



Term of Reference for the Provision of Dedicated Hosting Service – ASEAN Secretariat Virtual Data Center

1. Background

The ASEAN Secretariat (ASEC) was established in February 1976 by the Foreign Ministers of ASEAN. Currently staffed with approximately 350 people, the mission of ASEC is to initiate, facilitate and coordinate ASEAN stakeholder collaboration in realizing the purposes and principles of ASEAN as reflected in the ASEAN Charter. To effectively fulfil its function in providing greater efficiency in the coordination of ASEAN organs and implementation of ASEAN Programs and Projects, ASEC needs to be equipped with sufficient tools and up-to-date technology. ASEC is the delegated repository of all ASEAN documents. Over the years, many documents including legal instruments, agreements, protocols, blueprints, plan of actions etc. have been published through ASEAN Main Web Portal as well as Sub Domain Web portal. ASEC's main portal, www.asean.org, and its subdomain websites are now becoming one of most visited sites among net-citizen regarding the events/happenings within ASEAN region and with relations to ASEAN nations. Its consequences ASEAN Main portal and its subdomain websites received quite large of access from various location across the world especially during ASEAN key events. Websites can be threat from online attacks such as distributed denial of service (DDOS) which can make the websites/portals down or inaccessible. Therefore, the websites/portals and its subdomains require a dedicated hosting with adequate security, auto-failover and redundancy features for robust protection

2. Objective

ASEC intends to renew and upgrade its existing dedicated hosting, i.e. virtual Datacenter, and associated services which hosted a numerous website portal. ASEC is seeking a qualified vendor to facilitate and provide a dedicated hosting service for ASEC. The selected vendor will work with Information Technology System Division (ITSD) staff(s) who will be assisting the vendor on the procedure and facilitation.

The selected vendor shall be tasked to achieve the following objectives:



1. Setup a Dedicated Hosting System and configure it with at least 4 Virtual Machine (VM) Servers of required specifications.
2. Install all necessary applications, software and modules necessary for the smooth running of the Dedicated Hosting system – Virtual Data Center.
3. Perform all required testing for the Dedicated Hosting system, its associated infrastructure and configurations.
4. Develop the Technical Guidelines on how to use and manage the Dedicated Hosting system.
5. Migrate the database, contents and configurations from the existing Dedicated Hosting systems¹ to the new Dedicated Hosting system.
6. Possess Infrastructure Security, Identity Security, business Security, Data Security Assurance and Service Security features.
7. The Security Feature such as DDoS and Unified Security Management which can be upgraded to upper/further level at any time when needed.
8. Securing and protecting the overall systems from DDoS, Phishing and hacking.
9. Perform backup service for both content and systems periodically.

Note: The selected vendor **is required to agree** on the signing of ASEC's Non-Disclosure Agreement (NDA).

3. Expected Deliverables

The expected deliverables include:

1. Hardware and software applications required for running the Dedicated Hosting system.
2. A complete Dedicated Hosting system with at least 4 Virtual Machine Servers and their required specifications, with possibility of future expansion/modification.
3. All the 4 VM(s) require to be accessible through any means of protocol i.e. from web-based control/management panel, FTP, etc... even when remote desktop is not available.
4. Possesses self-owned technology on each infrastructure setup, storage, features as well as monitoring system for each VM.
5. Storage capacity using Tiering Storage Technology with SSD Type.



6. Integrated with Firewall capability on virtual system.
7. Possessing and using at least three (3) Data Center which redundant among each other to reduce and balance utilization for each portal resource consumption.
8. Collocated capability using at least DC Tier III or better.
9. Technical User and Support for all infrastructure.
10. Support, maintenance and licensing of Dedicated Hosting System for period of not less than **4 months** from the date of hand-over to ASEC.

