Azure Example Scenarios

Example scenarios show how to solve specific business or technical challenges using Azure. Each scenario is based on a real customer example and provides fast, easy-to-read guidance to accelerate your own implementation.

In each scenario you'll find an architecture diagram, data flows, and details about the technical components. You will also learn about considerations when running the solution in production, cost factors for the solution, and other options for solving similar problems. Many scenarios provide a way to easily deploy the solution in your own Azure subscription.

Jump to: Al scenarios | Application scenarios | Data scenarios | Infrastructure scenarios

New Scenarios

Accelerate digital image-based modeling

Movie recommendations on Azure

Multitier web application built for HA & DR

Top Scenarios

Building secure web apps with Windows VMs

Data warehousing and analytics for sales and marketing

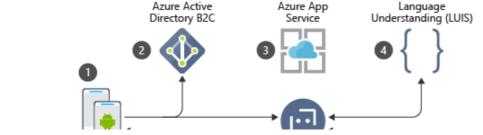
Highly scalable and secure WordPress websites



Submit your idea for a new scenario

Do you have a scenario that you'd like us to create? Would you like to build one yourself? Submit your idea here!

AI Scenarios



Conversational chatbot for hotel reservations

Build a conversational chatbot for commerce applications with Azure Bot Service.

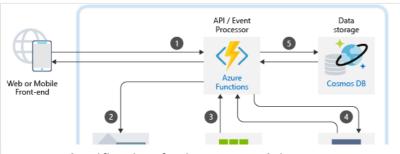
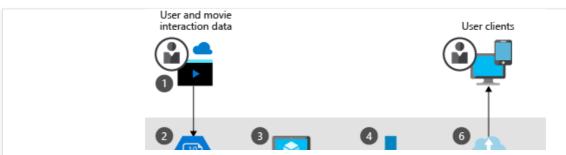


Image classification for insurance claims

Build image processing into your Azure applications.



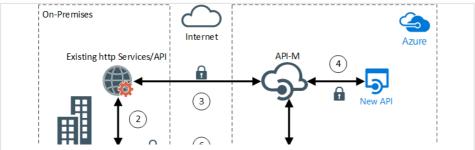
Movie recommendations on Azure

Use machine learning to automate movie, product, and other recommendations using machine learning and an Azure Data Science Virtual Machine (DSVM) to train a model on Azure.

Mass ingestion and analysis of news feeds on Azure

Create a pipeline for ingesting and analyzing text, images, sentiment, and other data from RSS news feeds using only Azure services, including Azure Cosmos DB and Azure Cognitive Services.

Application Scenarios



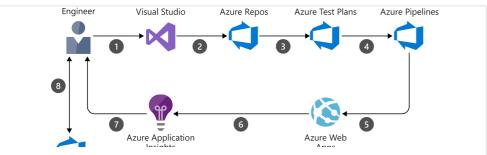
Migrating a web app to an API-based architecture

Use Azure API Management to modernize a legacy web application.



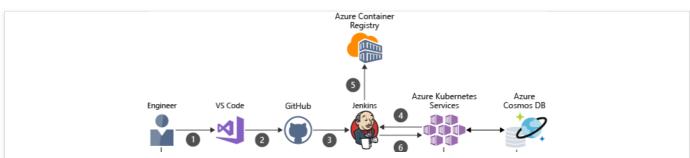
Decentralized trust between banks

Establish a trusted environment for communication and information sharing without resorting to a centralized database.



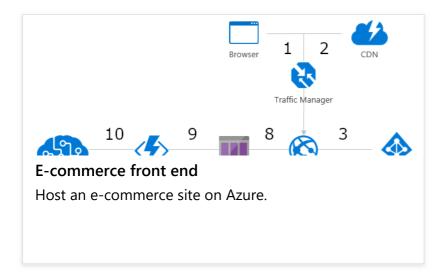
Design a CI/CD pipeline using Azure DevOps

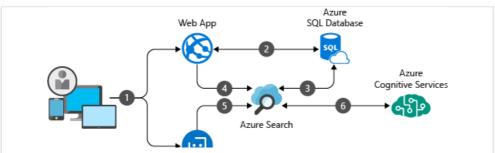
Build and release a .NET app to Azure Web Apps using Azure DevOps.



CI/CD pipeline for container-based workloads

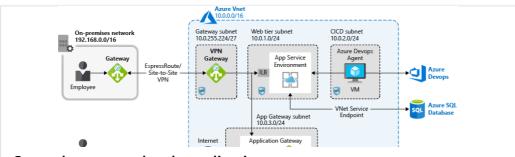
Build a DevOps pipeline for a Node.js web app with Jenkins, Azure Container Registry, Azure Kubernetes Service, Cosmos DB, and Grafana.





Intelligent product search engine for e-commerce

Provide a world-class search experience in an e-commerce application.

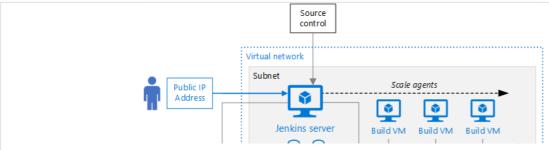


Securely managed web applications

Securely deploy an expense application to Azure App Service Environment

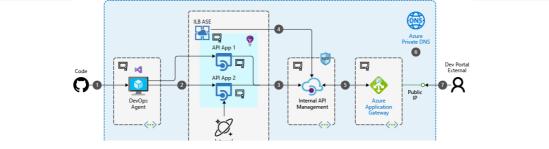
A computer-aided engineering service

Provide a software-as-a-service (SaaS) platform for computer-aided engineering (CAE) on Azure.



