



**State of Oklahoma
Office of State Finance
Information Services Division**

**Notice of Amendment of
Solicitation**

Date of Issuance: 06/27/2012 Solicitation No. 0900000055
 Requisition No. _____ Amendment No. 4

Hours and date specified for receipt of offers is changed: No Yes, to: _____ CST/CDT

This document shall serve as official notice of amendment to the Solicitation identified above. Such notice is being provided to all suppliers to which the original solicitation was sent. Suppliers submitting bids or quotations shall acknowledge receipt of this solicitation amendment prior to the hour and date specified in the solicitation as follows:

- (1) Sign and return a copy of this amendment with the solicitation response being submitted; or,
- (2) If the supplier has already submitted a response, this acknowledgement must be signed and returned prior to the solicitation deadline. All amendment acknowledgements submitted separately shall have the solicitation number and bid opening date printed clearly on the front of the envelope.

ISSUED BY AND RETURN TO:

Office of State Finance
 ISD Procurement Attn: Alana Owen
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Description of Amendment:

a. This is to incorporate the following:

QUESTIONS TO RFP- IT EFFICIENCIES #0900000055
QUESTIONS AFTER MAY 29TH THROUGH JUNE 12TH 3:00 P.M.

1. Can the State provide inventory of all PBXes and key systems with system details, defining the number of voice lines and type of voice equipment?

 The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

2. Can the State provide a list and description of current PBX and VoIP projects?

 There are numerous VoIP projects in progress or in planning. Projects are primarily to move off the old TDM phones on to current technology.

b. All other terms and conditions remain unchanged.

Supplier Company Name (**PRINT**) _____ Date _____

Authorized Representative Name (**PRINT**) _____ Title _____ Authorized Representative Signature _____



3. Can the State provide details, such as manufacturer and model, of the VoIP system currently replacing the legacy SL-100?

The VoIP systems are Avaya.

4. Can the State provide existing inter-agency location network infrastructure details to include state-owned and leased?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

5. Can the State provide WAN network architecture diagram?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

6. Can the State provide a network map reflecting the type and quantity of private and leased network connectivity services, service types and bandwidth between locations?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

7. Can the State provide the inventory of Centrix (LEC hosted) services by sites and number of lines?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

8. Can the State define any call centers within the scope of the transformation project, and the primary existing systems used for call distribution (ACD)?

The VoIP systems and call distribution (ACD) are Avaya

9. Can the State define the types of existing SIP based voice systems and devices?

There are no SIP installations at this time.

10. Can the State define existing primary systems existing for video conferencing, audio conferencing, voicemail and call recording?

- video conferencing – Tandberg/Cisco
- audio conferencing - Avaya
- voicemail - Avaya
- call recording - Verint

11. Can the State define the primary technology (if any) existing as the core of WAN and LAN routing, switching and security?

Juniper equipment is the technology used in the core for WAN, LAN routing, switching and security.

12. Can the State host an industry day and allow major site survey for this proposal?

Not intended at this time.

13. Given the variety of hypervisors and storage vendors noted in the RFP, is there a particular hypervisor that is more common than the rest?



In the i86 realm VMware is more prominent.

14. Given the variety of storage vendors noted in the RFP, is there a particular storage vendor that is more common than the rest?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

15. Are there any technical specifications that can be shared regarding the existing technologies in place?

The State has made available the CIO Study and vendors are encouraged to base their responses on the data contained within this study. Detailed Technical specifications have not been harvested at this time.

16. Does the State have any preference as to the hypervisor or storage vendor or vendors that are used to standardize, or would the State prefer an independent design based on industry expertise. If the former, which vendors are preferable to the State?

OSF's standards today are VMware for i86 hypervisor is and IBM for storage.

17. Does the State have any restrictions or preference in regard to the use of open source technologies for cost effectiveness?

No as long as it is supportable for the Enterprise and provides good investment.

18. Can the State provide any insight into their key consideration factors for this effort that will help us tailor a solution that uniquely meets their needs (e.g. minimizing capex, open standards, green, vendor preferences, etc)?

The key consideration for this effort is cost savings to the state using newer or intelligent architecture and/or approaches.

19. Will the State grant an extension to the due date/time for questions?

Refer to amendment number three.

20. Will the State grant an extension to the due date/time for this proposal?

Refer to amendment number three.

21. Will the State clarify expectations for vendor submittals for each stage of the evaluation process?

At the appropriate time during the evaluation vendors will be advised of required documents.

22. Will the State clarify whether or not vendor proposals submitted at this stage should address exceptions or items for discussion on standard terms Appendix C, General Terms and Conditions?

Refer to the Response Checklist in Appendix B of the RFP.

23. Will the State confirm the contract type?

The State is open to all considerations.

24. As I understand the question for references, is it the State's intent to ask for the responders to have our references fill out the form prior to turning in our responses to the RFP or is this completed June 12th and OSF will check our references, is this correct?

References should be filled out and submitted with proposal responses.

25. Due to the complexity of the RFP, will OSF consider extending the RFP for 1 month?

Refer to response number 19 above.



26. How much of the CapGemini study details will be shared and when will be made available for vendor review?

The CIO Study is available at the URL mentioned in the RFP.

27. The CapGemini study was based on reviewing specific costs and details surrounding the current infrastructure within the State. Will the details behind the data that CapGemini used to complete their recommendations be made available to vendors to review and if so when?

