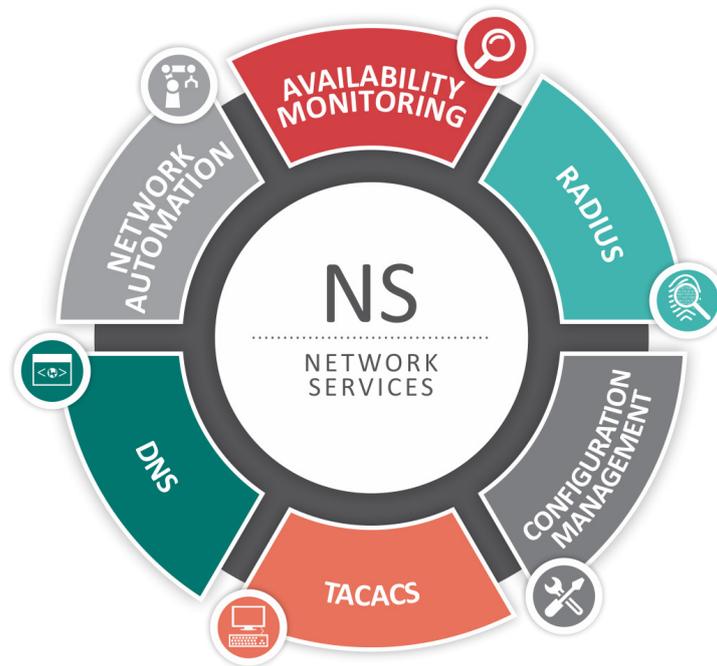CLOUDNET

What are **Network Services?**

three6five offers a range of Network Services which complement and enhance the performance, versatility, stability and services of an IP network. These network services are available as on-site or as cloud-based solutions.

NETWORK AUTOMATION

AVAILABILITY MONITORING

RADIUS

NS
NETWORK SERVICES

DNS

TACACS

CONFIGURATION MANAGEMENT

three6five Availability Monitoring

three6five 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.

WHEN?

If your business or network depends on equipment and/or services being up, available and functioning, then Availability Monitoring should form a critical component of your infrastructure.

WHAT?

The service provides frequent state checks on monitored items and generates notifications based on rules around state changes.

HOW?

three6five Availability Monitoring can be deployed either on-site or as a cloud service.

WHO?

three6five has the engineering experience to recommend a suitable monitoring strategy. Where required, three6five engineers will be included on notifications that involve equipment for which they are responsible, ensuring events are logged, tracked and responded to as efficiently as possible.

CLOUDNET

three6five Radius

AAA stands for Authentication, Authorisation and Accounting. 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.

WHEN?

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

WHAT?

- Authenticates end users to determine if they have access to the services being requested
- Provide authorisation information to ensure the user being authenticated gains access only to the services that they are entitled
- Store accounting data of all traffic, for reporting and billing purposes
- Provide the ability to cap user accounts and disconnect or restrict them, based on company policy

HOW?

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.

WHO?

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.

three6five Configuration Management

This service provides the ability to have the configurations of network devices regularly and automatically backed up and stored off-site.

WHEN?

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.

WHAT?

The Configuration Management service provides:

- Storing of the configurations off-site and within a version control system
- A web front-end where entire configurations can be retrieved

HOW?

three6five can provide Configuration Management as either an on-site or cloud service.

WHO?

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.

three6five 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 even the biggest networks today, is testament to its success in managing user authentication effectively.

WHEN?

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
- Login credentials for every user on every device

CLOUDNET

WHAT?

The Tacacs service provides:

- Basic user authentication
- Authorisation to determine access allowed to a device
- Logging of every command run on every device by every user

HOW?

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.

WHO?

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.

three6five DNS

The three6five Domain Name System (DNS) is a public primary DNS hosting service for customer owned domains. This service eliminates the need for customers to own and manage their own DNS infrastructure, while providing an easy to use web portal front-end to manage records within domains.

WHEN?

A DNS hosting service is recommended if your company infrastructure requires a large number of DNS records to be created within your domain, or require frequent additions or changes to the records.

WHAT?

Hosting of zone files for domain names on a fully redundant primary and secondary DNS infrastructure

- Editing of individual zone records from domains via a web portal
- Off-site backups of all zone configurations
- Create reverse PTR records for email verification

HOW?

This a cloud based service.

three6five monitors the DNS servers as well as the DNS service to ensure all services are up and running accurately at all times.

WHO?

Any faults are processed through our support team on a 24/7 basis to ensure any problems can be responded to in a quick and proactive manner.

We have highly skilled engineers who can advise and assist with DNS queries including the registration and migration process of domain names.

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.

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.

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