## Cyber Security Technologist Route Template 4 – The Employer Reference

**Apprentice details**

|  |  |
| --- | --- |
| Name |  |
| ULN number |  |

**Training provider details**

|  |  |
| --- | --- |
| Contact name |  |
| Company name |  |
| Company address |  |

**Employer details**

|  |  |
| --- | --- |
| Name |  |
| Company address |  |
| Signed by:Print name:Job title:Date:  |

**Section 1**

**Technical competence evaluation**

Please provide your evaluation of the technical competence of the apprentice using the tables below. Under each heading is a list of activities that a competent apprentice should be able to demonstrate.

Please indicate your assessment of each competence using the checkboxes, and then provide an overall evaluation of the apprentice’s technical competence

**Competence – Threats, Hazards, Risks and Intelligence**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Discover (through a mix of research and practical exploration) vulnerabilities in a system? | [ ]  | [ ]  | [ ]  |
| Analyse and evaluate security threats and hazards to a system or service or processes. Be aware of and demonstrate use of relevant external sources of threat intelligence or advice (e.g. CERT UK). Combine different sources to create an enriched view? | [ ]  | [ ]  | [ ]  |
| Research and investigate some common attack techniques and recommend how to defend against them. Be aware of and demonstrate use of relevant external sources of vulnerabilities (e.g. OWASP)? | [ ]  | [ ]  | [ ]  |
| Undertake a security risk assessment for a simple system without direct supervision and propose basic remediation advice in the context of the employer? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in threats, hazards, risks and intelligence?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Developing and Using a Security Case**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Source and analyse a security case (e.g. a Common Criteria Protection Profile for a security component) and describe what threats, vulnerability or risks are mitigated and identify any residual areas of concern? | [ ]  | [ ]  | [ ]  |
| Develop a simple security case without supervision. (A security case should describe the security objectives, threats, and for every identified attack technique identify mitigation or security controls that could include technical, implementation, policy or process)? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in developing and using a security case?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Organisational Context**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Identify and follow organisational policies and standards for information and cyber security? | [ ]  | [ ]  | [ ]  |
| Operate according to service level agreements or employer defined performance targets? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in organisational context?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Future Trends**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Investigate different views of the future (using more than one external source) and trends in a relevant technology area and describe what this might mean for your business, with supporting reasoning? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in future trends?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Design Build and Test a Network (“Build a Network”)**

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| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Design, build, test and troubleshoot a network incorporating more than one subnet with static and dynamic routes, that includes servers, hubs, switches, routers and user devices to a given design requirement without supervision? | [ ]  | [ ]  | [ ]  |
| Provide evidence that the system meets the design requirement? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in design build and test a network (“build a network”)?**

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| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Analysing a Security Case (“Make the Security Case”)**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Analyse security requirements (functional and non-functional security requirements that may be presented in a security case) against other design requirements (e.g. usability, cost, size, weight, power, heat, supportability etc.), given for a given system or product? | [ ]  | [ ]  | [ ]  |
| Identify conflicting requirements and propose, with reasoning, resolution through appropriate trade-offs? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in analysing a security case (“make the security case”)?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Competence – Structured and Reasoned Implementation of Security in a Network (“Build a Secure Network”)**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice competent to:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| • Design and build a simple system in accordance with a simple security case. Provide evidence that the system has properly implemented the security controls required by the security case. The system could be either at the enterprise, network or application layer? | [ ]  | [ ]  | [ ]  |
| Select and configure relevant types of common security hardware and software components to implement a given security policy? | [ ]  | [ ]  | [ ]  |
| Design a system employing a crypto to meet defined security objectives. Develop and implement a key management plan for the given scenario / system? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s competence in structured and reasoned implementation of security in a network (“build a secure network”)?**

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| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of competence in this area.Please continue on a separate sheet if required. |

**Section 2**

**Behaviours, business skills and level of responsibility evaluation**

Please provide an evaluation as to the level of responsibility of the apprentice you are providing a reference for using the tables below. Under each heading is a list of proficiencies that a competent apprentice should display. Please indicate your assessment of the apprentice’s proficiency using the checkboxes, and then provide an overall evaluation of the apprentice’s proficiency.

