Establishment Server Farm (Data Centre)
for
Indian Council of Forestry Research and Education (ICFRE), Dehradun, Uttrakhand, India

Vayam *assisted ICFRE in setting up Server Farm for the implementation of a comprehensive end-to-end software solution to assist ICFRE to speed up decision making process by ensuring timely availability of information and provide integrity and movement of information. The Server Farm would provide a firewall service, delivery service, web service, database, portal, integration management, security, data storage service and a messaging gateway, which could be a shared infrastructure for all the applications/departments in the server farm.*

CLIENT: Indian Council of Forestry Research and Education

LOCATION: Dehradun, Uttrakhand, India

CLIENT DESCRIPTION

Indian Council of Forestry Research and Education (ICFRE) is an autonomous body under the Ministry of Environment and Forest, Government of India and its mandate is to formulate, organize, direct and manage forestry research; transfer developed technologies to states and other agencies; and impart forestry education. ICFRE is the apex body in the National Forestry Research System to develop a holistic forestry research through planning, promoting, conducting and coordinating research, education and extension on all aspects of forestry for ensuring scientific management of forests, tree improvement, forestry productivity through scientific and biotechnological researches, bioremediation of degraded land, efficient utilization of forest products, value addition of forest products, conservation of biodiversity and climate change, effective agro forestry models for various agro-ecological zones, policy research, environmental impact assessment and integrated pests and disease management.

SOLUTION

- Vayam assisted ICFRE in setting up Server Farm. Main functions performed were:
- Establishing physical infrastructure for Server Farm
- Supply, install and configure all Non-IT components and undertake all the necessary civil, electrical, plumbing, air-conditioning and mechanical works including false ceiling/flooring, partitioning, installation of electrical component, cable laying, etc.
- Procure and supply all IT components (active and passive)
- Facility Management services for managing the physical infrastructure for Server Farm for a period of 6 (six) years.
- Provide operation and maintenance services for managing and up-keeping the IT infrastructure of Server Farm for running IFRIS application as per the defined service levels for a period of 6 (six) years.
- Undertake helpdesk and call management activities for ICFRE Server Farm
- Undertake server administration, database administration, e-mail administration, anti-virus administration, backup management, security management and access control activities, etc. for ICFRE Server Farm
- Training ICFRE Technical and support team.

Some of the key services identified for implementation of the Server Farm include:

- Database Service
- Java Application Service
- Windows Application Service
- Portal, Backup, Email Service

- Domain Authentication Service
- DNS
- Proxy Service
- Antivirus and other security services

- Content filtering services
- Suitable Data Backup and Recovery systems

TECHNOLOGY

- Hardware – HP (EPIC & Blade servers)
- Network – CISCO,
- Software – Microsoft, IBM (Lotus- Messaging), Redhat (OS),
- Oracle (Data Base),
- Security – ISS (IBM), Antivirus (Semantic), CA (EMS & NMS)

BENEFITS OF THE IMPLEMENTED SYSTEM

- Enables ICFRE to speed up decision making process by ensuring timely availability of information
- Provide integrity and movement of information.
- Streamlines internal processes by distributing the workload between the individual components of the farm.
- Expedites computing processes by harnessing the power of multiple servers.
- Shared infrastructure for all the applications/ departments.
- Scalable database, portal and application servers