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| **Cloud Transition Services (CTS)  Creation Template Guidance  (Delete this page & table before sending to a Customer!)** |
| **About this document**  This document has been created by the Offerings Teams as an insert into a customer’s ESWO only for the Offering it represents and that is a published Microsoft Industry Solutions Delivery worldwide Phoenix Catalog (CompassOne) Offering.  **This document, and the content contained within, can be used in this scenario:**   1. As content that can be inserted into a Customer’s ESWO, much as the “Work Order Stub” concept. |
| **Instructions for Deal Creators**  You will notice throughout this document:   * Pink text, which is instructional and should be deleted before sending to the Customer * Blue text, which is optional and should be removed or changed to style ‘normal’ based on the Customer deal before sending to the Customer   The content in this document is designed to be used directly in an ESWO. Complete these steps to tailor for your customer:   * Update the offer content for the Customer deal. * Remove any Pink text and remove or change any Blue text. * Extract the content in this template and place it directly into the ***section 1.2 Description of the Services***, of an ESWO (maintain the “*Services Delivery Location: <Country>*heading) * Be sure to also attach the Engagement Delivery Approach (EDA) document to the ESWO, by listing in the “*Attachments*” section, when using this template since the EDA contains the common approach and governance content that applies to all the services in this SKU. * The staffing plan for the engagement should be created from the CompassOne record and may be included as an attachment and listed in the “Attachments” section of the Work Order, if needed. See the Deal Shaping and Pricing Guide for additional guidance. * The ESWO 1.3 Fees section needs to be updated from the OSE template.   + Copy financials from CompassOne into the OSE ESWO Calculations tab following the guidance there.   + Copy the resulting pricing into the OSE ESWO Guidance tab. Copy the ESWO Guidance tab content into the ESWO 1.3 Fees section following the guidance at the top of the tab.   + In CompassOne, under Payments, generate the monthly fee schedule and populate the Billing Schedule table that was part of the copied content. |
| **Template Modularity**  The Cloud Transition Services and Data Estate Modernization SKUs are modular in nature.  The SKUs have many services that can be enabled or disabled depending on the customer needs. Services and their acronyms:   * Azure Landing Zone (ALZ) * Workload Landing Zone – Azure Kubernetes Service (WLZ-AKS) * People Mobilization for Velocity Service (PMVS) * Cloud Operations & Governance (COG) * Azure Migration Services (AMS) * Azure Refactoring Service (ARS) * Azure Transformation Services (ATS) * Container Migration Services (CMS) * Data Modernization Services (DMS) * Quality and Reliability Services (QRS) * Modernization Support Services (MSS)   Each of these services has several options. When editing the DoS, make sure the service options map was estimated in OSE and CompassOne.  General rules:   * ALZ is required per Domain policy. * At least one of AMS, ARS, ATS, or CMS must be included. * WLZ-AKS is strongly recommended when CMS is active * PMVS is strongly recommended per Domain policy. * COG is strongly recommended per Domain policy. * DMS is currently optional as the scope is limited to Oracle databases.   Editing for using the IGD Landing Zone:   * Includes Azure Platform, Azure Networking Cloud and Datacenter, Azure AD Integration, PAW, and COG Azure Governance, COG Azure Operations, and COG Cloud Monitoring for Azure. Remove other Azure Identity and COG services when this is chosen. All of this is shown in OSE when the IGD Landing Zone is chosen.   Editing by section:   * 1.2.1 – Update the customer-desired business outcomes * 1.2.2 – Edit the phases, services and their descriptions to match what is being estimated. CTS has multiple options when it comes to phases. Phase options are limited to:   + Prepare, Pilot, and Migrate (Full Program),   + Prepare only   + Prepare and Pilot.   + Pilot and Migrate IF Prepare was previously done   + Migrate IF Prepare and Pilot were previously done   The CTS Customer Presentation – TDM on [Services Portfolio](https://aka.ms/isd/cts) has the Prepare, Pilot, Migrate diagram if it needs to be customized to remove services.  The Data Strategy Accelerator includes the Data Strategy Workshop; keep both service descriptions when the Data Strategy Accelerator is in scope.  Edit the services and the scope based on the OSE inputs. Most scope requires the Migrate phase. Edit the products that are mentioned to match the scope.   * 1.2.2 – No changes needed. * 1.2.3 – Edit the intake application monthly amount from OSE * 1.2.4 – Edit the size and timeline info based on the scope and OSE. * 1.2.5 – Should not need changes * 1.2.6 – Edit the technology requirements based on the guidance and what is being included. * 1.2.7 – Edit the dependencies based on the services to be delivered. * 1.2.8 – Tailor the organization information to describe roles unique to the services selected which are not already covered in the EDA. |
| **Do not use this content for the following scenarios:**   * Time and Materials services – this offer is intended for a fixed fee only. * Germany, Austria, and Switzerland: This Description of Services ESWO stub, combined with EDA template, is acceptable for use as a Services Contract (Beratungsleistung/Dienstleistung/Einfacher Auftrag) in Fixed Fee (Austrian “Beratungsleistung” §§ 1153 ff. ABGB, German “Dienstleistung” §§ 611 ff. German Civil Code BGB, or Swiss “Einfacher Auftrag” Art. 394 et seqq. Swiss Code of Obligations). Reason: there is no acceptance process, nothing requires acceptance, we do not describe deliverables. Engage CCM and SQA as this case needs a customized ESWO, it cannot be fit into the standard ESWO template. |
| **Need help?**   * There are references to the [SOW Writing Guide](https://vldoctool.cloudapp.net/DocSearch/Document/64138) —that document accompanies this template with greater explanations, examples and handy hints. It is available from [K360](https://vldoctool.cloudapp.net/landing/services#/?name=SOW+Writing+Guide&area=&country=&language=&category=&type=&page=1&count=50) * If you have a contracting question, please reference the materials on [K360](http://aka.ms/k360) or, for general field support questions, reach out for assistance through [AnswersHub](http://aka.ms/AnswersHub). |

## Description of the services

Microsoft will partner with the Customer in an Azure migration and modernization effort. This partnership is in the form of an Azure migration program with the objective to migrate and operationalize up to the scoped number of applications and databases over the stated program length. This program is designed with considerable flexibility to drive migration velocity across a broad set of environments and applications and includes the foundational activities of building out the landing zone, applying Microsoft best-practice security controls, and operations and governance. The details of the services provided are in the following sections.

Any dates provided for Microsoft are estimates only.

