

# Module 5 - On-Premise Data Gateway

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## Lab 1

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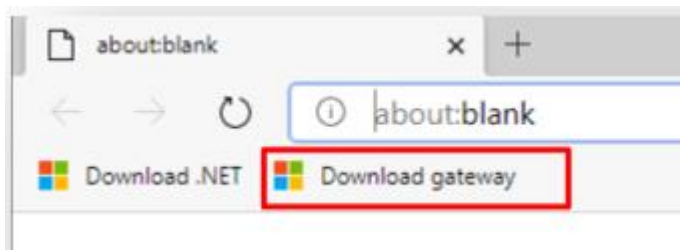
### Estimated Time

20 minutes

### Exercise 1 - Download and Install Data Gateway

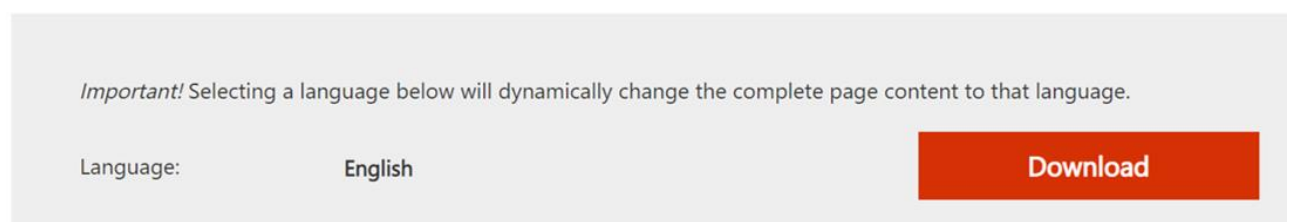
In this exercise, we will install and configure On-Premises Data Gateway

1. On **Virtual Machine** open the **Edge Chromium** browser and navigate to <https://www.microsoft.com/en-us/download/details.aspx?id=53127>

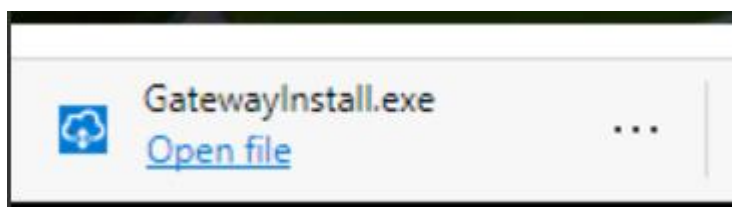


2. Select **Download** to start On-premise data gateway download

#### On-premises data gateway



3. Run the Installation File.



4. Review Terms of Use and then click **Install**.

## On-premises data gateway installation

Getting ready to install the on-premises data gateway.

Please review [minimum requirements](#) for installing the On-premises data gateway. Not meeting the requirements may result in performance bottlenecks.

Install to

C:\Program Files\On-premises data gateway

☒ I accept the [terms of use](#) and [privacy statement](#) .

Install

Clos

5. Sign-in using **MOD Administrator** account

**MOD Administrator Username**

**MOD Administrator Password**

# On-premises data gateway

Almost done.

Installation was successful!

Email address to use with this gateway:

admin@M365x161816.onmicrosoft.com

 **CONTOSO** demo

← admin@m365x161816.onmicrosoft.com

## Enter password

●●●●●●●●●●●●●●●●

[Forgot my password](#)

Sign in

6. Register a new gateway on this computer, then click **Next**.



## On-premises data gateway

You are signed in as admin@M365x983765.onmicrosoft.com and are ready to register the gateway.

- ☒ Register a new gateway on this computer.
- ☐ Migrate, restore, or takeover an existing gateway.
  - Move a gateway to a new computer
  - Recover a damaged gateway
  - Take ownership of a gatewayThe old gateway will be disconnected.

### 7. Type-in the gateway name and recovery key

- Name = ContosoOnPremiseDataGateway
- Recovery key = **MOD Administrator Password**.

Make sure that the selected data gateway region matches the targeted environment's region, by default the selected region will be Azure AD default region. Then click **Configure**.



## On-premises data gateway

You are signed in as admin@M365x38853873.onmicrosoft.com and are ready to register the gateway.


New on-premises data gateway name \*

ContosoOnPremiseDataGateway

☐ Add to an existing gateway cluster [Learn more](#)

Recovery key (8 character minimum) \*

.....

 This key is needed to restore the gateway and can't be changed. Record it in a safe place.

Confirm recovery key \*

.....


We'll use this region to connect the gateway to cloud services. West US 2 [Change Region](#)

[Provide relay details \(optional\)](#) By default, Azure Relays are automatically provisioned

8. Data gateway is configured and ready to be used.

?

×

 On-premises data gateway

Status

Service Settings

Diagnostics

Network

Connectors

Recovery Keys

✓

The gateway ContosoOnPremiseDataGateway is online and ready to be used.

Gateway version number: 3000.68.15 (December 2020 (Release 3))

✓

Help us improve the on-premises data gateway by sending usage information to Microsoft.

