Thinking about an API? Here's what you need to know

What is an API?

An API, or application program interface, allows your software system to communicate with our system. The API defines how the systems communicate with one another and share/exchange data from different sources.

This is a web-based process that requires computer programmers to build the linkages necessary for the systems to communicate with one another.

Why use an API?

There are several reasons why you may decide to use an API when using the RNR Simulation Tool:

- Increases efficiency in staff completing the Assess an Individual (AAI) within your information system. Staff would not have to go back and forth between your system (both your risk-needs assessment and your case management systems) and ours.
- Output data from the RNR Tool can be stored locally within your existing systems.
- More flexibility in how the results from the RNR output are presented to staff/clients when you control the data.
- Automation, either as an additional step in an existing data process, or for bulk processes like importing records from an existing data source.

What are the requirements to develop and implement the API?

- You (or your IT division) will need a cursory understanding of JSON, the language used by RESTFul applications.
- The in/out JSON data can be manipulated and/or stored in whatever native programming language/data solution your IT department has already in place.
- You will access the API from any architecture capable of making & receiving HTTP requests; from the UNIX command line to a jQuery in-browser request.
- Ability to map your system's data points to the RNR API's required inputs so that they match to data points on the RNR AAI form.
- You will need to extract and translate (if necessary) these pieces of your data into a format that the AAI API can understand. For example, your jurisdiction may have seven Risk levels, whereas the AAI API only accepts a maximum of five.
- You will need a technical person to work with GMU's technical team on translating these items that do not immediately line up 1:1, i.e., in the above example:

  "if Risk > 5, make Risk = 5"

How long will it take to develop the API?

This varies greatly by how well the questions or data points within your information match to the RNR AAI form and how complicated the data systems are to build the linkage between the systems.

For most setups, the majority of work will be on your end, to prepare the data to send to the RNR API, and figuring out what to do with the resulting data the RNR API will return to you.

Typically, we will have your Jurisdiction up and running with a development API endpoint to begin testing within a week. In our experience, jurisdictions with IT staff readily available will be up and running within 4-6 weeks. If you require a more customized API (such as adding new data or customizing/amending existing algorithms), the timeline will grow as the requirements do.

Another timeline factor may be whether you directly manage your information system or if you use a third party. With third parties, there tends to be less control over how this task fits into their existing workload and/or data models. As an example, there may be difficulty in accessing some of the data directly without additional development on the third party's part.