

Reading sample



Campus networking

High-performance networks in medium-sized company IT

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Table of contents

Foreword3

Companies grow and the networks grow with them4

The challenge of growing corporate networks5

 Network outages a daily occurrence in one in ten companies7

Redundancy planning and core switches as a key factor for business continuity8

 Core switches are crucial for 100% uptime9

Licensing models and vendor preferences for core switches.....10

 Everything from a single source for the corporate network10

 European manufacturers are preferred.....11

Conclusion11

Study design and sample12

Further information13

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Miscellaneous

Due to rounding adjustments, some totals may not add up to 100%.

Publication date: 10/2024

Foreword

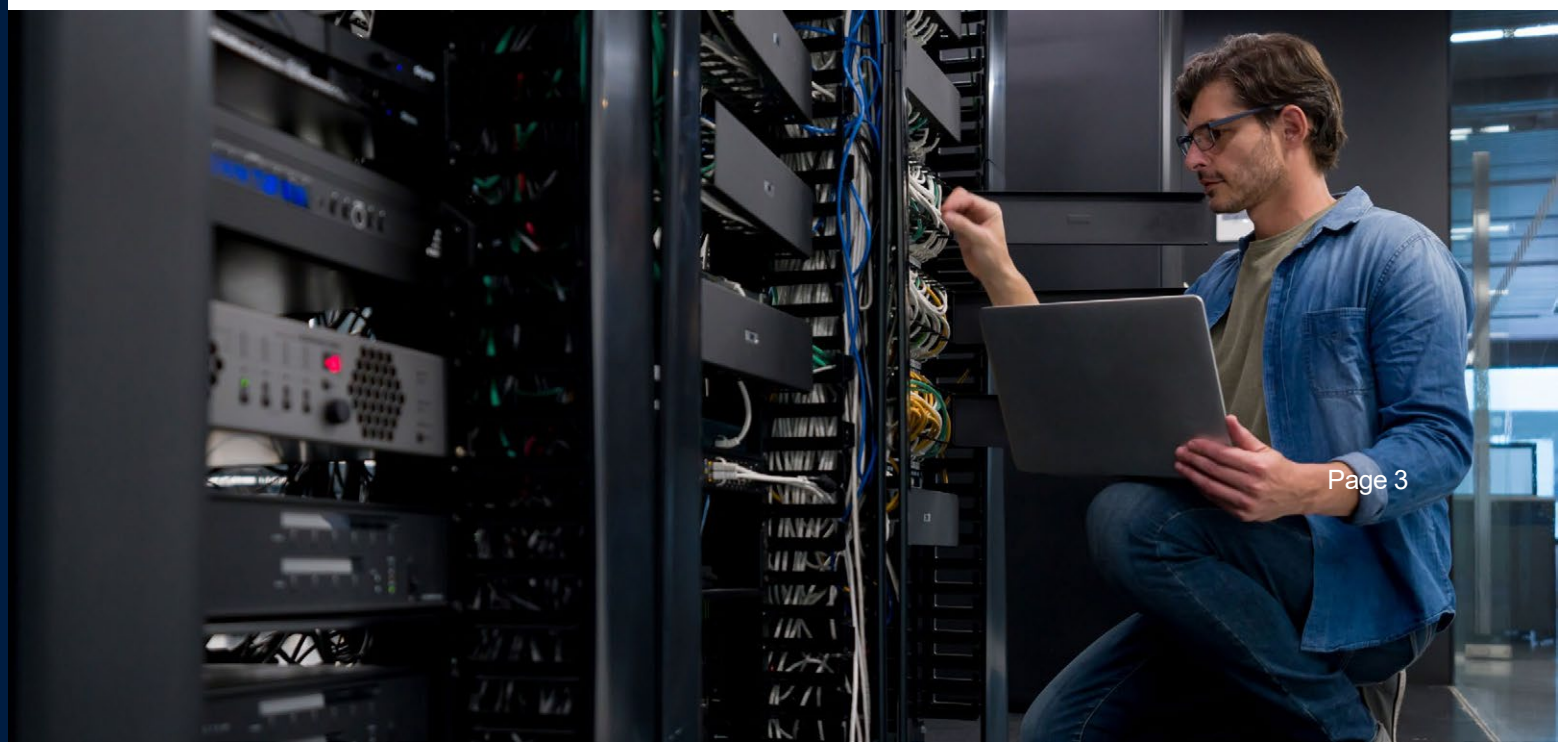
In today's business world, networks are not just technological tools, but the backbone of almost all business processes. With the constant increase in data volume and the ongoing digitalization, SMEs in particular are faced with the challenge of making their network infrastructures efficient and future-proof.