### Customer-desired business outcomes

This section cannot be left blank or have the outcomes indicated as to be determined (TBD). At a minimum, the overall business value to be delivered should be conveyed here. In defining outcomes, it is a balance between clarity (agree on where we are headed) and measurement (so that we understand if we are moving in the right direction of the desired outcomes).

At the end of the engagement, the agreed outcome will be assessed jointly with the Customer.

Ideally, when filling in this section, do not go into more detail than epics and features. The focus is on business functional needs. A full list of detailed user stories should not be used here because it can create the expectation of a fixed scope, as in, all the user stories will be delivered as part of this engagement.

The Customer has expressed the desire to obtain the following business outcomes. The agile delivery approach (described in the *Engagement Delivery Approach section of* the attached Engagement Delivery Approach (EDA)) allows the Customer to continually adjust and adapt the outcomes and direction of any solutions designed to reach said outcomes. Microsoft will continue its efforts based on the priorities and direction provided by the Customer until such time as all capacity has been consumed.

| Desired business outcomes | Assumptions |
| --- | --- |
| Example desired business outcomes. Replace with those expressed by the Customer.  Exit the datacenter in 18 months to reduce CapEx costs. | * The Customer has a plan in place for applications not moving to Azure. |
| Modernize key applications to take advantage of Microsoft Azure services. | * Applications being modernized do not require new features during the initial modernization to Azure. |

If more capacity is needed to deliver the desired business outcomes or if additional outcomes need to be defined, the change management process described in the attached EDA will be followed to increase capacity.

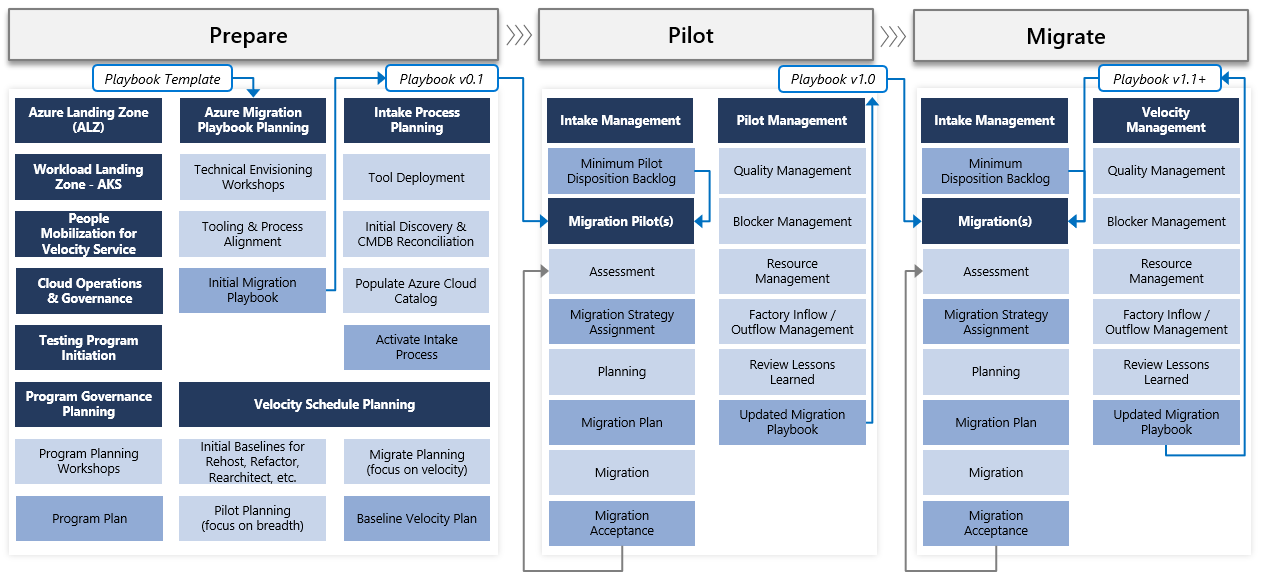
### Phases, services, and products

### Phases

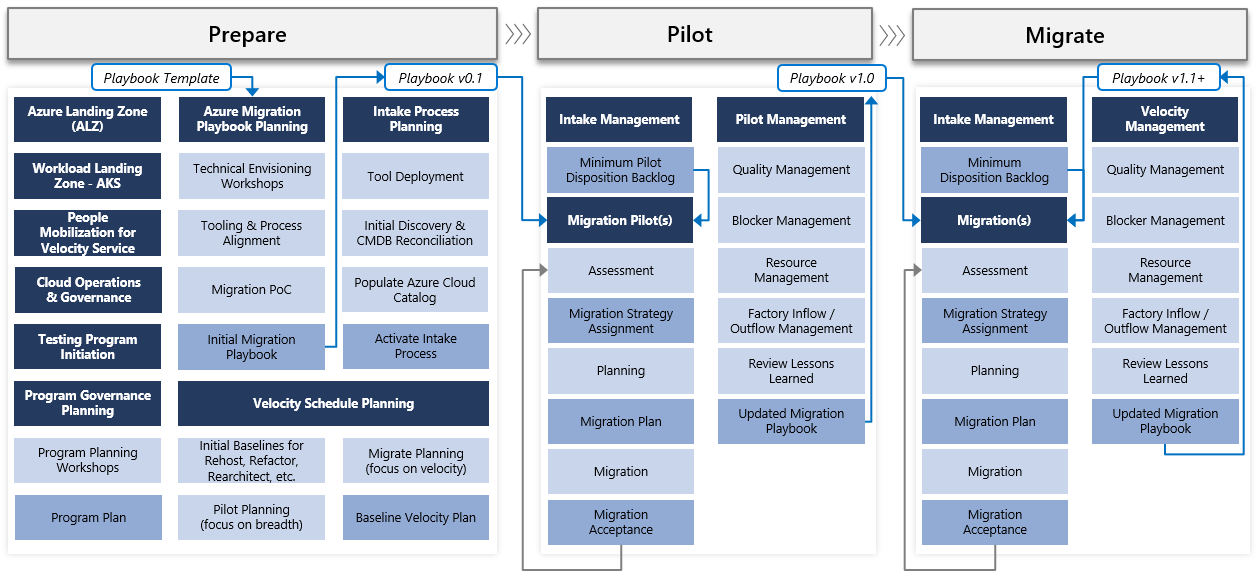
Using the agile delivery approach, sprints are implemented in three broad engagement phases: Prepare, Pilot, and Migrate. These phases are illustrated in the following diagram.

Choose the image based on the assigned customer complexity in OSE.

