

ENTERPRISE BACKUP SOLUTION

BID NO: 20-20071

Addendum No. 1

July 22, 2020

Change to the RFP Due Date

The due date of July 31, 2020 @ 3:00 PM central time has been changed to August 14, 2020 @ 3:00 PM central time.

End of Change to the RFP Due Date

Questions and Responses

This Addendum 1 contains responses to 179 questions received, but is not all inclusive of all submitted questions. There will be an Addendum 2 posted within the next few days that will contain the remaining 107 questions and responses.

1. **Question:** What size back up is needed on this project?

Response: *Five year plan, 250TB currently, estimated 7-10TB growth.*

2. **Question:** How many data centers / DR sites does SAWS have?

Response: *Currently SAWS has 2 data centers and we do not have a disaster recovery (DR), but do plan that one DR site will be included in the proposed solution in response to this RFP and will be in the cloud.*

3. **Question:** What are the defined RPO/RTOs?

Response: *RPO – unstructured 1 day, SQL/Oracle real time, / RTO 15-30 minutes in the event of DR.*

4. **Question:** How much data are your protecting/sizing (VM's/Physical machines)?

- a. TB size of data?
- b. Sources of data: internal, cloud?

Response: *Response as follows:*

- a. *TB size of data 250TB/400VM/10TB of physical servers.*
- b. *Everything is internal at this time, and we have a small Azure cloud presence as a software as a service.*

5. **Question:** Do you have a documented retention plan that you want us to plan to?
 - a. What is the retention length for data, DB's, email and other specialty applications?
 - b. Governance? Immutable? How long?
 - c. What does the end goal look from the sizing? On/off prem?

Response: *The document retention plan has been outlined and will be provided to the selected vendor. There is nothing that needs to be planned to at this time.*

- a. *90 days for data and data bases (DB), and some emails have an indefinite retention length.*
- b. *Will need to have an immutable copy as part of DR (30 days).*
- c. *The end game is to have a reliable appliance with appropriate sizing that will move to a private cloud that will move to a public cloud to maximum value. On premise.*

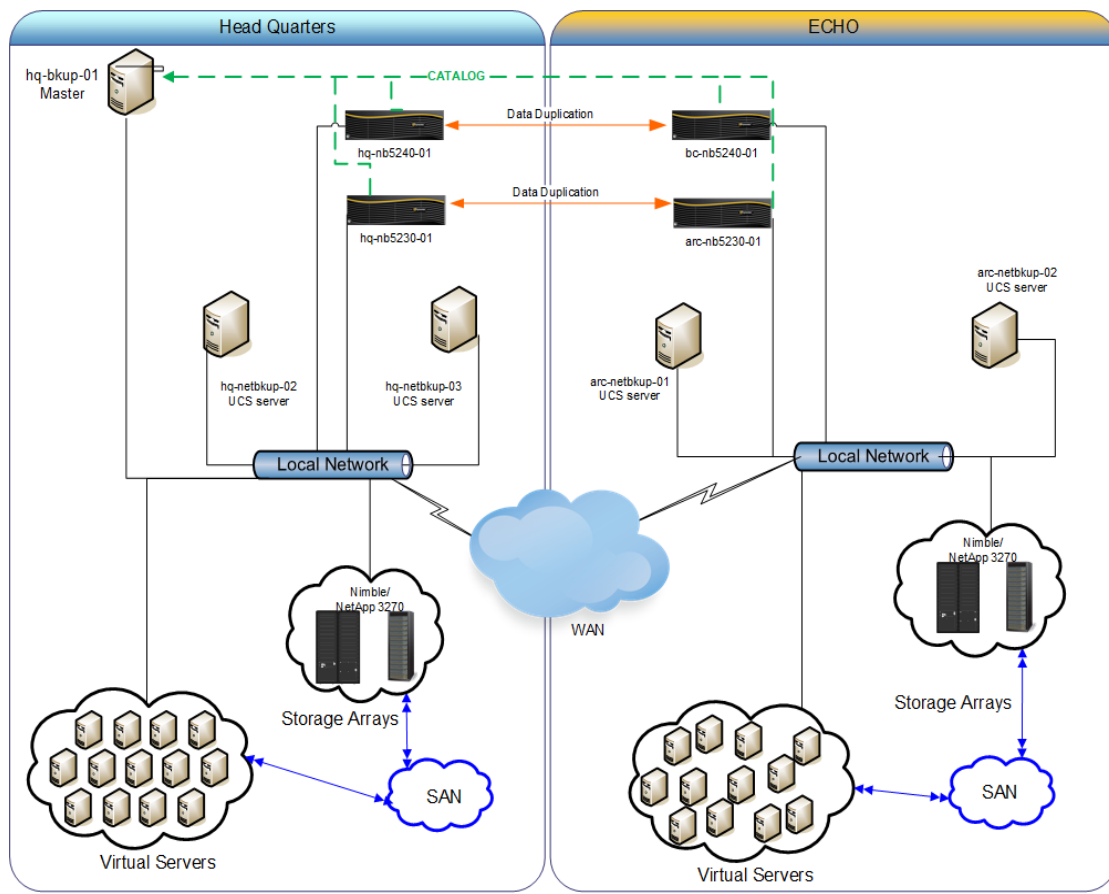
6. **Question:** What is the bandwidth between Data Centers / DR sites?
 - a. Do you have production and backup network?
 - b. Bandwidth size?

