

Microsoft FastTrack For Azure Service Level Description

Contents

Microsoft FastTrack for Azure	3
Eligible Solutions	3
FastTrack for Azure Process Overview	4
Responsibilities	6
Core Services	7
Solution Enablement – Design Review	8
Solution Enablement – Development and Test	9
Solution Enablement – Azure Backup and Archive	10
Solution Enablement – Disaster Recovery	11
Solution Enablement – Database Migration to Azure	12
Azure SQL Database	12
SQL Server on Azure Virtual Machines	12
Solution Enablement – Data Warehouse	13
Azure SQL Data Warehouse	13
Solution Enablement – App Lift-and-Shift	14
Solution Enablement – App Modernization	15
App Services	15
Service Fabric	15
Solution Enablement – Digital Marketing Apps	16
Solution Enablement – E-commerce and Transactional Apps	17
Solution Enablement – SAP on Azure	18
Solution Enablement – RedHat Enterprise Server and Linux on Azure	19
Solution Enablement – Big Data	20
HDInsight	20
Data Lake Analytics	20
Stream Analytics	20
CosmosDB	21
Solution Enablement – Artificial Intelligence	22
Solution Enablement – High Performance Computing	23

Microsoft FastTrack for Azure

Microsoft FastTrack for Azure provides direct assistance from Microsoft Azure engineering resources to help customers build Azure solutions quickly and confidently and to enable the successful deployment of Azure solutions.

To learn more about specific solutions eligible for enablement, see Eligible Solutions.

To learn more about FastTrack for Azure process and responsibilities, see FastTrack for Azure Process Overview.

Eligible Solutions

FastTrack for Azure is available to customers with active paid Azure subscriptions in the United States, Canada, Australia, New Zealand, United Kingdom, and Western Europe with an identified Azure project(s) with expected incremental Azure services consumption of USD \$5,000 or more per month (or equivalent in local currency) within 12 months of engagement. You can request assistance from the FastTrack for Azure service through your account team or your Azure Partner.

FastTrack for Azure is currently available only in English to assist with the following Azure solutions*:

- 1. Development and test
- 2. Backup and Archival
- 3. Disaster Recovery
- 4. Database Migration to Azure
- 5. Data Warehouse
- 6. App Lift and Shift
- 7. App Modernization
- 8. Digital Marketing Apps
- 9. E-Commerce Apps
- 10. SAP on Azure**
- 11. Red Hat on Azure**
- 12. Big Data
- 13. Artificial Intelligence***
- 14. High performance computing***

More solutions to come, see <u>FastTrack for Azure Roadmap</u> for more information.

^{*}Unless otherwise noted, Azure solutions and services described are available for Microsoft Azure Government as well as Microsoft Azure Commercial clouds. Azure Government services are kept updated here.

^{**}Limited preview in US, Canada, UK and Western Europe only

^{***}Limited preview in UK and Western Europe only

FastTrack for Azure Process Overview

FastTrack for Azure partners with you to drive your business outcomes and success. We want to empower your IT professionals and development teams to deliver a new breed of IT solutions that can meet the fast-changing and dynamic needs of business today and in the future.

To do this, FastTrack takes a solution-centric approach, providing you with tools and design principles for your applications from design to deployment in a development or test environment. When you leverage FastTrack to help accelerate and deploy solutions on Azure, there are several phases involved in the process. The following sections describe each phase and the process.



Initiate Phase – Upon Azure solution (project) identification, you can request your account team or your Partner to nominate through online form which initiates a kick-off meeting, including your account team and deployment partner to validate eligibility.

Assess Phase – If approved, the FastTrack for Azure engineering team will work with you to identify key stakeholders, validate your requirements and assess architectural needs to meet your business outcomes.

