

# A wave in cyber

Analysing the growth, diversity, and regional footprint of the UK cyber security workforce through ONS occupation data.

# Introduction

In 2024, a Socura report 'Their next job was in cyber,'\* revealed that cyber security was the fastest-growing IT occupation in the UK, albeit with significant imbalances in the number of women in the sector and stark geographical divides.

Over one year later, we examine the latest Office for National Statistics (ONS) figures to assess how the cyber security employment landscape has shifted, highlighting the latest trends and the barriers that both help and hinder the sector's potential.

\* <https://socura.co.uk/reports-and-whitepapers/employment-trends-report-2024>

Cover image, Waving sea water by Nathan Dumlao on Unsplash

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# 01. Key findings

Based on an analysis of Office for National Statistics Annual Population Survey data (Dec 2021 to June 2025)

01

Cyber security is the UK's fastest-growing IT occupation, with a 194% increase in professionals since 2021.

02

Cyber security is the fifth fastest-growing occupation in the UK, across more than 400 tracked by the ONS.

03

There are 4.5 cyber security professionals for every 100 IT professionals - more than double the number in 2021.

04

There is one cyber security professional for every 68 businesses in the UK.

05

The number of women in cyber security has increased 163% since 2021. However, only one in five cyber security professionals is female.



# 02. Methodology

**The findings in this report are derived from the Office for National Statistics (ONS) Annual Population Survey (APS).**

The APS tracks employment figures across more than 400 Standard Occupational Classification (SOC 2020) codes. This report focuses on 13 IT-related roles, including 2135: Cybersecurity professionals. See the Appendix (Section 10) for all IT-related SOC 2020 analysed.

The APS is a continuous survey comprising 12 months of data, which is released on a quarterly basis. This report analyses data released between December 2021 and June 2025. Please note that the ONS has only been tracking SOC 2020 code 2135, 'cybersecurity professionals,' since 2021.

# 03. A wave in cyber

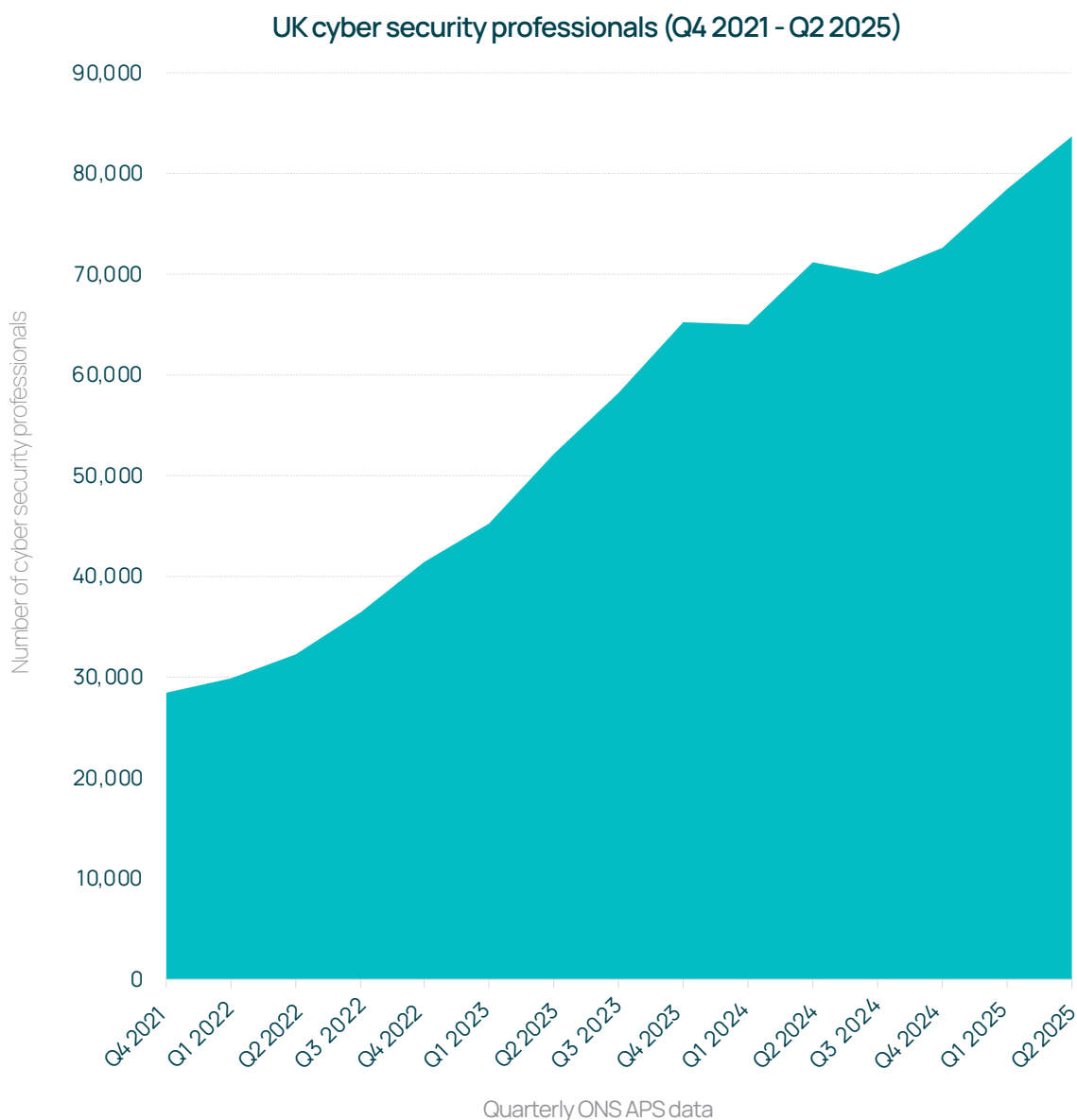
Since 2021, the number of cyber security professionals in the UK has almost tripled—rising from 28,500 to 83,700.

