Managing Your Data Trove
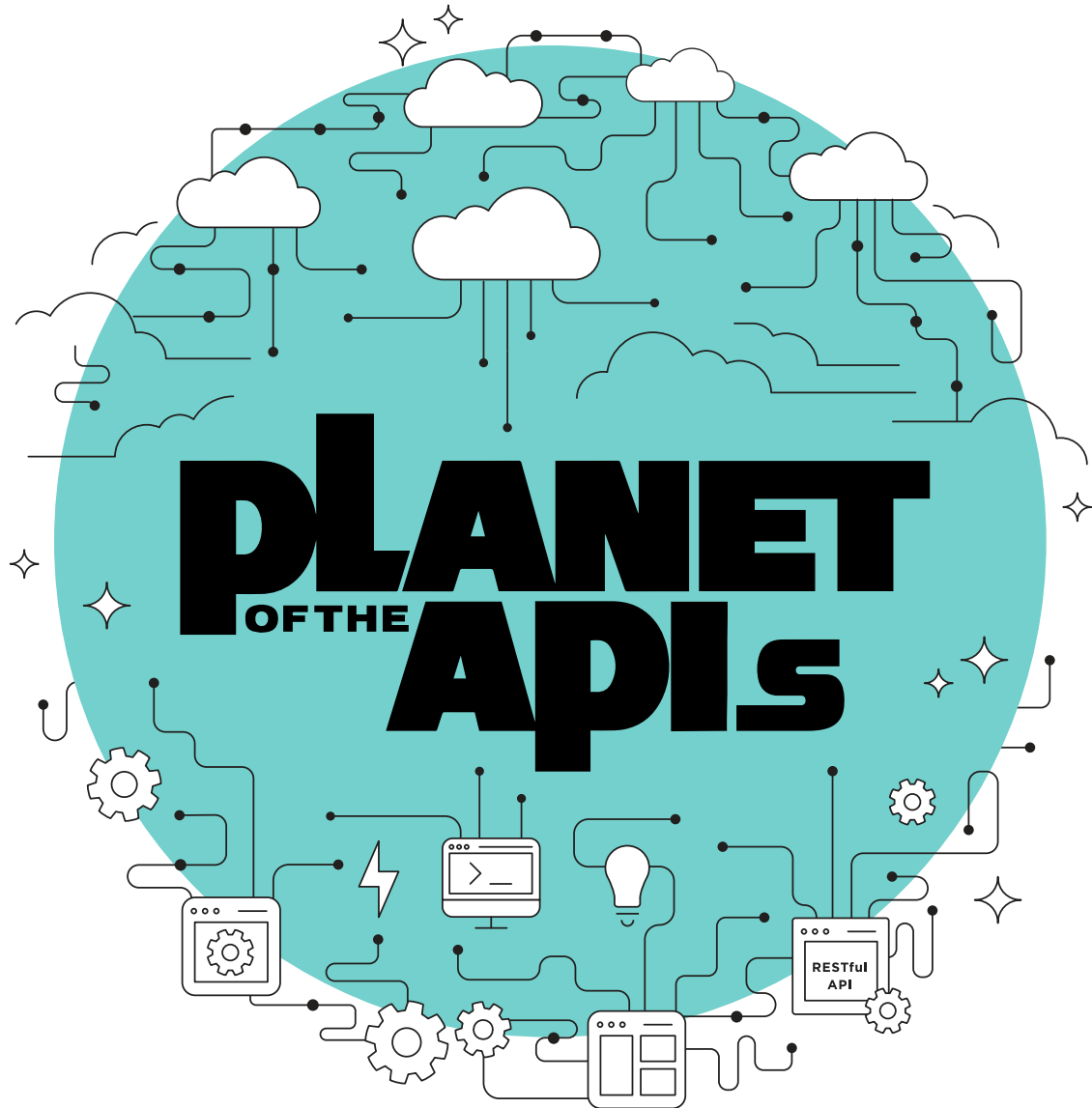
in the

PLANET
OF THE
APIs

RESTful
API

rubrik

## You will never have less data than you have right now.
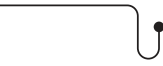
Think about that.

Your company's data is an irreplaceable asset, and every day your users are creating and storing that data on a mounting diversity of devices as well as in the cloud.

Until now, preserving your growing amount of data required not only snowballing amounts of storage, but also implementation of four or more products—sometimes from four or more different companies—to back up both cloud data and on-premises data originating from your increasingly heterogeneous ecosystem of devices. Those products included, but weren't limited to, storage, backup software, back-end databases, replication software, and archiving software to name a few. Putting those disparate products together meant weeks of installing, setting up, integrating, testing, and tweaking. Add to that the manual methods you needed to fulfill new customer requests and ensure the protection of new assets.