The available data for each category will be made available to each vendor subsequent to the selection.

28. Will the State consider challenges to CapGemini recommendations if a vendor can show more or similar savings in a different way?

The State is open to all suggestions.

29. Section F-1: Which PBX(s) are currently in use?

Primarily Avaya/Nortel

30. Section F-1: Will the existing PBX(s) be reused in the new design? If so, will software updates be required?

No

31. Section F-1: Does the State require end-to-end managed service or just network?

The State is willing to consider and explore all alternatives

32. Section 3.0, paragraph 4: Of the 130 State agencies, can we get a listing of all the addresses where Network Services would be required? Is there a repository/listing of the addresses of all agency locations the State can provide?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

33. Section F-1.12: Does the State require a bursting service, or will the ability to rapidly grow bandwidth be sufficient?

The State is willing to consider and explore all alternatives.



34. Section F-2.1.5: Is the State referring to true NNI connections between two service providers, or the ability to segment bandwidth from a larger connection?

The State is willing to consider and explore all alternatives.

35. Section F-2.1.21: Is the State specifically asking for last mile physical network diversity or diversity from the provider's Central Office?

Last mile physical network diversity.

36. Section F-2.2.3: If the State chooses to pursue an MPLS network, are you still planning on using multiple ISP's for Internet connectivity?

The State is willing to consider and explore all alternatives.

37. Can the State provide listing of all telephone number NPA/NXXs (area code/exchanges) currently in use state-wide by all agencies for coverage analysis?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

38. Question: Would the State consider a 2-week extension to allow the issue of unlimited liability to go through the necessary corporate approval channels?

Refer to response number 19 above.

The solicitation states: "The State reserves the right to reject any offers that do not comply with the requirements and specifications of the solicitation. An offer may be rejected when the offeror imposes terms or conditions that would modify requirements of the solicitation or limit the offeror's liability to the State.

To the extent any limitation of liability is construed by a court of competent jurisdiction to be a limitation of liability in violation of Oklahoma law, such limitation of liability shall be void."

Issue: We have tremendous concern over the state's position that would allow a vendor to have unlimited liability without boundaries based on the level of effort. It seems that a vendor that for whatever reason has a series of backup tapes that are destroyed could be assessed unlimited liability for the states losses if data cannot be restored. The state's verbiage specifically states that any attempt by the vendor to limit the state's ability to assess liability would be grounds for non compliance and could invalidate the bid.

39. Question: Would the state allow negotiations or discussions that would establish parameters and guidelines that would assure appropriate measures of liability assessment commensurate with the level of activity and/or loss.

The State's Limitation of Liability requirements cannot be changed.



40. Question: Will the vendor be able to have office space on the State's premises for personnel?

The State is willing to consider and explore all alternatives.

The solicitation states: "It is the State's intent to issue contracts from the information obtained in vendor responses. However, data obtained through this request for proposal may be used in the form of future solicitations for proposals, or other purposes. "

The solicitation states: "any contractor that has provided any consulting services or technical assistance that resulted in any specifications or concepts in this solicitation, either directly or indirectly, is precluded from the award of such contract and from securing a sub-contractor that has provided such services."

41. Question: Please confirm we will not be precluded from bidding on future solicitations that may be developed using data from our proposal for this solicitation.

It is not the State's intent to preclude vendors from responding to future solicitations.

42. Question: Who are the Internet Service Provider(s) – ISP(s) for the State of Oklahoma?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

43. Question: Please confirm that the state would like the contractor to provide the "Value of Project" in the column that requests the "Cost of Project".

The State would like to see the implementation costs and proposed savings over one year or more. Value can be included.

44. Please confirm that although bidders must be registered upon award of solicitation they are not required to be during the solicitation stage of this opportunity.

Vendors must be registered prior to award.

45. Section 2 Network: Requirement F-1.1.27 – Is the State interested in on-premise locally hosted (State owned Data Centers) and third party remote hosted (third party Data Center) solutions for core services such as Telephony, Messaging and conferencing?

The State is willing to consider and explore all alternatives.

46. Section 2 Network: Is the State interested in both self managed services and third party managed services for the WAN services and routers, VoIP Gateways, voice servers, messaging servers and collaboration servers and applications?

The State is willing to consider and explore all alternatives.



47. Section 2 Network: Does the State's shared model extend to communications as-a-service deployment options from third party providers on a monthly per user subscription based model?

The State is willing to consider and explore all alternatives.

48. Section 2 Network: Requirement F-1.12 – Does the State's interest in video extend to fully immersive ultra high definition life size Video solutions such as those offered by Cisco and Polycom?

The State is willing to consider and explore all alternatives.

49. Section 2 Network: Requirement F-1.11.3 – What is the State's primary current and consolidated email system (Exchange/Domino/other?)

Exchange

50. Section 2 Network: Requirement F-1.19 – What existing SIP services exist?

Currently no SIP services exist.

51. Section 2 Network: Requirement F-1.8.12 – What is the approximate % of users currently served by VoIP telephony/messaging solutions?

Approximately 1/3 of the campus TDM phones have been converted to VoIP.

