JOB DESCRIPTION

To ensure the overall functionality, security and other compliance of the Project following core personnel shall be repaired to exercise dual key, supervise, monitor and put into effect strategic control over all critical assets of Passport Seva system including Data & information. The system security architecture as configured in Passport Seva only allows dual key authentication for critical functions such as Application Configuration changes, Database Alteration, Database tuning, OS Level alteration, patch updates, EAS tuning, middleware tuning etc.

Core competency, experience, qualification and other skills required are as under:

1. **Senior Consultant (Data Center Experts)**

   The data centre experts is expected to ensure that every layer of the data center, be it NCPI layer, Server Layer, Storage Layer etc. are maintained in a high availability zone and security is not compromised at any cost. Data centre expert should monitor an ensure that service levels are met by the Service Provider of Passport Seva as per norms defined in the RFP and as per the frozen methodology, while delivering services to the stakeholders.

   The data centre Expert would be responsible for monitoring/overseeing the overall management of the DC/DR, user SLA commitments’ by SP, performance, availability, response time, problem resolution etc. He/she would also be the front person advising the SP for adhering to effective resource management; System & Resource planning based on business forecast and would be the single point contact for managerial responsibilities and direct interface with concern technical head. He/She would have the capabilities of team management, capacity planning and process documentation. He/She would co-ordinate with the SP to perform Business Continuity Planning (BCP) and Disaster Recovery (DR) mock trials regularly to ensure that each site should be able to handle the entire load in the event of major failure of one of the data centre and vice-versa.

   The desired profile of the candidate should preferably be B.E. (Computer/E&C/IT/Electrical)/MCA/MBA(System/IT), M.E./M.Tech./M.S.(CS/IT/Electronics) with more than 7 years experience in Data Centre/NOC Project. He/she should have exposure to BS15000 process/ITIL or ITIL certified and have proven track record of managing operational IT support teams including establishment of RMS/processes, technology & Staffing. Project management Certification (PMP) certification is a plus.

   Other capabilities should be:
   - Government/ e-Governance/Financial/ Banking domain experience
   - Experience in working in Central/State/Integrated Mission Mode Projects
   - An excellent analytical and problem-solving approach
   - Strong User-interaction skills/ client-facing skills
   - Good co-ordination skills
2. **Senior Consultant (Technology)***

In coordination with the Principal consultant & Head – Technology, assist the Ministry in defining the standards for application architecture, database design, development and deployment of ICT infrastructure as part of Passport Seva. He/She should study he status of IT infrastructure deployed under Passport Seva and Assist the Ministry in analyzing the requirements of new up-gradation, additional purchase as part of enhancement in the existing Data Centre. Provide assistance in regard to strategic control, security, and disaster recovery and business continuity. Ensure that individual project level initiatives are interoperable, standardized, and scalable and secure across various areas of software, hardware and infrastructure. He/She should have capability of a team lead manning NOC operations.

The candidate should have **7 plus years experience** in IT projects, infrastructure design/deployment, software development, hardware, networking, security management in IT projects. He/She should have 3 to 5 years experience of managing a complete life cycle of large scale IT/ICT/ E-Governance projects.

Conduct technical appraisal of the various project reports, SLA data, trend analysis for Decision Support System (DSS) etc. and technical evaluation of various proposals received from Service Provider and other stakeholders. Co-ordinate with the team members and suggest improvements in NOC strategic operations. Ensure that NOC operations are undertaken as per the guidelines issued by Principal Consultant & Head-Technology from time to time.

**B.E./B.Tech./M.E./ M.Tech./M.S.(Computer Science/IT/Electronics) or MCA or M.Sc.(Computer Science/IT/Electronics).**

- Experience of management of Projects, IT Networks, data Centers, IT Inventory Management, Planning and Implementation of ICT activities etc.
- Experience of Dealing with central/State government Departments/ Agencies, Development Programme / Scheme.
- Other capabilities should be:
  - Government/ e-Governance/Financial/ Banking domain experience
  - Experience in working in Central/State/Integrated Mission Mode Projects
  - An excellent analytical and problem-solving approach
  - Strong User-interaction skills/ client-facing skills
  - Good co-ordination skills

3. **Consultant (Application Experts)***

Ensure that Build-release-Deployemnt (BRD) process set-up under PSP in under the control of MEA. They are required to exercise control over process documentation, other documents, source code, licences, CD’s of system and application software for keeping the IPR with the MEA. They will ensure that version of the application code in all the three environments i.e. development; test and production are in synch with one another. They should take care of the tasks envisaged above at various stages of the application development life cycle and would be further involved during O&M phase. While the application experts will play a crucial role during design and development of the application software as stated above, they would also oversee activities being undertaken during application administration phase by the SP. They are expected to monitor the logs, audit trails etc.
and endure that the administration task is carried out by the service provider without breaching security concerns and within the purview of the defined boundaries of the application administrator. Application experts are expected to have deployment, troubleshooting and management skills on common application platforms to enable MEA to avail their expertise in exercising MEA’s control over PSP application/data. Application expert should be able to analyze the new requirements coming from business function and give shape to SRS and finally tune them in developing the required software by SP.

