

# **BCS Digital Industries Apprenticeship Infrastructure Technician Projects Overview**

**Version 1.0  
August 2017**

## Change History

Any changes made to the project shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

Version Number and Date	Changes Made
V1.0 August 2017	Document Created.

## Infrastructure Technician - Project D – Company Office Server

### Project Overview and Objectives

You are a newly appointed in-house Infrastructure Technician, with Acme Creative, your role supports critical IT functions within the business. Acme Creative, operates marketing campaigns for several well-known brands as well as providing training courses to local businesses and the public. They are expanding their portfolio of services and have recently been awarded several new contracts. The existing office server is aging and the business has determined that it will prove to be a constraint on how it can meet its obligations.

**You are required to design, configure, test and install a new office server that will meet your organisations requirements and support the growing business needs of the company. You will need to:**

1. **Review all the key information and specify the requirements for a new office server.**
2. **Install and configure a server and two clients, based on your specification.**
3. **Test your install.**
4. **Implementation, describe your role out plan.**

### Project Outputs and Deliverables

Once completed, to demonstrate completion of the tasks you will be asked to provide a series of outputs, that should be submitted together with the synoptic project declaration.

Deliverable	Output	Evidence
Design	<p>Review all the enclosed documentation and propose an updated design for Acme Creative. This can be submitted as a word or PDF document. Include in your design:</p> <ul style="list-style-type: none"> <li>• A list of assumptions you have made.</li> <li>• A risk register detailing risks to the project rollout and to computer systems future resilience. Also include, mitigations to these risks.</li> <li>• Determine the procedure for building the office server.</li> </ul>	Word or PDF Document

<b>Install / Configure</b>	<p>Install and configure a server to simulate your specification and provide evidence to demonstrate how the network application and operating system has been configured.</p> <ul style="list-style-type: none"> <li>• Keep a record of key configuration tasks document and record relevant actions when configuring the server be it manual or automated.</li> <li>• Where the system install or configuration is automated provide the system scripts.</li> </ul>	Screenshots, Photo or Video
<b>Test</b>	<p>Either using the test template provided or using your own, design a set of use cases and related tests to make sure the server works to the specified level.</p> <ul style="list-style-type: none"> <li>• Prepare a test plan.</li> <li>• Include a description of the test.</li> <li>• Include the intended purpose of the test.</li> <li>• Your expected outcome of the test and the actual results.</li> </ul>	Use test template or similar Word / Excel / PDF
<b>Implement</b>	<p>Write a document which describes a roll out plan for the new server so that any impact to the business is minimised, include in your plan:</p> <ul style="list-style-type: none"> <li>• Risks – including delays to the project, impact to the business during or after the project is completed.</li> <li>• Issues – give an explanation of the issues that could or will be encountered / when would be the best time to implement.</li> </ul>	Word or PDF Document

## Project Information and Equipment

To complete this project, you will need to review all the information specified below, this will enable you to deliver the key outputs and deliverables for this project detailed in the table above:

- Background information;
- Business requirements.

In addition, you will be provided with access to a virtual platform or alternatively if a virtual platform is not available, your training provider and or employer will provide you with all resources required to complete your project including:

- patch leads;
- 1 x network switch;
- small office server (or PC to simulate server);
- 2 x laptop/PC to act as office clients;
- internet access.

## Infrastructure Technician – Project G – PC Installation and Configuration

### Project Overview and Objectives

You are a newly appointed in-house Infrastructure Technician; your role supports critical IT functions within the business. It is expanding its portfolio of services and have recently been awarded several new contracts. The existing desktops are aging and the business has determined that they will prove to be a constraint on how it can meet its obligations.

**You are required to plan, install, configure and test new desktops that will meet your organisations requirements and support the growing business needs of the company. You will need to:**

1. Review all the key information and specify / plan the requirements for the project.
2. Install and configure three desktops, based on your specification
3. Test your install / build.
4. Implementation, describe your role out plan.

### Project Outputs and Deliverables

Once completed, to demonstrate completion of the tasks you will be asked to provide a series of outputs, that should be submitted together with the synoptic project declaration.

Deliverable	Output	Evidence
<b>Specify / Plan</b>	Review all the enclosed documentation and propose an updated design for Acme Creative. This can be submitted as a word or PDF document. Include in your design: <ul style="list-style-type: none"> <li>• A list of assumptions you have made</li> <li>• A risk register detailing risks to the project rollout and to computer systems future resilience. Also include, mitigations to these risks</li> <li>• List of business operating systems, tools and applications and their use</li> <li>• Determine the procedure for building the desktops</li> </ul>	Word or PDF Document

<b>Install / Configure</b>	<p>Install and configure three desktops to simulate your specification and provide evidence to demonstrate how the devices connect to the network and the operating system has been configured.</p> <ul style="list-style-type: none"> <li>• Keep a record of key configuration tasks and relevant actions when configuring the desktops be it manual or automated</li> <li>• Where the system installation or configuration is automated provide the system scripts</li> </ul>	Screenshots, Photo or Video
<b>Test</b>	<p>Either using the test template provided or using your own, design a set of use cases and related tests to make sure the desktops work to the specified level.</p> <ul style="list-style-type: none"> <li>• Prepare a test plan</li> <li>• Include a description of the test</li> <li>• Include the intended purpose of the test</li> <li>• Your expected outcome of the test and the actual results</li> </ul>	Use test template or similar Word / Excel / PDF
<b>Implement</b>	<p>Write a document which describes a roll out plan for the new desktops so that any impact to the business is minimised, include in your plan:</p> <ul style="list-style-type: none"> <li>• Risks – including delays to the project, impact to the business during or after the project is completed</li> <li>• Issues – give an explanation of the issues that could or will be encountered / when would be the best time to implement</li> </ul>	Word or PDF Document

## Project Information and Equipment

To complete this project, you will need to review all the information specified below, this will enable you to deliver the key outputs and deliverables for this project detailed in the table above:

- background information;
- Business requirements;
- A company network schematic diagram.

In addition, you will be provided with access to a virtual platform or alternatively if a virtual platform is not available, your training provider and or employer will provide you with all resources required to complete your project including:

- patch leads;
- 1 x network switch;
- 3 laptop/PCs;
- internet access.