52. Section 2 Network: Requirement F-1.14 – Please expand what is meant by compliance with FCC portability rulings.

Portability: Keeping Your Phone Number When Changing Service Providers

53. Section 2 Network: Requirement F-1.1.16 – Please expand what is meant by the system must offer Long Distance with and without Local phone service



One is not a requirement of the other.

54. Section 2 Network: Requirement F-1.9.4 – Please expand on this Requirement for raw data as it relates to Directory Services functionality.

This pertains to the required format for Directory White Pages Listings.

55. F-1.1.1 - Will the state accept a solution that provides IP based voice services but does not provide traditional TDM CENTREX and Measured Business Lines?

The State is willing to consider and explore all alternatives.

56. F-1.10 - Call Recording -- Please expand on your vision of call recording. Is call recording considered a standalone function to be available to every type of voice call possible, or is it more of a feature inside of a Unified Communications product?

A standalone function or a feature inside of a Unified Communications product would be acceptable.

57. F-2.1.8 - IP Services -- Please describe all data communication protocols used within the state.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

58. F-2.1.11 - IP Services -- Is the intent of this question to solicit from each bidder LAN equipment (switches and routers) ?

A proposed solution will support IPv4 or IPv6.

59. F-2.1.22 - IP Services -- Are all devices required to support Wireless service offerings?

Solution will enable wireless service offerings.

60. F-2.2.2 - Internet Access -- Please provide peak usage estimates for Internet Access to a single provider.

Current peak usage is approximately 500mb.



61. F-2.3.1 - Remote Access -- Is the intent of this question to solicit a response to a Remote Access VPN solution for remote workers to obtain access to a secure network?

Yes

62. F-1.10.1 The solution must support the ability to record calls as authorized by the designated agency lead -- Clearly define the types of calls required to be recorded. (i.e. Audio, Web, Video)?

Audio calls will be recorded.

63. F-1.12.9 The solution must provide support for remote camera control. -- Clearly define camera control. Is the video solution requiring a video operator to control the remote cameras (Pan, Tilt, Zoom), or remote camera control meaning testing and making sure the camera is working properly?

The solution must provide support for remote camera control for operations and support.

64. F-1.12.10 The solution must provide support for Computer Presentation Feature (display desktop and application only sharing) -- This feature is supported by the Video Codecs. Does current legacy hardware support h.239?

No

65. F-1.12.3 The solution must support increasing bandwidth requirements for video networking. -- (Network Requirement) Looking for a dedicated video network or a service that provides throttling of bandwidth?

The State is willing to consider and explore all alternatives.

66. F-1.12.2 The solution must provide a service between State locations to support secure video conferencing requirements. The services must be able to support SVC's, Quality of Service (QoS) capabilities, multicast, multipoint and fully meshed multicast/multipoint for video networking.

F-1.12.4 The solution must support all video network standards which include, but are not limited to H.320, H.321, H.323, H324, and H.310.



Contradictory

- What licensing have you purchased with Lync? (Client and Server)
- What features will you be utilizing?
- Will you be uplifting your PBX?
- Will you have a phased approach to rolling out Lync?
- How will you accommodate external conferencing?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

67. Web conferencing - Do they intend to use the video (conferencing) feature in there web conferencing?

68. F-1.12.1 The solution must support the State's currently-deployed video systems. What is the currently deployed video system? SD, HD, Telepresence? Tandberg, Polycom Cisco?

Tandberg/Cisco, Polycom

69. Please clarify the dollar value associated with the worker's compensation liability insurance requirement.

In accordance with State Statutes.

70. You mention a number of legacy applications – will support be required for these applications or are you looking for either a replacement for them or a vehicle that houses and connects to these applications?

The State seeks methods and approaches to manage and support legacy applications.

71. Is the State of Oklahoma looking for a partner that provides application architecture and support or someone that can deliver and support your technology solutions and requirements – or both.

The state will consider both options and is interested in evaluating both approaches.

72. Please clarify the dollar value associated with the worker's compensation liability insurance requirient. (this question was posted 2x)

In accordance with State Statutes.

73. How many Datacenters where servers will be moved to the new Datacenter exist today? **For each datacenter**, please list the following:

a. Datacenter name and location



- b. Number of physical servers per site
- c. Number of VMs per site and hypervisor type (If applicable)
- d. Hardware specifications of existing virtualization infrastructure (Host servers, SAN, etc...) (If Applicable)
- e. Wan link between site and destination datacenter (located in Oklahoma Office of State Finance)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

74. Has a VRA been performed for each site? If yes please forward VRA reports

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

75. Has a decision been made as to which hypervisor Oklahoma State would like to standardize on?

Today the State's direction is VMware. It will remain the State's direction until a time that some other platform proves to provide a better solution.

76. Is a hot DR site in scope for the virtualization/consolidation initiative? If yes,

- a. What is the location of the DR site?
- b. What is the WAN link between the new Production site and the DR site?
- c. What percentage of servers will need to have the ability to be failed over to the DR site?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

77. What is the average age of Desktop devices State of Oklahoma Support?

Vendors should assume that the average age of desktops is 5-6 years.

78. What is the approximate Laptop Count State of Oklahoma Supports?

The state is unable to provide the information requested within the timeframe and at this time.

79. What is the approximate Thin Device Count State of Oklahoma Supports, if any?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

80. What is the storage platform State of Oklahoma Supports and will it be leveraged for a VDI project?

The State supports numerous platforms today. Standardization and elimination of some platforms would provide the State better solution.



