

IROQUOIS COUNTY INFORMATION SERVICES

# Request for Proposal

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## Iroquois County Information Services Data Center Computer Server Consolidation

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**12/3/2013**

**PROPOSALS DUE BY 4:00 PM MONDAY, JANUARY 6<sup>TH</sup>, 2014**

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## **RFP: Request for Proposal – Iroquois County Information Services Data Center Computer Server Consolidation**

### **Section I: Request for Proposal**

Iroquois County Information Services is in the process of upgrading their aging servers and standardizing computer applications by consolidating servers, operating systems, domains and server storage to a cluster of servers in the County Data Center running virtual (VMWare) software on shared storage. This consolidation will minimize the need to manage many disparate devices scattered throughout various county offices while maximizing performance, security and common accessibility. It is critical for this system to be scalable, manageable and sustainable well into the future.

### **Section II. Purpose, Background and Intent**

Iroquois County Information Systems provides information technology services and support to all Iroquois County departments, offices and agencies. Iroquois County information Systems handles many critical information requirements for the County Clerk, Sheriff's Department and State's Attorney Office. The stability and availability of all information systems under their management is vital to the daily operations of all entities that fall under Iroquois County's jurisdiction.<sup>1</sup>

Information Services provided to the County include:

- Email Services to 100+ employees
- Access to the Internet
- Web Services
- GIS (Graphical Information System) Database
- Animal Licensing
- ESDA
- 911 Center Applications
- Judicial Applications
- County Clerk Applications
- County Finance Applications
- County Highway Applications
- Public Health Services
- County Tax (DEVnet)

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<sup>1</sup>Document-Overview, Iroquois County Information Systems

### Section III Deliverables:

Procurement of hardware and services by the county will be accomplished in two phases. Phase One will consist of an initial build out of highly available clustered servers and redundant storage while Phase Two will focus on tuning, hardening and management.

#### **Phase One of this RFP is for the purchase of:**

- redundant computer server hardware
- data storage hardware
- operating system software
- uninterruptable power supplies
- data backup hardware
- data backup software
- consolidation of domains
- migration of data from old hardware to new

#### **Phase Two of this RFP is for the purchase of:**

- contracted support
- managed services

Note: In light of new and very dangerous ransomware, the need for structured, redundant backups has become even more important. The vendor must define how each of their systems will synchronously and asynchronously replicate with written plans for business continuance, disaster recovery and data protection.

**Currently, the county has selected the following hardware and software vendors the contractor is expected to work with in Phase One:. The hardware needed in Phase Two (switching, etc.) must be from the same manufacturer of Phase One equipment.**

- Microsoft
  - Windows Server 2012 with 3 years software assurance
    - Licensing needed
      - 2 domain controllers
      - 5 Application Servers (minimum)
      - 75 Client access licenses (CAL)
- VMWare
  - VMWare vSphere Software (Admin Center)
    - VMWare vSphere 5.1 Essentials Plus Kit
    - Covers 3 VMware server hosts
  - VMWare vSphere Software Support (Admin Center)
    - Production support – 3 years minimum
    - Upgrade protection – 3 years minimum

- Veeam
  - Veeam Backup Software License (Admin Center)
  - Veeam Backup Software Support – 3 years minimum
- Dell - Please provide a detailed list of equipment and supporting components
  - PowerEdge R620 Servers optimized for VMware (3)
  - EqualLogic SAN Array (1)
  - iSCSI Force 10 S25N switch (2)
- TrippLite
  - SmartRack
  - Basic PDU (Power Distribution Unit)
- Uninterruptible Power Supply (UPS) – ***To be sized to the wattage needs of 3 servers, SAN array and switching. Must be capable of maintaining power to all racked systems for a minimum of 15 minutes while the generator starts and comes on-line***
  - APC Brand or equivalent
    - Smart-UPS
    - External Battery Pack
    - APC Network Management Card

## Section IV: Scope of Work

Technical specifications for Request for Proposal are as follows:

### Phase One:

- Install and make operable VMWare servers and virtual servers
- Migrate existing servers and data to the related virtual server
- Migrate users and domains to one common domain
- Install, test and make operable Veeam backup solution
- Document all systems and provide documentation to County
- Retire old equipment after migration to the virtual server
- Work with County Finance Director to resolve unplanned issues
- All pricing should reflect government discounts

### Phase Two:

- Build, test and make operable management solution to monitor systems reporting issues via email or other alert mechanism.
- Build additional capacity for data protection and disaster recovery. This could include off-premise storage, rented 'Cloud' space, and possibly virtual desktops to eliminate the potential loss of critical data stored on local devices.

