

Microsoft Dynamics 365 for Finance and Operations: DevOps Workshop*PLUS*

Module 1 – Lab 1

Deploy Lab Environment

Student Lab Manual

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Contents

MODULE 1 - LAB 1: DEPLOY LAB ENVIRONMENT	3
INTRODUCTION.....	3
ESTIMATED TIME TO COMPLETE.....	3
ACRONYMS USED IN THIS DOCUMENT.....	3
FIGURE 1: LAB ENVIRONMENT.....	4
ACCOUNTS USED IN THIS LAB.....	4
LAB 1.1: CREATE A NEW OUTLOOK.COM ACCOUNT	5
INTRODUCTION.....	5
ESTIMATED TIME TO COMPLETE.....	5
INSTRUCTIONS	5
LAB 1.2: CREATE DYNAMICS 365 FOR FINANCE AND OPERATIONS TRIAL	10
INTRODUCTION.....	10
ESTIMATED TIME TO COMPLETE.....	10
INSTRUCTIONS	10
LAB 1.3: CREATE MICROSOFT AZURE SUBSCRIPTION USING AZURE PASS	18
INTRODUCTION.....	18
ESTIMATED TIME TO COMPLETE.....	18
INSTRUCTIONS	18
LAB 1.4: CONNECT LIFECYCLE SERVICES TO YOUR MICROSOFT AZURE SUBSCRIPTION	22
INTRODUCTION.....	22
ESTIMATED TIME TO COMPLETE.....	22
LAB 1.4.1: COLLECT MICROSOFT AZURE SUBSCRIPTION DETAILS	22
<i>Instructions</i>	22
LAB 1.4.2: ADD THE DYNAMICS DEPLOYMENT SERVICES ACCOUNT TO YOUR AZURE SUBSCRIPTION	25
<i>Instructions</i>	25
LAB 1.4.3: GRANT DYNAMICS DEPLOYMENT SERVICES ACCOUNT RIGHTS TO THE MICROSOFT AZURE SUBSCRIPTION.....	31
<i>Instructions</i>	31
LAB 1.4.4: COMPLETE LIFECYCLE SERVICES AZURE CONNECTOR SETUP	34
<i>Instructions</i>	34
LAB 1.5: SETUP AND CONNECT AZURE DEVOPS (FORMERLY VSTS) TO LIFECYCLE SERVICES	42
INTRODUCTION.....	42
ESTIMATED TIME TO COMPLETE.....	42
LAB 1.5.1: CREATE A NEW AZURE DEVOPS ACCOUNT AND PROJECT	42

Instructions..... 42

LAB 1.5.2: SETUP LIFECYCLE SERVICES INTEGRATION WITH AZURE DEVOPS 49

Instructions..... 49

LAB 1.6: DEPLOY A DYNAMICS 365 FOR FINANCE AND OPERATIONS BUILD ENVIRONMENT
..... **51**

INTRODUCTION..... 51

ESTIMATED TIME TO COMPLETE..... 51

LAB 1.6.1: DEPLOY FINANCE AND OPERATIONS VM 51

Instructions..... 51

LAB 1.6.2: CONFIGURE AUTO-SHUTDOWN FOR THE LAB VM 63

Instructions..... 63

LAB 1.6.3: TEST AND TROUBLESHOOT REMOTE DESKTOP ACCESS..... 65

Instructions..... 65

Module 1 - Lab 1: Deploy Lab Environment

Introduction

Dynamics 365 for Finance and Operations is part of the Microsoft Azure cloud ecosystem. The first step in learning the DevOps skills necessary to manage Finance and Operations (aka D365FO) is to deploy an environment you can use to perform the labs in this workshop. In this lab, you will create a new Finance and Operations environment from scratch to gain experience with the underlying infrastructure and services required for a successful deployment. The steps to complete this lab and the estimated time for each step are detailed below.

Estimated Time to Complete

The estimated time to complete all steps is **75 minutes**.

- Create a new Outlook.com account (**5 minutes**)
- Create a Dynamics 365 for Finance and Operations trial (**10 minutes**)
- Create Microsoft Azure subscription using Azure Pass (**10 minutes**)
- Connect LCS to your Microsoft Azure subscription (**25 minutes**)
- Setup Azure DevOps (formerly Visual Studio Team Services) and connect it to Lifecycle Services (**15 minutes**)
- Deploy a Dynamics 365 for Finance and Operations Build Environment (**10 minutes followed by up to 6 hours of waiting for the deployment to complete**)

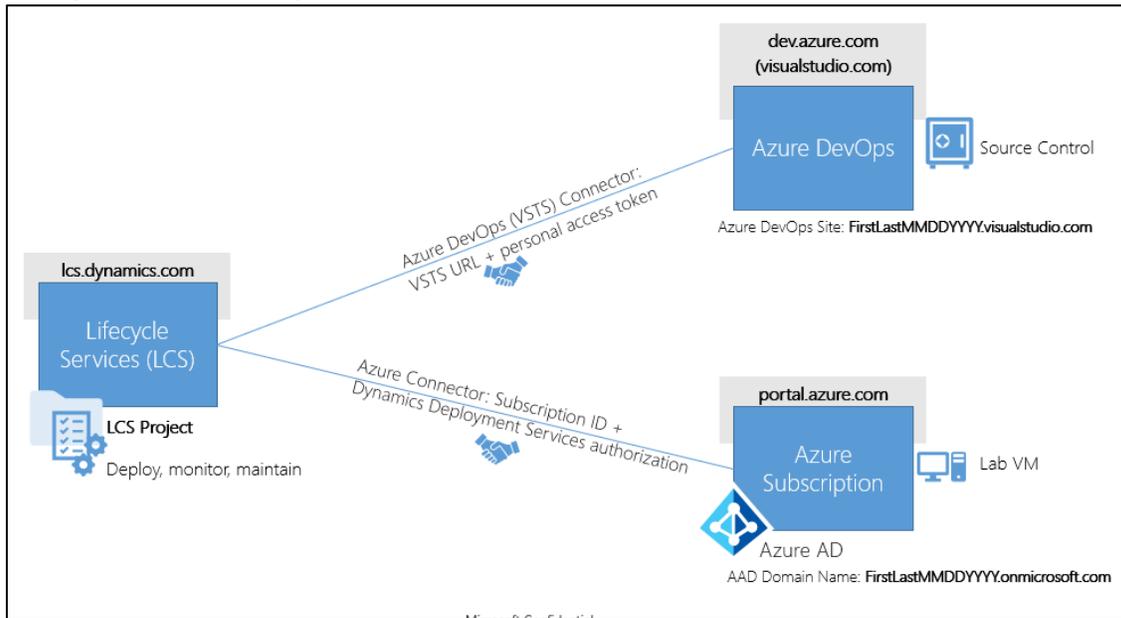
Acronyms used in this document

Acronym	Meaning
LCS	Lifecycle Services
AAD or Azure AD	Azure Active Directory
D365	Dynamics 365
D365FO	Microsoft Dynamics 365 for Finance and Operations

Note: Azure DevOps was formerly known as **Visual Studio Team Service (VSTS)**. Currently, some screens still reflect the old nomenclature. Any reference to VSTS should be treated accordingly.

Figure 1: Lab Environment

The following diagram is an outline of the environment to be configured in this lab and used throughout the workshop.



Accounts used in this lab

Use this table to document the accounts and passwords you will be using for the workshop.

Account Name	Account Name	Account Notes
Outlook.com Account	Format: FirstLastMMDDYYYY@outlook.com Account: _____ Password: _____	Account created in lab 1.1 when requesting a trial Azure subscription Use this account in lab 1.2 to provision a D365 for Finance and Operations trial.
OnMicrosoft.com Account	Format: admin@FirstLastMMDDYYYY.onmicrosoft.com Account: _____ Password: _____	Account is created in lab 1.2 when you request a D365 for Finance and Operations trial. Use this account when you sign into the Azure portal, LCS, Visual Studio and D365 for Finance and Operations .

Lab 1.1: Create a new Outlook.com Account

Introduction

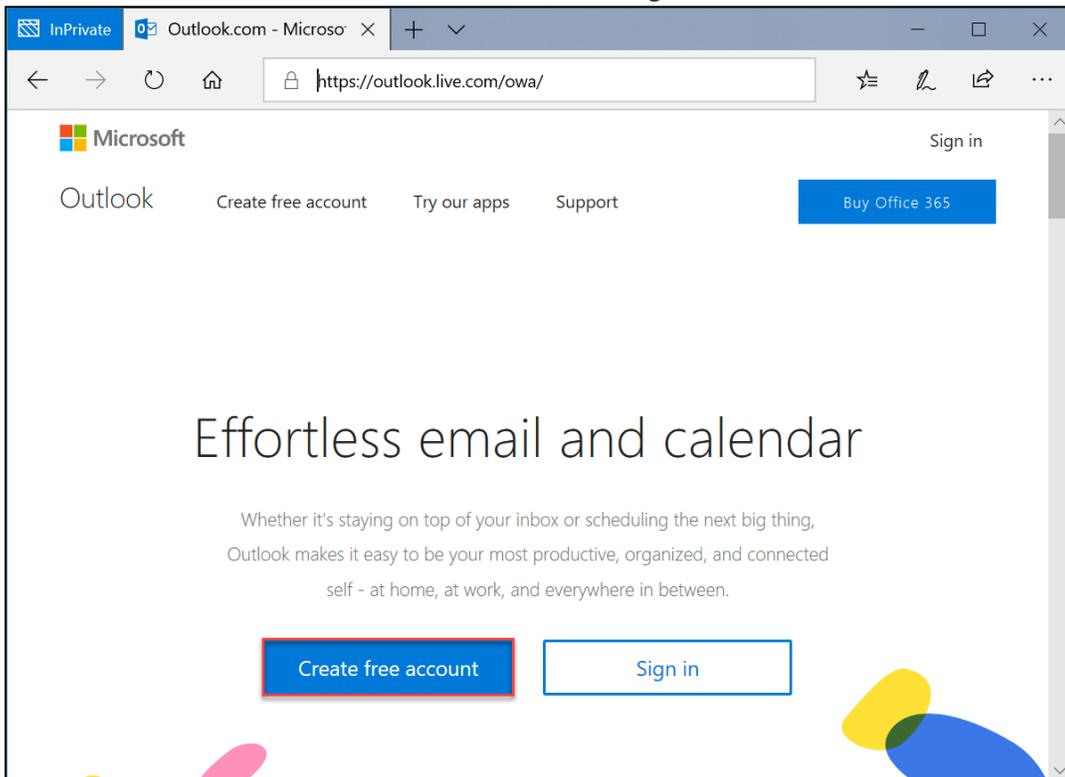
In this lab, you will create a new **Outlook.com account** that is used in the next lab to provision a Finance and Operations trial environment.

Estimated Time to Complete

5 minutes

Instructions

1. **Open a web browser** such as **Google Chrome, Microsoft Edge** or **Internet Explorer** from the Start menu. To prevent an automatic sign-on with your default company/personal credentials, use the **InPrivate/Incognito** mode when opening a new browser session.
2. Navigate to the web address: <https://outlook.live.com>.
3. Click the **Create free account** button to start creating a new outlook.com email address.

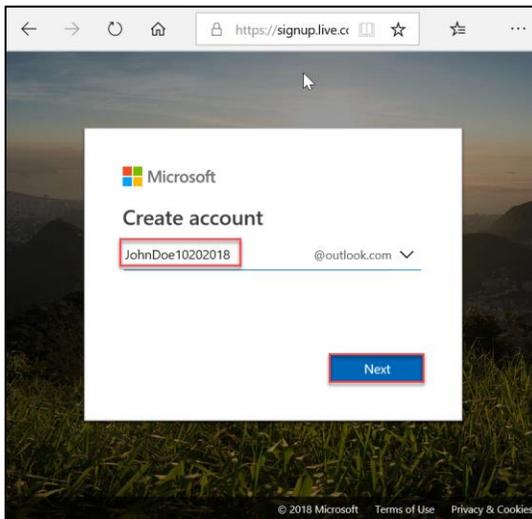


4. On the **create account** page, enter a new email address in following format:
FirstLastMMDDYYYY@outlook.com (or something similar) where

- **First** is your first name
- **Last** is your last name
- **MM** is the current 2-digit month
- **DD** is the current 2-digit day
- **YYYY** is the current 4-digit year

Note: This account will henceforth be referred to as your **Outlook.com account**. Other labs in this document use the **Outlook.com account** created here. If you prefer to use your existing outlook account or name it differently, note it down and substitute it accordingly in the subsequent steps.

5. Click **Next**.



6. In the **Create a password** dialog, enter a suitable **password** and click **Next**.

Microsoft
← JohnDoe10202018@outlook.com

Create a password

Enter the password you would like to use with your account.

Send me promotional emails from Microsoft

Choosing **Next** means that you agree to the [Microsoft Services Agreement](#) and [privacy and cookies statement](#).

Next

© 2018 Microsoft Terms of Use Privacy & Cookies

7. In the next two dialogs, enter the required information such as your **First name**, **Last name**, **Country/region** and **Birthdate** when prompted and click **Next**.

Microsoft
← JohnDoe10202018@outlook.com

Create account

We need just a little more info to set up your account.

John

Doe

Next

Microsoft
← JohnDoe10202018@outlook.com

Add details

We need just a little more info to set up your account.

Country/region
United States

Birthdate
January 1 1980

Next

8. You may be prompted to verify that you are a real person. Enter the required information and click **Next**.

Microsoft

← JohnDoe10202018@outlook.com

Create account

Before proceeding, we need to make sure a real person is creating this account.

New

Audio

Enter the characters you see

PVKMYMQ

Next

9. If you are prompted to **Add security info**, enter a cell phone number in the space provided and click **Send code**. You will receive a text message with a security code at this number. Enter the code in the space provided and click **Next**.

Microsoft

Add security info

When you need to prove you're you or a change is made to your account, we'll use your security info to contact you.

We'll text you the code you'll use to verify your phone number.

Country code

United States (+1)

Phone number

Send code

Back Next

Microsoft

Add security info

When you need to prove you're you or a change is made to your account, we'll use your security info to contact you.

We'll text you the code you'll use to verify your phone number.

Country code

United States (+1)

Phone number

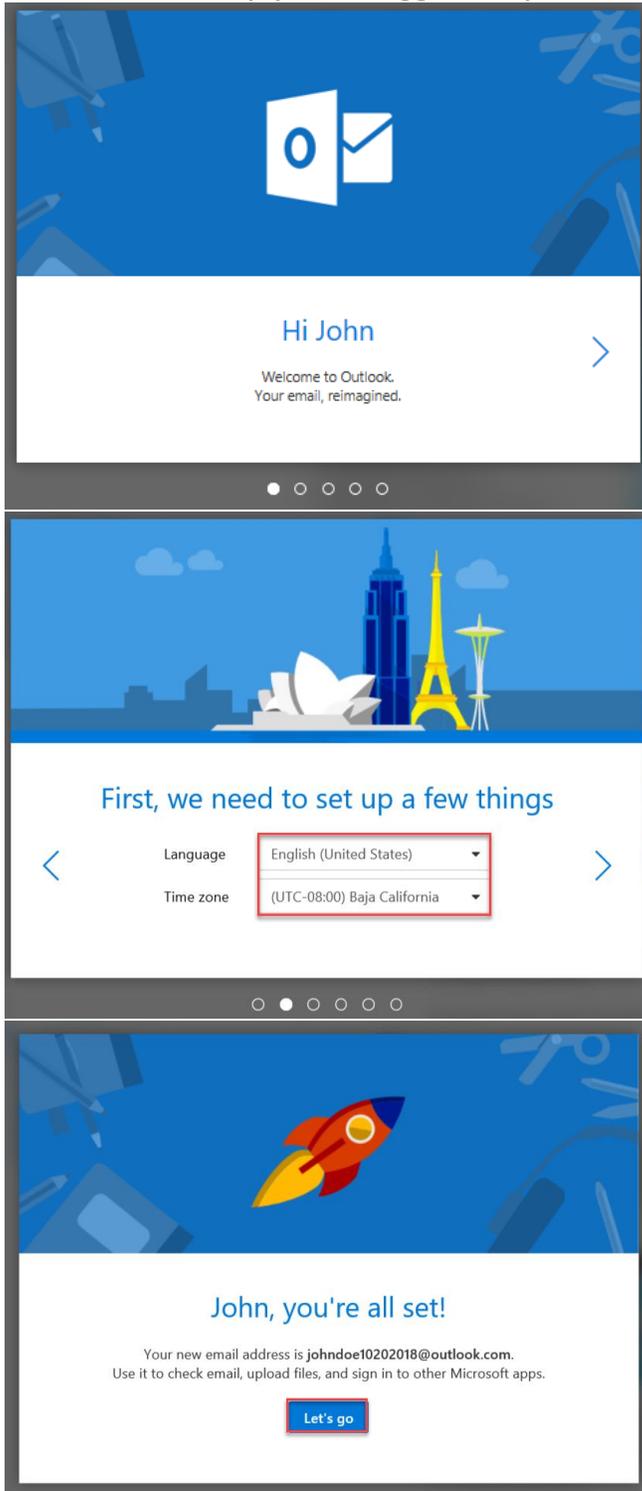
I didn't get a code

Enter the access code

Back Next

IMPORTANT! Make a note of the email address and password. You will need it later!

10. Make suitable selections in the remaining prompts to complete the process. Once the new account is ready, you are logged into your new mailbox on outlook.com.



This concludes the steps for creating the **Outlook.com account**.

Lab 1.2: Create Dynamics 365 for Finance and Operations Trial

Introduction

In this lab, we create a free trial of Dynamics 365 for Finance and Operations. This is required to deploy the lab environment we use for the workshop.

To complete this part of the lab you need the following information:

- **Outlook.com Account:** The username for this account looks like this **FirstLastMMDDYYYY@outlook.com**. (e.g., **JohnDoe10202018@outlook.com**).

Estimated Time to Complete

10 minutes

Instructions

1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to the URL: <http://aka.ms/iwlcsproject>.
3. Enter the relevant details using your **Outlook.com Account** created in **Lab 1.1**.
 - **Country or region:** Select the country associated with your cell phone number. You will receive an activation call at this number.
 - **Business email:** Email created in Lab 1.1. It is in the format **FirstLastMMDDYYYY@outlook.com** (e.g. **JohnDoe10202018@outlook.com**).

Click **Next** to start a 30-day trial.

Dynamics AX 30 days Trial

Welcome, let's get to know you

Want to add this to an existing subscription? [Sign in](#)

United States
This can't be changed after sign-up. Why not?

John Doe

JohnDoe10202018@outlook.com

Contoso

person

Next →

Caution: If you see a page saying **“Sorry, you can’t add that to your current account”**, you may be currently logged into an existing personal/company account. You need to log out or start a new **InPrivate/Incognito** browser session.

