

TC1	<p>Communication: works both independently and as part of a team and following the organisations standards; competently demonstrating an ability to communicate both in writing and orally at all levels, using a range of tools and demonstrating strong interpersonal skills and cultural awareness when dealing with colleagues, customers and clients during all tasks.</p>	<p>The apprentice should be able to use a minimum of 3 tools to communicate</p> <ul style="list-style-type: none"> <li>• Oral</li> <li>• Face-to-face</li> <li>• Remote</li> <li>• Diagrammatic</li> </ul> <p>The apprentice should be able to demonstrate and compile three different forms of written professional correspondence.</p> <p>The apprentice must be able to explain 3 types of communication styles to ensure cultural awareness and appropriateness for customer is taken into account.</p>	<p>Evidence should highlight the apprentices ability to communicate effectively using appropriate means and in a timely manner, ensuring that the tone and language is suitable. We expect this evidence to form part of other competencies.</p>	<p>Copies of emails between the apprentice and clients regarding technical and nontechnical matters.</p> <p>Written professional documentation could include:</p> <ul style="list-style-type: none"> <li>• Fault logs</li> <li>• Updated CV reflecting progress through apprenticeship.</li> <li>• Completion of System wide notifications</li> <li>• Report</li> <li>• Presentations</li> <li>• User guides</li> <li>• Recordings of verbal</li> <li>• conversations</li> </ul> <p>Reflective account can be used for explaining</p>
TC2	<p>IT Security: Demonstrates the necessary skills and behaviours to securely operate across all platforms and areas of responsibilities in line with organisational guidance, legislation</p>	<p>The apprentice must demonstrate how they comply with organisational security processes and how they would recognised and escalate issues.</p> <p>The apprentice must be able to locate and follow policies and legislation.</p>	<p>The evidence generated must be from the apprentice's current place of work and should follow their organisational policies. It is expected that evidence will be linked to other competencies.</p>	<p>Emails</p> <p>Testimony from a responsible person.</p> <p>Reflective account.</p> <p>Employment based reviews</p> <p>Fault logs/CRM record/ database entries</p> <p>Annotated screen shoots of configuring hardware and software required to maintain IT security</p>
TC3	<p>Remote Infrastructure: Effectively</p>	<p>The apprentice must demonstrate how to securely</p>	<p>It is expected that the</p>	<p>Annotated screen prints of</p>

	operates a range of mobile devices and securely add them to a network in accordance with organisations policies and procedures	connect a minimum of two different types of devices (e.g. laptop/mobile) to access the organisation's network services (e.g. email, files, applications)	<p>apprentice demonstrates an understanding of the following:</p> <ul style="list-style-type: none"> <li>• comparisons of hardware</li> <li>• comparisons of different computer systems</li> <li>• the latest hardware and its similarities</li> <li>• how to evaluate hardware readiness and compatibility</li> <li>• how to configure / support devices and device drivers</li> <li>• how to implement access control of local hardware and applications</li> </ul>	<p>installing and configuring devices and drivers.</p> <p>User guides created by the apprentice</p> <p>Client acceptance documentation/fault log entries</p> <p>Reflective accounts</p> <p>Comparison of technical specifications for devices.</p> <p>Presentations</p>
TC4	Data: effectively records, analyses and communicates data at the appropriate level using the organisation's standard tools and processes and to all stakeholders within the responsibility of the position	The apprentice must be able to select and securely use three appropriate tools when working with and analysing data.	Evidence must show that the apprentice can follow documented policies and procedures correctly, record relevant details of IT systems they are working with in appropriate format(s).	<p>Emails of dealing with client issues.</p> <p>Fault logs.</p> <p>Spreadsheets and charts.</p> <p>Packet capture software to analyse data flow.</p> <p>Annotated screen prints of using CLI utilities to interrogate networks eg tracer</p> <p>Reflective accounts justifying the choices made</p>
TC5	Problem solving: applies structured techniques to common and non-routine problems, testing methodologies and	The apprentice must be able to select and use three appropriate tools for testing, troubleshooting and analysing problems.	Evidence of using appropriate tools that are relevant to the	Reflective account of the tools used, reasons for selecting them, annotated screen shots or video of

