AUTODESK

aws

Autodesk is a leader in 3D design, engineering, and entertainment software. If you've ever driven a car, admired a towering skyscraper, used a smartphone, or watched a great film, chances are you've experienced what millions of Autodesk customers are doing with its software.

Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully-featured services from data centers globally. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—are using AWS to lower costs, become more agile, and innovate faster.

Becoming a Center of Excellence

As part of an objective to create a more efficient, resilient, and automated enterprise, Autodesk's IT organization collaborated with AWS to transform from a data center/cloud hybrid model to a cloud-first model. This mass migration and modernization effort would enable it to drive efficiencies, reskill its people, and be more innovative in the services and tools it delivers to the company.

With the freedom to save time and resources from undifferentiated work, like managing data centers, Autodesk IT is able to focus on exciting new projects that create frictionless, self-service experiences for employees.

When Autodesk first met with AWS Professional Services, it defined **two** major objectives:

1. Increase efficiency and reduce cost through large-scale migration and modernization.
2. Train and certify Autodesk IT employees so they can take advantage of all cloud has to offer.

4 months ahead of schedule

400+ enterprise apps migrated or retired

90% of cloud-trained staff members participated in cloud transformation

Measuring success

Enterprise cloud transformation metrics

239 application environments migrated to AWS

209 application environments retired, improving security profile by reducing attack surface

115 AWS certifications across the team

80% improvement in disaster recover time

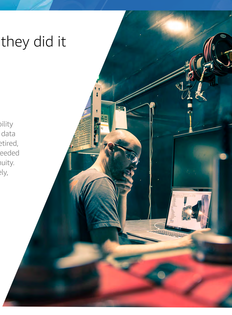
97% cost efficiency achieved for migrated applications

58% reduction in footprint (virtual machines, racks, and physical machines retired from data centers)

86% reduction in incidents for the applications migrated to cloud

> "We had this vision of being more efficient, resilient, and automated and that included moving most of our enterprise applications to the cloud. And it was a rocket launch; in just two months we were able to train staff and start the migration."
>
> **Prakash Kota**
> Chief Information Officer
> Autodesk

How they did it



Technology

Autodesk IT's cloud-first initiative aims to improve application performance and reliability by migrating workloads residing in physical data centers to AWS. Some apps needed to be retired, some apps needed to be migrated, and it needed to be done while protecting business continuity. To migrate technology quickly and effectively, Autodesk IT utilized the AWS Migration Acceleration Program (MAP).

What is MAP?

AWS Migration Acceleration Program (MAP) is a comprehensive program that packages best practices, tools, expertise, and a partner ecosystem to make cloud adoption easier.

People

To become a Center of Excellence, it's not just the technology, but the people who make it happen. Autodesk IT wanted to bring its team members along in the migration process and transform them into cloud experts. Employees participated in upskilling programs that helped prepare them to support a successful cloud transformation.

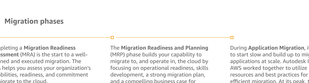
Listen to Prakash Kota, Autodesk CIO, discuss **The Importance of Training and Certification**.

Process

Global migration teams

Migration teams were spread across the globe and delivered against a set of specific goals and targets.

To complete all the tasks needed for migration, Autodesk IT formed a few separate teams of roughly 6–8 people. These teams worked independently to manage their assigned application migrations, and worked directly with application owners to establish migration schedules, execute the work, and coordinate go-lives.



Migration phases

Completing a **Migration Readiness Assessment** (MRA) is the start to a well-planned and executed migration. The MRA helps you assess your organization's capabilities, readiness, and commitment to migrate to the cloud.

The **Migration Readiness and Planning** (MRP) phase builds your capability to migrate to, and operate in, the cloud by focusing on operational readiness, skills development, a strong migration plan, and a compelling business case for the migration.

During **Application Migration**, it's best to start slow and build up to migrating applications at scale. Autodesk IT and AWS worked together to utilize resources and best practices for an efficient migration. At its peak, the Autodesk team was able to migrate or retire 60 applications in a single quarter.

> As we often say at Autodesk, 'You can't keep taking the same actions and expect different results.' Moving to the cloud alone won't help solve all your issues; you also need to change your practices and your mindset to see a real improvement."
>
> Prakash Kota
> Chief Information Officer
> Autodesk

Autodesk's tips for a successful migration

1. Provide a robust learning path/curriculum for employees to transform roles to cloud infra engineering. Leverage AWS resources to help upskill your teams.
2. Take time to validate the application inventory within your data centers and confirm application owners early. If needed, invest in discovery tools to validate your data center inventory.
3. Communicate early and often: Program benefits, time commitment needed from application owners, clear roles and responsibilities between the migration team and application owners.
4. Work with application owners early on migration roadmaps.
5. Start slow with migrations. Utilize pilot migrations to help the team gain confidence.
6. Partner closely with your security team. Ensure appropriate frameworks and policies are in place early.

In the end, becoming a Center of Excellence provides benefits across the entire company, not just IT.

- Improved business outcomes
- Reduction in costs
- Better end-user relationships
- Stronger security
- Reinforcing a can-do culture of innovation

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AWS Migration Acceleration Program