4. On the **Create your user ID** page, create a new user account for the organization in the following format: **admin@FirstLastMMDDYYYY.onmicrosoft.com** (like the **Outlook.com account** created in the previous lab). This will be referred to as your **OnMicrosoft.com Account**.
 - **First** is your first name
 - **Last** is your last name
 - **MM** is the current 2-digit month
 - **DD** is the current 2-digit day
 - **YYYY** is the current 4-digit year

Dynamics AX 30 days Trial

Create your user ID

Want to add this to an existing subscription? [Sign in](#)

You need a user ID and password to sign in to your account.

admin @ johndoe10202018 .onmicrosoft.com ?

✓ admin@johndoe10202018.onmicrosoft.com

.....

.....

By clicking **Create my account** you agree to our [terms and conditions](#).

Microsoft may share your contact information with selected partners to provide special offers which could include training, implementation or licensing. You can unsubscribe at any time. To learn more, read the [Privacy Statement](#).

Create my account →

IMPORTANT! Make a note of this account and password. You will need it later!

5. On the **Prove You're Not a Robot** dialog, enter your phone number and choose **Text me** or **Call me** as per your preference.

Dynamics AX 30 days Trial

Prove. You're. Not. A. Robot.

Want to add this to an existing subscription? [Sign in](#)

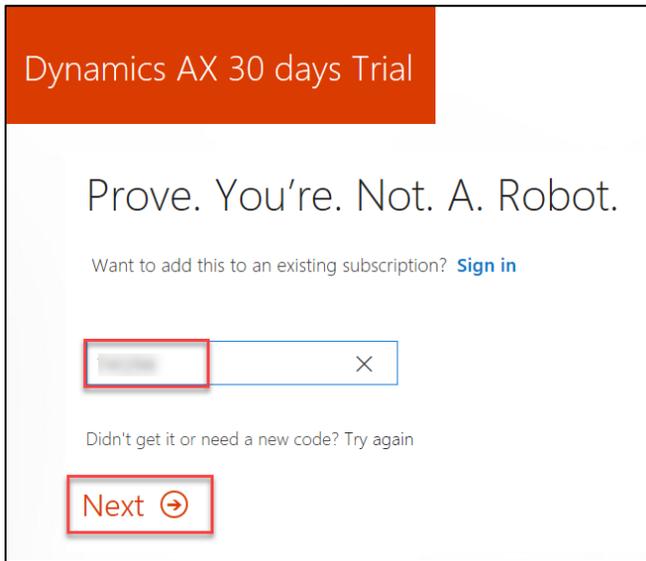
Text me Call me

(+1) Phone number

We don't save this phone number or use it for any other purpose.

Text me →

6. Enter the verification code you receive in the space provided and click **Next**.



Dynamics AX 30 days Trial

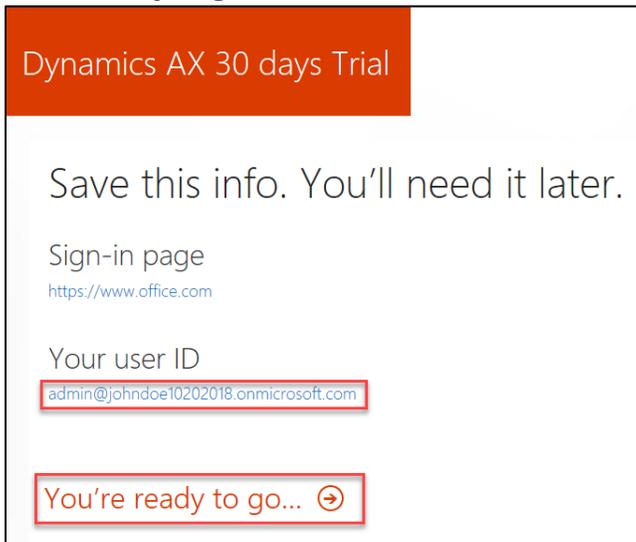
Prove. You're. Not. A. Robot.

Want to add this to an existing subscription? [Sign in](#)

Didn't get it or need a new code? Try again

Next →

7. Your new account has now been provisioned. Note the account information and click **You're ready to go** arrow.



Dynamics AX 30 days Trial

Save this info. You'll need it later.

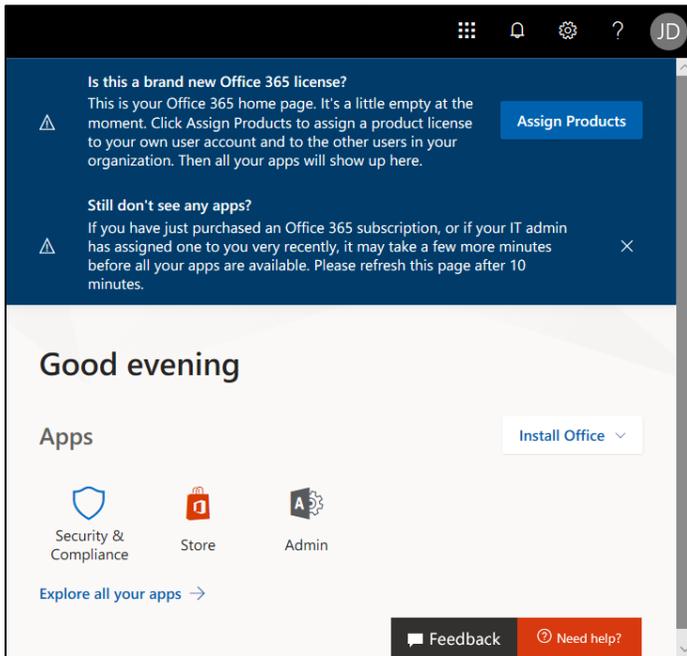
Sign-in page
<https://www.office.com>

Your user ID
admin@johndoe10202018.onmicrosoft.com

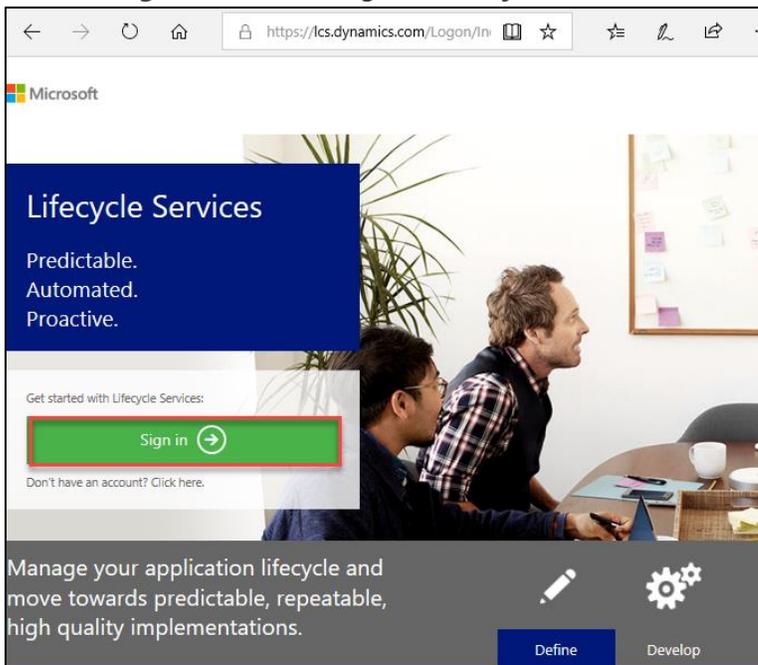
You're ready to go... →

Tip: Check the inbox of the email account you provided in the Account setup wizard. You will receive a welcome email.

8. The wizard takes you to Microsoft Office 365 Portal. You should be logged in with your **OnMicrosoft.com Account** (admin@FirstLastMMDDYYYY.onmicrosoft.com).



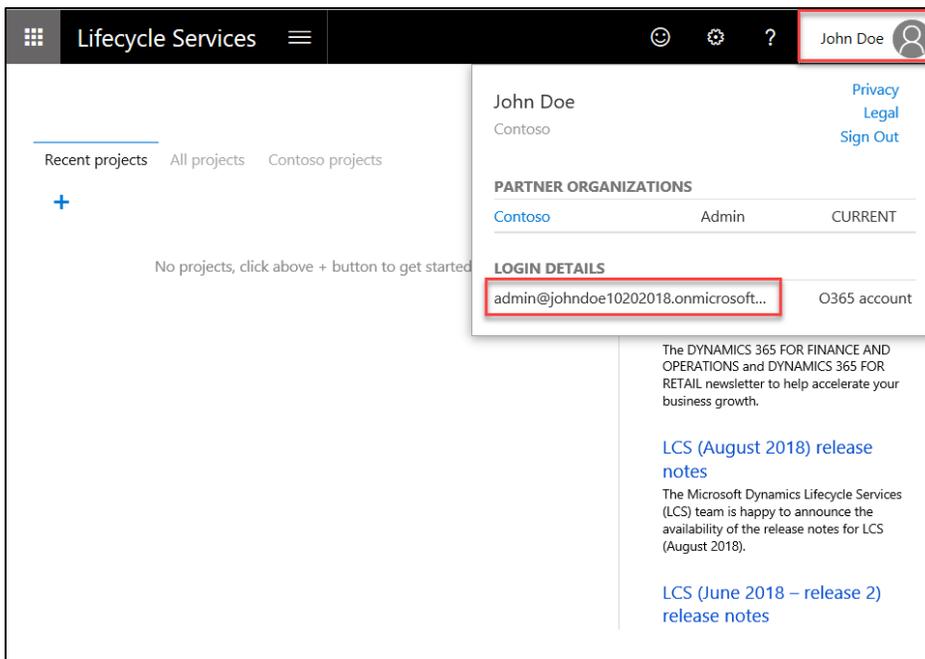
9. Open a new tab in the browser and enter <https://lcs.dynamics.com> in the address bar. This takes you to the **Lifecycle Service sign-on** page.
10. Click the **Sign in** button to log into **Lifecycle Services**.



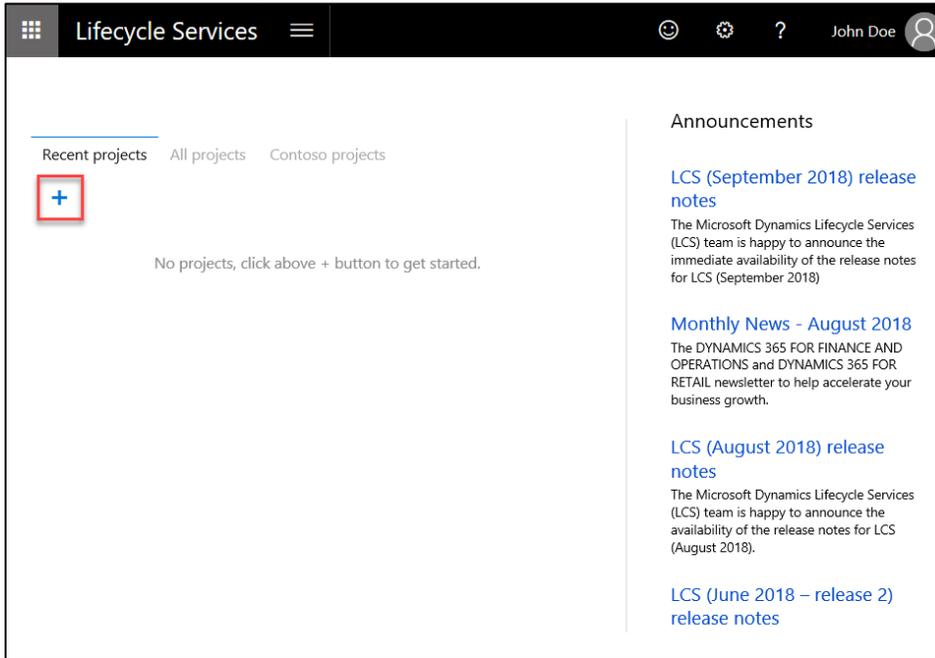
- If you are unable to log in, close the browser window, start a new InPrivate browser session and navigate to Lifecycle Services (<https://lcs.dynamics.com>) again. Sign in using your **OnMicrosoft.com Account**.
- Click **Accept** to agree to the online service agreement and privacy statement.



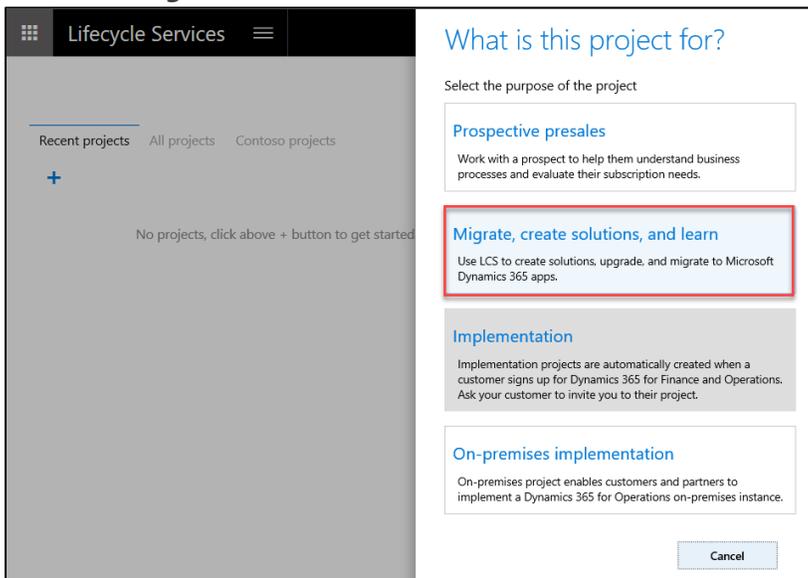
- You have signed into **Lifecycle Services** with your trial account. Check the login account and ensure that it reflects the **OnMicrosoft.com** account created earlier in this lab.



- Click the **Create a Project** ('+') icon below the **Recent projects** heading to create a new Lifecycle Services project.



- Select the **Migrate, create solutions, and learn** on the **What is this project for?** dialog.



16. Enter the following values on the **Create a project** dialog and click **Create**.

- **Name:** Workshop
- **Product name:** Finance and Operations
- **Product version:** Finance and Operations
- **Industry:** Manufacturing
- **Methodology:** Dynamics 365 for Finance and Operations Implementation Lifecycle Workshop (2018)

The screenshot shows a 'Create a project' dialog box with the following fields and values:

- Name:** Workshop
- Description:** (Empty text area)
- Product name:** Finance and Operations
- Product version:** Finance and Operations
- Industry:** Manufacturing
- Methodology:** Dynamics 365 for Finance and Operations Implementation Lifecycle Workshop (2018)

At the bottom of the dialog, there are two buttons: 'Create' (highlighted with a red box) and 'Cancel'.

This creates a new LCS project. This concludes the lab for creating a Dynamics 365 for Finance and Operations trial.

Lab 1.3: Create Microsoft Azure subscription using Azure Pass

Introduction

An Azure subscription is required to deploy the lab environment used for this workshop. In this lab, we create a Microsoft Azure subscription using an Azure Pass. An Azure Pass provides you with a \$100 Azure credit for 30 days. This is used to deploy an instance of D365FO that allows you to complete the lab exercises in this workshop. The Azure Pass code will be provided by the instructor before the workshop begins.

To complete this part of the lab you will need the following information:

- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.

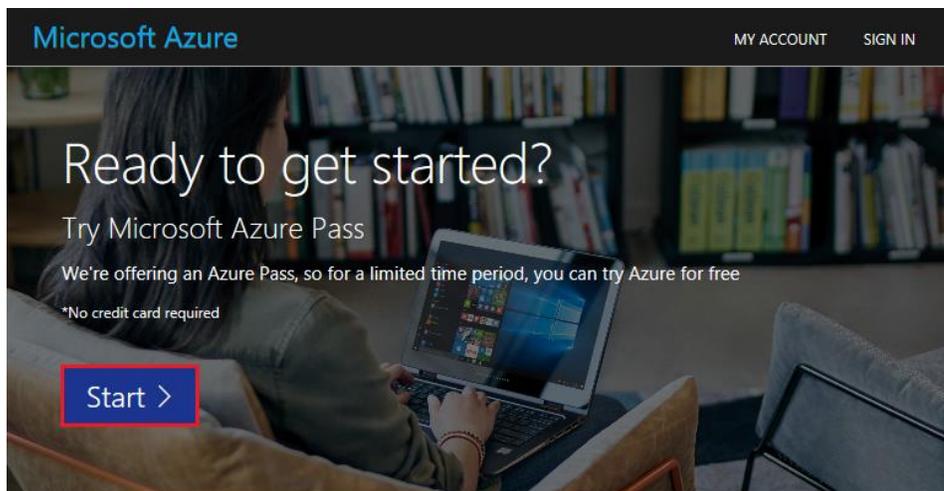
Note: You will also need an **Azure Pass code** from your instructor to complete this lab. Please have this code ready before proceeding.

Estimated Time to Complete

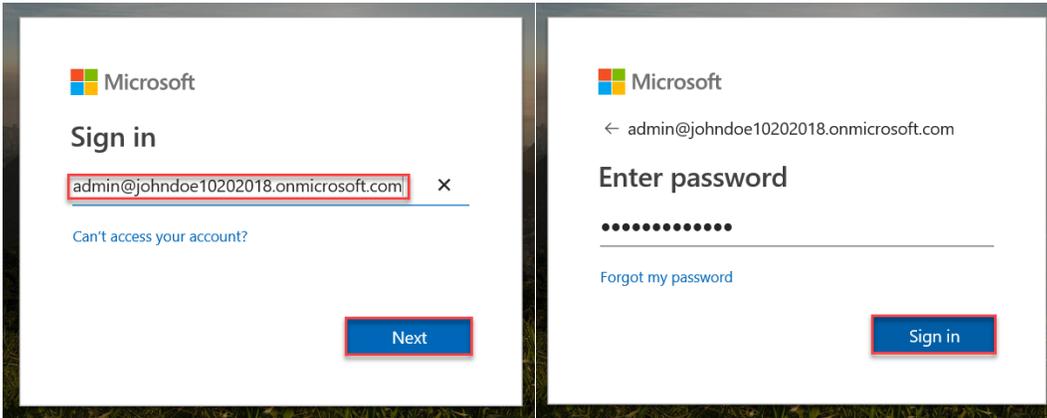
10 minutes

Instructions

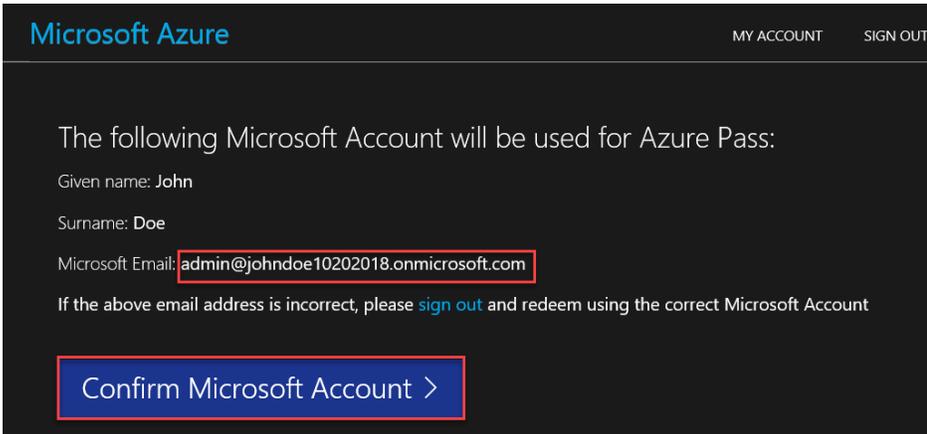
1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome**, **Microsoft Edge** or **Internet Explorer**.
2. Navigate to the site <https://www.microsoftazurepass.com>.
3. Click the **Start** button.



