ENTERPRISE ARCHITECT

User Guide Series

Microsoft Azure

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Date: 2022-10-03

Version: 16.0

CREATED WITH **ENTERPRISE ARCHITECT**

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Create Microsoft Azure Diagrams that Specify and Document Azure Virtual Infrastructure

Microsoft Azure (or simply Azure) is one of the market leaders in public Cloud computing platforms and provides services to define IaaS (Infrastructure-as-a-Service), PaaS (Platform-as-a-Service) and SaaS (Software as a Service) Cloud environments. Azure entered the market in 2010 and has steadily grown in importance as a corporate Cloud solution. The platform is used for building, testing, deploying, and managing applications and services through Microsoft-managed data centers and supports many programming languages, tools, and frameworks, including both Microsoft-specific and third-party software and systems.

Enterprise Architect provides modeling constructs that allow you to create expressive Azure diagrams that specify new Cloud infrastructure and platforms or document existing ones. You can also model other Cloud Infrastructure and platform providers such as Amazon Web Services (AWS) and Google Cloud Platform (GPC).

The Microsoft Azure UML profile provides a new image library of graphics (icons and images) required to model Microsoft Azure deployments. The icons and images are provided by a Model Wizard framework pattern, which must be imported into your model before you can start creating diagrams that describe Microsoft Azure deployments. The Azure pattern contains over 350 Image Assets that can be dragged-and-dropped onto diagrams.

Getting Started

Creating Microsoft Azure diagrams is straight forward; all the AWS service constructs are available from the Toolbox pages or from the Browser in the MS Azure Packages. This allows you to create expressive diagrams containing element items such as Virtual Machines, MS SQL databases, Cycle Cloud for big computer clusters, DevOps for code collaboration, Blob Storage and Managed Disks for data storage, and Load Balancers and Traffic Managers for networking.
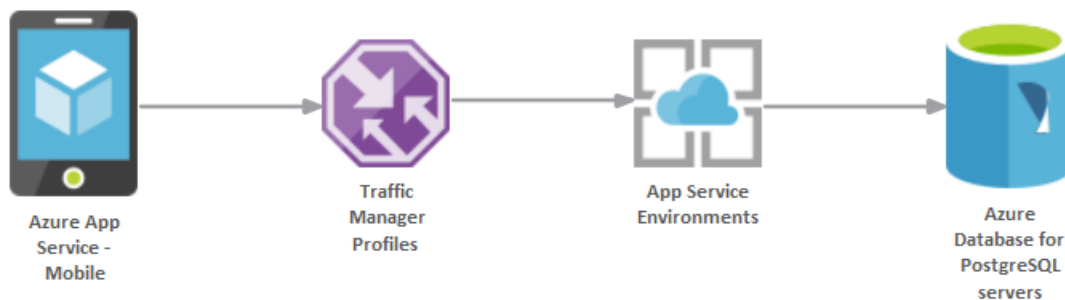
Diagram showing a mobile application using a Smart Phone Traffic Manager and PostgreSQL Database

In this topic you will learn how to work with the features that support MS Azure diagramming, outlined in the topic sections.

Selecting the Perspective

Enterprise Architect partitions the tool's extensive features into Perspectives, which ensures that you can focus on a specific task and work with the tools you need without the distraction of other features. To work with the Microsoft Azure features you first need to select this Perspective:

<perspective name> > Analysis > Microsoft Azure

Setting the Perspective ensures that the Microsoft Azure diagrams, their tool boxes and other features of the Perspective will be available by default.

Example Diagram

An example diagram provides a visual introduction to the topic and allows you to see some of the important elements and connectors used when specifying or describing AWS cloud infrastructure.

