Microsoft

Microsoft FastTrack for Azure Service Level Description

Contents

Microsoft FastTrack for Azure

Fastrack for Azure is a customer success program for organizations with cloud projects that enables the rapid, effective design & deployment of solutions. It includes tailored guidance from Azure engineers that leverages proven practices and architectural guides.

To learn more about specific solutions eligible for enablement, see Eligibility Criteria. To learn more about FastTrack for Azure process and responsibilities, see FastTrack for Azure Process Overview.

Eligibility Criteria

FastTrack for Azure is available to all customers:

- With an active paid Azure subscription.
- Located in an Azure commercially supported region with the following exceptions:
    - Not available in mainland China.
    - Available in Russia, Hong Kong, Taiwan, and Macao by exception and in English only. Engagements in local language are dependent on resource availability.
- A defined project* using a solution FastTrack for Azure supports, with intent to deploy.

* A defined project has an executive sponsor, committed customer/partner resources, established success metrics, and clear timelines for start/end of project.

Supported Solutions

FastTrack for Azure is currently available to assist with the following Azure Hero Solutions:

1. DC Migration
2. Windows Server on Azure
3. Linux on Azure
4. SAP on Azure
5. Business Continuity, Disaster recovery
6. High-Performance Computing
7. Cloud Native apps
8. DevOps
9. App Modernization
10. Intelligent Apps and Intelligent Agents
11. Internet of Things
12. Data Modernization to Azure
13. Globally Distributed Data
14. Cloud Scale Analytics
15. Azure Virtual Desktop (AVD)
16. Azure Marketplace

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.

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 three phases involved in the process. The following sections describe each phase and the process.

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

Solution Enablement– 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 by doing the following:

- Configuration guidance of Azure platform
- Design principles for building applications
- Enablement of PoC and development or test environment
- Solution review of applications and infrastructure for Production

As a part of Solution Enablement, we also offer some core services to help you align your business and IT needs with the 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 management, governance, networking, security, and Identity, 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.

Deployment: Support Customer in house resources or Partner in the deployment of Azure solution.

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 (IaaS/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 the 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

Architecture Design sessions

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.

DC Migration

Datacenter migration is the process of discovery, planning, and moving of IT systems and infrastructure to a carefully designed environment in a public cloud. The datacenter migration requires detailed planning and a phased approach to execution. The process is strategic in nature and must be executed without causing a significant impact on operations, delivery of services, performance, and protection of data.

Microsoft FastTrack for Azure will guide you thru the process of preparing the target environment in Azure, assessing the source environment, and moving workloads to Azure. Specific guidance will depend on your requirements, but can include the following:

- Understand or drive the end state architecture
- Deploy the end state solution in Azure
- Discover/identify on-premises applications, assess dependencies, and right-size Azure VMs
- Plan and configure the migration
- Migrate workloads/applications

Windows Server on Azure

Windows server on Azure refers to the approach of 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 rehost your application to Azure IaaS. 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 IaaS

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

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

Business Continuity, Disaster Recovery

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

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

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 on-premises, 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- in-time 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 of 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 the 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

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 Mod: Web

- 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

App Mod: Microservices

- 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

Migrate .NET applications to App Service (Windows, standard)

The process of Migrating existing, VM hosted applications, hosted on premises (or on other cloud) where the application is "lifted" from its original hosting infrastructure and location, and "shifted" to Microsoft Azure [windows] App Service and applicable SQL database dependencies to SQL MI or SQL DB PaaS.

It is possible that during this lift & shift the application would need to be modernized and refactored for suitability. The reasons for additional work over and above lift & shift rehosting would be:

- To remove blockers to migration; example, registry or GAC dependencies)
- To improve runtime performance; example, refactoring a monolith application which contains in-process services to external services which could be hosted and scaled independently.

We will work with you to help rehost your .Net Full framework, or .Net core application(s) to Azure Web App Service and SQL PaaS. Specific guidance will depend on your application, but can include:

- Managing application components using Azure Resource Manager
- Setting up any cross-premises network connectivity for downstream dependencies and private networking features (if applicable)
- Setting up App Service plans and configuration including management of Application level configuration
- Automating resource provisioning using ARM templates
- Leveraging governance features including role-based access control, resource locks, and policies
- Setting up SQL DB Server and databases or SQL MI cluster
- Migrating SQL data schema and content using SQL Migration tools and publishing compatible dot net app code to App Service using the most suitable method
- Reviewing application architecture design
- Design principles for building applications on Azure PaaS

Intelligent Apps and Intelligent Agents

AI 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.