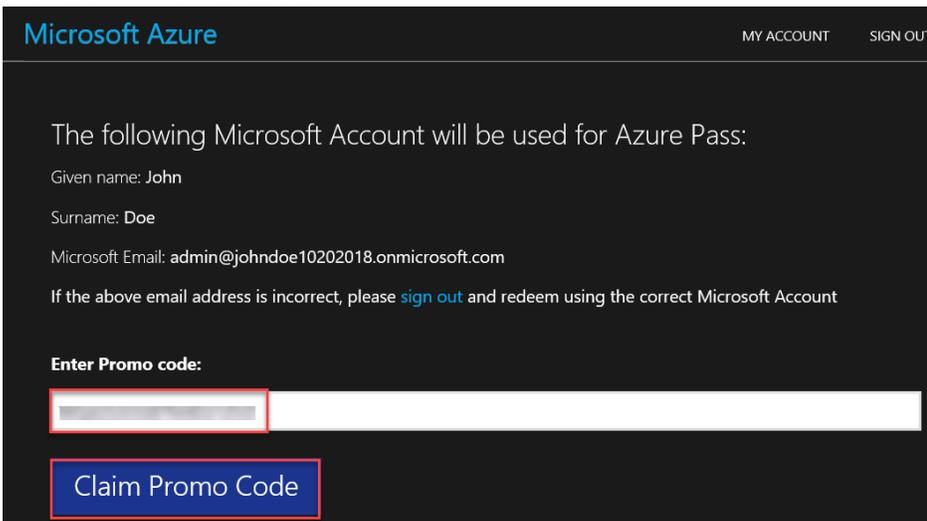
- 4. Sign in using your **OnMicrosoft.com Account**.



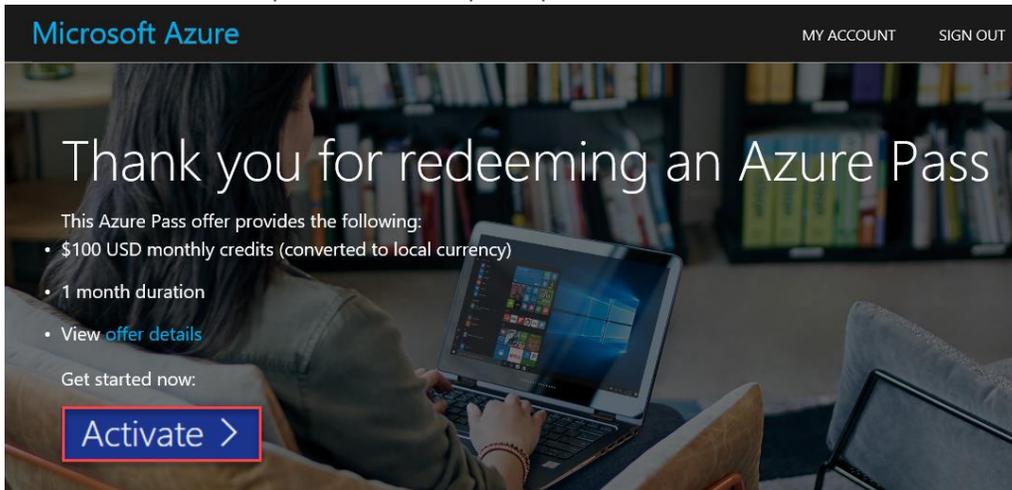
- 5. On the next page, verify that the Microsoft Account listed is the **OnMicrosoft.com account**. Click **Confirm Microsoft Account**.



- 6. In the **Enter Promo code** box, enter the Azure Pass code provided by the instructor and click **Claim Promo Code**.



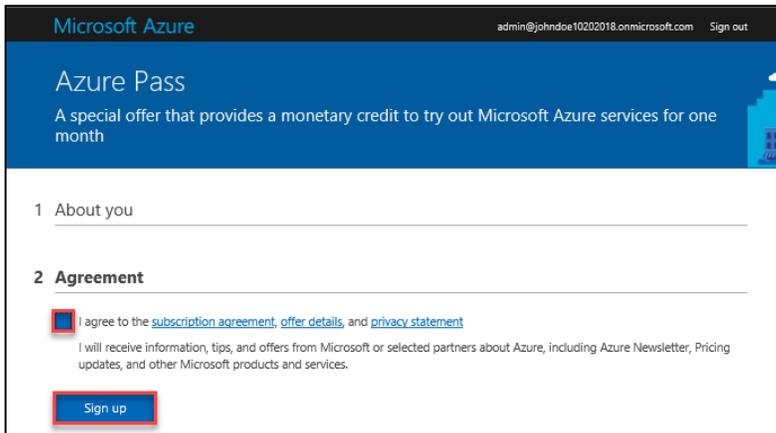
- Click **Activate** to complete the redemption process.



- Most of the fields in the **About you** section should be prepopulated. Enter any missing details from the **OnMicrosoft.com account** information and Click **Next**.

A screenshot of the Microsoft Azure 'About you' form. The header shows the Microsoft Azure logo, the user email 'admin@johndoe10202018.onmicrosoft.com', and a 'Sign out' link. The main heading is 'Azure Pass' with a sub-heading: 'A special offer that provides a monetary credit to try out Microsoft Azure services for one month'. The form is titled '1 About you' and contains the following fields: 'Country/Region' (dropdown menu with 'United States' selected), 'First name' (text input with 'John'), 'Last name' (text input with 'Doe'), 'Email address for important notifications' (text input with 'JohnDoe10202018@outlook.com'), and 'Phone' (text input). Below the fields is a checkbox for 'By proceeding you acknowledge the privacy statement and subscription agreement'. A blue 'Next' button is highlighted with a red border. The form is followed by a section titled '2 Agreement'.

9. Check the box to agree to the subscription **Agreement** and click **Sign up**.



Microsoft Azure admin@johndoe10202018.onmicrosoft.com Sign out

Azure Pass

A special offer that provides a monetary credit to try out Microsoft Azure services for one month

1 About you

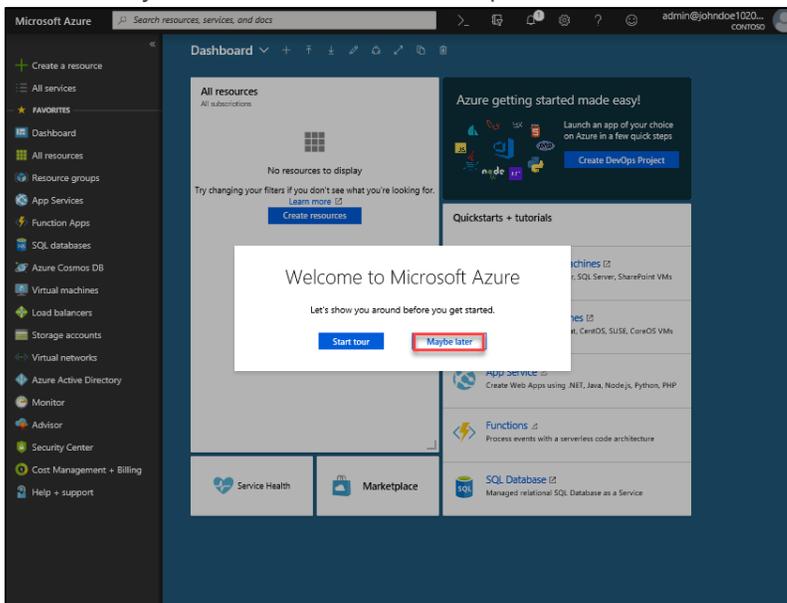
2 Agreement

I agree to the [subscription agreement](#), [offer details](#), and [privacy statement](#)

I will receive information, tips, and offers from Microsoft or selected partners about Azure, including Azure Newsletter, Pricing updates, and other Microsoft products and services.

Sign up

10. After a few minutes, a welcome message appears indicating that the Azure subscription is ready. You are logged into the Azure portal (<https://portal.azure.com>) with the **OnMicrosoft.com** credentials. You now have a free **30-day Azure Pass** with a **\$100 credit** that you can use for the workshop.



This concludes the setup up of a Microsoft Azure subscription using an Azure Pass.

Lab 1.4: Connect Lifecycle Services to your Microsoft Azure Subscription

Introduction

In this lab we connect the trial **Microsoft Azure subscription** to the **Lifecycle Services (LCS) project**. This is a prerequisite to deploying a D365FO environment.

Estimated Time to Complete

25 minutes

Lab 1.4.1: Collect Microsoft Azure Subscription Details

Goals for this part of the lab:

- Collect the Microsoft Azure Subscription ID
- Collect the Azure Active Directory Domain Name

To complete this part of the lab you will need the following information:

- **OnMicrosoft.com Account:** admin@FirstLastMMDDYYYY.onmicrosoft.com

Instructions

1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to the Microsoft Azure Portal at <https://portal.azure.com> and sign in using your **OnMicrosoft.com Account**.
3. Click to open the portal menu in the upper left corner. Select **Cost Management + Billing > Billing scopes** and click on your email address under the **Billing scope** heading to select your billing scope.

- Click on **Subscriptions** then click on the Azure Pass subscription under **My Subscriptions**.

Home > Cost Management + Billing - Billing scopes > Cost Management + Billing - Subscriptions

Cost Management + Billing - Subscriptions

Contoso

Search (Ctrl+*/*)

+ New subscription Manage

You have billing access for the subscriptions listed below. To

Search to filter items...

Subscription name	↑↓
Azure Pass - Sponsorship	

Subscriptions

Invoices

Properties

- Copy/note the **Subscription ID** to access it later in this lab.

Home > Cost Management + Billing - Subscriptions > Azure Pass - Sponsorship

Azure Pass - Sponsorship

Subscription

Search (Ctrl+*/*)

Manage Cancel subscription Rename Change directory

For billing information, visit <https://www.microsoftazureponsorships.com>.

Subscription ID	48007171-154f-40a2-8a7b-9a2d24e68efd
Directory	: Contoso (instructor01012020.onmicrosoft.com)
My role	: Account admin
Offer	: Azure Pass
Offer ID	: MS-AZR-0243P

Overview

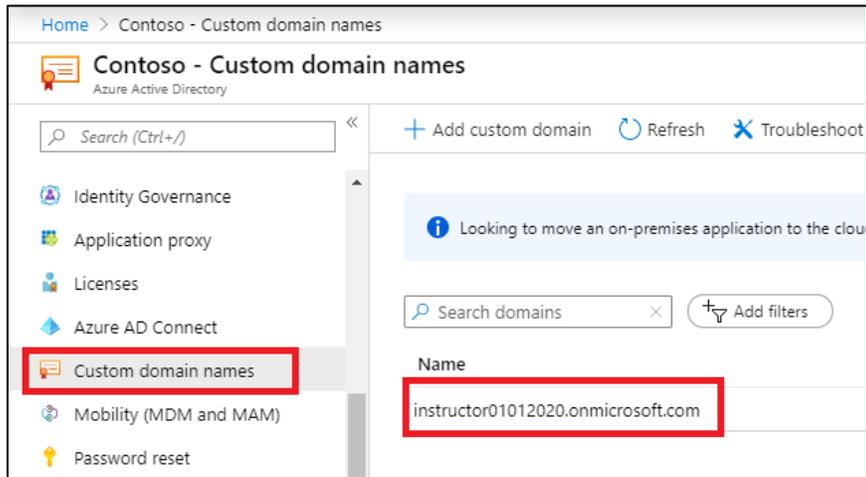
Activity log

Access control (IAM)

Diagnose and solve problems

Security

- From the portal menu in the upper left corner, click **Azure Active Directory** then select **Custom domain names**. Note the domain name to access it later in this lab.



You have completed all the steps necessary to **collect Azure subscription** details.

Lab 1.4.2: Add the Dynamics Deployment Services Account to your Azure Subscription

Goals for this part of the lab:

- Authorize **Lifecycle Services** to add the **Dynamics Deployment Services** account to your **Microsoft Azure subscription**.

To complete this part of the lab you will need the following information:

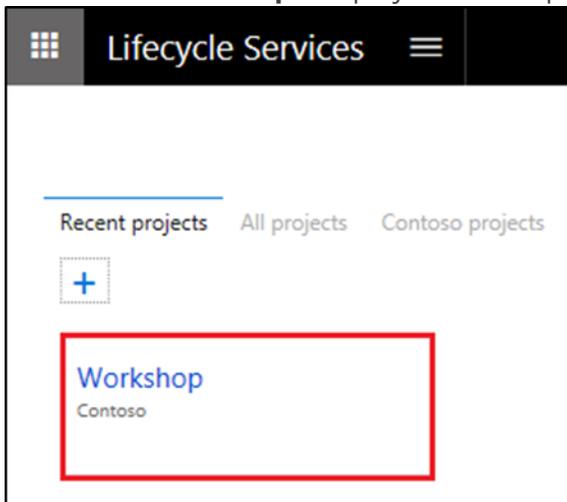
- **OnMicrosoft.com Account:** admin@FirstLastMMDDYYYY.onmicrosoft.com.

Instructions

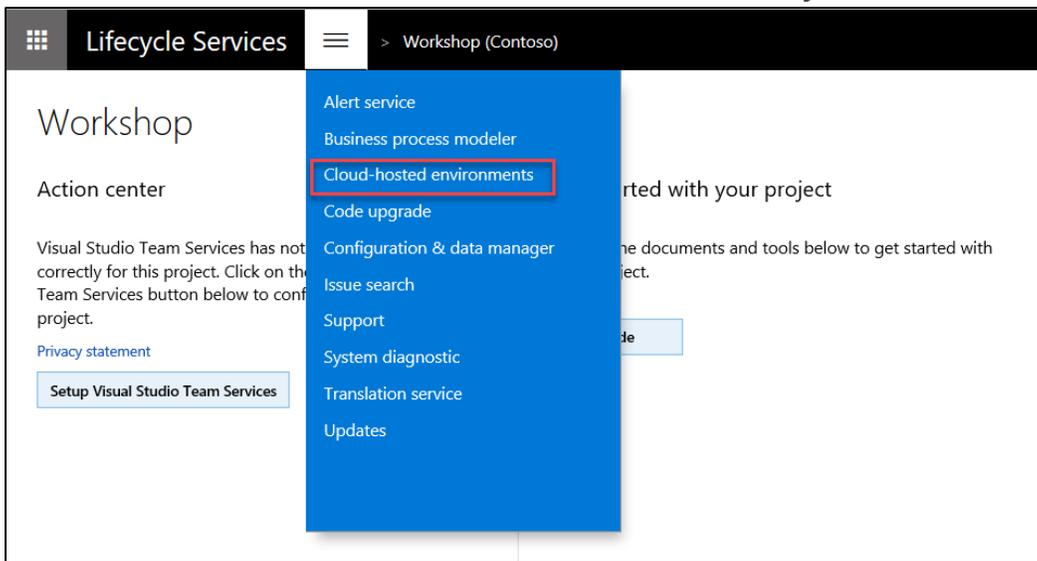
1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome**, **Microsoft Edge** or **Internet Explorer**.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.

Note: If you are prompted to accept a license agreement when you sign in, you may have signed in with an incorrect account. Log out and sign in again using your **OnMicrosoft.com account** before proceeding to the next step.

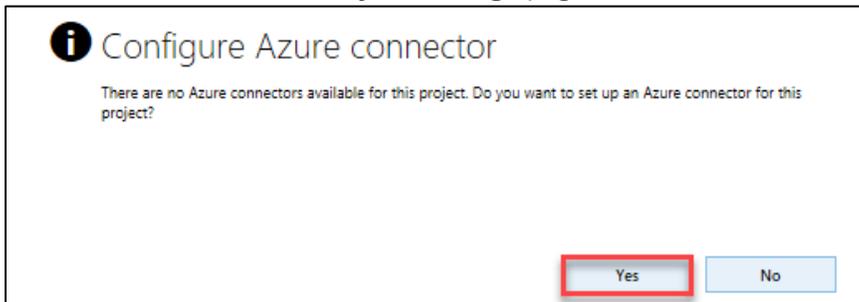
3. Click on the **Workshop** LCS project created previously.



4. Select **Cloud-hosted environments** from the menu next to **Lifecycle Services** heading.



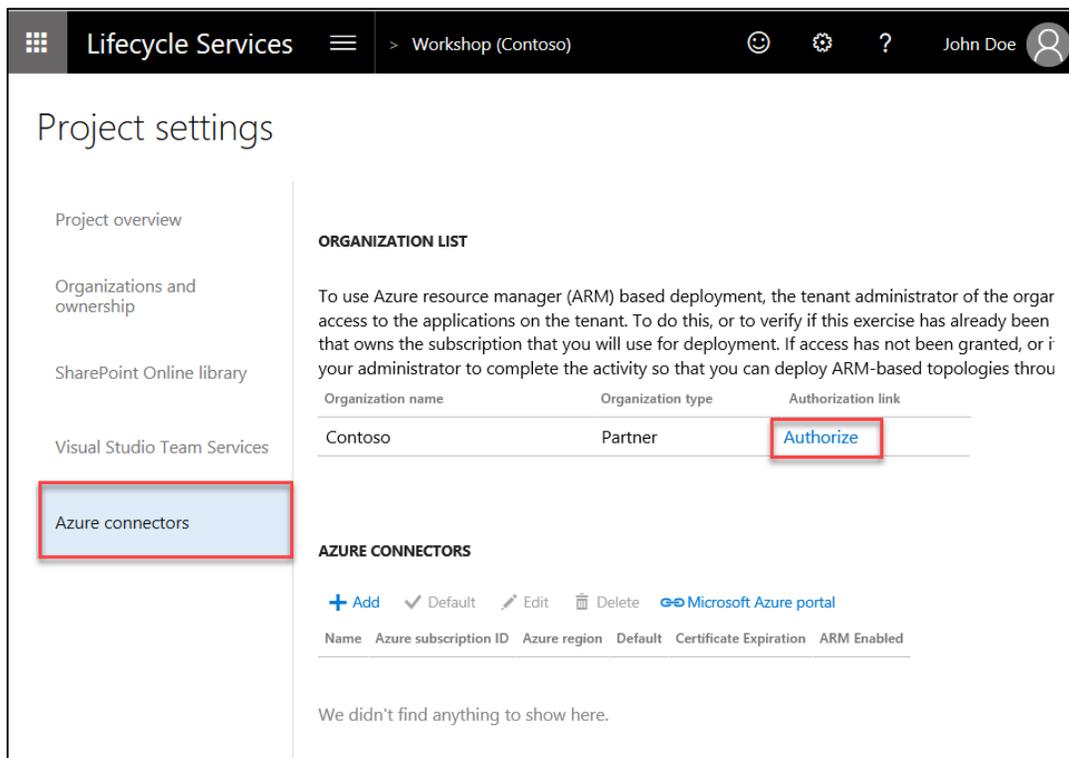
5. A message prompts you to confirm that you want to **Configure Azure Connector**. Click **Yes** to be directed to the **Project settings** page.