	troubleshooting and analyses problems by selecting the digital appropriate tools and techniques in line with organisation guidance and to obtain the relevant logistical support as required	<p>The apprentice must be able to demonstrate compliance with organisational guidance.</p> <p>The apprentice should demonstrate processes and practices for obtaining logistical support.</p>	<p>issue(s). Evidence of using the tools correctly to investigate and analyse the issue.</p> <p>Evidence of referral to relevant team members where required.</p>	<p>tools usage, output of monitoring and reporting tools (graphs, charts, tables) with description of the information they provide, likely causes for issues and actions to be taken.</p> <p>Evidence of gaining authority to source equipment/software</p> <p>Evidence of escalating issues.</p> <p>Witness testimonies from supervisor or line manager that discuss a specific situation that required the use of problem solving skills.</p>
TC6	Workflow management: works flexibly and demonstrates the ability to work under pressure to progress allocated tasks in accordance with the organisation's reporting and quality systems	<p>The apprentice must be able to demonstrate the ability to prioritise workflow and manage allocated tasks.</p> <p>The apprentice must be able to record tasks and comply with organisations quality processes.</p>	<p>Evidence must be provided of the apprentice responding to changes and prioritising activities to meet the requirements of the organisation. This should be naturally occurring evidence.</p>	<p>Annotated screen print of calendars before and after changes.</p> <p>Testimony from a responsible person.</p> <p>Fault log/CRM entries</p> <p>effective accounts – with supporting evidence.</p> <p>Client feedback</p>
TC7	Health and Safety: Interprets and follows IT legislation to securely and professional work productively in the work environment	<p>The apprentice must be able to demonstrate their interpretation and secure working practices in accordance with IT legislation.</p> <p>The apprentice must demonstrate an understanding and apply Health &amp; Safety policies to every day work.</p>	<p>Evidence should be provided of the apprentice complying with legislation and the organisations own policies.</p>	<p>Internal recognition of CPD</p> <p>Evidence from other competencies of working in a safe manner.</p> <p>Witness testimonies from supervisor or line manager that discuss a specific situation that required the use of safe working practices.</p>
TC8	Performance: Optimises the performance of hardware, software and Network Systems and services in line with business requirements	<p>The apprentice must be able to demonstrate how to configure a minimum of three pieces of hardware and configure three different types of software in line with business requirements.</p>	<p>It is expected that the apprentice demonstrates the following:</p> <ul style="list-style-type: none"> <li>• comparisons of hardware</li> <li>• hardware</li> <li>• optimising systems</li> </ul>	<p>Annotated screen prints of optimising devices and software.</p> <p>Client acceptance documentation/fault log entries</p> <p>Reflective accounts</p>

			<ul style="list-style-type: none"> <li>evaluating</li> <li>hardware readiness and compatibility</li> <li>configuring devices and device drivers</li> <li>hardware and applications</li> </ul>	<p>Comparison of technical specifications for devices/software.</p> <p>Witness testimonies from supervisor or line manager that discuss a specific situation that required the use of appropriate methodologies to optimise software</p>
TC9	Can explain the correct processes associated with WEEE (the Waste Electrical and Electronic Equipment Directive)	The apprentice must be able to explain how to comply when required with WEEE and the implications of data protection during disposal.	Evidence should be provided of the apprentice's knowledge of WEEE regulations and the Data Protection Act.	<p>Testimony from the responsible person.</p> <p>Emails.</p> <p>Reflective account which supports other evidence</p>