Internet of Things

An IoT journey starts with connecting the devices, getting insights from the data, and act on that information with automated alarms and integration with business processes and applications. FastTrack for Azure will guide you through the steps to implement your IoT Solution helping you take your project from proof of concept (PoC) to deployment at scale.

Specific guidance will depend on your implementation, but can include:

- Understanding the communication protocols available for connecting to Azure IoT services
- Reviewing the device onboarding processes (identity of device & attestation mechanisms)
- IoT architectural guidance to achieve optimal utilization of Azure IoT services
- Securing your IoT architecture (Azure services)
- Leverage and action insights based on telemetry data from smart sensors and devices

FastTrack is currently supporting IoT solutions leveraging the following services:

- IoT Hub
- IoT Device Provisioning Service
- IoT Edge
- IoT Central
- Azure Time Series Insight
- Industrial Internet of Things

This supported scope includes the core platform services to get "things" connected to Azure, plus the key Solution as a Service offerings including IoT Central & Time Series Insights. Support outside of these services is evaluated on a case-by-case basis and skill availability.

Hardware integration and specific firmware porting / support is explicitly out-of-scope by FastTrack for Azure and will be provided by alternative teams within Microsoft.

Cloud Native Apps

Event Driven Apps

Serverless computing is driven by the reaction to events and triggers happening in near-real-time—in the cloud. As a fully managed service, server management and capacity planning are invisible to the developer and billing is based just on resources consumed or the actual time your code is running.

FTA can show examples of how customers are using serverless computing. Some examples of serverless applications are: Web Application Architecture, IoT back end, SaaS Integration, Mobile back end

FTA can help you Explore Azure for serverless applications, helping you build a POC using a combination of following Azure Services:

- Azure Functions is an event-driven compute experience that allows you to execute your code, written in the programming language of your choice, without worrying about servers. Benefit from the scale on demand and never pay for idle capacity.
- Azure Storage provides durable, highly available, and massively scalable cloud storage to developers for cloud applications. Get options for unstructured object data, structured datasets, file storage, and queue storage for serverless communication between cloud apps.
- Azure Cosmos DB delivers a database ally for your serverless app. This multi-model database service provides transparent scaling and replication of your data to wherever your users are.
- Azure Active Directory provides cloud-based identity and access management. Using it, developers can securely control access to resources and manage and authenticate the users of their serverless apps.
- Event Grid is a fully managed event routing service that enables rich application scenarios by connecting serverless logic to events coming from multiple Azure services or from your own apps.
- Service Bus is a fully managed messaging infrastructure that enables you to build distributed and scalable cloud solutions with connections across private and public cloud environments.
- Logic Apps provide serverless workflows that allow developers to easily integrate data with their apps instead of writing complex glue code between disparate systems. Logic Apps also allow you to orchestrate and connect the serverless functions and APIs of your application.
- API Management is a turnkey solution to create, manage, monitor, and secure your APIs at any scale.
- Azure Functions Proxies allow the creation of microservice architectures by breaking large API surfaces into multiple function apps, while still presenting a single API surface for clients.

Digital Marketing

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 the performance of your digital marketing app
- Implementing continuous integration and continuous deployment workflows for your app
- Migrating your existing CMS (WordPress) site

DevOps

One of the main attractions of the cloud is the flexibility and potential cost savings when operating your workloads. This is especially important when you think of environments such as DevTest, 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.

Aside from cost, agility can also be a driving factor for many organizations to transform the way in which they deploy and operate their workloads. Many organizations are embarking upon a DevOps journey, to replace the silos of Dev and Ops into a multidisciplinary team with shared practices and shared tools. Essential DevOps practices include agile planning, continuous integration, continuous delivery, and monitoring of applications. These align well to a cloud-based solution.