- Under **Project settings** > **Azure connectors** > **Organization list**, your organization is listed with a link to authorize Azure resource manager (ARM) based deployments. Click the **Authorize** link.

Note: If you get an error message such as a **404 – File or directory not found** when you click the **Authorize** button:

- Close your browser, go back into LCS, and try this step again.
- Or, try a different browser. If you were using Microsoft Edge, try Google Chrome instead.



The screenshot displays the Lifecycle Services (LCS) interface. The top navigation bar includes the 'Lifecycle Services' logo, a hamburger menu, the current workspace 'Workshop (Contoso)', and user information 'John Doe'. The main content area is titled 'Project settings' and features a left-hand navigation pane with options: 'Project overview', 'Organizations and ownership', 'SharePoint Online library', 'Visual Studio Team Services', and 'Azure connectors' (highlighted with a red box). The main pane is divided into two sections: 'ORGANIZATION LIST' and 'AZURE CONNECTORS'. The 'ORGANIZATION LIST' section contains a text block explaining the need for tenant administrator access and a table with the following data:

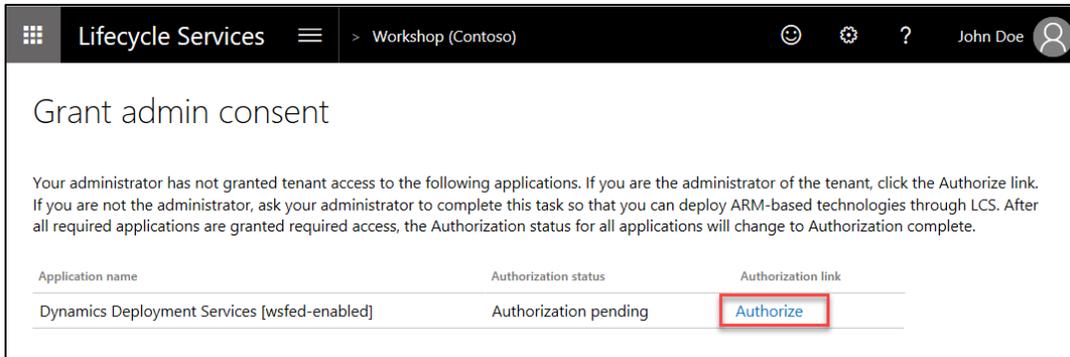
Organization name	Organization type	Authorization link
Contoso	Partner	Authorize (highlighted with a red box)

The 'AZURE CONNECTORS' section includes a '+ Add' button, a 'Default' status, 'Edit' and 'Delete' icons, and a link to the 'Microsoft Azure portal'. Below this is a table header with columns: 'Name', 'Azure subscription ID', 'Azure region', 'Default', 'Certificate Expiration', and 'ARM Enabled'. The table is currently empty, with the message 'We didn't find anything to show here.' displayed below it.

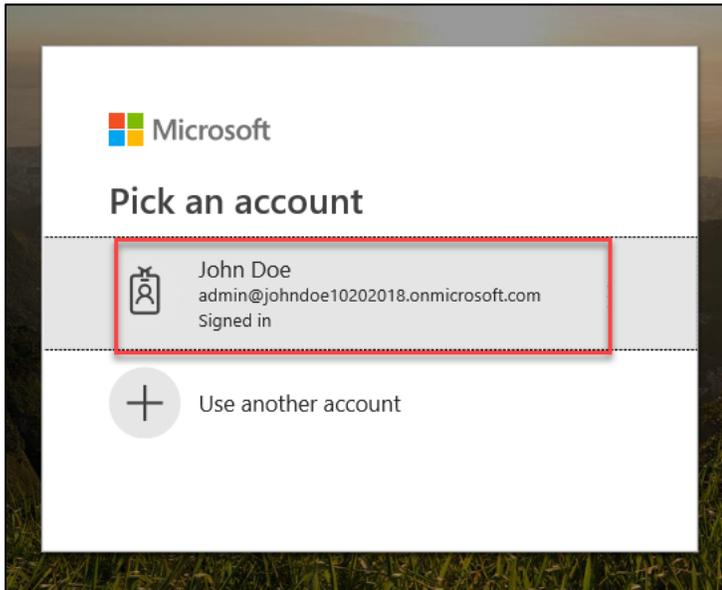
- On the Grant admin consent page, click Authorize.

Note: If you get an error message such as a **404 – File or directory not found** when you click the **Authorize** button:

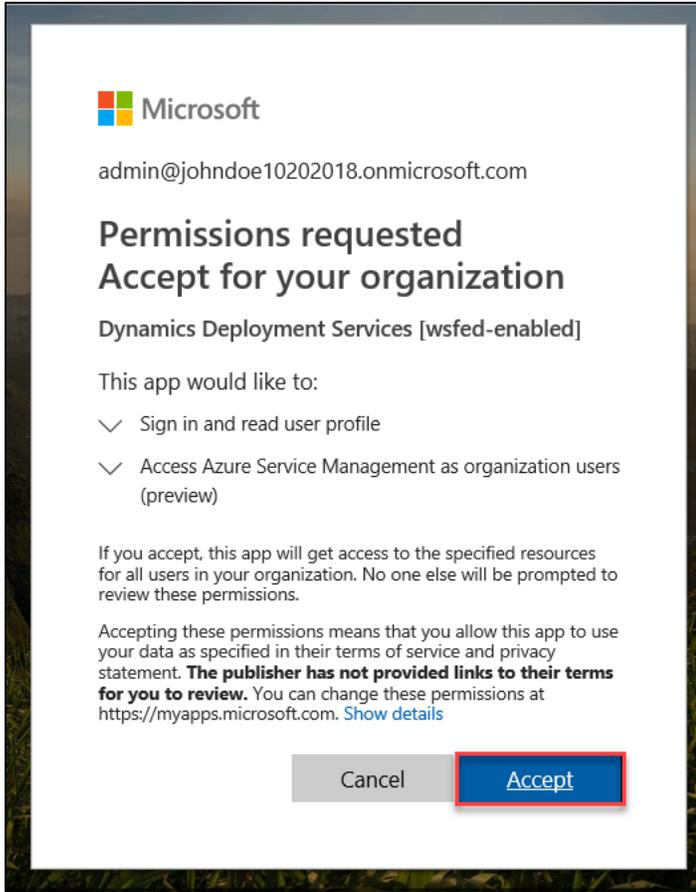
- Close your browser, go back into LCS, and try this step again.
- Or, try a different browser. If you were using Microsoft Edge, try Google Chrome instead.



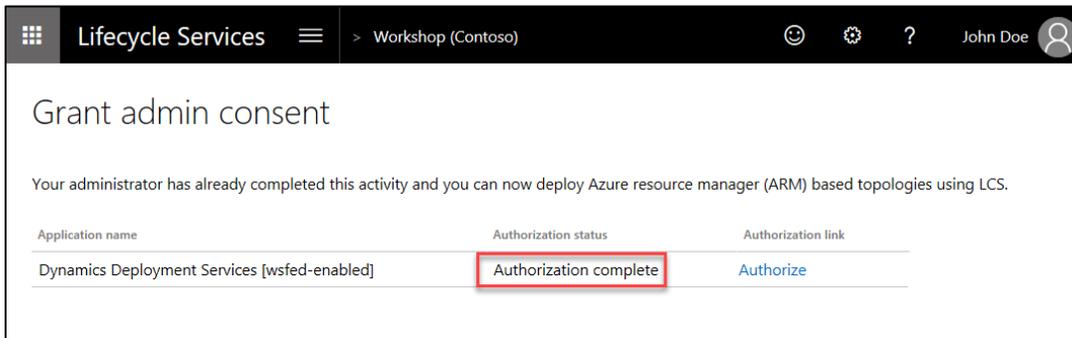
- When prompted for credentials, use your **OnMicrosoft.com** account.



9. When you see the **Dynamics Deployment Services [wsfed-enabled]** page, click **Accept**.



10. Navigate back to the **Grant admin consent** page and refresh your browser to check the authorization status.



Note: If there are no errors, the authorization will succeed even if your status still indicates the authorization is pending. This step adds the **Dynamics Deployment Services [wsfed-enabled]** account as a user in your Azure Active Directory. We grant this account rights to your Azure subscription in the next part of the lab.

11. If you receive an error message in step 9, ensure you are logged into LCS using your **OnMicrosoft.com Account**, return to step 3 and try again.

You have completed all the steps necessary to add the **Dynamics Deployment Services account** to your **Microsoft Azure subscription**.

Lab 1.4.3: Grant Dynamics Deployment Services Account Rights to the Microsoft Azure Subscription

Goals for this part of the lab:

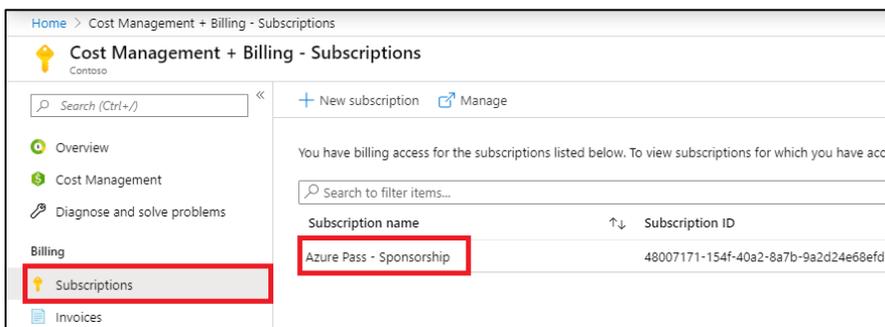
- Grant the **Dynamics Deployment Services Account** Contributor access to your **Microsoft Azure subscription**.

To complete this part of the lab you will need the following information:

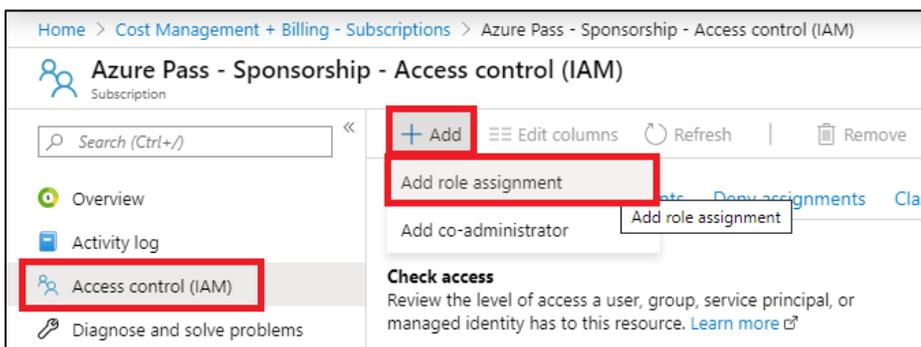
- OnMicrosoft.com Account:** admin@FirstLastMMDDYYYY.onmicrosoft.com.

Instructions

- Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
- Navigate to the Microsoft Azure Portal at <https://portal.azure.com> and sign in using your **OnMicrosoft.com Account**.
- Click on Cost Management +Billing > Subscriptions. Click on the subscription under the Subscription name heading.



- Click on Access control (IAM). Then click Add > Add role assignment.



5. Select **Contributor** as the role. Enter **dynamics deployment** in the **Select** field to search for the desired account. Select the **Dynamics Deployment Services [wsfed-enabled]** account from the list displayed. Notice the **Dynamics Deployment Services [wsfed-enabled]** account now shows up as a selected member. Click **Save**.

Add role assignment

Role ⁱ
Contributor

Assign access to ⁱ
Azure AD user, group, or service principal

Select ⁱ
dynamics deployment

Dynamics Deployment Services [wsfed-enabled]

Selected members:
No members selected. Search for and add one or more members you want to assign to the role for this resource.

[Learn more about RBAC](#)

Save Discard

Add role assignment

Role ⁱ
Contributor

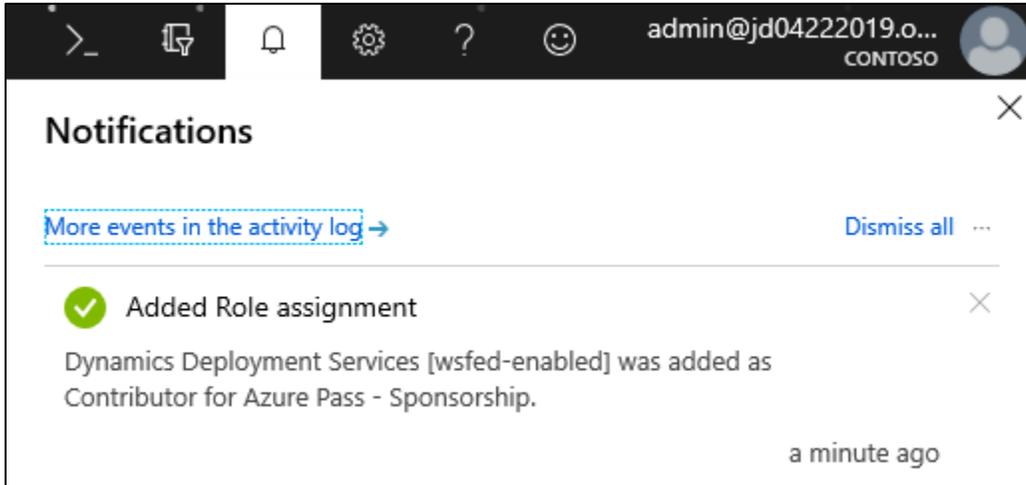
Assign access to ⁱ
Azure AD user, group, or service principal

Select ⁱ
dynamics deployment

Selected members:
 Dynamics Deployment Services [wsfed-en... [Remove](#)

Save Discard

- This account was added to Azure Active Directory previously by the Authorization step completed in Lifecycle Services. Adding this account as a **Contributor** is necessary for Lifecycle Services deployments to work. Once the operation is complete, you should see the following notification. You may have to click on the notification icon at the top to see the message.



You have completed all the steps necessary to grant the **Dynamics Services account** contributor rights to the **Microsoft Azure subscription**.

Lab 1.4.4: Complete Lifecycle Services Azure Connector Setup

Goals for this part of the lab:

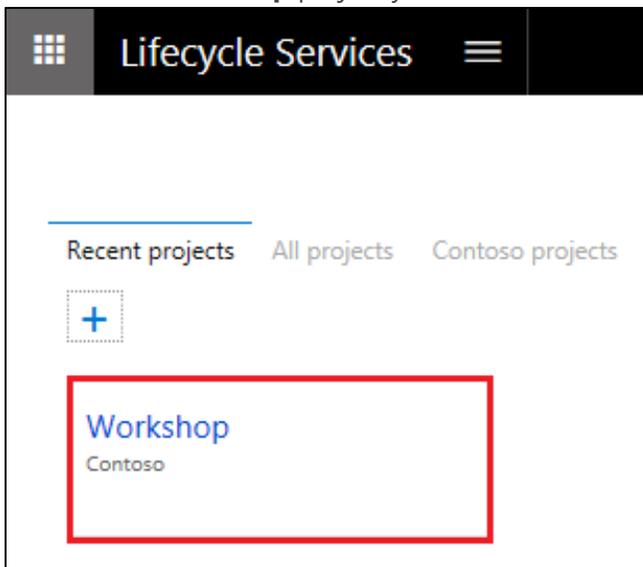
- Enter your Microsoft Azure subscription details in Lifecycle Services
- Download the Lifecycle Services management certificate
- Add the Lifecycle Services management certificate to your Azure subscription
- Complete the Microsoft Azure setup to enable Lifecycle Services to deploy Dynamics 365 for Finance and Operations environments to your Microsoft Azure subscription.

To complete this part of the lab you will need the following information:

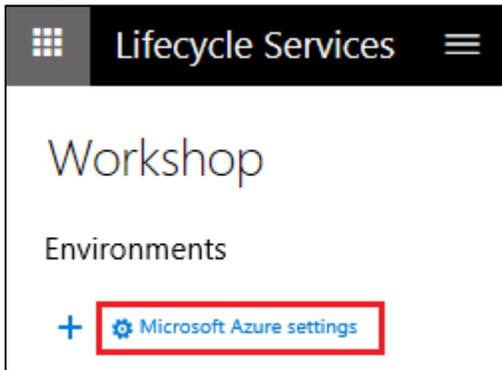
- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.
- Microsoft Azure Subscription ID
- Microsoft Azure Active Directory Domain Name

Instructions

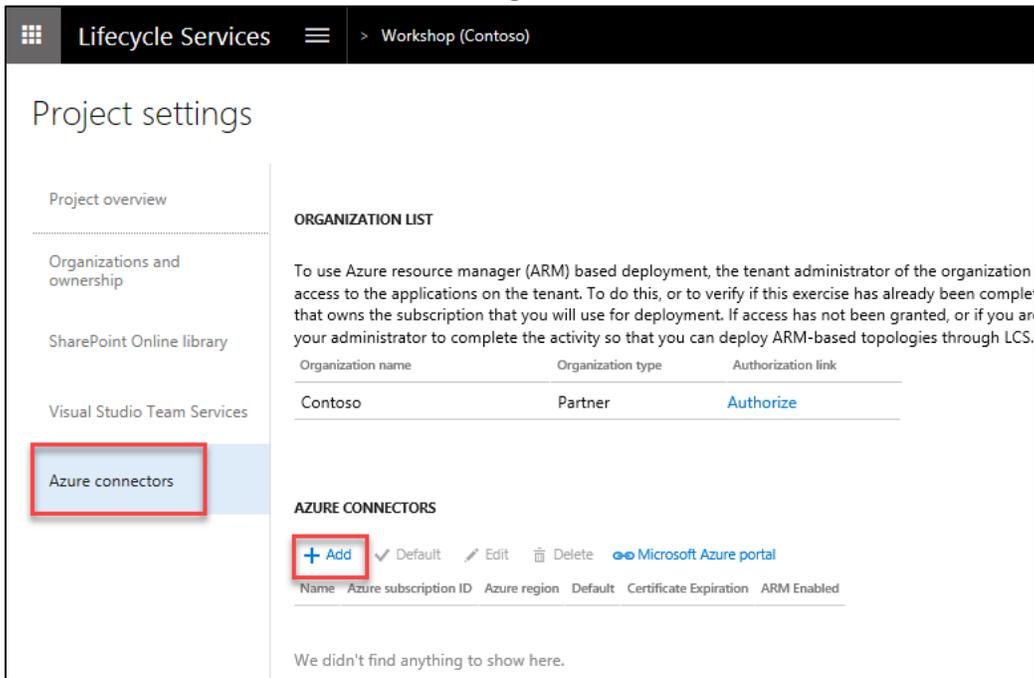
1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.
3. Click on the **Workshop** project you created earlier in this lab.



