>	n/a
EasyConnect (Passive-ID)	Base	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TrustSec	Base	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TrustSec-ACI-SDA	PLUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Device Profiling **	PLUS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pxGrid	PLUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passive-ID (Non-Subscriber)	PLUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BYOD	PLUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rapid Threat Containment	PLUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MDM Integration	APEX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Posture Assessment	APEX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threat Centric NAC	APEX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Device Administration – RADIUS	Base <input type="checkbox"/>	n/a	n/a	n/a
Device Administration – TACACS+	Base <input type="checkbox"/> TACACS <input checked="" type="checkbox"/>	n/a	n/a	n/a

** Profiling via VPN is limited and dependent on AnyConnect software

Seller will provide design, and pilot implementation of the Cisco ISE solution. All work will be performed from the Customer's designated location(s) only. Seller will not travel to other Customer locations.

Subject to the other provisions of this SOW, Seller will perform the following services:

1. Discovery

- a. Review current configuration of existing HP access-layer switches to determine necessary code level and capabilities to support key 802.1x features
- b. Determine authentication requirements
- c. Discover Customer access policies and supported use cases
- d. Determine type of supplicant to use
- e. Identify any endpoint-specific technologies that would impact 802.1x such as Wake-On-LAN, PXE boot, power management, IP telephony, etc. for wired access
- f. Discover Network Devices that will utilize ISE for network device administration

2. Design

- a. Design network access for corporate users
 - i. Wired
 - ii. VPN
- b. Determine method to be used for authenticating corporate devices – 802.1x, MAB, EasyConnect
- c. Design for devices not capable of supporting 802.1X authentication
- d. Design for profiling devices
- e. Flowchart the network authentication framework
- f. Design for high availability of Cisco ISE servers
- g. Design the following device administration type/s.
 - i. TACACS+

3. Configuration

- a. For each ISE deployment, installation and configuration of virtual Cisco ISE server appliances
 - i. Admin and Monitoring/Troubleshooting servers

- ii. Policy servers
 - b. Configure high availability between primary and secondary ISE servers
 - c. Configure ISE AAA policy rules
 - d. Configure 802.1x access layer infrastructure devices in monitor mode for auditing of 802.1x environment
 - i. Refine and tune switch and endpoint supplicant configurations as necessary
 - ii. Ensure authentication checks are done for corporate devices
 - e. Once monitor mode is completed, migrate switched environments into Auth-Mode
 - f. Configure ISE AAA services for VPN access
 - g. Configure Device Profiling of devices for:
 - i. Wired
 - h. Configure ISE for integration with Microsoft Active Directory
 - i. Configure ISE for Network Device Administration:
 - i. Configure Network Resources
 - 1. Network Device Groups
 - 2. Network Device Types
 - 3. AAA Clients
 - ii. Configure Device Admin Policy Sets
4. Pilot and Testing
- a. Test the ISE 802.1x environment with representative devices and use cases
 - i. Validate the design, configuration, and customer use cases prior to production rollout
 - ii. Customer will provide 10-15 workstations or laptops running Customer OS images to test configuration of designed ISE features
 - iii. Customer will provide 10-15 IP Devices (AP's, IP Phones, Printers, etc.) representative of the production environment to test Device Profiling
 - iv. Customer will provide HP access-layer switches for testing 802.1x policies
 - v. Customer will provide Network Devices for testing device administration policies
 - b. Revise configuration as necessary
5. Production
- a. Rollout of ISE in phased approach of Wired environment at the following locations:
 - i. See Exhibit A
 - b. Rollout of ISE for VPN environment at the following locations:
 - i. See Exhibit A
 - c. Rollout of ISE for Network Device Administration environment at the following locations:
 - i. See Exhibit A
 - d. Configure network access devices with 802.1x configuration
 - e. Customer is responsible for deploying switch configurations based on templates provided by Seller
 - f. If required, package AnyConnect supplicant for end user devices rollout
6. Documentation and Knowledge Transfer
- a. Document as-built network configuration
 - b. Document authentication framework

- c. Document supplicant configuration
- d. Provide knowledge transfer for Customer IT Staff – up to four (4) hours (non-classroom)
 - i. ISE Admin and Monitoring/Troubleshooting Persona
 - ii. Policy and Profiler Personas
 - iii. 802.1x configuration for access layer devices and endpoints
 - iv. Integration and interoperability with the HP switches and NetMotion VPN used in the deployment
 - v. Network Device Administration