Enable Phase – Work with Azure engineers to gain technical depth and guidance on core platform services and specific solutions. Enable phase consists of two major components:

• Solution Enablement

- Configuration guidance of Azure platform
- Design principles for building applications

- Solution review of applications and solutions
- o Enablement of PoC and development or test environment
- o Subscription activation and management
- o Integration with Azure AD
- Networking and governance
- **Continuous Partnership** Regular touchpoints with the FastTrack for Azure team to ensure deployment is on track. The FastTrack team will help identify and assist with other solutions you want to onboard, as well as facilitate feedback and remove deployment roadblocks.

Responsibilities

With FastTrack for Azure, our success is measured by your success. The following describes the different responsibilities of teams associated with your Azure project:

Microsoft Responsibilities

- Provide remote support and guidance toward enablement of Azure solutions
- Provide available documentation, tools, and automation to help with configuration tasks
- Provide assistance for configuration of Azure platform (laaS/PaaS)
- Provide architectural guidance and design principles for eligible solutions
- Provide Microsoft resources committed to making you successful

Your Responsibilities

- Have access to your paid Azure subscription
- Identify appropriate stakeholders including technical lead, architect, IT Ops, developer (as appropriate), Executive sponsor
- Share existing/proposed application architecture diagram
- Share on-premises/Azure network layout diagram as needed
- Create architectural and technical documentation specific to your organization
- Manage, configure, and apply security policies as needed
- Hands-on administration, support, and deployment on Azure
- Produce any reports, presentations, or meeting minutes that are specific to your organization
- Provide overall program and project management of your resources
- Management of deployment or implementation partner as necessary

Core Services

FastTrack for Azure services are designed to help you align your business and IT needs with the solution capabilities of Azure. Microsoft and partner experts will provide guidance, resources, and tools to help you get the most out of Azure. These services focus on a programmatic approach to building on Azure starting with core platform services as a part of solution enablement.

These involve subscription management, governance, connectivity, and Active Directory integration, and may extend based on the solution you plan to deploy. For example, you may already have Microsoft Active Directory on-premises in your environment that you want to integrate with Azure. We will help you integrate Azure AD with your existing on-premises infrastructure.

Service	Description
Subscription Management	Get an overview of the Azure Environment and help managing your subscriptions. Walkthrough role of account owners learn how to monitor usage and report on it.
Azure AD Integration	To leverage Azure Role-Based Access Control (RBAC) in the Azure portal, Active Directory identities will need to be created for each user who will utilize the service. Get help synchronizing your directory objects from the on-premises AD DS environment to the Azure AD (AAD) infrastructure using Azure AD Connect. Optionally, use a Federated Identity model to implement Single Sign-On. FastTrack AAD Onboarding Services team will help guide you through how to integrate your directory service.
Hybrid Network Connectivity	If you want to connect your on-premises sites securely to a virtual network, you have multiple different ways to do so, including Site-to-Site and Point-to-Site. We will work with you to compare the different cross-premises connections that are available, choose the best one for your organization, and help you set it up.
Governance Model	Address the need for governance and balance it with the need for agility within your organization. We will work with you to implement a set of flexible controls and Azure capabilities that provide structure to the environment, and a foundation to create or attach services built on the cloud.

Solution Enablement – Design Review

The Azure platform can enable you to drive new ways to engage with your customers and transform the solutions that you already build. You will likely have to provide a certain level of service to satisfy the business requirements and ensure that your end-users have an overall positive experience with your solution. While you are hosting your solution on Azure, it is important to understand the potential areas of optimization for your solution to run on a cloud platform.

Microsoft FastTrack for Azure will hold an interactive discussion with you to understand your solution's business requirements. Once understood, FastTrack will walk through your existing solution design document to understand the design decisions made and dependencies within your solution.

To ensure this engagement is a success, it is necessary that you already have a solution design and clearly defined requirements, for example SLA, RTO, RPO, Maximum/Concurrent number of users and any load profiles.

