1. What version of Oracle are you running?

A Oracle 12c for one Windows 2012r2 server

Q Is it Windows Oracle or Linux?

A Windows

Q What version of Mongo are you running?

A Two windows servers one running Mongo DB enterprise for Sage version 3.0.2

The other is running Mongo DB 3.0.7

Q ‘’Details of support provided to be included as optional extras in the tender submission’’ – by this do you mean you would like the different support options in relation to hardware and software? 1 year, 3 year, 5 year etc.

A Yes please but only as optional extras,

Q How many O365 mailboxes need backing up?

A We haven’t moved to O365 yet, but hopefully will be doing within the next 12 months. We will be looking for circa 500 mailboxes

Q How many PC’s are there to backup?

A Could you give a price based upon 20

Q The backup tender specification states  - The solution must be stored on directly attached disk storage. This can be disks within a server for example. These will be located on NML premises.

A The reasons for this are we would like one copy of the NML backup data on premises. We are looking at migrating some live data into the cloud for example office 365.  The secondary backup copy that would be a monthly offsite backup could be in the cloud, however with us already having working tape drives for this purpose then a cloud solution may not prove cost effective.

The other consideration is that the amount of backup data volume roughly 40TB + that we want to avoid monthly costings also for datacentre space. We are looking for a one off cost solution to potentially last five years.

Q What is the total number of VMs we are going to be protecting?

A 79 virtual vm’s

Q ‘*Full support of Office 365 backups’* – what does this include? Exchange, SharePoint and OneDrive? Or just Exchange?

A  We are not yet using office 365, but please quote as an optional extra for future potential project

*Q ‘We can provide a dedicated backup network over 1GB fibre or provide a link on the main MPLS network between two sites with connections of 100mb and 20mb’* – By this do you mean you have a 1GB ethernet network with fibre presentation? Would it need a standard RJ45 to connect into the backup network or an optical gigabit ethernet card/port?

A We can provide two options here -  a 1gb fibre connection into a switch to give a Ethernet presentation – option b is just using the standard network links between the two sites one is 100meg the other is 20meg, Ethernet both ends

Q How many Office 365/users will need to be protected and currently what data (from the 30-40TB raw) is apportioned to them?

A Currently the Microsoft exchange is backed up in house. Therefore, we don’t have any current 365 users.  The purpose of mentioning office 365 is to allow for this possibility in future. Therefore I would suggest an optional cost separate in the tender or at least a statement that this backups solution software could be used for 365 in the future and what would be required.

Q Sizing the 40TB of backup capacity will be straightforward enough, however being able to guarantee that there is sufficient storage for 30 days of additional incremental backups will be more difficult as we don’t know what is currently being backed up.  Can you provide any more guidance please?

A 175gb daily change rate on average, this is not the amount the data increases per day, just the changes made, so other files are deleted as well as new files created within this value. We have 26TB usable currently and I have asked for 40TB at least for locally attached storage server for a backup purpose.  The data store has increased only around 2tb in two years in total.

Q What is the proposed contract period?

A We are looking for a hardware warranty of three years minimum and expected live time scale of five years in terms of product and hardware support

Q What annual growth percentage (if any) for protected data should we include?

A Currently using 26TB of data and have specified 40TB with this growth already in mind

Q Is offsite replication of any / all backup data required?

A Using the Tape library mentioned in the tender specification

Q Do NML want us to supply racks if we propose physical equipment?

A no

Q Do NML have a preference for physical or virtual targets to hold backup data?

A Physical

Q How many months are the monthly backups retained for?

A Disk backups 30days and one monthly tape backup recycled every three months and one yearly kept

Q Should we include product education? For how many people?

A Basic training while the install is taking place and a pilot of five servers plus guide to continue the rollout process. 3 people

Q What is the current rate of change on the backups? How much data is being sent over daily?

A 175gb daily change rate on average, this is not the amount the data increases per day, just the changes made, so other files are deleted as well as new files created within this value. We have 26TB usable currently and I have asked for 40TB at least for locally attached storage server for a backup purpose

Q Can you provide details of the two sites?

A We have a dedicated 1gb fibre between the two sites or an MPLS network with one 100mb on one site to one 20mb on the other that the backups can use. We may use the 1gb dedicated as preference

Q Is there potential to upgrade the 1Gb fibre connection to 10Gb (we could potentially provide this for you if it is an option)?