Option 1: Customer Complexity = Simple:



Option 2: Customer Complexity = Medium or Complex:



**Prepare phase**

The Prepare phase consists of a series of parallel sprints that will be used to:

* Align on an end-to-end migration process that combines technical, operational, and business activities. These parallel sprints will also be used for tooling, intake and application disposition with backlog refinement, and the automation required for a successful migration program. This will produce a pilot-ready version 0.1 of the Azure migration playbook in Microsoft Azure DevOps, the initial cloud catalog of discovered assets, and the baseline velocity plan.

Add the following if customer complexity is medium or complex in OSE

* Validate key processes and tooling with a migration proof of concept.

Choose one:

* Design and implement an Azure Landing Zone (ALZ).
* Remediate an existing Azure Landing Zone (ALZ).
* Design and implement an Azure Kubernetes Service (AKS) landing zone for containerized applications.
* Align the Customer’s IT operating model to the Microsoft Cloud Adoption Framework.
* Mobilize key Customer stakeholders to achieve migration velocity.

If the Prepare phase (only) has already been delivered in a previous engagement add the following:

The Prepare phase was previously delivered in [Engagement name] and the outputs from that engagement will be used to drive the current project.

**Pilot phase**

The Pilot phase consists of a series of parallel sprints taking a set of selected applications and completing the activities in the migration playbook. *Include the following when the Pilot phase has been extended in OSE:* The Pilot phase’s intake and application disposition activities have been extended to drive the creation of a deeper backlog of applications to be migrated. The Customer and Microsoft will use the feedback obtained during this phase to review and agree on upgrades to the migration playbook. This phase will end with a revised, migration-ready version 1.0 of the Azure migration playbook.

If the Prepare and Pilot phases have already been delivered in a previous engagement add the following:

The Prepare and Pilot phases were previously delivered in [Engagement name] and the outputs from that engagement will be used to drive the current project.

If the Pilot phase has not been delivered and is not in scope, add the following:

The Pilot phase is not in scope and may be delivered in a future engagement.

**Migrate phase**

The Migrate phase consists of parallel sprints running the defined migration playbook across applications and business units at scale to achieve velocity in the migration program. The initial, assumed scope for this phase is listed below. This phase may lead to the identification of needed improvements that will be reviewed and added to the migration playbook through a defined governance process. During this phase, scale feature teams may be added, based on the application backlog and the limits defined in the *Program size and timeline* section.

If the Migrate is not in scope, add the following:

The Migrate phase is not in scope and may be delivered in a future engagement.

### Services

Microsoft plans to deliver the following services during sprints in the phases noted based on the prioritized backlog. While the program uses an initial set of assumptions to help size each service, actual migration and modernization strategy assignments will be done during application and database intake and assessment, based on Customer and technical needs, which may vary from the following tables. To achieve the migration and modernization in the time frames stated below, it will require the active participation of [Customer name] IT, business application owners, and executive sponsors during the project. Actual services delivered will be governed by the prioritized product backlog that will evolve throughout the engagement. If scope changes result in a resourcing or duration adjustment, the program’s change management process as described in the EDA will be followed.

**Foundation services**

*Use information from the Inputs tab of the OSE estimator that was used to structure the project to fill out the section below.*

Foundation services build the platform to support a scale migration program. Most foundation services, unless otherwise noted, run in the Prepare phase.

**Azure Landing Zone (ALZ)**

* **Azure platform:** [Establish | Improve] Microsoft Azure as the platform for cloud transformation by designing and implementing the ALZ based on the principles and guidance published in the *Microsoft Cloud Adoption Framework*, *Azure Landing Zone*, and *Azure Security Benchmark*.
* **Azure networking:** Establish Azure networking services from on-premises to Azure.
* **Azure identity:** Implement key capabilities in Azure Active Directory (Azure AD) and on-premises identities to increase the security posture of the organization.
* Azure AD integration: Establish integration between your on-premises Active Directory Domain Services (AD DS) environments and Azure AD to support onboarding to Azure and other online services. Azure Active Directory Connect will be installed and configured for synchronization, and authentication will be established using password hash synchronization, pass-through authentication, or federated authentication using Active Directory Federation Services (AD FS) or a third-party identity provider.
* Azure AD identity management: Implement and configure Azure AD self-service password management, self-service group management (SSGM), privileged identity management (PIM), and a group-based licensing assignment.
* Azure AD conditional access and Multi-Factor Authentication (MFA): Implement and configure MFA and configure Azure AD conditional access policies for a tenant, applying controls to applications integrated to Azure AD.
* Azure AD application integration: Integrate a subset of your applications with Azure AD for achieving single sign-on (SSO) authentication. This service may extend into the Pilot and Migrate phases for targeted applications.

|  |  |
| --- | --- |
| Area | Scope |
| Azure AD integration – AD DS forests | [Default is 1] |
| Azure AD integration – AD FS farms | [Default is 0] |
| Azure AD application integration - applications | [Default is 3] |

**Workload Landing Zone - Azure Kubernetes Service (WLZ-AKS)**

[Establish | Improve] AKS as the landing zone for containerized applications and services by designing and implementing the WLZ-AKS based on the principles and guidance published in the *AKS Azure Landing Zone* and the *AKS Secure Baseline*. This service is ongoing through the Prepare, Pilot, and Migrate phases.

**Security and Compliance for Azure (SCA)**

* **Governance, risk, and compliance (GRC) planning**:Establish planning to capture additional risks or regulatory compliance requirements.
* **Azure platform security**:Establish baseline security controls for the Azure platform, which provide general protections for the Azure AD tenant, including associated resources and subscriptions.
* **Azure service security**:Establish baseline security controls for Azure services that work with the Azure platform security controls to provide foundational security and general safeguards for workloads being migrated.
* **Azure workload security**:Establish baseline security controls for an application or application pattern that works with the Azure platform and Azure service security controls. This service is for the Pilot and Migrate phases only.

The SCA scope is listed in the following table.

|  |  |
| --- | --- |
| Activity | Estimated scope, up to the limits specified |
| GRC – frameworks | [Number of Frameworks] |
| Azure platform security – AD tenants | [Number of Tenants] |
| Azure service security – Azure services | [Number of Azure services] |
| Azure workload security – rehosted application patterns | [Number of rehosted apps] |
| Azure workload security – refactored application patterns | [Number of refactored apps] |

**Privileged Access Workstation (PAW) for Cloud Service Management**

Deploy and configure dedicated administrative workstations in an environment designed to help protect high-privilege administrative accounts from becoming compromised. This service provides highly automated activities to deploy and configure the workstations to manage cloud workloads.