CUSTOMER RESPONSIBILITIES

1. Customer will provide all ISE licensing and SmartNET required to support the features and tasks covered by this SOW
2. Customer is responsible for physical installation of all hardware
3. Customer will provide full access to all network devices necessary to implement the designed solution
4. Customer will provide Seller remote console / KVM access to ISE hardware (eg. ISE iPEP) servers located remotely or where physical access to servers is limited
5. Customer will provide capable administrative staff to assist Seller with physical or logical configuration of components
6. Customer will provide Virtual guest instances capable of supporting Cisco ISE software. Current minimum system requirements for each Virtual guest are:

Requirement Type	Minimum Requirements	Small	Medium	Large
OS	Red Hat Enterprise Linux 7 (64-bit) KVM on QEMU (1.5.3-160) Hyper-V (Microsoft)			
CPU Cores	Hyperthreading Enabled	8	12	12
# of Processors		16	24	24
CPU Clock Rate	2.0 GHz or higher			
RAM		32 GB	96GB	256GB
Physical Disk	600 GB – 2TB (based on persona)			
Disk Controller	SCSI – min. 10k drives			
NIC	1-6 x 1 Gb			
Hypervisor	VMware v.8 for ESXi 5.1 U2 VMware v.11 for ESXi 6.x Hyper-V (Microsoft)			

7. Customer is responsible for building and configuring an ISE supported virtual environment– this includes any physical NIC connections that may be used for SPAN sessions
8. Customer will ensure all Network Access Devices (NADs) hardware and code, within the scope of this project, are supported by Cisco ISE and follow Seller best practice recommendations. Customer is responsible for performing upgrades or replacements of equipment if necessary.
9. Customer is responsible for deploying Network Access Devices (NADs) configurations based on templates provided by Seller
10. Customer will provide HP access-layer switches for testing 802.1x policies
11. Customer is responsible for HP access-layer switches and NetMotion VPN configuration and support escalation
12. Customer understands that the integration of ISE with HP access-layer switches and NetMotion is not guaranteed and will only be configured on a proof of concept/proof of value basis.
13. Customer will provide MAC addresses for all statically defined devices (e.g. will not use Device Profiling) in an authentication rule
14. Customer will provide and deploy all endpoint supplicants and/or AnyConnect on required endpoints based on configurations provided by Seller
15. Customer is responsible for any additional hardware, software, certificates, and licenses that are required for installation
 - a. Customer will provide valid public certificates for use on the ISE servers and the Guest Portal page to avoid browser errors.
16. Customer is responsible for Mobile Device Management platform configuration and policy
17. Customer will ensure that all Network Devices support Radius and/or TACACS+

PROJECT ASSUMPTIONS

1. Seller will provide design and pilot implementation of the Cisco ISE solution. All work will be performed from the Customer's location only. Seller will not travel to other Customer locations.
2. Seller will review initial low-level design with Customer. After mutual agreement, Customer will sign off on acceptance of the design. Any subsequent changes to the design can be made by requesting a Change Order. Seller implementation of the Change Order may be billed at additional cost on a Time and Materials basis.
3. Seller will configure no more than:
 - a. 10 AAA policy rules
 - b. 4 profiling groups
 - c. 3 HP access-layer Switches
 - d. 1 NetMotion VPN authentication
4. For Network Device Administration, Seller will configure no more than:
 - a. 5 AAA based policy rules
 - b. 2 Switches
 - c. 2 Routers
 - d. 2 Firewalls
 - e. 3 different TACACS+ levels network based administrators:
5. Seller will deploy the following features as a proof of concept only:
 - a. HP access-layer switches, NetMotion VPN authentication
6. Seller will provide configuration templates for network access devices (NADs)
7. Seller will provide 802.1x supplicant configuration

8. Seller will provide best effort for 802.1x configurations for HP access-layer switches and NetMotion VPN authentication to Cisco ISE.