Microsoft FastTrack for Azure will help you get started with your DevTest solution and empower your teams to move forward with the deployment of your applications. We can provide guidance that includes:

- Deploying your DevTest environments using subscriptions, resource groups, and DevTest Labs
- How DevOps, Continuous Integration, and Continuous Deployment can help your organization
- Using Azure Repos, Azure Pipelines and Azure Artifacts to drive predictable deployments of your applications into Azure
- Creating Azure Resources using Infrastructure as Code practices
- Defining policies and additional governance controls that determine how resources can be used

Please be aware that FastTrack for Azure operates on a per project basis. From a DevOps perspective, this means that FastTrack for Azure is best suited in enabling your Azure Workloads to be deployed through Azure DevOps**, GitHub**, and specific in-scope OSS DevOps technologies. FastTrack for Azure will not support taking your organization on a broader DevOps transformation journey, or deployments into on-premises environments or other clouds. **FastTrack for Azure will not be able to advise on the configuration of "on the box" solutions such as Azure DevOps Server or GitHub Enterprise Server.**

Data Modernization 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 a 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

Data Mod: SQL Migration

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

Data Mod: Data Mod: Database on VM

- 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

Data Mod: OSS Migration

- In this session, we will look at Azure Database for MySQL, MariaDB, and PostgreSQL as a product and the practical application implementing new databases, as well as migrating existing databases from on-premises to Azure. We shall also discuss the built-in high availability, business continuity and disaster recovery options of the platform.

Globally Distributed Data

Cosmos DB

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 Cosmos DB
- Provision a Cosmos DB and create a data collection
- Understand data partitioning
- Define and tune data consistency in a globally distributed configuration
- Migrate existing NoSQL data stores to Cosmos DB

Cloud Scale Analytics

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

Analytics: Modern 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

Analytics: Real-time Analytics

- HD insights
- DataBricks
- Stream Analytics

HDInsight

HD insight 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

DataBricks

Azure Databricks is a service that enables you to accelerate big data analytics and artificial intelligence (AI) solutions with Azure Databricks, a fast, easy, and collaborative Apache Spark–based analytics service.

FastTrack for Azure will help you to:

- Deploy a Databricks Cluster
- Configure Security and access permissions
- Understand Databricks Notebooks and jobs
- Process as part of an Azure Data Factory pipeline
- Perform advanced workloads such as Machine Learning

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

Azure Virtual Desktop

Azure Virtual Desktop is a comprehensive desktop and app virtualization service running in the cloud. It's the only virtual desktop infrastructure (VDI) that delivers simplified management, multi- session Windows 10, optimizations for Office 365 ProPlus, and support for Remote Desktop Services (RDS) environments. Deploy and scale your Windows desktops and apps on Azure in minutes and get built-in security and compliance features.

Microsoft FastTrack for Azure will guide you to architect and deploy your Azure Virtual Desktop 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:

Deploy AVD Infrastructure and Management resources

1. Review and implement networking and identity prerequisites.
2. Build AVD
    a. Host pool
    b. Application groups
    c. Workspace
3. Assign other users to host pool
4. Provision Storage Shares
    a. FSLogix Profile / Office Profile
    b. MSIX App Attach
5. Deploy AVD VMs using image customer selects
6. Deploy and configure FSLogix

Configure AVD Management

1. AVD Monitoring Solution
2. AVD Scaling Automation
3. Review and recommend image and update management strategy

Migrate from AVD Fall Release to Spring Release

Azure Marketplace

Azure Marketplace is the central store for all the applications and services in Azure. Azure users can discover and deploy solutions to their Azure subscriptions in few clicks. With a catalog with more than 8000 listings it provides all the building blocks for Azure. You can have your solution listed there as welland even sell-through Azure which makes it very easy to
reach Microsoft Azure's entire customer base.

Microsoft FastTrack for Azure will help you get started with your Azure Marketplace offering and empower your teams with all the knowledge and tools you need to get the offering into Azure Marketplace. We can provide guidance that includes:

- Choosing the best offer type for your scenarios
- Understand the billing model behind the different scenarios
- Support the design of a solution following best practices
- Ramp up your technical knowledge on multiple areas – this will vary depending on the offer type select
- Support you through the publishing process to the Marketplace

Azure VMware Solution 2.0

Azure VMware Solution 2.0 (AVS 2.0) is available as a new service under FTA mainstream DC Migration and Virtual Machine engagements. Be aware that in many engagement scenarios, AVS requires specialist skills and support – see below for details.

FTA AVS engagements are geared to enable a customer to run their VMWare environment within Azure, they are not geared to educate customers on the topic of VMWare, nor how to operate and manage VMWare. It is expected that the customer (or executing partner) has a deep understanding of the current VMWare environment and VDC technologies.