A No

Q Are tape backups essential to the solution or would an alternative which provides a 3-2-1 solution be acceptable?

A Not essential, but anything different would be advised as an optional extra as obviously the tender project has a budget with the specification build in mind of this

Q Office 365 backups – is it just email or one drive/sharepoint etc?

A Phase one would be email and onedrive in future replacing some current backed up servers – currently none and the purpose of the question is to clarify the software would work with 365 for a future project

Q Who will be responsible for the day to day management of the backups/recovery etc.?  Is it something you wish to be managed by the solution provider or will there be internal staff who require training to then manage the backups/recovery etc.?

A Internal NML IS team

Q How much of the raw data is currently on the exchange server that ‘could’ move to Office 365 in the future? There is an offset that may affect the size of hardware we would put forward.

A This is the current database sizes that we may move to 365 in future

|  |  |  |
| --- | --- | --- |
| **Database Name** | **Database (in GB)** | **Size (in bytes)** |
| Test Mailbox + Exhibitions | 25.63 | (27,523,612,672 bytes) |
| I.S Database | 39.01 | (41,884,385,280 bytes) |
| Marketing | 147.6 | (158,520,115,200 bytes) |
| H.R | 17.63 | (18,933,678,080 bytes) |
| Estates | 74.63 | (80,136,962,048 bytes) |
| BookingsWML | 9.758 | (10,477,436,928 bytes) |
| DSSecurityandHS | 7.883 | (8,464,171,008 bytes) |
| NML | 4.008 | (4,303,421,440 bytes) |
| Finance | 61.38 | (65,909,358,592 bytes) |
| DaleStreet-PhotoTrad | 36.76 | (39,468,990,464 bytes) |
| DTO | 24.01 | (25,778,257,920 bytes) |
| JS | 4.508 | (4,840,292,352 bytes) |
| Visitor Services | 18.01 | (19,335,806,976 bytes) |
| MoL | 142.1 | (152,614,535,168 bytes) |
| NorthStreet | 9.508 | (10,209,001,472 bytes) |
| Sudley | 8.008 | (8,598,388,736 bytes) |
| WAG | 71.38 | (76,647,301,120 bytes) |
| ExecTeam | 58.76 | (63,091,310,592 bytes) |
| MRB | 51.88 | (55,709,335,552 bytes) |
| Lady Lever | 13.13 | (14,101,839,872 bytes) |
| Maritime Museum | 132.4 | (142,146,076,672 bytes) |
| World Museum | 284.9 | (305,891,180,544 bytes) |
| Development Office | 53.01 | (56,917,295,104 bytes) |
|  |  |  |
| **Total:** | **1295.893** |  |

Q Is the training requirement to cover general supportability or to extend towards configuration changes and fault diagnostics?

A General supportability training required as an option

Q What operating system are the Physical Machines running?

A Windows Server 2012 and server 2012r2

Q Do the physical machines require application aware backup processing?

A yes

Q What operating system are the Virtual Hosts running?

A Mix of Windows 2008r2, Windows server 2012 and windows server 2012r2

Q Is the backup solution to be independent of the existing infrastructure or is there resource available to run virtual machines?

A independent

Q Is the dedicated backup network 1GB between sites?

A We do have a 1gb fibre dedicated link available

Q Is the backup to be sized for X years, if so what is the expected yearly data growth rate?

A We currently have SAN storage for 40TB and are using around 28TB currently so that is the reason I have mentioned 40TB as that is the maximum data we can currently hold

Q Could you provide details of the “SAS bridge” currently in place?



Q Is MongoDB application aware processing a mandatory requirement or could this be crash consistent with the addition of internal backup routines?

A Yes application aware processing is required

Q Are Office365 backups to be included within the proposed solution?

A As an optional extra in the pricing

Q Should existing resource be considered to enable the ability “to startup the VM directly from a backup file in an isolated environment”?

A no

Q Is the 15min RTO based on the ability to run the infrastructure directly from the backup files?

A Ideally in a virtual lab that the VM can be tested in

Q What tests and verifications are required against the backups to ensure recoverability?

A Services, application is working as expected or in the case of a file server, shares are available on the WAN

Q Is there sufficient resources to power-on virtual machine groups including associated dependencies to enable the testing?

A Yes

Q What duration is required for the ability to run a sandboxed environment?

A Brief testing to check services can run and application will work – few hours 1 day max

Q Is it accepted that backup target storage would be lower performance than the production environment and when running virtual machines from a backup file performance would be impacted?