You may even have stored your backups on the same system where the vast majority of your data lived, and allowed client administrators full backup access. This approach could cost you dearly, and because it left your backups vulnerable to exactly the same attacks as your underlying data, it could also result in lost data—rendering all the time and money you spent on backup plans worthless.

Any efforts to automate parts of this process meant dealing with vendor-specific plug-ins, learning multiple limited-functionality product-specific scripting languages, and juggling a variety of tools. So even if your aim was an integrated solution, you ended up with some virtual duct tape scripts that unraveled when the underlying software and/or hardware changed.
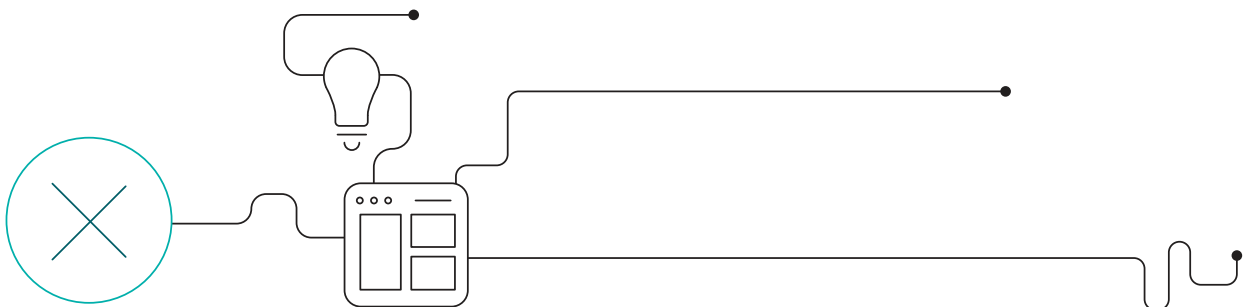
Validating your backups was labor intensive, with no timely and comprehensive method to confirm that all of the backup data was valid. Validation was always hit or miss based on samples. This could necessitate reverting to older, stale or even incomplete backups in the case of a breach.

One ransomware attack cost days of effort and productivity, not to mention data loss-- especially if your most recent backups were compromised along with your data. If you were lucky, you could restore from a backup. If you weren't, you paid the ransom and hoped that the attacker would actually give you the password to unlock your data.

So despite your best efforts, your data may still be at risk.

Let's talk about what to do to keep data safe.

Here's what you need to be able to achieve with your data backup and management solution:

Regularly back up and be able to dependably restore data from devices in both physical and virtual environments at a moment's notice. Your company's data is an irreplaceable asset that must be reliably preserved with decreasing daily operational overhead.

Minimize restoration time. Successful disaster recovery means having globally searchable data as well as fast restores so that you can quickly find and deploy the data you need.

Make data unassailable by thinking ahead about format. Backups are your safety net in case of an attack on your company's system, so they must be stored in a guaranteed immutable format.

Validate critical data every day. Rather than relying on validation sampling, which may require using stale or incomplete data in a restoration, critical data should be validated daily.

Reduce manual effort. Every time a solution is manual, it not only takes time, but it also risks human error... and repetitive tasks are the most prone to that error.

Make storage system updates and data maintenance **as easy as possible.**

Without meeting each of these challenges, a company risks its data.

This may sound like a daunting list, but it's all easily achievable. The key is using an API-managed data backup and management solution.

Enter: The Planet of the APIs.

What is this API of which you speak?

An application programming interface (API) is like a restaurant that offers delivery. If you don't feel like taking the time to go eat at that restaurant, you look at the restaurant's menu and then call with your order, say, aloo palak with five stars. Within the same call you also provide your address, phone number, and credit card info. An hour later someone shows up at your door with a very spicy order of aloo palak.

Now, to get this food, you don't have to buy spinach, potatoes, asafoetida, or any other ingredients. You don't have to find a recipe, know how to cook, or have access to a kitchen. You don't even have to go to the restaurant. All you or anyone else who wants potato spinach curry needs is a phone (any phone will do) and the restaurant's phone number to call with the following information: aloo palak, level of spiciness, address, phone number, and credit card. And voila! Aloo palak at your door!