Cyber continues to be the fastest-growing IT role tracked by the ONS and is now one of the fastest-growing occupations across all sectors. For context, there are now more cyber security professionals in the UK than there are architects, veterinarians, bricklayers, and coffee shop workers.

The chart below illustrates the 'wave-shaped' surge in cyber security professionals over the last four years.

## 194%

increase in cyber security professionals since 2021



## 04. The UK's fifth fastest growing occupation



# 05. Growth in cyber vs. other occupations

In June 2025, 326 occupations have a workforce of at least 20,000 people. Of these, cyber security professionals stands as the fastest-growing.

The chart below compares occupations that were a similar size to cyber security in 2021—specifically those with 25,000 to 30,000 workers. The growth in cyber security professionals since then far exceeds all other professions in the list (194%).

Percentage change: occupations with 25k–30k workers in 2021 (Q4 2021 – Q2 2025)

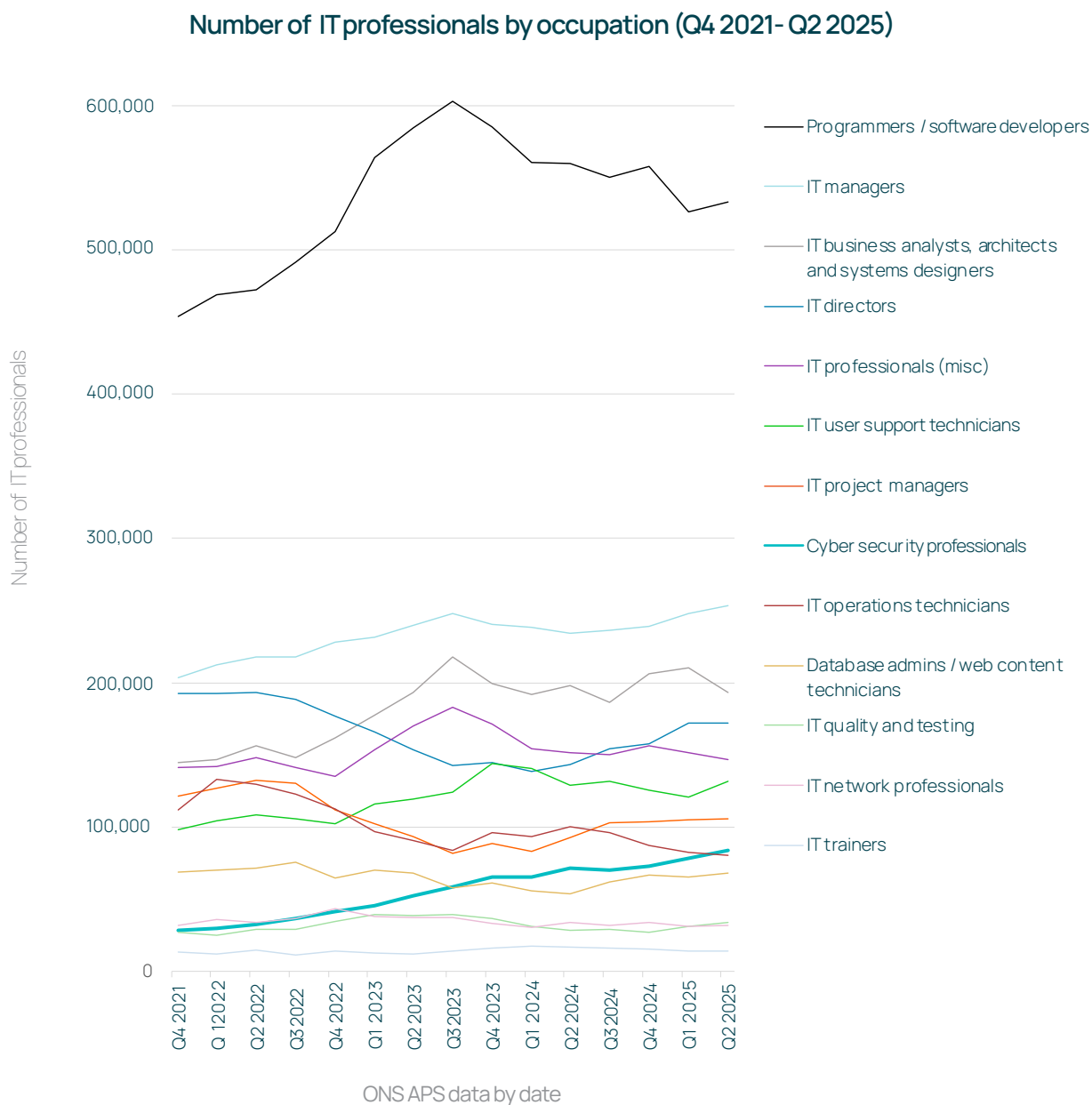




# 06. Growth in cyber vs. IT occupations

Cyber security is the fastest-growing IT occupation. Between 2021 and June 2025, the average growth rate of people working in IT roles (excluding cyber security) was 9.6%. By comparison, the growth in the number of cyber security professionals was 194%.

In the last five years, the number of cyber security professionals in the UK has surpassed the number of IT network professionals, IT operations technicians and database admin/web content technicians.





## 07. The defender-to-business deficit

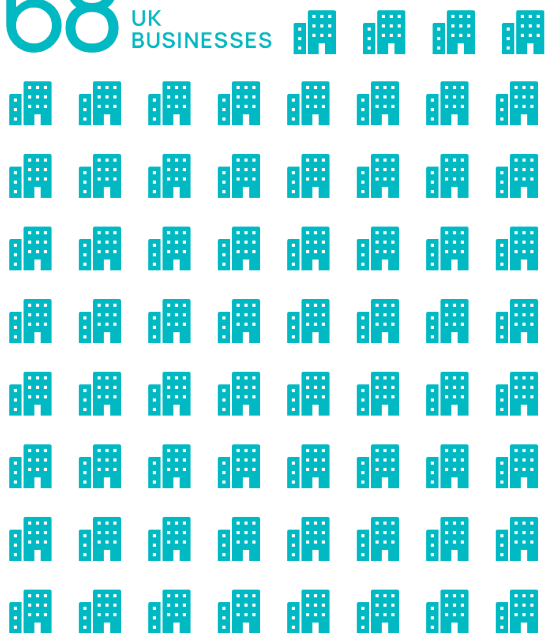
Socura's analysis of ONS occupation figures in December 2021 found there was just one cyber security professional for every 196 businesses in the UK. Today, that ratio has improved to one professional per 68 businesses\*.

