Managed Services

Formed in 2009, three6five delivers world class professional network services and managed solutions to enterprises and carriers across Africa.

We pride ourselves on a rigorous approach to IP services that satisfies our customers’ business needs.
Network Solutions

**NETWORK AUTOMATION**

Network automation is the process of automating the configuration, management, testing, deployment, and operations of physical and virtual devices within a network. Everyday network tasks and functions are performed automatically. Using a combination of hardware and software-based solutions, organisations can implement network automation to control and manage repetitive processes and improve network service availability.

Working together, automation and orchestration simplify network operations involving complex configurations and devices’ management while providing business agility to adapt to an ever-changing environment. Automation accomplishes repeatable tasks without human intervention, and orchestration strings together a series of these tasks to accomplish a process or workflow.

**AVAILABILITY MONITORING**

three6five’s Availability Monitoring is a core component of any managed network environment and is usually the first responder to critical equipment failures. Availability Monitoring differs from traditional threshold monitoring systems, in that it is stateful and binary in nature - it produces notifications based on state changes, typically up/down or available/unavailable type of events.

While such tests may seem basic in nature, they can be both highly configurable, and very reliable and accurate in producing timely and effective first-line notifications. The tests are also able to produce escalation notifications to relevant groups of people depending on the severity of the event.

**RADIUS**

Our solution consists of an industry-standard RADIUS deployment, with a host of additional custom built features to ensure a comprehensive offering, covering a wide variety of requirements. AAA stands for Authentication, Authorization and Accounting.

AAA services are used to provide centralized authentication services to engineers for access to internal network equipment, as well as end user and consumer authentication services for solutions such as Wi-Fi, LTE or broadband ADSL services. AAA is also used in conjunction with VoIP services.

AAA authenticates end users to determine if they have access to the services being requested and provides authorization information to ensure the user being authenticated gains access only to the services that they are entitled. Accounting data is sorted of all traffic, for reporting and billing purposes and provides the ability to cap user accounts and disconnect or restrict them, based on company policy.

Automated proactive notifications are sent to our call centre when servers go down or become unavailable to end users.

Problems with individual components such as databases are also monitored. three6five will ensure that the operating systems are patched and updated, and that the server resources remain sufficient to provide a quality service.

Every AAA deployment is integrated into the three6five Mission Control portal. This means you can add, manage and remove users easily and in real time. You can also define business rules, such as caps and bandwidth groups and apply them to users quickly and easily. Mission Control also allows engineers to create hand-crafted advanced configurations for any vendor equipment.

**CONFIGURATION MANAGEMENT**

This service provides the ability to have the configurations of network devices regularly and automatically backed up and stored off-site. three6five recommends that this service be deployed in the case of business or service critical network devices, where failure will have a negative impact on business, user experience or employee productivity.

The Configuration Management service provides storing of the configurations off-site and within a version control system as well as a web front-end where entire configurations can be retrieved. three6five can provide Configuration Management as either an on-site or cloud service.

three6five engineers will not only design and implement a suitable solution for you, but will also manage and monitor every hardware and software component forming part of the solution.

**TACACS**

This service is primarily intended to authenticate users on a variety of terminals; these terminals can be routers, switches, firewalls or other hardware. TACACS dates as far back as the early 1980’s, and its extensive continued use in the biggest networks today, is testament to its success in managing user
Managed Services

authentication effectively. Tacacs is used if your network has or needs a large number of network devices, a quantity of engineers needing access to these devices, engineers who require access to devices are frequently being added or removed, accountability for engineers’ actions when accessing network equipment and/or login credentials for every user on every device.

The Tacacs service provides basic user authentication, authorization to determine access allowed to a device, logging of every command run on every device by every user. three6five Tacacs can be deployed either on-site or as a cloud service. Generally, the Tacacs server will be deployed on-site within the LAN environment.