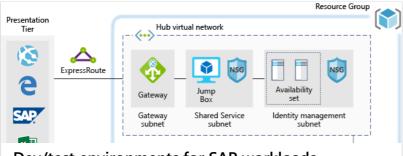
Run a Jenkins server on Azure

Recommended architecture that shows how to deploy and operate a scalable, enterprise-grade Jenkins server on Azure secured with single sign-on (SSO).



Publishing internal APIs to external consumers

Use Azure API Management to modernize and expose intranet legacy web APIs.

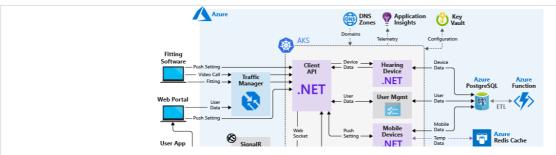


Dev/test environments for SAP workloads

Build a dev/test environment for SAP workloads.

Running SAP production workloads using an Oracle database

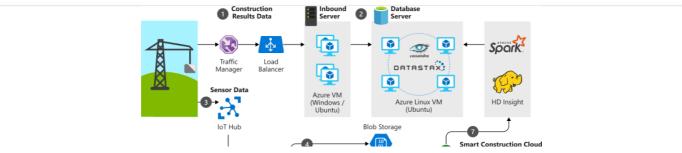
Run an SAP production deployment in Azure using an Oracle database.



Building a telehealth system on Azure

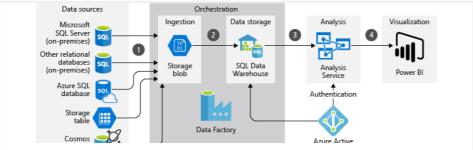
A healthcare system connecting users, devices, and providers built using Kubernetes and PostgreSQL

Data Scenarios



IoT and data analytics in the construction industry

Use IoT devices and data analytics to provide comprehensive management and operation of construction projects.

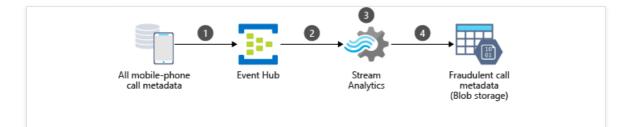


Data warehousing and analytics for sales and marketing

Consolidate data from multiple sources and optimize data analytics.

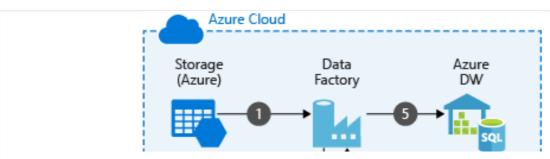
Scalable order processing

Build a highly scalable order processing pipeline using Azure Cosmos DB.



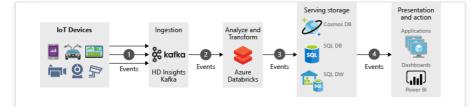
Real-time fraud detection

Detect fraudulent activity in real-time using Azure Event Hubs and Stream Analytics.



Hybrid ETL with existing on-premises SSIS and Azure Data Factory

Hybrid ETL with existing on-premises SQL Server Integration Services (SSIS) deployments and Azure Data Factory.



Ingestion and processing of real-time automotive IoT data

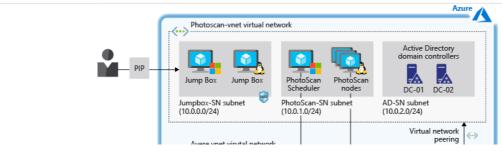
Ingest and process real-time vehicle data using IoT.

Infrastructure Scenarios

Microsoft Azure Virtual Natural

Running CFD simulations

Execute computational fluid dynamics (CFD) simulations on Azure.



Accelerate digital image-based modeling on Azure

Accelerate digital image-based modeling on Azure using Avere and Agisoft PhotoScan



Linux virtual desktops with Citrix

Build a VDI environment for Linux Desktops using Citrix on Azure.

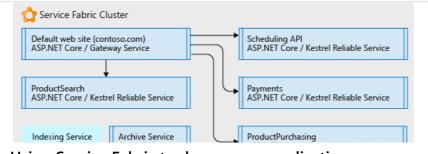
Multi-tier web application built for HA/DR

Create a multitier web application built for high availability and disaster recovery on Azure using Azure virtual machines, availability sets, availability zones, Azure Site Recovery, and Azure Traffic Manager.

Azure Azure

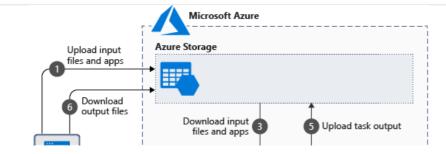
Building secure web apps with Windows VMs

Build a secure, multi-tier web application with Windows Server on Azure using scale sets, Application Gateway, and load balancers.



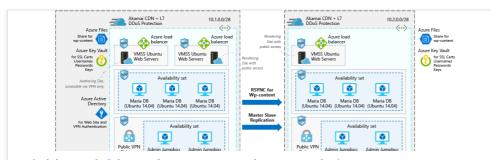
Using Service Fabric to decompose applications

Decompose a large monolithic application into microservices.



3D video rendering

Run native HPC workloads in Azure using the Azure Batch service.



Highly scalable and secure WordPress websites

Build a highly scalable and secure WordPress website for media events.