neutron

CAPABILITIES STATEMENT

Neutron Engineering Center for Research & Development (N.E.R.D Center)
6750 Alexander Bell Drive, Suite 120
Columbia, Maryland 21046
P: (443) 606-0411 or (877) 316-3086

Neutron Engineering is a technology company that provides IT solutions for business. Our approach to problem solving is based on the principles of systems design and engineering, the scientific method for troubleshooting/design, and a scientific approach to problem analysis and solution development.

We subscribe to industry-standard engineering models and methodologies in order to provide you with solutions that are efficient, effective, and provide measurable outcomes.

MANAGED + CONSULTATIVE SERVICES DESIGNED TO MEET THE NEEDS IN ANY INDUSTRY

Our approach is to combine managed and consultative services to deliver the best results possible for our clients. We believe that there is no one-size-fits-all approach to any given project. So, we customize our solutions to fit each customer's unique requirements, goals, and industry standards.

The industries we serve include:

- Law Firms
- Medical Practices
- Hospitals
- High Performance Computing Companies
- Dentist Offices
- Churches
- Schools/Universities
- Environmental Services
- Financial Services
- Museums
- State & Federal Government
- Defense Contractors

NEUTRON ON-PREM

On-premise virtualized computing services providing file storage, security, and central computer management.

This solution is ideal for businesses with established solutions that benefit from a modernization/upgrade to current standards, those who prefer their business resources reside on servers they own/possess, and/or those businesses with a need for highly available access to resources with limited or no access to the Internet.

NEUTRON HYBRID

Hybrid on-premise services combine a cloud-based solution to leverage the flexibility of the cloud with existing on-premise architecture. This solution provides a mix of physical, virtual, and cloud solutions to achieve a high degree of scalability while gradually scaling towards an all-in cloud solution.

NEUTRON MAX-CLOUD

Full (all-in) cloud solutions provide businesses with greater degree of remote operations, highly available content/data, and measured use of cloud resources.

This solution is perfect for the start-up without an IT Architecture footprint. This solution is also ideal for those firms who wish to make the transition from physical to cloud without a hybrid or phased approach.

ADD-ON SOLUTIONS

All solutions include desktop, laptop, and server support with a 24/7 service desk backed by experienced engineers. Each solution is monitored, supported, and maintained on a 24/7/365 basis.

In addition, each solution or service can be complimented with:
- Neutron deployed and managed Voice Over IP solutions (phones via the internet)
- Wireless networks deployment/management
- Firewall integration
- Cloud/on-prem file encryption
- Cloud/on-prem backup and disaster recovery/continuity of operations
- Customer focused IT training
- Cyber security assessment and remediation
- And many more

NETWORK ENGINEERING

Our approach to Network Engineering can include a curated combination of the following services as is determined appropriate for each client and circumstance.

- LAN Architecture, design, engineering, deployment, and expansion
- LAN Architecture re-engineering and optimization
- LAN/WAN equipment maintenance and upgrades
- Centralized network management
- Protocol/traffic Analysis - in depth troubleshooting
- Wireless LAN design, engineering and deployment
- Layer-2/VLAN solutions - all versions of spanning-tree
- Optimized Layer 2 - forwarding
- Routing solutions - EIGRP, OSPF,RIP, BGP

- Routing domain analysis and optimization
- WAN Traffic Engineering - BGP, MPLS
- Datacenter Network Engineering
- Network/App Server Load-balancing
- WAN Optimization
- Remote access and point to point VPN solutions
- Telework/Telecommute solutions
- Voice/Video Over IP solutions - Unified communications solutions
- Next-Generation Networks - IPv6, EIGRPv6, OSPFv6, RIPNG
- Hyper-converged platforms
- Software-Defined Data Centers (Native Amazon AWS & VMWare SDDC)

SECURITY OPERATIONS CENTER

Protect your company's data by securing your network and computers. This includes firewalls, security software/services, artificially intelligent solutions, security monitoring to avoid/detect/deflect/protect against cyber attacks. Here is a snapshot of what Neutron offers:

- Boundary Network Security - Firewall/Intrusion Prevention Detection
- Data Center Micro Segmentation
- Custom Intra/Internetwork Security solutions
- Anti-virus and Anti-malware solutions
- Configuration and update management
- Internet-enabled DVR Video Solutions for physical premise monitoring and remote viewing
- Maintain and monitor all IT resources, log collection and analysis, trending, and maintenance with centralized event reporting
- Periodic Auditing
- Network traffic analysis and trending for Netflow, SNMP, Wireshark, Splunk
- Penetration testing and reporting for risk and vulnerability mitigation
- 24/7/365 Active Monitoring
- Artificial Intelligence-based threat detection
- Automated threat remediation
- Anti-phishing Solutions
- Monthly/As-needed reporting

SYSTEMS ENGINEERING

We utilize a carefully integrated approach to design and manage a solution architected to our clients' needs. We do this using:

- Tactical - ruggedized, small form factor, highly mobile network systems solutions
- Physical to Virtual (P to V) migration
- Deployment and support for VMware virtual environments
- Deployment and Support for KVM virtual environments
- Workstation/Laptop/Server provisioning/deployment/upgrades
- Enterprise storage solutions w/options to integrate with our enterprise cloud backup solution
- High performance Linux solutions
- Data recovery - failed computers / hard-drives
- Application integration solutions
- Off-premise backup solutions to support COOP and DR strategies
- High performance computing
- Computational Fluid Dynamics (CFD++)
- OpenFoam
- Message Platform Interface (MPI)
- MatLab
- BigData Storage Architecture

CLOUD ENGINEERING

Our cloud engineering services can help your business reduce IT costs, increase agility and scalability, while improving the ability to respond to everchanging business needs.

- Serverless Application Integration
- Cloud Backup/Disaster Recovery/COOP
- Website Integration/Hosting
- Directory Services
- Web Streaming
- Cloud Computers/Desktops
- Lift/Shift Migration
- Datacenter Migration
- Serverless Office Solutions
- Network Integration (Cloud to Ground)