

National Resource Hub Web Services Guide

Restricted Access Data Connections

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FEMA

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Overview

The National Resource Hub (NRH) is a collection of mutual aid and resource management component tools that are maintained within the Preparedness Toolkit (PrepToolkit) FEMA System. The NRH includes the Resource Typing Library Tool (RTLTL), Resource Inventory System (RIS), and OneResponder.

Collectively, these component tools have key data sets that may be useful for sharing with external entities through data connections.

- RTLTL is an online catalog of national Resource Typing Definitions, Position Qualifications, and Position Task Books (PTBs).
- RIS is used by Federal, State, Local, Tribal, and Territorial (FSLTT) organizations and mission partners on a nationwide scale to inventory their resources which includes teams, equipment, supplies, personnel, and facilities.
- OneResponder is used by FSLTT organizations and mission partners on a nationwide scale to manage personnel qualifications and credentialing.

NRH Web Service Types

RIS and OneResponder provide restricted-access, read-only **REST Application Programming Interfaces (APIs)** and **ArcGIS data pushes**, with RIS delivering limited sets of RIS Resources data and OneResponder delivering limited sets of de-identified NQS Personnel data. Collectively, these are known as the NRH Web Services.

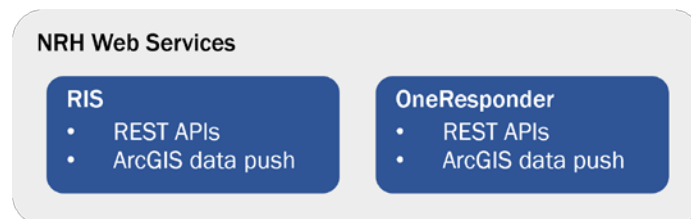


Figure 1: NRH Web Service Types

Note that the Resource Typing Library Tool (RTLTL) within the NRH contains publicly available data, and guidance on the RTLTL web services is documented separately. For guidance on making a connection to and consuming RTLTL data, reference the separate RTLTL API Guide, available upon request by contacting NRH@preptoolkit.fema.dhs.gov.

The graphic below illustrates the general architecture of the three primary component tools that comprise NRH, as well as the restricted-access and public-access web services that are available. This guide only pertains to the restricted-access web services from RIS and OneResponder.

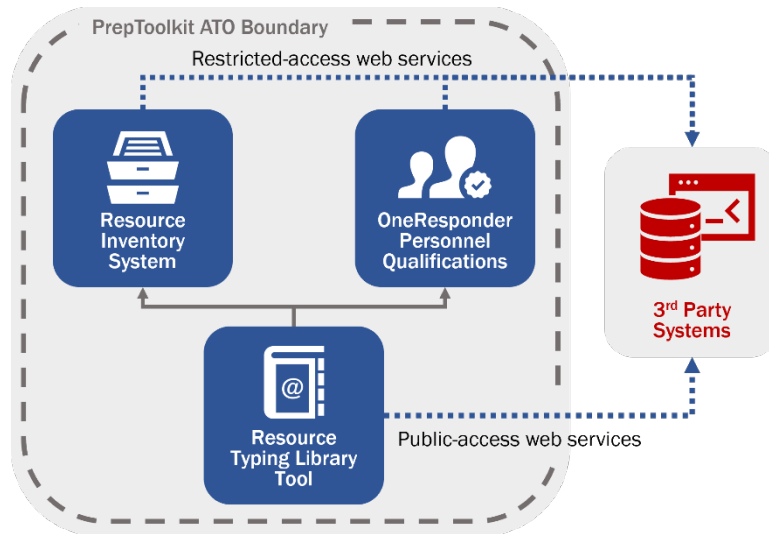


Figure 2: National Resource Hub General Architecture

Data Providers

RIS and OneResponder data made available through the NRH Web Services are maintained by the organization that collected and entered such data into the respective component tool. Within RIS, originating Organizations must enable their data to be shared before they are included in any data connections with external systems. Details of data collection, sharing, and usage is provided in the Terms of Use at <https://preptoolkit.fema.gov/terms-of-use>.

