

ITIL & Network Managers - What's in it for me?

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As the Training Manager at company providing best practice Network Support services, I am often asked 'Why should I, as a Network Manager, be interested in ITIL and more importantly what can it do for me?'

It is tempting to provide an answer along the lines of 'ITIL can save you money and reduce your stress levels by providing a framework for your working practices that has been developed in collaboration with subject experts, practitioners and consultants working throughout the IT industry.'

While this answer has the twin benefits of being short and accurate it does not address the particular interests of the Network Manager as opposed to managers of Server Support, Desktop Support, Helpdesk and/or Project teams or any of the other professionals working under the broader IT or MIS banner.

To provide a more complete answer it is necessary to go back a step and define the role of the Network Manager. A sample job description would run along the lines of 'The Network Manager manages the deployment and maintenance of an organisations local and wide area networks. They are responsible for the development and implementation of policies and procedures for network usage, security and performance monitoring. They lead a team of network engineers who implement these policies and procedures.'

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To fulfil these roles the Network Manager must wear many different hats and they, and/or their team, must interface with all aspects of the business they support. A simple awareness of the basic tenets of ITIL, such as always ensuring that the network infrastructure meets the requirements of the business and that all support functions maintain a customer focus will allow the network support team to develop effective working practices and minimise resource wastage. For guidance on how to develop these practices and procedures, and how to manage the interface with the wider IT community, we need simply to look deeper into the library.

There is no better place for the Network Manager to start than by obtaining the Network Services Management (NSM) Module, as this pulls together much of the required information. To quote from the modules own introduction, it 'defines the management procedures necessary to provide a quality network service' and 'describes the application of IT Service Management disciplines such as Capacity, Change and Configuration Management to the management of network services'. Within its pages the NSM considers all the main areas of both Service Management and Service Delivery but to illustrate how the Network Manager can benefit from using the information I will consider just two areas - Configuration/Change Management and the Help Desk interface.

Change Management & Configuration Management

These two disciplines are inextricably linked. Successful Configuration Management requires suitable Change Management processes, and visa versa. Together these two functions provide the means by which a network can be controlled. This is important as a strictly controlled network will not produce any surprises and in network management surprises are always unwelcome, expensive and time consuming.

The goal of Configuration Management is to create a centrally administered database, the CMDB, contains the details of all the assets, configurations and dependencies of not just the network infrastructure elements but the whole IT environment. The database must be able to provide accurate information for all the other service management processes. Ideally it should be possible to recreate any part of the IT infrastructure from the documentation alone. As an example, a faulty switch or router could be replaced, suitably cabled and connected with the correct configuration installed by reference to the appropriate stored configuration files and connectivity diagrams. Using the flexibility provided by an accurate CMDB keeps the network downtime to a minimum while at the same time reducing the level of resources tied up in 'cold spare' units.

The importance of storing this type of information, and having it readily available can be seen in the following, all too familiar, scenarios:-

1. The removal of a router causes a group of users to fall off the network, because although the link the router services was correctly identified as being no longer operational, it was not realised that the router served as a default gateway for this particular set of workstations. Users of a particular server report are unable to access their files and it takes days (I know of situations in which it has taken up to a week) to physically locate the device, simply so that it can be rebooted.
2. A bill for outsourced services or circuit provision is paid without proper reconciliation because it is easier to pay the bill than check it. When the bill is finally reconciled it is discovered that there is a large discrepancy between the billed services and the required services.

In all of these cases service disruption and additional costs could be avoided by the use of a well-populated CMDB.

As a business develops and grows it's network infrastructure will need to develop with it. To ensure that this development is properly evaluated and controlled it is essential to have a Change Management process. Due to the high levels of interconnectivity and the general complexity of modern network infrastructures one of the requirements of an effective Change Management process is that an Impact Analysis is undertaken. Before a request for a change can be agreed a risk assessment must be made and set against the potential benefits. It is impossible to make an accurate risk assessment if dependencies are not documented. Removing an unused link or circuit, perhaps as part of a rationalisation process, is great providing that this link is not the back up, or overload route, for a major business critical link and how can the impact of a scheduled outage while a network switch is replaced be assessed without knowing which users and/or services are connected through that switch. Finally it is important that the update processes for the CMDB are linked into the Change Management cycle so that the documentation is always an accurate depiction of the real world prototype.

The Help Desk - Incident & Problem Management

ITIL is unequivocal in saying that the Help Desk should represent a single point of contact for all users of IT services. The end user should not be required to assess whether any particular issue they are experiencing will be rectified by network support or by any of the other support teams, but rather the help desk personnel should be trained to such a level that they are capable of identifying and implementing quick fixes or of escalating the incident to the support team. Knowledge of the processes used by help desk personnel will assist the Network Manager in streamlining the interface between the two sets of staff. This in turn will reduce the number of inappropriate calls being passed on and increase the quality of reported fault details, both of which will help reduce the time it takes for an incident to be responded to and a fix applied.

The aim of all Network Managers is, or at least should be, to become proactive in their management of the network. They should be aware of potential problems before the user community. This requires regular testing of links and devices and the storing of test results so that long term trending and exception reporting can take place. The storage of these test results will need to be integrated with the CMDB and the analysis fed into the Capacity Management and Availability Management functions. An understanding of these functions will lead to a better appreciation as to why particular sets of information are being requested and the importance of supplying up-to-date and accurate information.

Throughout the ITIL publications can provide the Network manager with a mentor who can ease the learning curve and hasten the introduction of effective processes. As the old saying goes '*Why re-invent the wheel?*' especially when one already exists that has been fitted and balanced within a wide range of major companies and government organisations worldwide.

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