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AI-generated content may be incorrect.**

**Professional Discussion   
underpinned by a Portfolio AE2**

Portfolio Template

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| --- | --- |
| **Apprentice Name:** |  |
| **Pathway** |  |
| **Company:** |  |

BSc Digital and Technology Solutions Professional   
Apprenticeship Standard: ST0119 v1.2 (2023)  
Template Document (Version: 1 July 2025)  
Southampton Solent University - SO14 0YN  
[**End Point Assessor Organisation (EPAO) ID: EPA0325**](https://find-epao.apprenticeships.education.gov.uk/courses/25/assessment-organisations/epa0325)

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| **EPA Portfolio & Professional Discussion AE2 Template** v1 (2025) BSc Digital and Technology Solutions Professional  Apprenticeship Standard: ST0119 v1.2 (2023) Specialism (Pathway): **Network Engineer** Southampton Solent University - SO14 0YN [**End Point Assessor Organisation (EPAO) ID: EPA0325**](https://find-epao.apprenticeships.education.gov.uk/courses/25/assessment-organisations/epa0325) | **A red circle with white text  AI-generated content may be incorrect.** |

# **Network Engineer Portfolio Evidence**

This document presents a portfolio template focused on demonstrating key skills and knowledge areas relevant to **Network Engineer** roles. Each entry provides evidence in support of specific core and Software knowledge, skills, and behaviours (KSBs).

Before submission, both apprentice and employer must complete a [Statement of Authenticity](#Authenticity) at the ed of this document. This confirms that the work is your own and reflects your learning and development throughout the programme.

once.

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| **Theme A:** Underlying Principles | **Theme B:** Technical Solutions | **Theme C:** Innovation & Response | **Theme D:** Legal, Ethics |

## **Portfolio Evidence Table of Contents**

|  |  |  |
| --- | --- | --- |
| **Evidence #** | **Title / Description** | **Mapped Core KSBs** |
| [1](#item_1) |  |  |
| [2](#_Item_2) |  |  |
| [3](#item_3) |  |  |
| [4](#item_4) |  |  |
| [5](#item_5) |  |  |
| [6](#item_6) |  |  |

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| --- | --- |
| Item 1 |  |
| Add Narrative description | |

**<**Add KSB Block/s>

|  |  |
| --- | --- |
| Item 2 | Title |
| Add Narrative description | |

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| Item 3 | Title |
| Add Narrative description | |

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| Item 4 | Title |
| Add Narrative description | |

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| Item 5 | Title |
| Add Narrative description | |

**<**Add KSB Block/s>

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| Item 6 | Title |
| Add Narrative description | |

**<**Add KSB Block/s>

**KSB Professional Discussion underpinned by a portfolio Mapping Block – Appendix A**

KSB mapping blocks are tools used to align portfolio evidence with the specific Knowledge, Skills, and Behaviours (KSBs) required by the assessment criteria. These blocks play a crucial role in ensuring that each item in the portfolio clearly demonstrates how it meets the relevant standards.

Below are examples of Knowledge, Skills, and Behaviours (KSB) mapping blocks. These will be used in the portfolio assessment template to show how each piece of evidence supports the associated KSBs within each theme. The following examples illustrate how to use these blocks effectively throughout the assessment process.

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| **Theme A: Underlying Principles 1** | | | | | |
| Core - The Organisational  Context **(Theme A)** | | Reviews the roles, functions and activities relevant to technology solutions within an organisation. (K7) | | | |
| **K7** |  | |  |  |  |

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| **Theme A: Underlying Principles 2** | | | | | | | | | |
| Core - Leading and Working Together **(Theme A)** | | | Explains how teams work effectively to produce a digital and technology solution applying relevant organisational theories using up to date awareness of trends and innovations. (K8, S7, B4, B6, B7)     Describes the concepts and principles of leadership and management as they relate to their role and how they apply them. (K9, K10, S8) | | | | | | |
| **K7** | **K8** | **K9** | | **K10** | **S7** | **S8** | **B4** | **B6** | **B7** |

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| **Theme A: Underlying Principles 3** | | | | | |
| Network Engineer - Underlying Principles **(Theme A)** | | Describe key factors that affect network performance and provide some mitigation strategies to increase quality of service. (K64/NEK4) | | | |
| Explains the principles of failure modes in protocols and how they could be addressed. (K65/NEK5) | | | |
| **K64** | **K65** | |  |  |  |