Authentication and Authorization

Authentication and authorization to connect with the NRH Web Services depends upon the type of web service that is chosen.

- **REST API:** Connection is authenticated and authorized through an API key created and provided by NRH granting the data consumer access to make GET requests.
- **ArcGIS Data Push:** Connection is authenticated and authorized through either an API key or username and password created and provided by the target ArcGIS environment or data consumer granting NRH access to push data to their compatible geospatial software instance. This data are pushed every 12 hours.

Process to Access the NRH API

The graphic below illustrates the process for requesting and gaining access to the restricted NRH web services. For the purposes of the process below, the term Entity refers to the individual, organization, or agency requesting FEMA grant them access to the restricted NRH web services.

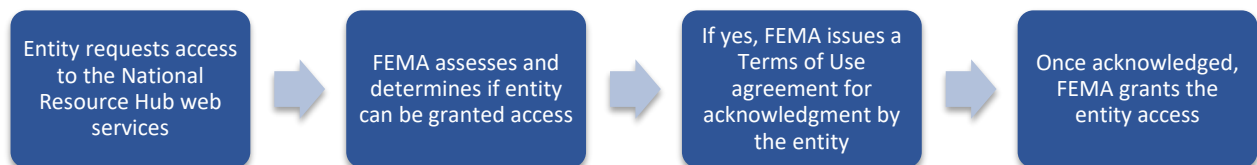


Figure 3: Process to Request and Gain Access to the National Resource Hub API and Data Services

To request access to the NRH web services, contact NRH@preptoolkit.fema.dhs.gov.

Pre-Requisite Steps for ArcGIS Data Pushes

In order for NRH to provide ArcGIS Data Pushes from either RIS or OneResponder, the requesting organization must configure the target ArcGIS environment to receive the data. The following steps should be completed once the requesting organization has been approved for access to the NRH web services as outlined in the section above.

- **Step 1:** Requesting organization must create and host a feature service for NRH data within their ArcGIS environment to prepare to receive the NRH data being pushed.
- **Step 2:**
 - **If using ArcGIS Online, Enterprise, Portal, or equivalent geospatial software:** Requesting organization establishes a named user account and provides the appropriate username and password to the NRH team to push the NRH data into a feature service within their ArcGIS environment.
 - **If using ArcGIS Platform or equivalent development geospatial software:** Requesting organization generates an API Key that they would provide to the NRH team to push the NRH data to a feature service within their ArcGIS environment.

ArcGIS feature layer templates are available for organizations to use in pre-configuring feature services in their target ArcGIS environment. These configured feature services will receive the one-way read-only data pushed from RIS and/or OneResponder. Links to these templates will be provided to organizations that have requested and been granted access to the data.

Resource Inventory System Web Services

These web services provide data that are specific to RIS.

RIS Resources REST API

Operation

This operation returns a list of Resources (personnel, teams, facilities, equipment, and supplies).

Signature

REST URL: <https://preptoolkit.fema.gov/pt/api/v1/nrh/ris/resources>

RIS Resources Parameters

Name	Type	Description	Example(s)
sort	String	Column(s) to sort by. Defaults to ascending sort. Descending sort is denoted by leading '-'.	.../ris/resources?sort=name .../ris/resources?sort=name&sort=-status
offset	Integer	Number of rows to skip before returning results. This parameter, in conjunction with the <code>limit</code> parameter, enables pagination of	.../ris/resources?offset=50 .../ris/resources?sort=name&offset=25

Name	Type	Description	Example(s)
		results. If response JSON includes "hasMoreItems": true, the <code>offset</code> parameter must be included in subsequent requests to retrieve the full list of results. Defaults to 0.	
limit	Integer	Maximum number of rows to return. This parameter, in conjunction with the <code>offset</code> parameter, enables pagination of results. Supports values between 25-100. Defaults to 25.	<pre>.../ris/resources?limit=25 .../ris/resources?offset=100&limit=50</pre>