4. Scope of Services

The vendor shall work closely with ITSD staff(s) and follow the overall direction and guidance provided to achieve the above objectives and expected deliverables, the selected vendor will undertake the following indicative tasks:

1. Propose and develop on the design/architecture and the functional requirements for Dedicated Hosting System with the required specifications to cater at least 4 Virtual Machine Servers.
2. Setup the Virtual Machine Servers with the required specifications.
3. Configure and install the Virtual Machine Servers with the latest version software environments and basic web technologies required for the portals.
4. Migration of needed CPanel, configuration and contents from existing systems to new Dedicated Hosting system.
5. Validate that the migrated CPanel from the existing standalone systems is properly synchronised and incorporated.
6. Provide Technical Support Guideline.
7. Conduct User Acceptance Testing (UAT) to ensure users have smooth operations of the websites/portals.
8. Conduct weekly/Monthly backup over the platform, and ASEAN Secretariat able to download it through internet every month.
9. Provide backup feature for VM and CPanel, with backup scheduler and multi region backup.
10. Provide 24/7 technical support and monitoring services during the service contract period, scalable within 1 hour.
11. Provide update/modify/downgrade/install of VM, technologies and environment upon request throughout the service contract period.
12. Provide 99.95% Service Level Agreement (SLA) with very minimal allowed downtime.
13. Provide support, maintenance and resolve any problems for the services during the contract period.

5. Indicative Work Schedule



Vendor is requested to provide a clear methodology and approach in carrying out this assignment. Vendor is required to demonstrate relevant knowledge and skills warranting that the Vendor's team will be able to implement this project successfully. It has been estimated that the provision of the Dedicated Hosting Services – Virtual Data Center shall not take more than 1 month to be fully completed. ASEC is expected the Go Live to be on 27 December 2024. The vendor shall present its proposed activities and timelines for ASEC's considerations.

6. Vendor Qualifications and Experiences

The to-be-selected Vendor shall meet the following criterion:

1. An established company/company registration with proven records in provision of dedicated hosting services for a multi-national-companies, governmental agencies, or international organizations similar to ASEC.
2. Received or awarded with ISO 27001 certification.
3. Provided at least 5 customer references and testimonials who have acquired the vendor for the provision of dedicated hosting services or similar system.
4. Have at least 5 customers who engaged to the same/ similar service
5. Proven track records and experiences in virtual Datacenter as well as dedicated hosting system and services for international/regional organizations of similar nature to ASEC
6. Authorised partner and/or supports of software solution/platform to be supplied.
7. Have the ability and infrastructure to provide adequate application support including helpdesk and on-site filed support.
8. Have at least one (1) Dedicated Support Engineer, one (1) System Administrator, one (1) Solution Architect, one (1) Web Administrator and one (1) Network Engineer who have experience and certification in provision of the Dedicated Hosting Services within the last 3 years, and Has a Cloud Computing certification of at least Professional/Expert level.
9. All personnel assigned for this project shall have good communications in English, both written and verbal communications.
10. A strong understanding about ASEAN structure and/or structure of international organizations such as UN will be an advantage
11. Possess certification in cloud computing
12. Possess certification in security.

7. Cloud Hardware, Software and Configuration Criteria

The Dedicated Hosting Services, its application, software, hardware and configurations shall meet at least the following criterion:

1. The proposed Dedicated Hosting System should configure with at least 5 VM Servers with the following expected required settings:



- a. VM 1, 16 Core CPU, 32 GB RAM – 4 TB HDD, Linux OS, Apache/ NginX
 - b. VM 2, 16 Core CPU, 32 GB RAM – 1,5 TB HDD, Linux OS, Apache/ NginX
 - c. VM 3, 8 Core CPU, 16 GB RAM – 2,5 TB HDD, Linux OS, Apache/ NginX
 - d. VM 4, 8 Core CPU, 16 GB RAM, 250 GB HDD, Linux OS, Apache/ NginX
 - e. VM 5, 4 Core CPU, 8 GB RAM, 250GB HDD, Windows Server 2012 R2, IIS.
 - f. Cpanel – Premier
 - g. Web application Firewall
2. There will be a need to create additional/modify VM(s) for future expansion/modification on the Dedicated Hosting System as long its existing resources are sufficed.
 3. Equipped with appropriate web-based management panel e.g. Cpanel and WHMCS for Linux-based server(s).
 4. The Windows-based server(s) shall be installed with IIS support.
 5. Install with the latest versions Operating Systems like Ubuntu/Debian/CentOS etc. on Linux Server or Microsoft Server O.S for Microsoft Server
 6. Install with the basic range of technologies e.g. Server-Side Technologies (e.g. PHP5, PHP7, ASP, .NET, etc.
 7. Allow selectable multi-PHP environment and Database platform.
 8. Install with Web-based management control like Cpanel, WHMCS, phpMyAdmin, etc.
 9. Install with Basic web application and hosting features like FTP, Anonymous FTP, SSH CGI, Fast CGI, Perl, Curl, email hosting, mail forwarding, Awstats, etc.
 10. Use Load Balancing with throughput 200 Mbps and possesses Anti DDoS feature.
 11. Provide and to install SSL for each web multi-domain (*.asean.org) accounts created.