1  
SECURITY  
PROFESSIONAL



68

UK  
BUSINESSES



While the growth in cyber security headcount is encouraging, the ratio of professionals to businesses must continue to improve if the UK is to be considered one of the safest places in the world. As direct hiring is not feasible for every organisation, leveraging the support of service providers remains a vital way to access specialist skills.

Andrew Kays, Socura

\*As of 1st January 2025, there were 5.7 million private sector businesses in the UK according to the House of Commons business statistics report published in December 2025.

# 08. Women in cyber

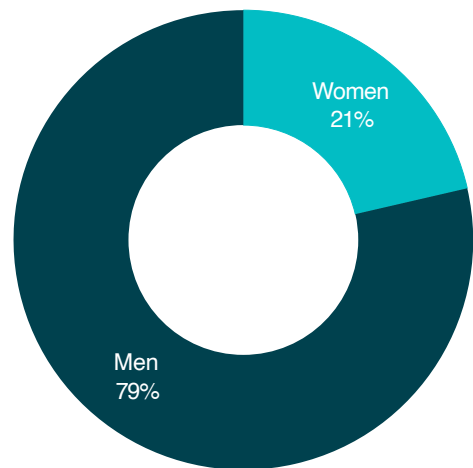
Women are entering cyber security in record numbers, with the female workforce growing from 6,800 in 2021 to 17,900 in June 2025 (+163%). However, these gains have not yet shifted the dial on the sector's gender balance; the field remains heavily male-dominated.

As of June 2025, women accounted for just one in five cyber security professionals. While this figure is slightly higher than the 18% quarterly average observed through the analysis period, it actually represents a decline from nearly 24% in 2021.



Despite more women working in cyber than ever before, this is another stark reminder that the industry must do more to increase female representation.

Andrew Kays, Socura



UK cyber security professionals by gender (June 2025)