4. On the main project page, scroll right to locate the **Environments** heading. Under the **Environments** heading, click **Microsoft Azure settings** to complete the Azure connector setup.



5. Under the **AZURE CONNECTORS** heading, click **Add**.



6. On the **Microsoft Azure setup** form, enter the required details for the Microsoft Azure subscription and click **Next**.
- **Name:** Any valid name.
 - **Azure subscription ID:** The ID noted in the Microsoft Azure portal earlier in this lab.
 - **Configure to use Azure Resource Manager (ARM):** Set to Yes.

- **Azure subscription AAD Tenant Domain (or ID):** This value must be set to the domain name you noted from the Microsoft Azure portal earlier in this lab. The default value should be correct but verify it before you continue. It should look something like this **FirstLastMMDDYYYY.onmicrosoft.com**

Microsoft Azure setup

This tool will deploy an environment on Microsoft Azure.

An Azure subscription is required for deployment. If you don't have an Azure subscription, click the link below to get one.

Deployment to Azure requires full control over a subscription. Any services deployed will be billed at the Azure standard usage rate.

CONNECT TO YOUR AZURE SUBSCRIPTION

Name

Azure subscription ID

Azure subscription AAD Tenant Domain (or ID)

Configure to use Azure Resource Manager (ARM)
Yes

[Sign up for Azure](#)

7. Once the Dynamics Deployment Services account has been verified as a contributor in the Azure subscription, click **Next**.

Microsoft Azure setup

In order to complete the setup for this Azure connector, the following applications require access to your subscription. Please navigate to the Azure portal, select your subscription and assign the appropriate role(s) to these application(s) before you hit Next.

[Click here to navigate to the Azure portal](#)

Name	Expected role	Valid
Dynamics Deployment Services [wsfed-enabl...	Contributor	✓

Next **Cancel**

8. On the **Microsoft Azure setup** screen, click **Download** to save the management certificate **LifecycleServicesDeployment.cer** to a local folder. Before clicking **Next**, we should upload the management certificate to the Microsoft Azure Portal. Leave this browser window open. We will return to it momentarily.

Microsoft Azure setup

Deployment to Azure requires full control over a subscription. Any services deployed will be billed at the Azure standard usage rate.

TO AUTHORIZE, DO ONE OF THE FOLLOWING:

ENSURE YOU ARE A SUBSCRIPTION USER

Go to the Azure Portal and navigate to this subscription. Select the 'Access Control (IAM)' panel and ensure that you (admin@manny10202018.onmicrosoft.com) are directly added as a user with any role for that subscription.

OR:

DOWNLOAD THE MANAGEMENT CERTIFICATE

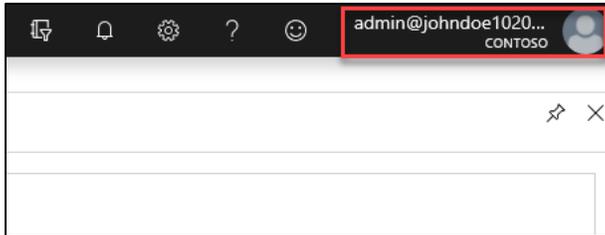
This certificate will enable Lifecycle Services to communicate with Azure on your behalf. Download this management certificate to your local computer. Then, upload the management certificate to the Azure management portal (Settings > Management Certificates).

Download

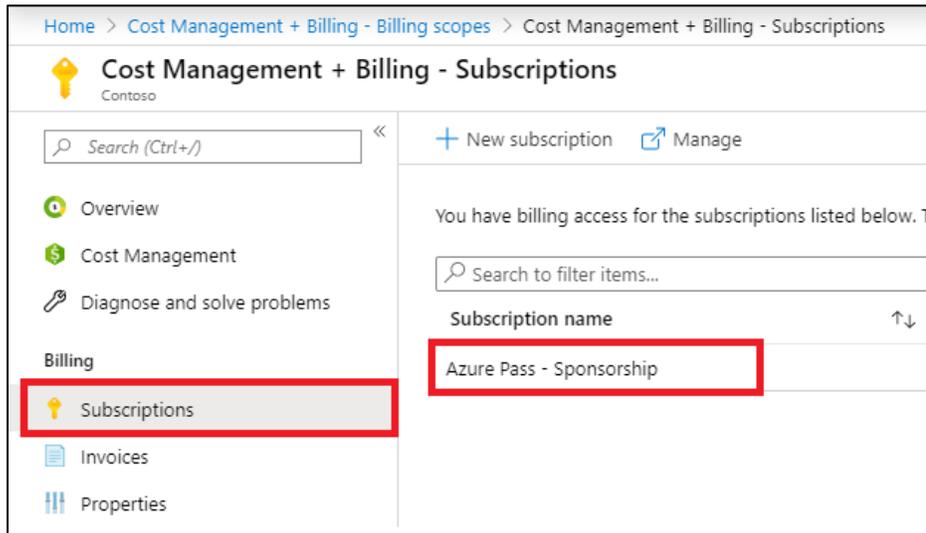
Next **Cancel**

9. Open a new web browser session in the InPrivate/Incognito mode using a browser such as Microsoft Edge or Internet Explorer.

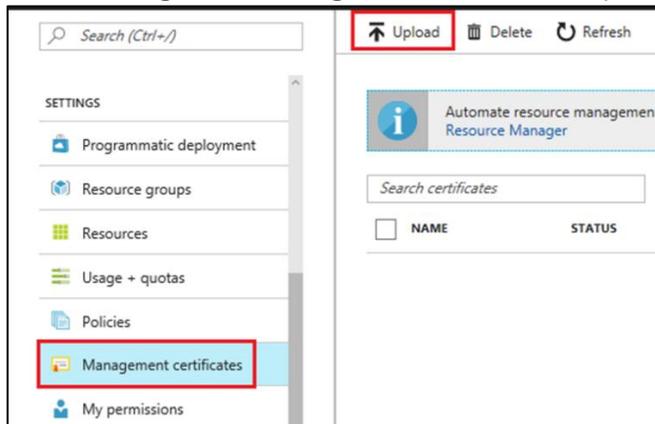
10. Navigate to the Microsoft Azure Portal at <https://portal.azure.com> and sign in using your **OnMicrosoft.com Account**. If you are not prompted to sign in, the browser may have automatically authenticated you with another account. Check the upper righthand corner of the portal to ensure you are signed in with your **OnMicrosoft.com Account**. If not, sign out and sign in again using the correct account.



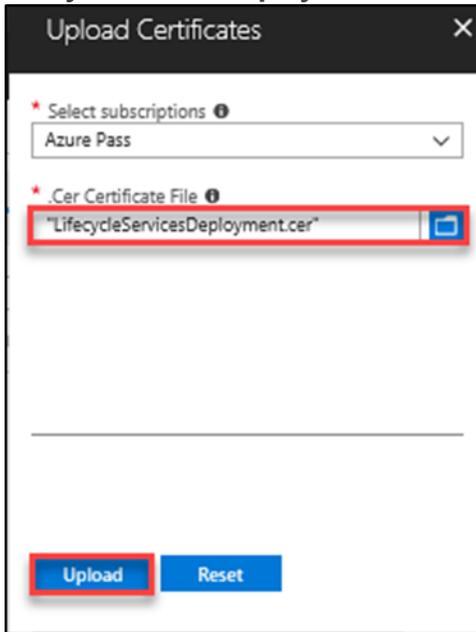
11. Navigate to Cost Management + Billing > Subscriptions and click on the Azure Pass subscription under the Subscription name heading.



12. Under Settings, click Management certificates>Upload.



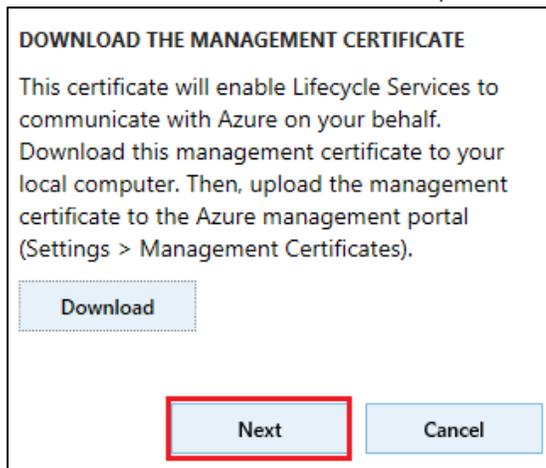
13. The correct subscription name should appear by default since there is only one subscription. Click on the **folder** button and select the **LifecycleServicesDeployment.cer** file downloaded in **step 8**. Click **Upload**.



14. You should receive a notification that the upload was completed successfully.



15. Switch to the **Lifecycle Services browser window** to complete the Azure setup started in Step 8 and click **Next**. Lifecycle Services will check if the management certificate is valid. If you receive an error, retry after some time. It may take a few minutes for Lifecycle Services to validate the certificate uploaded to Azure portal.



16. If the management certificate was uploaded correctly in the Azure portal, you will move to the next setup page. Select the **Azure region** recommended by your instructor and click **Connect**. In the United States, this is most commonly the **South Central US** region.

Microsoft Azure setup

Deployment to Azure requires full control over a subscription. Any services deployed will be billed at the Azure standard usage rate.

Azure region

Connect Cancel

17. Once the setup is complete, you will return to the **Azure connectors** page. You should now see the new connector listed with **ARM Enabled** checked next to it.

Project settings

Project overview

Organizations and ownership

SharePoint Online library

Visual Studio Team Services

Azure connectors

ORGANIZATION LIST

To use Azure resource manager (ARM) based deployment, the tenant administrator of the organization that owns the subscription must grant access to the applications on the tenant. To do this, or to verify if this exercise has already been completed, click the Authorize link for the tenant that owns the subscription that you will use for deployment. If access has not been granted, or if you are not the administrator of the tenant, ask your administrator to complete the activity so that you can deploy ARM-based topologies through LCS.

Organization name	Organization type	Authorization link
Contoso	Partner	Authorize

AZURE CONNECTORS

+ Add Default Edit Delete Microsoft Azure portal

Name	Azure subscription ID	Azure region	Default	Certificate Expiration	ARM Enabled
Azure Pass	a9ec7870-6a20-4d99-814d-63170058dbcf	East US	✓	10/18/2020	✓

This completes the lab to **setup the Lifecycle Services Azure connector**. You are now ready to deploy a Dynamics 365 for Finance and Operations environment to your trial Microsoft Azure subscription using the Lifecycle Services deployment tools.

Lab 1.5: Setup and connect Azure DevOps (formerly VSTS) to Lifecycle Services

Introduction

In this lab you will deploy Azure DevOps (formerly VSTS) project and connect it to your Lifecycle Services (LCS) project.

Estimated Time to Complete

15 minutes

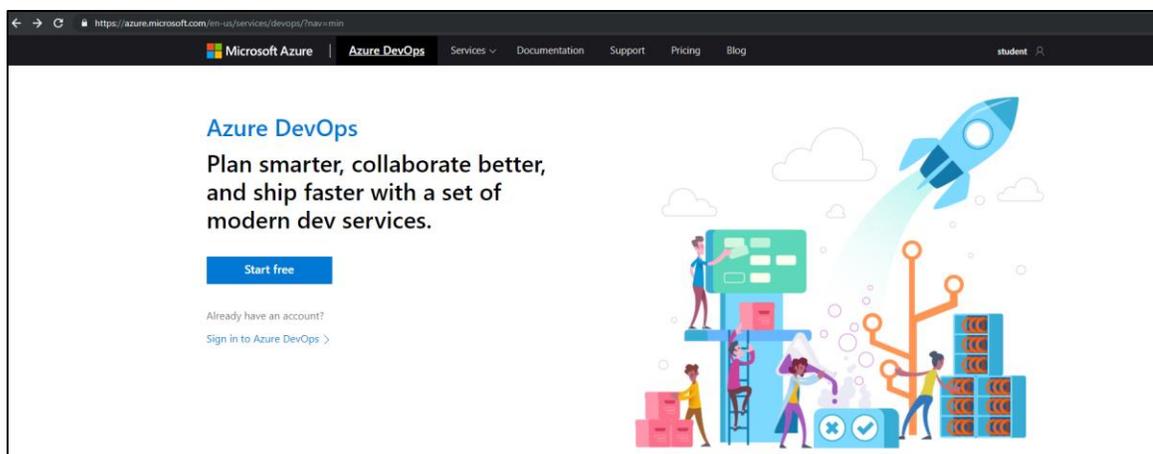
Lab 1.5.1: Create a New Azure DevOps Account and Project

To complete this part of the lab you will need the following information:

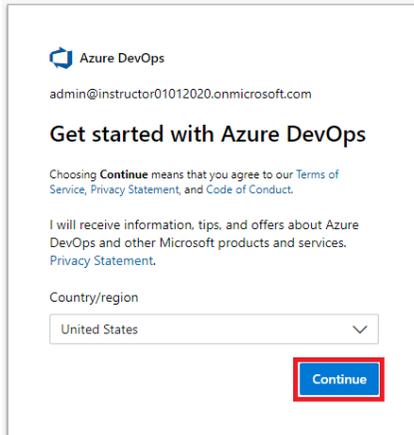
- **OnMicrosoft.com Account:** admin@FirstLastMMDDYYYY.onmicrosoft.com.

Instructions

1. Open a new web browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to the <https://dev.azure.com>
3. Click on the **Start free** button.



4. Sign in with your **OnMicrosoft.com Account**. We use this account since the general recommendation is to sign in with the same admin account created for the tenant connected to your Lifecycle Services project. If you are already signed in, you will be prompted to select a Country/region.
5. Select the appropriate country/region for your location then click **Continue**.



Azure DevOps

admin@instructor01012020.onmicrosoft.com

Get started with Azure DevOps

Choosing **Continue** means that you agree to our [Terms of Service](#), [Privacy Statement](#), and [Code of Conduct](#).

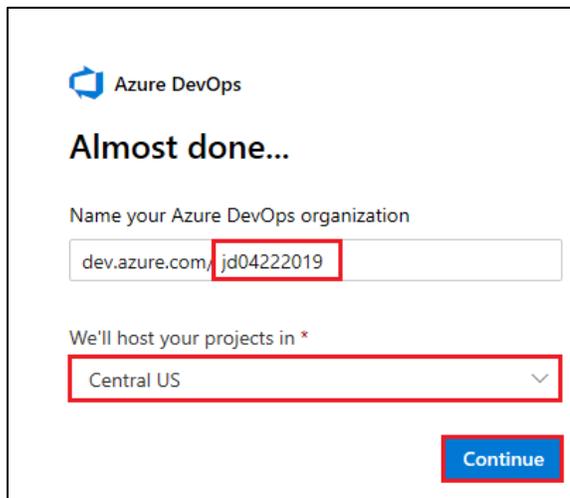
I will receive information, tips, and offers about Azure DevOps and other Microsoft products and services. [Privacy Statement](#).

Country/region

United States

Continue

6. Create a unique organization name by using the first part of your **OnMicrosoft.com Account**. Select the location recommended by you instructor then click **Continue**. In the United States, the location is usually **Central US**.



Azure DevOps

Almost done...

Name your Azure DevOps organization

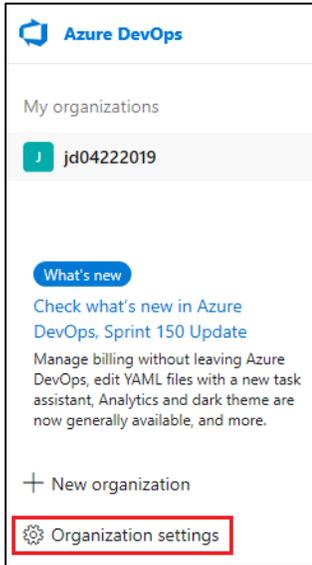
dev.azure.com/jd04222019

We'll host your projects in *

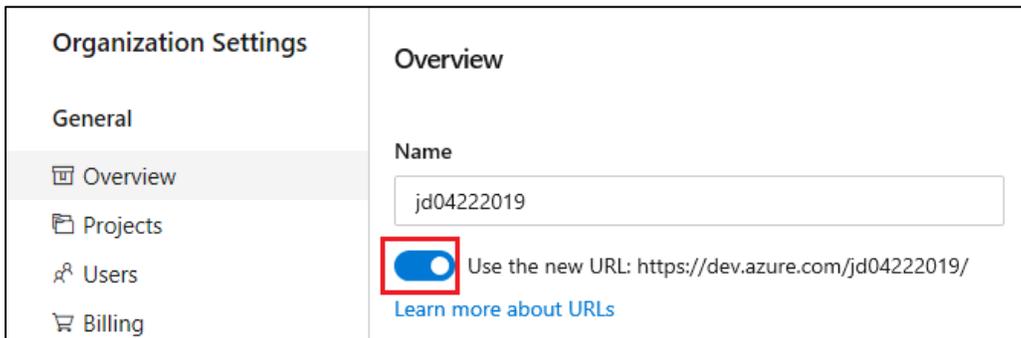
Central US

Continue

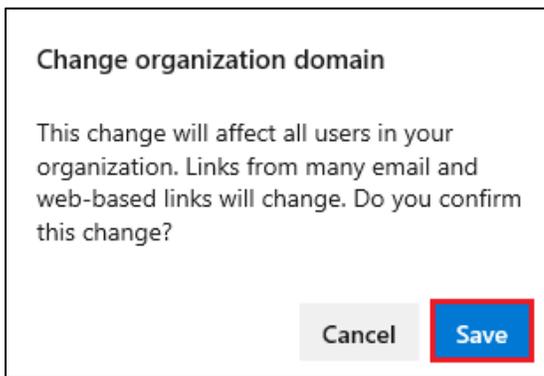
- From the main Azure DevOps page, in the lower left corner, click **Organization Settings**.



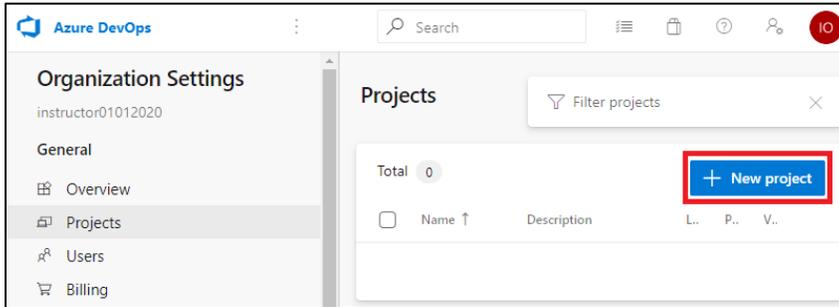
- On the **Organization Settings** page, under the **General | Overview** tab, turn the **New Azure DevOps URL** off. Currently Lifecycle Services only supports the old visualstudio.com format.



