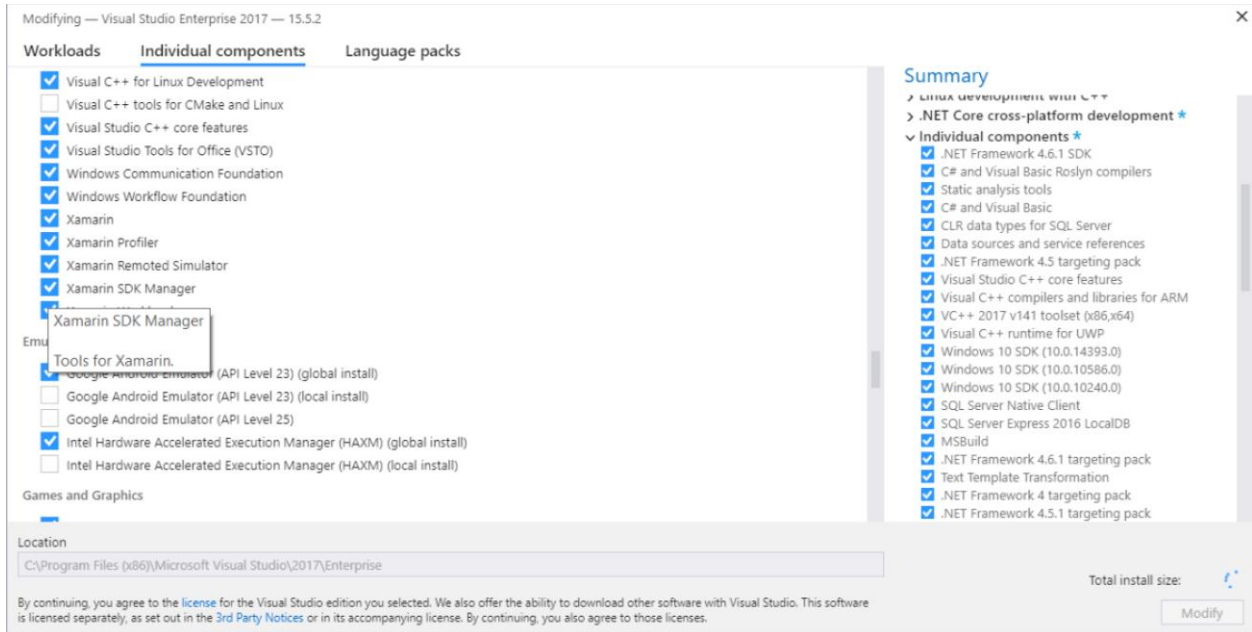


Table of Contents

Overview	2
Requirements.....	2
Setup Instructions.....	3
Step 1: In the Azure Portal, Create a new Virtual Machine.....	3
Step 2: Update VS 2017 to 15.5.....	4



.....	5
Step 3: Update Android SDKs	5
Appendix: Setup Documents for your own workstations	6
Installing Xamarin in Visual Studio on Windows	6
Installing Visual Studio for Mac	7

Overview

Mobile app development is integrating at an incredible pace. While certain scenarios don't evolve as quickly, new versions of mobile platforms, with new features are coming out continuously. Microsoft, in turn, is continually provide product updates to make sure developers can take advantage of the latest-and-greatest technologies available.

This guide will focus on two objectives. The first objective is setting up a Virtual Machine in Microsoft's Azure that can support the necessary developer tools. The second is installing the correct versions of tools to make sure you have everything you need to complete the activities in today's hackathon.

For those who are going to use their own workstation, please review the environment requirements, and skip to step 2 below.