OUT OF SCOPE

1. Configuration of any other network equipment not directly related task of implementing the Cisco Identity Services Engine and configuring required services. Within scope are minor changes to existing network infrastructure that may need to occur to accommodate required services, such as VLAN configurations, routing, and AAA (authentication, authorization, and accounting) services.
2. Implementation, configuration, and testing as a result of design changes made after the initial design review and acceptance
3. Seller is not responsible for upgrading code on Switches, Wireless LAN Controllers, and Firewalls
4. Configuration or troubleshooting of Customer's existing CA or PKI solution
5. Configuration or troubleshooting of Customer's existing credentials/identity sources (AD, LDAP, ODBC, etc)
6. Custom HTML or Scripting for Web Portal(s)
7. Configuration of Guest Services and BYOD
8. Configuration of MACSec or SGT
9. Configuration of EasyConnect
10. Configuration of pxGrid
11. Configuration of Threat Centric
12. Configuration DHCP and DNS Services
13. Configuration of ISE for Wireless Network
14. Deployment of Posture Assessment
15. Configuration of Mobile Device Management platform

ITEM(S) PROVIDED TO CUSTOMER

Table 1 – Item(s) Provided to Customer

Item	Description	Format
Design Document	ISE Design and Authentication Flow Information	PDF
As-Built Documentation	As-Built Information	PDF
Supplicant Configuration	Document supplicant configuration	PDF

Services not specified in this SOW are considered out of scope and will be addressed with a separate SOW or Change Order.

GENERAL RESPONSIBILITIES AND ASSUMPTIONS

- Customer is responsible for providing all access that is reasonably necessary to assist and accommodate Seller's performance of the Services.

- Customer will provide in advance and in writing, and Seller will follow, all applicable Customer's facility's safety and security rules and procedures.
- Customer is responsible for security at all Customer-Designated Locations; Seller is not responsible for lost or stolen equipment, other than solely as a result of Seller's gross negligence and willful misconduct.
- This SOW can be terminated by either party without cause upon at least fourteen (14) days' advance written notice.

PROJECT MANAGEMENT

Seller will assign a project management resource to perform the following activities during the project:

- **Kickoff Meeting.** Review SOW including project objectives and schedule, logistics, identify and confirm project participants and discuss project prerequisites.
- **Project Schedule or Plan.** A project schedule that details the schedule and resources assigned to the project.
- **Weekly Status Meetings and Reports.** Status meetings will be conducted on a weekly basis. During these meetings, Seller and you will discuss action items, tasks completed tasks outstanding, issues and conduct a budget review.
- **Change Management.** When a change to a project occurs, Seller's project change control process will be utilized.
- **Project Closure Meeting.** The project team will meet to recap the project activities, provide required documentation, discuss any next steps, and formally close the project.

CONTACT PERSONS

Each Party will appoint a person to act as that Party's point of contact ("**Contact Person**") as the time for performance nears and will communicate that person's name and information to the other Party's Contact Person.

Customer Contact Person is authorized to approve materials and Services provided by Seller, and Seller may rely on the decisions and approvals made by the Customer Contact Person (except that Seller understands that Customer may require a different person to sign any Change Orders amending this SOW). The Customer Contact Person will manage all communications with Seller, and when Services are performed at a Customer-Designated Location, the Customer Contact Person will be present or available. The Parties' Contact Persons shall be authorized to approve changes in personnel and associated rates for Services under this SOW.

CHANGE MANAGEMENT

This SOW may be modified or amended only in a writing signed by both Customer and Seller, generally in the form provided by Seller ("**Change Order**"). Services not specified in this SOW are considered out of scope and will be addressed with a separate SOW or Change Order.

In the event of a conflict between the terms and conditions set forth in a fully executed Change Order and those set forth in this SOW or a prior fully executed Change Order, the terms and conditions of the most recent fully executed Change Order shall prevail.

PROJECT SCHEDULING

Customer and Seller, who will jointly manage this project, will together develop timelines for an anticipated schedule ("**Anticipated Schedule**") based on Seller's project management methodology. Any dates, deadlines, timelines or schedules contained in the Anticipated Schedule, in this SOW or otherwise, are estimates only, and the Parties will not rely on them for purposes other than initial planning.

TOTAL FEES

The total fees due and payable under this SOW (“**Total Fees**”) include both fees for Seller’s performance of work (“**Services Fees**”) and any other related costs and fees specified in the Expenses section (“**Expenses**”).

Seller will invoice for Total Fees. Customer will pay invoices containing amounts authorized by this SOW in accordance with the terms of the Agreement. Unless otherwise specified, taxes will be invoiced but are not included in any numbers or calculations provided herein. Any objections to an invoice must be communicated to the Seller Contact Person within fifteen (15) days after receipt of the invoice.

SERVICES FEES

Services Fees will be calculated on a TIME AND MATERIALS basis.

