

Storage Refresh - NetApp

Statement of Work

Prepared for
City of Dalton



Engagement Number: 40322

February 6, 2019

City of Dalton
300 West Waugh Street
Dalton, GA 30719

This Statement of Work ("SOW") is entered into as of this _____ day of _____, 2019 (the "Effective Date") by and between iVision, Inc. ("iVision"), located at 1430 West Peachtree Street, Atlanta, GA 30309; and City of Dalton ("Client"), located at the address above (each of iVision and Client, a "Party" and together, the "Parties") and in keeping with our existing Master Services Agreement.

Project Summary

The City of Dalton and Dalton Police Department have storage environments that require a hardware refresh. The current IBM storage platform was purchased in 2006 and has reached end of life. The environment requires additional capacity and performance, and IT leadership also wants to consolidate the Dalton PD environment into the City of Dalton data center. The Dalton PD datacenter will act as an offsite replication target for disaster recovery.

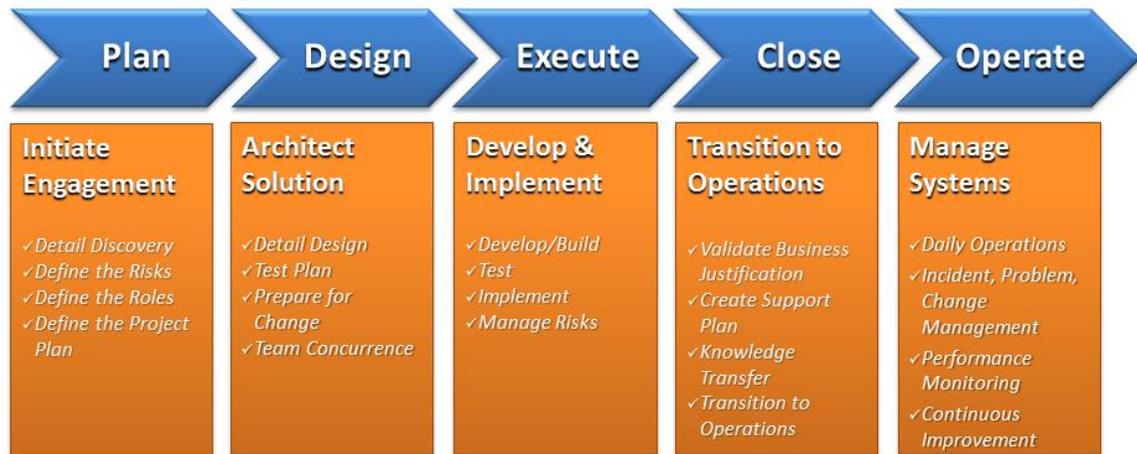
iVision has been asked to provide a quote and services to replace the IBM storage array at each location with NetApp enterprise class storage. iVision proposes a NetApp All Flash array for the City of Dalton data center, and a NetApp Hybrid array for the Dalton PD. This will provide additional performance and capacity for consolidated data center, and provide for a highly resilient, budget friendly platform for the Dalton PD.

This SOW will include the following:

- Architecture workshop to define the networking VLAN architecture to align with NetApp best practices
- Installation and configuration of an AFF A220 platform in the City of Dalton and a FAS 2720 platform for Dalton PD.
 - The A220 will require 10Gb SFP+ copper connectivity
 - The FAS2720 will use traditional 1Gb RJ45 connections
- Installation and configuration of NetApp SnapCenter to manage the VM snapshot replication between City of Dalton and Dalton PD.
- Assist with VM level migration of VM's from IBM to NetApp
- Configuration VM level replication from City of Dalton to Dalton PD

Our Project Approach

The iVision Momentum Delivery Framework



The **iVision Momentum Delivery Framework** is a powerful methodology used to deliver all iVision projects. It is based on the PMI project delivery phases for a solid and predictable delivery methodology. The Framework also leverages concepts from the Information Technology Infrastructure Library to bring focus on the concept of implementing a service into an organization. This Service based approach focuses the iVision consultants on the delivery of a service and all the related business implications of doing so. Each iVision Consultant / Engineer is trained on this framework and leverages Momentum to ensure consistent results across the entire life cycle of a solution. The full life cycle of a solution is as follows:

1. **Plan.** During this phase, the project strategy, objectives, requirements and success criteria are defined, the team is assembled, and a project plan is developed.
2. **Design.** In the Design phase, the solution design is drafted and approved.
3. **Execute.** During this phase, the design is typically phased into production following the approved testing and change management plans resulting in achievement of success criteria established in the “Plan” phase.
4. **Close.** In this phase the original business justification is validated and formal acceptance by the operations team is achieved. All documentation and maintenance procedures are turned over to Client.