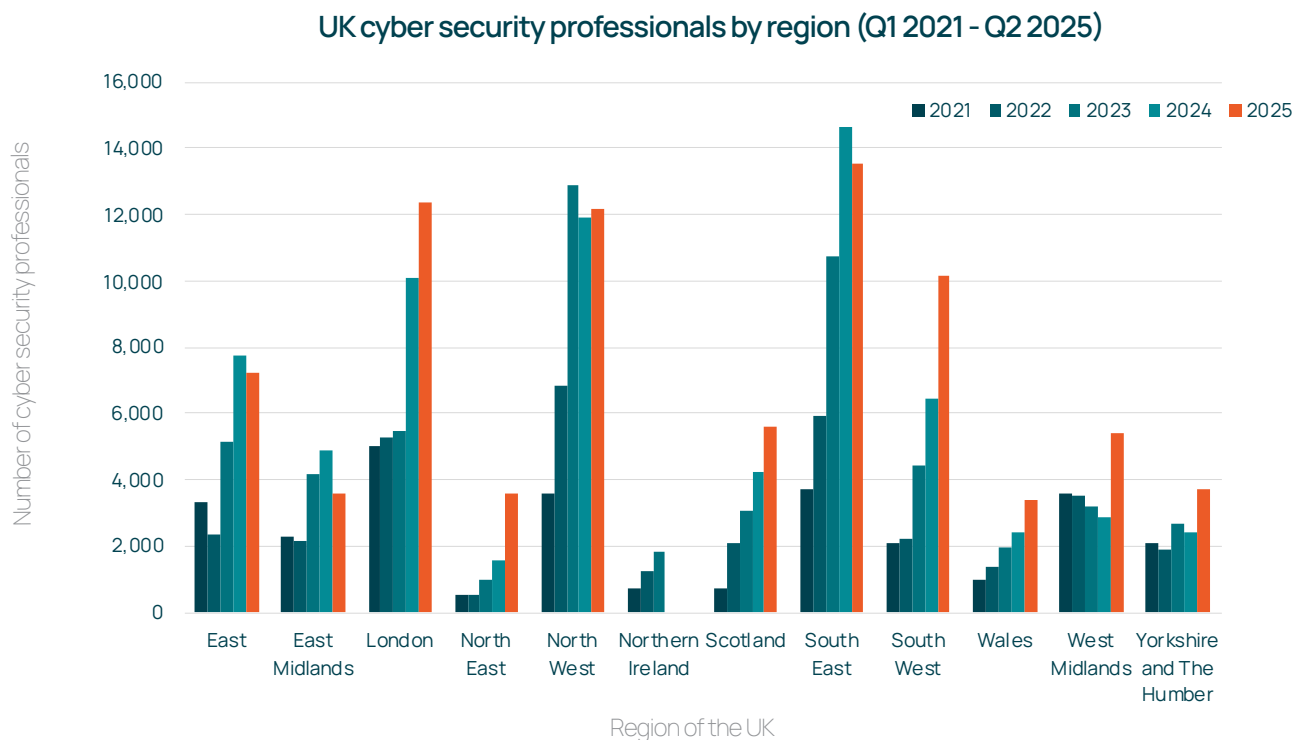
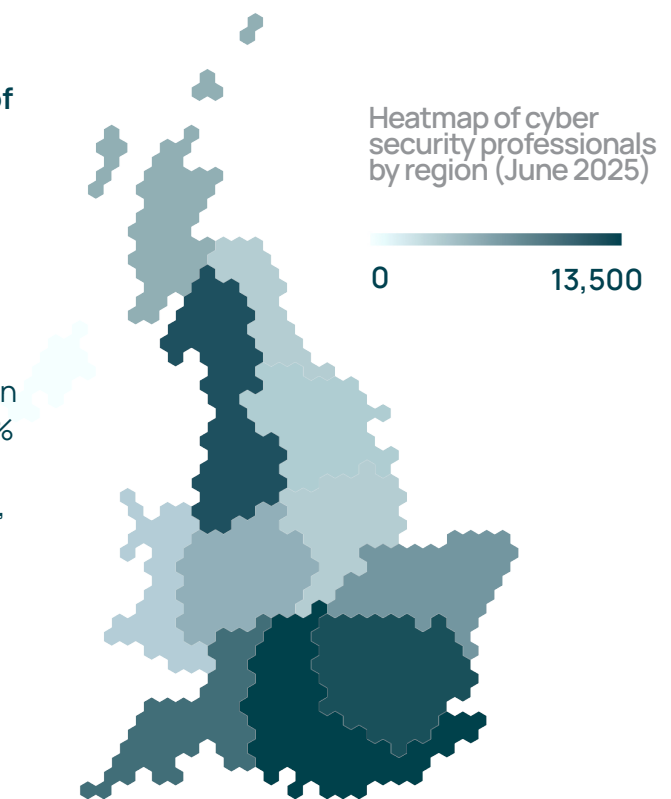


# 09. The regional talent divide

The South East is home to the highest number of cyber security professionals in the UK, followed by London and the North West. Each of these regions now boasts a workforce exceeding 12,000 cyber specialists.

While 20% of all UK IT workers live in London, only 13% of the nation's cyber security professionals are based there.

Meanwhile, Scotland is the fastest-growing region for cyber security professionals, recording a 700% increase between 2021 and June 2025. However, this growth figure should be treated with caution, as the 2021 baseline was notably low.



# 10. Conclusion



With cyber security a critical national priority, the continued growth of the profession is vital to the ongoing resilience of the UK. Cyber security isn't just a booming IT niche—it's one of the fastest-growing occupations in the whole country.

To ensure that the wave of cyber professionals continues to build momentum, governments and businesses alike must remain committed to investing in talent and creating accessible pathways into the industry. With gender diversity remaining a significant hurdle, programmes such as CyberFirst are key to both attracting new workers and diversifying the recruitment pipeline for the next generation.

While the impact of AI in cyber security is yet to be fully realised, an evolving threat landscape and new regulations designed to strengthen national-level resilience—such as the Cyber Security and Resilience Bill—ensure that human expertise remains indispensable.

