

Ashburnham

IT Advisory Board

Date: 4/10/2012 / 7:00PM

Location: Fire Conference Rm. @ Public Safety Building

Attendance: Opened @ 7:10 pm Closed @ 9:30 pm	Board Members: Ken, Joe, Brian, Duncan Not Present: Kyle Guests: N/A
Agenda	Minutes
Past minutes approval for "2/22/2012 Meeting"	Motion to accept minutes of 2/22/2012, Joe Second: Ken Pass: 4-0
Strategic Plan Discussions	
<u>Virtual Environment Upgrades:</u> <ul style="list-style-type: none"> ● Reference: Guardian Specification & Cost Projections ● high lights: <ul style="list-style-type: none"> ○ "in kind" replacement today <ul style="list-style-type: none"> ■ redundant server to be moved to PSB ○ munis today is requiring office 2010 for client side "office" work <ul style="list-style-type: none"> ■ when does munis require the 2008 server vs. 2000/03 ■ current virtual environment: no 2008 ○ note on vendor certification of virtual environment support 	<p><i>(Attachment to Minutes is the scope of work provided by Guardian)</i></p> <p><u>Scheduled meeting for 4/17 @ 6:30 PM</u> as team, to be joined at 7:00PM by Guardian representative</p> <p>IT Board Opinion: We would like to meet to discuss the details of the questions below with Guardian and the Town Administrator before providing a final recommendation to proceed. The team understands the need for the replacement but needs more information and clarification to understand the true cost.</p> <p>Questions:</p> <ul style="list-style-type: none"> ● <u>Guardian experience</u> with Avance & key applications (Munis, Vision, Exchange, & ShoreTel) <ul style="list-style-type: none"> ○ installation experience in municipal application of the Avance product

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<ul style="list-style-type: none"> ○ Note: the notes <ul style="list-style-type: none"> ■CALS for products ■other important “out of scope” items 	<ul style="list-style-type: none"> ■concern over the virtual iron experience ■longevity of Avance installation <ul style="list-style-type: none"> ● are there any protection/insurances to ensure virtual environment does not require replacement due to software support ● like we have seen with virtual iron ■discussion in notes of certification letters <ul style="list-style-type: none"> ● are there letters in hand for other installations ● <u>Clarification of service agreement</u> and avance year warranty <ul style="list-style-type: none"> ○ impact on FY13 service agreement w/Guardian ○ following years impact on service agreement w/Guardian ● Clarification on CALS for environment <ul style="list-style-type: none"> ○ estimated cost for licensing ○ what can be transferred from existing environment ● Estimated out of scope Guardian engineering services from system engineering task <ul style="list-style-type: none"> ○ ball park figure from experience
<p><u>Migration to Microsoft Office - new versions</u></p> <ul style="list-style-type: none"> ● Munis is requiring Office 2010 ● for Office 2010 in 2012 options <ul style="list-style-type: none"> ○ “all in” approach based on features or ○ migration with new machines ● strategic plan needs to identify upgrade paths <ul style="list-style-type: none"> ○ discussion of future upgrades and inclusion into plan 	<p>discussion of migration path:</p> <ul style="list-style-type: none"> ● user by user vs. “all-in” upgrade <ul style="list-style-type: none"> ○ all-in approach has large cost ○ all-in new application will require hardware updates ○ evaluation of upgrade per user is likely the cost effective method <p>Motion to recommend upgrading per user: Joe Second: Ken Vote: 4-0</p> <p>IT Advisory Board recommends upgrading per user based on need</p> <p>Strategic plan should seek to have hardware replacement and software upgrades tied to the leasing cycle</p>
<p><u>Fiber Installation and Roll Out Updates</u></p> <ul style="list-style-type: none"> ● Town selecting Guardian via state contract list 	<p>discussion of installation & Roll out</p>