FTA Region Supported	Now	Preview
Americas	•	
Asia		•
EMEA	•	

Going forward, FastTrack for Azure will not support AVS 1.0 to AVS 2.0 migrations, nor will we support any new AVS 1.0 deployments.

What scenarios are supported?

1. On-prem VMware to AVS 2.0 migrations
2. BCDR planning for AVS 2.0
3. AVS 2.0 new deployments

Why are AVS 1.0 to AVS 2.0 migrations not supported?

AVS 1.0 and AVS 2.0 are very different underlying products that currently do not allow for a lightweight migration.

In what Azure regions is AVS supported?

Go here to see what Azure regions currently support AVS 2.0 - Azure Products by Region | Microsoft Azure

What is in scope for an FTA AVS engagement?

FTA provides best practices and guidance on the above supported scenarios. This includes providing assistance in designing and validating existing or future configuration/architecture for supported scenarios, as well as access to Azure engineering and product teams as appropriate. It does not include any hands-on delivery, written deliverables or rubber stamping of designs.

A typical FTA engagement may consist of the following:

- FTA will assist on migrating this existing environment into AVS 2.0.
- FTA will assist on how to run AVS on the Azure platform.
- FTA will assist on how to run and operate the Azure platform, incl. AVS on top of Azure.
- FTA will assist on how and which Azure services can be used in conjunction with workloads running within AVS.

What is out of scope for an FTA AVS engagement?

Out of Scope areas for FTA for AVS 2.0 include the following:

- Anything running within the AVS or On-Prem Cloud
- Non-Azure native operations or management components
    - E.g., 3rd-party tools for Backup/DR /security/management
- Any on-prem VMWare VDC related troubleshooting

Note: FTA will not be able to assist with specific guidance on VMWare nor how to manage or operate the VMware vSphere environment – Microsoft has other resources that may assist with this.

What specific guidance is recommended for an FTA AVS engagement?

For FTA AVS 2.0 engagements, be aware of the following guidance:

- Partner and/or customer VMware engineers should have a deep understand of vDC VMware incl.
    - NSX-T/HCX
- If a partner is involved, the partner should have engineers that have a basic understanding of the Azure infrastructure environment.
- For Asia region - until FTA AVS 2.0 goes GA in the Asia region, GBBs will need to be engaged.

What resources are available to help scope an FTA AVS engagement?

Scoping assistance for FTA AVS 2.0 engagements can be found here - Scoping questionaire.docx

In what specific technology areas can FTA assist for an FTA AVS engagement?

FTA can assist with the following AVS 2.0 specific technology areas:

- Guidance and best practices regarding the Azure platform and Azure Landing Zones* e.g.
    - Enrollment types
    - Identity
    - Networking
    - Resource Organization
    - Governance
    - Operations
    - BDCDR
    - Deployment options

*This guidance ensures that the customer is migrating onto a platform that is suitable for AVS and other workloads.

- Guidance and best practices in specific AVS technology areas e.g.
    - AVS capacity planning for existing VMWare deployments (using Azure migrate tooling only)
    - Network Planning
        - VNet and ER circuit considerations
        - Routing and subnet requirements
        - Required communication ports
        - DHCP and DNS considerations
    - Private cloud creation considerations
        - RBAC considerations
        - Identity considerations

- Private cloud access
  - Access to vCenter
- Networking
  - VNet/VNet Gateway requirements
  - ER requirements
  - URLs for vCenter and NSX Manager
  - Azure DNS resolution
- NSX-T networking segment
  - How to add and observe network segments via NSX-T Manager
- Peering on-prem with AVS
  - Global reach peering
- HCX configuration
  - How to deploy and activate HCX connector
  - Paring and configuring the interconnect
- Azure Native integrations

Additionally, you will be able to avail these services as a part of any of the Solution areas above

Service	Description
 **Management**	Get an overview of the Azure Environment and help to manage your subscriptions. Walkthrough role of account owners learn how to monitor usage and report on it. Use a bundle of management tools like Traffic manager, Application insights, Azure resource Manager, Log Analytics, Automation, etc. to manage and monitor the health of your systems
 **Identity**	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. Other services include B2B and B2C
 **Networking**	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 choosing from VPN, Express Route, and Azure networking

 **Governance**	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 (Cloudyn, Azure Advisor, Azure policy) that provide structure to the environment, and a foundation to create or attach services built on the cloud
 **Security**	For all your security needs we will help you build the most secure solutions using Azure Security center, RBAC, Security, and Compliance