Response: *Bandwidth between Data Centers is 10GB. We do not currently have DR sites, but we will require them in the proposed solution.*

- a. *Yes.*
- b. *10GB.*

7. **Question:** Can you provide high level network diagrams of environment(s)?

Response: *Yes, see below.*



8. **Question:** What specifically do you need fiber channel for?
- SAN transport for VMs?
 - Tape Drive?

Response: *The fiber channel is needed for the backup job speed.*

- Yes.*
- No, tape drive is not acceptable.*

9. **Question:** What operating systems need to be support?
- Legacy OS(s) that need support?

Response: *2012 and newer MS Servers need to be supported.*

- Our oldest MS Servers are 2012.*

10. **Question:** What SaaS applications need to be supported?
- Microsoft: O365, Sharepoint Online, OneDrive, Teams, Yammer, Dynamics 365, Skype
 - Amazon RDS: Oracle, MS SQL, MySQL, PostreSQL, MariaDB, Aurora
 - Google Suite
 - Others: SalesForce, SAP, Splunk, ServiceNow
 - Kubernetes

Response: *Response are as follows:*

- Yes.*
- No.*
- No.*
- No.*
- No.*
- Azure.*

11. **Question:** What application types are you using or planning on using/managing in the cloud? RDBMS, Hypervisors, data storage etc.

Response: *Please see RFP Scope of Services #3. Functional Requirements.*

12. **Question:** Are they looking for reference architecture? Appliance? Either?

Response: *Both.*

13. **Question:** What do you mean by 'System authentication via "air-gap"'? Please explain/clarify

Response: *System that does not need Active Directory (AD).*

14. **Question:** Do you have a preferred Cloud Vendor?
- Do you have a dedicated connection to that vendor?

Response: *Azure is our cloud vendor.*

- Yes.*

15. **Question:** Does your DR strategy include the use of Multi-cloud?

Response: *Yes.*

16. **Question:** Being unaware of an Enterprise Backup solution that supports this RFP at 100%, how will you prioritize features and needs?

Response: *We are looking for a vendor that will provide a solution that best meets the majority of our needs in one solution, a 5 year plan, and support. Also refer to the RFP Selection Process C. Evaluation Criteria Summary for additional details on evaluation.*

17. **Question:** Do you currently have an Enterprise Backup solution? If so, what is it?

Response: *Yes, we currently have Veritas Enterprise server backup solution.*

18. **Question:** It has come to our attention that SAWS has another RFP issued to address the Endpoint Cloud Access. We have seen in other organizations like yours that endpoint cloud access is combined into one centralized data protection/governance strategy. Keeping that in mind, would it be of benefit to SAWS if this function were added to this RFP?

Response: *The other RFP (20-20080) is for cloud-managed endpoint protection software with endpoint detection and response (EDR) capabilities. In order to obtain best of breed technologies for each RFP, we are keeping them separate. If you have a solution that provides benefits related to the other RFP (20-20080), please feel free to provide information that communicates these capabilities. We also welcome you to participate in the other both RFP opportunities.*

19. **Question:** What current backup solution is in place?

Response: *Refer to response to question 17.*

20. **Question:** Functional Requirements Question: 3.2 - Main Backup System: Implementation of an immutable system - Can you define what you mean by “immutable” and what your expectations are for this? Previously stated use of this term may not be the same here.

Response: *Immutable is defined as a copy of data that can't be changed. Expectations will be designed as part of the DR plan.*

21. **Question:** Functional Requirements Question: 3.2 - Main Backup System: The system must be redundant – meaning several locations to perform backup and restore duties. Can we know how many locations and what their networks look like?

Response: *Refer to response to question 2.*

22. **Question:** Datacenter Question: Your data center configurations and locations. (Ex. Primary Data Center, DR Site, etc.)

Response: *The configurations are a primary DC and a backup DC. DCs are within 50 miles, DR will be regional cloud.*

23. **Question:** Datacenter Question: If you are running any production data within your DR site which needs original backups created (Active-Active Scenario)?