Read the privacy statement online

Logic Apps, Azure Analysis Services

Central US

Create a gateway in Azure

Power Apps, Power Automate

Central US

✓ Ready

Power BI

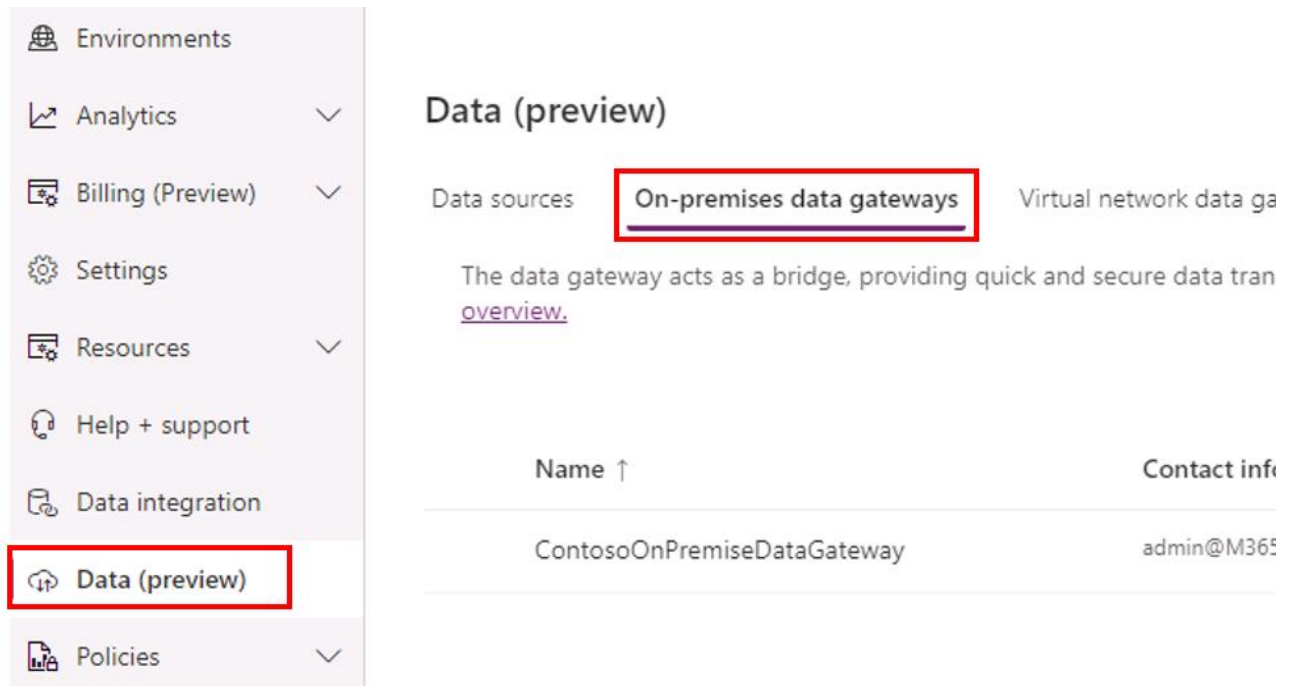
Default environment

✓ Ready

9. Open browser and navigate to Power Platform Admin Center <https://aka.ms/ppac>

10. From the left menu, select **Data (preview)** > **On-premises data gateways** to see the gateway we installed

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**Data (preview)**

Data sources **On-premises data gateways** Virtual network data ga

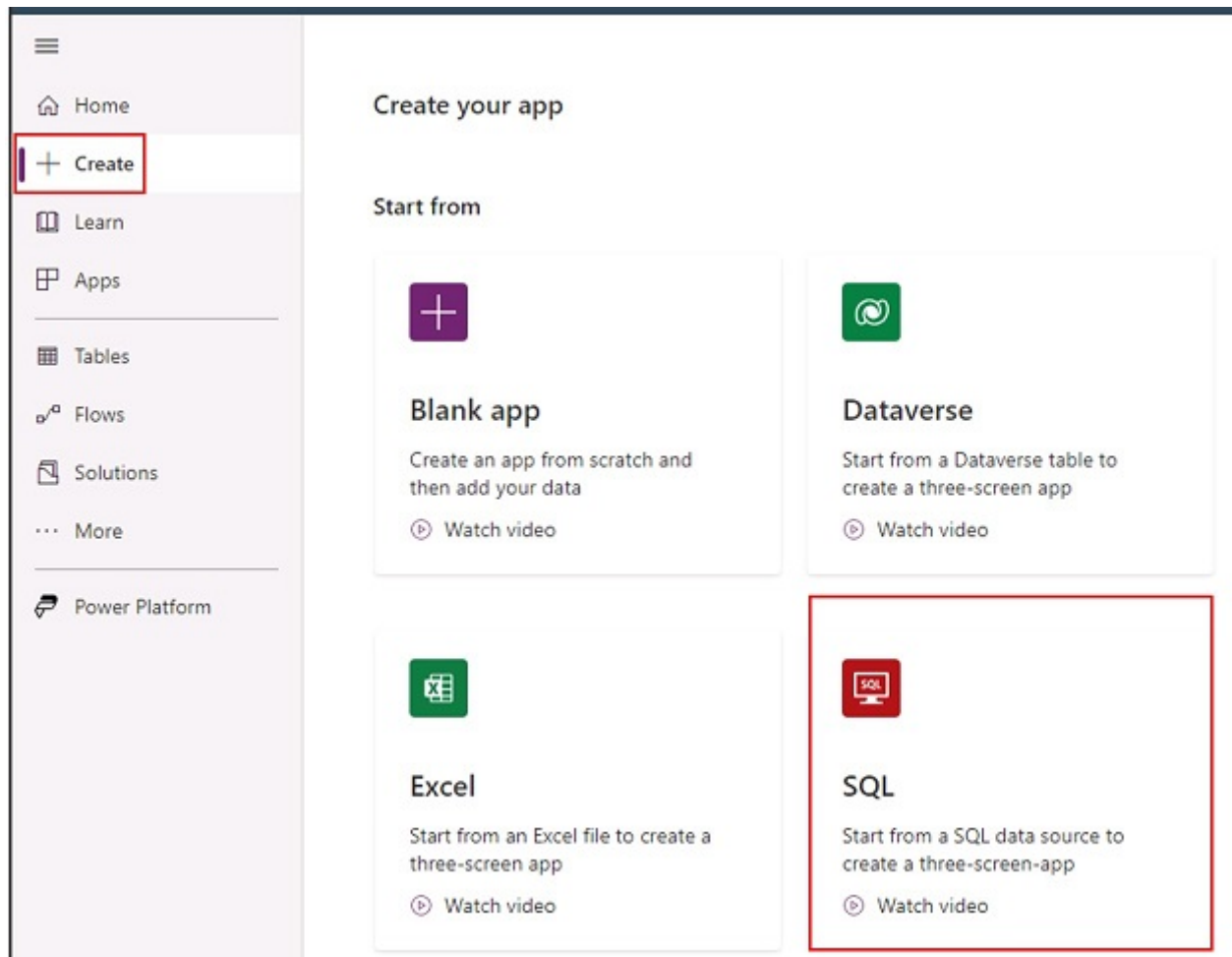
The data gateway acts as a bridge, providing quick and secure data tran  
[overview.](#)