81. What is the total Active Directory User Count State of Oklahoma Supports for this project?

The Active Directory environment will need to support up to the State employee FTE count of ~39,000.

82. Will there be any non-Employees within AD User Count that State of Oklahoma will require Support for this project?

Yes – contractors and such.

83. Can State of Oklahoma list the operating systems that will be deployed during this project and will it require the VDI environment for the actual deployment or upgrade?

Any Operating System that exists today and that is required for the State to do its business functions could exist after. Elimination of some and standardization on fewer would be preferred.

VDI could be included or could be considered as a separate standalone project.

84. Will State of Oklahoma be considering the implementation of any non-Microsoft user productivity/office applications such as Google apps or Open Office? If so, for what use cases?

Supportability and presented solution will determine future direction for the Enterprise.

85. Is there any specific types of desktop multi-media (i.e. audio, video, VOIP, etc.) planned for future use during this project?

The state is unable to provide the information requested within the timeframe and at this time.

86. What is the State of Oklahoma standardization for the desktop environment (technology, processes, tools, applications, end-user rights, etc.) today?

A state standard for the desktop does not exist at this time. However, some agencies have a standard desktop image.

87. What risks/objections/barriers are anticipated during this project?

Risks, objectives and barriers will be assessed based on presented solutions.

88. Are there use case and/or scope assumptions to be considered and how solid are those



assumptions within the sponsor's mind?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

89. Are there any specific businesses or IT initiatives underway or planned expected to benefit from the implementation of virtual desktop technology?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

90. Can State of Oklahoma provide a list of the key application that will be required to be deployed within the VDI environment?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study

91. Can State of Oklahoma provide a DR plan that will be required to be leveraging in the design and deployment of the VDI environment, if any?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

92. What plans are in execution, in place or being developed to upgrade the standard desktop operating system?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

93. Describe current uses of server virtualization within your environment. List products, environment (test/dev/prod) and percentage of planned use currently in place.

- a. Platforms
- b. Use Volumes
- c. Farm Size
- d. Planned Upgrades

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

94. Describe current uses of application virtualization within your environment. List products, environment (test/dev/prod) and percentage of planned use currently in pace.

- a. Platforms
- b. Use Volumes
- c. Farm Size



d. Planned Upgrades

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

95. Describe current uses of desktop virtualization within your environment. List products, environment (test/dev/prod), business impact and percentage of planned use currently in place.

- a. Platforms
- b. Use Volumes
- c. Farm Size
- d. Planned Upgrades

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

96. Besides Active Directory, are any other end-user authentication or directory services platforms used in the environment today (i.e. Novell eDirectory, etc.)?

Microsoft Active Directory is the standard for now. It will remain the State's direction until a time that some other platform proves to provide a better solution.

97. Is there an available schematic of the current network and AD architecture?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

98. What are the Active Directory trust relationships in the enterprise? Are there multiple trusted domains?

Yes

99. Are end-user desktops currently members of an Active Directory domain?

Yes

100. Most organizations intend to maintain AD reflecting groups of users into departments and/or role based security, does State of Oklahoma have any plans for this?

Yes

101. Are there specialized local or group policies required by any applications or as a result of the current infrastructure configuration?



Yes

102. Can you provide a conceptual topology map between sites specifying bandwidth provisioning in place today?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

103. What is the backbone bandwidth within the primary data center network (i.e. 1 GB, 10 GB, etc.)?

10 Gb

104. Are there any unique network requirements within your WAN and/or extranet environment?

No

105. Beyond typical VLAN and Firewall best practices, are there any unique requirements within your environment?

No

106. Is quality of service (QoS) supported on the network today, in what locations and for what network protocols/traffic types?

QoS for voice traffic across MPLS and IP pt to pt.

107. Is any disk or device encryption utilized today, and what user groups utilize this technology?

These technologies differ from agency to agency at this time. However, OSF uses Symantec Endpoint Encryption and intends to standardize as agencies are consolidated.

108. Are any desktop firewall technologies enabled? What types, in what locations and for what purpose?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

109. What security rules are in place and/or desired for desktops today (i.e. no floppy drives, no USB devices, etc.)? What user groups are/are not subject to these security rules?



The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

110. Are any desktops or userids shared by multiple users? In what locations, use cases and/or for which User Groups?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

111. Describe use cases where non-administrative users have administrative rights to their desktop environment.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

112. Beyond accommodating administration of the virtual desktop environment itself, will desktop administrative accounts need to be made available to a third-party to support management of desktops for any other purpose?

All solutions will be considered.

113. How is software deployed to end-user devices today?

The vehicle to deploy software and patches to end-user devices varies from agency to agency. However, OSF uses Altiris.

114. How are desktop images deployed to end-user devices today?

The vehicle to deploy software and patches to end-user devices varies from agency to agency. However, OSF uses Altiris.

115. How many unique desktop images are supported today?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

116. Describe standard desktop HW configuration deployed today.



The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

117. Describe your desktop patching process and tools.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

118. Describe your software distribution process and tools.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

119. Describe your virus protection process and tools.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

120. Describe how you deploy PC's/Laptops to end users.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

121. Describe field deskside support for end-users today.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

122. Describe measures used to manage risk of locally stored data (policy against, folder redirection, backup facilities)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.