RIS Resources Properties

Name	Display Name	Field Description	Type
id	ID	Unique ID of RIS resource or personnel	String
name	Resource Name or Job Title/Position	Resource or Job Title/Position Qualification Name	String
type	Type	Resource Type	String
rtId	RTL ID	RTL ID for the NIMS or NQS Resource Typing Definition or Job Title/Position Qualification	String
kind	Kind	Kind as defined for NIMS/NQS resource typing	String
organization	Organization	Organization Name	String
status	Status	Availability status for the specific resource or personnel	String
category	Category	Category as defined for NIMS/NQS resource typing	String
location	Location	A collection of data fields identifying the location of the resource's home location or personnel's duty station	Location Object
poc	POC	A collection of data fields identifying contact information for the resource's or personnel's point of contact	POC Object

RIS Resources Location Object Properties

Name	Display Name	Field Description	Type
streetAddress	Street Address	Street address of resource's home location or personnel's duty station	String
city	City	City of resource's home location or personnel's duty station	String
stateOrProvince	State / Province	State / province of resource's home location or personnel's duty station	String
county	County	County of resource's home location or personnel's duty station	String

Name	Display Name	Field Description	Type
postalCode	Postal Code	Postal code of resource's home location or personnel's duty station	String
femaRegion	FEMA Region	FEMA region of resource's home location or personnel's duty station	String
latitude	Latitude	Latitude of resource's home location or personnel's duty station	Number
longitude	Longitude	Longitude of resource's home location or personnel's duty station	Number
usng	USNG	United States National Grid coordinate of resource's home location or personnel's duty station	String

RIS Resources POC Object Properties

Name	Display Name	Field Description	Type
emailAddress	POC Email Address	Email address for organization's point of contact, typically 24/7 deployment, for the resource or personnel	String
phoneNumber	POC Phone Number	Phone number for organization's point of contact, typically 24/7 deployment, for the resource or personnel	String

RIS Resources ArcGIS Data Push

Configuration

Layer access (sharing)

- People with access: Private (authentication required)

Editing settings

- Enable editing: Yes
- Track new features and updates: Yes
- What kind of editing is allowed?: Add, delete, and update (attributes and geometry)

Geometry type

- Point

Coordinate system:

- Latitude/Longitude (WGS 84/EPGS 4326)

RIS Resources Data Fields

Name	Display Name	Description	Type
id	ID	Unique ID of RIS resource or personnel	String
name	Name	Resource or Job Title/Position Qualification Name	String

Name	Display Name	Description	Type
resourceType	Type	Resource Type	String
rtltId	RTL ID	RTL ID for the NIMS or NQS Resource Typing Definition or Job Title/Position Qualification	String
rtltUrl	RTL URL	RTL URL for the NIMS or NQS Resource Typing Definition or Job Title/Position Qualification	String
kind	Kind	Kind as defined for NIMS/NQS resource typing	String
organization	Organization	Organization Name	String
status	Status	Availability status for the specific resource or personnel	String
category	Category	Category as defined for NIMS/NQS resource typing	String
streetAddress	Street Address	A collection of data fields identifying the location of the resource's home location or personnel's duty station	String
city	City	A collection of data fields identifying contact information for the resource's or personnel's point of contact	String
stateOrProvince	State / Province	State / province of resource's home location or personnel's duty station	String
county	County	County of resource's home location or personnel's duty station	String
postalCode	Postal Code	Postal code of resource's home location or personnel's duty station	String
femaRegion	FEMA Region	FEMA region of resource's home location or personnel's duty station	String
pocEmailAddress	POC Email Address	Email address for organization's point of contact, typically 24/7 deployment, for the resource or personnel	String
pocPhoneNumber	POC Phone Number	Phone number for organization's point of contact, typically 24/7 deployment, for the resource or personnel	String
created	Created	The date the record was created in the ArcGIS feature layer through a data push from NRH	Date
lastSynced	Last Synced	The date the record was last updated in the ArcGIS feature layer through a data push from NRH	Date

OneResponder Web Services

These web services provide data that are specific to OneResponder.

OneResponder Personnel REST API

Operation

This operation returns a list of de-identified Personnel.