Name ↑	Contact info
ContosoOnPremiseDataGateway	admin@M365

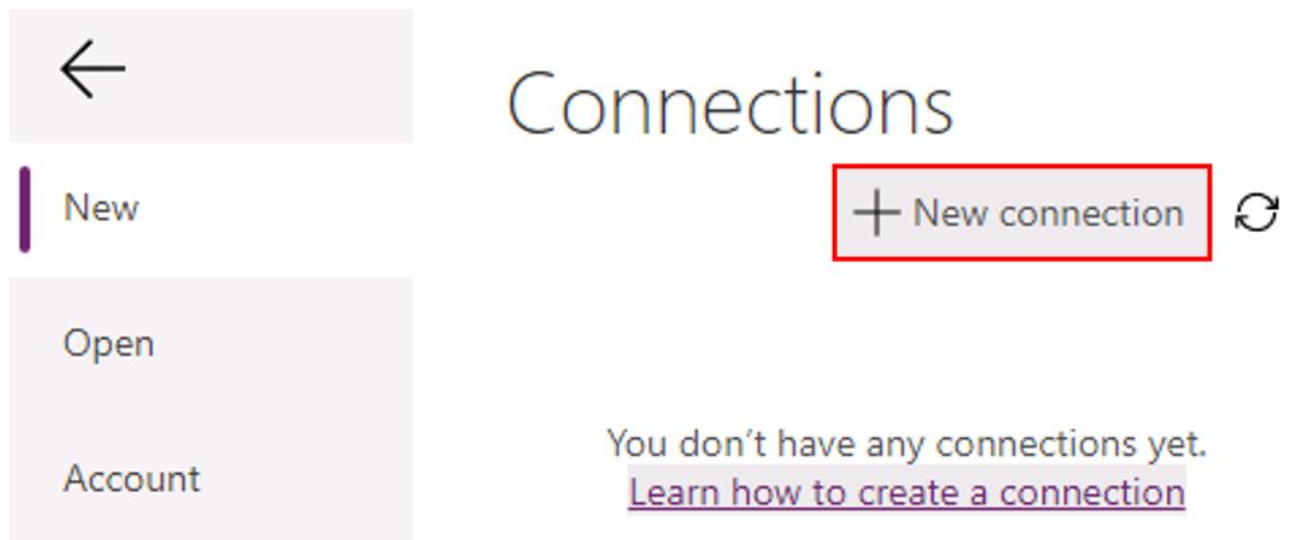
## Exercise 2 - Build an app using On-premise data gateway

In this exercise, we will build a Power App which connects to SQL Server database and returns data from one database table to the app

1. Navigate to **<http://make.powerapps.com>** then switch to the **Contoso (default)** environment.
2. Select **+ Create** from the left menu and then from the **Start from** select **SQL**



3. First you need to create new SQL Server connection, so click **New connection** and select **SQL Server**





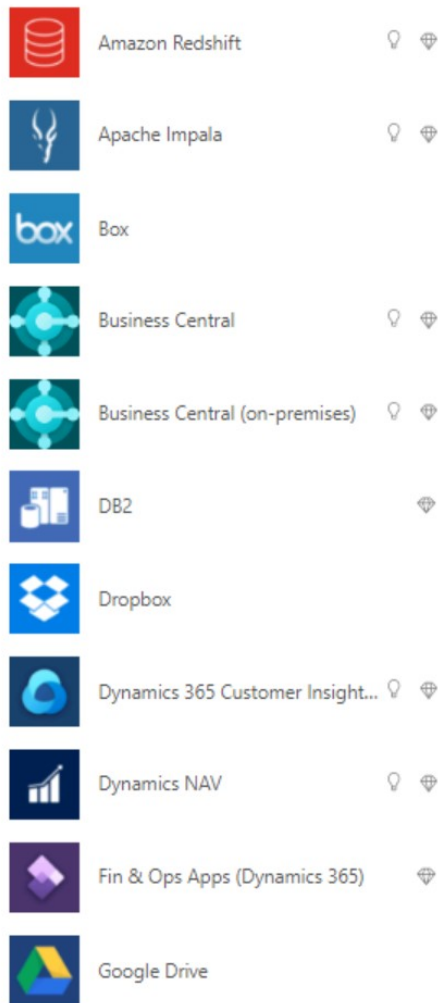
4. Type the required connection information like below

- Authentication Type: **Windows Authentication**
- SQL server name: **ContosoSQL**
- SQL database name: **AdventureWorks2017**
- Username: **Administrator**
- Password: **VM Password**
- Choose a gateway: **ContosoOnPremiseDataGateway**
- Then select **Create**



## Connections

← My connections



### SQL Server

Premium

Microsoft SQL Server is a relational database management system. Connect to SQL Server to manage data. You can perform insert, update, and delete on rows in a table. [Learn more](#)

Authentication Type

Windows Authentication

SQL server name \*

ContosoSQL

SQL database name \*

AdventureWorks2017

Username \*

Administrator

Password \*

.....

