



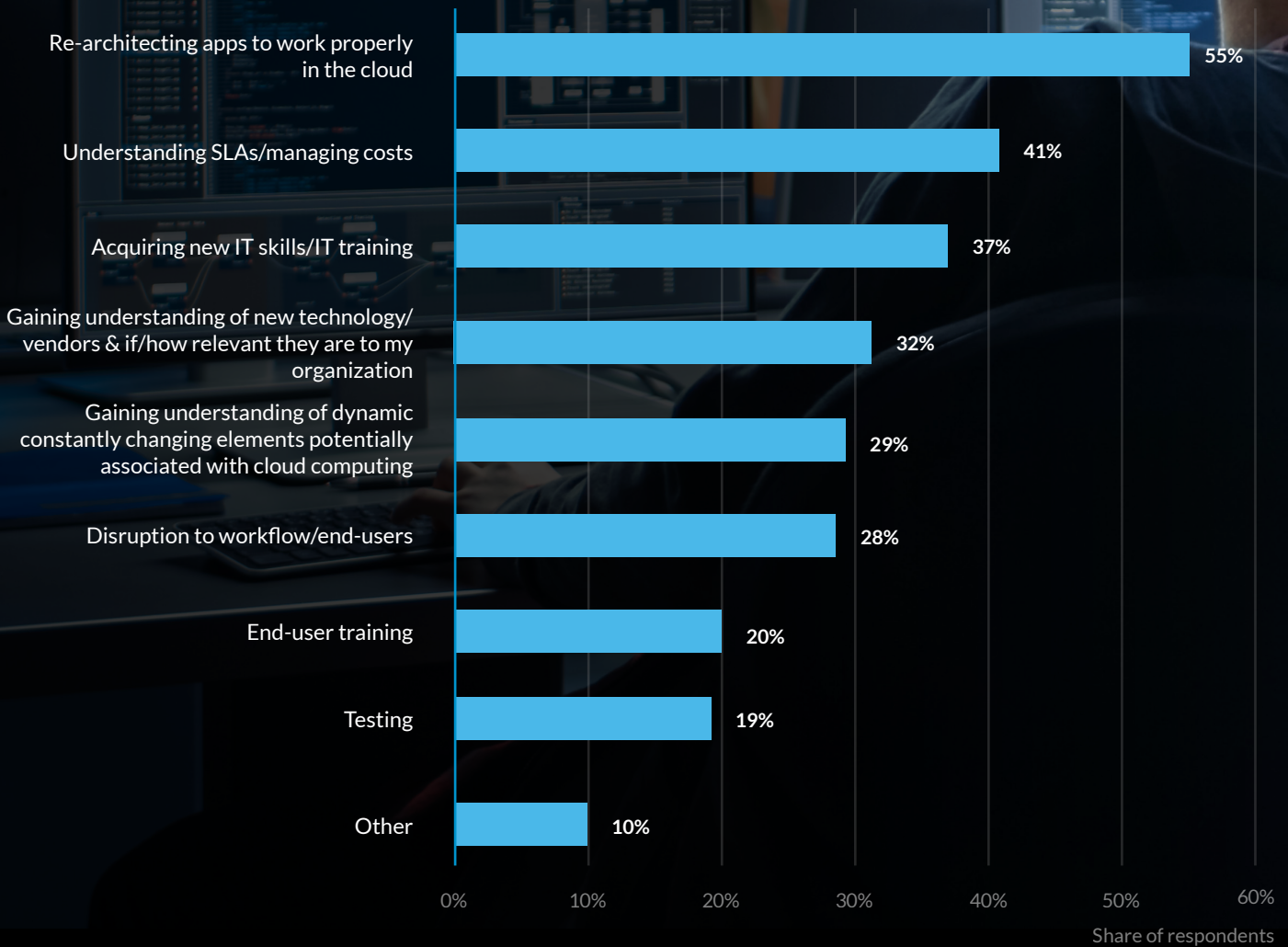
CLOUD MIGRATION

BEST PRACTICES



OVERVIEW

Migrating to the cloud can be complicated, but it doesn't have to be. Businesses reported many concerns when considering a migration to a cloud server.



Cloud servers introduce a wide variety of benefits for various applications that may normally be hosted on a bare metal dedicated server or another hosting solution. These include increased redundancy, scalability, and performance.

With a proper cloud migration and the right tips, you can migrate any application to the cloud with ease.