The PAW scope is listed in the following table.

|  |  |
| --- | --- |
| Area | Estimated scope, up to the limits specified |
| PAW devices | [Default is 10] |
| PAW supported hardware models | [Default is 1] |
| PAW supported applications/tools | [Default is 1] |

**Data Strategy Workshop**

Match Customer objectives and key results (OKRs) with specific use cases and assess shared data service capabilities, people, processes, change management readiness, and data maturity. The outcome is a horizon-based delivery (refer to *Definitions and acronyms* in the EDA) through shared strategy services and use-case implementation to help realize critical business value for customers.

**Data Strategy Accelerator**

Implement the foundational capabilities and shared data services required for a modern data analytics platform. Delivery of prioritized use cases defined during the Data Strategy Workshop service, including data lake, ingestion, handshaking, control file, and data catalog using Microsoft-recommended practices and IP. This service extends into the Pilot and Migrate phases.

**People Mobilization for Velocity Service (PMVS**)

Assist the Customer with team mobilization to achieve cloud migration velocity. We prepare, equip, and support key business and IT stakeholders to more successfully prepare their assets and subsequently achieve more efficient migration. PMVS is designed to minimize the negative, people-side consequences associated with cloud transformation. This service runs continuously through the Prepare, Pilot, and Migrate phases.

**Cloud Operations and Governance (COG**)

Help the Customer become operationally ready to run the Azure platform and target workloads, align to the Microsoft Cloud Adoption Framework, and transition IT operations to enhanced ways of working on the Azure platform.

* **Operations readiness review:** Develop a prioritized approach for achieving the desired state based on the Microsoft vision for operationalizing target Azure workloads along with the current state of related operations and service management.
* **Azure governance:** Provide recommended disciplines, policies, and practices for establishing a governance framework for Azure based on five disciplines: identity baseline, security baseline, cost management, resource consistency, and deployment acceleration.
* **Azure operations:** Provide recommended operational roles, responsibilities, tasks, and processes aligned to the five disciplines of Azure operations: inventory and visibility, operation compliance, protect and recover, platform operations, and operational processes.
* **Cloud monitoring for Azure:** Establish a foundation for monitoring Azure services to provide core visibility into the health and availability of the Azure landscape using native Azure capabilities and patterns. Integrate into existing alert and incident management processes to support the operational lifecycle.
* **Target Operating Model strategy:** Define a vision and strategy in the form of an implementation backlog for the transformation of IT to a Target Operating Model that is cloud-first and cloud native, with increased efficiency and agility to realize the benefits of modern cloud capabilities that help support the business to rapidly innovate.
* **Target Operating Model delivery:** Lead the Customer through the detailed planning and implementation of the Target Operating Model that will transform the IT organization topology, team roles and responsibilities, tooling, and processes, allowing IT to deliver foundational cloud service capabilities to the business in a consistent, timely, cost-efficient, and more secure manner. This service extends during the Pilot and Migrate phases only.
* **Operations control framework:** Lead and coach the Customer’s teams to implement the recommended operations and governance controls using Microsoft cloud native technologies and the Microsoft technical library of control framework artifacts. Iterate in an agile manner to continually mature and improve the Customer’s cloud operating model. This service extends to the Pilot and Migrate phases only.

**Migration and modernization services**

*Use information from the Inputs tab of the OSE estimator that was used to structure the project to fill out the section below.*

Migration and modernization services move servers, applications, and databases at scale to Azure across a variety of strategies and supporting services. Most migration and modernization services, unless otherwise noted, run in the Pilot and Migrate phases.

**Migration and Modernization Planning**

Align on an end-to-end migration process that combines technical, operational, and business activities; tooling; intake and application disposition with backlog refinement; and the automation required for a successful migration program. This service runs in the Prepare phase.

**Intake and Application Assessment**

Produce an application disposition and validate in-scope backlog items. <Number of Intake and Assessment Only applications> have been identified to be taken through intake and application assessment, but not to be moved to Azure.

**Azure VMware Solution (AVS) Deployment Planning**

Plan and create an instance of AVS and VMware vSphere-related objects. Install and configure VMware HCX in source and target VMware vCenters. The service has been sized to set up [*Number of vCenters from OSE]* VMware vCenter(s) and runs in the Prepare phase.

**Azure Migration Services (AMS)**

Provide services to rehost servers, applications, and databases in Azure.

* **Rapid application migration**: As-is migration of applications by servers to Infrastructure as a Service (IaaS) or AVS. An operating system upgrade is available via automation.
  + Low-touch approach: Tool-based migration by servers or subnet.
  + Light assessment and planning: Minimal application team involvement and no planning deliverables.
  + Databases: If any, databases are migrated as part of server migration.
  + Fast velocity: Accelerated migration to Azure IaaS or AVS with little application owner involvement.
* **Application migration**: As-is migration of applications to Azure IaaS or AVS. An operating system upgrade is available via automation.
  + Medium-touch approach: Tool-based migration by application.
  + Standard assessment and planning: Moderate application team involvement. An application migration plan is the deliverable.
  + Simple or medium complexity databases: Database migration to Azure IaaS, AVS, or platform as a service (PaaS).
  + Medium velocity: Migration velocity is dependent on Customer resource availability for migration acceptance testing (MAT).
* **Clean deployment**: Redeployment of applications on new Azure virtual machines. Enhancements include Infrastructure-as-Code (IaC), new operating system version, and upgraded application components, targeting Azure IaaS, AVS, or PaaS.
  + High-touch approach: Deployment of new servers by application.
  + Complex: Deep assessment and planning, and significant application team involvement. An application migration plan and application deployment plan are deliverables.
  + Simple or medium complexity databases: Database migration to Azure IaaS, AVS, or PaaS.
  + Variable velocity: Migration velocity is dependent on Customer resource availability for planning or MAT and the number of scale components.

The AMS scope is listed in the following table.

| Rehost strategy | Application count |
| --- | --- |
| Rapid application migration | [Combination of Rapid App Migration (RAM) and RAM with OS Upgrade] |
| Application migration | [Combination of App Migration (AM) and AM with OS Upgrade] |
| Clean deployment | [Clean Deployment] |
| **Total** | **[Applications to be Rehosted]** |

**Azure Refactoring Service (ARS)**

Refactor legacy .NET, .NET Core, Java, Classic Active Server Pages (ASP), WordPress, and Hypertext Preprocessor (PHP) web applications to the Azure platform as PaaS services for supported runtimes and versions. Refactoring refers to modifying applications through targeted coding and application changes to prepare the application to be hosted in Azure PaaS services. Some of the targeted coding and application changes include configuration management, database connectivity, external resource connectivity, and authentication.