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<ul style="list-style-type: none">○ guardian's sub contractor:<ul style="list-style-type: none">■ Com Tract to provide quotation■ Good meeting last week○ Town Hall to PSB○ optional:<ul style="list-style-type: none">■ cost effective to do at base installation■ DPW to PSB■ Library to PSB● ADSS fiber backbone<ul style="list-style-type: none">○ engineering & route to be in quotation○ star arrangement○ PSB is the hub of the infrastructure● Guardian/Com Tract responsible<ul style="list-style-type: none">○ Com Tract warranties work● room exists in both switch rooms for fiber termination	
Adjournment	motion to adj: Joe second: Brian vote: 4-0



TOWN OF ASHBURNHAM

PROJECT SPECIFICATIONS & COST PROJECTIONS

APRIL 9, 2012

PROJECT: <u>HIGH- AVAILABILITY</u> SERVER VIRTUALIZATION INFRASTRUCTURE	SERVICES	TOTAL
OBJECTIVE: The objective of this project is to architect, setup, configure, and deploy a high-availability server virtualization infrastructure in the Town of Ashburnham's IT environment. Upon completion of this project <i>all 5</i> existing virtual servers (currently platformed of Virtual Iron) will be migrated and operating on the server virtual infrastructure platform in a stable and steady state. <i>In addition, the new infrastructure provides for growth and feasibly desktop virtualization in the future.</i>		
PROJECT MANAGEMENT: Complete project management services consistent with scope of services as detailed below: <ul style="list-style-type: none">Professional project management services that may include a project plan. Project plan will detail tasks, resources, timeline, and costs.Development of detailed specifications for all project hardware and software.Acquisition of quotations, processing of purchase orders, and tracking / receipt of orders.Collaboration with the Town of Ashburnham's project team, IT stake holders, and 3rd party vendors (i.e. MUNIS, Vision, etc.). Single point of contact for the project duration.Continual Information Technology (IT) advising and representation of Town of Ashburnham's IT interests (in relationship to this project).	2500	
PROJECT MANAGEMENT SUBTOTAL:		\$2500
SYSTEMS ENGINEERING SERVICES		
System Architecture <ul style="list-style-type: none">Guardian Information Technologies, Inc. will provide its professional IT engineering resources to architect and deploy a high-availability server virtualization platform capable of supporting 8-10+ virtual servers.	20,500	

- Development of specifications for all necessary hardware and software.
- Collaboration with vertical application vendors for virtual server system requirements, migration planning, and cutover.

System Infrastructure Deployment

- System architecture, specification of all components, order / receipt tracking.
- Inspection of all system components and assembly of all systems (i.e. processors, memory, drives, power supplies, fans, lights out, et cetera).
- Updating bios and firmware, installation of Stratus Avance High-Availability system. Installation of required patches & updates, configuration of services.
- Master server image creation: installation of Windows 2008 operating system, installation of appropriate OS security patches, configuration of services.
- Install and configure GuardianAngel / GuardianEYE systems, WinZip, Acrobat Reader, java, .NET framework, Symantec Endpoint Protection (SEP), et cetera.
- Installation and testing of UPS software.
- Performance tuning, stress testing, and failure / restoration of Windows 2008 master server image. Server to be in stable and steady state upon completion.
- Assemble all systems in data server cabinet. Test failover capabilities for all failure modes (power and / or connectivity loss).
- Establish virtualization network for redundancy and continuity of operations.
- Integrate system into existing infrastructure. Stress test system for redundancy and continuity of operation.
- Server virtual infrastructure platform to be in stable and steady state upon completion of this milestone.

Town Hall Domain Controller Migration & Upgrade

- Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual infrastructure.
- Copy master server image as domain controller.
- Join server to domain. Configure system for domain controller role. Performance tuning, stress testing, and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion.
- Test server for redundancy and failover in virtualization environment.
- Migration and integration of network print services
- Transfer all Domain accounts to new server
- Install Backup Exec 2010 and appropriate modules

and agents.