Response: *DR will only incorporate tier 0 servers – less than 10 – will need to be updated in the most efficient way possible solution.*

24. **Question:** Hardware Question: What type of production storage(s) you are using and what is the capacity?

Response: *Nimble – 1PB.*

25. **Question:** Hardware Question: What type of physical servers and compute hosts and hardware used for virtualization?

Response: *Cisco.*

26. **Question:** Hardware Question: What protocols are used to connect Primary/SAN storage for virtualization hosts? (Fiber Channel, iSCSI, NFS, SAS?)

Response: *All the above.*

27. **Question:** Hardware Question: Would you like the ability for a backup solution to integrate into production storage to back up directly from SAN snapshots, deploy on demand sandboxes from storage based snapshots for test/dev and Secure or Staged Restores, and or ability to process database transactions directly from primary storage?

Response: *Yes.*

28. **Question:** Hardware Question: What backup storage repository are you currently writing backups to and are you copying backups to another site? If so, how and to what hardware?

Response: *Veritas and we have a redundancy with Veritas.*

29. **Question:** Hardware Question: Do you plan to continue to use your existing backup repository or are you planning to purchase new hardware? If new, what have you selected or are you open to suggestions for us?

Response: *New hardware that should be included in the response to this RFP with the vendor's proposed solution.*

30. **Question:** Hardware Question: If applicable, what NAS hardware/appliance do you own for hosting of unstructured/departmental data (Non-Windows or Linux File Services)?

Response: *Nimble.*

31. **Question:** Hardware Question: What is the in-use vs. total capacity of existing backup target?

Response: *In use capacity is 75% of the total.*

32. **Question:** Server / OS Question: Type of servers you are using and operating systems?

Response: *Microsoft and Linux.*

33. **Question:** Server / OS Question: Type of virtualization you are using (VMware, Hyper-V, AHV, etc.)?

Response: *VMware.*

34. **Question:** Incumbent Solution Question: What is your existing backup product and how you are currently using it?

Response: *Veritas is the backup solution and we are only backing up servers and databases.*

35. **Question:** Incumbent Solution Question: What you like about your current backup product?

Response: *It backs up servers.*

36. **Question:** Incumbent Solution Question: What you dislike about your current backup product?

Response: *The current product we have has not provided private cloud and other updated enterprise solutions that we need.*

37. **Question:** Incumbent Solution Question: If applicable what is the method on how you are currently backing up your unstructured/departmental file shares (Non-Windows or Linux Server OS File Services)?

Response: *Nimble is doing some of this.*

38. **Question:** Licensing Question: How many total VMs need to be backed up on VMware hosts?

Response: *We are under 400 VM.*

39. **Question:** Licensing Question: How many VMware hosts are supporting those total VMs?

Response: *30 hosts.*

40. **Question:** Licensing Question: How many sockets per each VMware host?

Response: *2 processors.*

41. **Question:** Licensing Question: How many total VMs need to be backed up on Hyper-V hosts?

Response: *None.*

42. **Question:** Licensing Question: How many Hyper-V hosts are supporting the those VMs?

Response: *None.*

43. **Question:** Licensing Question: How many total sockets per each Hyper-V host?

Response: *None.*

44. **Question:** Licensing Question: How many physical servers need to be backed up?

Response: *Less than 10.*

45. **Question:** Licensing Question: How many VMs that are running on a free ESXi hosts?

Response: *We do not have any free hosts. All have licensing.*

46. **Question:** Licensing Question: How many total VMs are running on Nutanix Hypervisor (AHV)?

Response: *None.*

47. **Question:** Licensing Question: Are there any VMs using RDM or Pass Through disks (disks that cannot be snapshotted or checkpointed from the hypervisor)? If so, how many?

Response: *None.*

48. **Question:** Licensing Question: Do you run IBM AIX OS? If so, how many servers need to be backed up?

Response: *None.*

49. **Question:** Licensing Question: Do you run Solaris OS? If so, how many servers need to be backed up?

Response: *None.*

50. **Question:** Licensing Question: What is the total amount of unstructured/department file data hosted on a NAS appliance (Non-Windows or Linux File Services) that needs to be backed up?

Response: *None.*

51. **Question:** Licensing Question: What databases you are running (Oracle, SAP HANA, MS SQL, MySQL, PostgreSQL etc.) and how do you back them up?

Response: *SQL and Oracle, Veritas client for SQL and Dump&Sweep for Oracle.*

52. **Question:** Licensing Question: Do you use O365 and are you interested in backing up Exchange Online, Sharepoint Online, One Drive, and MS Teams data? If so, how many users? (Note: Microsoft doesn't back up O365)

Response: *Please see RFP Scope of Services #3. Functional Requirements. Between 1500-1800 users depending on proposed backup solution.*

53. **Question:** Licensing Question: Do you want to protect end points (desktops/laptops, etc.)? If so, how many?

