The Manager

Dear Sir / Madam,

INVITATION TO TENDER FOR THE SUPPLY OF File Server (Tender/2425/05)

You are invited to quote for the supply of the items as specified in the enclosed tender schedule. If you are not prepared to accept a partial order, please state this clearly on the tender schedule.

Your sealed tender, in duplicate should be clearly marked on the outside envelope: Tender for File Server (Tender/2425/05)

The envelope should be addressed to "S.K.H. TSOI KUNG PO SECONDARY SCHOOL, 101 Chung Hau Street, Homantin, Kowloon" and arrive not later than 12:00pm on 13th February 2025. Late tenders will not be accepted. Your tender will remain open for 90 days from the "Closing Date", and you may consider your tender to be unsuccessful if no order is placed with you within these 90 days. You are requested to note that unless Part II of the tender form is completed, the tender will not be considered.

If you are unable or do not wish to quote, it would be appreciated if you would return the tender form with reason to the above address at your earliest convenience.

Tender will be accepted on an *'overall' / 'group' / 'itemized' basis.

Yours sincerely,

(Ms.) Tsang Pui Yu Principal

Encl.

Please delete as appropriate

TENDER FORM FOR THE SUPPLY OF File Server (Tender/2425/05)

Name and Address of School S.K.H. Tsoi Kung Po Secondary School

101 Chung Hau Street, Homantin, Kowloon

Tender Closing Date and Time 13th February 2025 12:00pm

PART I

The undersigned hereby offers to undertake the service as described in the tender schedule within the period of time as specified therein from the date of a firm order placed by the school at the price or prices quoted in the tender schedule including labour, materials, all other charges and in accordance with the details provided by the school. In so doing, the undersigned acknowledges that all items not otherwise specified shall be provided in accordance with such details; tenders shall REMAIN OPEN FOR 90 DAYS after the Closing Date; and the school is not bound to accept the lowest or any tender and reserves the right to accept all or any part of any tender within the period during which the tenders remain open. The undersigned also warrants that his Company's Business Registration and Employees' Compensation Insurance Policy are currently in force and that the service which his Company offers to undertake will not cause any damage to the school's premises.

PART II

RECONFIRMATION OF TENDER VALIDITY

With reference to Part I of this tender form, it is reconfirmed that the validity of tender offered by this company remains open for 90 days from 13th February 2025.

The undersigned also agrees to accept the fact that once the validity of tender is reconfirmed, the pre-printed clause specified in the Company's tender forms in regard to this nature shall NOT apply.

PART III

SAFEGUARDING NATIONAL SECURITY

The undersigned acknowledges that notwithstanding anything to the contrary in the written quotation documents, the school reserves the right to disqualify this company on the grounds that this company has engaged, is engaging, or is reasonably believed to have engaged or be engaging in acts or activities that are likely to cause or constitute the occurrence of offences endangering national security or otherwise the exclusion is necessary in the interest of national security, or is necessary to protect the public interest of Hong Kong, public morals, public order or public safety.

The undersigned also acknowledges that the school may immediately terminate the contract upon the occurrence of any of the following events:

- (a) this company has engaged or is engaging in acts or activities that are likely to cause or constitute the occurrence of offences endangering national security or which would otherwise be contrary to the interest of national security;
- (b) the continued engagement of this company or the continued performance of the contract is contrary to the interest of national security; or
- (c) the school reasonably believes that any of the events mentioned above is about to occur.

| Dated this | day of | 20 |
|---------------------------|------------------------------------|------------|
| Name (in block letters) | : | |
| Signature | in the capacity | of |
| (State official position, | e.g. Director, Manager, Secretary, | etc.) |
| Duly authorized to sign | tenders for and on behalf of: | |
| whose registered office | is situated at | |
| | | Hong Kong. |
| Telephone No. | .Fax No. | |

TENDER

| (1) Item No. | (2) Description / Specification | (3) Quantity required | (4) Unit Rate | (5) Total Amount (HK\$) | (6) Delivery Offered |
|-----------------|---|-----------------------------|------------------|----------------------------------|----------------------------|
| 1 | File Server | | | | |
| | - Please also refer to Appendix One (附件一) for service details | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

We/ I understand that if we/ I fail to supply the stores as offered in our / my tender upon accepting school's order, we are / I am prepared to pay the price difference to the school if such stores are obtained from elsewhere.

| Name of Supplier : | Company Chop |
|---|--------------|
| Name and Signature of Person authorized to sign Written quotation | |
| Name (in block letters) | Signature: |
| Date: | |

Summary

Our School is looking for a solution designed to provide us with a high-performance, secure, and scalable server and a storage system that would give us reliable and secure backup.