Not all applications are alike. ARS handles this by assigning a complexity based on the applications’ characteristics that include, but are not limited to, the items listed below:

* Language/platform
* Local server resource usage
* Session management
* Messaging patterns
* Lightweight Directory Access Protocol (LDAP) integration
* Third-party component usage
* Custom continuous integration/continuous delivery (CI/CD) requirements
* Use of legacy technologies (for example, COM/DCOM)

The ARS Complexity Slotting tool will assign the complexity and business criticality based on application metadata gathered as part of the intake process. Code scanning tools are also used to finalize the complexity during the assessment phase. Applications are slotted into three complexity buckets consisting of Simple, Medium, and Complex.

The ARS service scope is listed in the following table.

|  |  |
| --- | --- |
| Refactor application complexity | Application count |
| Simple | [Simple Applications] |
| Medium | [Medium Applications] |
| Complex | [Complex Applications] |
| **Total** | **[Applications to be Refactored]** |

**Azure Transformation Services (ATS)**

Begin the re-architect or rebuild process for legacy applications to Azure PaaS. This service does not guarantee a final re-architected or rebuilt application in Azure. It is meant to provide a starting capacity to begin the re-architect or rebuild development work, which the Customer can extend using the change management process described in the EDA.

| Activity | Application count |
| --- | --- |
| Re-architect | *[Rearchitect applications]* |
| Rebuild | *[Rebuild applications]* |

**Container Migration Services (CMS)**

* **Application containerization:** Create container images and migrate on-premises applications in virtual machines to containers in Azure.
* **Container to container migration:** Migrate on-premises/unmanaged Kubernetes applications, Google Kubernetes Engine applications, or Amazon’s Elastic Kubernetes Service applications to AKS.

| Complexity | Application count |
| --- | --- |
| Application containerization | *[Application Containerization]* |
| Container to container migration | *[Container to Container Migration]* |
| **Total** | ***[Sum above]*** |

**Data Migration and Modernization Services (DMS)**

* **Data migration services**: Migrate databases to Azure IaaS virtual machines or rehost databases to the same platform as Azure PaaS targets.

| Database | IaaS | PaaS |
| --- | --- | --- |
| SQL Server | Yes | Azure SQL Database  Azure SQL Managed Instance |
| **Non-SQL Server databases** | | |
| Oracle | Yes | Not applicable (N/A) |
| PostgreSQL | Yes | Azure Database for PostgreSQL |
| MySQL | Yes | Azure Database for MySQL |
| MariaDB | Yes | Azure Database for MariaDB |
| Sybase | Yes | N/A |
| DB/2 | Yes | N/A |
| NoSQL | No | Azure Cosmos DB—The application must be compatible with an available Azure Cosmos DB NoSQL API. |

|  |  |
| --- | --- |
| Activity | Database count |
| AMS SQL Server migrations | *[AMS SQL count]* |
| CMS SQL Server migrations | *[CMS SQL count]* |
| Total SQL Server migrations\* | ***[Sum SQL Server Databases]*** |
| AMS non-SQL Server migrations | *[AMS Non-SQL count]* |
| ARS non-SQL Server migrations | *[ARS Non-SQL count]* |
| CMS non-SQL Server migrations | *[CMS Non-SQL count]* |
| **Total non-SQL Server migrations** | ***[Sum Non-SQL Server Databases]*** |

**\***ARS migrates SQL Server databases as part of its core service.

* **Data modernization services**: Refactor Oracle databases to Azure SQL Managed Instance or Azure Database for PostgreSQL along with data migration. Databases are categorized into three in-scope complexity buckets consisting of Simple, Medium, and Complex as defined in the following table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Non-programmable objects** | | | **Programmable objects** | | |
|  | Tables/ views | Partitions | Custom data and collection types | Objects (Proc / trigger/UDF) | Collections | Packages |
| **Simple** | <500 | No | 10 | <100 | <10 | <10 |
| **Medium** | 501-1000 | Yes | 20 | 101-300 | 11-30 | 11-50 |
| **Complex** | 1001-2000 | Yes | 40 | 301-500 | 31-50 | 51-100 |

The DMS scope is listed in the following table.

| Activity | Oracle database count |
| --- | --- |
| Simple | *[Simple Databases]* |
| Medium | *[Medium Databases]* |
| Complex | *[Complex Databases]* |
| **Total** | ***[Number of Oracle Databases]*** |

**Quality and Reliability Services (QRS)**

Provide resources and support to deliver quality, testing, and system reliability validation and health monitoring services in support of the migration and modernization activities for migrated applications.

The QRS service has been sized as follows.

| Activity | Estimated scope |
| --- | --- |
| Migration validation | [Number of rehosted applications requiring Migration Validation + Number of refactored applications requiring Migration Validation from OSE] applications |
| Only one performance option can be used. Choose based on the Performance Validation setting in OSE.  Performance advisory services | [Number of Key Applications requiring Performance Validation if set to Advisory Services Only] applications |
| Performance validation | [Number of Key Applications requiring Performance Validation if set to Full Testing] applications |
| Enhanced application support | [Number of Key Applications requiring EAS Advisory Services from OSE] applications |

**Modernization Support Services (MSS)**

The goal of MSS is to provide architecture reviews, create IaC deployment resources, and facilitate IaaS management services in support of both Microsoft and Customer-led migrations.

**Post-Migration Support**

All migration scope includes post-migration support by the migration factory for 10 business days. Post-migration support starts at MAT handoff and is signaled by submission of the MAT acceptance form to the Customer. Post-migration support covers the following MAT, cutover, and post-cutover scenarios.

* **During MAT**: Help the Customer resolve migration-related issues.
* **Following MAT acceptance of production environments:**
* Provide guidance to the Customer during post-MAT cutover, if required.
* Provide guidance to the Customer that addresses migration-related problems reported to Microsoft after MAT acceptance.
* **Following MAT acceptance of nonproduction environments**: Support the Customer in order to resolve migration-related problems reported to Microsoft after MAT acceptance.
* **Following post-migration support:**  The Customer will be solely responsible for resolving any problems not reported during post-migration support. The Customer can choose to fund extended post-migration support for applications which meet specific criteria from a dedicated Microsoft team using “flexible hours allocation.”
* **Hypercare support for server migration**: Provide 30 days of virtual machine monitoring support after post-migration support ends.
* **Flexible hours allocation**: As opportunities are identified to further drive Azure consumption toward Customer targets, Microsoft and the Customer will jointly review and approve hours from the flexible hours allocation pool of hours. These flexible hours can be applied to tasks that will drive workloads to Azure. [Flexible Factory Hours] flexible hours have been added to the program.