Response: *No.*

54. **Question:** Licensing Question: Do you want to create and orchestrate a dynamically created DR runbooks for testing and automation of failover and recovery from replicated VMs or backups? If so, how many servers would need to be orchestrated for DR?

Response: *Yes, 100 servers.*

55. **Question:** Licensing Question: Do you have any servers/workloads running as Azure VMs or AWS EC2 Instances that need to be backed up? If so, how many?

Response: *No, we need Azure to be backup in its native mode (SaaS environment in Azure).*

56. **Question:** Licensing Question: What is your current and future cloud strategy?

Response: *To have a DR cloud backup presence.*

57. **Question:** Licensing Question: Do you have a preferred partner/s when purchasing IT?

Response: *No.*

58. **Question:** Licensing Question: If you decided to move forward, when would you like to purchase Veeam?

Response: *We intend to take this project to our October or November Board meeting for formal approval of the purchase and would be able to make the purchase after approval has been obtained. The selected vendor will begin to implement the solution Q1/Q2 2020.*

59. **Question:** Backup Repository Sizing Question: What is the desired short-term retention (RPO) of point in time backups? (Example: Daily Backups retained for 30 days)

Response: *90 days.*

60. **Question:** Backup Repository Sizing Question: What is the desired long-term retention? (Example: Weekly Backups retained for 4 weeks, Monthly Backups retained for 1 year, yearly backups retained for 5 years, etc.)
- Response:** *90 days.*
61. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed by virtual machines?
- Response:** *250TB.*
62. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed for all physical servers?
- Response:** *Less than 10TB.*
63. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed by dedicated NAS appliances hosting unstructured/departmental data (Non-Windows or Linux Server OS File Services)?
- Response:** *None.*
64. **Question:** Backup Repository Sizing Question: Are short-term backups desired to be copied to another datacenter?
- Response:** *Yes, we are looking to have a replicated copy at DC 2.*
65. **Question:** Backup Repository Sizing Question: Are long-term backups desired to be copied to another datacenter?
- Response:** *Yes.*
66. **Question:** Backup Repository Sizing Question: Are short-term backups desired to be copied to Cloud?
- Response:** *This could be part of the long term solution and as part of the 90 day retention.*
67. **Question:** Backup Repository Sizing Question: Are long-term backups desired to be tiered to Cloud?
- Response:** *Yes.*
68. **Question:** Backup Repository Sizing Question: What is the Cloud provider(s) of choice to store any backup data?
- Response:** *Azure.*
69. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed by Exchange Online?
- Response:** *4TB.*
70. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed by One Drive?
- Response:** *Equal to 1500 users at 25TB as per MS. Currently we have 30TB being used on prem.*

71. **Question:** Backup Repository Sizing Question: What is the total In Use storage consumed by Sharepoint Online?
- Response:** *SAWS has not developed this at this time, and the vendor's proposed solution will need to plan for it.*
72. **Question:** Backup Repository Sizing Question: Would O365 Backups need to be backed up to an on premise repository or directly to Object Storage?
- Response:** *SAWS has not developed this at this time, and the vendor's proposed solution will need to plan for it.*
73. **Question:** What kind of workloads is SAWS looking to protect? (VMware, NAS, SQL, Oracle, etc.)
- Response:** *Please see RFP Scope of Services #3. Functional Requirements.*
74. **Question:** What is the total Logical / Front End TB being used today for all of SAWS workloads that is currently being backing up today? And can SAWS provide a breakdown of TB usage for each type of workload?
- Response:** *Unstructured 60TB / SQL/Oracle 30TB / Email 4TB.*
75. **Question:** How many days of local retention is SAWS looking to keep on the vendor solution?
- Response:** *90 days.*
76. **Question:** How many days / months / years of long term (archive) backups are they looking to keep? Where are they looking to keep those long term backups? (Cloud, on-prem, etc.)
- Response:** *90 days. The long term backup should be proposed by the vendor's response to this RFP.*
77. **Question:** How much organic data growth year over year (in percentage) does SAWS usually experience?
- Response:** *7TB.*
78. **Question:** How many years does SAWS want this solution sized out for?
- Response:** *Refer to response to question 1.*
79. **Question:** How many days does SAWS want to replicate their data from one DC to another DC? Will both DC's need to replicate to each other for the same amount of days?
- Response:** *90 days and yes.*
80. **Question:** Can you provide more details about the "air-gapped" environment where the solution will be deployed?
- Response:** *Refer to response to question 13.*
81. **Question:** Please describe the number of databases at each location, including stand alone or clustered SQL and Oracle environments?
- Response:** *Less than 150.*

82. **Question:** How many user end points, if any, are in scope for the backup project?