Objectives

Project background

- 1. IT infrastructure, hardware and software are ageing and must be revamped.
- 2. Larger capacity of VM farm
- 3. Security improvements are taken into consideration
- 4. Improving workload availability SLA
- 5. Improving data protection SLA

Scope of work

| Туре | Scope of work | Yes/ No | If no , Please clarify |
|--|---|---------|------------------------|
| 1. Project Management | 1.1. Develop a project schedule for this migration service, which identifies and assigns tasks and major milestones. | | |
| | 1.2. Ensure, track and evaluate progress against the project schedule.1.3. Review project tasks, schedules and resources and make changes or | | |
| | additions as appropriate. 1.3. Review project tasks, schedules and resources and make changes or additions as appropriate. | | |
| | 1.4. (Dedicate a PMP certified project manager to manage the whole project deployment (need to provide certificate) | | |
| | Provide regular meetings and reports every week to report on the project status. | | |
| 2. Environment Assessment and Project Planning | Pre-implement new system health check to ensure project deployment using under-planned and controlled solutions. 2.1 Provide Solution design for implementation and system | | |
| 3. AD Upgrade | integration. 2.2. System Implementation 3.1 Installation for 1 x Windows Server 2022 or above with the latest patch | | |

| | 1000 | |
|-----------------|--|--|
| | 3.2 Promote one new Windows Server | |
| | 2022(or above) to Domain Controllers | |
| | and upgrade the DC server. | |
| | 3.3 Raise domain and forest | |
| | functional level if needed | |
| | 3.4 GPO, File permission consulting, | |
| | planning | |
| | 3.5 GPO, File permission deployment | |
| | for user groups management if | |
| | needed. | |
| | 3.6 Demote the Old Domain | |
| | Controller and Disjoin Current AD | |
| | 2022 (or above) Environment | |
| | 3.7 Newly Creation of folder/file | |
| | permission rules if needed. | |
| | 3.8 Schedule the System States | |
| | backup in Windows Server native | |
| | backup tools | |
| | | |
| | 3.9 (Optional) New jointing 10x | |
| | notebooks/desktop/server to DC with | |
| | MAX 1x batches (within office hours) | |
| 4. VM migration | 4.1 VM host installation | |
| J | | |
| | 4.1.1. Review existing infrastructure to | |
| | ensure compatibility. | |
| | 4.1.2. Installation for 2 x Windows | |
| | Server 2022 (or above) with the | |
| | latest patch and join the current | |
| | domain. | |
| | 4.1.3. Enable Hyper-V on the 2x | |
| | Windows Server 2022(or above). | |
| | 4.1.4. Connect to the new SAN | |
| | storage's LUN for VM implementation. | |
| | | |
| | 4.2 Storage Installation | |
| | 4.2.1. Pre-Installation Planning: | |
| | | |
| | -4.2.1.1. Review existing | |
| | infrastructure to ensure compatibility. | |
| | -4.2.1.2. Plan storage layout, including | |
| | aggregates, volumes, and LUNs. | |
| | -4.2.1.3. Coordinate downtime | |
| | schedules with stakeholders. | |

| | 4.0 Dhusiaal lastallatian |
|--------------------|---|
| | 4.3 Physical Installation |
| | 4.0.1. Upped and |
| | 4.3.1. Unpack and mount the SAN |
| | STORAGE in the designated rack. |
| | 4.3.2. Connect power and network |
| | cables. |
| | 4.3.3. Verify proper ventilation and |
| | cooling. |
| | 4.4 Initial Configuration: |
| | |
| | 4.4.1. Connect the SAN STORAGE to |
| | the management network. |
| | 4.4.2. Access the CLI and web |
| | interface for initial configuration. |
| | 4.4.3. Identify the SAN STORAGE |
| | I |
| | controllers in the storage network. |
| | 4.4.4. Create backup policies for SAN |
| | and NAS workload. |
| | 4.4.5. Create Backup policies for |
| | LUNs correspondingly. |
| | |
| | 45304 |
| | 4.5.VM migration |
| | |
| | 4.5.1. Migrate VMs (within 20TB) from |
| | existing VM farm to new SAN storage |
| | with corresponding backup policies. |
| | 4.6. Existing Server Migration |
| | |
| | 4.6.1 Assist in migrating existing |
| | domain servers, such as printer |
| | server, to the new domain controller |
| | 4.7 Shared folder migration |
| | z.iaisa istasiigiation |
| | 4.6.1. Migrate files from existing MAX |
| | |
| | 8 file servers to storage NAS. |
| | 4.6.2. Config backup policies for the |
| | folders |
| 5. Infrastructure | 5.1Infrastructure functional test |
| Acceptance Test | 3. Illinastructure functional test |
| | C.1 Complete the leb |
| 6. Acceptance Sign | 6.1 Complete the Job |
| off | 7 days als Nameira d Construction |
| 7. Project Closure | 7.1 week Nursing Support Upon Acceptance Sign-Off |
| | I Accentance Sign-Citt |

