Network Assessments

Tesrex Network Assessments are an ideal starting point for many companies.

Whether you are expanding, relocating, downsizing or simply going through some internal changes, our Network Assessments are vital to ensure a seamless transition.

Tesrex will accurately assess what your network needs as your business evolves and proactively secure your business from any future network concerns.

Our Network Assessments are well renowned in the industry. With our reputation for accuracy and transparency, you can be confident that our report findings and recommendations will be catered to your specific business and network needs.

The Objectives

There are three main objectives of the Tesrex Network Assessment:

1. **Ensuring the network fits the needs of your business.**

2. **Providing; scalability, security and resiliency, allowing for future growth.**

3. **Investment Protection alongside business growth.**

Network Assessment Benefits

Tesrex Network Assessments provide both technical and financial benefits. Below you'll see six of the main benefits that our customers found after their Network Assessments and recommendations.

Reduce Costs

Quickly identify potential savings on your network.

Increase ROI

Plan long term investments to extend the life and use of your existing infrastructure.

Network Optimisation

Enhance application performance and staff productivity.

Improve Security

Be pro-active, preventative measures to combat evolving security threats.

Scale Efficiently

Designing a modular network that's flexible, robust and prepared for future requirements.

Effective Strategy

Helping you prepare a comprehensive plan for the future.

Network Assessment Process

While performing each of our Network Assessments, we follow a defined process; Discover, Assess, Review. This process has been refined over years of engagements to deliver the optimal report for our clients. It is a detailed 3-step routine that ensures we consider all aspects of your business, every current requirement, and likely future requirements based on similar organisations we have worked with previously. The process is easily adapted to meet the clients exact needs when required. Below you can find what is involved in each step.

Discover – Phase 1

- Review Strategy and Network Architecture with stakeholders

- Review existing documentation

- Review Authentication, Authorization over network devices

- Network device discovery

- Physical mapping

- Management protocols (SNMP, NTP, SSH, HTTPS, SYSLOG) & Backups

- Data Collection using Span ports, NetFlow and SNMP access

- Physical Network devices inspection

Assess – Phase 2

- Information analysis

- Hardware and software End-of-Life/End-of-Support status

- Identify issues and level of risk respectively

Review – Phase 3

- Deliver Network assessment documentation

- Deliver report with findings and recommendations

- Present/review assessment report with stakeholders

- Collaboration through Design Workshops

What you get

At the end of the engagement, we present you with a detailed report containing an **Executive Summary**, and a **Recommendations Summary**. Both of these contain our findings and our suggested roadmap to achieve your network goals, however they are designed to be understood by differing departments of your business. We will arrange a meeting where we will take you through every aspect of the report so you can fully understand it all. We are always available for further clarification, should you need it.

The **Executive Summary** is aimed at the business-oriented members of your organisation. It focuses on the current hurdles and recommends ways to overcome these in a less technical fashion. It defines the most pressing issues and provides simple explanations of solutions.

The **Recommendations Summary** is primarily for the technical team at your organisation. We provide a rolled-up summary of the various findings from a technical perspective. Each recommendation can be explored further for details and screenshots showing the finding in action. This allows the internal team to segment the findings to various team for review per the organisational structure.

Pricing options

We work with businesses of all sizes in countless industries. Because of this we have various pricing tiers that are applicable to different companies. Different clients have different needs and so this is a pricing guideline to roughly see what you may pay for the Tesrex Network Assessment.
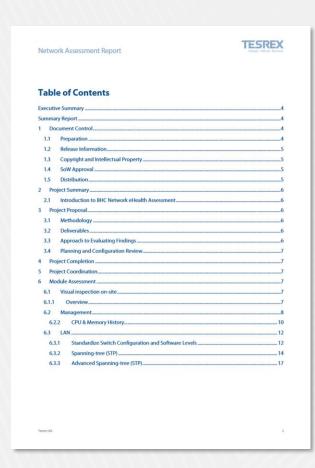
The base price for our engagement is £1000. Below you'll see an estimated cost per user calculated by the size of your organisation.
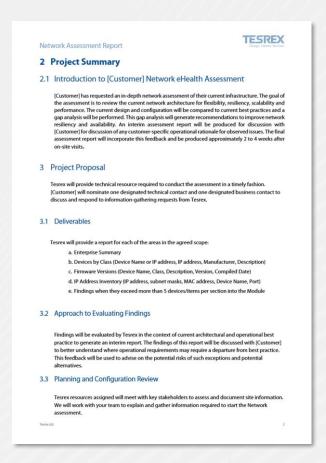
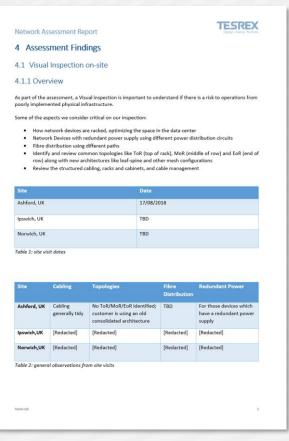| Up to 500 users	500 – 1500 users	1500+ users
£10 per user + base	£8 per user + base	£6 per user + base

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Network Assessment

An Example Report

Below is an example of 4 pages of the report we will provide you after we have completed our process. The entire report is usually around 20-25 pages. It is loosely based on one our previous clients but all sensitive data has been changed.