## Section V: Outcome and Performance Standards

The vendor is expected to produce a complete project checklist, with milestone markers and delivery dates upon starting the project. *(Please refer to **Appendix I**: for an example)* The vendor should schedule weekly progress meetings for the duration of the project(s).

## Section VI: Term of Contract

Proposals are due by 4:00 PM Monday, January 6<sup>th</sup>, 2014

**Project start date:** January 14<sup>th</sup> 2014

**Project end date (Phase One)** April 14<sup>th</sup>, 2014

**Project end date (Phase Two)** to be determined at the completion of Phase One.

## Section VII: Payments, Incentives and Penalties

The payment terms of the project will be as follows:

- 30% upon approval of the Phase One proposal.
- 30% when hardware is delivered, installed and virtual services are operational
- 30% when the project is complete and documentation is delivered and approved by Iroquois County Information Services and Iroquois County Board Committee.
- 10% balance to be placed in escrow and released when all involved partners supported by Iroquois County Information Services have signed off on acceptance of the newly installed systems.

## Section VIII: Contractual Terms and Conditions

Terms and conditions are requirements that are binding upon the vendor awarded the proposal and form a part of all contract documents and a part of the terms of all purchase orders for items included in the specifications and proposal forms issued herewith. They communicate the County's expectations in regards to the vendor's performance in connection with any Iroquois County Information Services purchase.

- a) **Negligence:** The vendor will be responsible for any mishap or accident during the installation / maintenance of the equipment which may occur due to negligence on the part of the vendor.
- b) **Insurance:** The vendor must show proof of General Liability, Professional Liability and Property Damage insurance. This insurance must be adequate to cover claims for damages caused by the contractor(s) and must remain in force throughout the duration of the project.
- c) **Purchase Orders:** Contracts for purchase will be put into effect by means of a written purchase order executed by Iroquois County Financial Director. Any deviations from this must be pre-approved in writing through the Iroquois County Financial Director only.
- d) **Invoices and Payments**
  - a. The vendor shall submit separate invoices on each purchase order after each delivery. Invoices shall indicate the purchase order number, shall be itemized and transportation

charges, if authorized, shall be listed separately. A copy of the bill of lading, and the freight weight bill, when applicable, should be attached to the invoice.

- b. Do not include Federal Excise, State or City Sales Tax. Iroquois County Information Services shall furnish tax exemption certificate, if required.**
- c. Invoices are Mailed to:

Iroquois County Board Computer Committee Attn: Anita Speckman, Finance Director 1001 E Grant Street Watseka, IL 60970
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- e) **Termination:** The performance of work under this order may be terminated in whole or in part by the Iroquois County Information Services in accordance with this provision. Termination of work hereunder shall be effected to the vendor with a “notice of Termination” specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective.
- f) **Warranties**
  - a. Please include written explanation of warranty terms from each manufacture, software supplier and service vendor(s) This must include any and all time lengths, any extension at no-charge, when the warranty period begins and ends. All hardware must have the ability to extend warranties an additional three years beyond the specified three year minimum.
  - b. Hardware warranties on product replacement must be 4 hours for equipment deemed critical to business continuance and next business day for non-critical equipment.
- g) **Vendor Qualification:** Vendors not on Iroquois County Information Services approved vendor list shall be required to prove their qualifications concerning the following criteria:
  - a. Financial capabilities
  - b. Bonding status
  - c. Ability to fulfill and abide by the terms and specifications
  - d. Quality and stability of product and sources
  - e. Vendor must provide copies of current certification and/or licenses with proposal.

**Transparency Clause:**

Vendor must include on their company letterhead an exact list of products) or service(s) for this RFP that are to be delivered to the County.

Vendor must include on their company letterhead their hourly rate for repairs not covered under warranty. i.e. – dispatch time, materials and or extra service.

- No hidden fees will be incurred by Iroquois County Information Services
- Subject to governing board approval after receipt of funding approval

Vendors hereby affirmatively states that it has not participated in any act of collusion, favoritism, gratuity or inside dealings with any member of the staff of the Iroquois County Government or the County Board.

COMPANY: \_\_\_\_\_

SIGNATURE OF PERSON BIDDING \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY & STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

PHONE: \_\_\_\_\_ DATE: \_\_\_\_\_

**Section IX: Evaluation and Award Process**

*“Most Advantageous Proposal”*. Iroquois County will evaluate and select vendor(s) for their ability to supply as necessary in RFP and per any addendums. In evaluating submitted proposal, the following considerations will be taken into account for the award recommendations:

- The Purchase price
- The reputation of the vendor and of the vendor’s goods or services.
- The quality of the vendor’s goods or services.
- The extent to which the goods or services meet the needs of Iroquois County Information Services.
- The impact on the ability of Iroquois County Information Services to comply with laws and rules relating to historically underutilized businesses.
- The total long-term cost to Iroquois County Information Services to acquire the vendor’s goods or services.
- Vendor’s service and delivery capabilities.
- Warranty and warranty service history.
- Probability of continuous availability.
- Any other relevant factor specifically listed in the Request for Proposal.