Certificate & Responsibilities

| Role | Responsibilities |
|---|--|
| Project Manager PMP Certified 10+ Years' experience in Project Management | Single point of contact Oversight of the progress of the project Regularly reporting the status of the project Managing of all resources, manpower and schedule Provide Project Plan |
| Consultant Manager | Technical Design of the final solution for the project |
| Consultant with over 10 years' experience in IT | Identifying in advance any technical risks during the implementation of the project |
| VMware VCP certifiedHPE MASE certified | Ensuring quality control and quality assurance. Each deliverable will be checked and signed off by the Architect |
| Solution Consultant | Solution Implementation |
| Consultant with over 5 years' experience in IT | Project deliverable |
| VMware VCP certified HPE MASE certified Veeam - Veeam Certified Engineer | |
| HPE - HPE Master ASE - Compute IT Solutions | |
| Storage Certified Data Administrator, ONTAP certificate | |
| Storage Certified TechnologyAssociate certificate | |
| Storage Certified Implementation Engineer – SAN, Specialist, ONTAP (2022, 2024) | |
| Project Engineer | Product installation and configuration |

Implementation Plan

The Contractor shall comply with the following implementation plan in preparing the Acquisition Proposal:

A) Server

The Qty: 2

• Product installation and configuration

| Features | Requirement | Proposed Specification | Proven in Datasheet |
|-----------------------|---|------------------------|---------------------|
| CPU | • DL380 Gen11 8SFF svr - Xeon-Sliver 4210R (10-Core, 2.4 GHz, 100W) , 16GB | | |
| Memory | Provide 64GB RamSupport 24 DIMM slots. | | |
| Disk Drives | Provide 2x 600GB 10krpm SFF HDD Support expansion from initial 8 SFF front drive bays to future 24 SFF front drive bays. The disk drives shall have icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically when the drive is not under RAID protection or under RAID rebuild | | |
| Storage controller | Supporting 12Gb/s SAS and PCIe 3.0 Provide Controller-based Data Encryption, which encrypts data on both internal storage and cache modules of the array controller Support mixed mode, which runs RAID and HBA mode at the same time Support 3-Way Advanced Disk Mirroring across three disk drives | | |
| Network adapter | Provide one 2x 4-port RJ45 card Provide one additional 2x 2-port 10GBaseT RJ 45 Adapter | | |
| Form factor | At most 2U rack mount with rail kits provided | | |
| Power and cooling | At least 500W hot-plug redundant power supply and power cords or above Provide hot-plug redundant fans | | |

| Features | Requirement | Proposed Specification | Proven in Datasheet |
|----------------------------------|---|------------------------|---------------------|
| Embedded Remote Management | System remote management should support a browser-based graphical remote console along with a Virtual Power button and remote boot using a USB/CD/DVD Drive. It should be capable of offering upgrades of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication Remote console sharing up to 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Should support managing multiple servers as one via Group Power Control Group Firmware Update Group Configuration Group Virtual Media detailed hardware and firmware inventory report for a group of servers baseline compliance reports | | |
| System security | UEFI Secure Boot and Secure Start support Support tamper-free firmware updates, component firmware is digitally signed and verified by hardware-based silicon root of trust Support for FIPS and Commercial National Security Algorithms (CNSA) mode to prevent the use of insecure algorithms Support runtime firmware validation at regular intervals. Validate BIOS firmware at runtime, notify and automated recover on detection of compromised firmware. | | |

| Features | Requirement | Proposed Specification | Proven in Datasheet |
|---------------------------------|---|------------------------|---------------------|
| | Secure erase of NAND/User data Chassis Intrusion detection option | | |
| Operating Systems Support | Microsoft Windows Server 2022 or above | | |