**Proficiency – Business Skills**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice proficient at:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Demonstrating an analytical and systematic approach to issue resolution? | [ ]  | [ ]  | [ ]  |
| Demonstrating effective communication skills? | [ ]  | [ ]  | [ ]  |
| Contributing fully to the work of teams? | [ ]  | [ ]  | [ ]  |
| Appreciating the wider business context, and how their role relates to other roles and to the business of the employer or client? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s business skills?**

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| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of proficiency in this area.Please continue on a separate sheet if required. |

**Proficiency – Complexity**

|  |  |  |  |
| --- | --- | --- | --- |
| **In your view, is the apprentice proficient at:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Performing a range of work, sometimes complex and non-routine, in a variety of environments? | [ ]  | [ ]  | [ ]  |
| Applying methodical approaches to issue definition and resolution? | [ ]  | [ ]  | [ ]  |
| Undertaking all work in accordance with agreed safety, technical and quality standards, using appropriate methods and tools. | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s proficiency at handing complexity?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of proficiency in this area.Please continue on a separate sheet if required. |

**Proficiency – Autonomy**

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| --- | --- | --- | --- |
| **In your view, is the apprentice proficient at:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Determining when issues should be escalated to a higher level? | [ ]  | [ ]  | [ ]  |
| Working under general direction? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s proficiency to work autonomously?**

|  |
| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of proficiency in this area.Please continue on a separate sheet if required. |

**Proficiency – Influence**

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| --- | --- | --- | --- |
| **In your view, is the apprentice proficient at:** | **The apprentice has MET this requirement** | **The apprentice has EXCEEDED this requirement** | **The apprentice has NOT MET this requirement** |
| Having working level contact with customers, suppliers and partners? | [ ]  | [ ]  | [ ]  |

* **Met** – you have observed this behaviour in the apprentice most of the time.
* **Exceeded** – you have observed this behaviour in the apprentice all of the time.
* **Not Met** – you have not observed this behaviour in the apprentice.

**What is your overall evaluation of the apprentice’s ability to influence?**

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| --- |
| Please give reasons, together with supporting examples, why you think the apprentice has demonstrated this level of proficiency in this area.Please continue on a separate sheet if required. |

**Section 3**

**Professional development**

A number of professional development activities have been identified as part of the SFIA***plus*** framework to help career development. These activities have been associated with the various levels of responsibility, and the activities listed in the table below represent those that are appropriate for an infrastructure technician apprentice.

|  |  |  |
| --- | --- | --- |
| **In your view, is the apprentice undertaking any of the following professional development activities:** | **The apprentice is demonstrably undertaking this activity** | **The apprentice is NOT demonstrably undertaking this activity** |
| Participating in group activities inside or outside the working environment that can assist with the development of interpersonal skills? | [ ]  | [ ]  |
| Undertaking pro bono (unpaid) activities that can help to develop professional skills or offer additional insight into, or understanding of, their working role? | [ ]  | [ ]  |
| Undertaking learning in subjects relevant to, but not directly related to, their role (e.g. foreign language courses, mentoring skills, cultural awareness and diversity training), perhaps through self-study or evening classes? | [ ]  | [ ]  |
| Gaining basic knowledge of the employing organisation, its business, structure, culture, products/services, operations and terminology? | [ ]  | [ ]  |
| Gaining knowledge of IT activities in the employing organisation external to their function? | [ ]  | [ ]  |
| Exploring a topic that is not part of their normal responsibilities, and presenting findings to colleagues and/or management? | [ ]  | [ ]  |
| Attending meetings, seminars and workshops organised by a professional body and reading published material such as journals and web content? | [ ]  | [ ]  |
| Undertaking learning and practice in the techniques of team and collaborative working. Gaining an understanding of the underlying concepts? | [ ]  | [ ]  |
| Undertaking learning and practice in oral and written communications, including report writing and presentations? | [ ]  | [ ]  |

**What is your overall evaluation of the apprentice’s ability to undertake wider professional development?**

|  |
| --- |
| Please continue on a separate sheet if required. |

**Section 4**

**Overall impressions and constructive feedback**

This section is an opportunity for you to provide written feedback outside the rigid competency structure.

It is a free text field to allow you to share general thoughts on the apprentice’s performance in case you were unable to say everything you wanted to say using the structured template.

For example, you may want to highlight some of the areas where you have not been able to give the apprentice the exposure they would have liked.

We would welcome any general constructive development advice you may wish to give.

|  |
| --- |
| Please continue on a separate sheet if required. |