

Move All the Workloads to the Cloud Environment

Cloud Migration Services






Softline Cloud Migration Service at a phase following the assessment at which we physically transfer workloads, applications and data to the cloud environment, test them and discontinue running on-premises systems. Knowing the goals of migration, and having collected all the requirements and restrictions, we select the migration scenario that suits best. The choice of scenario is normally addressed separately for each application or infrastructure component.

Migration Scenarios

Rehost	This scenario known as 'lift and shift' we move your workloads to the cloud as they are. Quickly shifting your on-premises environment to IaaS, you reap the benefits of the cloud, without the risk and cost associated with code changes.	Use this approach when you need: <ul style="list-style-type: none"> • To move apps quickly to the cloud • To avoid code modification • To take advantage of Azure and architecture allows that • To continue running business critical apps without immediate changes to their capabilities
Refactor	You continue using your apps with minor changes allowing connecting them to cloud services like Azure SQL Database Managed Instance, App Service, Kubernetes Service and containers. Or, you could refactor databases into options such as Azure SQL Database Managed Instance, Azure Database for MySQL, Azure Database for PostgreSQL, and Azure Cosmos DB.	Refactor your apps if: <ul style="list-style-type: none"> • They can easily be repackaged to work in Azure • You want to apply DevOps practices provided by Azure • You have available development skills to think about the portability of your existing code • Modernized services can reduce both cost and management of application servers, database or middleware
Rearchitect	This approach involves modifying existing application's code to transform it to a modular architecture and extensive cloud services usage. Although time-consuming, this scenario takes the most advantage of the Azure cloud. A good example of rearchitecting is migration from a Microsoft SQL Server database to a fully managed Azure SQL Database.	Follow this strategy if: <ul style="list-style-type: none"> • Your apps need major revisions to incorporate new capabilities, or to work effectively on a cloud platform • When you want to use existing application investments, meet scalability requirements, apply innovative Azure DevOps practices, and minimize use of virtual machines
Rebuild	Rebuild takes things a step further by rebuilding an app from scratch using Azure cloud technologies. For example, you could build greenfield apps with cloud-native technologies like Azure Functions, Azure AI, Azure SQL Database Managed Instance, and Azure Cosmos DB.	Rebuild your infrastructure when you: <ul style="list-style-type: none"> • Want rapid development but existing apps have limited functionality and lifespan • Are ready to expedite business innovation (including DevOps practices), build new applications with cloud-native technologies
Replace	This strategy involves replacing an existing application with commercial software delivered as a service. You use a new software solution from a cloud service provider on a pay-as-you-go basis.	Use this approach to have all underlying infrastructure, app, and data managed by a service provider ensuring the availability and security of the app and the data.

Typical Cloud Migration Roadmap

 Authentication	 Storage	 Networks
Like in the local environment, you will need user authentication and access rights management. In most cases, we implement it based on Azure Active Directory, which will simply extend the local identity management to the cloud. In the case of a hybrid infrastructure, you can use a single sign-on for the convenience of the user.	In the cloud, NAS or SAN is replaced by a native cloud storage that will meet the performance requirements of migrated workloads. You can choose from many types of storage: managed disks, file storage, object storage, archive storage, big data storage and much more. We will configure the storage for each workload: performance and access levels, backup, geographic replication, and disaster recovery.	Moving to the cloud, you get independence from the physical topology of the network, which simplifies network connectivity. By moving applications from your on-premises environment to the cloud, you can easily maintain the same topology and even the same ranges of IP addresses. Alternatively, you can build a more convenient configuration.

Real-time Replication and Testing

By creating a copy of the workload in the cloud using a dependency map, we can replicate and start virtual machines in the right order. For example, in a web application, the data source must be available before the application starts.

Many applications support replication automatically, such as Microsoft SharePoint, Dynamics, SQL Server, and Active Directory, and applications from other vendors (including Oracle, SAP, IBM, and Red Hat) independently ensure source data consistency.

After creating replicas of the required hosts, as well as configuring storage and network connections, you can begin testing. We use migration tools to run a set of virtual machines in an isolated environment, which allows us to simulate a production environment in the cloud.

When all of your systems are functioning properly, it's time to make the final transition: finally start the system in the cloud and discontinue on-premises applications.

About Softline International

Global Digital Transformation & Cybersecurity Solutions Provider. We are a global IT services provider that helps businesses and governments to carry out digital transformation. We convert digital technologies into profit of our customers and well-being of the citizens.