Choose a gateway \*

ContosoOnPremiseDataGateway

If you don't see a gateway, or want a new one, you can install one now.

To see recently installed gateways, refresh this list.

[Install a gateway](#)

Create

5. At the created connection, search for **Production.Product** table then select the table and click Connect.

## Connections

+ New connection Refresh



← contososql,adventureworks2017

### Choose a table



Production.Product



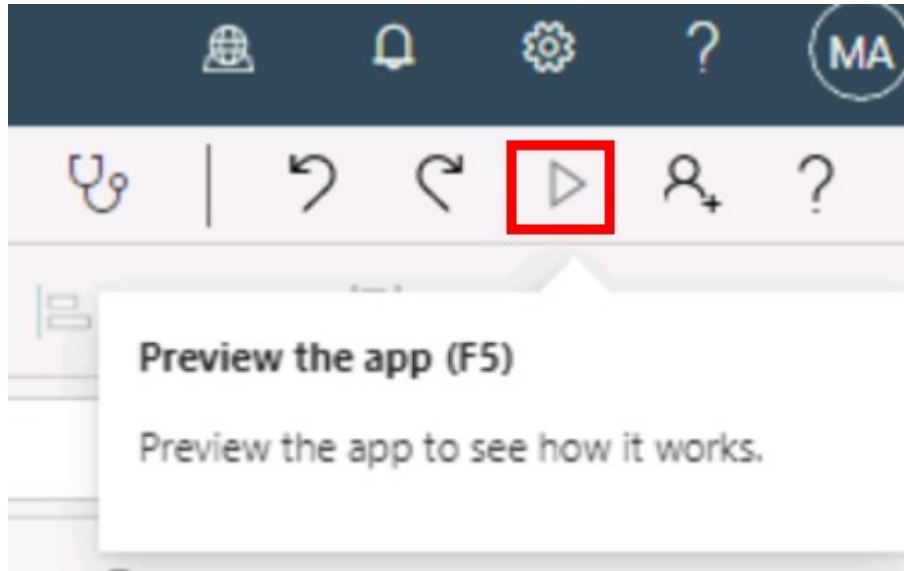
Production.ProductCategory



Production.ProductCostHistory

5. Power Apps will start creating an app managing all CRUD operations for the selected table using SQL server on-premises.

6. Run the app by clicking the Play button on top-right corner (or press F5). Test, for example, how sort, search and edit item operations works

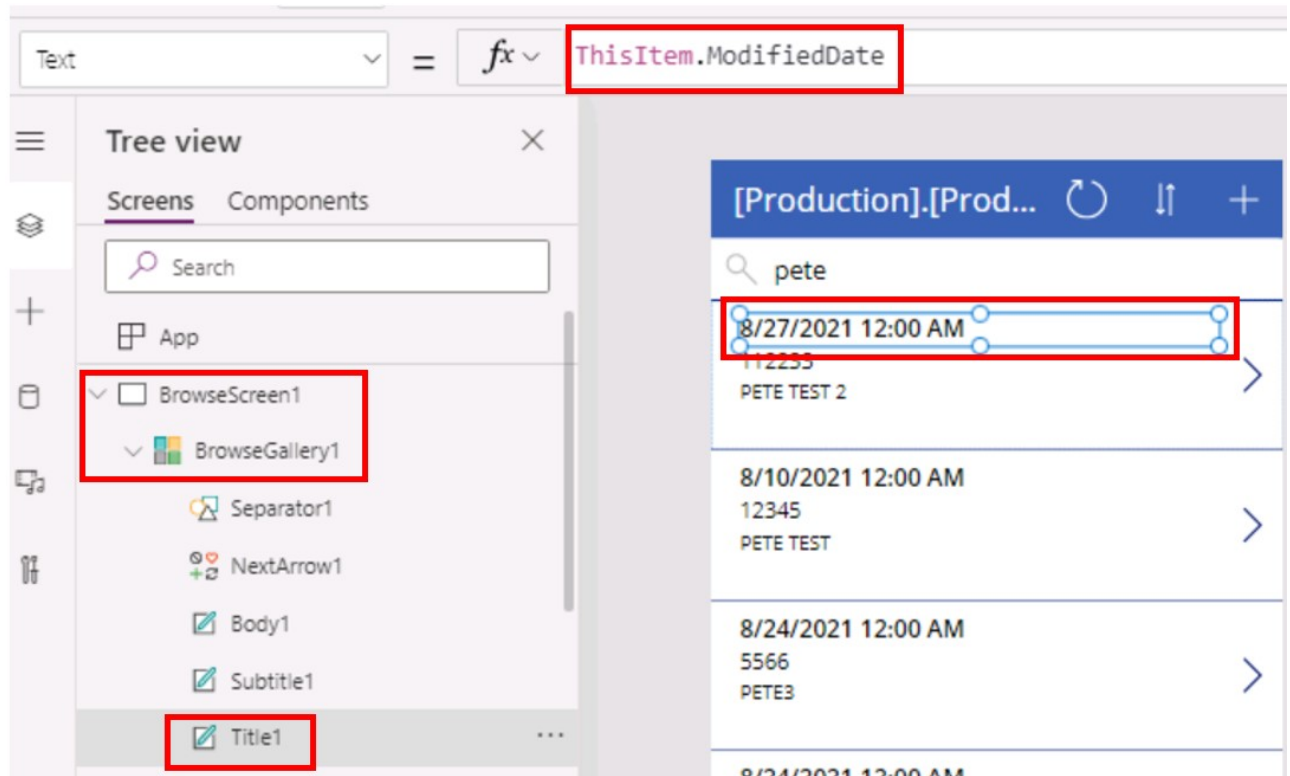


**NOTE:** Adding new items does not work in generated by default because mandatory ROWGUID column is not created to the form. This type of column is not yet supported by Power Apps. To get insert operation working, you need to change the submit icon on top-right corner OnSelect event formula of the EditScreen. Instructions how to get insert working are in the next optional tasks, so if you have time then continue to Exercise 3