In large, distributed networks, we might need to deploy multiple Tacacs servers, one per site, or even a single, dedicate cloud instance that is accessible to the entire WAN via a VPN or similar network architecture. three6five has also built a web based front-end within our Mission Control portal to allow any network administrator the ability to perform simple day-to-day actions. These actions include adding and removing users, and querying the Tacacs logs via this easy to use portal.

We will design and implement a suitable solution for you, as well as manage and monitor every hardware and software component of the solution. Automated proactive notifications are sent to our call centre if servers become unavailable.

Problems with individual components, such as the Tacacs daemon and log rotation, are also monitored. We will also ensure that the operating systems are patched and updated, and that the server resources remain sufficient to provide a quality service.

WEB APPLICATION
LOAD BALANCING AND FIREWALLING

three6five’s Web Application Load Balancing and Firewalling powers fast, secure delivery of business-critical applications anytime, anywhere, on any device, platform or cloud-based infrastructure. This offering is unique in a market of legacy vendors, with a modern, best-in-class web application load balancer and firewall this is built for flexibility, performance and virtualisation.

CLOUD NETWORK SERVICES

This solution is aimed at enterprises looking for a truly scalable solution that extends beyond wireless LAN to managed Security, Switching, SD WAN, Comms, Mobility Management and Video Surveillance. The Cloud Network Services solution includes high capacity, plug and play WLAN solution managed in the Cloud, security in a box appliance featuring a next-gen firewall, intrusion prevention, cloud-brokered VPN, content filtering, malware protection all available with failover and HA option.

BANDWIDTH AND SUBSCRIBER MANAGEMENT

The Bandwidth and Subscriber Management product is aimed at Tier 2/3 ISP’s as well as Enterprises who want to craft a better experience to their customers, but do not need a full featured DPI (Deep Packet Inspection) solution.

The solution is licensed on a monthly subscription basis. vDPI provides shaping, prioritisation, de-prioritisation, and scheduling as well has extensive real-time and historical reporting via a self-service interface.

Service Desk Solutions

three6five’s Service Desk Solutions are designed to provide afterhours call centre management and IT services on behalf of its customers’ support desks.

We offer a range of services on behalf of our customers on a 24/7/365 basis to provide full availability on networks. Services range from handling service calls after hours – including on weekends and public holidays – to dispatching engineers and providing reporting. three6five will tailor-make the service suite for each customer, dependent on their requirements, and will also offer the services on an ad-hoc basis where needed.

Call centre as a service is extremely scalable and can work across a range of company and support desk sizes. Incoming callers are not even aware that they are speaking to a third-party supplier. Where there is no existing system, we can help to create one. The call centre as a service provides huge human resource savings, as you only pay for the services used on a basis determined by your requirements.
Wireless Solutions

WiFi on Demand

Planning a temporary installation for any live event requires more than just installing outdoor Access Points (APs) or infrastructure. Different solutions are required for huge stages with large metal infrastructure, outdoor tents, convention centres, arenas, stadiums or a small special occasion. From a small indoor event to a massive rock concert, three6five can provide a tailored solution to fit any occasion. three6five partners with the leading manufacturers for high-density Wi-Fi deployments.
Infrastructure Solutions

Our infrastructure solutions provide virtualized computing resources over the internet. Infrastructure components traditionally present in an on-premises data centre, including servers, storage and networking hardware, as well as the virtualization or hypervisor layer, can now be hosted in the cloud. These services are increasingly policy-driven, enabling infrastructure users to implement greater levels of automation and orchestration for important infrastructure tasks. Resources and services are accessed through a wide area network (WAN), such as the internet, and our services will provision for the installation of the remaining elements of an application stack.

**Infrastructure as a Service**
- Compute
- Storage
- Back up & recovery
- Disaster recovery
- Desktop
- Applications and Subscriptions
- Managed colocation

**Managed Services**
- Operating systems management
- Managed storage
- Managed visualization
- Managed Disaster recovery
- Managed backup & recovery
Connectivity Solutions

A connectivity matchmaker that uses geo-location technology to offer you a choice of over 20 connectivity providers. Access to 20+ providers offering fibre, wireless, copper and LTE. Have your installation managed for you with Single online interface for viewing. Quality and comprehensive mapping means that customers are assured of feasibility that’s at least 95% accurate.