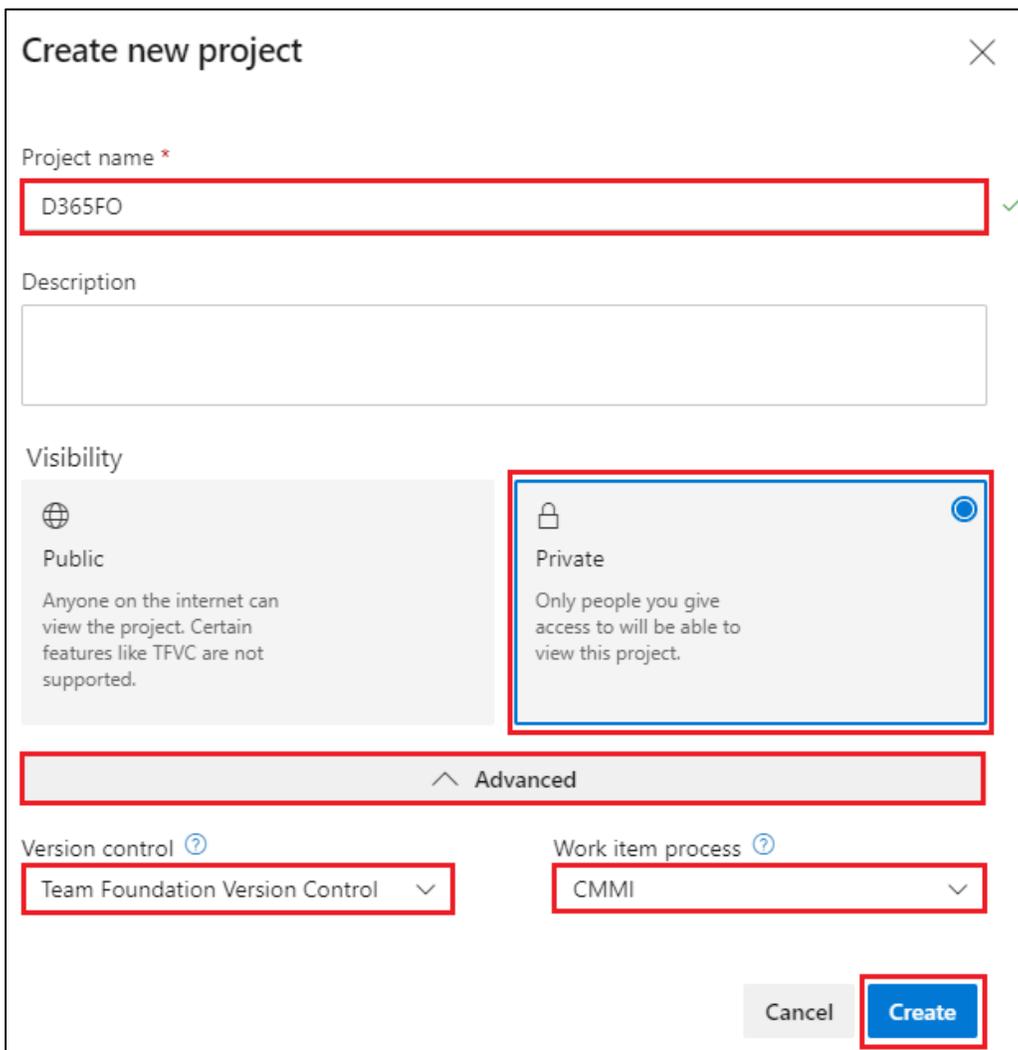
- On the **Change organization domain** pop up, click the **Save** button.



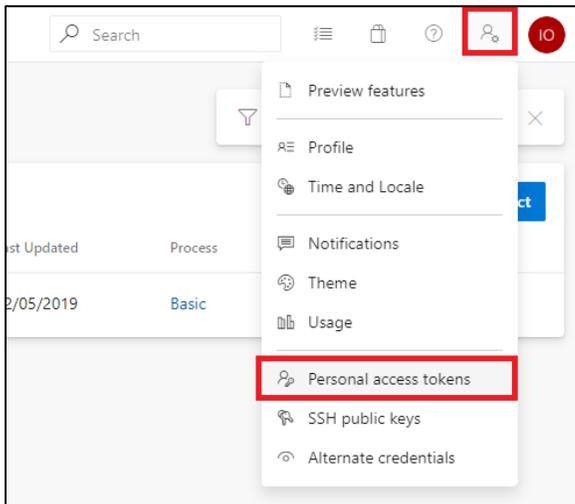
10. Go to Organization Settings | General | Projects and click New project.



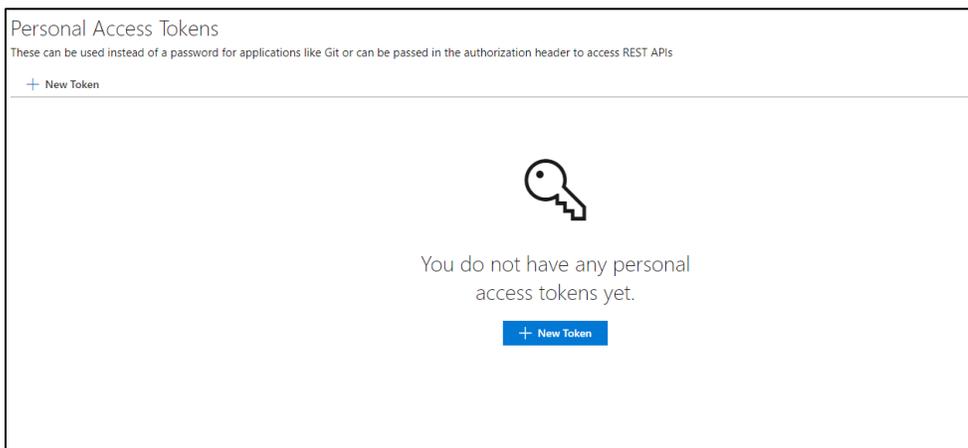
11. Enter **D365FO** as the project name and choose **Private** for the visibility. Expand the **Advanced** section. Under **Version control**, select **Team Foundation Version Control**. For the **Work item process**, select **CMMI**, then click **Create**.

The 'Create new project' dialog box is shown. The 'Project name' field contains 'D365FO' and is highlighted with a red box. The 'Description' field is empty. Under 'Visibility', the 'Private' option is selected and highlighted with a red box. The 'Advanced' section is expanded and highlighted with a red box. In the 'Advanced' section, the 'Version control' dropdown is set to 'Team Foundation Version Control' and the 'Work item process' dropdown is set to 'CMMI', both highlighted with red boxes. At the bottom right, the 'Create' button is highlighted with a red box.

12. Click on the User icon  in the top right corner of the site and select **Personal access tokens**.



13. Click New Token.



14. Enter the personal access token details then click **Create** at the bottom the of the page.

- **Name:** Lifecycle Services
- **Organizations:** All accessible organizations
- **Expiration:** 90 Days
- **Scopes:** Full access

Create a new personal access token ✕

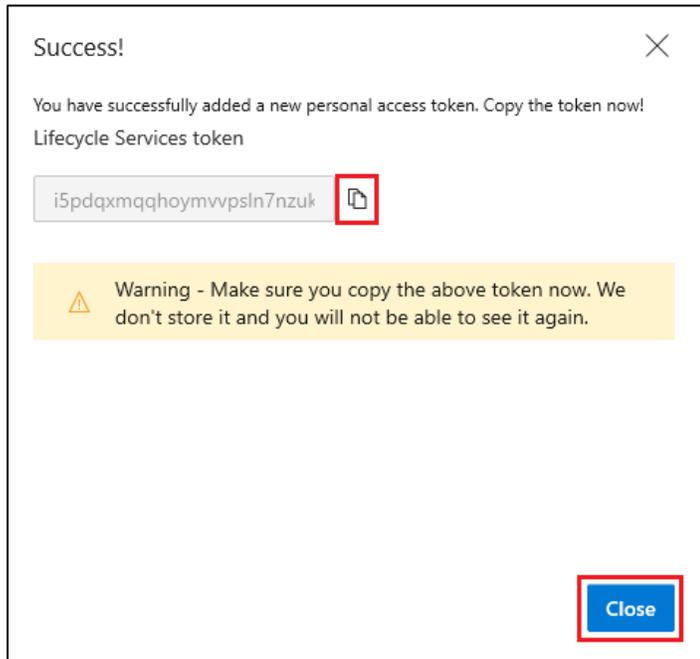
Name

Organization

Expiration (UTC)

Scopes
Authorize the scope of access associated with this token
Scopes Full access Custom defined

- Copy the token by clicking on the copy icon. Save the personal access token so you can use it later. Once you leave this page, you will no longer be able to view the token.



- This completes the process of setting up an Azure DevOps account.

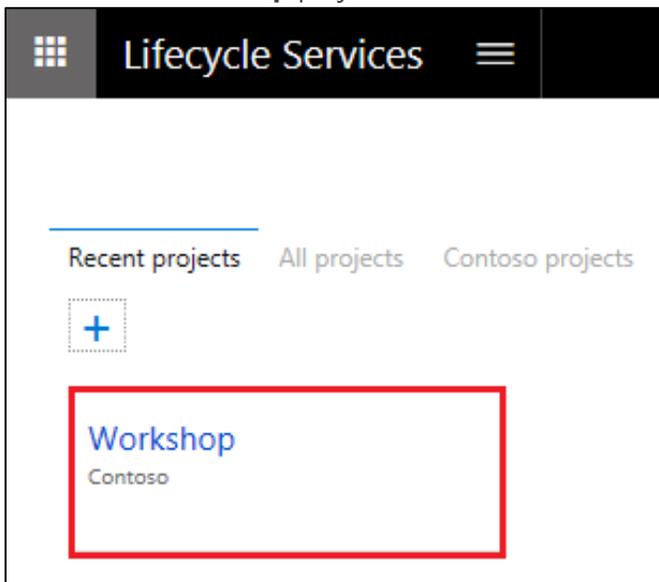
Lab 1.5.2: Setup Lifecycle Services Integration with Azure DevOps

To complete this part of the lab you will need the following information:

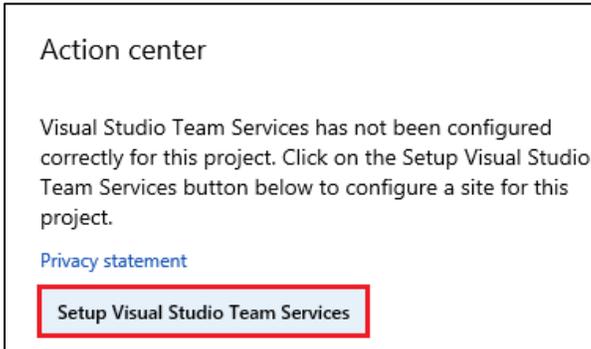
- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.
- Azure DevOps URL: `FirstLastMMDDYYYY.visualstudio.com`
- Personal access token saved from the last step in the previous lab.

Instructions

1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.
3. Click on the **Workshop** project.

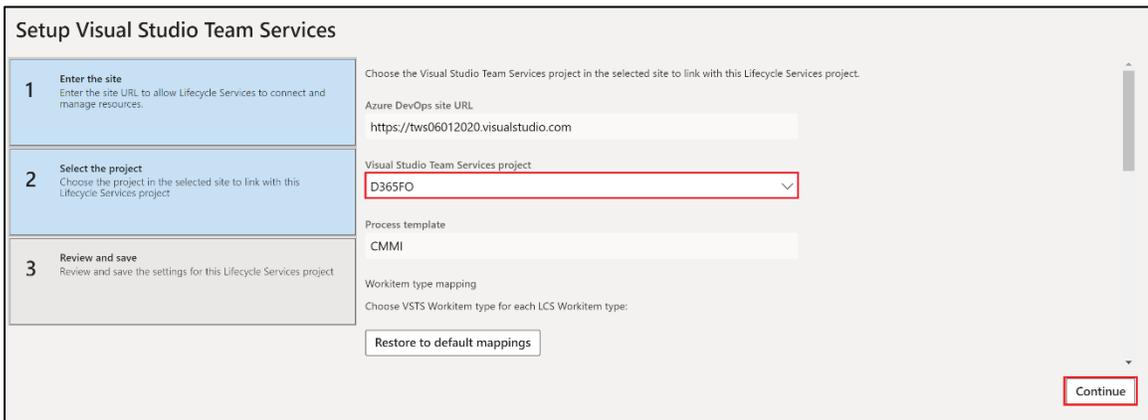


- Click **Setup Visual Studio Team Services** under the **Action center** in the project’s home page. Alternatively, you can navigate to **More tools > Project settings**. Then click **Setup Visual Studio Team Services**.



Enter the Azure DevOps (formerly VSTS) URL and Personal access token (from the last step in **Lab 1.5.1**). If your Azure DevOps URL is <https://dev.azure.com/jd04222019>, enter the URL <https://jd04222019.visualstudio.com>. You must convert your URL because Lifecycle Services only supports the visualstudio.com format. Click **Continue**.

- Select D365FO under the Visual Studio Team Services project and click Continue.



- Review the setup parameters and click **Save**.
- This completes the lab to setup the Lifecycle Services connection to Azure DevOps. You can click on the **Workshop** project link to return to the project home page.



Lab 1.6: Deploy a Dynamics 365 for Finance and Operations Build Environment

Introduction

In this lab you will deploy a cloud-hosted Dynamics 365 for Finance and Operations Build Environment using Lifecycle Services.

Estimated Time to Complete

10 minutes + up to 6 hours of waiting for the deployment to complete.

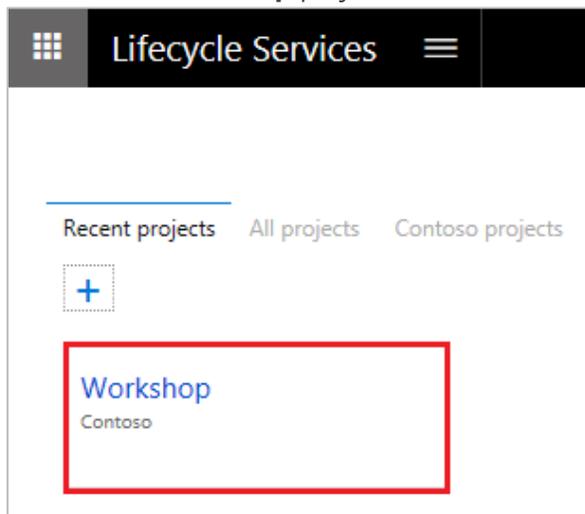
Lab 1.6.1: Deploy Finance and Operations Build VM

To complete this part of the lab you will need the following information:

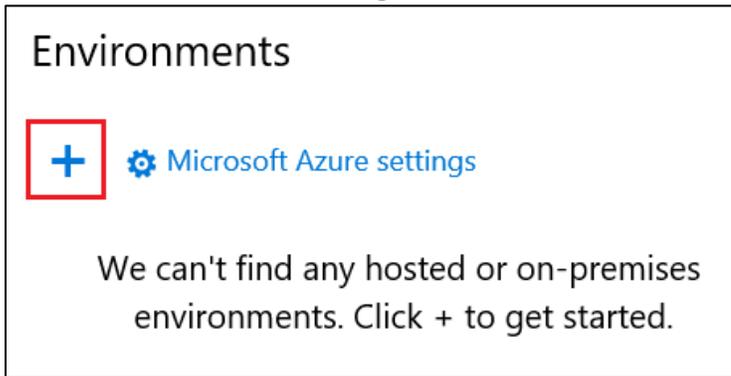
- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.

Instructions

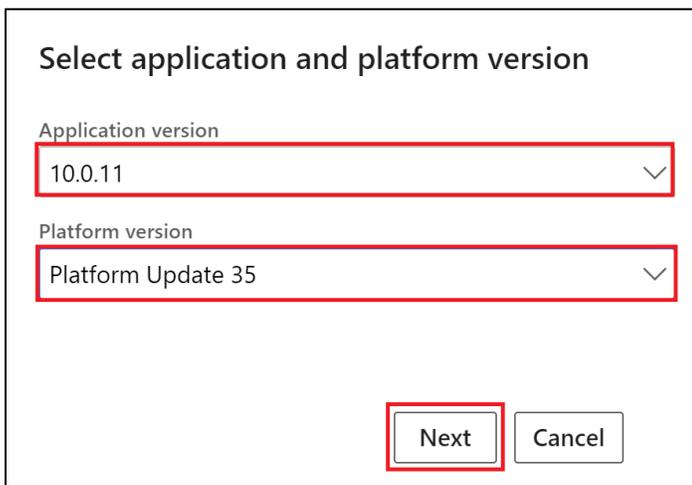
1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.
3. Click on the **Workshop** project.



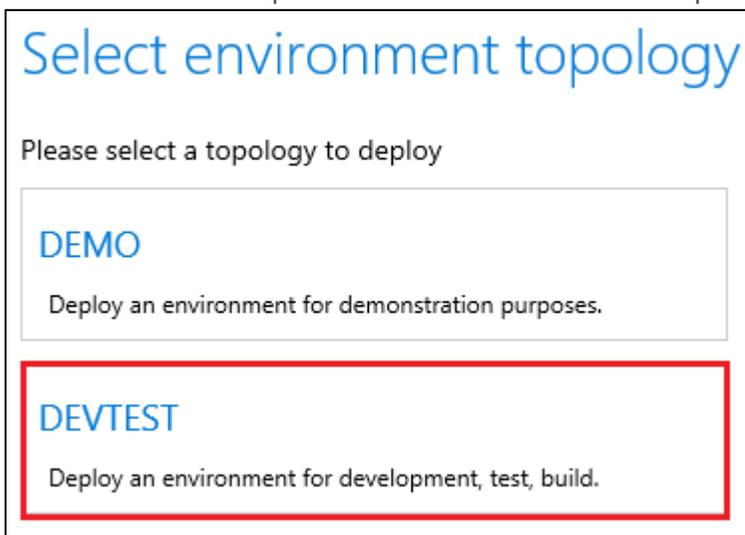
- On the main project page under the **Environments** heading, click the **Add (+)** button (next to Microsoft Azure settings) to add a new environment.



- Select application version **10.0.11** and platform version **Platform Update 35** and click **Next**.



- Select the **DEVTEST** option under Select environment topology.



7. Select the **Dynamics 365 for Finance and Operations – Build and Test (10.0.11 with platform update 35)** topology. Since this is a build server, you can only deploy with this topology if the Azure DevOps (formerly VSTS) integration is already configured. Demo and Development environments do not require Azure DevOps integration before deployment.

Select environment topology

Please select a topology to deploy

Finance and Operations - Build and Test (10.0.11 with Platform update 35)

Deploy this environment for team development on Finance and Operations 10.0.11.

Finance and Operations - Develop (10.0.11 with Platform update 35)

Deploy this environment for team development on Finance and Operations 10.0.11.

Cancel

- Click the **Advanced settings** button on the Deploy environment form.

Deploy environment

Dynamics 365 for Finance and Operations - Build and Test (8.0.0 with Platform update 15) v 69

Environment name

*

Advanced settings

Virtual Machine	Instances	Size
Build	1	▼ D13 ▼

Total deployments:
1 x D13

By selecting this checkbox, you agree to the pricing and licensing terms below.