### Product definitions

The program will deliver the products defined below based on the prioritized backlog:

* ALZ is a product and the Customer’s OKRs will be defined during product baseline planning.
* WLZ-AKS is a product and the Customer’s OKRs will be defined during product baseline planning.
* AMS and all servers and applications that move through it are a product and follow a shared set of OKRs with specific application OKRs handled only on an exception basis. OKRs will be defined during the Prepare phase.
* ARS and all applications that move through it are a product and follow a shared set of OKRs with specific application OKRs handled only on an exception basis. OKRs will be defined during the Prepare phase.
* ATS treats each application as a separate product with distinct OKRs defined during each application’s individual product baseline planning.
* CMS and all applications that move through it follow a shared set of OKRs with specific application OKRs handled only on an exception basis. OKRs will be defined during the Prepare phase.
* DMS and all databases that move through it are a product and follow a shared set of OKRs with specific database OKRs handled only on an exception basis. OKRs will be defined during the Prepare phase. Dependencies with applications moving through AMS, ARS, and CMS may exist.

### Velocity and application pipeline planning

**Velocity planning**

During the Prepare phase, Microsoft and the Customer will build a view of the aggregate number of applications and databases planned to be migrated or modernized over each sprint remaining in the engagement. The view represents the baseline velocity plan for the rates of migration and modernization of the applications and databases; it does not identify specific applications or databases—only an aggregate count. Microsoft and the Customer will use this information to review and adjust capacity and duration as needed. During the Pilot and Migrate phases, the velocity plan will be updated and reviewed with the prioritized backlog, initially after every application and database move, and as the engagement progresses, monthly to adjust resourcing or duration as needed. If the resourcing or duration adjustment requires a formal change request, the engagement’s change management process as described in the EDA will be followed.

**Application pipeline planning**

Microsoft and the Customer will conduct application pipeline planning during mutually agreed-upon time frames, to develop the pipeline for the program. The program is broken into a multiple series of migration sprints called migration waves. The number of migration waves will be mutually agreed to during the Prepare phase.

The Customer will be responsible for the identification of the pipeline of applications. Starting in the Pilot phase, the Customer agrees to maintain a monthly minimum threshold of <Intake Velocity in OSE> applications and their associated databases for the intake assessment backlog. This threshold will be reviewed on a weekly basis. The Customer will also provide to Microsoft, the prioritization of the applications included in the pipeline. The pipeline will provide key preliminary information about the applicable applications, such as contacts for Customer application owners and any known interfacing applications.

For the applications included in the pipeline, Microsoft will then start the creation of the migration plan, which will include understanding application affinity or which applications must migrate together and defining those bundles. Microsoft will engage Customer business owners to align the migration plan in accordance with business owner inputs regarding application complexity and criticality, business disruption impact, business owner/application owner availability, and legal/regulatory impacts. Microsoft’s migration process will include defining migration bundles (move groups), sequencing the bundles, and aligning bundles according to the planned migration wave schedule.

Once the pipeline planning is complete and approved by the Customer, it will be incorporated into the migration wave plan.

### Program size and timeline

If you need to include a staffing plan (text in blue), please refer to guidance in the Deal Shaping & Pricing Guide for suggestions on how to create the plan.

The maximum resource capacity and months available by phase are shown in the following table. Feature teams will be staffed within these limits. For details, please review the staffing plan that is referenced in the *Attachments* section.

Update the tables below with information from OSE / CompassOne.

| Engagement phase | Duration (months) | Resources |
| --- | --- | --- |
| Prepare | 3 | Up to 35 resources |
| Pilot | 2 | Up to 43 resources |
| Migrate | 20 | Up to 56 resources |
| Hypercare support end month | 1 |  |
| **Total** | 26 |  |

The maximum defined capacity of <total hours from OSE> hours can be flexibly handled based on the prioritized backlog across the individual services and can also be moved between phases, provided that the maximum defined capacity is not exceeded.

Along with the resources noted above, the feature teams also use factory capacity to handle planning and migration activities. The total application and database factory fees are located in the *Fees* section of this WO.

The timeline for this engagement is relative to the engagement start date. The start date for the engagement will be based on a mutually agreed-upon timeline when key project startup prerequisites are completed. All dates and durations provided are estimates only. The specific timeline will be finalized during product baseline planning and will be updated as part of core engagement planning activities.

We will provide the Microsoft team described in the EDA, *Engagement organization* section, for a period not to exceed <total months from OSE> or until the capacity defined above is consumed.

The high-level timeline of the engagement is depicted in the following image.

igh-Level Engagement Timeline

The image shows five horizontal lanes or rows that depict the relative start dates of each phase.
The first row is engagement initiation which starts when the engagement starts.
The second row is product baseline planning which starts after engagement initiation and completes before the next phase starts.
The third row is the prepare phase of delivery sprints.  The row depicts 1 or more sprints each in succession.
The fourth row is the Pilot Phase of delivery sprints.  The pilot phase begins when the prepare phase ends and has one or more sprints each in succession.
The last row is the migrate phase of delivery sprints.  They migrate phase starts at the conclusion of the pilot phase and contains one or more sprints each in succession.
Upon the completion of the migrate phase, the engagement ends.

Note: Sprint implementation may be concurrent across these workstreams and will be addressed in the engagement communications plan for clarity.

### Program completion

Microsoft will provide the services described previously during the period of performance defined in this Work Order (WO). If additional services are required, the engagement’s change management process described in the EDA will be followed, and the contract will be modified. The engagement will be considered complete when at least one of the following conditions have been met:

* The available capacity has been consumed.
* All Microsoft activities and product backlog items have been completed.
* The WO has been terminated.

Due to the nature of the Microsoft Agile Capacity Model, the final backlog items produced at the conclusion of the engagement may or may not include the completion of all items in the product backlog identified by the product manager. The Microsoft team will rely on the Customer product manager to determine priority in the product backlog so that the important backlog items specified by the Customer can be completed during the engagement.