The candidate should have **5 plus years of experience** in software design/development, application security, application maintenance/monitoring etc. He/She should have 2 to 3 years experience of managing a complete life cycle of large scale IT/ICT/e-Governance projects. The ideal candidate should have:

- Knowledge of J2ee, JMS, Websphere AS
- Knowledge of P1/SQL, Oracle DB, XML/XSLT, Web Services
- Hands-on experience in designing, coding and development
- A clear understanding of OOPS and RDBMS concepts

B.E./B.tech/M.E./M.Tech/M.S.(Computer Science/IT/Electronics) or MCA or M.Sc. (Computer Science/IT/Electronics)

Other capabilities should be:

- Experience in working in Central/State/Integrated Mission Mode Projects
- Good analytical and problem-solving approach
- Strong User-interaction skill/client-facing skills
- Good co-ordination skills

### 4. Consultant (Database Experts)

He/she will oversee activities undertaken during database administration by the personnel of the Service Provider. The database experts are expected to have skills on one or more RDBMS systems including user and object management, TSQL, transaction and monitoring of query performance. The desired profile of the candidate could include **5 plus years experience** in administering production databases and worked in Oracle 9i, 10g, 11g, DB2, MS-SQL etc. knowledge in PL/SQL programming with experience in handling standby database preferred. He/She should be familiar with Database Migration tools and must have done similar exercise and should be aware of the technology concerns, risks involved during migration into new Database platform. The Database personnel are expected to monitor the logs and audit trails and endure that the control of the data lies with the MEA both de-jure and de-facto.

The Database experts are expected to ensure the following and advise remedial action accordingly, in case of breach of security:

- That data is safe and should both at DC and DR facility
- That the actions executed by the administrator are as per the intended and stated purpose of the activity which was communicated in advance in writing before the activity was initiated and the action should have been approved by Govt. Officials
The desired profile of the candidate should be B.E./B.Tech(Computer/E&C/IT)MCA, M.Tech/M.S (CS/IT/ Electronics) with more than 5 years experience on DB2/Oracle database administration, Back-up/Recovery Process, Knowledge of UNIX/AIX, Replication Technologies, knowledge of SAN/CAS, Database performance tuning etc. Technical certification on DB2/Oracle/SQL/SUN products etc. would be a plus.

Other capabilities should be:

- Experience in working in Central/State/Integrated Mission Mode Projects
- Good analytical and problem-solving approach
- Strong User- interaction skills/client-facing skills
- Good co-ordination skills

5. Consultant (System Experts)

He/She should ensure that SP personnel does the OS administration/ management, database configuration, scalability, performance, load-balancing troubleshooting & debugging and monitoring of servers as per the access mechanism set for them and do not breach security threats and would exercise control over system environment e.g. O/S. Database Server Application Server and Web Server. They should also ensure security of entire database, logs of both/Os and database levels, executables, network resources etc., in both raw form, through user ID and passwords AND also through end-to-end monitoring tools. Further, they should monitor the SP for proper implementation of back-up plan for storing and retrieving of data, report generation, server maintenance etc. and also oversee the SP’s response in resolving the real time (RT) requests raised by users as per SLA.

The desired profile of the candidate should be B.E/B.Tech/M.E./M.Tech./M.S.(CS/IT/ Electronics) or MCA or M.Sc.( CS/IT/ Electronics ) with more than 5 Years experience in sys admin of RDBMS data (MS- SQL, Oracle etc.), sysadmin windows-2000/UNIX/AIX/Solaris etc. programming in Java, C,C++, QL,PL/SQL, Corba etc.

Other capabilities should be:

- Knowledge of Java, J2ee
- Work Knowledge in Webservices would be an added advantage
- Hands-on experience in designing coding and development
- Experience in working in Central/State/ Integrated Mission Mode Projects
- Good analytical and problem-solving approach
- Strong User- interaction skills/ client –facing skills
- Good co-ordination skills

6. Consultant (Network/ Security Experts)

The Network / security experts would monitor and confirm that Service Provider should furnish the correct SLA data so that SLA scores to be deducted due to failure of communication links/ traffic mismanagement and other problems like network choking, peak time load etc. are reflected accurately. The network expert is expected to point out the exact cause of failure if any, at network/communication layer with clear evidence of proof generated from automated tools deployed in the Passport Seva system. It is the duty of the network/ communication experts to ask the SP to deploy the desired tool and generate the reports which justify the SLA
matrix defined for the SP. Secondly, the network/security personnel would be responsible to analyze the different logs of the firewalls, IPS/IDS and other security devices deployed to protect the network/communication layer of the passport system. These logs are complex in nature and the experts so engaged are supposed to evaluate these logs and bring to the notice of SP/MEA to take Preventive action.

The major responsibility of the network expert would be to monitor the SP in maintaining the network uptime, security, performance issued and other related services. The candidate should be well versed with Routing and switching devices and technologies like ATM, Frame relay, MPLS, Wireless, Broadband and Protocol Analysis Tools. Must have beginner to intermediate skills in Information Security technologies like anti-virus, firewalls, 2 & 3 factor Authentication, IDS, IPS, Content Filtering Encryption, VPS, Threat Management and be familiar with information Security audit parameters.

The desired profile of the candidate should be B.E. (computer/E&C/IT)/MCA with more than 5 years Experience as mentioned above. Certification likes CCNA/CCNP/PIX/CCSA/SISSP/ certified information Security Manager (CISM) would be an added Advantage.

Other capabilities should be:

- Hands-on experience in network design, implementation, information security architecture & its deployment
- Experience in working in Central/State/Integrated Mission Mode Projects
- Good analytical and problem-solving approach
- Strong User-interaction skills/client-facing skills
- Good co-ordination skills