Requirements

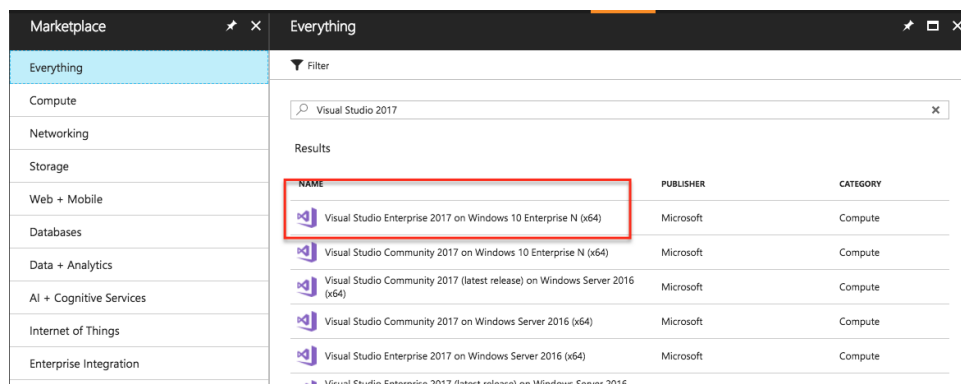
- Azure Subscription
- Windows
 - Workstation with VT-X Support w/Hyper-V Disabled (under Programs and Features in Windows Settings)
 - Intel HAXM Support installed
 - Windows 10 (Fall Creators Update recommended)
 - Visual Studio 2017 (15.5 Required)
- Mac
 - Visual Studio for Mac (latest stable release)
 - Xcode 9.2 (or current latest stable release)
- Android SDKs (21, 22, 23, 24, 25, 26, 27)

Setup Instructions

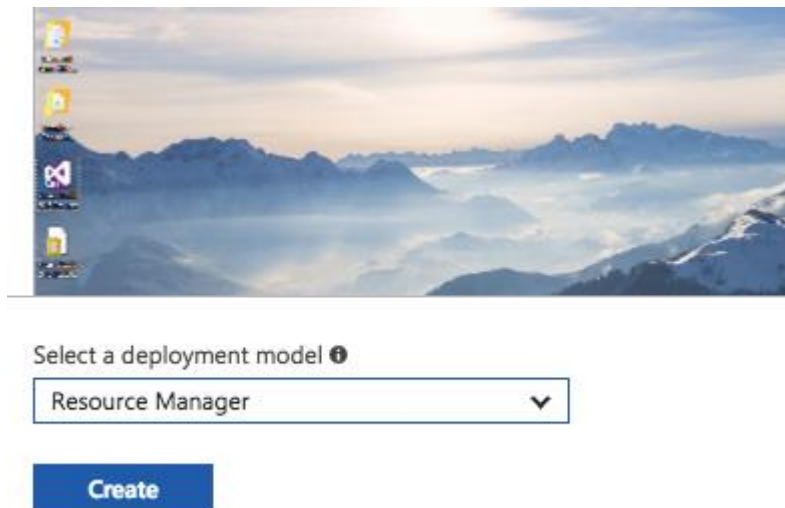
Step 1: In the Azure Portal, Create a new Virtual Machine

- a. Browse to <https://portal.azure.com>
- b. Once logged in

- a. Click the  button
- b. Search for "Visual Studio 2017", and choose "Visual Studio Enterprise 2017 on Windows 10 Enterprise N (x64)"



- c. Choose "Resource Manager" as deployment model, and click "Create"



- d. Enter in
 - i. Name – a unique name for your VM
 - ii. VM disk type (Choose SSD)
 - iii. Username – anything you want
 - iv. Password / Confirm Password – anything you want
 - v. Subscription – whichever subscription you want to use

- vi. Resource Group – Name a resource group (anything you want) or select an existing Resource Group,
- vii. Location – Choose **“East US”** (This region has the specific types of VMs we need for this)

The screenshot shows the 'Create virtual machine' dialog box with the 'Basics' tab selected. The left sidebar lists four steps: 1 Basics (Configure basic settings), 2 Size (Choose virtual machine size), 3 Settings (Configure optional features), and 4 Purchase (Visual Studio Enterprise 2017 o...). The main area contains the following fields:


- Name:** MyNewVM (with a green checkmark)
- VM disk type:** SSD (dropdown menu)
- User name:** username (with a green checkmark)
- Password:** (masked with dots, with a green checkmark)
- Confirm password:** (masked with dots, with a green checkmark)
- Subscription:** Visual Studio Enterprise (720badcf-16ef-4f... (dropdown menu)
- Resource group:** AIG (dropdown menu, with radio buttons for 'Create new' and 'Use existing' (selected))
- Location:** East US (dropdown menu)

An 'OK' button is located at the bottom right of the dialog box.