123. Describe use cases for which roaming profiles are implemented, if any.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

124. Describe how you enforce desktop data retention policy.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

125. Describe any standard desktop maintenance windows and process.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

126. Describe current desktop support service hours and service levels

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

127. List use cases and approximate volume for multiple monitor support, if any.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

128. Describe your policy for standard location for PST files on desktops

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be



considered.

129. Describe tools used to access corporate computing resources for remote or travelling users.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

130. Are end-user devices tracked in an asset management application or configuration management database today?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

131. Does the State have a complete inventory of every Agency's Infrastructure (Hardware)?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

132. Does the State have a complete inventory of even Agency's Applications?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.

133. From an application Modernization perspective, what Application Modernizations does the State have planned for the next Fiscal Year ?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study. All solutions will be considered.



134. The State currently has multiple Server Virtualization options, would they like the ability to go from P to P, P to V, V to V, and V to P from a workload perspective ?

Yes

135. Is VDI something on the horizon for the State of Oklahoma ?

Yes

136. What is the existing system architecture, is it centralized or is it distributed across the different agencies?

The agencies are in the process of being centralized into a single data center.

137. Are there expectations to 're-use' some of the existing telephony system architecture?

No. Legacy equipment will be replaced with VoIP.

138. The RPF mentions ACD functionality. Are there agent call centers that will be included in this proposal? If so, how many centers and how many agents?

There are multiple call center in service today. The size varies by agency.

139. Can the state provide cut sheet paper purchases based on an annual spend by agency? If so, please provide separation of paper sizes by 8.5 x 11/14 and 11x17, if available.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

140. Can the state provide an employee count/roster by agency?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

141. Can the state provide a WAN/LAN network topology map and related legacy ERP systems map showing which state agency utilizes what system and how they access and authenticate?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



142. What is the network printing architecture constructed of? IP direct and/or Print Servers? If Print Servers, are these consistently implemented across each agency? Describe

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

143. What is the network infrastructure capabilities or constraints between agency and IT datacenters? Do all agency sites have IP connectivity?

Bandwidth is a major constraint. All sites have IP connectivity.

144. Would it be possible to have end users by agency provide responses to a survey instrument to allow further capture of document and process information?

The State is willing to consider and explore all alternatives.

145. What is the typical procurement method – purchase or lease? If other, provide any details.

Typically purchased, some are leased.

146. Can the state provide an inventory of all owned and leased imaging hardware by location by agency? If not, would the state/agency project allow for both an electronic discovery process and a onsite, survey instrument to be used?

The State is unable to provide the information requested within the timeframe at this time. Vendors are encouraged to use the information from the CIO Study. The State is willing to consider and explore all alternatives.

147. Are there any requirements for mobile printing or BYOD device support for printing?

The state encourages a response that covers mobile printing and BYOD printing support.

148. 10. What are the current “scan to” formats being utilized other than PDF?

TIFF and JPEG

149. 11. What are the current “scan to” software solutions being used?

The State is unable to provide the information requested within the timeframe at this time. Vendors are encouraged to use the information from the CIO Study. There are many used



across the state. (Jon) The software I am aware of are: Kofax Capture, Application Xtender, WebXtender, eFile Cabinet, Farifax, eDoctus and OnBase.

150. 12. What are the current document profiling / indexing requirements?

Indexing requirements vary based on the business needs for agencies or departments. Common index filed types are text, integer, date, and user defined list.

151. 13. What time of Employee ID security access badge is in use? (HID, PIV, CAC, other?)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

152. 14. What are the predominate user workstation platform apps being used, such as Web, MS Office, AutoCad, Citrix terminal services, other?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

153. 15. Help Desk statistics – can statistics be provided on the amount of calls related to print / output devices? If so, by agency, site, by month or other timeframe?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

154. 16. Financial data – can annual budget spend for “known” spend on print, copy, fax or scan devices and service contracts and consumables be provided?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

155. The following data table would in some cases be redundant to the above questions, but if possible is this information or budget data available on a statistical basis?

Volume of Helpdesk Requests

Helpdesk Cost per Call



Volume of Service & Repair Requests

Cost per Service repair Dispatch (Service fee, Parts, etc)

Amount of Paper Purchased

Cost per Month of a Service Desk FTE

Volume of Consumables Purchased

Cost per A/P for vendor invoice payment processing

Asset listing/ownership schedule (if any)

Remaining Asset Value, Purchase & Lease Schedules of current output Devices

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

156. Has the State completed any of the recommendations suggested in the IT assessment specifically the consolidation of staff into a centralized organization?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

157. Provide the total number of FTEs performing the work by tower and their associated job levels.

Application Development

- a. Network
- b. Server Virtualization
- c. Desktop Administration
- d. Storage
- e. Document Imaging

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

158. Please provide the raw data of information collected during IT Modernization Study.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



159. Do you have any VDI Platform preference like VMWare , Citrix etc ?

Today the State's direction is VMware. It will remain the State's direction until a time that some other platform proves to provide a better solution.