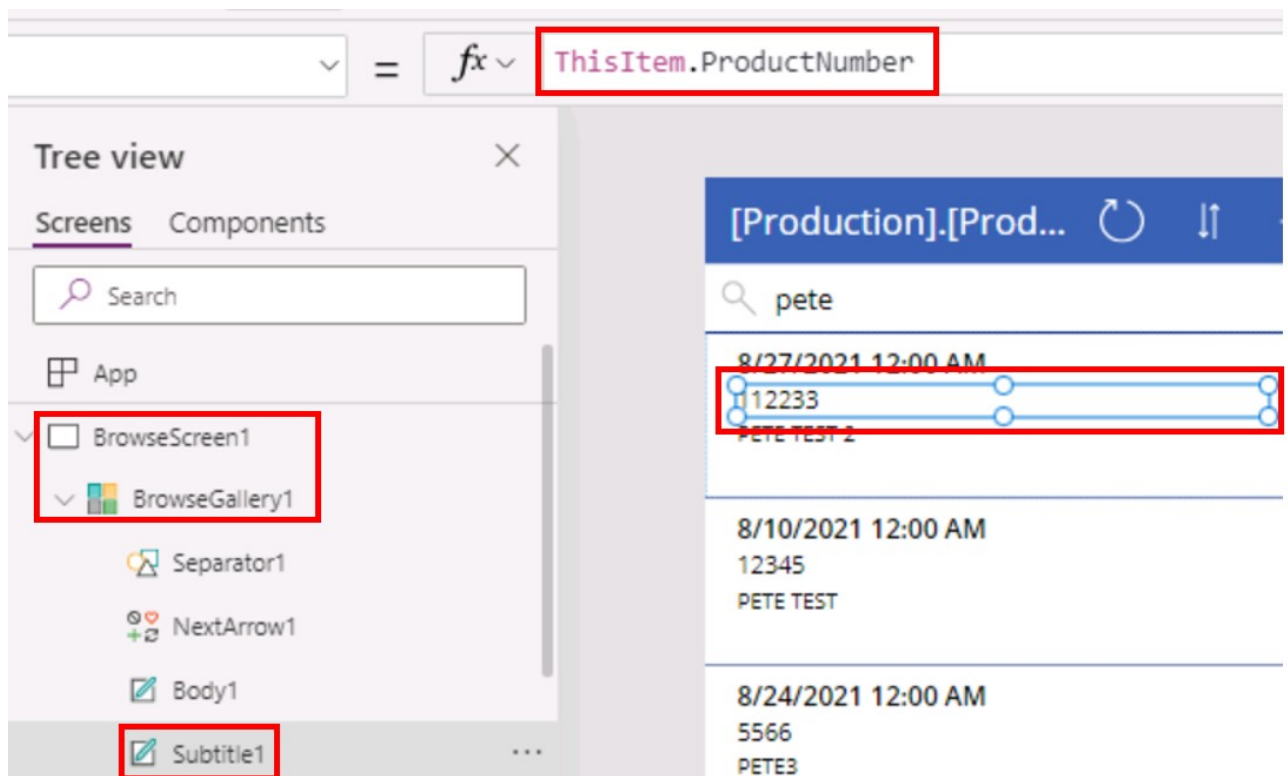
## Exercise 3 (OPTIONAL) - Add insert new product functionality to the app