In this guide, we'll share our cloud migration best practices so your next cloud migration can be a success.

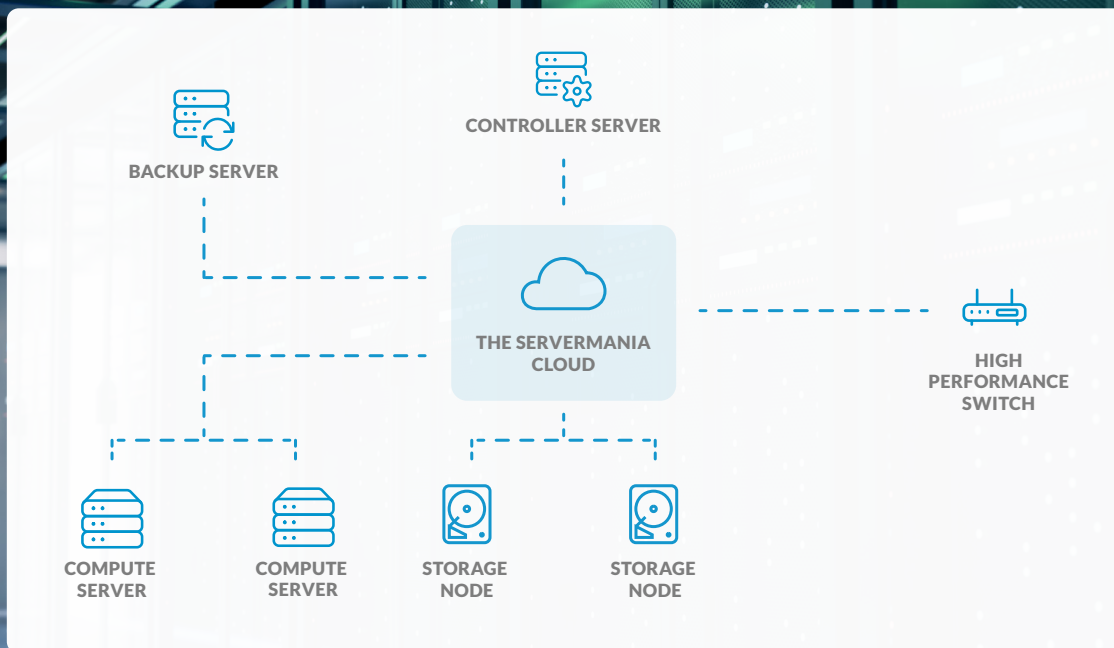
While this answer may seem obvious to some, it's important for us to define what we're talking about when we say cloud servers.

After all, technically anything hosted in a remote data center is "in the cloud" and many providers have rebranded their various server offerings as "cloud bare metal" or "cloud hybrid servers" when they are in fact just traditional hosting solutions.

A cloud server is a cluster of servers stored and accessible in a remote data center which form a server solution which is redundant, scalable, and has high performance.

This is accomplished by connecting together servers which each perform a specific function such as computing, memory, storage, and backups.

Each of these components is pooled together to form an elastic resource which is both redundant and can be upgraded instantly. These servers are also rapidly provisioned and accessible via a web control panel as well as an API interface.



Every cloud migration is unique and presents specific challenges depending on the applications being deployed, how users interface with the server, and how many servers need to be migrated. Nearly every cloud migration will contain the following essential steps:

1	Create an inventory of server assets including: <ul style="list-style-type: none">• Physical servers to be migrated to the cloud• Which applications are running on those servers• Which admin accounts on the servers need to be recreated• Which domains point to the server and need to be updated
2	Review Current Usage <p>Review current system usage (CPU load, Free memory, Disk Usage). Note that CPU usage on a dedicated server may vary between that required on a Cloud Server.</p>
3	Determine Requirements <p>Determine cloud server resources required based on current systems. You can always upgrade your Cloud plan, but it cannot be downgraded, so we recommend choosing the next plan up based on your current usage so you have a small buffer.</p>
4	Purchase Cloud Servers <p>Purchase and configure Cloud Servers based on the existing OS usage / user environment. Update server software, configure admin users, and install the base software applications the server will run. Test each of these applications before migrating the production data.</p>
5	Schedule Time <p>Schedule the Migration With Staff and Users</p>
6	Copy Content <p>At the scheduled migration time, copy databases and files to the new server</p>
7	Verify Data <p>Verify data on new server and update domains to point to new IP (if needed)</p>
8	Monitor and Test <p>Test Cloud Server functionality across all applications</p>
9	Update Domains <p>Once domains have propagated, resync data between old and new server</p>
10	Disable services on the old server and decommission. <p>It's a good idea to complete a full backup of the old server in the event some files were not migrated.</p>

Plan, Plan, and Plan

Failing to plan is planning to fail, and when you try to move server resources haphazardly and without a concrete plan of when, what, and how to migrate to your new Cloud Server, you're asking for trouble.