Costs are all-inclusive, from start to finish. There are no hidden costs, and prices are strictly market-related so customers can compare options equably. All services are business-calibre services, so users have the peace of mind that comes with reliable, consistent and uncapped value for their money.

three6five takes the admin, the wait and the confusion out of the connectivity selection process, giving the customer more control both before and after.

CONNECTIVITY MEDIUMS
- Fibre (Business & Home)
- Wireless (PTP, PTMP)
- LTE

Security Solutions

VIRTUALISED FIREWALL (VFW)

Available both in the cloud and as part of vCPE solution bundles at the network edge, vFW is highly flexible in terms of operations management. Solutions can be either self-managed or form part of a three6five Managed Firewall Service.

VIRTUAL SECURITY LOG ANALYZER

Our Virtual Security Log Analyzer is a centralized, comprehensive visibility tool for the FortiNet security fabric. It provides a consolidated view across all Fortinet devices throughout your network, with real-time alerts that expedite the discovery, investigation, and response to incidents. With detailed views of threats, equipped with deep drill-down capabilities. The Virtual Security Log Analyzer gives organizations critical insight into threats occurring on their networks.
Voice Solutions

Our Voice Solution will simplify your business communications. It’s an effective communication solutions ensuring your business runs smoothly. If you’ve wasted time at work, due to downtime, had difficulty in reaching the right people or struggled to give your clients the seamless experience they deserve, then it’s time for your business to change the way it communicates.

three6five’s Voice Solution will provide your company with a single source of communication, collaboration and mobility features that will keep you connected to your business and your customers from anywhere. Our collaborative communication solutions will enable your business to increase revenue, minimise management and operational headaches and improve your customer relationships.

APN Solutions

An APN (Access Point Name) is a gateway between a 3G/LTE mobile network and another computer network, accessing the public internet or private Virtual Private Network (VPN). It is a unique identifier that allows a connection to the network and identifies the data access services associated with your account. The APN is the exit point from the Mobile Network Operator’s (MNO) 3G/LTE network into either the public internet or a private network.

three6five’s Mobile APN solution offers clients the benefits of post-paid, fully aggregated mobile data, with the ability to manage and report on every single mobile user. Clients are not required to install any extra physical infrastructure of their own in order to implement this solution. Clients will be charged for the data that they use on either Vodacom or MTN’s network and associated reporting/management value added services.

A remote workforce, telemetry & backup connectivity are just some of the use cases which leverage GSM connectivity.

Clients may choose to deploy a Dedicated Access-Point-Name (APN) or to utilise our Shared APN, depending on the use case. While dedicated APN’s provide VPN functionality across a GSM network, shared APN’s provide internet breakout.
SD-WAN Solutions

Enables simple, agile and secure branch office Wide Area Networks (WAN). Software-Defined Wide Area Network (SD-WAN) is a specific application of technology applied to WAN connections, which are used to connect enterprise networks – including branch offices and data centres – over large geographic distances.

three6five’s SD-WAN powered by Redvine, enables quick and cost-effective deployment of new branches, provides enterprise-grade WAN by leveraging broadband and private links, and offers a platform for a Virtual Service delivery solution that is available to businesses of all sizes.

KEY FEATURES

three6five’s SD-WAN Solution provides bandwidth expansion as well as direct optimal access to enterprise and cloud applications and data. It also enables virtual services insertion in cloud and on premise – while dramatically improving operational automation.

Formed in 2009, three6five delivers world class professional network services to enterprises and carriers across Africa. We pride ourselves on a rigorous approach to IP services that satisfies our customers’ business needs.

As an end-to-end IP network and systems solutions provider, three6five has the technical skills to design, supply, upgrade and build resilient networks. Best-of-breed products from leading vendors provide us with the equipment and infrastructure to monitor, maintain, support and secure those networks now and into the future.