## TK

TKU1	Working knowledge of a range of cabling and connectivity, the various types of antennas and wireless systems and IT test equipment	<ul style="list-style-type: none"> <li>Understand and identify Ethernet, Coaxial, Fibre optic and RJ 45 connector</li> <li>Understand and identify a range of Cat 1-6 cables</li> <li>Understand and identify Directional, Omni directional, point to point, point to multi point, mobile antennas</li> <li>Understand the types of wireless systems</li> <li>Understand the relevant test equipment associated with each element of the above</li> </ul>	The apprentice should be able to demonstrate a sound understanding of both wired and wireless standards and protocols and how they are utilised within networks.	<p>Reflective accounts that clearly defines the transmission media, standards and protocols that have applied when implementing networks.</p> <p>Photographic or video evidence of terminating and installing media.</p> <p>Vender qualifications such CCNA or CompTIA Network +</p>
TKU2	Understands maintenance processes and applies them in working practices	<ul style="list-style-type: none"> <li>Understands the requirements for managing maintenance work order records</li> <li>Understands how to respond to real time system down times for maintenance order requests.</li> <li>Understand how to undertake short notice tasking</li> </ul>	The apprentice should be able to demonstrate a sound understanding of maintenance processes and applies them in	<p>Copies of job sheets / CRM entries dealing with maintenance.</p> <p>Reflective accounts of undertaking maintenance tasks, justifying the methods used.</p>

		<p>requests</p> <ul style="list-style-type: none"> <li>• Understand how to record all maintenance tasking through a job card system of control</li> <li>• Understand maintenance tools</li> <li>• Understand, configure and manage updates</li> <li>• Understand how to manage local storage</li> <li>• Understand how to monitor system performance</li> </ul>	working practices.	<p>Feedback from clients.</p> <p>Witness testimonies from supervisor or line manager that discuss a specific situation that required the use of appropriate methodologies to maintain systems.</p>
TKU3	Understands and applies the basic elements and architecture of computer systems	<p>Understand the basic architecture of “computer systems”</p> <ul style="list-style-type: none"> <li>• Understand business IT architecture, taking into account the full range of devices: OS, applications, databases, servers, networking, security and services</li> </ul>	The apprentice should be able to demonstrate a sound understanding of the architecture required to implement IT systems to meet a business needs.	<p>Reflective accounts containing justification of choices regarding the selection of hardware and software required to meet the needs of the organisation and clients.</p>
TKU4	Understands where to apply the relevant numerical skills e.g Binary	<p>Understanding of Internet Protocol addresses and how they work</p> <ul style="list-style-type: none"> <li>• Understand how computers see IP addresses</li> </ul> <p>Understand and be able to use binary arithmetic and create large numbers from groups of binary units or bits</p>	The apprentice should be able to demonstrate a sound understanding of the IP Addresses and how they work.	<p>Worked examples of converting a dotted decimal representation in to binary notations.</p> <p>Worked examples of converting a binary notation into a decimal representation.</p>
TKU5	Understands the relevant networking skills necessary to maintain a secure network	<ul style="list-style-type: none"> <li>• Understanding of Platforms and Data Communications</li> <li>• Understanding of the requirements to configure IP settings</li> <li>• Understanding how to deploy and configure DNS service</li> <li>• Understanding of how to create and configure virtual networks</li> <li>• Understanding how to configure/ support networking settings and connectivity</li> <li>• Understanding how to configure/ support and maintain network security</li> <li>• Understanding how to configure/ support remote management systems</li> <li>• Understand why and how to install domain controllers</li> </ul>	The apprentice should be able to demonstrate a sound understanding of the network services and system configuration required to maintain a secure network.	<p>Reflective accounts containing justification of the choices made when configuring devices and services.</p> <p>Annotated screen prints of configuring devices and services.</p> <p>Witness testimony from manager or supervisor that is specific to configuring devices and services.</p> <p>Vendor qualifications such as CompTIA Server + or Microsoft MTA Server Administration Fundamentals.</p>