160. Do you have an existing Server side virtualization in your environment

Yes

161. Volumetrics

- a. Users , # Desktops by location
- b. Network bandwidth for each location
- c. How old are the desktops
- d. List of Operating Systems on the desktops with their versions
- e. Are there users using Tablets and Mobile devices?
- f. Application Packaging SW if any
- g. Patching SW
- h. Local Storage used per user (OS , Data) in GB

162. Do you allow users to work from home?

Yes

163. How many users work from home

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

164. What is the Current Security SW used on desktops?

Primarily Active Directory

165. How many desktop applications in the environment?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

166. How many images are currently supported?



**State of Oklahoma
Office of State Finance
Information Services Division**

Solicitation

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

167. How many Resources are currently supporting Desktop, Desk Side?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

168. Since the VDI environment is based on a Server based Back end technology, do you have any preference for Server HW, Vendor, Platform ?

Today OSF uses IBM Blades and SAN storage. That will remain the State's direction until a time that some other platform proves to provide a better solution.

169. What kind of availability are you looking for on the Back end Server side

Depends on business requirements. We strive for 3 nines in most cases. Some may require better than 3 nines.

170. Please provide true asset list showing hardware specifics (date acquired, model #, etc.).

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

171. Is the State of Oklahoma seeking to implement a single unified VDI solution across all state departments?

It should be considered if it will provide the State better supportability and solution.

172. Will the desired solution be centralized or does the potential exist for departmental solutions?

Centralized as much as is reasonably possible. Network bandwidth and other factors could affect final designs and configurations.

173. Will the state consider a hosted solution? VDI as a service?

The State may consider any solution that will provide the best supportability and solution.

174. What is the target timeframe to have VDI implemented statewide

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

175. Is there an order in which departments or state organizations will move to a vdi environment?



What is that order and why?

The state is unable to provide the information requested within the timeframe and at this time.

176. What is the desired first go live date? What will be the size of that group?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

177. Are there any mobility concerns?

Mobility must always be considered for any solution that the State would standardize on.

178. Is BYOD a consideration and if so what role will it play in the project

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

179. What backend environment will they be connecting to?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

180. What types of peripherals will be attached to the devices?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

181. Will there be a need for locally attached printers? USB/LPT?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

182. Any mounting requirements for the devices? (mounting behind the monitor, under the desk, etc..)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

183. What kind of network connectivity is required? (Ethernet, Wireless)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



Ethernet and Wireless.

184. If Wireless what is the wireless network type (802.11 a, b, g, n) (2.4 Ghz, 5 Ghz?)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

802.11 a, b, g, n
2.4 Ghz, 5 Ghz

185. Any requirements for locally installed apps? (VPN , Wireless authentication software?)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

186. Definition of virtual machines (what can we use to spec a server)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

187. Where will people be using virtualization?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

188. Network connectivity at each location including branch offices around the State

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

189. San Connectivity?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

190. Can we propose a unified solution (aka vblock or flexpod)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



191. What are the applications to be virtualized

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

192. Please demark existing vs new systems in this bid

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

193. Please outline in detail all existing (legacy) networks / network elements that will interface with, or participate in, the data path systems included in this bid.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

194. Please outline individual element high availability functionality, and redundancy, designed and configured into existing (legacy) networks that will interface with or participate in the data path systems included in this bid.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

195. Is there a minimum requirement of 10G connectivity throughout the proposed solutions

10G is required in the core network.

196. What security points (firewall/NAC/IPS/etc) that the proposed solution will need to traverse in the end-to-end data path. Please provide device type and capacity

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

197. Identify any wireless interaction points for the proposed solution. Please provide device type and capacity

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

198. What NAT/PAT points in the end-to-end data path that traffic from the proposed solutions will



need to traverse

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

199. Will bidders awarded part or parts of the solicitation for design and consulting services be precluded from bidding on hardware components of individual or designed projects.

The State does not intend to preclude vendors.

200. Is a portal or self-service catalog for infrastructure request or rapid provisioning a requirement

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

201. Is there a portal or self-service catalog for infrastructure request currently in place? If yes, what product/products?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

202. Who would be the primary audience or early adopters for the initial use of private cloud?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

203. What are the likely initial use cases or workloads to be provisioned out of a portal?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

204. What OSS/BSS products/ tools are currently in place?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

205. How important is the internal "marketing" of these IT services from a portal? Rate as 1-5 with 5 being the greatest importance

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



206. What are the current lead times for provisioning servers/compute? Is it currently manual?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

207. Is the State willing and able to enter into a lease/purchase or financing agreement to fund the projects covered in this bid?

The State is open to all suggestions at this time.

208. How many State Agencies have been cut to the new Avaya system and how many remain on legacy systems, and what are those systems?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

209. What is the total phone count for each agency?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

210. Call Centers/Contact Center, how many agents needed and can agents serve multiple agencies or will contact centers need to be handled on an agency by agency basis? What are the current call center deployments and agent counts.

There are multiple call centers in service. The numbers of agents vary by agency. Future plans are to have a central call center to service all agencies.

211. In the RFP, The State calls out several different kinds of Web Applications, can we be given a percentage breakdown of the proliferation of each language?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



212. Please list the application frameworks or languages categorized as “Open Source” under Web Apps.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

213. Does the state have a preference on what language the future custom applications are written in (.NET or Java)?

No, the state does not have a preference at this time.

214. Is the State interested in modernizing the existing applications or is this just to create a new standardized framework for any new development?

Vendors are encouraged to respond based on both approaches mentioned above.