Operations. This is an iterative process that focuses on continuous improvement of the service through review of availability, capacity and performance metrics. This is the process of aligning the service to meet business objectives based on continual change in a Client’s environment.

Detailed Activities

The following represents the activities that iVision will perform as part of this project as well as the expected Client responsibilities pertaining to this project:

iVision Activities

- ✓ **Architecture Workshop** – iVision will facilitate an architecture workshop to discuss recommended modifications to the current flat network architecture to create dedicated storage vLANs for the storage environment.

Note: SOW does not include time for iVision to configure the network changes. A Change Order would be required to implement the recommended changes.

- ✓ **Installation and Configuration** – iVision will install and configure a AFF A220 (City of Dalton) and FAS2720 (Dalton PD) according to NetApp Best Practices. The configuration will include the following:
 - Rack and Stack
 - ONTAP upgrade to most current GA version
 - Network configuration (NetApp side)
 - Storage layout and provisioning of capacity
 - Create NetApp NFS volumes and present to VMware
 - CIFS Configuration and namespace migration
 - Setup Auto-Support
 - System Manager
 - Unified/Performance Manager

- ✓ **NetApp SnapCenter** – iVision will install and configure NetApp SnapCenter to manage Snapmirror replication

Note: Client must provide a fully patched Windows VM for SnapCenter

- ✓ **VM Migration** – iVision will assist Dalton IT with VM migration from the IBM storage array to the NetApp storage. The migration will utilize VMware Storage vMotion for all VMs. iVision will evaluate the best method to migrate the Dalton PD VMs across the 10 Mb circuit.
- ✓ **CIFS Migration** – iVision will assist Dalton IT with CIFS migration from the current NAS platform. This migration will utilize a technology similar to RoboCopy.

Note: Client will be responsible for reconnecting user file shares after migration

- ✓ **Replication** – iVision will setup and initiate VM replication between City of Dalton and Dalton PD. Replication options may include NetApp SnapMirror and/or VMware vSphere Replication
 - ✓ **Knowledge Transfer** – iVision will provide up to four (4) hours for knowledge transfer and general NetApp training.
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Resource Management

- ✓ Schedule & Manage Project Resources
- ✓ Weekly checkpoint

Financial Management

- ✓ Track budget to actual
- ✓ Review & post time for billing purposes

Project Status Reports

- ✓ High level project indicators – time, budget, issues
- ✓ Tasks completed in current period & planned for next
- ✓ Budget review
- ✓ Issue tracking

Issue/Risk Management

- ✓ Track issues uncovered, and resolution

Client Responsibilities

- ✓ Provide access to data centers
 - ✓ Provide remote access, as required
 - ✓ Provide a fully-patched Windows VM for SnapCenter installation
 - ✓ Enact recommended networking changes, if possible
 - ✓ Data validation and user testing of migrated VMs
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Documentation Deliverables

iVision will provide the following documentation as part of this engagement:

- ✓ **Weekly Status and Work Effort Reports** – The project team will be responsible for providing weekly status and work efforts reports to Client’s project liaison.
 - **Format:** Email
- ✓ **As-Built Document** – iVision will provide As-Built documentation for the NetApp environment. If feasible, iVision will integrate into the VMware environment documentation
 - **Format:** Microsoft Word
- ✓ **Project Closure Documentation**
 - **Format:** Microsoft Word

Engagement Assumptions

- Data centers have appropriate power, rack space, and cooling for new equipment
- Core switching has four (4) 10Gb SFP+ ports in City of Dalton. Dalton PD has at least four (4) 1Gb ports available
- VMware datastores will be NFS
- All data (VM and CIFS) will be migrated to NetApp
- The current 10Mb circuit has enough capacity to handle user traffic and replication

Out of Scope

The following items are considered out-of-scope for iVision as they relate to the work effort estimated within this Statement of Work:

- Network switch configuration
- Windows VM build / configuration
- Failover runbooks / failover documentation
- Circuit bandwidth troubleshooting
- Any remediation of items found during this effort.
- iVision will not be responsible for any modifications to the existing environment not directly related to the scope of this project and called out in this SOW.
- Any items not specifically called out as in-scope.

Estimated Project Timeline

The following represents an estimated pre-project timeline based on initial requirements gathered from Client and may be revised. Note that dates are placeholders only and all project scheduling will happen once the Statement of Work is signed.