- Discuss the design decisions made, and whether there is room for optimization in line with those publicly documented recommendations
- Determine potential risks that may influence the overall success of the project (For example, high scalability requirements but having inappropriate load testing in place, or no plans implemented to scale the solution)
- Receive information relating to Azure recommended patterns & practices

Please note that there is no detailed follow-up report as part of this engagement, and that this will cover the Azure solution that you are looking to deploy. On premises components, third party components and code reviews are all considered out of scope.

Solution Enablement – Development and Test

One of the main attractions of the cloud is the flexibility and potential cost savings/avoidance when operating your workloads. This is especially important when you think of environments such as Dev-Test, which may not need to be in operation 365 days a year, 24x7. In fact, 50-70% of today's on-premises compute is used for non-production workloads. Take advantage of cost savings, agility and mobility in your application development with Azure's Dev-Test solutions.

Microsoft FastTrack for Azure will help you get started with your Dev-Test solution and empower your teams to move forward with development and testing of your applications. We can provide guidance that includes:

- Gaining insight into options for managing your development environments
- Using subscriptions, resource groups, and DevTest Labs
- Understanding how DevOps, Continuous Integration, and Continuous Deployment can help your organization
- Setting up a build and release pipeline in Visual Studio Team Services (VSTS)
- Creating infrastructure for use within the development lifecycle
- Defining polices that control how resources can be used

Solution Enablement – Azure Backup and Archive

Azure Backup is the Azure-based service you can use to back up (or protect) and restore your data in the Microsoft cloud. Azure Backup replaces your existing on-premises or off-site backup solution with a cloud-based solution that is reliable, secure, and cost-competitive.

Microsoft FastTrack for Azure will assist you in backing up your Virtual Machines (Windows and Linux) or backing up your files and folders from Windows machines (Server and Client) installed on-premises or in public cloud. Guidance can include:

- Creating and configuring Recovery Services Vault to backup files/folders or Azure VMs
- Configuring storage replication for the vault
- Installing and registering agents to automate backups
- Defining backup schedules and policies
- Backup single VMs from the virtual machine management blade in Azure
- Backing up multiple VMs from the recovery services vault dashboard
- Test restore operations

Solution Enablement – Disaster Recovery

Azure Site Recovery (ASR) is an Azure service that contributes to your Business Continuity and Disaster Recovery (DR) strategy. Using Site Recovery, you can deploy application-aware replication to the cloud, or to a secondary site. Whether your apps are Windows or Linux-based, running on physical servers, VMware or Hyper-V, you can use Site Recovery to orchestrate replication, perform disaster recovery testing, and run failovers and failback.

Microsoft FastTrack for Azure will help you automate protection and replicate virtual machines, providing true Disaster Recovery as a Service Solution (DRaaS). FastTrack guidance can include:

- Creating and configuring Recovery Services Vault
- Capacity planning guidance
- Configuring the protection option that fits your workload (Hyper-V, VMWare, Bare Metal)
- Defining replication policies
- Replicating virtual/physical machines (Windows & Linux) to Azure as a DR Site
- Using runbooks to automate a DR plan
- Testing failover to Azure

Solution Enablement – Database Migration to Azure

Customers rely on Azure to support their data in a broad range of applications and workloads, from managing straightforward transactional data to driving the most data-intensive, mission-critical applications requiring advanced data processing at global scale.

For Azure SQL Database or SQL Server on Azure Virtual Machines, Microsoft FastTrack for Azure will guide you through the process to host your SQL Server workloads in Microsoft Azure. The exact steps will depend on your workload, but can include guidance for building new workloads, migrating or rearchitecting your data solution. FastTrack can help:

- Understanding the data platform and matching the right option to your business requirements
- Optimizing your database environment on Azure
- Onboarding onto new data platform features
- Reviewing workload architecture designs
- Providing design principles and guidance for security, performance, and scalability

Azure SQL Database

- Configuring your environment using built-in features and functionality
- Understanding DTUs, service tiers, and elastic pools
- Migrating on-premises SQL Server database to Azure SQL DB
- Setting up backups, security policies, and geo-replication for DR

SQL Server on Azure Virtual Machines

- Provisioning SQL Server virtual machines (using Azure Portal/Automation tools)
- Configuring Always On Availability Groups
- Migrating on-premises SQL Server database to SQL Server in an Azure VM

Solution Enablement – Data Warehouse

Big data describes any large set of digital information, and today it is being collected in growing volumes, velocities, and varieties. You can transform your big data into intelligent action with the big data and advanced analytics solutions of Microsoft Azure.