8. Maintenance, Support and Monitoring

1. **4 months** of support, maintenance and monitoring of the Dedicated Hosting Service – Virtual Data Center is to be provided after the handover to ASEC.
2. To provide full technical support on call, by email and/or online helpdesk with expected response within 3 hours. In case of emergency, the expected response shall be within 1 hour. The vendor shall have their own dedicated support team to provide the support.
3. To provide monitoring service of 24/7 during the contract period.



4. To provide Monitoring Alert System via Email when usage of resources reaching 80% (Memory, CPU and Storage) on each VM and Server.
5. To support web hosting and service request within the Dedicated Hosting System available resources.
6. Is able to provide annual maintenance, support and monitoring of the Dedicated Hosting Service for a period of 4 months after the handover to ASEC.
7. Is able to provide managed service report (to be proven)
8. Support multi-cloud and possess dedicated engineers with certification.

9. Contract Service Period

The service period will be conducted without a contractual obligation, with payments made monthly based on usage. After this period, the contract will end without any further obligations. The selected vendor is required to submit an annual service performance report at least three (3) months before the end of the year. Under any circumstances, ASEC reserves the right to terminate the service by providing written notice to the vendor. Notice of termination must be given one (1) month in advance, stating the reasons for termination.

10. Annex 1. ASEC's Existing Website/Portal

There are at least 45 website and portals maintained and managed by respective division in ASEC. The ASEAN website/portals. Some among others:

- www.asean.org
- Eastasiasummit.asean.org
- Aseanregionalforum.asean.org
- Aseantom.asean.org
- Agreement.asean.org
- Forestry.asean.org
- Environment.asean.org
- Haze.asean.org
- Learning.asean.org
- AWSC.asean.org
- Astnet.asean.org
- ATR.asean.org
- Assist.asean.org
- Tariff-finder.asean.org
- Investasean.asean.org
- Asw.asean.org



- Etc.



11. Service cost components

The following is an estimate of the number of professional services for cloud infrastructure for ASEAN Dedicated Hosting

Item & Description	Quantity	SKU
DurVM 1	4	16 Core CPU, 32 GB RAM - 4 TB HDD, Linux OS, Apache/ NginX
VM 2	4	16 Core CPU, 32 GB RAM - 1,5 TB HDD, Linux OS, Apache/ NginX
VM 3	4	8 Core CPU, 16 GB RAM – 2,5 TB HDD, Linux OS, Apache/ NginX
VM 4	4	8 Core CPU, 16 GB RAM, 250 GB HDD, Linux OS, Apache/ NginX
VM 5	4	4 Core CPU, 8 GB RAM, 250GB HDD, Windows Server 2012 R2, IIS.
Cloud Backup	4	For Virtual Machine
Cpanel	4	Premier
Web Application Firewall	4	
Implementation charge	1	
Manage Service	1	

12. Additional Pricelist

Additional item from BOQ that can be increased if needed.

Item & Description	Quantity	SKU
Upgrade VM Compute Only	1	32 Core CPU, 64 GB RAM, Linux OS
Upgrade VM Compute Only	1	16 Core CPU, 32 GB RAM, Linux OS
Upgrade VM Compute Only	1	8 Core CPU, 16 GB RAM, Linux OS
Cloud Backup	1	Per 1 GB
Manage Disk	1	Standard HDD per 1 GB
Bandwith (After Free Tier)	1	Per 1 GB