Signature

REST URL: <https://preptoolkit.fema.gov/pt/api/v1/nrh/nqs/personnel>

OneResponder Personnel Parameters

Name	Type	Description	Example(s)
sort	String	Column(s) to sort by. Defaults to ascending sort. Descending sort is denoted by leading '-'. Defaults to 0.	.../nqs/personnel?sort=name .../nqs/personnel?sort=name&sort=-status
offset	Integer	Number of rows to skip before returning results. This parameter, in conjunction with the <code>limit</code> parameter, enables pagination of results. If response JSON includes <code>"hasMoreItems": true</code> , the <code>offset</code> parameter must be included in subsequent requests to retrieve the full list of results. Defaults to 0.	.../nqs/personnel?offset=50 .../nqs/personnel?sort=name&offset=25
limit	Integer	Maximum number of rows to return. This parameter, in conjunction with the <code>offset</code> parameter, enables pagination of results. Supports values between 25-100. Defaults to 25.	.../nqs/personnel?limit=25 .../nqs/personnel?offset=100&limit=50

OneResponder Personnel Properties

Name	Display Name	Field Description	Type
id	ID	Unique ID of OneResponder personnel	String
name	Name	Job Title/Position Qualification Name	String
type	Type	Position Type	String
rtltId	RTLT ID	RTLT ID for the NIMS or NQS Job Title/Position Qualification	String
kind	Kind	Kind as defined for NIMS/NQS resource typing	String
organization	Organization	Primary Organization Name	String
status	Status	Personnel qualification status as qualified or trainee	String
category	Category	Category as defined for NIMS/NQS resource typing	String
location	Location	A collection of data fields identifying the location of the personnel's organization	Location Object

Name	Display Name	Field Description	Type
poc	POC	A collection of data fields identifying contact information for the personnel's point of contact	POC Object

OneResponder Personnel Location Data Subset Properties

Name	Display Name	Field Description	Type
streetAddress	Street Address	Street address of personnel's duty station	String
city	City	City of personnel's duty station	String
stateOrProvince	State / Province	State / province of personnel's duty station	String
county	County	County of personnel's duty station	String
postalCode	Postal Code	Postal code of personnel's duty station	String
femaRegion	FEMA Region	FEMA region associated with the personnel's duty station	String

OneResponder Personnel POC Data Subset Properties

Name	Display Name	Field Description	Type
pocEmailAddress	POC Email Address	Email address for organization's point of contact in OneResponder	String
pocPhoneNumber	POC Phone Number	Phone number for organization's point of contact in OneResponder	String

OneResponder Personnel ArcGIS Data Push

Configuration

Layer access (sharing)

- People with access: Private (authentication required)

Editing settings

- Enable editing: Yes
- Track new features and updates: Yes
- What kind of editing is allowed?: Add, delete, and update (attributes and geometry)

Geometry type:

- Point

Coordinate system:

- Latitude/Longitude (WGS 84/EPGS 4326)

OneResponder Personnel Data Fields

Name	Display Name	Description	Type
id	ID	Unique ID of OneResponder personnel	String
name	Name	Job Title/Position Qualification Name	String
positionType	Type	Position Type	String
rtltId	RTLT ID	RTLT ID for the NIMS or NQS Job Title/Position Qualification	String
rtltUrl	RTLT URL	RTLT URL for the NIMS or NQS Job Title/Position Qualification	String
kind	Kind	Kind as defined for NIMS/NQS resource typing	String
organization	Organization	Primary Organization Name	String
status	Status	Personnel qualification status as qualified or trainee	String
category	Category	Category as defined for NIMS/NQS resource typing	String
streetAddress	Street Address	Street address of personnel's duty station	String
city	City	City of personnel's duty station	String
stateOrProvince	State / Province	State / province of personnel's duty station	String
county	County	County of personnel's duty station	String
postalCode	Postal Code	Postal code of personnel's duty station	String
femaRegion	FEMA Region	FEMA region associated with the personnel's duty station	String
pocEmailAddress	POC Email Address	Email address for organization's point of contact in OneResponder	String
pocPhoneNumber	POC Phone Number	Phone number for organization's point of contact in OneResponder	String
created	Created	The date the record was created in the ArcGIS feature layer through a data push from NRH	Date
lastSynced	Last Synced	The date the record was last updated in the ArcGIS feature layer through a data push from NRH	Date