RFP 2122-08 Server Virtualization

CITY OF URBANA (IL)

Sections of Questions

- Current Environment
- Future Goals
- Division of Labor

Current Environment

Make/Models of Servers

Can we please get the make/model of each server? This will help us determine the feasibility of using them as hosts, hardware consolidation, etc...

Answer: Motherboard specs were provided for servers that were assembled, not bought.

Server Details

SAN volumes attached if any.

Answer: There are no SAN volumes.

Is any of these servers a Cluster?

Answer: No.

Do any servers use any special addon cards or dongles?

Answer: No

Backup Software

Do you have any existing backup software?

Does current backup solution support a virtual environment?

Answer: Veritas Backup Exec, although we have left than a year less on our license.   We do not have any experience with it, but Backup Exec v21 does support virtual environments. We may need to add licensing for that or switch to a different solution. We will use the input from the Virtualization process to decide what tool to use in the future.

Server Software Licensing & Versions

Is any software licenses bound to a physical server?

Answer: ESRI License Manager, but that is based on a server 'finger print' and can be regenerated when the server goes virtual.

What version of Exchange is being used?
Answer: 2013

Is Virtualization Supported?

Can current network infrastructure support virtualization?

Answer: Yes.

Are any apps used that application vendors don't support virtualization?

Answer: None that we are aware of.

Does internal monitoring system support virtualization and are virtualization capable?

Answer: Not applicable; there is none.

Shared Storage/SAN

Is there currently a shared storage/SAN solution?

Answer: The City recently deployed a NAS for storage that is not in-scope for virtualization. Otherwise, no.

Future Goals

Scoping the Size of Virtual Servers

How many CPU cores and how much RAM is required for each physical server to meet current minimum requirements and to allow for sufficient room for growth? Or does the city just want the available resources to be mirrored on the VM's?

If this is unknown then we can determine this but it will require additional information about the servers, applications hosted on them, number of simultaneous users, etc...

Answer: We don't know. The analysis phase will determine this.

High Availability and Clustering

Your RFP states that you are trying to minimize costs and reuse existing servers if possible; my question is are you trying to achieve high availability (Hyper-V Clustering for instance) in-house with your virtualization project? With the number of servers you have it may be a good idea to consider that.

Answer: We're open to all good ideas.

RPO and RTO Goals

Regarding the first priority mentioned in the RFP, what is the RTO and RPO for the restoration of the virtual machines?

Is the city looking strictly for snapshot recoveries, or failover capabilities, such as in a host cluster?

Answer: These are initial goals:

RPO (Recovery Point Objective) – less than 24 hours

RTO (Recovery Time Objective) – For critical systems: 1-2 days, for non-critical systems: 3-5 days

Backup Datacenter

It is mentioned in the RFP that the city wants the ability to run the servers from another datacenter if the current one becomes unusable, what is the RTO and RPO for this?

Answer: Similar RPO and RTOs:

RPO (Recovery Point Objective) – less than 24 hours

RTO (Recovery Time Objective) – For critical systems: 1-2 days, for non-critical systems: 3-5 days

Storage Desires

Does the city want the storage available to the VMs to match the current capacity of the physical machines?

Answer: Storage needs will be discussed on a server-by-server basis.

VMWare

(Is the City) open to VMWare as a virtualization solution?

Answer: Yes, although if that is part of your strategy then you need to tell us that in your <u>Phase I </u>Proposal, and make the case for VMWare vs. Hyper-V now.

Nobillis Server

Are you going to want (the Nobillis server) virtualized as well?

Answer: Possibly in a later phase, but not initially.

Domain Controller

It states current plan is virtualize 'as is'. Does this include Domain controllers?

Answer: Maybe. We are open to guidance.

Division of Labor

Hardware Installs

If new hardware is required will the awarded vendor install and do the initial configuration of the hardware, or will the city's staff do this?

Answer: City staff.

P2V (Physical to Virtual) Work

No actual hands on work will be done by us to P2V the servers? That will all be done by the city's staff with our guidance?

Answer: It will either occur by vendor staff in a screenshare with City staff, or by City staff directly – with vendor support as needed.

Staff Skills

Does current staff have virtualization skills to support environment?

Answer: It is our intention that our staff will learn the additional skills they need through this process.