[Microsoft Dynamics Software License Terms](#)

[Privacy Statement](#)

[Azure price list](#)

Next Cancel

- Select Visual Studio Team Services tab.

- Build Agent Name: **Build1**
- Branch Name: **Main**

Note: Branch Name is case sensitive, the **M** in **Main** must be uppercase.

10. You can explore the remaining settings. But leave the default values in them unchanged. Click **Done**.

Deployment settings

- Visual Studio Team Services >
- Visual Studio Customization >
- Supported version >
- Customize SQL Database Configuration >
- Disk space configuration >
- Premium Storage Settings >
- Customize virtual machine names >
- Enable Product Recommendations >
- Configure Machine Learning >
- Dynamics 365 for Finance and Operations >
- Customize virtual network >

VISUAL STUDIO TEAM SERVICES

Build Agent Name

Build Agent Pool (HINT: Must exist prior to deployment)

Branch Name

VSO CREDENTIALS (DEPRECATED: SET ACCESS TOKEN IN PROJECT SETTINGS)

Alternate User ID

Alternate Password

Done

11. Enter the remaining information in the **Deploy environment** dialog.
12. Use the following format for the environment name **aaa-build-01012020** where **aaa** are your initials, **build** is the VM description, and **01012020** is the date, e.g. **tws-build-06012020**.
13. For the virtual machine size, select the size recommended by your instructor. If your instructor did not specify a certain size, select **D12 v2** or **DS12 v2** or **D12**, the most used VM sizes.

The **D12 v2**, **DS12 v2**, and **D12** VM types have **4 cores** and **28GB** of memory. Other VM types that have less memory will not be able to run the Finance and Operations application. VM types such as D13 cost more per hour, so they will use your Azure Pass subscription credits more quickly, and you may run out prior to the end of the workshop. Consult your instructor if the recommended VM type is not available. If necessary, you can change the VM size in the Azure Portal after the deployment is complete.

Check the box to agree to the pricing and licensing terms and click **Next**.

Deploy environment

Finance and Operations - Build and Test (10.0.11 with Platform update 35) v 69

Environment name

Virtual Machine	Instances	Size
Build	1	<input style="border: 1px solid red;" type="text" value="D12 v2"/>

Total deployments:
1 x D12 v2

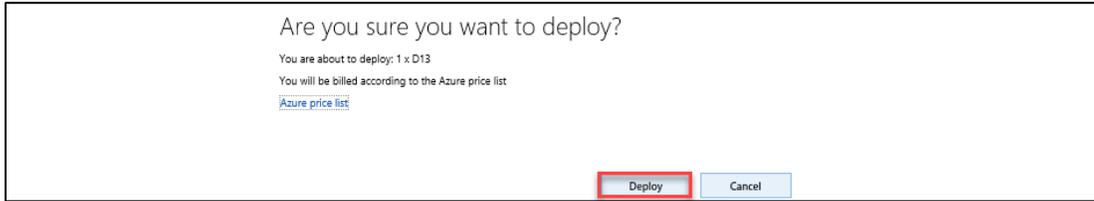
By selecting this checkbox, you agree to the pricing and licensing terms below.

[Microsoft Dynamics Software License Terms](#)

[Privacy Statement](#)

[Azure price list](#)

14. Click **Deploy** when you are asked “Are you sure you want to deploy?”



The environment deployment takes several hours to complete.

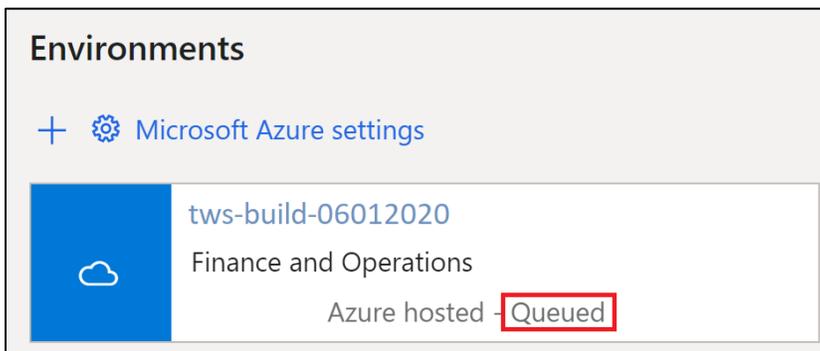
Note: If the VM type/size selected is not available in the region specified, an error message (like that shown below) is displayed. If that happens, select another size and reattempt the deployment. You can always change the VM size after the deployment is complete if needed.

✖

Error

The current subscription id [2741d00d-bc0a-4371-afca-73fa85ef17d5] does not allow the VM SKUs [Standard_D13], either because they don't exist in the current region or because of the restriction codes [NotAvailableForSubscription;NotAvailableForSubscription]. Please open a ticket with Azure Support to enable these SKUs in your subscription. If the issue persists, please contact support with this id: 61e0e1ce-7b32-434c-9333-8cc4a10ef7ce

Following a successful deployment request, your environment appears in a **Queued** state. Later, the status changes to **Deploying** and eventually to **Deployed**. The environment will only be accessible when its status is updated to Deployed.



Important: The deployment process may take up to 6 hours to complete.

This completes the lab on deploying a Dynamics 365 for Finance and Operations Build VM. In the next lab, you will deploy a Development VM. The next lab can be started while the Build VM is still being deployed.

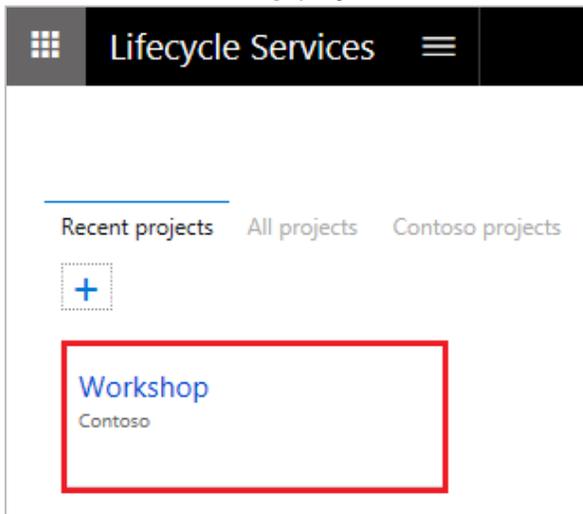
Lab 1.6.2: Deploy Finance and Operations Dev VM

To complete this part of the lab you will need the following information:

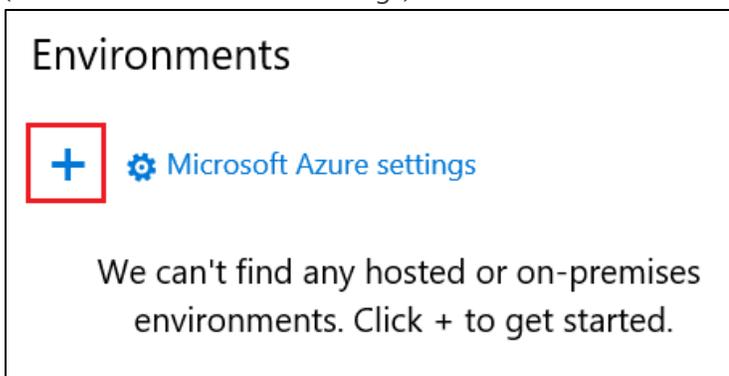
- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.

Instructions

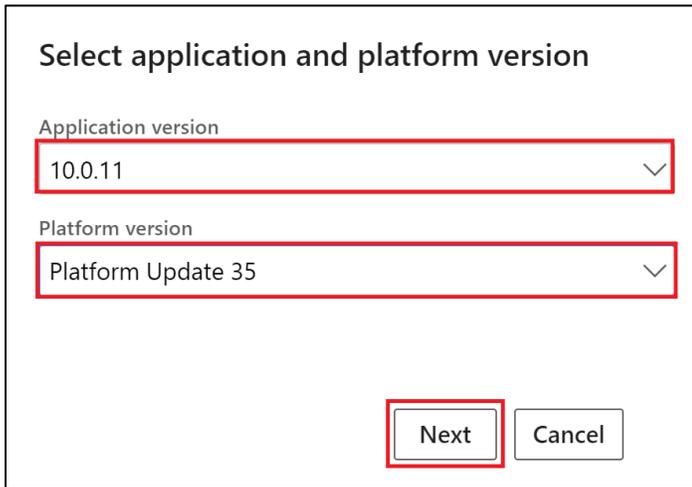
1. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome, Microsoft Edge** or **Internet Explorer**.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.
3. Click on the **Workshop** project.



4. On the main project page under the **Environments** heading, click the **Add ('+')** button (next to Microsoft Azure settings) to add a new environment.



5. Select application version **10.0.11** and platform version **Platform Update 35** and click **Next**.



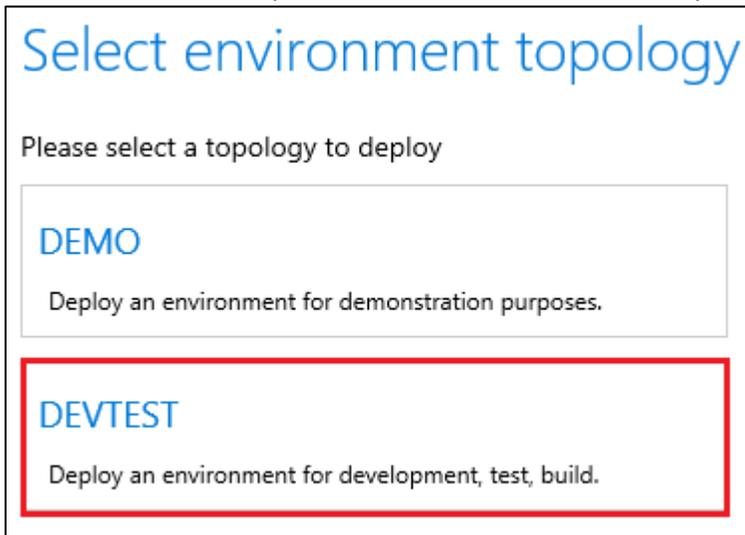
Select application and platform version

Application version
10.0.11

Platform version
Platform Update 35

Next Cancel

6. Select the **DEVTEST** option under Select environment topology.



Select environment topology

Please select a topology to deploy

DEMO
Deploy an environment for demonstration purposes.

DEVTEST
Deploy an environment for development, test, build.

7. Select the **Dynamics 365 for Finance and Operations – Develop (10.0.11 with platform update 35)** topology.

Select environment topology

Please select a topology to deploy

Finance and Operations - Build and Test (10.0.11 with Platform update 35)

Deploy this environment for team development on Finance and Operations 10.0.11.

Finance and Operations - Develop (10.0.11 with Platform update 35)

Deploy this environment for team development on Finance and Operations 10.0.11.

Cancel

8. Use the following format for the environment name **aaa-dev-01012020** where **aaa** are your initials, **dev** is the VM description, and **01012020** is the date, e.g. **twS-dev-06012020**.
9. For the virtual machine size, select the size recommended by your instructor. If your instructor did not specify a certain size, select **D12 v2** or **DS12 v2** or **D12**, the most used VM sizes.

The **D12 v2**, **DS12 v2**, and **D12** VM types have **4 cores** and **28GB** of memory. Other VM types that have less memory will not be able to run the Finance and Operations application. VM types such as D13 cost more per hour, so they will use your Azure Pass subscription credits more quickly, and you may run out prior to the end of the workshop. Consult your instructor if the recommended VM type is not available. If necessary, you can change the VM size in the Azure Portal after the deployment is complete.

Check the box to agree to the pricing and licensing terms and click **Next**.

Deploy environment

Finance and Operations - Develop (10.0.11 with Platform update 35) v 69

Environment name

Select VM size recommended by instructor

Virtual Machine	Instances	Size
Developer	1	<input type="button" value="D12 v2"/>

Total deployments:
1 x D12 v2

By selecting this checkbox, you agree to the pricing and licensing terms below.

[Microsoft Dynamics Software License Terms](#)
[Privacy Statement](#)
[Azure price list](#)

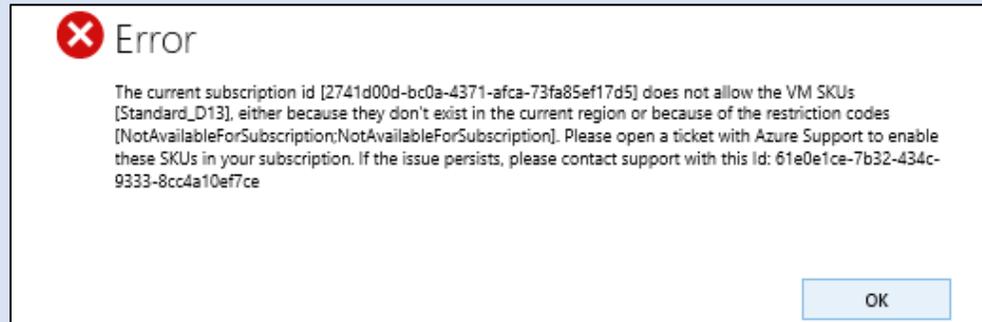
10. Click **Deploy** when you are asked "Are you sure you want to deploy?"

Are you sure you want to deploy?

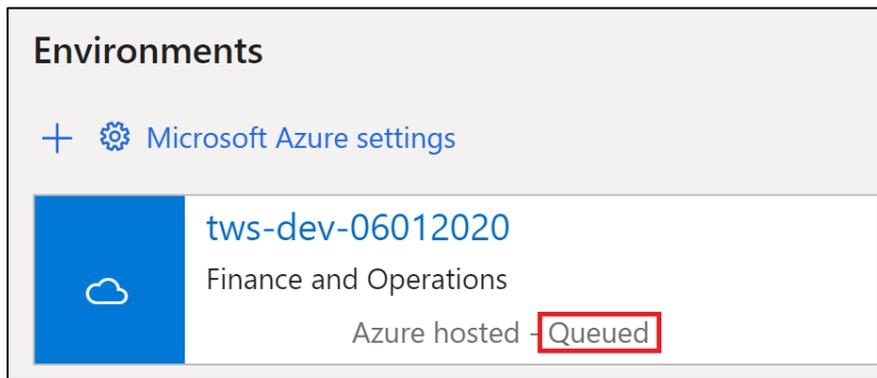
You are about to deploy: 1 x D13
 You will be billed according to the Azure price list
[Azure price list](#)

The environment deployment takes several hours to complete.

Note: If the VM type/size selected is not available in the region specified, an error message (like that shown below) is displayed). If that happens, select another size and reattempt the deployment. You can always change the VM size after the deployment is complete if needed.



Following a successful deployment request, your environment appears in a **Queued** state. Later, the status changes to **Deploying** and eventually to **Deployed**. The environment will only be accessible when its status is updated to Deployed.



Important: The deployment process may take up to 6 hours to complete.

This completes the lab on deploying a Dynamics 365 for Finance and Operations Build VM. In the next lab, you will deploy a Development VM. The next lab can be started while the Build VM is still being deployed.

Lab 1.6.3: Configure Auto-shutdown for the Lab VM

Goals for this part of the lab:

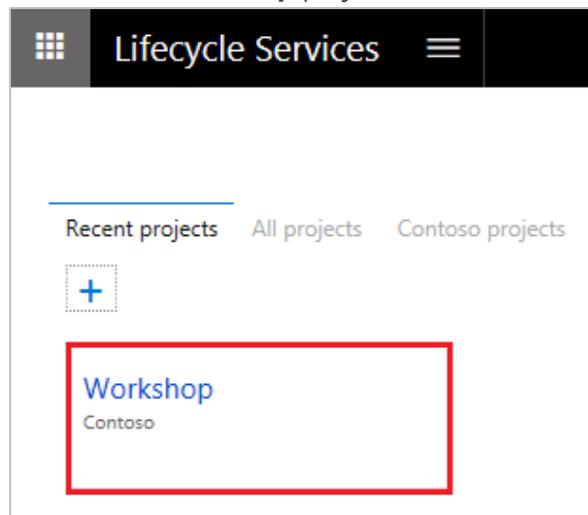
- Configure the auto-shutdown feature to shut down your lab VM each evening. This will help conserve your Azure credits for classroom activities.

To complete this part of the lab you will need the following information:

- **OnMicrosoft.com Account:** `admin@FirstLastMMDDYYYY.onmicrosoft.com`.

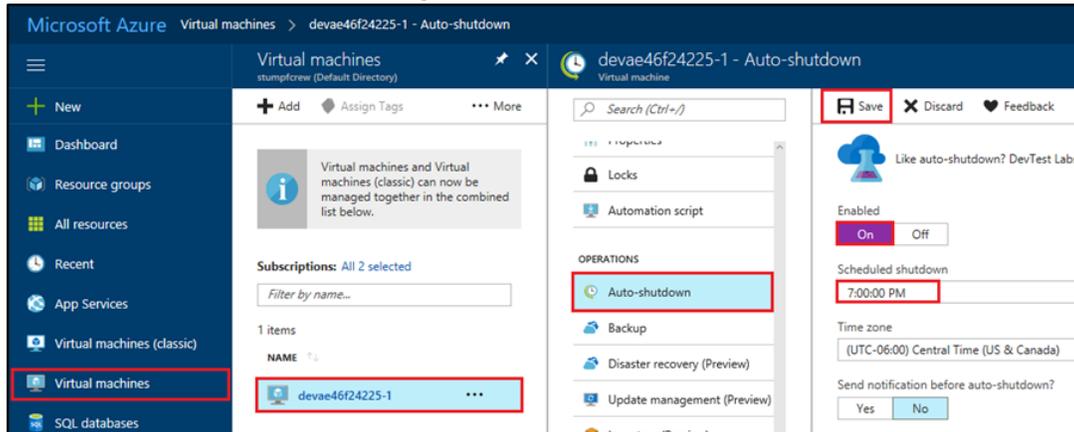
Instructions

1. **Open a web browser** such as **Google Chrome**, **Microsoft Edge** or **Internet Explorer** from the Start menu. To avoid signing in automatically with your default company/personal credentials, use the InPrivate/Incognito mode when opening a new browser session.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **OnMicrosoft.com Account**.
3. Click on the **Workshop** project.



4. On the main project page under the **Environments** heading, check to make sure your environment status shows as **Deployed**. If you see a status of **Queued** or **Deploying**, the VM deployment is not yet complete and auto-shutdown should not be configured. **Continue with this lab only after the status changes to **Deployed**.**
5. Open a new browser session in the **InPrivate/Incognito** mode using a browser such as **Google Chrome**, **Microsoft Edge** or **Internet Explorer**.

- Navigate to the **Microsoft Azure Portal** at <https://portal.azure.com> and sign in using your **OnMicrosoft.com Account**.
- Click on **Virtual machines** then click on your **VM name**. Under the **Operations** heading, click **Auto-shutdown**. In the auto-shutdown properties, set **Enabled to On** and the scheduled shutdown time to **7:00pm**. Then click **Save**.