Azure offers multiple solutions for storing, processing, and displaying your data, whether it is structured relational data or unstructured data from devices and servers. Data can be processed using real-time streams, or as batches of high volume data in a variety of formats. Microsoft FastTrack for Azure can help:

- Understanding the data platform and matching the right option to your business requirements
- Optimizing your database environment on Azure SQL Data Warehouse for large volumes of data
- Reviewing workload architecture designs
- Providing design principles and guidance for security, performance, and scalability

Azure SQL Data Warehouse

- Understanding massively parallel data processing (MPP) distributed database system
- Migrating new or existing workloads to Azure SQL Data Warehouse
- Configuring Azure SQL Data Warehouse as part of a data processing and reporting pipeline
- Understanding DWUs, data protection, and data loading

Solution Enablement – App Lift-and-Shift

"Lift-and-shift" refers to the approach to migrating your application where you "lift" your existing application from your local datacenter infrastructure, and "shift" it to Microsoft Azure, which can minimize changes. This approach allows you to increase efficiency and productivity, while reducing IT operating expenses, by implementing cloud and hybrid scenarios on Azure infrastructure-as-a-service (IaaS).

Microsoft FastTrack for Azure will work with you to help lift-and-shift your application to Azure laaS. Specific guidance will depend on your application, but can include:

- Managing application components using Azure Resource Manager
- Setting up cross-premises network connectivity
- Using Azure Storage services, selecting storage tiers and disk types
- Deploying and managing virtual machines
- Automating resource provisioning using ARM templates
- Leveraging governance features including role-based access control, resource locks, and policies
- Migrating applications using Azure Site Recovery (ASR)
- Reviewing application architecture designs
- Design principles for building applications on Azure laaS

Solution Enablement – App Modernization

Azure platform-as-a-service (PaaS) is a complete development and deployment environment in the cloud, with resources to enable you to modernize your applications.

Microsoft FastTrack for Azure will guide you through the steps to modernize your application, starting with base concepts and helping you take an identified workload from proof of concept (PoC) to deployment in a development environment using App Services or Service Fabric. Specific guidance will depend on your application, but can include:

- Understanding Azure development platforms and matching the right option for deploying your internal business application
- Reviewing common architecture styles and considering benefits and challenges
- Discussing design principles for scalability, availability, manageability, and security
- Implementing continuous and integrated deployment workflows for your app
- Using automation to deploy your application during every stage of the application lifecycle

App Services

- Hosting workloads using Web Apps, API Apps, Azure Functions*, and Azure SQL Database
- Selecting an App Service plan to deploy resources and features
- Publishing web apps and configuring backups
- Setting up a staging environment using deployment slots
- Using scale features to scale up, scale out, or auto scale*
- Automating using ARM templates

Service Fabric

- Leveraging distributed system platform benefits to host LOB applications, develop microservices, or deploy a guest executable
- Configuring and deploying code to Service Fabric clusters
- Developing highly reliable stateful and stateless microservices
- Building services using Reliable Service and Reliable Actor programming models
- Scaling at service and platform levels
- Monitoring and diagnosing application health

Solution Enablement – Digital Marketing Apps

Your digital marketing solution allows your organization to engage with customers around the world with rich, personalized digital marketing experiences. Azure provides a scalable, secure, and easy-to-use environment to build your solution, quickly launch digital campaigns that automatically scale with customer demand and analyze the effectiveness of those campaigns with data analytics.

