



## **SGCO OpenVMS RMS / RDB Dynamic API V 2.0**

SGCO has developed a revolutionary fully functional and industry  
Standard, OpenVMS RMS / RDB API

Stirling & Young  
info@sgco.com

Copyright 2021

## OpenVMS RMS / RDB Dynamic API

The Stirling & Young Group's OpenVMS RMS API V 2.0 is the first ever API designed to give your applications direct access to your RMS / RDB data files in real time. The SGC0 API is a JSON-based RESTful API Installed on your VMS server which then listens for incoming JSON requests and then interacts with your RMS files or RDB tables.

The Stirling API enables your external application to: INSERT \* READ \* UPDATE \* DELETE records in your RMS/RDB data in real time. Functionality includes RMS file and record level locking and all data types as keys and members of compound keys.

No more swapping huge amounts of data to Microsoft SQL Server! No ODBC. No more trying to pretend that RMS is a SQL database! Use your RMS files like RMS files to create remote GUI type apps that interact real time with RMS. Alpha or Itanium, 100% native OpenVMS and licensing 80% less than other less efficient or no longer supported solutions.

**Version 2.0 has executables that work with Python 2.7 (HP/VSI) or Python 3.9 (VSI only) on VAX, Alpha or Itanium.**

Installation and configuration have been drastically simplified. The user only needs to confirm the version of Hardware, OS and Python. Initial delivery of a pre-compiled file to copy to any directory and run. From that point on all configuration and monitoring is managed through the **API dashboard accessible by a browser.**

The web GUI has a built-in workflow that allows to identify all of the parameters necessary including paths, mappings, keys, instance environments etc. As mappings are completed the web GUI will perform various sanity checks and test the interaction with the RMS file, key searches, generated API documentation etc.

### **Lightweight:**

The major design concern in architecting our API was to be lightweight and efficient. The competing solutions put an unnecessary load onto the host computer resulting in the need to upgrade hardware to compensate. This in turn leads to more issues and a cycle of constant hard to identify problems.

Our API uses only the processing power and memory needed to provide access to RMS/RDB data.

There are no unnecessary spoolers, tracking tables etc. needed to keep the API working as it relies only on the current state of the native data in 100% real time. Other commercial solutions either require a service that runs on OpenVMS and a service that runs remotely on Windows that must semi- manually be kept in sync and are not truly real time or dynamic or they use alternatives that put a gigantic load on the OpenVMS host to generate full web content.

Our API consists of only a very small application the runs detached on OpenVMS. It accepts JSON input via posts to a listener that can be assigned to any port, processes that input, performs the requested tasks on the RMS files and returns and necessary response as a JSON array.

The fact that it is 100% native gives you the flexibility to interact with the API via standard REST calls from anywhere. Unlike Attunity Connect and Connex you are not limited to connecting only from their client server solution. We have used our API in many different environments from Web Based cloud portals to iOS apps, MS Power BI and other dashboards, and syncing large amounts of data from and to external databases. Again 100% native on OpenVMS. There is very little load on the OpenVMS box as well once the RMS files have been tuned with the needed indexing. This is an important step that is skipped over by the other solutions but makes a huge performance difference. A recent use case for inserting large amounts of data via the API with JSON calls gives up to 3,000 records per second performance.

### **Secure:**

Our API is by design as secure as possible. The API is not only limited to accept only properly structured JSON input but will only accept input strings that are structurally compatible with the target. This prevents the API from blindly accepting possibly dangerous input.

Security may also be further enhanced by front ending the API using a second network interface on the host OpenVMS box onto a dedicated LAN with two other entities: A PCI compliant - WAF enabled reverse proxy and a Cisco 5500 series or similar firewall. The Cisco 5500 provides further traffic management as well as the ability to add Cisco Firebox IDS functionality.

It should be noted that this is addressing only the security of the API and that security for the remote applications that manipulate RMS/RDB via the API are a separate and equally important issue.

### **Connect your RMS data files to any external file or report source including:**

- Business Intelligence applications (Power BI)
- Dashboards
- Web services such as sales/vendor portals, customer portals
- Mobile device application/portals
- Spreadsheet report templates
- Any external dynamic need



The Stirling API is ideal for user authentication and custom content filtering based on user ID or other user characteristics. The Stirling API also plays well with others by interacting seamlessly with other APIs.

About Us

## A Strategic Internet and Information Management Solutions Group

Since 1997 the Stirling & Young Group has provided advice, consultancy, design, implementation, internal/external business application solutions and digital media communications solutions. The firm delivers innovative, scalable business solutions to help reduce costs, increase revenue and gain competitive advantage through technology. SGCO has provided services to a wide range of companies and organizations in more than 12 countries including USA, Canada, United Kingdom, France, India, Australia, South Africa, Serbia, and the Netherlands.

Our consultants and developers have profound technical skills and extensive hands-on experience to meet the toughest challenges. Including a high-level of experience applied across a broad range of sectors in the implementation of data integration and migration solutions.

Our OpenVMS / RMS Dynamic API is licensed on an annual basis and additional support for applications using our API is available. The Stirling OpenVMS / RMS API is now available for installation on your OpenVMS system. For pricing, licensing, or other product information contact: Stirling Young & Murch Group LLC at [info@sgco.com](mailto:info@sgco.com).

Contact:

Stirling Young & Murch Group LLC

Bedford, NH USA and Mesa, Arizona USA

Learn More: [www.sgco.com](http://www.sgco.com)

For more information please contact us at [info@sgco.com](mailto:info@sgco.com) we're happy to answer any questions.

SGCO  
.com