

**Tender for the Supply of Virtual Desktop Solution in Cloud mode to C-DIT.**

Centre for Development of Imaging Technology (C-DIT) is a scientific institution under Government of Kerala engaged in providing ICT services to various Government departments/organisations. Major services offered by C-DIT include Software development, Printing and production of Holographic security labels and other security documents, Document Digitisation/preservation, Video production, Multimedia/Web content development, etc. Due to the social distancing requirements and frequent lockdown instances occurred due to Covid-19 pandemic outbreak, the activities being carried out at various offices of C-DIT have been seriously affected and to mitigate such issues, C-DIT desires to implement an cost effective solution to enable the users to remotely access virtual desktops in cloud mode.

**Objective**

The objective of this tender is to select bidder/System Integrator (SI) / Managed Service Provider (MSP) to implement Virtual Desktop solution on Cloud mode , availing Cloud services from MIETY empanelled Cloud service providers

**Scope of work**

C-DIT wishes to appoint a Bidder (SI) for providing Virtual Desktop Solution on cloud mode. The SI together with CSP and OEM shall provide cloud Virtual Desktop solution and managed Services for such infrastructure during the contract period.

The brief scope of work is as follows.

- a) Setting up Virtual Desktops in Public Cloud.
- b) Providing VDI for applications used by C-DIT along with 24\*7\*365 days support.
- c) Provide Managed Services for New VDI setup which runs on Public cloud.
- d) Bidder shall provide 24x7x365 Remote Management Services for VDI environment which runs on Cloud Infrastructure supplied by Bidder.
- e) Provisioning Cloud services for additional quantities as per BOM.
- f) Provisioning Cloud Storage for Maximum capacity of 10 TB object Storage.
- g) The bidder shall propose the required no. of O.S , Server Virtualization, VDI and other relevant license suitable to meet the specified 100 concurrent VDI user access .

- h) The selected Bidder is responsible for Maintenance Services on proposed Cloud VDI infrastructure including Resource Management, User Administration, Security Administration & Monitoring of Security Incidents, Monitoring Performance & Service Levels, and Backup.
- i) Reports providing system-wide visibility into resource utilization, application performance, and operational health through proactive monitoring (collect and track metrics, collect and monitor log files, and set alarms) of the cloud resources

## **Terms& Conditions**

1. Cloud service provider must ensure that all compute, storage, network, database and other resources are hosted within India region only. Cloud service provider also ensures that C-DIT data must reside only in India region.
2. CSP should provide auto scaling support within the limit of total instances purchased for all compute instances (without any manual intervention) during peak demand as well as normal workloads to maintain stable performance of applications
3. CSP have capability to Provision the Compute Instance on the fly through Console within 15 minutes.
4. CSP should have Capabilities as below:
  - a. Agility - software defined configurations to add / remove capacity
  - b. Customer has the full control on the environment (e.g., can create a virtual private cloud) and has the ability to log, monitor, and audit the traffic and usage
  - c. Published SLAs / Uptimes and pricing on the public portal
  - d. Availability of reports (e.g., personal health dashboard, security logs, audit reports,..) to the customer on the portal
5. Proposed Virtual Machines should be offered with Intel Xeon Platinum 8000 series (SkylakeSP) processor @ 3 GHz or higher
6. The virtual application and desktops (VMs) should continue to be responsive even if the CPU utilization reaches 100%
7. Compute service should provide auto-scalable, redundant, dynamic computing capabilities.
8. Compute service should have support for operating systems such as Linux, ,

Windows Server etc. Shall support different versions of Linux desktops like Ubuntu, CentOS, RHEL, Suse

9. Compute service must allow resizing of compute resources (vCPU, Memory, Storage, Network, IOPS etc.) at any point of time.
10. CSP should offer secure, durable, highly scalable object storage for storing and retrieving any amount of data from the web
11. CSP should offer a solution for storing cloud data from cloud backup storage or object storage to on-premises storage.
12. CSP should provide the best suitable enterprise security framework to manage modern and advance security threats
13. Desktop virtualization management software should have advanced desktop management capabilities such as automatic suspend and resume which reduces the memory and processing power required to host virtual desktops
14. The admin panel provided should have an ability to use centralized smart pooling and auto provisioning capabilities, user credential creation, user privilege setting etc.
15. Usage statistics of the VMs/storage by the users shall be made dynamically available to the administrator.
16. The solutions should authenticate users based on their LDAP and active directory credentials
17. This solution have the ability to restrict access to applications and desktops, access to upload/download files, etc, depending on the client IP, client network, client name, User privilege setting, etc
18. End Users get flexible access to a virtual desktop that behaves just like their PC desktop in a complete, managed, secure computing environment.
19. End users get flexibility to access their virtual desktop from any browser supporting HTML5
20. The bidder should carry out Proof of Concept(PoC) in Cloud VDI instances to ascertain the software used by C-DIT are compatible and the performances are satisfactory with VDI instances.
21. The OEM should have at least 3 customers in India that have deployed at least 100 VDI Users each
22. The VDI instance running in Public cloud can be restored or backed up and should be able to run in private cloud also

