

Operational excellence

The case for going serverless





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Like most businesses, family offices have traditionally used a physical server to house their technology stack (i.e., applications, printers and databases) and files. Over the last decade or so, advances in cloud computing and Software as a Service (SaaS) have made it possible to take what was once on a stored physical server and put it on a cloud server. In a post-COVID world, we have noticed an acceleration of this trend.

Going serverless is now currently viewed as best practice for a host of reasons. At the top of the list is eliminating physical servers and all the maintenance they require: patching, upkeep, security, warranty and monitoring. There is also no need to replace devices every five to ten years, which businesses would have to do as a matter of necessity to maintain optimal performance.

The decision to go serverless is an important one. As with many technology operation decisions, family offices should conduct a careful evaluation before pulling the trigger.

If a family office does decide to make the switch, preparing to make the transition involves two main considerations: the office's files/data and technology stack.

Managing files and folders in a serverless environment

With remote work on the rise in a post-COVID world, being able to access files from anywhere is vital for a family office. While it is possible to access files on a physical server remotely using a Virtual Private Network (VPN), using a content management system (CMS) such as SharePoint, Laserfiche or Worldox provides more flexibility. In this context, the CMS is the "serverless" option, while the VPN represents the traditional option where content sits on a physical server. The VPN to physical server method can typically only be done on a laptop on which the IT department has configured access, while a CMS can be accessed from any desktop or mobile device.

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Another benefit of using an online CMS is the additional organizational functionality. These platforms can enable users to tag files for quicker searching, as well as track version history, collaborate online in real time, share externally and create granular permissions. With the volumes of documents that family offices handle every day, this feature makes a serverless environment an attractive option.

A CMS also contains major security enhancements, which allow family offices to log access and see who has viewed, downloaded or edited a file. This detail (which was previously logged in the background) is now transparent to the user. In a traditional file browser environment, the technology team would not be able to easily spot a mistake or suspicious activity, while they can easily do so in a serverless space. With security being a core consideration of any family office technology stack, this is a great feature to have.

Managing a technology stack in a serverless environment

Moving from a physical server to a cloud-based one requires some careful consideration in terms of migration. It is not just about lifting what a family office has from the server to the cloud, but also about embracing the new applications that come along with it.

Accounting is a great example. Rather than just moving the in-house QuickBooks to a private hosted server (“lift and shift”), consider moving to QuickBooks online, Microsoft Business Central, Sage Intacct or NetSuite. Single Sign On (SSO) can also be added, providing one set of user credentials to access all software, from accounting to investment tools.

The benefits of going serverless

There are four main benefits to going serverless: better security, more resources, greater flexibility and overall cost savings.

Security

With the sophistication of cyber threats on the rise, even IT professionals can find it challenging to keep up. Family offices (and most of their infrastructure management providers) do not have the resources to stay abreast. Due to their size, family offices tend to lack the server volume, deeply trained technical team and focus that a bank or application service provider has in order to stay in front of these security issues. Moving to a serverless environment bolsters the overall security of the family office’s content and applications.

Resources

In a cloud environment, a family office can leverage the resources of a much larger company. With Microsoft Azure, for example, the organization can benefit from Azure’s SOC 2 compliant physical site security. Within an application like Addepar or Intacct, the family office can leverage their entire infrastructure team for backup, patches and business continuity. Often these application providers are using Azure or AWS servers under their own applications.

Flexibility

In some cloud-based server systems, the family office can throttle its computing resources up and down based on need. This flexibility provides a savings on long-term costs. Physical servers need more resources and require expensive purchases; physical servers needing fewer resources during certain times of day cannot be throttled down to save on costs. They must be built for peak performance periods. In a cloud-based server environment, the family office can throttle computing resources up or down—for example, from a virtual desktop for an intern to a SQL server that might have nightly loads, batch reports or large performance calculation intervals.

Distributed cost

In terms of costs, physical servers involve large, lump-sum costs for upkeep (\$50K to \$60K every few years to replace hardware), as well as high recurring costs (hundreds of dollars per server per month for MSP management). Cloud-based solutions, in contrast, are subscription-based: costs are spread out and predictable. While they are not always less expensive, the costs are more evenly spaced to meet the need. The family office can increase or decrease the resources on an ad hoc basis as business needs change and evolve.

With cloud-based solutions, costs are spread out and predictable.

Conclusion

If a family office is looking to make the switch to serverless, there are five key considerations:

- Check that the family office's current MSP (Managed Service Provider) can work with the new paradigm. Are the family office's fees based on hours, licenses, servers, software or users?
- What does the family office use locally? Do they still need it, or is there a cloud-based alternative? For example, Adobe desktop with mapped drives to Advent APX or QuickBooks.
- Plan for each application to migrate in a phased approach. Also consider the following:
 - How does this change the family office's backups, uptime and business continuity?
 - What can be archived and not migrated?
 - How will the family office handle training?
 - How can the family office clean up security rights and roles?

- As a VPN would no longer be needed to access the family office's files or applications, consider the following:
 - How does this change the office's logins, remote access and desktop experience?
 - Single Sign On (SSO)
 - Password vault
 - Your desktops and home access with security
- Moving security from your servers and local network to your desktops

It is also important to note that there can still be reasons to keep a VPN, even if the family office makes the switch to serverless. These options should be evaluated carefully.

If a family office would like to explore making the transition, the best place to start is with their managed service provider (MSP) and take it from there. At the end of the day, eliminating the physical server is a business decision and should be approached with careful thought and consideration.

Tania Neild

Founder and CTO of InfoGrate, Inc., Tania provides technology and operations consulting services to family offices. She founded InfoGrate in 1996 to provide consulting services on complex issues, such as selecting, implementing and integrating general ledgers, performance management systems, cybersecurity and content collaboration tools. With a Ph.D. in computer engineering, she has worked in the FinTech space for over 30 years and with family offices for 20 years.

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