### Technology and environment requirements

**Technology requirements**

The products and technology that are listed in the following table are required for the engagement. The Customer is responsible for obtaining all specified licenses, products, or subscriptions unless otherwise specified.

| Product and technology item | Description | Ready by |
| --- | --- | --- |
| Microsoft Azure subscription | Target for the migration | Start of engagement |
| Microsoft Azure DevOps Services | An online Azure DevOps solution unique to the Customer that will be used to manage the Azure migration program. | Start of engagement |
| Microsoft Power BI Workspace | A reporting solution with integration to the Azure DevOps solution—used to manage the Azure migration program. | Start of engagement |
| Azure Cloud Catalog | A hosted web service and database in the Customer subscription configured as a dedicated migration catalog. | Microsoft supplied, deployed during the Prepare phase |
| Azure Migration Toolkit | A Microsoft tool used to automate the installation of key discovery and assessment tools and perform an inventory of Linux server environments. | Microsoft supplied, deployed during the Prepare phase |
| Microsoft Data Transfer and Management tool | A required Microsoft-hosted secure file transfer service that is used when transferring large files to Microsoft. | Microsoft supplied, deployed during the Prepare phase |
| Cloudockit | An online service that generates the documentation for Azure subscriptions. If required, this tool can be run from an on-premises server that has network access to the Azure subscription management endpoints. | Microsoft supplied, deployed during the Prepare phase |
| SQL Data Migration Assistant (DMA) | A no-cost tool used to collect SQL Server planning data. | Microsoft supplied, deployed during the Prepare phase |
| GitHub Enterprise | A DevOps solution used for work backlog management, code repositories, and to create build and release pipelines. | Start of engagement |
| Active Directory Domain Services | Functional levels: 2008 - 2019 | Start of engagement |
| Azure Active Directory | Premium/P2 | Start of engagement |
| Include the following rows if the Privileged Access Workstation for Cloud Services Management workstream is in scope. Note we require either EMS E5 and ATP, OR M365 E5 | | |
| Microsoft Enterprise Mobility and Security (EMS) | E5 | Start of engagement |
| Microsoft Defender ATP |  | Start of engagement |
| Microsoft 365 | E5 | Start of engagement |
| Include the following rows if Clean Source Deployment is in scope as part of PAW-CSM | | |
| Windows Server | 2019 | Start of engagement |
| Windows 10 | Enterprise x64  Education x64 | Start of engagement |
| Include the following rows if the Azure Migration Services are in scope (AMS) | | |
| Azure Migrate | A Microsoft tool used for assessment and migration. | Start of engagement |
| Service Map | A service in Azure that automatically discovers application components on Windows and Linux systems and maps the communication between services; includes the Operations Management Suite Agent, and the Microsoft Dependency Agent. | Start of engagement |
| Azure Site Recovery | A migration and disaster recovery tool for Azure. The source server operating system version must be supported by Azure Site Recovery as documented at <https://azure.microsoft.com/en-us/documentation/articles/site-recovery-vmware-to-azure-classic/#before-you-start-deployment>. | Start of Pilot phase |
| Microsoft Assessment and Planning (MAP) Toolkit | A no-cost, agentless utility from Microsoft that is used to perform an inventory of Windows Server environments. | Microsoft supplied, deployed during the Prepare phase |
| RiverMeadow | A migration tool for Azure IaaS and AVS. It supports automated operating system upgrades and post-migration script implementation. It is used as an alternative to native Microsoft tools, based upon migration factory recommendations. | Microsoft supplied, deployed at the start of the Pilot phase |
| Web Deploy | A no-cost tool used for Microsoft Internet Information Services web applications during the Planning and Migration phases. | Microsoft supplied, deployed at the start of the Pilot phase |
| Windows Server 2012R2 or 2016 Virtual Machine | The operating system required for discovery and assessment tools. | Start of engagement |
| Include the following rows if the AVS Migration using VMware HCX is in scope for AMS | | |
| VMware HCX Enterprise | VMware HCX is an application mobility platform that is designed to simplify application migration, workload rebalancing, and business continuity across data centers and clouds. | Deployed during the Prepare phase |
| Include the following rows if the Azure Refactoring Service is in scope (ARS). There is no funding for licenses in FY23 so either the local subsidiary picks up the licensing costs or the customer will have to. Choose one. | | |
| CAST Highlight | A third-party tool that can be used to analyze the application source code and identity components to be refactored. | Microsoft | Customer supplied, deployed at the start of the Pilot phase |
| Include the following rows if the Azure Monitoring is in scope (COG) | | |
| Azure Monitor | Azure native monitoring capability available within the Azure subscriptions. | Start of Pilot phase |
| Include the following rows if the Data Migration service is in scope (DMS). There is no funding for licenses in FY23 so either the local subsidiary picks up the licensing costs or the customer will have to. Choose one. | | |
| Newt Global DMAP | DMAP is a no-cost tool used to assess and migrate Oracle to PostgreSQL.  Due to the nature of the licensing agreement for use of the DMAP tool during Oracle migrations, only Microsoft resources can use the tool to do the assessments and migrations. | Microsoft | Customer supplied, deployed at the start of the Pilot phase and used by Microsoft resources only |

**Environment requirements**

Add or remove the items from the table as needed for your engagement. The list of environments may differ by legal requirements and geography. If an environment is not required and is a customer’s responsibility, remove it from this table. Refer to the [SOW writing guide](https://vldoctool.cloudapp.net/landing/services#/?name=SOW+Writing+Guide&area=&country=&language=&category=&type=&page=1&count=50) for additional examples.

All environments used for the development and delivery lifecycle will be supplied and maintained by the Customer. The Customer will provide the required Azure subscriptions and provide Microsoft with administrative control to build the development and test environments.

Make sure you pick one responsible party for configuration and maintenance and one party has subscription ownership.

| Environment | Location | Responsible for configuration and maintenance | Subscription ownership | Ready by |
| --- | --- | --- | --- | --- |
| Automation environment | Azure DevOps, GitHub | Microsoft or Customer | Customer | Start of engagement |
| Development | Specify Azure regions | Customer | Customer | Start of engagement |
| Test  For ARS, ATS, DMS | Specify Azure regions | Customer | Customer | Start of engagement |
| MAT | Specify Azure regions | Customer | Customer | Start of engagement |
| Preproduction  For ARS, ATS | Specify Azure regions | Customer | Customer | Start of engagement |
| Production | Specify Azure regions | Customer | Customer | Start of engagement |
| Clean deployment lab  For AMS Clean Deployment | Specify Azure region | Microsoft or Customer | Microsoft or Customer | Start of engagement |
| Backup, disaster recovery | Specify Azure regions | Customer | Customer | Start of engagement |
| Include the following rows if Clean Source Deployment is in scope as part of PAW-CSM. Also include the customer responsibility sections related to Secure Room in the Customer Responsibilities section below. | | | | |
| Secure room | Customer facility | Customer | Customer | Start of engagement |
| [Add additional required environment] |  |  |  |  |

