



BlackHawkData

SERVICES OVERVIEW

At Your Service

Designing, delivering and supporting your IT is the life-blood of the BlackHawk Data team. We offer a comprehensive suite of services — from consultation advice to every-day managed support services — to enable you to grow, prosper and define success on your own terms. We take care of the technology, so you can focus on what really matters.

www.blackhawk11.com

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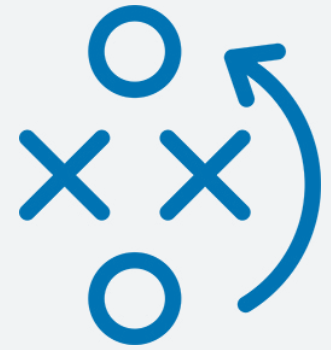
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Overview of Services

Network and Security Assessments

Our Network Assessments provide a holistic view of the current infrastructure allowing the engineering teams to quickly identify potential areas of concern, reducing downtime and expediting resolutions. A network assessment will provide a full inventory of network equipment, connections, appliances, security equipment and traffic metrics. It will also present a baseline for network identifying, traffic bottlenecks, instable code, security gaps, configuration errors and hardware issues.



The BlackHawk Data Engineering Team can produce a full report identifying “hot spots” within the network that should be addressed immediately, giving us the ability to provide a predictive report of potential upcoming failures. Our baseline reports include:

- Network Inventory
- Life Cycle Review
- Code Revision / Recommendations
- Uplink States, including Traffic Loads and Errors
- Best Practice Recommendations
- Configuration Issue Identification
- Security Gaps and Vulnerabilities

Routing and Switching

The BlackHawk Data Team has been designing, configuring, deploying and troubleshooting networks for two decades. Our team of experts are experienced in almost every routing and switching architecture, from the simple Layer-2 access methods to the most challenging multi-tenant global MPLS networks. Below are a few of our areas of expertise:

- Design and Architecture
- Cisco Experts (multiple CCIEs)
- Fortinet
- HPE Aruba Experts
- Dell Switching
- SD-WAN Deployment and Design, including Viptela and Versa
- All Routing Protocols (EIGRP, OSPF, ISIS, BGP)
- VPN and Multi Tenancy (MPLS, VRFs, GRE)
- Multicast Experts Supporting Deployments of 10,000+ CCTV Endpoints
- Device Hardening and Securing the Access Edge

Security



BlackHawk Data has a multivendor and open source approach to security. We partner with all of the major security vendors, including Cisco, Palo Alto Networks, Checkpoint and Fortinet, with experts to support each of the technologies.

Our security approach also incorporates open tools to provide data insights, intrusion detection, compliance monitoring and vulnerability scanning. We take a holistic approach to security, securing from the endpoint to the edge with a focus on data visibility.

- Partners – Cisco, Fortinet, Palo Alto Networks, Checkpoint
- IPS / IDS Integration
- SIEM (Snort, OSSIM, Splunk, Elk Stack)
- Identity Service Engine Integration to secure both wired and wireless access Stealth Watch Integration
- Using Netflow Data for Security Analysis to quickly identify threats that move laterally across subnets
- Securing Wireless Networks
- DMZ Design and Securing
- Penetration Testing
- Vulnerability Scans



Data Center

BlackHawk Data fully embraces the progression to the Next Generation Data Center and has been deploying the best-of-breed, most scalable solutions since the evolution began with Virtual Extensible LAN (VXLAN). This technology, coupled with BGP-EVPN as the control plane, has become an industry standard.

This level of technology has made automation even more possible than before with the integration of Data Center Network Manager (DCNM).



BlackHawk Data can guide you through turning-up services or even entire data centers, which once took weeks or months and now take just hours. The BlackHawk Data team has expertise in all areas of the data center, from switching to compute, including Cisco Nexus, UCS, VMware, BigSwitch, Dell VxRail and many more.