23. An online pre bid meeting will be conducted, which shall be attended by all interested bidders . The specifications mentioned above are preferred only and deviations OR better solution/ configuration may be decided after the pre-bid meeting.
24. Bidders should quote upfront along with the bill of materials the data transfer in and out charges, broadband/Internet usage/overusage charges inside the cloud VM instances , overusage of cloud VM instances etc
25. The bidders shall necessarily furnish details of Authorised Service Provider in India. Dealers who are authorised to quote on behalf of the Principals shall provide valid Authorised Dealership Certificate from the Principals.
26. C-DIT reserves the right to procure additional quantity of Cloud VMs and also additional object storage, if needed, and the bidder should be able to provide the additional quantities as per the quoted per unit price in the bill of material or the prevailing price, whichever is lesser, during the contract period.
27. Acceptance test for System Performance: Upto 14 days non-stop acceptance test has to be run on the delivered VDI solution with all the users simultaneously running GUI applications. There should be no perceivable lag when working on the VDI instances, simultaneously by 80 concurrent users.
28. **Training of Personnel:** The supplier shall provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the Virtual desktop solution
29. **Indemnity:** The vendor shall indemnify, protect and save C-DIT against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the materials supplied by him.
30. **Service Facility:** Bidder should mention about the service set up in India and how capable they are to provide uninterrupted services. Escalation matrix for any issues pertaining to the solution should be provided.
31. SLA/NDA shall be entered into by the selected bidder in the mutually decided format.
32. **Pre bid meeting will be held on 03-02-2021 at 2 PM. The last date for submission of tender is 08-02-2021 at 3.00 PM. The tender will be opened on the same day at 3.30 PM. Those who wish to participate in the pre bid meeting may inform their contact details (address, mobile no, email, etc..) to [procurement@cdit.org](mailto:procurement@cdit.org) latest by 02.02.2021,**

**5PM**

33. At any time prior to the deadline for submission of tenders, the C-DIT may, for any reason deemed fit by it, modify/amend the tender documents by issuing suitable amendment(s)/ corrigendum's to it. Corrigendum to this tender shall be published in the site [www.cdit.org](http://www.cdit.org). Prospective bidders are advised to regularly visit the website: [www.cdit.org](http://www.cdit.org) to keep track of corrigendum, if any.

34. In case of clarification

If the bidder has any doubt on technical specifications or on terms & conditions stipulated above, please contact HOD (Digitization) in Mobile Number: 9895788220/9895788211.

Sd/

REGISTRAR, C-DIT

Dated 23.01.2021

## Financial Bid

Service type	Description	Furnish applicable rates per unit or for specific quantity	
		Rate per hour	Rate per month
Windows Virtual Desktop	Pooled, 100 Users, 0.5 Peak concurrency, 0 Off peak concurrency, 730 Usage hours/month, multi-session, medium workload, D4 v3 (4 vCPU(s), 16 GB RAM), E10 (128 GiB, 500 IOPS) Disks		
Virtual Machines	1 D2s v3 (2 vCPUs, 8 GB RAM) x 730 Hours; Windows – (OS Only); Pay as you go; 1 managed OS disk – S4, 100 transaction units; Inter Region transfer type, 5 GB outbound data transfer from India		
Storage Accounts	File Storage, Cool Performance Tier, General Purpose V2, LRS Redundancy, 1,000 GB of Data at-rest, 1,000 GB Snapshots, 1,000 GB of Metadata at-rest, 1 x 10,000 Write Transactions, 1 x 10,000 List Transactions, 1 x 10,000 Read Transactions, 1 x 10,000 Other Operations, 1,000 GB of Data Retrieval, 1,000 GB of Early Deletion, 0 Additional Sync Server(s)		
VPN Gateway	VPN Gateways, Basic VPN tier, 744 gateway hours, 10 S2S tunnels, 128 P2S tunnels, 500 GB, VPN outbound VPN gateway type		
Bandwidth	Inter Region transfer type, 500 GB outbound data transfer from South India		
Rates for additional services which may be required by C-DIT	Compute service must allow resizing of compute resources (vCPU, Memory, Storage, Network, IOPS etc.) at any point of time. Hence unit rates for such potential services that C-DIT might require shall also be furnished		

*The rates quoted shall be all inclusive rates in INR*