

### **Question & Answers:**

Q 1: What are the network requirements for the back-end connection to the storage array?

Answer- 10GbE connection per node

Q 2: What Video Management Software is being used to capture the data?

Answer- Video files are transferred to the storage array through an NFS share. The video management software does not interact with the storage array

Q 3: For the three past similar projects requested on Form 6, are these required to be completed projects or can ongoing projects be provided?

Answer- Ongoing projects can be provided

Q 4: How many Recording/Archiving hosts will connect to the storage array?

Answer- from 5 to 15

Q 5: What operating system(s) will be used on the host side?

Answer- There is no requirement for the OS on the storage array

Q 6: How many clients will access the data on the storage array?

Answer- from 10 to 20

Q 7: Are there other applications or workloads besides toll data (license plate recognition, traffic flow, surveillance, pattern / object recognition, etc.)?

Answer- the storage array will solely be used to store tolling data

Q 8: Regarding Exhibit A : What are the use cases for each listed protocol? Can you provide specific examples of each protocol needed?

Answer- NFS -> used to store most of the Tolling data through NFS shares  
SMB -> used by users to access Tolling data

HTTP -> used to access the interface for the storage array

FTP -> used to upload data in specific scenarios

HDFS -> not currently used at THEA, however THEA would like to have this option available for possible future needs

S3 -> not currently used at THEA, however THEA would like to have this option available for possible future needs

Q 9: Request for clarification, Within the ITB for Toll Operations storage array replacement there are two different storage sizes provided. Which capacity is THEA requesting 650 TB or 960TB

Answer- 650 TiB of usable storage space. This does not include snapshots or any redundant data.

Q 10: Which Requirements table has the correct solution specifications? The table in section 2.02 does not match the table in Attachment 1.

Answer- The table in section 2.02 is the correct one.

Q 11: What type and speed of network connections are preferred and available?

Answer- 10GbE connection per node

Q 12: What type of power voltage and plug type are preferred and available?

Answer- 120volts on 15-20amp circuits

Q 13: Regarding the statement "The system must be flexible enough to support multi-protocols including NFS, SMB, HTTP, FTP and HDFS, and S3 from the same folder or export," can you please further define the use case and requirements around this, particularly the need for accessing file and object stores in the same namespace?

Answer- Data will be uploaded using mostly NFS shares, however a small percentage of data will be uploaded using SMB and FTP. Data created in NFS shares will need to be accessed through SMB as this is how most users will access this data. HDFS and S3 are not currently used at THEA, however THEA would like to have this option available for possible future needs

Q 14: Can you provide details on what versions of SMB are required?

Answer- Version 3.0 support is required

Q 15: Will those shares be accessed via SMB or also accessed via NFS? If NFS is also used, can you specify how many required and mixed protocol access and what version of NFS is needed?

Answer- Most shares will be accessed through SMB as well as NFS (around 15 shares). NFS shares is how most of the data is being uploaded. Support for NFS versions 3 and 4 is required.

Q 16: Are there any authentication requirements outside of Active Directory?

Answer- Besides Active Directory only local users will be needed

Q 17: What is the estimated total file count?

Answer- Around 418 million

Q 18: If the entire solution cannot be installed within the contiguous five rack units (RUs) of rack space, may the solution be installed within two racks? Once the existing NL410 has been removed, the solution can be placed in one contiguous rack without disruption.

Answer- The entire solution needs to be installed within 5 contiguous rack units.

Q 19: Will we be considered compliant if we do not offer native HDFS protocol? Many customers use the solution BlueAlly is proposing via NFS for Hadoop.

Answer- Proposals without HDFS will still be considered. Having HDFS protocol is a plus.

Q 20: Can two options from the same manufacturer be submitted with the proposal?

Answer- The Proposer shall submit only one bid/option, as the best offer, for this advertisement.