- VXLAN Data Centers
 - Provide Layer-2 Mobility
 - Automation
 - Monitoring, Management and Operations
- Vendors
 - Cisco
 - Arista Networks
 - Dell
 - HPE
 - Nutanix
 - Big Switch Networks
 - Cumulus
- High-Availability Configurations
- Data Center Interconnections
 - VXLAN / EVPN
 - OTV
 - DWDM Optical transport
 - UCS
- Hyperflex
- Storage Switching (fiber SAN)
- Fabric Interconnects
- Micro Segmentation
- VMware to Nutanix Migrations



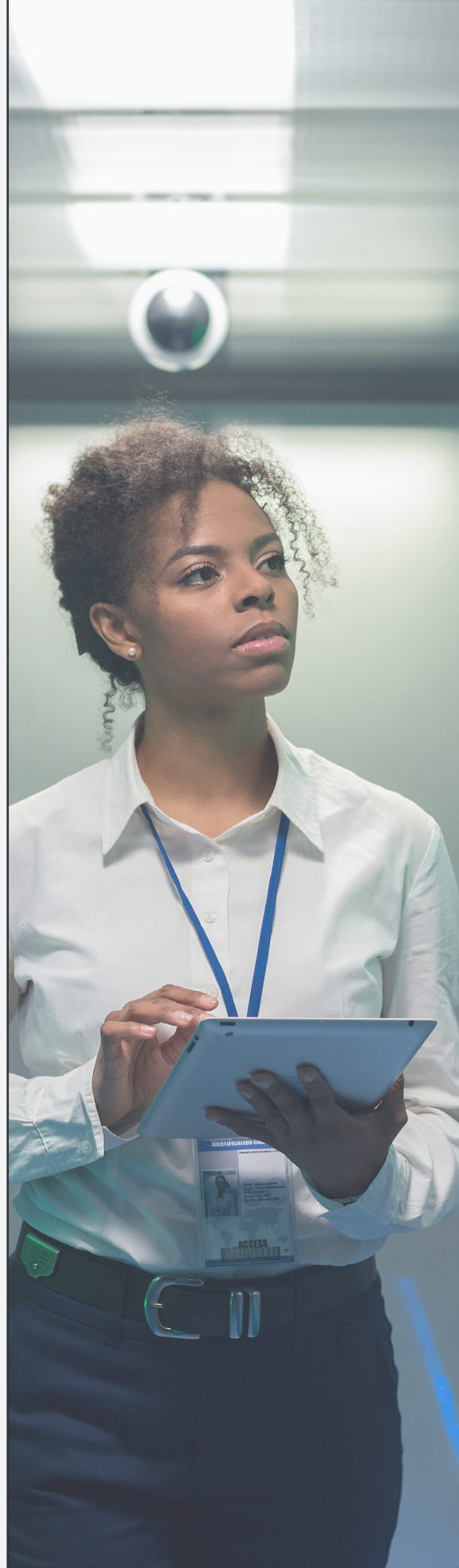
Voice & Collaboration

The BlackHawk Data Engineering Team has a long-standing history of voice deployments leading major voice migrations for some of the area's largest agencies, including Port Authority, NYPD, CUNY and many others in the NY region.

Our Voice Team is led by an industry veteran with a CCIE in Collaboration and 15 years of experience deploying voice solutions for a variety of clients, from large telecoms to city agencies.

As with other areas of our business, we don't believe that a sole-vendor approach is the best for the customer, so BlackHawk Data has partnered with experts across multiple vendors, including Cisco, Mitel, 3CX and Ring Central. We have expertise in the following:

- Cisco CUCM
- Cisco Unity
- Cisco UCCE (Contact Center)
- WebEx
- E911
- Site Survivability
- PRI to SIP Migrations
- Mitel On-premises and Cloud Deployments
- Analog to Digital Upgrades
- Analog Services



Application & DNS Load Balancing

The BlackHawk Data Team has been deploying load balancers even before they were called load balancers or Application Delivery Controllers to the original Content Selection Switch in 2001. With a background of deploying Cisco CSS, ACE, F5 LTM / GTM, Netscalers, A10 and Kemp, we have the expertise to guide you through any load balancing solutions.