B) Storage Requirements

Estimated Quantity of the Required Hardware: 1 Specifications of the Required Hardware

| Basic Component /Features | Basic Requirement | Proposed Specification | Proven in Datasheet |
|---------------------------------|--|---------------------------|---------------------|
| Form Factor • | Form Factor • Rack-mountable, 2U | | |
| Controller • | A) Fibre Channel/FC, NVMe/FC, iSCSI, NFS and SMB/CIFS are used for data consolidation without an add-on controller. B) symmetric active-active controller | | |
| | C) persistent write log, which will be written to flash for protection | | |
| | D) Needs deduplication, compression, compaction, thin provisioning, and snapshot software to reduce the data size and optimize the storage capacity | | |
| | E) At least support up to 2,000,000 snapshots per storage | | |

| | F) offer both scale-in and scale-out architecture G) Storage array must provide both async and sync data replication license for data protection | |
|----------|---|--|
| | H) Support and provide QoS service for LUN, Volume and system-defined workload | |
| | I) The system must support autotiering cold data to on-premises or public cloud object storage without adding any third-party software/solution. | |
| | J) Offer a subscription model in major public cloud service providers such as Azure, AWS and GCP to enable data replication capability between the on-prem system and the virtual storage in the cloud. | |
| Security | A) Need to provide a feature for File System Analysis, a Tamper-Proof snapshot feature and cannot be deleted until the expiration time is reached. | |
| | B) Must support and provide both encrypted drives and controller-based encryption. | |
| | C) The Commercial Solutions for Classified (CSfC) program must validate controller-based encryption. | |
| | D) Must provide multi-admin verification, which can help to prevent a single administrator from executing sensitive commands such as volume delete without approvals from one or more administrators | |

| | E) Must provide native anti- ransomware protection feature to provide tamperproof snapshots protection for data recovery. F) support Write Once Read Many (WORM) technology natively, without the need for additional software executables or additional | |
|------------------------------|---|--|
| | hardware | |
| Hardware specification | A) At least Minimum, have 64GB memory with separate 8GB non-volatile RAM (NVRAM) modules | |
| | B) The proposed hardware system must have at least a total number of 16x1.92TB SSD(Max 24 slot) | |
| | C) The proposed hardware system must come with at least 4 x 10Gb/s ports for cluster interconnect connection and 8 x 10GbE ports with 5m RJ45 CAT6 cables. | |
| Snapshot Recovery Time | Completed within a few minutes to four hours | |
| Software License | Perpetual license or subscription model required | |
| Others | A) Power supplies for array and disk shelves must be at least platinumrated (90% efficiency) to improve power efficiency. | |
| | B) The proposed hardware vendor must be named as a leader in the 2023 Gartner Magic Quadrant for Primary Storage Arrays | |

| | _ | I |
|----------|-------------------------------------|---|
| | C) A "Digital Advisor" must be | |
| | provided, which uses artificial | |
| | intelligence to provide insights, | |
| | guidance, and actions to improve | |
| | system availability, security, and | |
| | performance. | |
| | D) The digital Advisor must be able | |
| | to uncover and correct potential | |
| | problems before they affect your | |
| | business, including security | |
| | vulnerabilities, misconfigurations, | |
| | outdated firmware, and failing | |
| | hardware. | |
| 3 years | (A)Hardware warranty: | |
| Warranty | Replacement services for | |
| | hardware failures are provided | |
| | during the warranty. | |
| | (B)Technical Support: | |
| | Customers can contact the | |
| | technical support team via | |
| | phone, email or online support | |
| | platform for troubleshooting and | |
| | technical consultation. | |
| | (C)Software updates and | |
| | patches: During the support | |
| | period, customers can receive | |
| | the latest software versions, | |
| | updates, and security patches. | |
| | (D)On-site Service: In some | |
| | ` ' | |
| | cases, on-site technical support | |
| | and equipment repair services | |
| | may be provided. | |
| | (E)Spare parts management: | |
| | Usually ensuring enough spare | |
| | parts to support quick repairs. | |

PRICE SCHEDULE

For our school to better understand the services your company can provide, we would like to ask your company to describe in detail the best service and commitments it can provide in the following points:

| Pricing table | | |
|----------------------------------|-----------------------|--------|
| Item | Detail | Total: |
| 1. Project | | |
| Management | | |
| | | |
| 2. Environmental | | |
| Assessment and | | |
| Project Planning | | |
| AD Upgrade | | |
| 4. VM Migration | | |
| Infrastructure | | |
| Acceptance Test | | |
| 6. Acceptance Sign off | | |
| 7. Project Closure | | |
| 8. Server | | |
| 9. Storage | | |
| 10. Other fees (if | | |
| applicable) | | |
| | Estimated Total Cost: | |
| | | |

Additional information:

| | Item | Detail | Price: |
|----|---|--------|--------|
| 1. | Price for each additional SSD in Storage (including hardware and service fees) | | |
| 2. | Annual maintenance costs after the 3-year maintenance period (including 3 years Warranty's part A to part E) | | |

| Activity Description | Completion Date |
|----------------------------------|--|
| Hardware Delivery & Installation | Within 8 weeks from the date of written |
| | order. |
| Software Delivery & Installation | Within 8 weeks from the date of written |
| | order. |
| Service Delivery | Within 16 weeks from the date of written |
| | order. |

Enquiry

For enquiry, please contact Mr. Chan Shun Hong by phone at 2760 0463.