Page preview 1 — Table of Contents

Network Assessment Report

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Page preview 2 — Project Summary

Network Assessment Report

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2   Project Summary

2.1   Introduction to [Customer] Network eHealth Assessment

[Customer] has requested an in-depth network assessment of their current infrastructure. The goal of the assessment is to review the current network architecture for flexibility, resiliency, scalability and performance. The current design and configuration will be compared to current best practices and a gap analysis will be performed. This gap analysis will generate recommendations to improve network resiliency and availability. An interim assessment report will be produced for discussion with [Customer] for discussion of any customer-specific operational rationale for observed issues. The final assessment report will incorporate this feedback and be produced approximately 2 to 4 weeks after on-site visits.

3   Project Proposal

Tesrex will provide technical resource required to conduct the assessment in a timely fashion. [Customer] will nominate one designated technical contact and one designated business contact to discuss and respond to information-gathering requests from Tesrex.

3.1   Deliverables

Tesrex will provide a report for each of the areas in the agreed scope:
a. Enterprise Summary
b. Devices by Class (Device Name or IP address, IP address, Manufacturer, Description)
c. Firmware Versions (Device Name, Class, Description, Version, Compiled Date)
d. IP Address Inventory (IP address, subnet masks, MAC address, Device Name, Port)
e. Findings when they exceed more than 5 devices/items per section into the Module

3.2   Approach to Evaluating Findings

Findings will be evaluated by Tesrex in the context of current architectural and operational best practice to generate an interim report. The findings of this report will be discussed with [Customer] to better understand where operational requirements may require a departure from best practice. This feedback will be used to advise on the potential risks of such exceptions and potential alternatives.

3.3   Planning and Configuration Review

Tesrex resources assigned will meet with key stakeholders to assess and document site information. We will work with your team to explain and gather information required to start the Network assessment.

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Page preview 3 — LAN / Switch Configuration

Network Assessment Report

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4.2.2.3 Tesrex Recommendation

Tesrex recommends that [Customer] adopt a configuration standard, which includes the following:

- Configure thresholds on Monitor systems to alert if current value is above an agreed baseline value

4.3 LAN

4.3.1 Standardise Switch Configuration and Software Levels

4.3.1.1 Overview

[Customer] has a network of 25+ switches across 3 sites: Ashford, Ipswich and Norwich. The key to efficient management is consistency in configuration, naming conventions, firmware versions and functionality. Standardisation of the running firmware version, services, and interface labeling will minimize administrative overhead and decrease problem resolution time. The goal would be to have templates for configurations that can easily be modified and deployed to support new and existing switches on a consistent firmware version basis.

4.3.1.2 Tesrex Findings

H3C switches are not running the same version, and no network switches are using the latest recommended version by Vendor. On many switches naming conventions vary for the various interfaces and some interfaces are not described as to function and purpose.

Discovered Example: Ashford_4800,SEH-LISA,H3C,SEH-HOMER,HP,

Hostname	Firmware	Newest Firmware
Ashford_4800	5.6.4.1	5.9
SEH-HOMER	12.2(35)SE5	12.2.55-SE11
SEH-BART	12.2(35)SE5	12.2.55-SE11
SEH-LISA	12.2(35)SE5	12.2.55-SE11
SEH-MAGGIE	12.2(35)SE5	12.2.55-SE11
SEH-MARGE	12.2(35)SE5	12.2.55-SE11
MrBurns	12.2(35)SE5	12.2.55-SE11
HP	5.20.99, Release 2215	5120.EI-4210G-4510G_5.20.R2221P25
Grace	5.20.99, Release 2215	5120.EI-4210G-4510G_5.20.R2221P25
HP	5.20.99, Release 2220P02	5120.EI-4210G-4510G_5.20.R2221P25
HP	5.20.99, Release 2220P02	5120.EI-4210G-4510G_5.20.R2221P25
H3C	5.20, Release 2202P06	3C.S5120EI-CMW520-R2221P28
H3C	5.20, Release 2202P06	S5120EI-CMW520-R2221P28
H3C	5.20, Release 2202P06	S5120EI-CMW520-R2221P28

MrBurns

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Page preview 4 — Assessment Findings

Network Assessment Report

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4   Assessment Findings

4.1 Visual Inspection on-site

4.1.1 Overview

As part of the assessment, a Visual inspection is important to understand if there is a risk to operations from poorly implemented physical infrastructure.

Some of the aspects we consider critical on our inspection:

- How network devices are racked, optimizing the space in the data center
- Network Devices with redundant power supply using different power distribution circuits
- Fibre distribution using different paths
- Identify and review common topologies like ToR (top of rack), MoR (middle of row) and EoR (end of row) along with new architectures like leaf-spine and other mesh configurations
- Review the structured cabling, racks and cabinets, and cable management

Site	Date
Ashford, UK	17/08/2018
Ipswich, UK	TBD
Norwich, UK	TBD

Table 1: site visit dates

Site	Cabling	Topologies	Fibre Distribution	Redundant Power
Ashford, UK	Cabling generally tidy	No ToR/MoR/EoR identified; customer is using an old consolidated architecture	TBD	For those devices which have a redundant power supply
Ipswich, UK	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Norwich, UK	[Redacted]	[Redacted]	[Redacted]	[Redacted]

Table 2: general observations from site visits

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Talk to us

Click the button to get in touch with us about a Tesrex Network Assessment. We will arrange an initial call within one working day.

Talk to us