- Local Traffic Management
- Global Load Balancing (Smart DNS)
- In-depth Scripted Health Monitors
- Service Dependency
- Cloud-based Load Balancers in AWS & Azure
- Securing Workloads Behind a Full Proxy
- SSL Offloading
- Credential Verification
- User Portals and Remote Access VPNs

Wireless

Wireless is quickly overtaking the wired connection. With the new standards of AX/Wifi6, wireless can be a replacement for a cable to the desktop. Of course, this type of added capacity in a wireless network means that the deployment and positioning is more critical than ever before. The BlackHawk Data team believes that every wireless deployment requires a predictive survey and on-site survey to gain an accurate picture of the area and coverage zones. The next piece of the puzzle to wireless success is the access edge.

The new standard will require multigigabit ports in the switching architecture, so our teams determine how to best future-proof your investment or cost-effectively retro fit your current environment to take advantage of the new standards. The wireless access is only the beginning of your journey into wireless as we ensure that our deployments are secure, available and provide visibility into usage with integration of profiling tools.

- Deployment Experts in Cisco, Meraki, Aruba, Ruckus and Mojo (now Arista)
- Integration of Identity and Security (ISE, Clearpass, Radius and Active Directory)
- Bring Your Own Device (BYOD)
- Seamless Mobility
- Device Profiling
- Visibility and Analytic Reporting

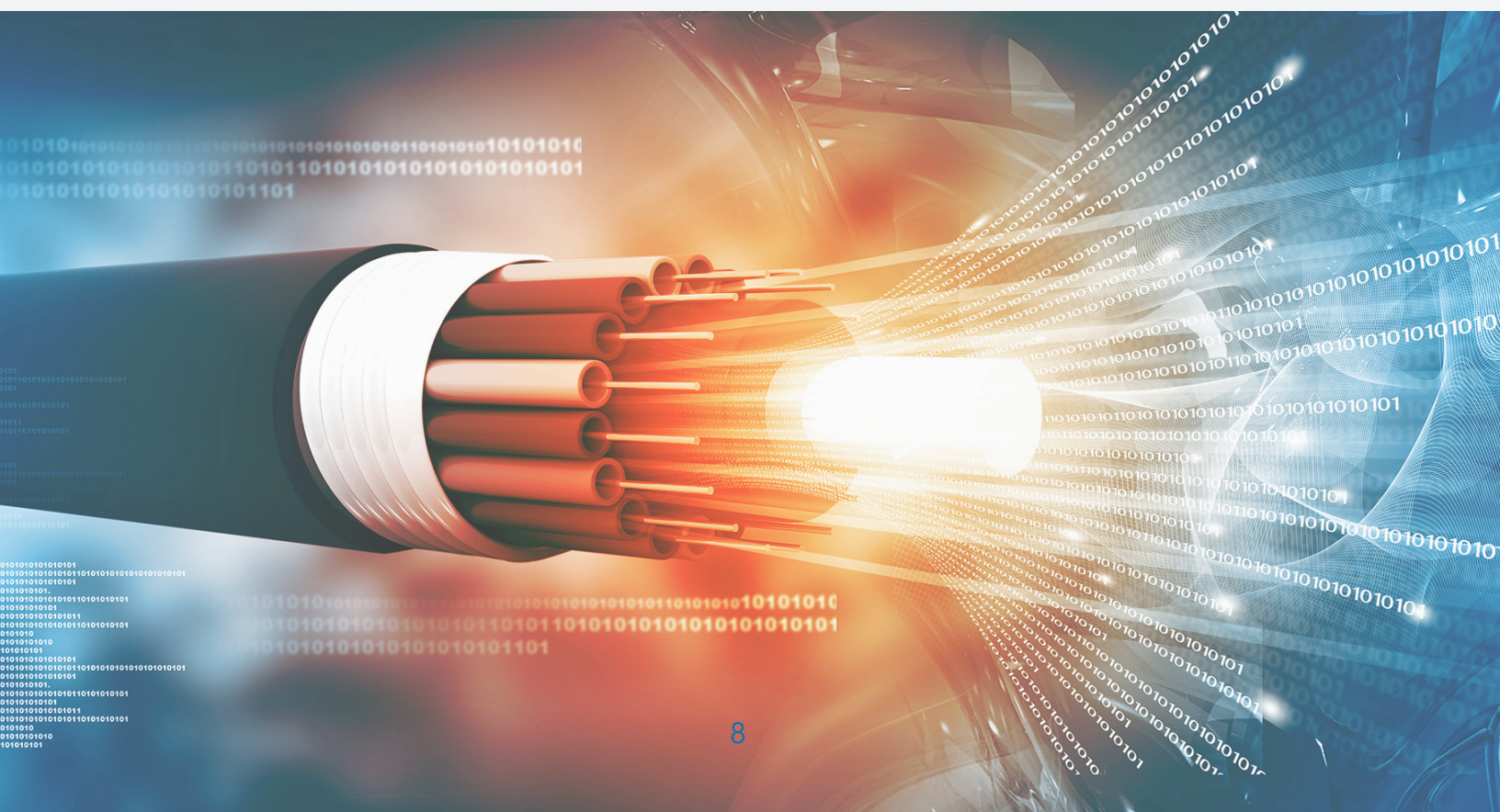
Optical Dense Wave Division Multiplexing (DWDM)