A Yes, usable

Q What is the backup window for the backup to disk target?

A 24hours

Q What is the backup frequency for the backup to disk target?

A Daily

Q What is the backup window for the backup to tape target?

A One monthly backup per server

Q What is the backup frequency for the backup to tape target?

A One monthly backup per server

Q Could you please define the “lifetime of the schedule” in reference to point 4.7?

A These are our standard terms of payment. We do not expect to make a single upfront payment when consultancy/engineering work is included. We would expect the payment to be phased across the implementation, reflecting the work completed.

Q Are you in possession of any spare OS licenses?

A One Windows Server 2012R2 standard  license for  this purpose if required  , quote from the tender specification - The solution must be stored on directly attached disk storage. This can be disks within a server for example. These will be located on NML premises.

Q In terms of your 4 physical machines, are they Windows or Linux?

A All windows

Q Will you be assessing the cost of this solution over a period of 1, 3 or 5 years?

A We would expected the solution to have at least a three year warranty on hardware and a five year support lifecycle

Q What connections do you currently have from you tape backup library?

A SAS bridge and Ethernet



Q Are your virtual machine hosts clustered?

A Yes

Q We have noticed that your Tape Library is 6 years old and been out of support for 3 years. With this in mind, how important is backing-up to tape?

A Yes, we do have third party support for the tape library with next day replace on parts separate to this

Q Would cloud storage and disaster recovery be a good option for you for an extra layer of protection?

A The tender spec does state - The solution must be stored on directly attached disk storage. This can be disks within a server for example. These will be located on NML premises. We already have a full Disaster recovery solution.

Q Do you require to restore the ability data from Legacy backup tapes to the new solution?

A Yes

Q Do you want physical backup devices or are you intending to use your existing servers and storage, currently in use for DPM? Or would you would you like a cost for both?

A New hardware is proposed in the tender specification as in The solution must be stored on directly attached disk storage. This can be disks within a server for example. These will be located on NML premises.

Q Total data size of Physical Servers

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ServerName** | **Server Type** | **Drive Label** | **Drive Letter** | **Total Disk Size (Gb)** | **FreeSpace (Gb)** | **PercentFree** | **Total Data Used(Gb)** |
| DCWML | Physical |  | C: | 371.46 | 336.85 | 90.68 | 34.61 |
| FIELDARCHHOST | Physical |  | C: | 1862.15 | 1839.25 | 98.77 | 22.9 |
| FIELDARCHHOST | Physical | Data | D: | 3724.85 | 133.99 | 3.6 | 3590.86 |
| MIMSYSERVER2012 | Physical |  | C: | 100 | 74.26 | 74.25 | 25.74 |
| MIMSYSERVER2012 | Physical | Data | D: | 318.28 | 251.9 | 79.14 | 66.38 |
| SECOND-STORAGE | Physical |  | C: | 130.24 | 101.65 | 78.05 | 28.59 |
| Hyperv nodes won’t be backed up but host the virtual machines that will be |  |  |  |

Q Total data size of VMs (used, not allocated)

A 26TB used

Q Total data size of each application:

A Exchange databases

|  |  |  |
| --- | --- | --- |
| **Database Name** | **Database (in GB)** | **Size (in bytes)** |
| Test Mailbox + Exhibitions | 25.63 | (27,523,612,672 bytes) |
| I.S Database | 39.01 | (41,884,385,280 bytes) |
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| Development Office | 53.01 | (56,917,295,104 bytes) |
| **Total:** | **1295.893** |  |

SQL Databases 205gb

Oracle Databases 1 Database 12GB size

Mongo DB databases 2 databases 14gb in total for both

Q Retention requirements for the Monthly tape backups (e.g. 1 year/7 years/infinite etc)

A 1 monthly and 1 yearly and we keep the yearly every year for as long as possible of the technology eg LTO 5 tapes

Q Version of Hyper-V

A Server 2012 R2 Microsoft

Q Storage location and connectivity of CSVs (SAN make/model/connections)

A Gridstore SAN  with 10gb Ethernet presentation (no fibre)

Q How concrete are the timelines for installation? The reason I ask is we cannot confirm consultants availability without a PO.

A The timelines are aspirational, however we would work with the successful bidder to arrange a mutually agreeable implementation plan

Q Do you require PC directly backed up?

A No PC’s are required to be backed up, just the physical servers and virtual servers mentioned