Response: *None.*

83. **Question:** Please describe your current Exchange mailbox deployment for the number of mailboxes to be protected for onsite Exchange and Office 365.

Response: *SAWS should be migrated to Office 365 within 6-8 month.*

84. **Question:** How many current O365 mailboxes will need backup; and what is the expected growth for total mailboxes during the contract period?

Response: *1500 mailboxes, current size of Exchange is 4TB, and some mailboxes don't get deleted/archived.*

85. **Question:** Will SAWS have a dedicated WAN connection for backups and replication to the cloud?

Response: *Yes.*

86. **Question:** What is the current size of the SAWS Internet connection?

Response: *10Gb.*

87. **Question:** What vendor(s) solution(s) does SAWS currently use for Office 365 backup?

Response: *None.*

88. **Question:** What vendor(s) solution(s) does SAWS currently use for Disaster Recovery?

Response: *None.*

89. **Question:** What vendor(s) solution(s) has SAWS evaluated over the past 24 months for Disaster Recovery?

Response: *Not applicable.*

90. **Question:** Will SAWS host a hybrid (on premise and cloud) solution?

Response: *Yes.*

91. **Question:** In Section C "Scope of Services" point 2 "Support" – SAWS has mandated a "Dedicated full time project level representative". How many hours per week does SAWS consider full time? Does dedicated mean that this individual will not have any other non-SAWS customer responsibilities? Does this representative need to be onsite?

Response: *This is referencing to the project installation, setup and configuration. However, we will need a support desk that can be available 40 hours per week 8-5 CST. This individual will need to be available as a knowledgeable technician that can help with issues that arise with the solution. Dedicated means when we need their support, we can get help and not wait more than 1-2 hours before we receive a call back. We are also asking on "b" customer service and technical support be available 7/24/365. No, a representative will not be on-site at SAWS facility.*

92. **Question:** Please explain in more detail what is meant by "air-gap".

Response: *Refer to response to question 13.*

93. **Question:** Is Fiber channel a requirement for backup data movement with VMware data? Is Fiber channel a requirement for data replication between sites?

Response: *It is recommended/preferred.*

94. **Question:** Is there a requirement for the selected solution to provide backup and restore of VM's from an OpenStack virtualization environment?

Response: *Not applicable.*

95. **Question:** Is it mandatory that the selected vendor solution provide policy-based auto-protection for virtualized hierarchical levels for VMware environments including VCenter, ESXi Host, Datastore, vAPP, vCloud Director VM, Tags?

Response: *Preferred.*

96. **Question:** Is it mandatory for the selected vendor solution to backup and restore a Windows virtual machine on VMware with 4K native block size?

Response: *Must support all block sizes.*

97. **Question:** Is it mandatory for the selected vendor solution to ability to restart backup of two specific Virtual machines with failed backups, from user interface without use of any scripting?

Response: *Preferred not mandatory.*

98. **Question:** Is it mandatory for the selected vendor solution to be able to make IP addresses changes of backup appliances without the need of support personnel and without causing any disruptions for backup infrastructure?

Response: *Preferred not mandatory.*

99. **Question:** Is it mandatory for the selected vendor solution to have the functionality to assign role(s) to individual end users and group of users from Active Directory to one VM or set of VMs?

Response: *Preferred not mandatory.*

100. **Question:** Should the selected vendor solution have the capability to instantly access and boot up 50 virtual machines with 500 GB data each, from single appliance without duplicating the VM backup entirely on the appliance?

Response: *Good to have.*

101. **Question:** Should the selected vendor solution have the capability to Run a backup of 100 VMs and note the time taken. Run a backup of those same 100 VMs in parallel with restores of 20 different VMs. Demonstrate that the backup time difference between these two cases is not more than 10%?

Response: *Good to have.*

102. **Question:** Should the selected vendor solution have the capability to Measure data deduplication ratios after backup of 100 VMs with 1 full and 20 incremental backups and a 2% churn rate in VM data?

Response: *Good to have.*

103. **Question:** Should the selected vendor solution have the capability to Measure deduplication ratios for VM data?

Response: *Yes.*

104. **Question:** Should the selected vendor solution have the capability to provide Granular object recovery for exchange without the use of third-party tools?

Response: *Preferred not mandatory.*

105. **Question:** Is it acceptable for the selected vendor solution to use third-party tools?

Response: *Preferred to have a single application interface but not required.*

106. **Question:** Is Frequent re-indexing and repairs for On-premise and cloud backups acceptable to SAWS?

Response: *Would rather not have to re-index and repair.*

107. **Question:** Is a vendor solution that Requires staging space for deduplication resulting in fluctuating available capacity, greater operational complexity and higher TCO acceptable to SAWS?

