

# Automation + APIs 101

## The Essential Guide to Rubrik Automation & APIs

### THE RUBRIK ADVANTAGE

Transform APIs into a *strategic asset* instead of a technical tool. Rubrik's native RESTful APIs allow users to automate the delivery of data management services (apply SLA policies, automate recovery testing plans, etc.) with granular control. Unlike legacy solutions, Rubrik built an API-first architecture from day one, consuming the same APIs published and offered to users. Users can quickly start automating services with Rubrik's APIs. At a high level, this means associating an object with a desired end state.

### INTELLIGENT DATA MANAGEMENT + APIS = SIMPLE SERVICE DELIVERY

In order to deliver services on-demand and in a simplified manner, two things are required: 1) the solution itself must be intelligent (self-learning, self-healing) and 2) well-documented RESTful APIs to customize service delivery. Without #1, users need to have extensive knowledge of the backend system and of custom scripting. Without #2, it is nearly impossible to integrate with third party services and create end-to-end workflows at scale. Rubrik combines APIs with policies, delivering a true automated orchestration engine.

#### #1: INTELLIGENT DATA MANAGEMENT

- **Self-learning:** The industry's *only* self-learning backup and recovery solution. Employs adaptive throttling, automatically detecting production workload characteristics to adjust ingest speed and minimize impact to production.
- **Self-healing:** Designed to be masterless, distributing data, metadata, and tasks for web-scale and high performance. Automatically updates all connectors on physical databases, servers, and hosts.
- **Policy-based automation:** Eliminate manual job scheduling with a single SLA policy engine. Create backup, recovery, and archival schedules within a consumer-grade UI.

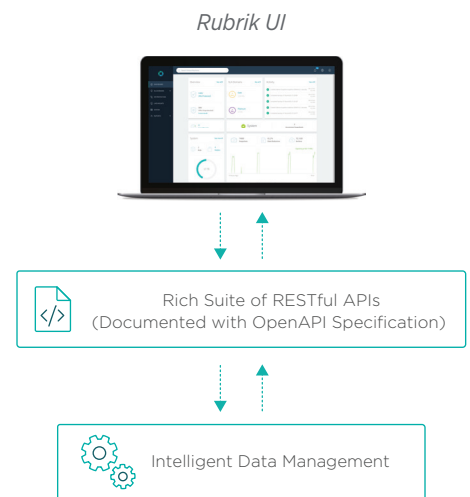
#### #2: A RICH RESTFUL API SUITE

A Great API = RESTful + Well-documented [Easy to use + Explains the why AND the how]

**Rubrik is the industry's only data management solution built with (1) an API first architecture and (2) an HTML5 interface that consumes its own RESTful API endpoints.** Rubrik also uses the OpenAPI specification trusted by companies such as Google, Salesforce, and Paypal, employing industry-standard methods for API documentation.

### THE 5 ESSENTIALS FOR API HYGIENE

- 1. User-centric:** Rubrik APIs are built with the target user in mind. APIs are language-independent, meaning you can generate code in your language of choice (e.g. PowerShell, Python, Ruby on Rails, etc.).
- 2. Native:** Gain access to any operation available in the UI through the Rubrik REST API: backup, DR, search, analytics, and more. Rubrik's UI consumes its own API endpoints.
- 3. Extensible:** Integrate seamlessly with any third party service of your choice, such as Chef, Puppet, Ansible, and ServiceNow, with minimal number of calls. Automate end-to-end workflows at scale.



**4. Simple:** From design (RESTful) to documentation (professional-grade). Easy to learn, integrate, and test. Zero REST API knowledge needed with our pre-built modules.

**5. Future-proof:** All APIs are battle-tested by our engineers with every product release. Supported API calls will work between versions. We are the tester, not you.

## TOP CUSTOMER USE CASES

**1. Configuration Management:** Easily plug into config management tools (i.e. Puppet, Chef, SaltStack, Ansible) to simplify deployments across hundreds of servers or VMs. Automate compliance testing, SLA assignments, and lifecycle management in fewer lines of code.

**2. Orchestration Management:** Leverage service catalogs to deliver backup-as-a-service. Simplify orchestration of daily data management tasks (backup, recovery, and archival) with self-service. Get customized analytics built into your tool of choice.



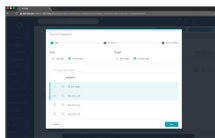
### ServiceNow

Eliminate wait times. Integrate Rubrik with ServiceNow to deliver critical data management functions (automated data protection, self-service file recovery, test/dev, analytics) through items presented in ServiceNow's service catalog.



### VMware vRealize Orchestrator & Automation

Perform self-service data management tasks through vRO/vRA. Modify SLA protection policies, create backups on-demand, and instantly recover VMs within the vRealize portal.



### VMware vCloud Director

Securely manage virtual data centers (VDCs) for multiple tenants through vCloud Director. Create your own customized private cloud offerings. Empower tenants to assign SLA policies, recover an entire vApp, or restore a subset of VMs on their own.

**3. Application and Server Validation:** Instantly provision copies to test restores of applications or entire servers with minimal API calls (i.e. build a live mount in one line of code).



### Automated Recovery Testing

Conduct end-to-end recovery testing in less than three minutes with a simple script. Create a live mount, run tests to validate, and shut down in only a few lines of code. Use any language of your choice or Rubrik's pre-built PowerShell module to get started quickly.

## CASE STUDIES

**Langs Building Supplies** – Recovered from ransomware in under an hour by writing a script to search and restore encrypted files. The result was no random paid and zero data loss.

**Assured DP** – Service delivery partner created an advanced portal for centralized management and monitoring to complement the Rubrik UI – all through Rubrik's REST APIs.

**Secure-24** - Leveraged Rubrik's API integration with ServiceNow for automated data protection and self-service file-level recovery. It resulted in a significant reduction in management complexity and recovery times (from hours to minutes).

## SLA Domains

Rubrik clusters provide automated data management and protection through SLA Domains. An SLA Domain defines the c protection policies for their assigned snappables (virtual machines, file systems, and applications).

To provide policy based management and protection of a snappable, add the snappable to an SLA Domain, or to multiple

### Retrieving SLA Domains

Before assigning snappables to SLA Domains, get a list of the SLA Domains that exist on a Rubrik cluster. For a new Rubr only the default SLA Domains. When custom SLA Domains are added to the Rubrik cluster, the list is modified to include t

**Example:** Retrieving SLA Domains from a Rubrik cluster

Send a GET request to `/sla_domain`.

```
curl -X GET "https://$cluster_address/api/v1/sla_domain"
```

The Rubrik REST API server returns a `ListResponse` object of all SLA Domains. At a minimum, the `ListResponse` SLA Domains: Gold, Silver, and Bronze.

```
{
  "data": [
    {
      "id": "%gold_sla_id",
      "name": "Gold"
    }
  ]
}
```

*Example documentation*