215. Does the State intend to virtualize applications (either legacy or new custom)?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

216. Are there contracts in place with middleware vendors that we prevent the State from adopting a new middleware platform now?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

217. Is this RFP meant to be the start of the work needed to accomplish the goals or is The State merely looking for an architectural review, guidelines, and a transition roadmap?

The State is willing to consider and explore all alternatives.

218. How many applications does the State intend to bring under the centralized IT organization?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

219. What is the current makeup of the States developer resource pool?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



220. Are there “Big Data” problems with any of these applications?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

221. A stated goal of this program is to “Lower the overall Total Cost of Ownership for desktop endpoints while increasing availability”. Can the state provide the Cost of Ownership for desktop endpoints today?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

222. A stated goal of this program is to “Develop strategy to lower hardware setup and installation costs”. Can the state provide the hardware setup and installation costs today?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

223.

There are approximately 32,000 end user devices within the 70 agencies that responded to the survey. Can the State provide guidance to EMC on the following?

- a. What is the total estimated number of end user devices?
- b. Did the CapGemini survey identify a detailed end user asset and application inventory list from the 70 agencies that responded?
- c. Assuming that there are 130 State Agencies (as is referenced in the RFP) what data collection process would be required to gather data from the 60 agencies that did not respond to the CapGemini survey?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

224. A stated goal of this program is to “Enable standards enforcement and compliance”. Are the specific regulatory or compliance rules that the State must adhere to?

The statement “Enable standards enforcement and compliance” refers to technology standards from the perspective of this RFP.

225. Has the State made any decisions on building in-house capabilities or does the State wish to



consume a Service Providers 'Desktop as a Service' outsourced model?

The state will consider both approaches.

226. Does the State require the responding vendor to have the capabilities to provide end user devices? Will the state purchase the assets or lease them from the responding vendor over the life of this program?

a. If yes, what time period is required/assumed?

The state will purchase its own assets as funding permits.

227. Does the State require the responding vendor to assume ongoing ownership of the deployment tools, support teams, etc.? Will the state purchase the assets or lease them from the responding vendor over the life of this program?

a. If yes, what time period is required/assumed?

All solutions will be considered.

228. Does the State require the responding vendor to maintain operational control of the Desktop environment?

a. If yes, what time period is required/assumed?

All solutions will be considered.

229. Can the state clearly identify critical use cases that must be supported in the desktop environment?

- a. If yes, what is the total number of use cases that will exist in the consolidated future state environment?
b. Do these use cases apply across all agencies and departments?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study"

230. Can the State produce a detailed inventory of all 'end user' applications?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study"

231. Has the State undertaken any 'end user' application rationalization activities?

No such efforts have been undertaken from a State perspective.

232. Is there an estimate for the rationalized number of applications in the future state?

- a. Estimated number of low, medium, high complexity applications
b. Estimated number of Win 7 compatible applications

The state is unable to provide the information requested within the timeframe and at this time. Vendors



are encouraged to use the information from the CIO Study”

233. Has the state identified the preferred hardware platforms for laptop, desktop, and mobile devices? How many of each platform type will be supported?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

234. Does the State have any requirements for a ‘Bring Your Own Device strategy”?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

235. Can the State produce a detailed inventory of all ‘end user’ hardware assets?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

236. Do any of the State users have requirements for desktop video content?

- a. Streaming? On Demand? Multicast? Flash?

Agencies are requesting, Streaming, On Demand and Flash.

237. Do any of the State’s users have any special hardware\connectivity requirements on the desktop devices (scanning equipment, requirements for serial port, handicap accessibility devices, etc.)?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

238. Will the required centralized provisioning and configuration management system be a new (Greenfield) system? Or is an existing system in place that the state wishes to expand?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study”

239. Does the State envision a single consolidated Active Directory environment to service all state agencies and departments? Is this environment in place today?



Yes No

240. Has the state implemented any virtualization to date?

- a. If yes please detail which of the of following types of virtualization are in place and which toolsets are used:
- i. Server Virtualization
 - ii. Desktop Virtualization
 - iii. Persona Virtualization
 - iv. Application Virtualization
 - v. Presentation Virtualization

Yes.

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

241. How much of the existing end user environment will be preserved and migrated to the next generation state?

- a. User configuration settings and favorites/preferences
- b. Application settings
- c. Network Settings
- d. User data (stored locally on PC's)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study"

242. Does the State envision enforcement of centralized single-instance storage of all data on managed assets in State Datacenters (file shares, SharePoint sites, etc.)?

- a. Or will data storage remain distributed across all end user devices?

Centralized as much as is reasonably possible. Network bandwidth and other factors could affect final designs and configurations.

243. Can the State provide detail on the desired vendor involvement in the required end user communications program?

The State is willing to consider and explore all alternatives.

244. Does the State have a Helpdesk solution in place that will be leveraged for migration support?

Help Desk solution vary from agency to agency, however, OSF uses PeopleSoft CRM



245. Does the State have Tier 1 and Tier 2 support agreements in place that will be leveraged for this migration activity?

All solutions will be considered.

246. Can the State provide detail on the desired vendor involvement in end user support through the migration program?

All solutions will be considered.

247. What is estimated total estimation of total capacity backed up currently?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

248. Can a list of data broken down by application type be provided? Can the retention mandates be associated with each?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

249. Understand that tiering data is critical to reduce total cost of ownership. Has Recovery Point Objectives been determined? Has the State broken down applications into tiers of importance? Will this data be shared?