Response: *No.*

108. **Question:** Is there a requirement for NDMP support to backup NAS shares data with NTFS permissions?

Response: *Not at this point, but there could be in the future.*

109. **Question:** Would a vendor solution that only offers Ransomware detection for snapshot level be acceptable?

Response: *No, would like some intelligence built in to help recognize Realtime changes in backups.*

110. **Question:** Does SAWS require a vendor solution that detects ransomware above and beyond the snapshot level?

Response: *Preferred not mandatory.*

111. **Question:** Are No Cloud tiering cost and infrastructure overhead a requirement?

Response: *Preferred not mandatory.*

112. **Question:** Is Fiber Channel support a requirement?

Response: *Preferred.*

113. **Question:** Is Global De-dup as opposed to Workload limited De-dup a requirement?

Response: *Not a requirement.*

114. **Question:** Is STIG rule based hardening a requirement?

Response: *Like to have.*

115. **Question:** Is Automated Business continuity for multi-tier complex environments a requirement?

Response: *Like to have.*

116. **Question:** Is Self-contained granular exchange recovery a requirement?

Response: *Preferred.*

117. **Question:** Is Simultaneous instant access for 50 VMs a requirement?

Response: *Preferred not mandatory.*

118. **Question:** Is Source optimized client-side?

Response: *Not applicable.*

119. **Question:** Do you have any workloads that have to be protected at a particular time or any workloads that have to complete protection at a certain time?

Response: *Yes.*

120. **Question:** Is there a preferred server platform to host the backup solution to be included?

Response: *No.*

121. **Question:** What service management, orchestration, and automation tools are used for IT operations? E.g. ServiceNow, Cherwell, VMware vCloud Director, etc.

Response: *Cherwell, Avanti.*

122. **Question:** Will tape be utilized as a secondary or tertiary storage medium?

Response: *No.*

123. **Question:** Would SAWS be open to running a data tool (i.e. Mitrends) to ensure we have the best possible sizing for your data backup requirements?

Response: *Yes, this may be incorporated into a Proof of Concept as outlined in the RFP Selection Process D. Proof of Concept.*

124. **Question:** How many physically separate copies of backups are desired?

Response: *3.*

125. **Question:** Please describe the deliverables and SLAs associated for the following requested Maintenance Services to include whether these are delivered onsite or remotely for each:

- a. Operational support
- b. Monthly Service and Support Calls
- c. Quarterly Health Checks
- d. Upgrade Assistance

Response: *Refer to the RFP Scope of Services Section 2 Support. Remote support if acceptable.*

126. **Question:** Should Maintenance Services be included with the purchase price of the solution? Or billed hourly? Project or SOW-based after purchase?

Response: *Per the RFP Exhibit C Price Schedule the initial purchase price should be all inclusive and should include maintenance and service for the base term. The pricing for maintenance and support for the five optional extension terms should also be included as a lump sum total per year on the Price Schedule.*

Respondents can provide an additional level of detail as supporting documentation in addition to Exhibit C if needed.

127. **Question:** How many employees will require live training? Do you have a preference for online or onsite training?

Response: *Refer to the RFP Scope of Services #6 Training.*

128. **Question:** The RFP asks a question around annual payment options:

- a. Is there a desire for an annual subscription term (i.e. 12 months) that you can just renew annually?
- b. Or a multi-year term such as 3+ years but paid annually?
- c. Are you wanting a solution sized and priced for 3 years, 4 years, or 5 years of capacity?
- d. Will this solution be purchased or leased?
- e. If there is more than one financial model, what pricing should be included in the response?

Response: *Responses are as follows:*

- a. *No.*
- b. *1 Year plus 5 optional years of maintenance and support. The base year should include maintenance and support.*
- c. *5 Years.*
- d. *Purchased.*
- e. *CapEx and OpEx (maintenance) separated.*

129. **Question:** Does SAWS have a need to protect any NoSQL environments? If so, what platforms and versions?

Response: *Oracle v11.2.0.4 migrating to 19 in Nov.*

130. **Question:** Are there any unstructured data platforms requiring protection?

- a. If so, what versions?
- b. What is the total data footprint of each?

Response: *Not applicable.*

131. **Question:** Do you have any “big data” workloads to protect such as Hadoop? If so, what version and how many servers? What is the total data footprint of the big data environment?

Response: *Not applicable.*

132. **Question:** Do you have any containerized workloads to protect? What is your container management platform, e.g. Kubernetes?

Response: *Not applicable.*

133. **Question:** What Data Analytics platforms are currently in use?

Response: *None for current backups.*

134. **Question:** Are backups on the solution required to be encrypted?

Response: *Yes.*

135. **Question:** Do you have any workloads that are encrypted prior to being protected?