- e. On the "Size" pane, click the "View All" button, and select **"D8S_V3"**
- f. On "Settings" page, make any necessary changes (all the defaults here should be fine)
- g. On the "Purchase" page, review all the details, and click "Purchase"

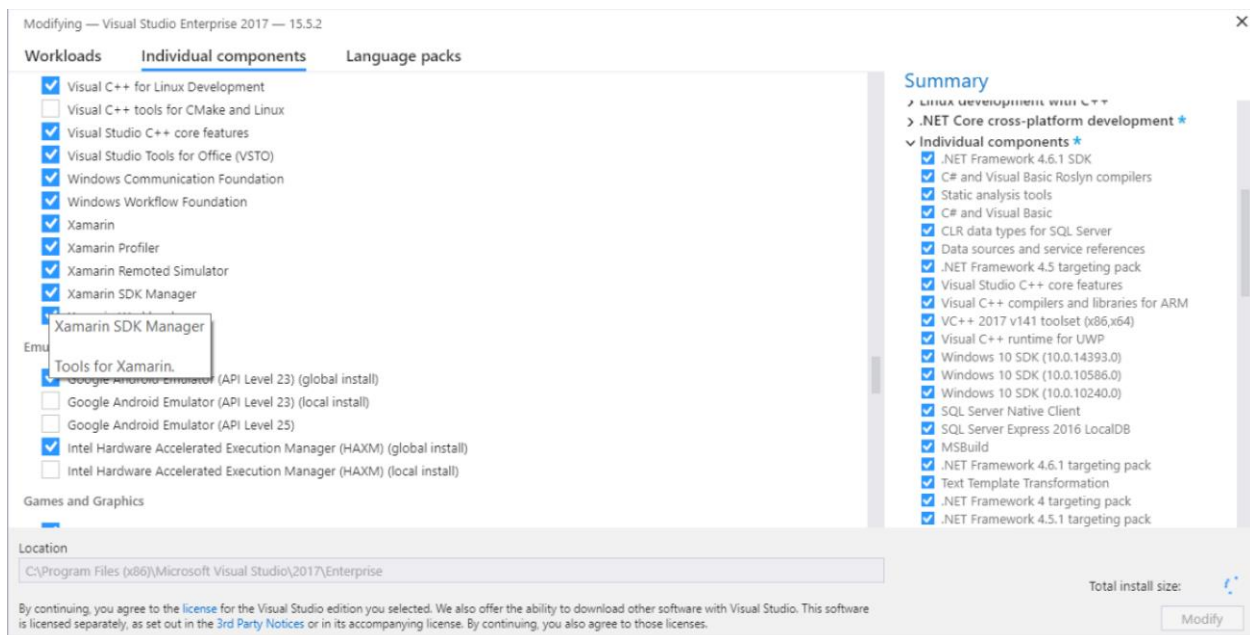
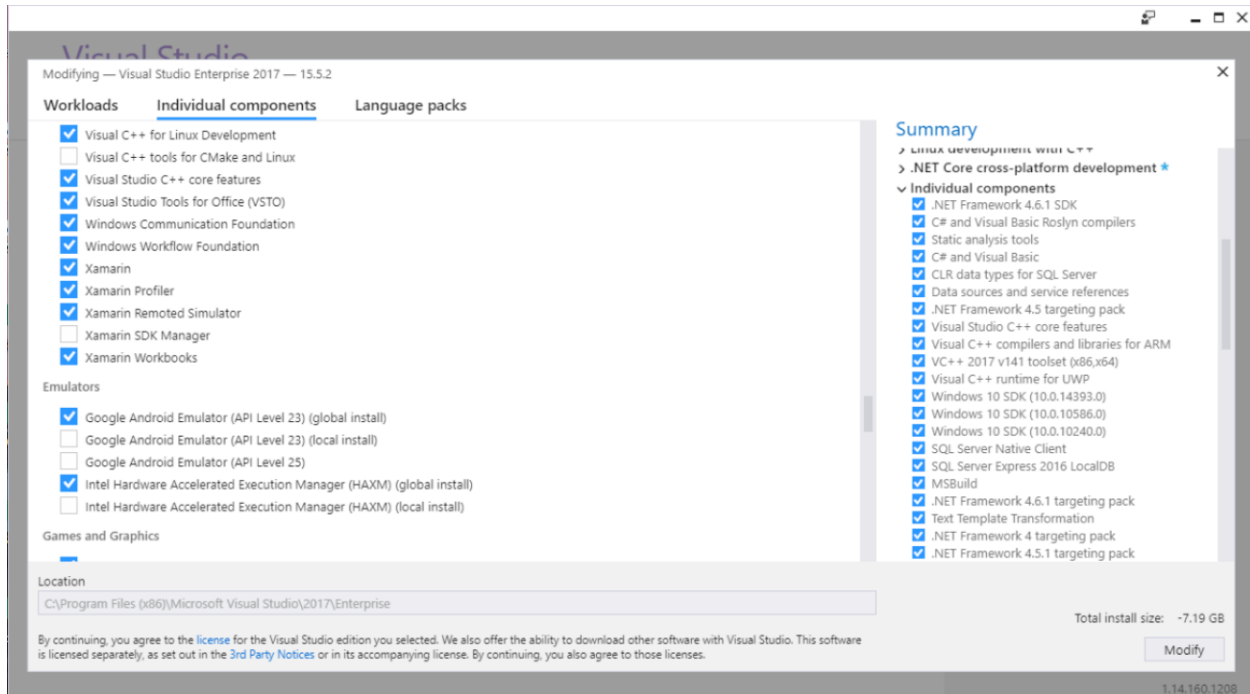
Your machine will now be provisioned. Grab a cup of coffee, and continue to Step 2 below when it's ready.