### Customer dependencies

In addition to Customer responsibilities outlined in the EDA, the Customer is responsible for the items noted in the following table..

| Responsibility or dependency | Ready by |
| --- | --- |
| **Application intake**  On an ongoing basis, the Customer will include sufficient applications in the pipeline, such that the number of applications planned to be included in each migration wave can be achieved. Applications shall be included in the pipeline at least 60 days prior to the applicable migration wave month and shall include a buffer so that applications eliminated in the migration process do not cause Microsoft to have an insufficient application count to meet its monthly migration target. | Ongoing during the Pilot and Migrate phases |
| **Migration wave planning**  On an ongoing basis, the Customer will collaborate with Microsoft on the migration wave planning and scheduling, taking into account holidays, vacations, and other potential velocity obstacles. | Ongoing during all phases |
| Include only if Intake & Assessment scale teams configured to be supplied by the customer in OSE.  Intake and assessment  The Customer will staff <number of Scale teams from OSE> migration velocity scale teams in support of migration. Each team will consist of a migration coordinator and two migration subject matter experts (SMEs) to perform intake/application disposition and assessment under the governance of the Microsoft team. See Section 1.2.8, *Program organization addendum*, for more details. | Migrate phase start |
| *Include section below if LOW effort for Cloud Operations and Governance was identified in OSE. Choose the language that addresses the need of customer commitment.*  COG  The Customer needs only limited effort to achieve full operational readiness because either (a) the Customer is already managing Azure workloads without issue, and operations and governance are generally aligned to the Microsoft Cloud Adoption Framework and using at least some Azure native (or other cloud native) operational tooling effectively; (b) the Customer has outsourced these functions and needs only awareness and guidance so they can hold their supporting vendors accountable for using recommended practices; or (c) the migration is Azure VMware services-based, which limits the breadth of changes needed to be operationally ready. Microsoft will identify areas of risk and the Customer assumes the responsibility for remediating the risks during the Pilot and Migration phases. | Ongoing during the Pilot and Migrate phases |
| *Include section below if customer complexity is simple in OSE and People Mobilization for Velocity Services (PMVS).*  The Customer has identified a team who will manage all organizational change management needs for the migration of applications to Azure. This identified Customer team will perform the duties to mobilize key stakeholders and will report to the Microsoft program team to engage with the relevant business and IT stakeholders to help make sure that the pipeline is prepared with applications ready to migrate to Azure. Microsoft will identify areas of risk and the Customer assumes the responsibility for remediating risks during the migration phase. | Prepare, Pilot, Migrate Phase |
| **MAT**  The Customer will perform functional, security, and performance testing based on the migration or modernization strategy and requirements defined in the Customer-provided test specification.  **AMS rapid application migration**  MAT and cutover are a single event and will occur prior to authorizing non-MAT users to access the servers.  **AMS application migration**  MAT and cutover are a single event and will occur prior to authorizing non-MAT users to access the application. The Customer can perform “pre-MAT” in an isolated environment if desired, prior to MAT and cutover.  **AMS clean deployment**  MAT will occur prior to the final cutover and prior to granting non-MAT users access to the application.  **ARS**  For each application, the Customer will conduct a MAT test plan to verify the application operational state post refactoring to Azure.  **ATS**  For each application, the Customer will conduct a MAT test plan to verify the application operational state post re-architecting or rebuilding to Azure.  Feedback from MAT (defect or additional user stories) and other backlog items will be prioritized in the product backlog.  **DMS**   * For each database, the Customer will conduct a MAT test plan to verify the database operational state post migration. * The Customer is responsible for providing access to production systems for the purposes of database backups and configuration of synchronization tools or the Customer must perform these activities directly. * Feedback from MAT (defect or additional user stories) and other backlog items will be prioritized in the product backlog. | Ongoing. MAT schedules determined during product baseline planning |
| **People mobilization for velocity service**  The Customer is responsible for any change management activities that target the users of migrated or modernized applications and databases. | N/A |
| **Organizational change management**   * Redesigning or re-engineering business processes. * Designing—or redesigning—the functional organization. * Branding—creating custom brand elements or branded materials. * Planning or undertaking user communications. | N/A |
| **Other general responsibilities**   * Monitor network activity. * Provide application support. * Fix bugs and troubleshoot problems related to applications or other third-party software, hardware products, or applications that are not explicitly mentioned as being in scope. * Prepare documentation about processes, standards, policies, or existing guidelines. * Design, configure, integrate, deploy, or fix issues in commercially available third-party software. * Take responsibility for modifications to third-party systems and external interfaces to support integration. * Plan, design, customize, enhance, troubleshoot, and resolve problems that are related to, but not limited to, supporting the on-premises infrastructure listed here:   + Firewalls   + Storage area networks   + Routing and switching devices. * Coordinate across IT and Customer business units to prioritize the Azure migration program. * Identify and assign project resources. * Identify and prioritize the applications for migration. * Maintain an adequate backlog of qualified applications to sustain migration velocity for improved utilization of the available capacity. | Ongoing |

### Program organization addendum

Generally, this section will not be used. However, this section can be used if there are unique roles which are not already covered in the EDA which must be defined in the contract. Delete this section if not used.

The following is a list of roles specific to the engagement, in addition to those described in the EDA.

| Role | Responsibilities | Responsible party |
| --- | --- | --- |
| Include the following two roles only if AMS scale teams configured to be supplied by the customer in OSE. | | |
| Migration coordinator | * Function as a Customer advocate with Customer application support teams. * Maintain a velocity plan for assessments, planning, and migrations. * Build a migration wave plan and maintain a migration calendar. * Verify ownership of servers and applications that reside on those servers; follow up for data quality issues. * Work with application teams and migration consultants to classify servers into an assessment disposition. * Organize and facilitate assessment and planning meetings; update the migration catalog with notes; make sure that follow-up activities are tracked and escalated on a timely basis. * Verify data quality and Power BI reports. * Distribute, track, and collect deliverable acceptance forms. | Customer |
| Intake and assessment SME | * Assist with the deployment and configuration of program tools. * Coordinate MAT. * Coordinate migration factory activities. * Deliver factory progress reporting and metrics. * Work with business and technical owners to group migration catalog components (such as servers, applications, and databases) into application collections. * Collect data through Customer interviews. * Drive test specification validation with application support teams. | Customer |