

## What is the cost of free?

### Free migration tools carry hidden fees and unnecessary complications.

Migrations are ever present in today's IT world. While there is a lot of information about the tools that can be used for migrations and how to migrate, there's little information about the real challenges organizations face when going through a migration project.

Successful migration depends on knowing what these hurdles are and how to prepare for them, what the risk factors are for modern migrations, and what the hidden costs might be. Changing the focus from "How to migrate?" to "What can happen during a migration that might derail my project?" can save significant time and money during a migration.

#### Identifying pitfalls

Determining and anticipating issues is a key factor to successful migration. In many cases, the same issues come up over and over again:

- Low downtime tolerance
- Reducing the time staff has to work irregular hours
- Failing to validate new systems before cutover

These are large and important obstacles, but ones that can be overcome easily with the right planning and the right migration tools.

#### Tool time

Using free vendor tools to consolidate or virtualize an environment is not as straightforward as it seems. Consider the example of a migration project involving a front-end application attached to a back-end database server. Using vendor tools, the migration agent would be deployed through the hypervisor and the job configuration would begin. Starting the process involves getting initial snapshots into the new environment and creating a new replica of the production server.

The first challenge lies in determining when the server can go offline, and when staff needs to be on-hand. An administrator will be necessary to perform the cutover, a database administrator to verify the integrity of the data, an application owner to verify functionality, and test users to ensure consistency between pre- and post-migration UX. Downtime begins when the application comes offline so the migration tool can perform a final snapshot and sync the data.

This time-consuming process has the potential to derail a migration project. With no indication of when the migration will complete, users are on standby waiting for the new system to come online. Once the final sync is finished, it can be several hours before those responsible for verification and testing complete their part in the migration. On a small scale, the cost of downtime for a server is about \$500 an hour. The cost of staff or consultants is around \$100 an hour.



#### Why migrate?

What is driving businesses to make technology changes? This is the starting point of any migration discussion. There can be many reasons why a business would need to consider a migration solution or project, among them:

- Changes to hardware vendors or storage technologies
- Integrating with virtualization technologies
- Hardware refreshes
- Periodic upgrades

Ultimately, it's about improving business capabilities while reducing technology cost.

## Small-scale migration using free tools\*

Action	Time	Cost
Job setup and configuration	2 hours	\$200
Server downtime for data sync	4 hours	\$2,000
Users waiting to perform validation testing (5 users)	4 hours	\$2,000
Users performing validation testing (5 users)	1 hour	\$500
Re-sync data after testing	1 hour	\$100
<b>Total cost</b>		<b>\$4,800</b>

\*This information is an estimate of a hypothetical scenario based on migrating 2 servers using a vendor tool taking a total of 12 hours with 1 IT admin and 5 test users. Actual migration may cost more or less depending on several factors, including bandwidth and rate of change, among others.

These are the hidden costs of “free” migration tools. Suppose there are 10 pairs of the application and database servers, and they have to be migrated separately to prevent wide-scale disruptions to the business. The cost for this could easily be 10 times higher, plus many working weekends for staff.

### A better way

Now consider the same small-scale migration scenario using a non-disruptive migration tool, such as Carbonite® Migrate. Working in a central control console, an administrator installs the solution on the target and production servers. There are no reboots or downtime required for the installation. The migration jobs are configured from the same console, and the sync and real-time data replication begin immediately. If it's a migration to a virtual environment, the replica virtual machine is automatically created. This replica virtual machine can be configured in many ways, including adjusting the size of the volumes, the location of the disks in the virtual environment and alignment of the new disks.

The same group of users would be necessary for validation, but they can test the new environment without affecting production. Carbonite Migrate allows the administrator to perform a test migration and bring the new server online without affecting production. Much of the validation and user acceptance testing can be done on the test cutover without introducing downtime into the process, and it can be done on a large scale to eliminate the need for separate tests across pairs of servers. This eliminates duplicate testing and additional application downtime for the final migration.

Pushing a single button in the Carbonite console is all that's required for cutover. There is no need for any final data sync since the Carbonite replication engine updates the data on the new server in real time. Within minutes the new production servers come online and the migration process is complete. The team can perform final validation and user acceptance testing on the server. There's no waiting and no significant downtime.



## 8 tips for mastering migration

### Factor downtime into your cost analysis

Determine the downtime cost for each application in your ecosystem.

### Use the right tool for the job

Free tools use inferior technology, which opens the door for data loss during the migration process.

### Fully plan out the migration

There may be issues with the new platform that necessitate moving back to the old one. Have a plan for returning to the source without losing new data.

### Chunk workloads

Break projects down into logical units. Then attack those server groups accordingly.

### Perform fully functional tests

Fully functional tests are critical for consistently successful migrations.

### Know when to raise your hand

A service provider with migration expertise can reduce the risk of a failed migration and may help control costs.

## Small-scale migration using Carbonite Migrate

Action	Time	Cost
Job setup and configuration	1 hour	\$100
Server downtime for data sync	0 hours	\$0
Users waiting to perform validation testing (5 users)	0 hours	\$0
Users performing validation testing (5 users)	1 hour	\$500
Software cost (2 migrations)		\$550*
<b>Total cost</b>		<b>\$1,150</b>
<b>Cost savings</b>		<b>\$3,650</b>

\*Software cost based on \$275 list price per source server

### The true cost of free

Compare the free tool versus a non-disruptive solution and you'll see how hidden costs and unnecessary complications can derail a migration project. This is a serious concern, because at the rate of technology innovation today, businesses need agility to adopt new platforms and stay competitive.

### 8 tips for mastering migration (continued)

#### Take the long view

Assume that migrations will need to be performed again. Invest in using and learning tools and methodologies that will be useful for future projects as well as the current one.

#### Make the most of migration

Take the opportunity to review your overall business continuity (BC) plan. Consider high availability (HA) and disaster recovery (DR) strategies holistically, where each plays off the other's strengths, and as part of the larger business continuity strategy.

#### Contact us to learn more – Carbonite US

Phone: 877-542-8637

Email: [carb-data\\_protection\\_sales@opentext.com](mailto:carb-data_protection_sales@opentext.com)

#### About Carbonite and Webroot

Carbonite and Webroot, OpenText companies, harness the cloud and artificial intelligence to provide comprehensive cyber resilience solutions for businesses, individuals, and managed service providers. Cyber resilience means being able to stay up and running, even in the face of cyberattacks and data loss. That's why we've combined forces to provide endpoint protection, network protection, security awareness training, and data backup and disaster recovery solutions, as well as threat intelligence services used by market leading technology providers worldwide. Leveraging the power of machine learning to protect millions of businesses and individuals, we secure the connected world. Carbonite and Webroot operate globally across North America, Europe, Australia, and Asia. Discover cyber resilience at [carbonite.com](https://carbonite.com) and [webroot.com](https://webroot.com).