As much as you possibly can, document everything that needs to be migrated, the steps required to move the content, and who will be responsible for performing the migration. This documentation should include how to test that the migration was successful, and any internal stakeholders who need to be informed.

This documentation doesn't need to be complex. A shared google sheet or document will be sufficient in most cases.

How to Find Out What A Server is Hosting: Sometimes a server hosts a variety of files and databases that connect to a number of other systems. It may be difficult to determine what other systems need to be updated after the migration is performed.

If, after performing an inventory of server assets, you still think something is missing, pick an off peak time to restart the server. You'll get a quick view of any resources connected to that server.

Pick the Right Migration Time

Your server migration time should coincide with a period of time where your server is being accessed by the least amount of users. This could be 2AM on a Sunday, or any time on the weekends if the server is only used during the work week.

The most important element of choosing a migration time is finding a time where all key staff will be easily available to intervene if the migration causes issues. For example, let's say the migration has a hiccup and the system management team are not online to intervene. Or customers are calling in, but there aren't enough support staff to assist users.

These things all need to be considered. Sometimes it is better to choose a busier time where there will be adequate staff available to help in case of issues.

Embrace Automation and Optimization

When migrating to a new server, you can copy all the files and applications exactly as they are and call it a day. But you should take the opportunity to re-evaluate whether the applications and servers are running as efficiently as they could be.

With the Cloud, you have access to server automation and optimization which you did not have access to previously. Migrations are a great time to think outside the box and determine what changes you could make to how you use your servers.

Monitor Everything

Once the migration is complete, you'll need to update your server monitoring systems such as Zabbix to connect to the new servers and monitor their performance. It's important to do this as soon as possible so you have a snapshot view of the post-migration process and can spot issues before they become bigger problems.



The ServerMania Cloud control panel includes robust server monitoring features and automations to help.

Don't Forget To Re-Sync the Data

If you are migrating e-commerce or email servers, users may continue to access the old server after the migration has been completed due to DNS propagation. It's important to review whether any new data has accumulated on the old server after the migration and re-sync it with the new Cloud Server.

You should also keep the old server online during the DNS propagation period so that users will not see an error page when visiting your website or sending an email.

Maintain Your Documentation

Perhaps your server documentation isn't exactly up to par. Every organization tends to have that one senior administrator who is keeping everything together, but nobody would have any idea what to do if they left the company.

Cloud migrations are the ideal time to get your server documentation updated. Keep a log of exactly what applications are running on each server, how they work, and what someone who has no idea how to manage the server will need to know to keep things running smoothly.

Know When to Ask For Help

Depending on the resources of your organization, you may have gone through this document and realized you don't have the technical skills to successfully pull off a migration to the cloud. That's okay - after all, you're likely not in the business of managing servers all day and your time should be spent managing your business.

For businesses considering a migration to the cloud, and looking for advice, our experts are standing by ready to assist you. Book a [free consultation](#) so we can learn more about your business and determine what the best migration plan would be.

BOOK A MIGRATION CONSULTATION

Even the best planned cloud migration will become a challenge if you choose the wrong cloud platform. At ServerMania, we've been helping businesses worldwide accomplish their server goals since 2002. We have the tools, experience, and know how to make your next cloud migration a success.

Why Use the ServerMania Public Cloud



Reduce Infrastructure Costs

Only pay for the server resources you need and switch plans as needed.



Scale Resources Instantly

Add more CPU, RAM, or storage at any time through our easy to use control panel.



Rapidly Deploy New Servers

Tired of waiting for a new server deployment? Spin up a new Cloud instance in seconds.



Reduce Time Managing Servers

Our easy to use control panel gives you complete access to manage all servers in just a few clicks.



Automate Server Tasks

Automate server management and provisioning using server templates and our robust API.



Increase Server Uptime

Every Cloud Server is connected to redundant power, networking, CPU, storage, and RAM.

READY TO LEARN MORE?

CONTACT US TODAY TO GET STARTED!