- The County reserves the right to reject any and all bids if it feels none of these meet the county's objectives.
- The County reserves the right to reject any and all bids if there is deemed to be an error in either the RFP or bidding process.
- The County reserves the right to extend the bidding process if vendor questions or ideas change the direction of the County.
- The County is not obligated to pursue the lowest bid and may freely choose the response/vendor that best meets the County's needs.

### **Section X: Process Schedule**

Proposals will be opened and evaluated after the January 6<sup>th</sup> 2014 4:00 pm deadline. Contract award will be during the scheduled County Board meeting on January 14<sup>th</sup>. **Vendors should be available for questions concerning their proposal during the week of January 6<sup>th</sup>.**

### **Section XI: Points of Contact for Future Correspondence**

Please direct any question concerning this Request for Proposal to:

Iroquois County Board Computer Committee  
Attention: Anita Speckman, Finance Director  
Iroquois County Government  
1001 E. Grant Street  
Watseka, IL 60970  
Phone: 815-432-6963 x 1  
FAX: 815-432-6984  
aspectman@co.iroquois.il.us

## Appendix:

### I: Sample VMware Virtual Infrastructure Deployment

This Statement Of Work provides the services to deploy a VMware virtual infrastructure environment. This standard deployment consists of three servers running VMware 5.1 Enterprise. A fourth server will be configured as a VMware Management Center server to control the VMware environment. A shared storage array will be used to store virtual machine images. A shared storage array is necessary to allow virtual machines to be moved between physical VMware hosts. The following sections provide the scope, tasks, deliverables, and costs associated with this engagement.

#### Project Planning

*The Project Planning stage includes:*

- Create a project schedule
- Check facilities for appropriate power, cooling, and network access
- Coordinate product delivery and appropriate engineering resources
- Identify initial storage configuration for internal drives and SAN volumes
- Determine initial network configuration for physical and virtual network interfaces
- Identify backup strategy for virtual machines and VMware servers
- Confirming hardware/software requirements for all installations
- Create test plan for virtual server farm
- Discuss procedures for onsite work and temporary work space for Vendor personnel
- Finalize project timeline

#### Hardware Installation & Configuration

This task involves installation and configuration of three servers and a SAN disk array. Specifically, this task includes:

- Install drives, RAM, and HBAs
- Rack mounting systems and connection of power, network, and KVM cables
- Confirm RAID configuration on internal hard drives
- Perform hardware verification tests
- Install SAN Storage Array and switches
- Configure array by creating RAID groups, LUNs, and Host Mappings
- Connect array and servers to the LAN and SAN switches

#### Virtual Center Implementation

This task involves installing and configuring VMware Virtual Center on new servers.

- Installing Windows Server operating system
- Install Virtual Center software

- Integrate Virtual Center with Active Directory for authentication

### **Virtual Infrastructure Installation**

This task involves installing VMware Infrastructure 3 Enterprise on three servers. Specifically, this task includes:

- Loading Virtual Infrastructure Software
- Configuring storage partitions for internal disk
- Assign VMware servers to Virtual Center
- Installing VMware licenses

### **Storage & Network Configuration**

This task involves configuring the storage and network adapters for connection to shared resources.

*Specifically, this task includes:*

- Creating virtual networks and switches
- Mapping physical network interfaces to virtual switches and VMotion
- Configure Storage Area Network multi-pathing
- Create shared VMFS file systems and mount onto server farm members

### **Virtual Machine Creation**

This task involves building virtual machines for use by Customer.

- Build a generic Windows 2003 Server and load current OS patches
- Convert the new virtual machine to a template
- Deploy the template for testing

### **Migration of Selected Systems**

This task involves assisting the administrators with migrating two physical servers to virtual machines.

- Prepare physical servers for migration
- Perform a test migration into a private network
- Evaluate test virtual machine
- Adjust process as necessary and perform real conversion

## II: Synchronous / Asynchronous Replication

### *Synchronous Replication*

Clustered redundant arrays of hard drives in Storage Area Network, **Critical for business continuance.**  
When one or more drives in a cluster fail, the system sounds a warning and the drives can be replaced without shutting down the system. (hot swap)

### *Asynchronous Replication*

Backup to static source either on-line or off-line

- Local
  - Server Snapshots
  - Classic data backups
  - Shadow Copies
- Remote
  - Server Snapshots
  - Classic data backups