Full Stack Application Development with Cloud Computing

Module 5 – Azure Data Services

Lab Practical Manual

Unit 1 - Azure Database Services (e.g., Azure SQL Database, Cosmos DB)

Topic: Configure Azure SQL Database – Solved Question

Ex. 1: To create a SQL database in Azure cloud

Learning objective

- Describe the evolution of SQL Server in Azure
- Determine which deployment option is best for workloads in your organization.
- Select the purchasing models, service tiers, and hardware that best fit a workload.

Activity: This practical activity makes learner create a SQL database in Azure cloud and perform interaction from local terminal for creation and management of SQL database using local terminal window.

Design a relational database in Azure SQL Database using SSMS

Prerequisites

To complete this tutorial, make sure you've installed:

1. SQL Server Management Studio (latest version)
2. BCP and SQLCMD (latest version)

Sign in to the Azure portal

Sign in to the Azure portal.

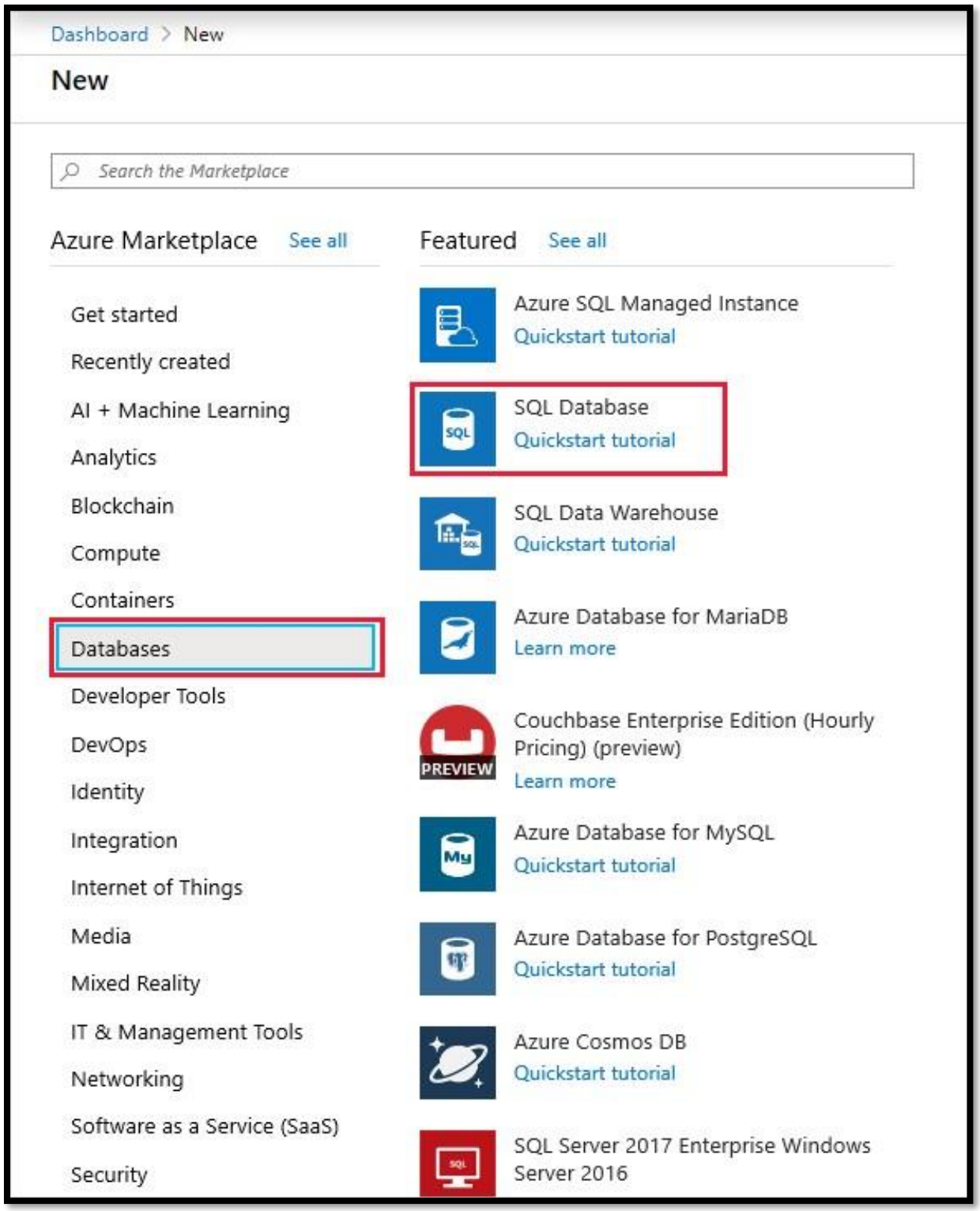
Create a blank database in Azure SQL Database