		<ul style="list-style-type: none"> <li>• Understand the need for creating and managing Active</li> <li>• Directory users and computers</li> </ul> <p>Understand how to create and manage Active Directory groups and organisational units (OUs)</p>		
TKU6	Understands the similarities, differences and benefits of the current Operating Systems available	<ul style="list-style-type: none"> <li>• Understanding of different platforms</li> <li>• Understands the process for constructing PCs with applied Software utilised</li> <li>• Understands and is able to apply knowledge to various operating systems with installations required for end to end testing.</li> <li>• Understand native applications and tools <ul style="list-style-type: none"> <li>• Understands security principles associated with differentn platforms and operating systems</li> </ul> </li> </ul>	The apprentice should be able to demonstrate a sound understanding of types of operating systems available and the functionality that they offer.	<p>Reflective accounts containing justification of the choices made when selecting an operating system.</p> <p>Vendor qualifications such as CompTIA Server + or A +.</p>
TKU7	Understands how to operate remotely and how to deploy and securely integrate mobile devices	<ul style="list-style-type: none"> <li>• Undertakes a Data Network Deployed Exercise to implement and deploy remote and mobile communications technology</li> <li>• Understands Secure Communications Interfaces for mobile connectivity</li> <li>• Understand mobility</li> <li>• Understand remote management and assistance</li> <li>• Understands security in mobile devices</li> <li>• Understanding of configuration for: <ul style="list-style-type: none"> <li>○ support remote access/ connections</li> <li>○ support mobility options</li> <li>○ support security for mobile devices</li> </ul> </li> </ul>	The apprentice should be able to demonstrate a sound understanding of remote tools and how they are used to manage systems and support end users.	<p>Reflective accounts of remotely managing systems and supporting end users.</p> <p>Witness testimony from manager or supervisor that is specific to remotely managing systems and supporting end users.</p> <p>Annotated screen prints of remotely managing systems.</p> <p>Annotated screen prints of configuring systems remotely to meet organisational and user needs.</p>
TKU8	Understanding and working knowledge of Cloud and Cloud Services	<ul style="list-style-type: none"> <li>○ Understand how to create and configure virtual machines</li> <li>• Understand hosted applications, such as: email, server, storage, desktops</li> <li>• Understand and explain provision tenants</li> <li>• Understand how to configure secure passwords and management of passwords</li> <li>• Understand how to manage user and security groups and/or cloud identities and their importance</li> <li>• Understand how to configure DNS records for services</li> <li>• Understand how to enable clien connectivity to</li> </ul>	The apprentice should be able to demonstrate a sound understanding of the technologies involved in enabling the provision of Cloud based services.	<p>Annotated screen prints of configuring systems for the provisioning and accessing cloud based services.</p> <p>Reflective accounts that describe configuring systems for the provisioning and accessing cloud based services. Justifying the choices made.</p>

Cloud Service			
TKU9	Understands the importance of disaster recovery and how a disaster recovery plan works and their role within it	<ul style="list-style-type: none"> <li>Understand backup and recovery methods</li> <li>Understand what a Disaster recovery plan is and where it can be found</li> <li>Understand their role within the disaster recovery plan</li> <li>Understand what should be in a recovery plan</li> <li>Understand how and when it should be practiced or tested</li> <li>Understand how to implement and configure system recovery</li> <li>Understand how to configure file recovery</li> </ul>	<p>The apprentice should be able to demonstrate a sound understanding of disaster recovery and how a disaster recovery plan works and their role within it</p> <p>Witness testimony from manager or supervisor that is specific to disaster recovery.</p> <p>Reflective account including details of where information regarding where the organisations' disaster recovery plan can be found and their role within the plan.</p> <p>Annotated screen prints of configuring systems to comply with the disaster recovery strategy</p>
TKU10	Understands the similarities and differences between a range of coding and logic	<ul style="list-style-type: none"> <li>Understand working/scripting at command line: particularly when supporting any server work</li> <li>Understand and recognise different coding and language</li> <li>Understand application life cycle management</li> <li>Understand algorithms and data structures</li> <li>Understand web page development</li> </ul>	<p>The apprentice should be able to demonstrate a sound understanding of using scripts to automate processes on a server and how web pages are developed.</p> <p>Reflective account containing justification of the choices made.</p>
TKU11	Understands and complies with business processes	<ul style="list-style-type: none"> <li>Understanding of Security Operating Procedures</li> <li>Understanding and ability to work confidentiality</li> <li>Understanding of how to work within the Company Operating Procedures</li> <li>Understanding and ability to comply with Data Protection</li> </ul>	<p>The apprentice should be able to demonstrate a sound understanding of how to comply with business processes.</p> <p>Reflective account that details how the apprentice has complied with business processes</p> <p>Witness testimony from manager or supervisor that is details how the apprentice has complied with business processes.</p>
TKU12	Working knowledge of business IT skills relevant to the organisation	<ul style="list-style-type: none"> <li>Understanding of company IT requirements</li> <li>Understanding of company IT systems and platforms</li> <li>Understanding of company IT business required skills</li> <li>Understand software life cycles Understanding of desktop applications, messaging systems, document management</li> </ul>	<p>The apprentice should be able to demonstrate an understanding of business IT skills relevant to the organisation.</p> <p>Reflective account that covers the skills that are relevant to the apprentices' organisation.</p>