Import the Microsoft Azure Patterns

Before you can start creating Microsoft Azure diagrams to specify or document your cloud services you will need first to import the graphics from a pattern. This will inject all the Azure icons as components into the selected location in the Browser window.
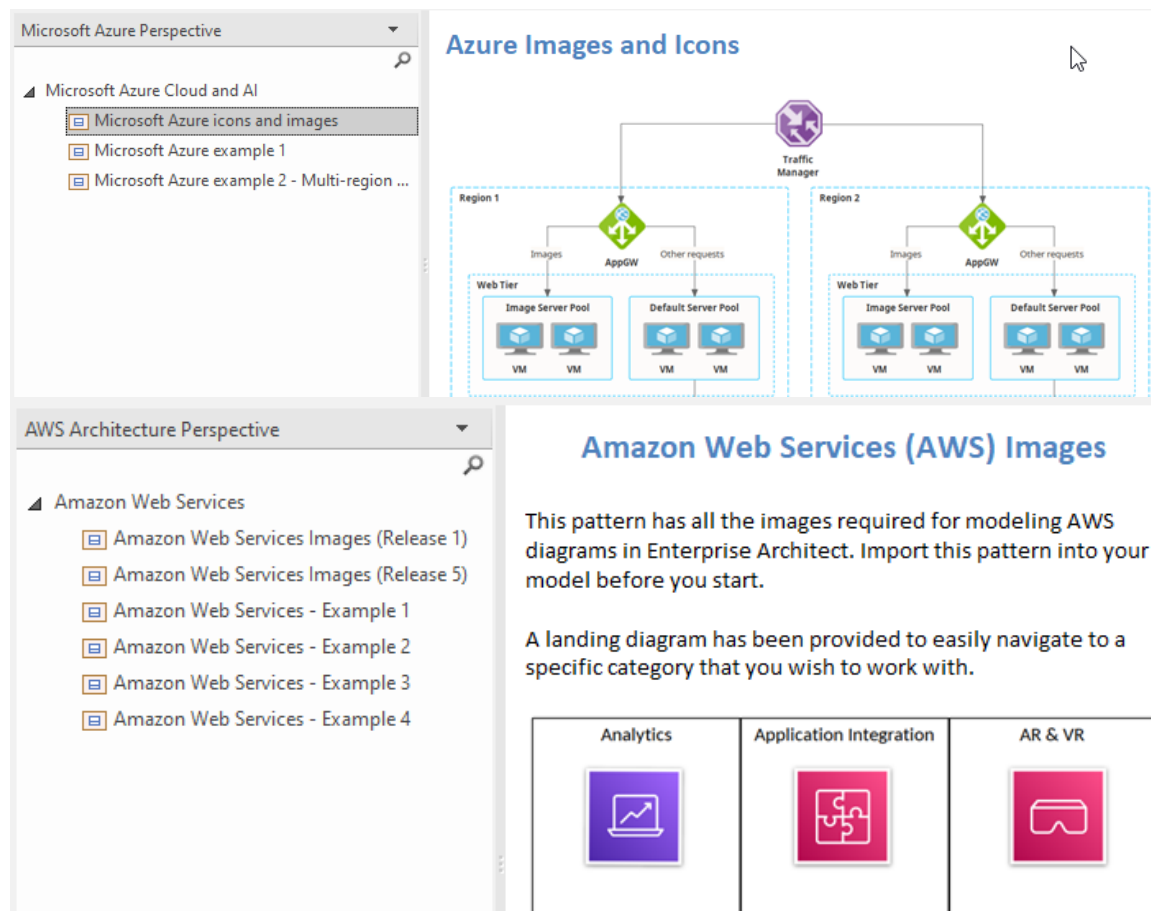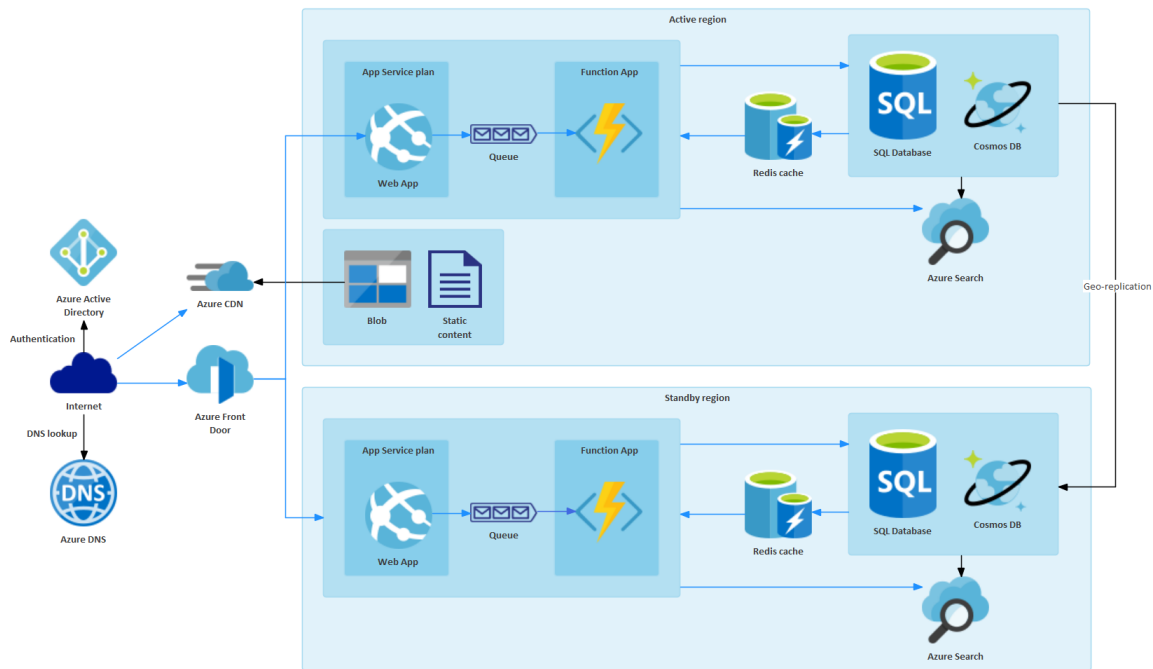
Patterns window showing Azure pattern for Import.