Response: *No.*

136. **Question:** What cloud native workloads, if any, will need to be protected? What cloud providers?

Response: *Azure.*

137. **Question:** What NAS platform are currently in use, if any? What is the front-end capacity of this environment? What file systems and versions are used?

Response: *None for backups.*

138. **Question:** What block storage arrays are in the environment requiring protection? What is the make, model, version, and total data footprint capacity of each?

Response: *None for backups.*

139. **Question:** Does SAWS have any DevOps initiatives or strategies that need to include backup operations?

Response: *Yes.*

140. **Question:** Are there 10GbE or 40GbE connections for the backup appliances? Copper or fiber?

Response: *Vendor shall provide this with their proposed solution.*

141. **Question:** From a security hardening perspective, do you require full control over all accounts on a system, including ones used for vendor support?

Response: *No. We will need to have full control to accessing the system.*

142. **Question:** How important is identifying, locating, and controlling PII or other sensitive data classifications within the backup environment?

Response: *Good to have.*

143. **Question:** Do you have any financial models in use to determine the cost of inefficient deduplication and data reduction, (separate deduplication domains, or workloads not being reduced/compressed)?

Response: *No.*

144. **Question:** If selected how will SAWS be handling presentations and demo's due to COVID-19 concerns? Will these be done on-site or remote?

Response: *Remote.*

145. **Question:** Section I.c.2.e. Is the vendor required to make software and hardware patches and upgrades available to SAWS to apply or is it the vendor's responsibility to apply them?

Response: *It will be the vendor's responsibility to apply them and update the clients as well.*

146. **Question:** Section I.c.5.1. Does this statement imply that the vendor has operational control of the system and will be responsible to maintenance windows?

Response: *No. This is a coordinated effort with SAWS Backup Administrators to allow Vendor access to the system and update/patch hardware and clients.*

147. **Question:** Section I.c.6. What will the trainers be trained on, administration of the system or usage of the system or both?

Response: *Both, and how to setup all parts of the system.*

148. **Question:** Section I.d.1. Does SAWS expect to pay for all of the equipment and installation services in the 1st 12 months as a capital expense?

Response: *Yes.*

149. **Question:** Disaster Recovery 3.5. Do Technical Recovery Procedures and Application Recovery Procedures exist, or are you looking for the vendor to develop these?

Response: *Vendor to develop during install.*

150. **Question:** Disaster Recovery 3.5. How many DR tests are you looking to conduct on an annual basis?

Response: *2.*

151. **Question:** Disaster Recovery 3.5. Are you looking for the vendor to provide a fully managed Testing Program? I.e test mgmt, test execution, updating testing procedures, change mgmt, post- test reporting?

Response: *If the vendor has the ability to perform 3.5, this will need to be setup and SAWS trained. Vendor will not need to be available during test execution. If the system does not work, vendor will need to support SAWS to remedy the system which should be included in the support/maintenance of the turnkey purchase price and subsequent optional extension years.*

152. **Question:** Main Backup System 3.2. You require a 1:10 compression ratio minimum. Can share an analysis of your data to confirm this minimum ratio is achievable?

Response: *This is up to the vendor to provide if they can or can't.*

153. **Question:** Does SAWS have a formal change mgmt process? How is DR updated with production changes?

Response: *Yes. DR is being formulated and will be a part of the chosen vendor's input to help.*

154. **Question:** Are you using a journaling server to capture all transmitted emails?

Response: *Yes.*

155. **Question:** For software-based solutions, are there plans to repurpose any hardware, or will all hardware (servers, storage, etc.) be required as well?

a. If yes, is there standardization on any particular OEM?

Response: *There are no plans to repurpose any hardware.*

156. **Question:** Will the organization be looking at leveraging cloud environments for Disaster Recovery purposes?

Response: *Yes.*

157. **Question:** What vendor(s) solution(s) does SAWS currently use for Office 365 backup?

Response: *Not applicable.*

158. **Question:** What vendor(s) solution(s) does SAWS currently use for Disaster Recovery?

Response: *Not applicable.*

159. **Question:** What vendor(s) solution(s) has SAWS evaluated over the past 24 months for Disaster Recovery?

Response: *Not applicable.*

160. **Question:** Will SAWS host a hybrid (on-premise and cloud) solution?

Response: *Yes.*

161. **Question:** What Cloud Services Provider(s) does SAWS currently use?

Response: *Azure.*

162. **Question:** Please explain in more detail what is meant by “air-gap”.

Response: *Refer to response to question 13.*

163. **Question:** Is Fiber channel a requirement for backup data movement with VMware data? Is Fiber channel a requirement for data replication between sites?

Response: *Refer to response to question 93.*

164. **Question:** Is there a requirement for the selected solution to provide backup and restore of VM's from an OpenStack virtualization environment?