The RPF is 24 hours. Application prioritization is an ongoing process.

250. Is it the States goal to consolidate all backup applications to a single deduplicated target which will then replicate for DR?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

251. Is the State looking to consolidate backup and recovery locations and share between open



systems and mainframe systems?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

252. Is it the States goal to implement multi tenancy and charge back/show back to disparate internal entities?

This varies depending on the needs for agencies and departments, but the State is open to alternatives.

253. Is different training options to be discussed in initial solution brief?

The state does not understand this question.

254. What is the implementation timeline for the State in regards to backup and recovery?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

255. Is both image and guest level virtual backup and recovery required?

All solutions will be considered.

256. What is the state doing for Disaster Recovery?

All State agencies fall under the State of Oklahoma Information Security Policy for Disaster recovery. Consolidate agencies incorporate the Office of State Finance, Information Services Division DR & BC Plan. Agencies not consolidated are responsible for and handle their own DR & BC Planning. (John)

257. What criteria will be used to determine the virtualization vendor of choice?

Refer to the evaluation criteria process in the RFP.

258. Will it be mandatory for all agencies to standardize on the chosen virtualization vendor?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



259. Has a decision been made on server, storage, and networking vendors that will be used for the virtualization infrastructure? If not, what criteria will be used to determine the hardware choices?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

260. Has a complete server inventory been completed, including operating system, resource utilization, available storage, used storage, etc.?

No

261. Are there any plans for an application rationalization and/or modernization effort? (Application rationalization can potentially reduce the number of servers to be virtualized. Application modernization, depending on the chosen application platform, may realize additional benefits if a complementary virtualization platform is chosen.)

Vendors are encouraged to include rationalization and modernization efforts in their response.

262. Of the 2200 servers amongst 130 agencies, what strategy will be employed to determine virtualization candidates? Will the virtualization strategy be combined with standardizing on server operating systems, or will that be done separately? Will all 130 agencies be required to consolidate their servers into the new datacenter housed in Oklahoma's Office of State Finance?

Server virtualization is the direction that the State is headed. Anything that can be virtualized will be virtualized – if it makes sense from a business standpoint and if it provides the State a better solution.

263. Will the RFP response need to include plans for training existing IT employees on virtualization?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

264. Will the RFP response need to include estimates for human resources needed to operate the virtualization infrastructure, versus architecting & implementing alone?

The State desires responses that include all details necessary to present a vendors solution.

265. Will the RFP response need to include IT transformation consultations (IT transformation being a Capgemini recommendation)?

All alternatives will be considered.

266. Are there any preferences or requirements that would preclude the use of off-shore contractors



Responses should include any intended use of off-shore consultants for discussion.

267. Can the State share any reports concerning the IT infrastructure created during the initial capacity/computing assessments done using the BDNA software?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

268. Can the State expand on virtual infrastructure? Are there existing VMs that have special requirements when being migrated to new infrastructure and how much if any of the existing infrastructure hardware does the state want to continue to use? From that, what type of hardware is it? ie details about servers (CPU, Memory, storage and networking details)

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

269. Within the virtual infrastructure what storage protocols are in use and for what types of VMs? ie FC,FCoe, iSCSI, NFS, DAS, NAS

Various Primarily Fiber Channel

270. What versions of VMWare, Hyper-V, and Citrix are in use? If they are not the latest version, is the state willing to upgrade?

Various Yes

271. Do any of the physical servers and/or VMs use any kind of window clustering for Exchange and SQL Server?

Yes

272. Do any of your Oracle database servers use Real Application clusters?

Yes

273. Do the Oracle databases run on Windows, Linux, UNIX, or Solaris? If so, are they 32 bit or 64 bit and if Oracle runs on more than one OS type what are the types they run on?

All the above

274. Do any of the VMs use device pass-through for direct access to physical hardware?

The state is unable to provide the information requested within the timeframe and at this time.



Vendors are encouraged to use the information from the CIO Study.

275. Do any of the existing VMWare VMs use Raw Device Manning?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

276. Can you state your domain and forest functional levels?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

277. Are any of the MS Outlook email clients in older versions than 2003?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

278. During the recent Domain/Exchange migration or upgrade did the State introduce new hardware to host the servers or were they virtualized on machines? Did the state have problems during or after the migration that could still have an impact on future domain/exchange server changes?

Yes No

279. Do any of the subordinate IT enclaves use Microsoft Exchange server where the mail exchange records are hosted by external organizations or ISPs?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

280. Are any subordinate IT organizations in the state using perimeter security devices i.e. firewalls that are supported and maintained by an outsourced agency or company?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

281. Do any databases require storage LUNS over 2 TB?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.



282. Do any of the services boot from a SAN?

Yes

283. How many servers use internal or hot swappable drives for data storage? Is locally stored data on the servers critical? Can any data currently stored on local HDDs be moved to the SAN?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.

284. During the modernization project do you wish to have all of the OS versions on servers upgraded to the latest ones?

All that can be updated, should be updated. State's direction is to have all servers on supported versions of the Operating System – no matter what the platform is.

285. Do any firmware updates need to occur before upgrading?

The state is unable to provide the information requested within the timeframe and at this time. Vendors are encouraged to use the information from the CIO Study.