A database in Azure SQL Database is created with a defined set of compute and storage resources. The database is created within an Azure resource group and is managed using a logical SQL server.

Follow these steps to create a blank database.

1. On the Azure portal menu or from the Home page, select Create a resource.

2. On the New page, select Databases in the Azure Marketplace section, and then click SQL Database in the Featured section.



3. Fill out the SQL Database form with the following information, as shown on the preceding image:

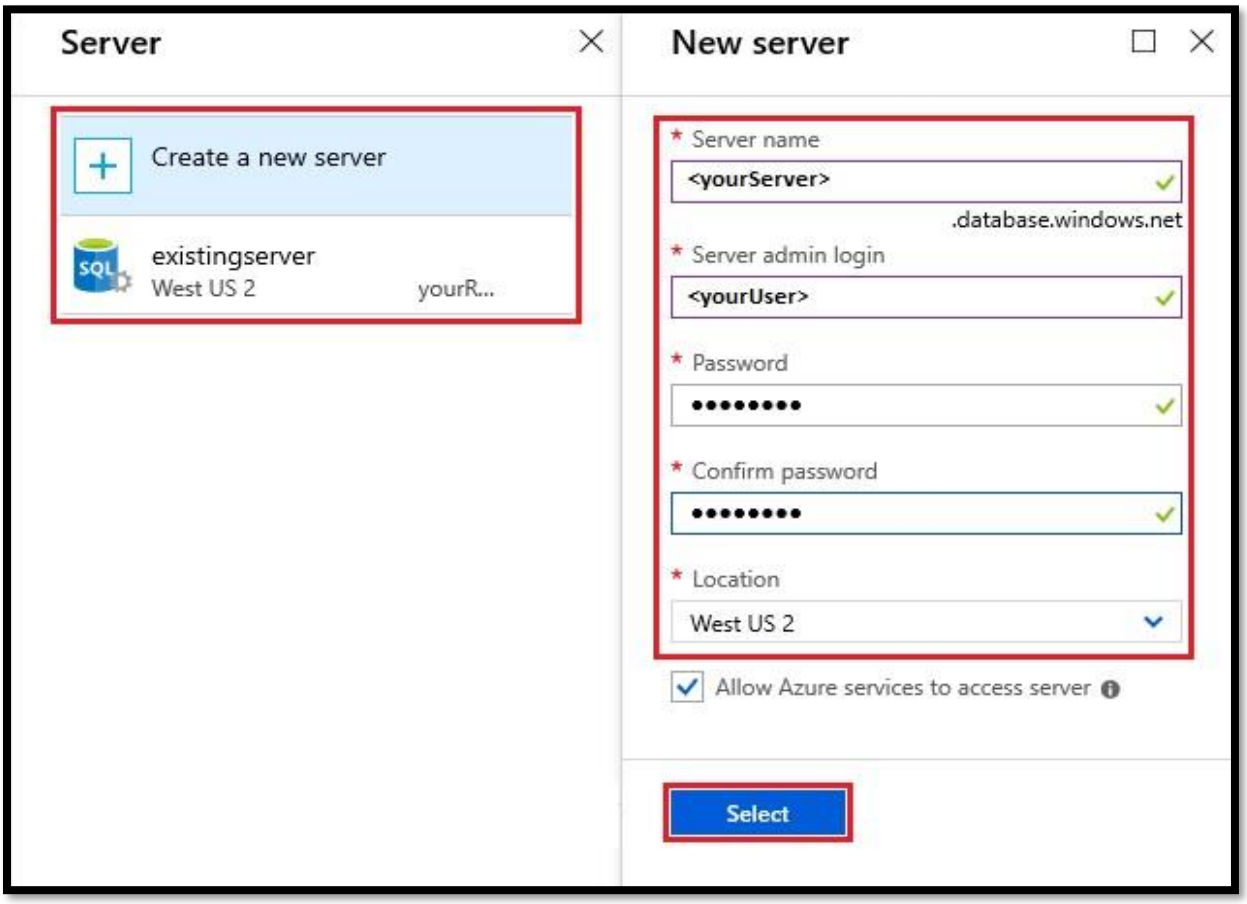
TABLE 29

Setting	Suggested value	Description
Database name	yourDatabase	For valid database names, see Database identifiers.
Subscription	yourSubscription	For details about your subscriptions, see Subscriptions.
Resource group	yourResourceGroup	For valid resource group names, see Naming rules and restrictions.
Select source	Blank database	Specifies that a blank database should be created.

4. Click Server to use an existing server or create and configure a new server. Either select an existing server or click Create a new server and fill out the New server form with the following information:

TABLE 30

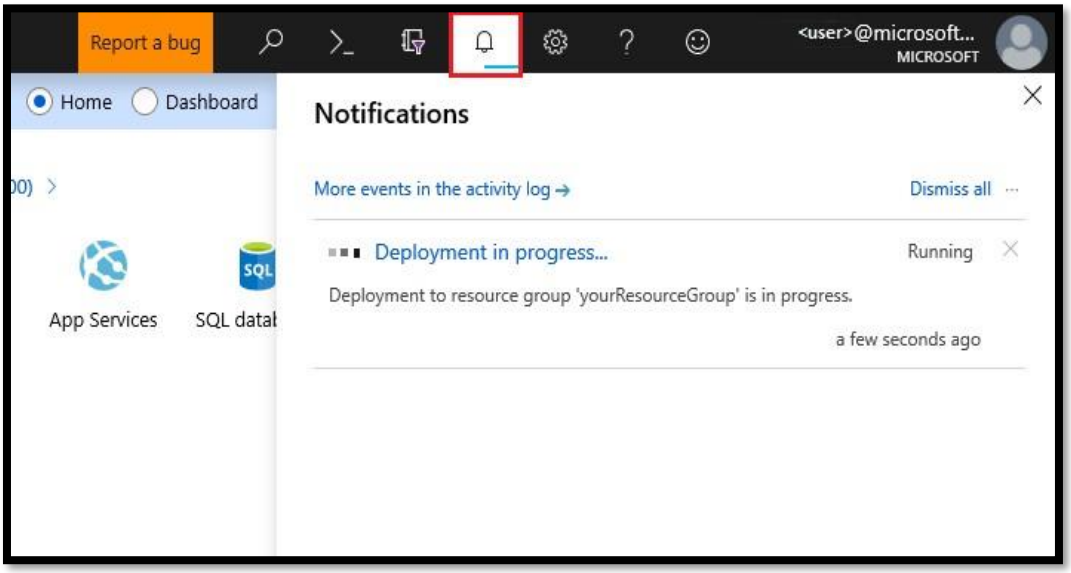
Setting	Suggested value	Description
Server name	Any globally unique name	For valid server names, see Naming rules and restrictions.
Server admin login	Any valid name	For valid login names, see Database identifiers.
Password	Any valid password	Your password must have at least eight characters and must use characters from three of the following categories: upper case characters, lower case characters, numbers, and non-alphanumeric characters.
Location	Any valid location	For information about regions, see Azure Regions.



5. Click Select.
6. Click Pricing tier to specify the service tier, the number of DTUs or vCores, and the amount of storage. You may explore the options for the number of DTUs/vCores and storage that is available to you for each service tier.

After selecting the service tier, the number of DTUs or vCores, and the amount of storage, click Apply.

7. Enter a Collation for the blank database (for this tutorial, use the default value). For more information about collations, see Collations
8. Now that you've completed the SQL Database form, click Create to provision the database. This step may take a few minutes.
9. On the toolbar, click Notifications to monitor the deployment process.


Report a bug
<user>@microsoft...
MICROSOFT
Home
Dashboard
Notifications
More events in the activity log →
Dismiss all
Deployment in progress...
Running
Deployment to resource group 'yourResourceGroup' is in progress.
a few seconds ago
App Services
SQL datal