- Establish backup jobs and test.

Town Hall Workflow Migration & Upgrade

- Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual infrastructure.
- Copy master server image.
- Join server to domain. Configure system for workflow server role. Performance tuning, stress testing, and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion.
- Test server for redundancy and failover in virtualization environment.
- Migration and integration of ALL user data,
- Migrate drive mapping to new server environment.
- Install Backup Exec 2010 and appropriate modules and agents.
- Establish backup jobs and test.
- Turn off Townhall08 server. Insure that all services and functions are properly migrated. Remove ASH10 from domain roles. Disjoin server from domain. Turn off server and virtually remove from environment.

Town Hall Exchange 2010 Migration & Upgrade

- Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual infrastructure.
- Copy master server image.
- Join server to domain. Install and configure Exchange 2010 on server. Configure system for Exchange / messaging server role. Performance tuning, stress testing, and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion.
- Test server for redundancy and failover in virtualization environment.
- Migration and integration of ALL user data,
- Migrate all email accounts to new Exchange 2010 server.
- Install Backup Exec 2010 and appropriate modules and agents.
- Establish backup jobs and test.
- Turn off Ash11 server. Insure that all services and functions are properly migrated. Remove ASH11 from domain roles. Disjoin server from domain. Turn off server and virtually remove from environment.

MUNIS Migration & Upgrade

- Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual

<p>infrastructure as specified by MUNIS.</p> <ul style="list-style-type: none"> • Copy master server image. • Join server to domain. Configure system for MUNIS server role. Create required accounts for MUNIS. Performance tuning, stress testing, and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion. • Test server for redundancy and failover in virtualization environment. • Provide systems administration support for SQL installation, setup and configuration, MUNIS application install, and MUNIS data migration. • Install Backup Exec 2010 and appropriate modules and agents. • Establish backup jobs and test (per MUNIS written specifications and requirement). • Turn off ASH14 server. Insure that all services and functions are properly migrated. Remove ASH14 from domain roles. Disjoin server from domain. Turn off server and virtually remove from environment. <p><i>Vision Migration & Upgrade</i></p> <ul style="list-style-type: none"> • Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual infrastructure as specified by Vision. • Copy master server image. • Join server to domain. Configure system for Vision server role. Create required accounts for Vision. Performance tuning, stress testing, and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion. • Test server for redundancy and failover in virtualization environment. • Provide systems administration support for database platform installation, setup and configuration, Vision application install, and Vision data migration. • Install Backup Exec 2010 and appropriate modules and agents. • Establish backup jobs and test (per Vision written specifications and requirement). • Turn off ASH12 server. Insure that all services and functions are properly migrated. Remove ASH12 from domain roles. Disjoin server from domain. Turn off server and virtually remove from environment. <p><i>ShoreTel Migration & Upgrade</i></p> <ul style="list-style-type: none"> • Allocate resources for new virtual server (i.e. processor, memory, and storage) from virtual infrastructure as specified by ShoreTel. • Copy master server image. • Join server to domain. Configure system for voice system server role. Performance tuning, stress testing, 		
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and failure / restoration of Windows 2008 network server. Server to be in stable and steady state upon completion.

- Test server for redundancy and failover in virtualization environment.
- Provide systems administration support for database platform installation, setup and configuration, ShoreTel application install, and data migration.
- Install Backup Exec 2010 and appropriate modules and agents.
- Establish backup jobs and test.
- Turn off ASH15 server. Insure that all services and functions are properly migrated. Remove ASH15 from domain roles. Disjoin server from domain. Turn off server and virtually remove from environment.

General Project Tasks

- Upgrade antivirus application (SEP) to current version for all systems (servers and desktops).
- Provide an overview, walk-thru, and demonstration of the new environment. Project completion and acceptance will be marked by all virtually supported servers and applications operating in a stable and steady state.