Create Azure Diagrams

More Information

This section provides useful links to other topics and resources that you might find useful when working with the Microsoft Azure tool features.

Example Diagram

Import the Microsoft Azure Patterns

Before you import the 'Microsoft Azure icons and images' pattern into your model, click on the ⬤ icon and select the 'Analysis > Microsoft Azure' Perspective.

This automatically opens the Model Wizard on the 'Model Patterns' tab at the 'Microsoft Azure Perspective' page.

Click on the target Package in the Browser window, then on the 'Microsoft Azure icons and images' pattern and click on the Create Model(s) button.

Note: When you have the Images packet in your model, do not copy it to another location in the model or save it as XMI; always use the Model Wizard to import the pattern into a new model. The reason for this is copying the Image Assets will give them new GUIDs, which you do not want to do.

In the Model Wizard there are two example patterns that show typical use of the images in diagrams. This example is the Azure Multi-region Web App.
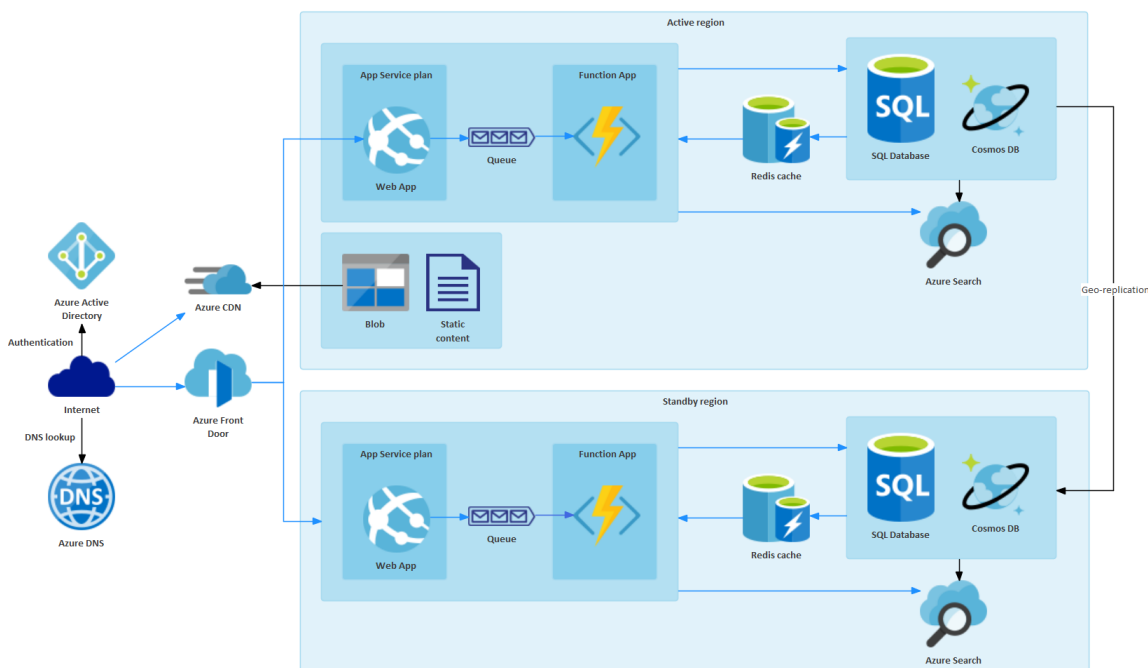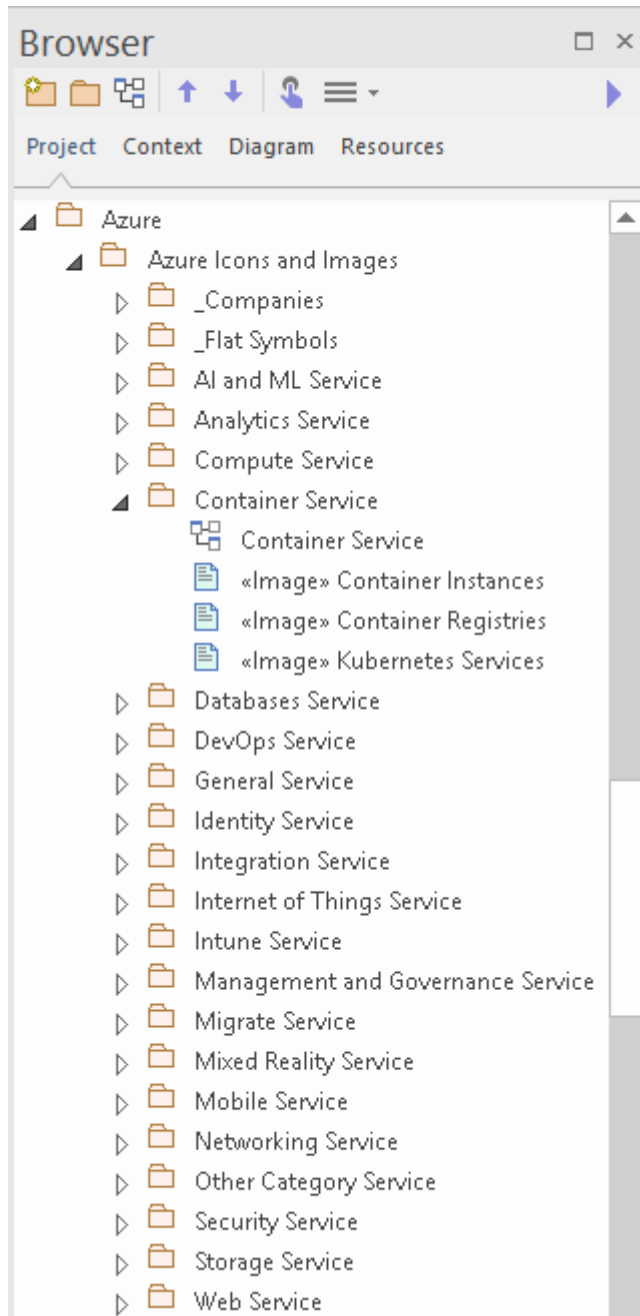
Create Azure Diagrams

You can create a diagram by right-clicking on its parent Package and selecting the 'Add Diagram' menu option to display the 'New Diagram' dialog.

If you do not have the Microsoft Azure Perspective selected, click on the drop-down arrow in the Type field and select 'Analysis > Microsoft Azure'.

In the 'Diagram' field type an appropriate name for the diagram, in the 'Select From panel' click on 'Microsoft Azure', and in the 'Diagram Types' panel click on 'Azure', and then click on the OK button. The 'Azure' page of the Diagram Toolbox opens, showing a small number of UML base element types for Azure. However, you create your diagrams using the images dragged onto the diagram from the Azure Library Packages that you imported, illustrated here:

Note that the Azure diagrams are automatically set to Custom Style, and when you right-click on an element in the diagram you can make use of the Custom Style icons on the Custom Styles Toolbar.

Each Package in the downloaded 'Microsoft Azure icons and images' pattern has a diagram that shows every image that

is included in the Package.

To add one of these images to your diagram, locate it in the Browser window by either:

- Searching for it by name or
- Opening the diagram for the Package that you believe it should be in, finding it in the diagram and pressing Alt+G to highlight the Image Asset in the Browser window

Now drag-and-drop the Image Asset onto your diagram. You can choose to:

- Add it as an element with an icon
- Add it as an element with an image, or
- (If you have made an element from the icon already) Add as link

More Information

Edition Information

This feature is available in the Corporate, Unified and Ultimate Editions of Enterprise Architect, from Release 15.2.