Stable, highly available networks that can manage continuous availability (uptime) and a high number of end devices have become business-critical. Every failure has a direct impact on work efficiency and therefore on business success.

This study examines the role of modern campus networking (3-tier architecture incl. core switches) in the growing network infrastructure of medium-sized companies. Core switches play a central role in networking, as they not only ensure high network availability and reliability, but also improve the scalability and efficiency of networks. Modern hierarchical network solutions with a focus on redundancy are indispensable, especially with regard to the growing requirements in companies – such as the exponential growth of data traffic in decentralized cloud environments, the increasing number of networked devices, and the rising demands on security standards.

The core layer enables the performance of the network by acting as the central layer above the other network layers and distributing the data traffic.

The results of this study are based on a detailed survey of 200 IT managers from various industries and companies with between 500 and 2,500 employees. They provide valuable insights into the challenges that medium-sized companies face when optimizing their networks. In addition, an objective analysis of the current state-of-the-art practices serves to complement the results, illustrating how modern core switches, redundancy concepts, and licensing models can ensure business continuity and long-term competitiveness.



Companies grow and the networks grow with them

The three-tier network design of a campus network, consisting of core, distribution, and access layers, is increasingly becoming the standard in medium-sized companies with 500 employees or more.

A large majority (63%) of the companies surveyed overall have already implemented this network structure. A further third (33%) are planning to switch to 3-tier campus networking in the near future. And the larger the company, the higher the degree of use of a three-tier hierarchical network design.

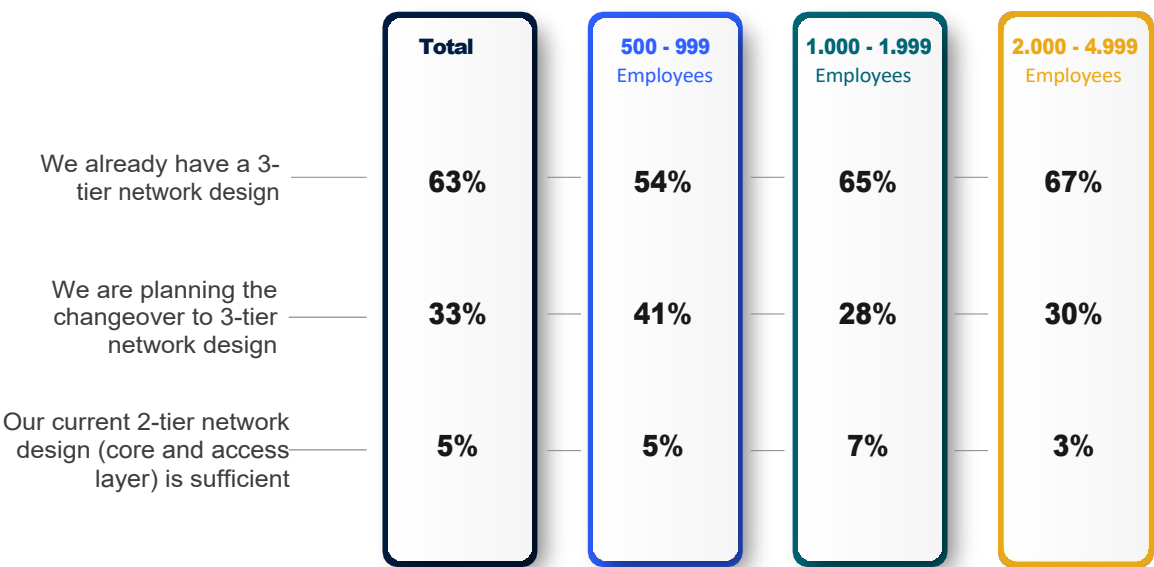
The 3-tier network design provides a clear structure by separating the core, distribution, and access layers, which increases performance and distributes data traffic more efficiently. It enables flexible scaling and ensures a stable, fail-safe network infrastructure that is particularly suitable for growing companies.

Only 5% of companies are of the opinion that a two-tier network is still sufficient for their current requirements. In particular SMEs with 500 to 999 employees are increasingly planning to add a core layer.

The advantages of the three-tier model include better connectivity for a large number of end devices or distributed building sections, as well as better scalability, greater redundancy, and a simpler network layout. In this way, medium-sized companies can make their networks future-proof.

Degree of use of a 3-tier campus network

Basis: 200 companies



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