Lab 1.6.4: Test and Troubleshoot Remote Desktop Access

Goals for this part of the lab:

- Verify access to the VM via the Remote Desktop client to ensure you can access the VM from the network where the workshop will be delivered. If the network where the workshop will be delivered prevents certain outbound traffic, it may be necessary to adjust firewall settings or change the port number of the virtual machine to successfully connect.

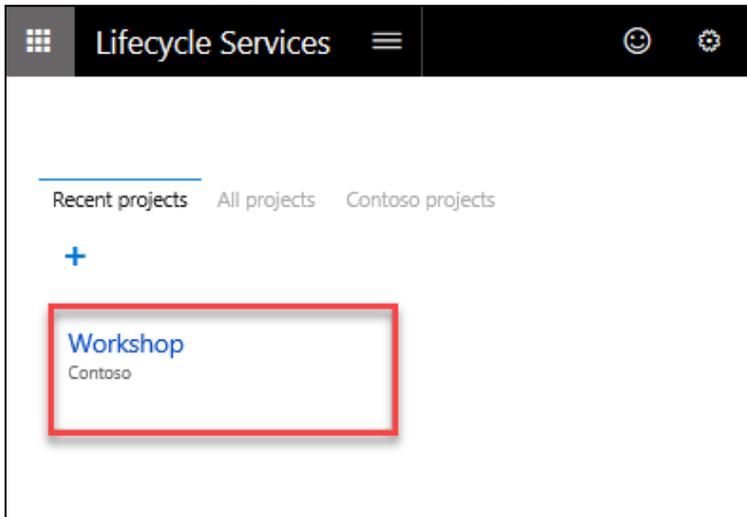
To complete this part of the lab you will need the following information:

- **OnMicrosoft.com Account:** This account should be in the format: **admin@FirstLastMMDDYYYY.onmicrosoft.com**. (e.g., **admin@JohnDoe03142018.onmicrosoft.com**).
- The lab machine must be finished deploying.
- You must test remote desktop access on the same network that the workshop will be delivered at. For example, from your corporate network.

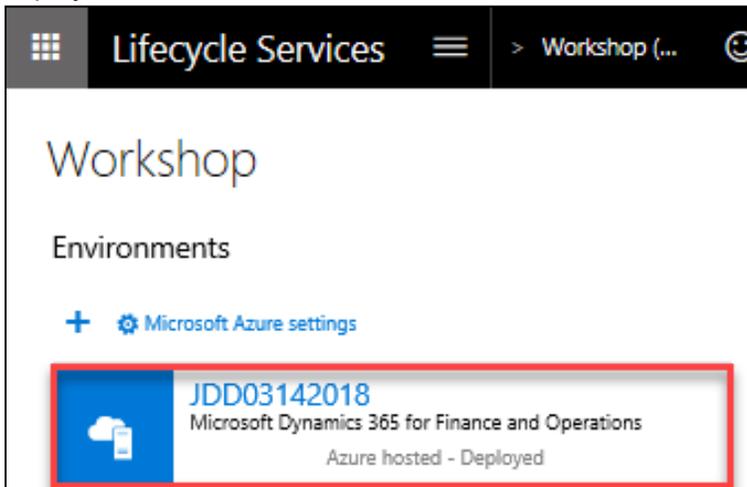
Instructions

1. **Open a web browser** such as **Google Chrome**, **Microsoft Edge** or **Internet Explorer**, from the Start menu. To avoid signing in automatically with your default company/personal credentials, use the **InPrivate/Incognito** mode when opening a new browser session.
2. Navigate to Lifecycle Services at <https://lcs.dynamics.com> and sign in using the **Primary LCS Account** (looks like **admin@JohnDoe03142018.onmicrosoft.com**).

- Click on the LCS project **Workshop**. This project was created in the deployment lab.



- Under the **Environments** heading, click on the build environment that was created in the deployment lab.



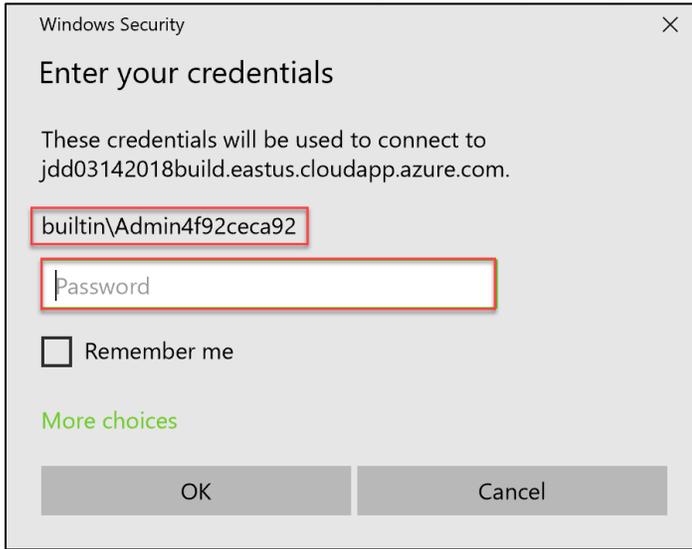
- On the Environment page, locate the **LOCAL ACCOUNTS** table in the **Manage environment** section. Click on the VM name under **VM Name** heading.

LOCAL ACCOUNTS		
VM Name	User name	Password
build6ecccd28-1	builtin\Admin2a9f7ea98c	*****
build6ecccd28-1	builtin\User6f01c46646e	*****

- You will be prompted to select an action from **Open**, **Save** or **Cancel**. Click **Open**.



- You will be prompted for login credentials. The **user id** should already be populated. If it is not, continue to the next step. If it is, skip to step 11.



Windows Security

Enter your credentials

These credentials will be used to connect to
jdd03142018build.eastus.cloudapp.azure.com.

builtin\Admin4f92ceca92

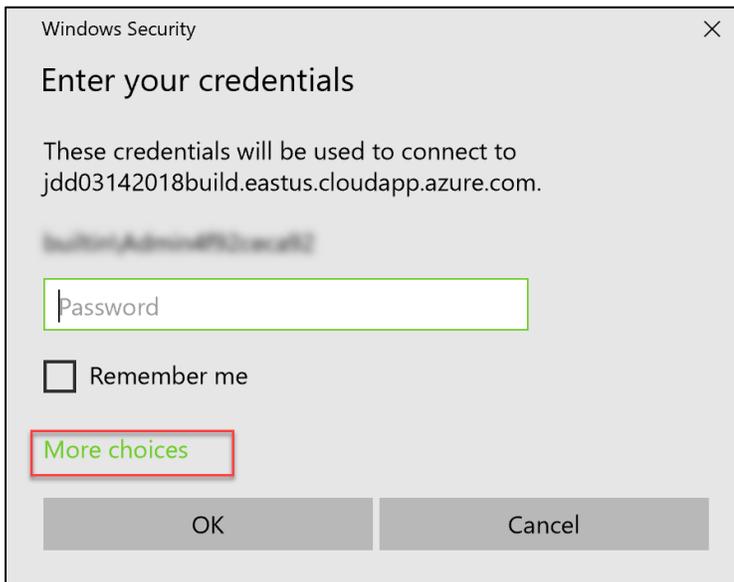
Password

Remember me

[More choices](#)

OK Cancel

- If the user id is missing or different from the account that appears under **User name** in the **LOCAL ACCOUNTS** section, select **More choices**.



Windows Security

Enter your credentials

These credentials will be used to connect to
jdd03142018build.eastus.cloudapp.azure.com.

builtin\Admin4f92ceca92

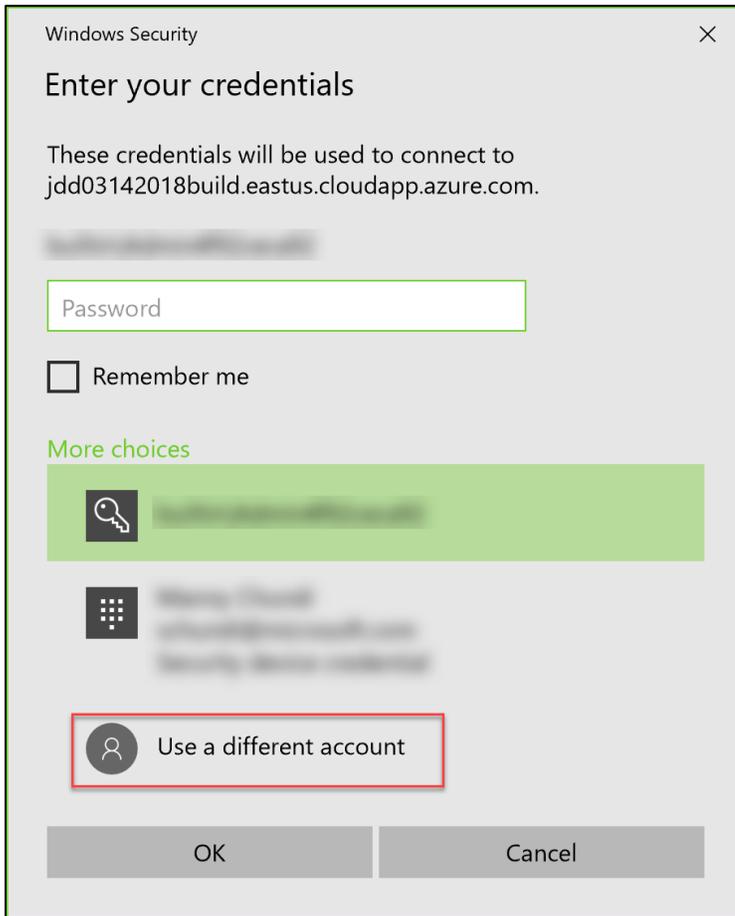
Password

Remember me

[More choices](#)

OK Cancel

9. Select Use a different account.



10. The credentials you need to enter appear in the **LOCAL ACCOUNTS** section. Copy the **User name** to the Windows security dialog box.
11. Click on the icon next to the **Password** field to copy the password then paste it into the Windows security dialog box and click **OK**.

LOCAL ACCOUNTS		
VM Name	User name	Password
builde00245fb-1	builtin\Adminine80001c5dc	*****
builde00245fb-1	builtin\User88502b4edb3	*****

12. **Click Yes** when prompted for confirmation. This will establish a remote desktop session to the build server. If you can successfully establish a remote desktop session, you have completed the last step necessary to prepare for the workshop. The steps below are only necessary if you have problems connecting.



STOP HERE

Proceed with the rest of this lab only if you are unable to establish a remote desktop session.

The steps below are only necessary if your network is blocking the outbound network traffic required to connect to your virtual machine via Remote Desktop.

First, consult your network administrator to find out if any outbound network traffic is blocked. For some networks, adjusting the port number your VM is listening on will resolve the issue.

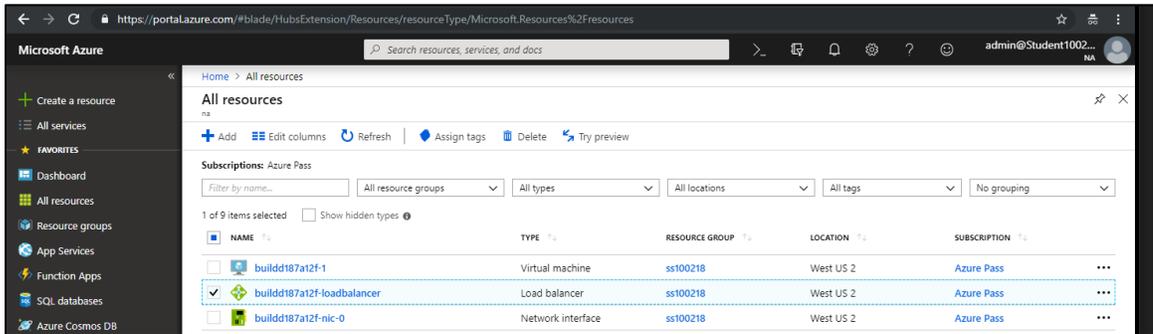
Contact your workshop instructor if you have any questions.

The next steps show you how to change the public RDP port of your newly created VM to port 80 which is a more commonly allowed port number.

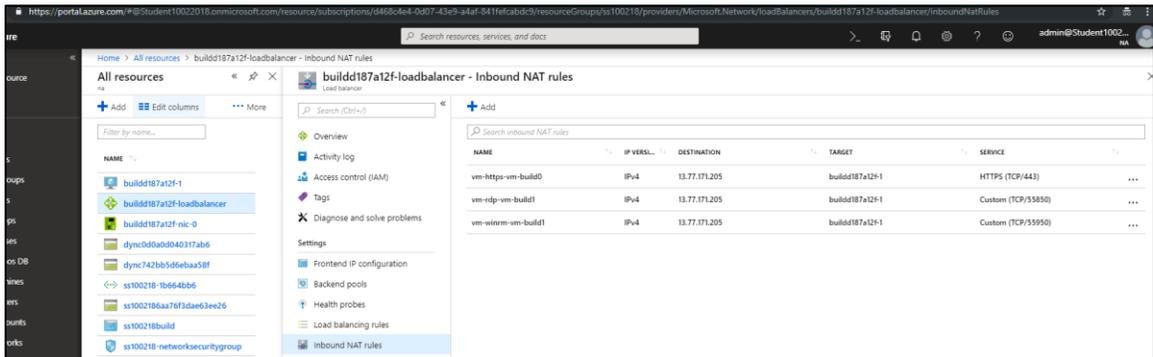
- Navigate to the Microsoft Azure Portal at <https://portal.azure.com> and sign in using your **OnMicrosoft.com** Account.

Only perform the following steps if you determine you cannot connect to your VM due to firewall issues. If you change the port number, the RDP links downloaded from LCS will no longer be correct and you will need to manually adjust the port number in the RDP files.

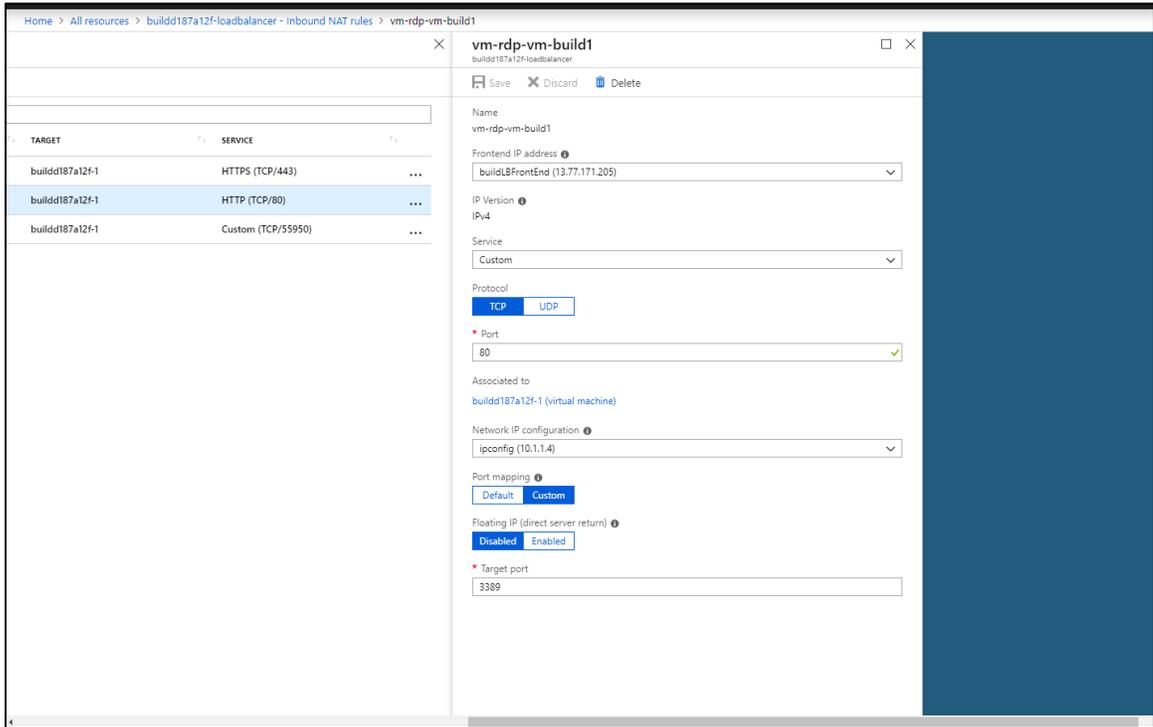
- Click on All resources and the Load Balancer Resource.



- Click on **Inbound NAT rules** and click on the **vm-rdp.vm-build1** rule.



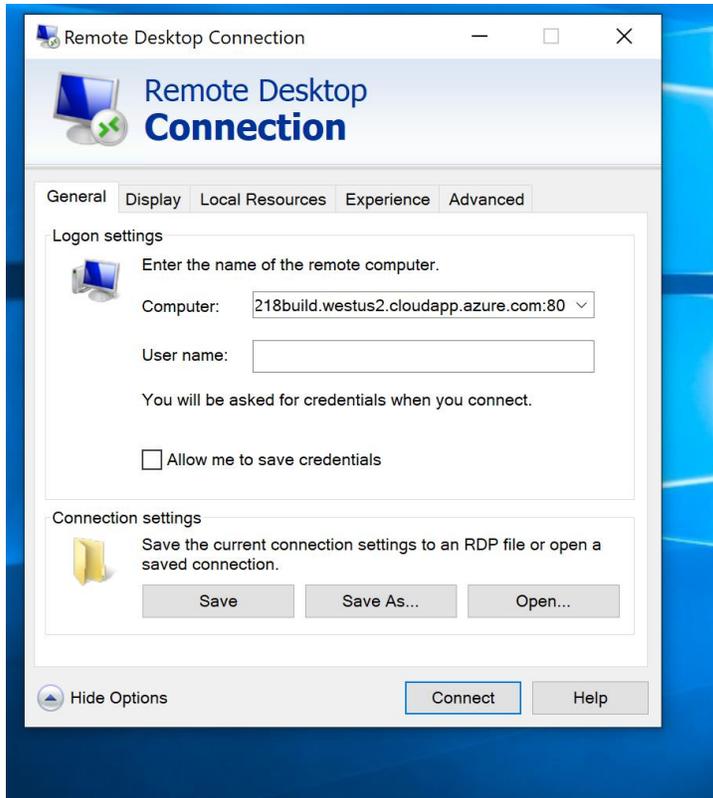
16. Change the Port to **80** and save.



17. On the Environment page in LCS, locate the **LOCAL ACCOUNTS** table in the **Manage environment** section. Click on the VM name under **VM Name** heading.

LOCAL ACCOUNTS		
VM Name	User name	Password
build6ecccd28-1	builtin\Admin2a9f7ea98c	*****
build6ecccd28-1	builtin\User6f01c46646e	*****

18. You will be prompted to select an action from **Open**, **Save** or **Cancel**. Click **Save**. Edit the SAVED configuration file. The computer name will have a name followed by a colon then a port number. Change the value after the colon to 80 and save the remote desktop connection. Click **Connect** to see if you can now reach the VM.



If the above RDP still does not work, please contact the Premier Field engineer who is delivering the workshop prior to the onsite.