Instructions to Tendering

- 1. Tenderers are invited to submit a tender for the "SKH Tsoi Kung Po Secondary School"
- 2. The tender shall be based on both the below.
- -A "lump sum" that will not be adjusted for variation in freight cost, insurance, currency fluctuation, labor or materials occurring after the Tender Closing Date.
- -Cost for separate items not limited to the Tender for SKH Tsoi Kung Po Secondary School shall include maintenance, configuration, and installation, which will not be adjusted for variation in the freight price, insurance, currency fluctuation, labor or materials occurring after the Tender Closing Date.
- -The tender shall be made out on the Form of Tender provided, signed, witnessed and dated. The Tender Schedules shall be fully priced in ink and total led. The sums shown in the Form of Tender must agree with the total of the Summary of Tender. Schedules forming part of the Form of Tender shall be completed in full. The Form of Tender, Summary of Tender, Tender Schedules, Job Reference List, Form of Declaration of Conflict of Interest, and Confirmation Letter for Compliance with the Anti-collusion Clause in Tender, and Pricing summary shall be submitted.
- -Form of Tender, Summary of Tender, Tender Schedules, Job Reference List, Form of Declaration of Conflict of Interest, and Confirmation Letter for Compliance with Anti-collusion Clause in Tender together with those as required, and pricing summary shall be submitted.
- -School is not bound to accept the lowest or any tender received and reserves the right to accept or omit part(s) of any tender and might select products from different / not one single tenderer/contractor to complete the tender work, in which case no adjustment in price for the accepted part(s) of work shall apply. It should be noted, however, that this tender may not be conclusive or final, and a retender may be called as required.
- -Firms tendering shall acquaint themselves with the site conditions at their own expense for all information, including on-site measurements necessary for making the tender. Tenderers' bids will NOT be considered if tenderers do not visit the site.
- -The tender's validity shall be open for 90 days from the Tender Closing Date.
- -Post-tender negotiation may be exercised if deemed necessary.

- -The tenderer shall be deemed to be in possession of a valid Business Registration Certificate and, if necessary, be registered with the relevant authority(ies) authorizing him to carry out the Works as described in the tender document.
- -No unauthorized alteration or erasure to the text of the tender documents will be permitted. Any tender containing such alteration or erasure may not be considered. Any tender qualification or submission of incomplete information may cause the tender to be disqualified.
- -No liability will be admitted, nor will a claim be allowed, with respect to errors in the tenderer's tender due to mistakes that should have been rectified in the manner described above.

Schedule Payment

| Stages | Major Deliverables | Amount (percentage %) |
|-------------------------|--------------------------------------|-----------------------|
| Project Start | i. Kickoff Meeting | |
| Design & Implementation | ii. Domain Controller Implementation | |
| Mass Rollout | iii. Domain Migration | |
| Project Completion | iv. Project Closure | |

Company Experience

| The number of schools the company has previously collaborated with | |
|--|--|
| and provided related services: | |

Marking Scheme for Tender

The marking Scheme will involve two stages, including:

Stage 1

At this stage, the tender is assessed according to all the requirements. It will not be assessed further if it does not meet all the requirements.

Stage II

At this stage, the tender must meet all the requirements. The service, quality, price, and credibility the Company provides will be assessed further.

| Items | Ratio |
|--------------|-------|
| Credibility | 10% |
| Service | 30% |
| Quality | 30% |
| Pricing | 30% |
| Total Weight | 100% |

| | | Assessment Criteria | Weighting |
|-------------|----|--|-----------|
| | 1. | 1.1 Company background. IT project experiences. | 10% |
| Credibility | | 1.2 Company Experience and Goodwill in building up | |
| (10%) | | backup systems in schools over the past years* | |
| | 2. | System software and configuration | 20% |
| Service | | (Technical architecture, security, resilience) | |
| (30%) | 3. | Composition of On-Going Support/ | 10% |
| (3070) | | Maintenance Services | |
| | 4. | Proposed approach and methodology | 15% |
| Quality | 5. | Manufacturer's brand name and goodwill, skill level, | 15% |
| (30%) | | compatibility and stability | |
| Pricing | 6. | Contractor's quoted price | 30% |
| (30%) | | | |
| | | Total Weight | 100% |

^{*} Provide the number of schools with which the company has previously collaborated and provided related services. If not provided, it will impact on the score.