Microsoft FastTrack for Azure will guide you to run various Content Management Systems (CMS) on Azure App Service, using WordPress to build a proof of concept (PoC) and illustrate recommended practices. Specific guidance will depend on your application, but can include:

- Understanding Azure App Service platform and installing CMS (WordPress) on Web Apps
- Reviewing common architecture styles and considering benefits and challenges
- Discussing design principles for scalability, high availability, manageability, and security
- Configuring monitoring and optimizing performance of your digital marketing app
- Implementing continuous integration and continuous deployment workflows for your app
- Migrating your existing CMS (WordPress) site

Solution Enablement – E-commerce and Transactional Apps

Azure platform-as-a-service (PaaS) enables you to deploy enterprise grade E-commerce applications, and lets you adapt to the size and seasonality of your business. When demand for your products or services takes off—predictably or unpredictably—you can be prepared to handle more customers and more transactions automatically. Additionally, take advantage of cloud economics by paying only for the capacity you use. In short, focus on your sales and leave the infrastructure management to your cloud provider.

Microsoft FastTrack for Azure will guide you to run E-commerce applications at scale on Azure App Services. FastTrack starts with the basics of running a web application backed by a database, then guides solution build out with more advanced features. Specific guidance will depend on your application, but can include:

- Understanding Azure App Service platform and building on Web Apps with SQL DB
- Reviewing common architecture styles and considering benefits and challenges
- Discussing design principles for scalability, high availability, manageability, and security
- Implementing user sign-up, product search, background task processing, and caching
- Gaining insights into application and user behavior with Application Insights
- Implementing continuous integration and continuous deployment workflows for your app

Solution Enablement – SAP on Azure

Reliably run your mission critical SAP workloads and scenarios on Azure, the scalable, compliant, and enterprise-proven platform. With the long-standing and recently expanded partnership between Microsoft and SAP, you can run SAP applications across dev/test and production scenarios with Azure infrastructure - and be fully supported.

- Microsoft FastTrack for Azure will guide you to architect and deploy your SAP workload on Azure, and take advantage of the scalability, flexibility, and productivity gains offered by Azure.
 Specific guidance will depend on your implementation, but can include:
- Providing recommended practices for running SAP on Azure
- Reviewing and validating SAP workload architecture design
- Reviewing and providing recommendations on the SAP migration process\runbook

FastTrack is currently supporting SAP running on:

- OS Windows, Linux
- DBMS Microsoft SQL, Oracle, HANA

Solution Enablement – RedHat Enterprise Server and Linux on Azure

Run your enterprise critical RedHat and Linux workloads and scenarios on Azure, the scalable, and enterprise-proven RedHat Enterprise Server platform with confidence. With the expanded partnership between Microsoft and RedHat, you can run your mission critical applications across a hybrid environment to leverage dev/test and production scenarios with Azure infrastructure - and be fully supported.

Microsoft FastTrack for Azure will guide you to architect and deploy your RedHat Enterprise Server and Linux workloads on Azure, and take advantage of the scalability, flexibility, and productivity gains offered by Azure. Specific guidance will depend on your implementation, but can include:

- Providing recommended practices for running RedHat and Linux workloads on Azure
- Reviewing and validating RedHat and Linux workload architecture design for Azure
- Reviewing and providing recommendations on the RedHat and Linux lift and shift
- Migration process from on-premises into Azure
- Provide recommended business practices to deploy Azure Automation with RedHat/Linux, creation of JSON templates, and recommended deployment practices.

FastTrack is currently supporting RedHat Enterprise Server running on:

- OS RedHat Enterprise Server 6.7 7.x supported on Azure
- OS General supported Linux distributions on Azure

Solution Enablement – Big Data

HDInsight

HDInsight is the Azure-based service that allows easy, fast and cost-effective analysis of massive amounts of data. Azure HDInsight enables scenarios such as: ETL, Data Warehousing, Machine Learning, and IoT using popular open-source frameworks such as Hadoop, Spark and Hive.

