About the Hands-on Labs

This courseware includes a rich set of hands-on lab exercises that are designed to complement the learning material that is presented in the lectures. The lab exercises were designed to run in a student virtual machine (VM) which runs a SharePoint Server 2016 environment. As a student, you may be supplied with a local copy of the student VM by the training company that is hosting the training class you are attending. Alternatively, you can build your own copy of the student VM using the instructions below. Some students may be directed to use a student VM running with a VM hosting provider such as CloudShare.

The Student VM Environment

All lab exercises should be completed in a student VM that has been created by using the **SharePoint Server 2016 Virtual Machine Setup Guide**. The documentation and associated PowerShell scripts for this setup guide are available in their own GitHub repository at https://github.com/CriticalPathTraining/SharePoint2016VmSetupGuide.

The student VM runs a SharePoint Server 2016 environment based on the following software.

- 1. Windows Server 2012 R2 (the server name of the VM is WINGTIPSERVER)
- 2. Active Directory Domain Services (the domain being used is WINGTIP.COM)
- 3. SQL Server 2016
- 4. SharePoint Server 2016 (RTM version)
- 5. Workflow Manager 1.0 CU
- 6. SharePoint Designer 2013 with SP1
- 7. Visual Studio 2015 with the latest Office/SharePoint Development Tools

When building or running the student VM on a local machine, we recommend a minimum of 12GB on the Hyper-V host machine so you can allocate at least 10GB of RAM to the VM. Anything less than this will result in degraded performance. For optimal performance we recommended configuring the VM with at least 4 processors and allocating between 12.5 GB and 16 GB to the student VM. You can also optimize local student VM performance by using solid state drives (SSD) and ensuring the student VM runs on a separate drive from the drive where the Hyper-V host operating system is running.

Logins for the Student VM When Running Locally

When prompted to log into the student VM, you should use the **WINGTIP\Administrator** account unless otherwise specified. The password for the **WINGTIP\Administrator** account and all other accounts used in the lab exercises on the student VM will be **Password1**.

Logins for the Student VM When Running in CloudShare Environment

When prompted to log into the student VM, you should use the **WINGTIP\Administrator** account unless otherwise specified. Note that the web page used in CloudShare to host your student VM will usually log you into the student automatically using the **WINGTIP\Administrator** account without requiring you to enter the password.

If your student VM is running in CloudShare, the password for the **WINGTIP\Administrator** account will be a unique machine-generated password that will be different for each student VM. At various times in the lab exercises, you will be required to enter the password for the **WINGTIP\Administrator** account. You can find the unique password assigned to you on the CloudShare web pages which host your VM. You should write this password down on a piece of paper and leave it on your desk because there are many places in the lab where you will need it.

Copying the Student Lab Files to the Student VM

There is a set of student lab files that must be copied to our student VM before you can begin to work on the student lab exercises. These student files are distributed in a single ZIP archive known as the "student.zip" file which will have a file name that also contains the course code and the version (e.g. CPT_GSA2016_Student_v1.0.zip). Make sure the version number (e.g. v1.0, v1.1, v2.0, etc.) of the student.zip file matches the version number of this manual.