Step 2: Update VS 2017 to 15.5

From within <https://portal.azure.com>, locate your VM, and click the  **Connect** button to download an RDP profile. If connecting from Mac, please make sure to install Microsoft's Remote Desktop Client (link).

1. Launch Visual Studio 2017
2. Click Tools > Extensions and Updates
3. Follow the prompts to start the update to VS 2017 15.5

4. Reboot the VM when all bits have been updated
5. Make sure the “Xamarin SDK Manager” is installed



Step 3: Update Android SDKs

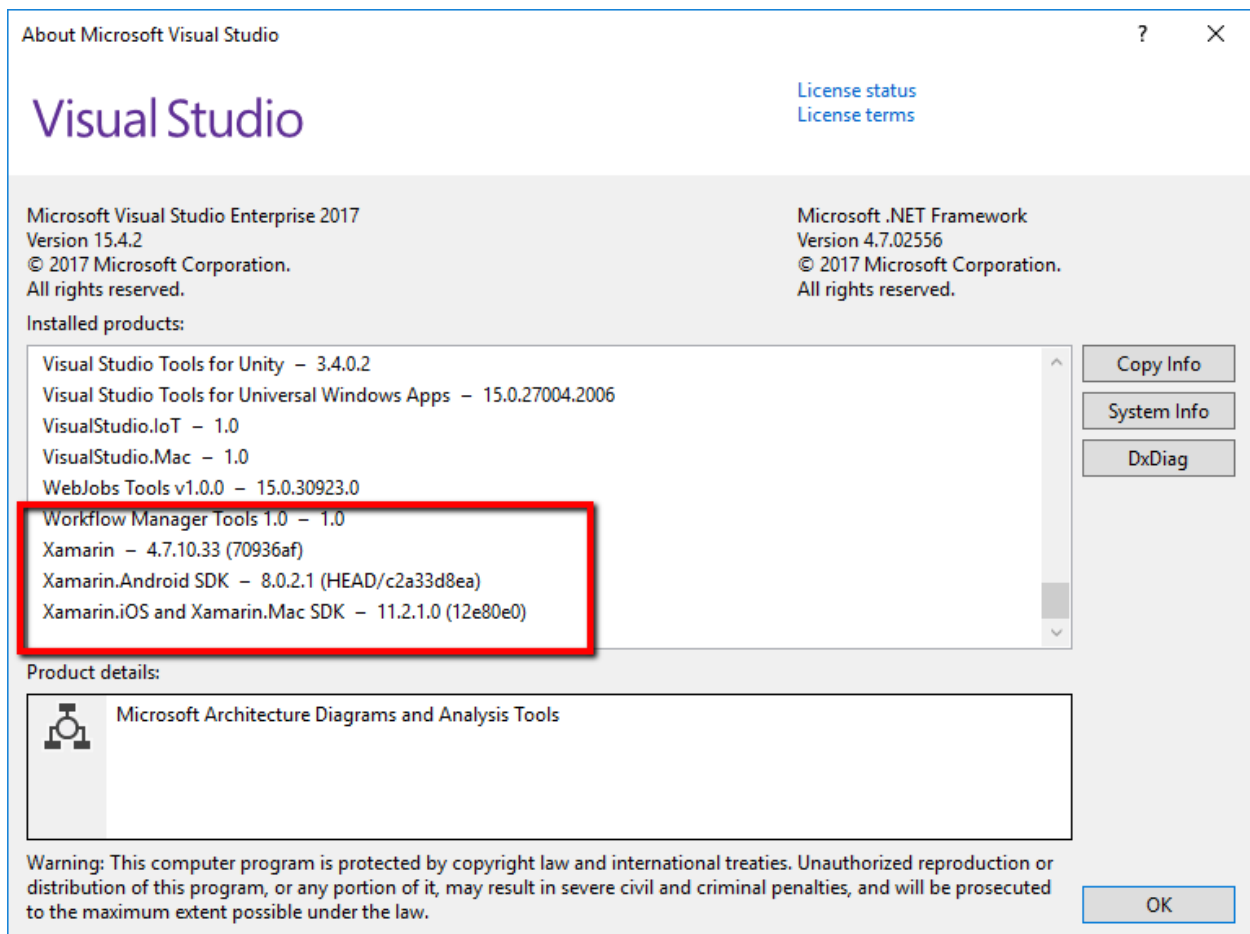
Appendix: Setup Documents for your own workstations