## USAB

USAB1	Logical and creative thinking skills	Logical thinking:	The apprentice must demonstrate the	Reflective accounts.
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		<ul style="list-style-type: none"> <li>• Understands initial premise(s) and preconditions</li> <li>• Recognises the conclusion to be reached</li> <li>• Proceeds by rational steps</li> <li>• Evaluates information, judging its relevance and value</li> <li>• Supports conclusions, using reasoned arguments and evidence</li> </ul> <p>Creative thinking:</p> <ul style="list-style-type: none"> <li>• Explores ideas and possibilities</li> <li>• Makes connections between different aspects</li> <li>• Adapts ideas and approaches as conditions or circumstances change</li> </ul>	<p>ability to apply logical and creative thinking skills.</p>	<p>The network planning documentation.</p> <p>Emails and correspondence to/from clients and managers.</p> <p>Audit documentation and subsequent reports.</p> <p>Minutes from team meeting.</p> <p>Performance reviews.</p>
USAB2	Analytical and problem solving skills	<p>Problem-solving:</p> <ul style="list-style-type: none"> <li>• Analyses situations</li> <li>• Defines goals</li> <li>• Develops solutions</li> <li>• Prioritises actions</li> <li>• Deals with unexpected occurrences</li> </ul>	<p>The apprentice must demonstrate the ability to analyse information, drawing conclusions and implementing solutions.</p>	<p>Reflective accounts of under analysing issues and resolving them.</p> <p>Fault logs that include details of the actions undertaken.</p> <p>Audit documentation and subsequent reports.</p> <p>Minutes from team meeting.</p> <p>Feedback from clients and managers.</p>
USAB3	Ability to work independently and to take responsibility	<p>Work independently and to take responsibility</p> <ul style="list-style-type: none"> <li>• Comply with SLAs</li> <li>• Prioritises actions</li> <li>• Manage time effectively</li> <li>• Escalating issues</li> <li>• Reviewing processes employed, identifying improvements</li> </ul>	<p>The apprentice must demonstrate the ability to work independently and to take responsibility for their actions.</p>	<p>Reflective accounts.</p> <p>Emails and correspondence to/from clients and managers.</p> <p>Minutes from team meeting.</p> <p>Performance reviews.</p>

				Witness testimonies from supervisor or line manager.
USAB4	Can use own initiative	<p>Use own initiative</p> <ul style="list-style-type: none"> <li>• Prioritises actions</li> <li>• Setting long term and short term goals</li> <li>• Reviewing processes employed, identifying improvements</li> <li>• Selecting appropriate tools and techniques to achieve the required outcome.</li> </ul>	The apprentice must demonstrate the ability to use their own initiative in a work based setting.	<p>Reflective accounts.</p> <p>Performance reviews.</p> <p>Witness testimonies from supervisor or line manager.</p>
USAB5	A thorough and organised approach			
USAB6	Ability to work with a range of internal and external people	<p>Managing relationships:</p> <ul style="list-style-type: none"> <li>• Understands the value and importance of good relationships</li> <li>• Influences others by listening to and incorporating their ideas and views</li> <li>• Acknowledges other people's accomplishments and strengths</li> <li>• Manages conflict constructively</li> <li>• Promotes teamwork by encouraging others to participate</li> </ul> <p>Customer/client relationships:</p> <ul style="list-style-type: none"> <li>• Understands their requirements, including constraints and limiting factors</li> <li>• Sets reasonable expectations</li> <li>• Involves them in decisions and actions</li> <li>• Interacts positively with them</li> <li>• Provides a complete answer in response to queries ('transparency', 'full disclosure')</li> </ul> <p>Stakeholders:</p> <ul style="list-style-type: none"> <li>• Understands who they are and what their 'stake' is</li> <li>• Prioritises stakeholders in terms of their</li> </ul>	<p>The apprentice should be able to describe the factors that should be considered when work with a range of internal and external people. Including managing customer/client relationships and identifying stakeholders.</p> <p>Evidence is required of working in manner to comply organisational policies and procedures.</p>	<p>Reflective accounts of working with a range of internal and external people.</p> <p>Emails to/from clients and managers</p> <p>Performance reviews.</p> <p>Witness testimonies from supervisor or line manager.</p>