In this exercise, we will change how new product is saved into the database

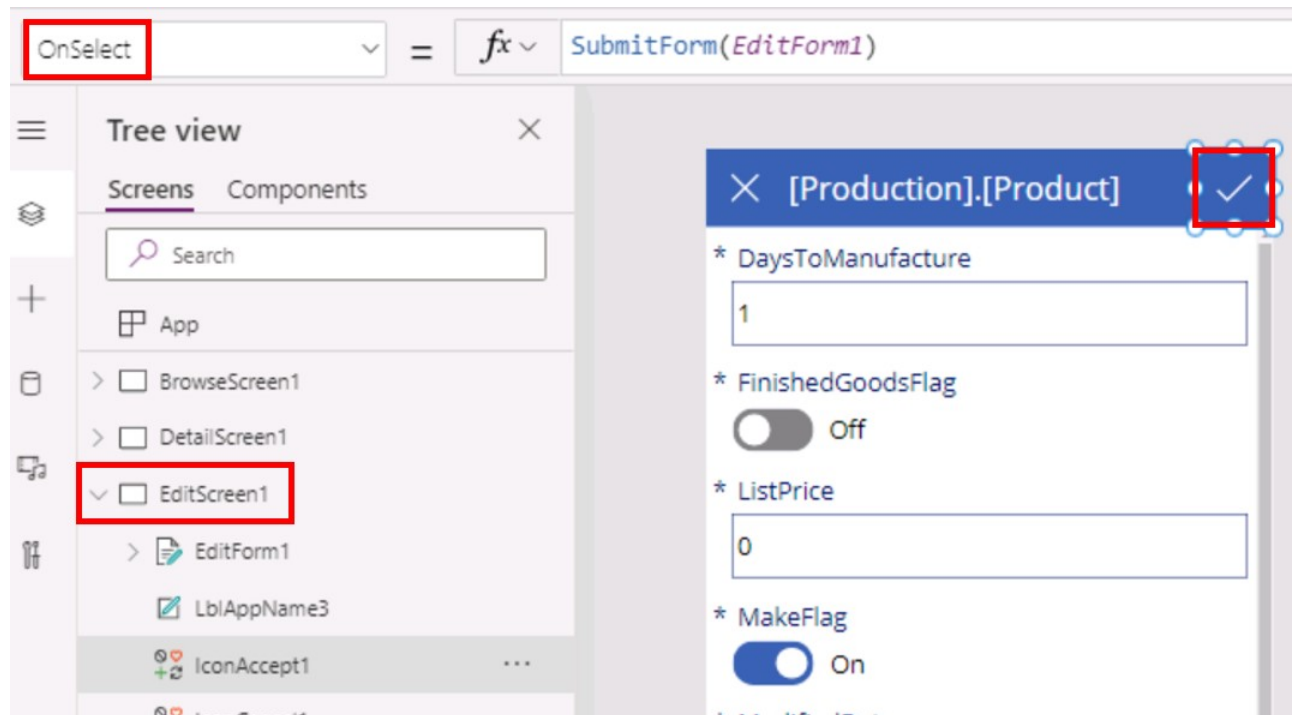
1. On **BrowseScreen1** screen, open the **BrowseGallery1** control, select **Title1** field and then Change its **Text** property to **ThisItem.ModifiedDate**



2. In a similar way, change the **Subtitle1** field **Text** property to **ThisItem.ProductNumber**



3. Select **EditScreen1** screen and then select the submit icon on top-right corner (accept icon). Verify that **OnSelect** event in formula bar is selected

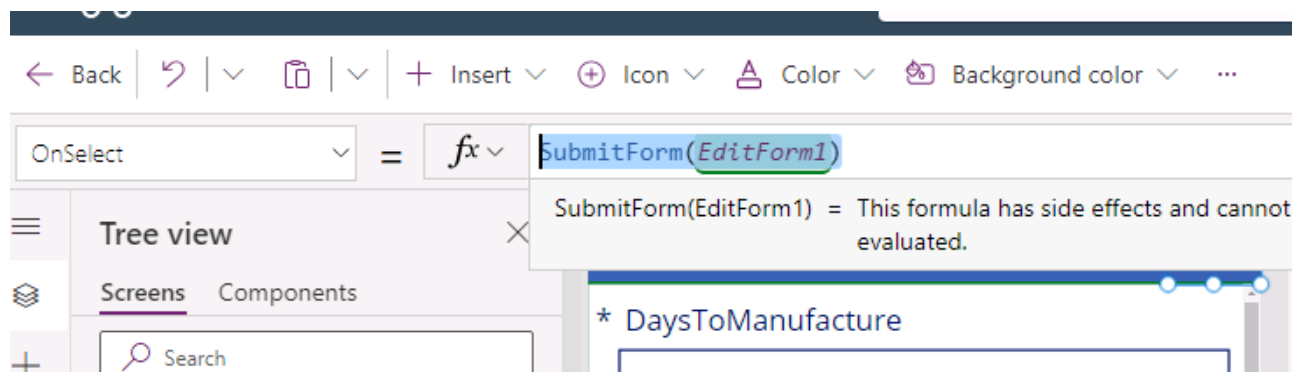
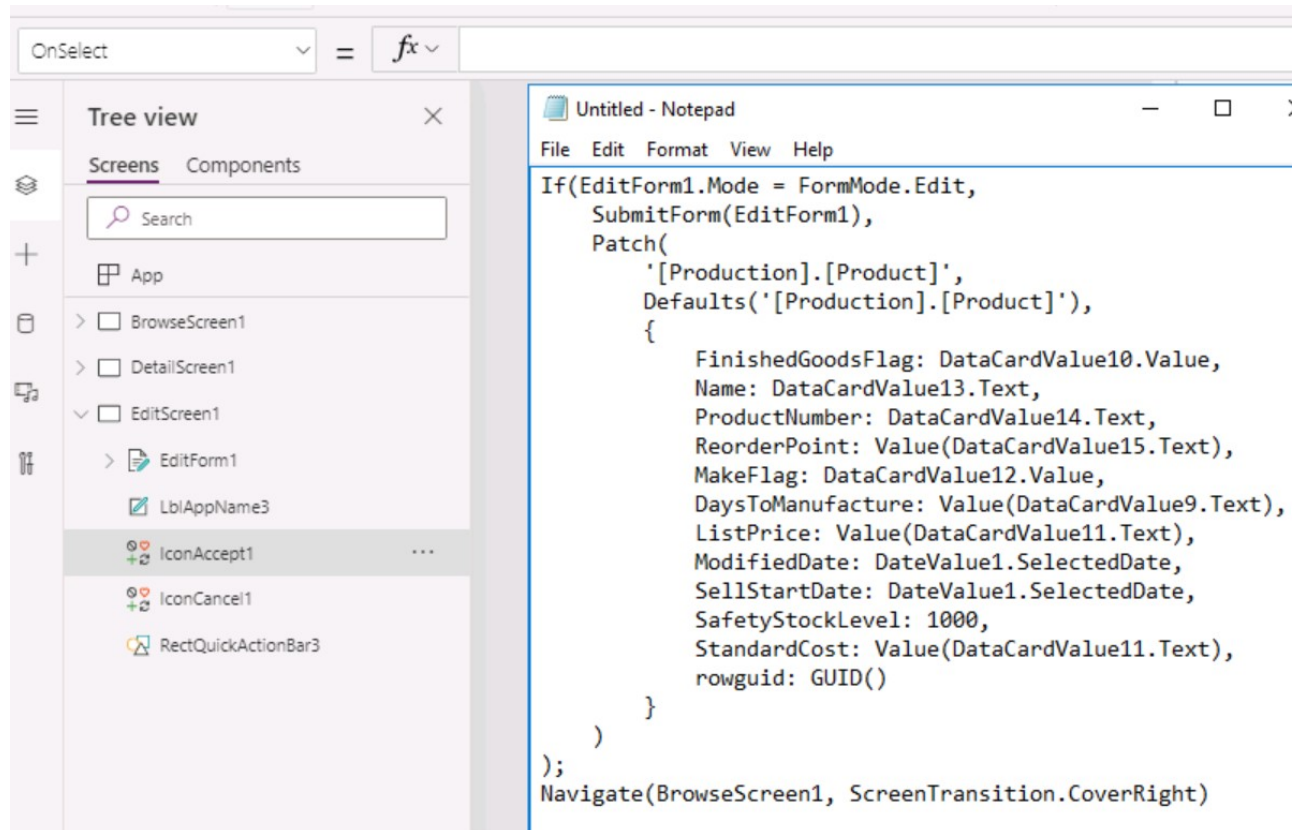