Prerequisites (on Windows)

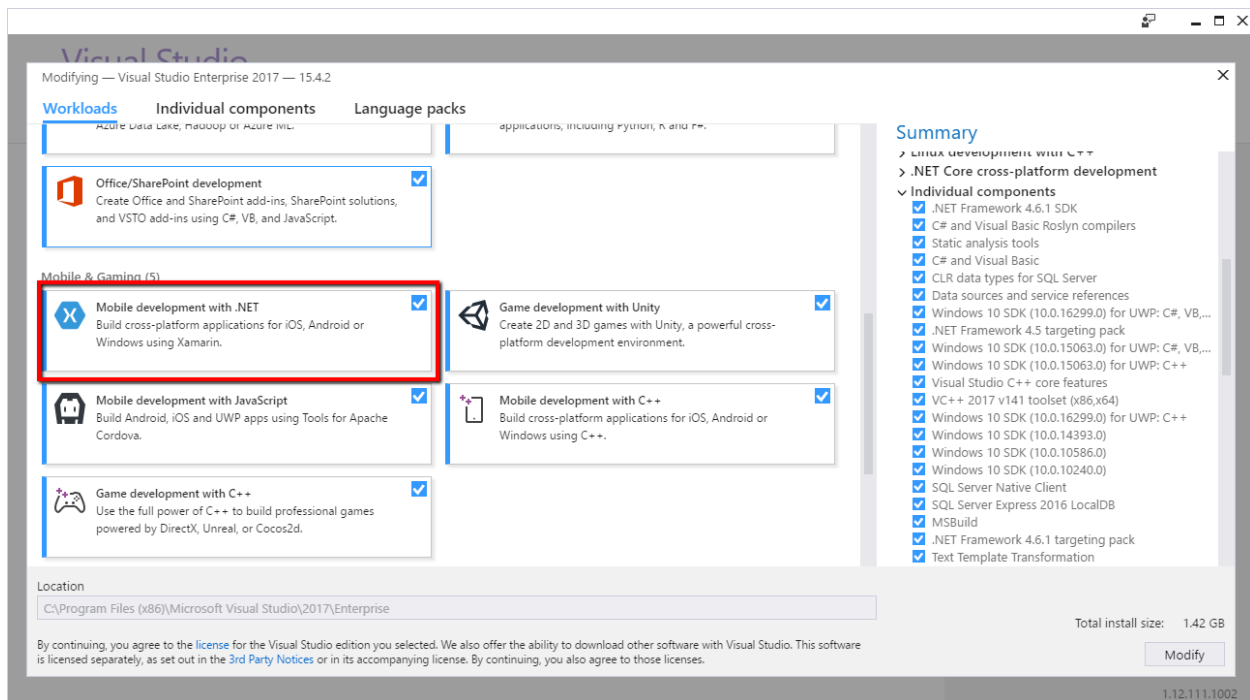
1. Have Visual Studio 2015 or 2017 installed (2017 15.3 release recommended)
2. Have support for VT-x enabled in BIOS (this is required for HAXM, which is needed for Android Emulators) or...
3. Have an Android Device with debugging enabled

Installing Xamarin in Visual Studio on Windows

Xamarin is included Visual Studio 2017 on Windows. To check to see if Xamarin is installed, select Help > About in Visual Studio, and confirm that you see the following entries.



If you do not see the following entries, re-run the Visual Studio 2017 Installer, and select the “Mobile development with .NET” workload



Installing Visual Studio for Mac

Please visit <https://docs.microsoft.com/en-us/visualstudio/mac/installation> for installation instructions for Visual Studio for Mac.