Microsoft FastTrack for Azure will assist you in architecting, developing, and deploying HDInsight based solutions. Guidance can include:

- Evaluating Map/Reduce, Hive, and Spark based solutions on HDInsight
- Deploying and running an HDInsight cluster
- Define and understand Map/Reduce processing on HDInsight
- Define and understand Hive and querying Hive defined schemas on HDInsight
- Define and understand Spark architecture on HDInsight

Data Lake Analytics

Azure Data Lake Analytics is an on-demand analytics job service that simplifies big data. Instead of deploying, configuring, and tuning hardware, you write queries to transform your data and extract valuable insights. The analytics service can handle jobs of any scale instantly by setting the dial for how much power you need. You only pay for your job when it is running, making it cost-effective.

FastTrack for Azure will help you to:

- Deploy a Data Lake Analytics Environment
- Configure Security and access permissions
- Understand U-SQL programming language
- Process as part of an Azure Data Factory pipeline

Stream Analytics

Stream analytics is a processing engine for capturing data streamed into Azure and processing that data in real-time. FastTrack for Azure will help you to understand how to implement real-time analytics of your data and integrate this with Machine Learning capabilities.

Within the session we will cover:

- Provisioning a Stream Analytics Environment
- How to ingest data into Stream Analytics
- How to connect to long term storage location or real-time reporting destinations
- Enhancing your analytics with ML
- Windowing functions across streamed data

CosmosDB

Azure Cosmos DB is Microsoft's globally distributed, multi-model database with multi APIs that enable you to store and interact with several different ways.

In these sessions, FastTrack for Azure will help you:

- Understand the different APIs and storage models in CosmosDB
- Provision a CosmosDB and create a data collection
- Understand data partitioning
- Define and tune data consistency in a globally distributed configuration
- Migrate existing NoSQL data stores to CosmosDB

Solution Enablement – Artificial Intelligence

Al in Azure consists of a number of Azure services designed to enhance your application and analytics with intelligent insights and capabilities. The supporting Azure services are:

- Cognitive Services
- Azure Bot Framework
- Azure Machine Learning

Azure FastTrack will assist you in identifying the right service or framework to use, to meet your business and technical requirements for implementing an AI solution, such as adding an interactive Bot to your website to supplement user questions, adding anomaly detection to your business data, or adding intelligence to your loyalty program or website for user recommendations.

FastTrack will cover:

- Provisioning these services in your Azure subscription
- Implementing end to end Cognitive solutions using the AI and Cortana Analytics Gallery
- Implementing Machine Learning models and publishing ML web services
- Integrating ML into other services such as Stream Analytics
- Developing intelligent Bots that respond directly to user input.

Solution Enablement – High Performance Computing

HPC has traditionally been limited to running on specialist physical hardware dedicated to the workloads at hand. With growing demands being made to reduce HPC costs, increase its availability while also attempting to accommodate additional business workloads, HPC grids can start to become a bottleneck due to the lack of flexibility and ability to meet capacity overloads.

FastTrack for Azure can help alleviate many of the common challenges that arise while running HPC onpremise, by providing clear guidance and best practices to migrate workloads into Azure. Each customer has unique requirements to run HPC in the cloud, be it for specific applications, testing purposes, just-intime capacity scaling or to even provide an HPC service to your own customers, and as such each engagement is treated as a blank canvas.

Our end goal is to ensure you have the familiarity with Azure to confidently and successfully move your workloads to the cloud, while also future proofing for the inevitable changes in HPC demands.

To provide the knowledge and assurance we will:

- Review your current requirements
- Understand your goals, the business drivers and outcomes that are expected from Azure
- Provide an overview on how Microsoft defines HPC and Big Compute in the Cloud
- Discuss usage patterns and best practices for running HPC in the cloud
- Demonstrate the open support, technologies, hardware and solutions that are available in Azure for HPC
- Provide guidance to ensure a best fit matches your requirements
- Work with you through our discussions to implement a Proof of Concept
- Review and provide recommendations on your proposed HPC design prior to your implementation in Azure