An API is a reusable restaurant of functionality. You don't need to know the underlying code; you just need to know what's available and how to order it. Furthermore, an API is a commitment to offering that functionality. The internal workings could change, offering more efficient code or more functionality, but the aloo palak that you ordered today will be orderable in exactly the same manner tomorrow.
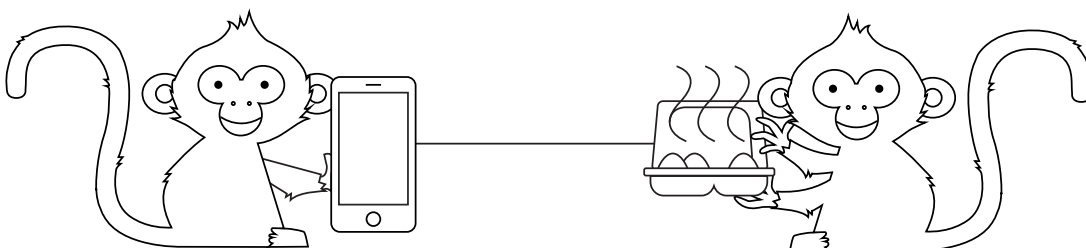
What does this have to do with my ever-increasing data?

A managed backup and data management solution makes it simple and cost-efficient to keep your data as safe as possible. It simplifies regular back-ups, makes data restoration quick and reliable, stores your data in immutable format for extra security, and makes updates and maintenance easy.

In addition, an API-managed backup and data management solution makes reliable, language-agnostic automation possible. You can automate repetitive manual processes and validate your all of your data daily.

So, automation using an API-managed data backup and management solution is key to survival in an age of data proliferation and ransomware.

Yes, you could continue to use a patchwork of products, each with its own jobs, options, consoles, and scripting language, to handle your data. But as your data management needs expand, your requirements for storage and manual intervention grow.

That manual effort means working through each product's graphical user interface (GUI) as well as learning and staying current on changes to each product-specific scripting language that you use. When they function, those virtual duct tape scripts work faster than a manual effort. But remember, those same scripts can fail at two critical points: when your environment changes, and when the related product itself is updated.

Replacing that vulnerable patchwork of products with an API-managed data backup and management platform, cuts down on risk: You'll use one unified GUI in place of several.

Furthermore, APIs are language-agnostic. You automate repetitive processes using a language of your choice like Java, Javascript, Perl, Powershell, Python, or Tcl, (to name a few), meaning more time spent on automating repetitive tasks and less time spent learning multiple scripting languages or maintaining your virtual duct tape scripts.
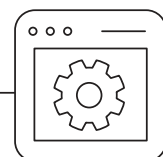
But there's one more thing you should know about APIs. All APIs are not created equally.

Let's go back to our API restaurant. Some restaurants offer only a limited delivery menu; if you want to order from the full menu, you must go to the restaurant, order your food, and eat your meal there. You get the food you want, but it takes more time and effort on your part. In the same way, some API-driven products expose only a subset of that product's functionality. Everything else must be done through manual interaction with the GUI.

But once you've got an API that exposes the full functionality of its product, you can use automation to integrate data backup and management system functions into your company's internal and external tools and processes. Imagine a user requesting the setup of a new device and, once approved, that request is fulfilled seamlessly, including all backup, retention, compliance, archive, replication, and security settings.
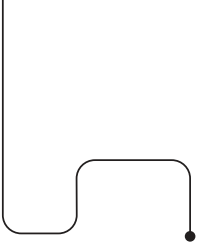
Imagine using the APIs to build a copy of a workload, stand it up, test it at the infrastructure/operating system/application layers, and then retire it. Now, imagine doing that on a nightly basis. Periodically using questionable table-top or "smoke" tests to test your data is like asking four blind men to describe an elephant; genuinely testing the restoration of a workload or application lets you see the elephant yourself.

It boils down to this: this solution allows you to automate every repetitive manual task you currently use the GUI to complete. That's the revolutionary gift of the Planet of the APIs.

Where Rubrik comes in

There is one data backup and management solution available that exposes its entire functionality through an API so that whatever you can do via manual effort, you can also do programmatically. That solution is Rubrik Cloud Data Management. We believe so strongly in our product that we use it ourselves for our data management needs.

Rubrik is a single, scalable platform for backup to disaster recovery that securely manages and safeguards data. Rubrik manages heterogeneous physical devices without vendor-specific plug-ins, methods, or storage formats in both physical and virtual environments.

Rubrik secures globally searchable data as well as the management of that data to protect from data incursions. Rubrik's declarative policy engine reduces ongoing manual effort without writing any code whatsoever by allowing administrators to create service level agreement policies that easily define data protection frequency, retention, archiving, and more in far fewer steps than previous alternatives and allowing near-zero Recovery Time Objectives (RTOs).

Best of all, Rubrik exposes its full functionality with an open API compliant with the Open API Initiative (formerly known as Swagger), allowing automation of all data management through one product.

With all of this to offer, Rubrik is disrupting the data backup and recovery industry.

Learn more about the technology and our products on our website, **Rubrik.com**. You could be living the good life on the Planet of the APIs sooner than you think.