AI is helping security teams become more effective and efficient, but no organisation can afford to rely on technology alone. This is why more experts are needed to close the talent gap and keep pace with adversaries. Currently, there is only one cyber security professional for every 68 UK businesses—a disparity we must continue to bridge.

Fostering talent beyond London and the South East must also be a priority if all organisations are to access the support they need. Equally, investing in employee welfare and mental health is essential to prevent burnout and ensure the sector's growth remains sustainable in the long term."



**Andrew Kays**  
CEO, Socura



# 11. Industry reaction

**Dr Yulia Cherdantseva, Reader, School of Computer Science & Informatics and Director Academic Centre of Excellence in Cyber Security Education at Cardiff University.**

"Despite the extraordinary growth of the cyber security profession in the UK, the skills gap remains a complex and persistent challenge—making it clear that growth alone is not enough to address the issue.

"Tackling the skills gap requires coordinated action between academia, industry, and certification bodies. This includes aligning training and qualifications to a common knowledge core, standardising language in job descriptions, and investing in pathways that support global mobility.

"The need for a structured knowledge framework that addresses emerging cyber security concerns in a timely manner and provides clear guidance to the community is critical. Frameworks such as CyBOK exemplify this approach by offering a foundation that underpins university degree programmes, professional certifications, and assured training led by the NCSC.

"Resilience has become a new buzzword in cyber security, and rightly so. The introduction of the Cyber Security and Resilience Bill will accelerate the creation of new roles and reshape existing ones, demanding capabilities that combine technical expertise with organisational resilience and assurance.

"AI is transforming the profession, yet the outlook for the cyber security workforce remains positive. Practitioners increasingly view AI as a way to augment rather than replace human expertise. Longer term, it is expected to create new specialisms and drive continuous learning, reinforcing the sector's growth.

"By embracing cross-sector collaboration, international cooperation, and globally shared skills and knowledge frameworks and standards, we can build a workforce that is not only skilled but resilient, adaptable, and prepared for the evolving threat landscape."

# 11. Industry reaction

## **Dr Clare Johnson, Founder, Women in Cyber Unlimited**

"Given the increasing threats to UK infrastructure, it is no surprise that cyber security is the UK's fastest-growing IT occupation, and that the number of people working in the sector has increased significantly over the past four years.

"It's encouraging to see that more businesses employ cyber security professionals today than in previous years, signifying that they are being more proactive in improving their cyber security posture, although there's still some way to go.

"What is disappointing though, is that diversity in the sector remains fairly static, with women

making up just over 20 per cent of the cyber security workforce.

"Initiatives such as the CyberFirst (soon to be TechFirst) Girls' competition and the increasing number of Women in Cyber networks are important in addressing this imbalance.

"Providing a platform for women to showcase their skills and meet other women, alongside being visible role models, all helps to raise awareness of the importance of diversity. The more brilliant minds we have working on cyber security challenges, the more resilient we will all be."

# 12. Appendix

This report is based on UK ONS Annual Population Survey data, which tracks employment trends by monitoring occupations classified by Standard Occupational Classification (SOC 2020) codes. There are over 400 SOC 2020 codes in total.

To analyse occupation figures relating to IT professionals, Socura used the following SOC 2020 codes:

**1137: Information technology directors**

**2131: IT project managers**

**2132: IT managers**

**2133: IT business analysts, architects and systems designers**

**2134: Programmers and software development professionals**

**2135: Cyber security professionals**

**2136: IT quality and testing professionals**

**2137: IT network professionals**

**2139: Information technology professionals n.e.c.**

**3131: IT operations technicians**

**3132: IT user support technicians**

**3133: Database administrators and web content technicians**


**3573: Information technology trainers**

Note that the ONS has only been tracking SOC 2020 code 2135 'cybersecurity professionals' since 2021.

# About us

**Socura is a Managed Detection and Response provider bringing the power of calm to organisations across the UK. In an ever-changing landscape, we empower teams with the clarity, control, and confidence to minimise cyber security risk and thrive.**

Trusted by businesses and critical infrastructure, we deliver a precise, measured, and personal service that shuts down threats swiftly and effectively. We're proud to be ranked among the top 100 managed security service providers globally.

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