The estimated project start and end dates are as follows:

Target Start Date:	TBD
Target End Date:	TBD

Estimated Project Cost

iVision proposes the following good faith estimate to complete the services in this Statement of Work on a Time & Materials basis, at the rates and estimated times listed below:

iVision Resource	#Hours	Rate / Hour	Total
Network Architecture	4	215.00	\$ 860.00
NetApp Architecture	4	215.00	\$ 860.00
NetApp Consultant	72	215.00	\$15,480.00
Service Delivery	16	185.00	\$2,960.00
Totals	96		\$20,160.00

"iVision's standard working hours are (8) hours per day between the hours of 7:00 AM to 7:00 PM, Monday through Friday. Time required by Client to work outside the standard working hours or on Federal Holidays will be billed in addition to the above rates at one and a half (1.5) times the standard rate indicated above."

Travel Expenses

Actual and reasonable travel expenses will be billed to the client in addition to the cost for services estimated above. iVision frequently travels for consulting engagements and will make every effort to minimize the total travel costs. Any travel time required outside of a fifty (50) mile radius from the iVision Office located at 1430 West Peachtree Street, Atlanta, GA will be billed at half (0.5) times the standard hourly rate indicated above.

Engagement Terms and Conditions

Client contributions

- iVision will depend on Client's technical staff in order to complete tasks and deliverables. If this time is not made available there may be a budget impact to increasing the overall work effort of the project. iVision and Client will work in the early stages of the project to define a resource level work estimate based on project activities.
- Client will provide a readily accessible point of contact that will assist in identifying and scheduling client's personnel in a timely manner as well as coordinating communications.
- Client will provide iVision with any existing technical or process documentation that may pertain to this engagement.
- If this engagement includes the deployment of an architecture or design proposed by iVision, Client is responsible for ensuring the deployment does not deviate from the proposed architecture or design unless a change to the architecture or design has been agreed upon and approved by both Client and iVision. Deploying an architecture or design that deviates from

what has been agreed upon may result in delays and may require changes to the scope and budget.

- If this engagement includes implementation, Client will provide sufficient change windows to support the engagement's related activities. If these change windows cannot be provided then the engagement duration may be affected and may result in changes to the scope and budget.
- Client is responsible for designing, deploying, and/or configuring any third-party systems that may interoperate with those that are within scope for iVision to design, deploy, and/or configure as part of this engagement.
- Client is responsible for ensuring that all systems that pertain to this engagement are backed up and in a restorable state throughout the engagement lifecycle.
- It is Client's responsibility to ensure that all hardware and software that is required as part of this engagement is procured and provisioned in a timely manner.
- It is Client's responsibility to ensure that all software that is required as part of this engagement is properly licensed.
- Client is responsible to ensure all systems are backed up and in a restorable state throughout the project lifecycle.

Working Location and Hours

- The minimum onsite time for services is four (4) hours. In the event a Consultant must be onsite to perform a specific duty, other activities will be included to leverage the 4 hour timeframe. In the event the 4 hour timeframe is not fully leveraged, the minimum 4 hour block will be billed. Client agrees that all parties will work towards a continuous engagement schedule for all resources to ensure the availability of resources and to prevent delays.
- International or travel beyond the greater Atlanta metro will incur travel time equal to ½ of the hourly billable rate.

Engagement Scope Changes

- If during the course of this engagement the scope and/or deliverables agreed upon in this Statement of Work need to be modified to accommodate additions and/or changes, iVision will submit a Change Order document to Client for review and signature. This Change Order document will contain the proposed additions and/or changes and their respective budget impact.
- Scope changes need to be agreed upon by both Client and iVision in order for the Change Order document to be issued.

Support

- Client is responsible for ongoing operations, maintenance, and support of any systems designed, deployed, and/or configured by iVision as part of this engagement, unless an Engineering Support Services (ESS) contract has been established between Client and iVision.

Statement of Work Validity Period

- This statement of work is valid for a period of thirty (30) days from the date stated at the beginning of this document.

This Statement of Work incorporates by reference all terms and conditions of the Master Services Agreement as if such terms and conditions were fully set forth here.

Signatures of Approval

In witness whereof, City of Dalton and iVision have executed this Statement of Work by their duly authorized representatives listed below.

*Accepted and approved for **City of Dalton** by:*

Signature

Date of Acceptance

Name (please print)

Title

*Accepted and approved for **iVision, Inc.** by:*

Signature

Date of Acceptance

Name (please print)

Title