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| **Theme B: Technical Solutions 1** | | | | | |
| Core – Technical  Concepts **(Theme B)** | | Critically evaluates the nature and scope of common vulnerabilities in digital and technology solutions (K11) | | | |
| **Explains core technical concepts for digital and technology solutions**: The approaches and techniques used throughout the digital and technology solution lifecycle and their applicability to an organisation’s standards and pre-existing tools. (K6) | | | |
| **Explains core technical concepts for digital and technology solutions:** Data gathering, data management, and data analysis. (K12, K14) | | | |
| **Explains core technical concepts for digital and technology solutions:** Computer networking concepts. (K16) | | | |
| **K6** | **K11** | | **K12** | **K14** | **K16** |

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| **Theme B: Technical Solutions 2** | | | | | | |
| Core - Applied Technical Solutions  **(Theme B)** | | **Demonstrates the use of core technical concepts for digital and technology solutions** Initiate, design, code, test and debug a software component for a digital and technology solution. (S4) | | | | |
| **Demonstrates the use of core technical concepts for digital and technology solutions** Security and resilience techniques. (S9) | | | | |
| **Demonstrates the use of core technical concepts for digital and technology solutions** Initiates, designs, implements and debugs a data product for a digital and technology solution. (S10) | | | | |
| **Demonstrates the use of core technical concepts for digital and technology solutions** Plans, designs and manages simple computer networks. (S12) | | | | |
| Applies the principles of data analysis for digital and technology solutions.  (K13, S11) | | | | |
| **K13** | **S4** | | **S9** | **S10** | **S11** | **S12** |

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| **Theme B: Technical Solutions 3** | | | | | | | |
| Network Engineering - Technical Solutions  **(Theme B)** | | Explains the benefits and risks of cloud computing and the common integration deployments (private, public, hybrid) including the benefits and risks of virtualisation as a concept, key features of virtualisation and current cloud platforms available. (K63) | | | **For Distinction:** Critically provide a comparative analysis between different cloud models stating their risks, strengths and weaknesses, considering their organisational needs. (K63) | | |
| Explains Software Defined Networking and Network Function Virtualisation Core Principles. (K67) | | |  | | |
| Describe the key elements of mobile networks including some specific key functions and communication concepts. (K68) | | |  | | |
| Explains how they undertake network performance monitoring, including capacity management and auditing of IP addressing. (S58) | | | **For Distinction:** Critically evaluates how they undertake network performance monitoring, including capacity management and auditing of IP addressing. (S58) | | |
| Explains how they secure network systems, apply security policies, access and firewalls. (S61) | | |  | | |
| **K63** | **K67** | | **K68** | **S58** | | **S61** |  |

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| **Theme C: Innovation & Response** | | | | | | | |
| Network Engineer -  Innovation and Response **(Theme C)** | | Explain approaches for investigating, troubleshooting and resolving network faults. (S59) | | | **For Distinction:** Compare and contrast approaches for investigating, troubleshooting and resolving network faults. (S59) | | |
| **S59** |  | |  |  | |  |  |

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| **Theme D: Legal, Ethics & Landscape 1** | | | | | | | | |
| Core - Social Infrastructure  - Legal, Ethical and Sustainability **(Theme D)** | | Applies relevant legal, ethical, social and professional standards to digital and technology solutions considering both technical and non-technical audiences and in line with organisational guidelines. (K19, S15, B1, B2, B5) | | | | **For Distinction:** Justifies the application of relevant legal, ethical, social and professional standards to digital and technology solutions. (K19, S15) | | |
| Explains sustainable development approaches within digital technologies as they relate to their role including diversity and inclusion. (K20, B8) | | | | **For Distinction** Evaluates the impact of sustainable digital technology practices of their organisation. (K20) | | |
| **K19** | **K20** | | **S15** | **B1** | **B2** | | **B8** |  |

**Apprenticeship Statement of Authenticity**

This statement confirms that the work submitted as part of the apprenticeship programme is the original work of the apprentice named below. It has been completed in accordance with the guidelines and expectations of the programme and reflects the apprentice’s own efforts and understanding.

|  |  |
| --- | --- |
| **Statement by Apprentice** | |
| I, the undersigned, declare that the work submitted is my own and has not been copied from any other source, except where due acknowledgment is made. | |
| Apprentice Name: |  |
| Signature: |  |
| Date: |  |

|  |  |
| --- | --- |
| **Statement by Employer** | |
| I confirm that the apprentice named above has completed the work independently and that it reflects their own learning and development. I have reviewed the submission and support its authenticity. | |
| Manager/mentor Name: |  |
| Company Name: |  |
| Position/Title: |  |
| Signature: |  |
| Date: |  |