NOTE: The following assumptions have been made:

- *Adequate space, power, and environmental provided at site.*
- *This Scope of Work is NOT inclusive of any engineering resources (provided by Guardian) to facilitate the migration and upgrades of vertical applications (i.e. MUNIS, Vision, etc.). Requested resources will require a change order or be provided on a time & materials basis.*
- *ALL application vendors must provide written acceptance for support of their application on a virtualization platform, virtual server configuration requirements, and migration planning and cutover resources. Vendors must also provide written procedures for required backup and recovery. ALL application migrations must be completed within 60 days of project engagement or require a change order (and billed additionally).*
- *Application software not noted in this scope of work (i.e. Pictometry, Town Code, Scan to folders, Dog licensing, et cetera) may not operate in the virtual environment. Each application will be addressed on a case by case basis. Guarantees of compatibility or performance (by Guardian Information Technologies, Inc.) are neither stated nor implied through this scope of work.*
- *The pre-existing ASH08 backup server and domain controller will remain in place. It is projected for*

<p><i>displacement next fiscal year.</i></p> <ul style="list-style-type: none"> ▪ <i>Downtime of all IT services is expected during this project. Guardian will work collaboratively with the Town to coordinate and minimize interruptions of services.</i> 		
SYSTEMS ENGINEERING SERVICES SUBTOTAL:		\$20,500
<p>Materials: The following bill of materials are inclusive in the Scope of Work</p> <ul style="list-style-type: none"> • Hardware / Software: <ul style="list-style-type: none"> ○ Avance rack server, 3GHz 6 core processor (qty. 2), 128GB RAM, 7.2TB drive storage (raw), RAID controller (w/ cache), DVD, 1GB NIC (qty. 3), dual power supplies, redundant fans, advanced lights out, 3 year manufacturer's warranty (<i>entire system above - qty. 2</i>) ○ Stratus Avance High-Availability w/ 1 year manufacturers support & monitoring ○ Rack mount UPS (qty 4) ○ Associated cables, cable management, et cetera <p>The above systems and architecture are projected to accommodate for anticipated growth over the next 3-5 years. Projections are based on growth data captured over the past 3 year time span.</p> <p>NOTE: The following materials and resources are external to the Scope of Work and must be provided by the Town of Ashburnham:</p> <ul style="list-style-type: none"> • Materials / resources : <ul style="list-style-type: none"> ○ Personnel resources for collaboration with vendors, migration, et cetera. ○ Software & Applications (inclusive of however not limited to <ul style="list-style-type: none"> ▪ Windows 2008 Server R2 (qty 6-8) w/ CALS ▪ Exchange 2010 w/ CALS (Town & Police) ▪ SQL Server w/ CALS ▪ Backup Exec 2010 (qty 6-8), Exchange, SQL, ▪ SEP 12.X (qty. 70) ▪ <p>NOTE: Costs & estimates for above software & applications not inclusive of PROJECTED TOTAL for this Scope of Work.</p>	59,928	
Materials Total:		\$59,928
PROJECTED TOTAL		\$82,928

Note: *This proposal is copyrighted and the sole property of Guardian Information Technologies, Inc. It is submitted to the Town of Ashburnham for exclusive use in establishing a reciprocal agreement. It may not be used for any other purposes without the explicit and written consent of Guardian.*

The above pricing is valid for 15 days. All product pricing is inclusive of ground shipping and handling charge (unless otherwise specified). Project completion time is contingent upon receipt of a signed hardcopy of this Scope of Work and a purchase order. Any delays incurred that are determined to be beyond the control of Guardian Information Technologies, Inc. will be added to the effective end date. Materials to be invoiced upon receipt of the hardware. A 33% deposit is due upon engagement. 33% payment is due when all hardware is deployed onsite. Final payment is due upon project acceptance. Payment terms are net 30 days unless specified above.

ACCEPTED:

Signature

Date