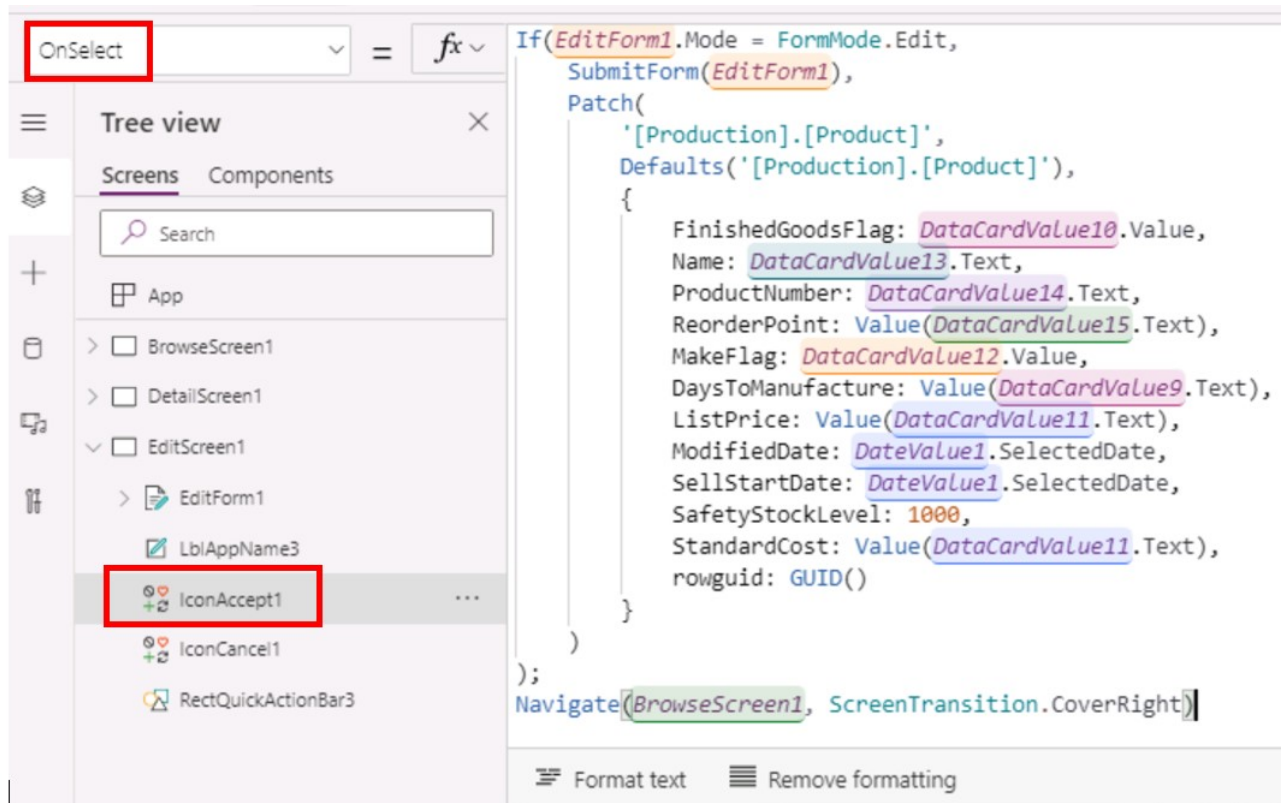
4. Copy-paste the formula below first to **notepad** and from there to **OnSelect** event by **replacing** the existing formula `SubmitForm(EditForm1)`

```

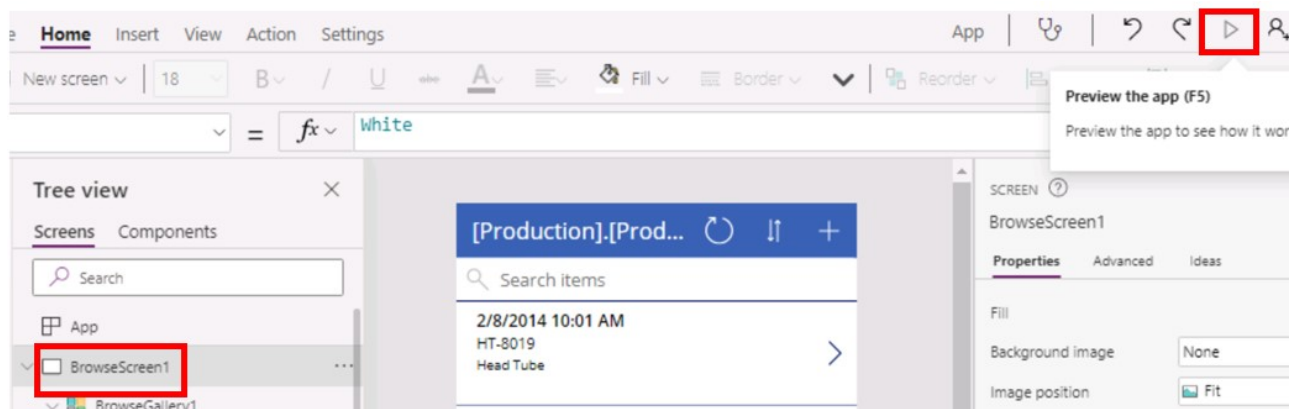
If(EditForm1.Mode = FormMode.Edit,
    SubmitForm(EditForm1),
    Patch(
        '[Production].[Product]',
        Defaults('[Production].[Product]'),
        {
            FinishedGoodsFlag: DataCardValue10.Value,
            Name: DataCardValue13.Text,
            ProductNumber: DataCardValue14.Text,
            ReorderPoint: Value(DataCardValue15.Text),
            MakeFlag: DataCardValue12.Value,
            DaysToManufacture: Value(DataCardValue9.Text),
            ListPrice: Value(DataCardValue11.Text),
            ModifiedDate: DateValue1.SelectedDate,
            SellStartDate: DateValue1.SelectedDate,
            SafetyStockLevel: 1000,
            StandardCost: Value(DataCardValue11.Text),
            rowguid: GUID()
        }
    )
);
Navigate(BrowseScreen1, ScreenTransition.CoverRight)