Response: *No.*

165. **Question:** Should the selected vendor solution be able to backup and restore the following without use of third-party software?

- a. Active Directory – Restore of all users, groups, memberships. Restore of selected users, groups, OUs. Recreate deleted objects that cannot be restored from Active Directory Deleted Objects container.
- b. Exchange emails, mailboxes and email contacts?

Response: *Preferred not mandatory.*

166. **Question:** Is Automated Business continuity for multi-tier complex environments a requirement?

Response: *Preferred.*

167. **Question:** Is Self-contained granular exchange recovery a requirement?

Response: *Preferred.*

168. **Question:** Is Simultaneous instant access for 50 VMs a requirement?

Response: *Good to have.*

169. **Question:** Is the customer expecting a managed service offering here (ongoing helpdesk type support) or looking for this support to be handled by the OEM (Original Equipment Manufacturer)?

Response: *Vendor will need to provide a total system support outline meeting the requirements in RFP.*

170. **Question:** Based on the complexity of the solution being bid, would SAWS issue an extension of the deadline for all vendors to respond to 8/14/2020?

Response: Yes.

171. **Question:** Please complete the table and answer the questions to the best of your ability. Your dedicated Data Protection Specialist will determine the appropriate solution. The below information will allow us to accurately predict deduplication ratios and help your organization adopt a Next Generation backup methodology that speeds up backup/recovery times and lessens or eliminates reliance on unreliable backup media.

FOR THE TABLE BELOW:
Amount in GB is for the size of a SINGLE FULL BACKUP (before compression). Please complete all sections with your best possible estimates.

Data-Sets (Insert Site Name)	Backup Details				
	Amount in GB	Full backups a Week	Inc/Diff backups a week	Annual Growth Rate %	Desired Retention
<i>(EXAMPLE) Unstructured File Data</i>	300	1	5	10	10daily/4weekly/ 12Monthly
Unstructured File Data					
Rich media (images, video, audio, PDF, CAD, etc.)					
SQL					
Exchange					
SharePoint					
Other database (please specify)					
VMs (OS only) (NOT including File/DB above)					
Laptop/Desktop (if backing up)					
Other (not listed above)					
Total Backup					

Response: Responses have been provided in the table below.

FOR THE TABLE BELOW:
Amount in GB is for the size of a SINGLE FULL BACKUP (before compression). Please complete all sections with your best possible estimates.

Data-Sets (Insert Site Name)	Backup Details				
	Amount in TB	Full backups a Week	Inc/Diff backups a week	Annual Growth Rate %	Desired Retention
<i>(EXAMPLE) Unstructured File Data</i>	300	1	5	10	10daily/4weekly/ 12Monthly
Unstructured File Data	60	1	5	10	
Rich media (images, video, audio, PDF, CAD, etc.)					
SQL	36	1	5	10	
Exchange	4	1	5	10	
SharePoint	0				
Other database (please specify)	36	1	5	10	
VMs (OS only) (NOT including File/DB above)					
Laptop/Desktop (if backing up)					
Other (not listed above)					
Total Backup					

172. **Question:** Cyber Recovery. Do you plan on including an offline copy (Air Gap) in this project?

Response: *Yes and immutable.*

173. **Question:** Cyber Recovery. Which workloads need to be protected with an Air Gap? (Please highlight workloads in table that need Cyber Protection, or copy/paste table with separate Air Gap workloads.)

Response: *All systems being backup will need Air Gap.*

174. **Question:** BACKUP WINDOW. Are you currently meeting your backup window? (yes/no)

Response: *Yes.*

175. **Question:** BACKUP WINDOW. Full Backup Window Requirement (hrs):

Response: *24 hours.*

176. **Question:** BACKUP WINDOW. Incremental Backup Window Requirement (hrs):

Response: *8 hours.*

177. **Question:** VIRTUAL ENVIRONMENT. How virtualized is your environment (%)?

Response: *98%.*

178. **Question:** VIRTUAL ENVIRONMENT. Do you perform Bare Metal Restores? (yes/no)

Response: *None now, but would like physical machines 7-9 totals servers with less than 10TB.*

179. **Question:** Fiber Channel is mentioned as a requirement. Is this for a particular workload, systems you are looking to protect?

Response: *We find that fiber channel integration with our current system is a best solution and is preferred.*

End of Questions and Responses

ACKNOWLEDGEMENT BY RESPONDENT

Each Respondent shall acknowledge receipt of this Addendum No. 1 by noting such and signing below.

This undersigned acknowledges receipt of this Addendum No. 1 and the bid proposal submitted herewith is in accordance with the information and stipulations set forth.

Date

Signature of Respondent

End of Addendum