Members of the BlackHawk Data team have deployed some of the largest DWDM networks in the region, including DoITT, NYPD, Newark Liberty International Airport, JFK International Airport, LaGuardia Airport, PATH and the LIRR. A DWDM solution allows for a more efficient use of fiber optic cables.

Instead of using a pair of fiber for 1,10 or 100Gb connections, a DWDM solution can turn that single pair of fiber into 96 individual circuits, allowing native connections from 100mb to 400Gb, as well as fiber channel and time-division multiplexed circuits (SONET OC3 – 192).



- Vendor partnerships, including Cisco and Ciena
- Cisco NCS Platforms Deployment Experts
- Migrations of SONET to DWDM
- Data Center Interconnections
- Passive Optical Solutions, providing redundancy even during a power failure
- Fiber Analysis and Link Budgeting
- Optical Transport Design
- GPON and EGPON



Managed & Monitoring Services

BlackHawk Data maintains a full managed service solution for all facets of your infrastructure from the desktop to the network and all points in between. Our staff will monitor 24x7, alerting you of any issues as well as making every effort to remedy the issue.

We believe that telling a customer their device or service is down or that their workstations or servers need patches is only adding work to their already overwhelming schedule, which is why our team acts as an extension of your team finding the issues and correcting them.

- 24x7 Network Management
 - Monitor All Devices
 - Correct Issues and Notify Customer of Impacts
 - OS Upgrades / Patching
- 24x7 SOC Services
 - Monitor for Threats / Attacks
 - Mitigate Risk with reduction in exposed profiles
 - Regular Security Scans
- Change Management
- Containment of Security Breaches and Triage
- Desktop System Management
 - OS Patching
 - Application Inventory
 - Compliance Reviews and Remediation
- Voice / Collaboration
 - 24x7 Monitoring
 - Moves, Adds and Changes
 - Wireless
 - Regular Heat Map Review



BlackHawk Data Partners



Meraki

FORTINET



paloalto
NETWORKS

NUTANIX



big switch
networks

ARISTA



Hewlett Packard
Enterprise

DELL EMC

vmware®



Global Knowledge



Mitel

Edge-core
NETWORK!

PICAS
WHITE BOX SDN

ipinfusion™

CUMULUS

ekahau

Microsoft

Jabra GN
One
Authorized
Partner

plantronics®

amazon
web services

ciena

VERSA
NETWORKS

aruba®
NETWORKS

BPM

VoxTeleSys
enterprise long distance service

EQUINIX

CERTES
NETWORKS



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Call us today at 877-456-HAWK(4295) to learn more
about our comprehensive portfolio of services
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BlackHawk Data is a Woman Owned Certified Business