```










5. Now you can test to add new product, so select **BrowseScreen1** and press play button or F5 to test the app




6. Click + icon on top right of the **BrowseScreen**

[Production].[Prod...

 Search items

2/8/2014 10:01 AM  
HT-8019  
Head Tube

2/8/2014 10:01 AM  
HT-2981

7. Fill-in all the fields and, submit the form



✕ [Production].[Product] ✓

\* DaysToManufacture

\* FinishedGoodsFlag

☒ On

\* ListPrice

\* MakeFlag

☒ On

\* ModifiedDate

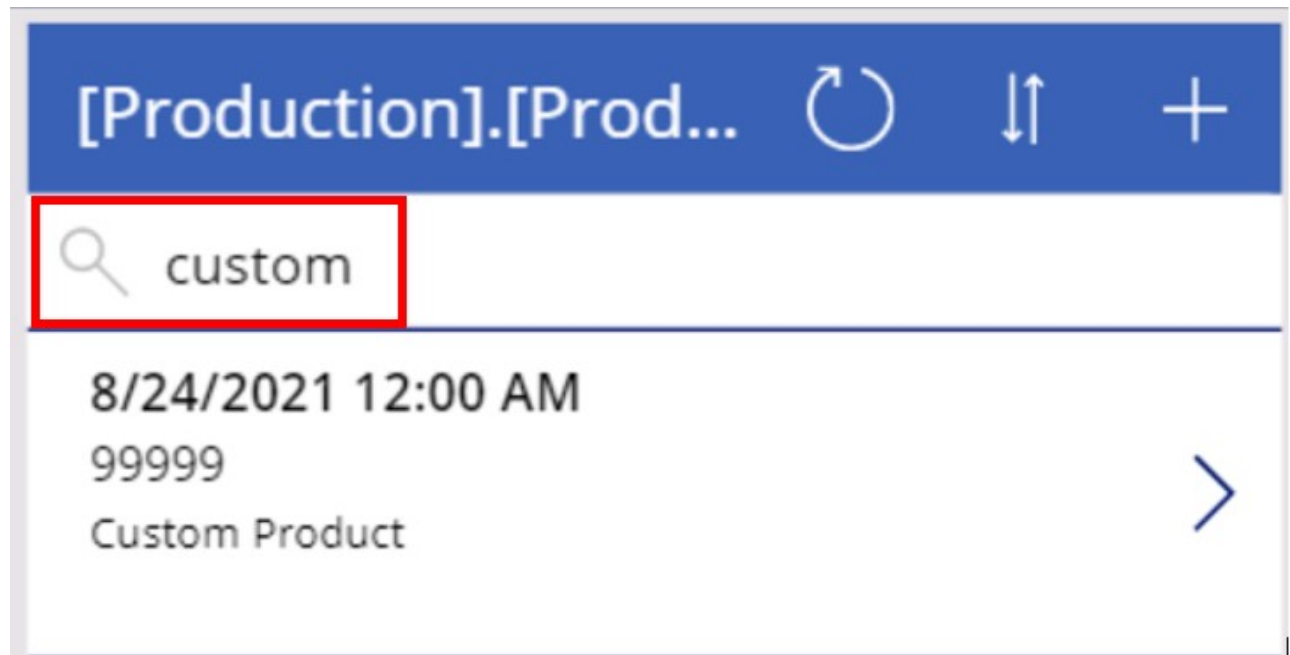
\* Name

\* ProductNumber

\* ReorderPoint

8. Use search functionality in **BrowseScreen** to search your product you just added





[!KNOWLEDGE] For more information about On-Premise Data Gateway, review the Microsoft document [here](#).

## Congratulations

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You have now completed the lab. Check if any of your colleagues need help with completing the lab.