The invoiced amount of Services Fees will equal the rate applicable for a unit of a service or resource (“**Unit Rate**”) multiplied by the number of units being provided (“**Billable Units**”) for each unit type provided by Seller (see Table below).

Services Fees of \$22,507.50 is merely an *estimate* and does not represent a *fixed fee*. Neither the Billable Units of 101 nor the Services Fees are intended to limit the bounds of what may be requested or required for performance of the Services.

The rates presented in the table below apply to *scheduled* Services that are performed during Standard Business Hours (meaning 8:00 a.m. to 5:00 p.m. local time, Monday through Friday, excluding holidays). When Seller invoices for scheduled Services that are not performed during Standard Business Hours, Services Fees will be calculated at 150% of the Unit Rates. For any unscheduled (i.e., emergency) Services performed at any time of the day, Services Fees will be calculated at 200% of the Unit Rates.

Any non-Hourly Units will be measured in one (1) unit increments when Services are performed remotely or at any Customer-Designated Location(s) (as defined below).

Any Hourly Units will be measured in one (1) hour increments with a minimum of one (1) hour billed each day Services are performed remotely and four (4) hours billed each day Services are performed at any Customer-Designated Location(s). When Hourly Seller personnel must travel more than two (2) hours a day to work at any Customer-Designated Location(s), there will be a minimum of eight (8) hours billed for each day (less travel time that is invoiced pursuant to the “Expenses” section below).

Upon notice, Seller may adjust the rates below, provided that the rates will remain fixed for at least six (6) months after the SOW Effective Date and then again for at least six (6) months after any subsequent adjustment.

The rates below only apply to Services specified in this SOW as it may be amended by one or more Change Order(s).

Table – Services Fees

Unit Type	Unit Rate	Billable Units	Subtotal
Senior Engineer – Per Hour	\$220.00	80	\$17,600.00
Senior Engineer – OT Per Hour	\$330.00	4	\$1,320.00
Project Manager – Per Hour	\$205.00	16	\$3,280.00
Project Manager – OT Per Hour	\$307.50	1	\$307.50
Estimated Totals		101	\$22,507.50

EXPENSES

When Seller’s personnel are located more than 80 miles from the Customer-Designated location, travel charges will apply. Seller will invoice Customer for the time Seller’s personnel spend traveling to and/or from the Customer-Designated Location(s) (or otherwise, as necessary) at a rate of \$85/hour. Seller will make efforts to schedule appropriate personnel from

Seller's offices located nearest to the Customer-Designated Location(s) in order to minimize such expenses. Seller's ability to do so may depend on various factors (e.g., specialized project skills needed, personnel availability, and changes to, or challenges inherent in, the Anticipated Schedule).

Seller will invoice Customer for Seller's reasonable, direct costs incurred in performance of the Services. Direct expenses include, but may not be limited to: airfare, lodging, mileage, meals, shipping, lift rentals, photo copies, tolls and parking. Seller will charge actual costs for these expenses. Any projected expenses set forth in this SOW are estimates only.

TRAVEL NOTICE

Two (2) weeks' advance notice from Customer is required for any necessary travel by Seller personnel.

CUSTOMER-DESIGNATED LOCATIONS

Seller will provide Services benefiting the locations specified on the attached Exhibit ("**Customer-Designated Locations**").

SIGNATURES

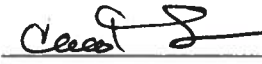
In acknowledgement that the parties below have read and understood this Statement of Work and agree to be bound by it, each party has caused this Statement of Work to be signed and transferred by its respective authorized representative.

This SOW and any Change Order may be signed in separate counterparts, each of which shall be deemed an original and all of which together will be deemed to be one original. Electronic signatures on this SOW or on any Change Order (or copies of signatures sent via electronic means) are the equivalent of handwritten signatures.

CDW Government LLC

CITY OF COSTA MESA

By: Chris
Name: Schroeder
Digitally signed by
Title: Chris Schroeder
Date: 2020.10.21
Date: 16:12:47 -05'00'

By: 
Name: Carol Medina
Title: Finance Director
Date: October 28, 2020

Mailing Address:

200 N. Milwaukee Ave.

Vernon Hills, IL 60061

Mailing Address:

EXHIBIT A

CUSTOMER-DESIGNATED LOCATIONS

Seller will provide Services benefiting the following locations ("**Customer-Designated Locations**").

Location(s)	Address
City of Costa Mesa	77 Fair Drive, Costa Mesa, CA 92626-6546