		<p>importance, power to affect the task and interest in it</p> <ul style="list-style-type: none"> <li>• Uses stakeholders' views to shape projects early on</li> <li>• Gains support from stakeholders, e.g. to win resources</li> </ul> <p>Agrees objectives</p>		
USAB7	Ability to communicate effectively in a variety of situations	<p>Intention/purpose:</p> <ul style="list-style-type: none"> <li>• Understands the purpose of communicating in a particular situation or circumstance (e.g. inform, instruct, suggest, discuss, negotiate etc.)</li> <li>• Checks that the person/people with whom one is communicating also understand the purpose</li> <li>• Is sensitive to the dynamics of the situation</li> <li>• Is aware of anything that might disrupt the effectiveness of the communication (e.g. status, past history)</li> </ul> <p>a. Method:</p> <ul style="list-style-type: none"> <li>• Chooses a good, appropriate method for the situation</li> <li>• Aware of the limitations of the chosen method, and the possible risks of miscommunication (e.g. ambiguity)</li> <li>• Takes account of the affective dimensions of the method (e.g. body language, tone of voice, eye contact, facial expression etc.)</li> </ul> <p>b. Execution:</p> <ul style="list-style-type: none"> <li>• Expresses self clearly and succinctly, but not over-simplifying</li> <li>• Checks that the other person/people understand what is being expressed</li> <li>• Takes account of the potential barriers to understanding (e.g. filtering, selective perception, information overload)</li> <li>• Modifies the purpose and methods of communication during a situation in</li> </ul>	<p>The apprentice should be able to describe the factors that should be considered when communicating with a range of internal and external people.</p> <p>The apprentice should be able to select an appropriate method to effectively communicate with a range of internal and external people.</p>	<p>Reflective accounts of communicating with a range of internal and external people.</p> <p>Emails to/from clients and managers</p> <p>Witness testimonies from supervisor or line manager.</p>

response to cues from the other person/people

USAB8	Maintain productive, professional and secure working environment	<p>Knows what skills, knowledge and behaviours are needed to do the job well</p> <p>Are aware of their own strengths in the job role, and any areas for improvement</p> <p>Appreciate who else is important, for them to do their job and fulfil the role effectively (e.g. colleagues, managers, other stakeholders)</p> <p>Are aware of potential risks in the job role (e.g. security, privacy, regulatory)</p> <p>Use personal attributes effectively in the role, e.g. entrepreneurship</p> <p>Understand how the job fits into the organisation as a whole</p> <p>Understands the goals, vision and values of the organisation</p> <p>Aware of the commercial objectives of the tasks/projects they are working on</p> <p>Understands the importance of meeting or exceeding customers' requirements and expectations</p> <p>Is in tune with the organisation's culture</p> <p>Aware of the position and contribution of the organisation in the economy</p> <p>Understands the key external factors that shape the way the organisation function, e.g. regulation</p> <p>Knows how the organisation can gain advantage</p>	<p>The apprentice should be aware of the factors that impact on maintaining a productive, professional and secure working environment.</p> <p>They must be able to show they can work safely, following relevant HSE legislation, security and safety policies and procedures.</p>	<p>Reflective accounts of how the apprentice maintained a productive, professional and secure working environment.</p> <p>Witness testimonies from supervisor or line manager.</p>
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in the industry, e.g. through innovation,  
technology