

# cloud migration to-do list

There's typically a lot riding on migration initiatives. Expectations are high. The need to see immediate, positive results is as well. Proper planning is critical to avoid missteps and the inevitable "why-didn't-we-think-of-this" issues.

While each migration project is unique, the following checklist will provide a good starting point for planning your migration project.

## 1. Set goals, objectives, and success factors.

If you've already made a business case for the migration, this information is already available. If not, it will help build your business case.

## 2. Determine if you'll go solo or with an expert.

If you've done a migration, check back on "lessons learned" from the previous one and get your plan and resources in place. If you're a first-timer and/or are short on resources or are facing a complex move, enlist a cloud services providers (CSP) or a third-party consultant.

## 3. Inventory and audit your applications / workloads.

Assess their criticality to the organization and their performance levels/needs. Determine any security, compliance, architecture or other requirements. Note end-of-life/end-of-service status. Map dependencies.

## 4. Identify which applications / workloads can and should move.

Pick the migration strategy. The six most common migration strategies, also known as the 6 R's, are:



**Rehost** - Lifting from on-premise and shifting to the cloud without re-architecting.



**Replatform** - Taking advantage of some cloud optimizations without fully re-architecting.



**Repurchase** - Purchasing a SaaS application to replace the on-premise application.



**Refactor** - Re-architecting an application to improve performance, agility, and business continuity.



**Retire** - Removing applications that have a low business value or a business criticality.



**Retain** - Keeping applications on-premise with no change.

## 5. Determine the appropriate cloud model(s): public, private, or hybrid.

Ensure the new environment(s) will have adequate bandwidth for optimal application performance.

### IaaS

CSP provides servers, network, and data storage. You maintain OS, applications, and data security.

### PaaS

Includes infrastructure plus services like a platform to run your apps, middleware, and database management system.

### SaaS

Application that is accessible over the internet. Popular for remote work.

### Serverless

CSP is responsible for scaling application. Pay for server capacity on-demand.

## **6. Architect and test the new environment(s).**

A cloud architect will need to design the cloud environment(s). The design typically assembles virtualized compute, storage, and networking instances, along with services such as databases, logging/monitoring tools, security, and event-driven computing.

## **7. Define the migration project scope and develop your complete migration plan.**

Outline responsibilities. Specify the order in which workloads will migrate. Create a schedule for each step of the migration process and include checkpoints. Establish contingency plans. Include plans for data backup and security, as well as testing.

## **8. Start the migration plan.**

Quiesce and back up the local deployment. Migrate the application, services and related databases to the new cloud environment and synchronize data.

## **9. Test and validate the completed migration.**

You don't need to test every possible feature and function, but you should run a solid cross section of tests to ensure your application performs as expected. Among them: functional validation, performance and integration. Test on cellular networks and Wi-Fi networks, as different data speeds impact an application's behavior.

## 10. Cutover and next steps.

Open the migrated workload to some (or all) users. Implement workload monitoring, support/troubleshooting, adjustments, refinements, and other general upkeep. Before moving ahead with more workload migrations, review how the initial process went. What worked well? What could have worked better?

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