

# UNDERWRITING GATEWAY



# CLARETO

API Specification v1.0

# Underwriting Gateway

## API SPECIFICATION

### TABLE OF CONTENTS

- OVERVIEW** ..... 1
  - Basic Workflow ..... 2
  - Networking Requirements ..... 2
  - Security ..... 2
  - Additional Headers ..... 3
  - Example Code ..... 3
- API SPECIFICATION** ..... 4
  - INTAKE Method ..... 4
    - Request ..... 4
- PUSH NOTIFICATIONS** ..... 6
  - API Specification ..... 7
    - Exposed URL Endpoint ..... 7
  - Notify ..... 7
- POLLING RETRIEVAL API SPECIFICATION** ..... 9
  - STATUS Method ..... 9
    - Request ..... 9
    - Response ..... 10
  - DOWNLOAD Method ..... 11
    - Request ..... 12
    - Response ..... 12

### OVERVIEW

## Underwriting Gateway

---

Clareto (<http://www.Clareto.com>) has created this specification to allow insurance carriers to submit requests with authorizations and retrieve medical documents for proposed insureds that have granted consent to access their information.

The Underwriting Gateway (UG) is a REST-based web service that allows automated integration of systems. The insurance carrier will start the process by submitting patient information, demographics and a copy of a valid, signed patient consent document. The gateway will then contact health information organizations (HIOs) and retrieve medical documents for the proposed insured. Once the gateway has assembled all documents for the request, they will be transmitted to the insurance carrier or available for download and review by the insurance carrier.

## Basic Workflow

- 1) The insurance carrier's system will call the UG web service's INTAKE method to submit patient information.
- 2) The Underwriting Gateway provides two mechanisms for retrieving resultant medical documents from the INTAKE submission
  - a. Push Notifications – *Preferred method.*
    - i. The insurance carrier hosts a web application capable of receiving a webservice call from the UG to receive medical documents for delivery to their system. In order to use the push mechanism, please contact Clareto support and provide the URL of your notification method. See the PUSH Notification section of this document for more information.
  - b. Polling Retrieval
    - i. The insurance carrier's system will periodically call the UG web service's STATUS method to check the status of a submitted request and to get a list of documents currently available to download.
    - ii. The insurance carrier's system will then call the UG web service's DOWNLOAD method to download each document the STATUS method indicates is ready.

## Networking Requirements

The API is accessible using HTTPS (TLS 1.1 and above) with X509 certificates to encrypt network traffic between systems. Additionally, Clareto may use access control lists (ACLs) to restrict IP addresses from accessing our systems.

In order for insurance carriers to connect to the Underwriting Gateway, they must exchange a X509 certificate with Clareto. If ACLs are used, the customer must also provide an IP address or IP address ranges of their systems that will be calling the Underwriting Gateway so that network routes can be created to allow access.

## Security

In addition to any network security measures imposed, all exposed API methods require callers to supply credentials for authorization. The API uses the standard implementation of the BASIC authentication scheme.

In the request header of all API messages sent to Clareto, the caller must add the following as an example:

**Authorization: Basic Qd1vWxhZGRpbjpvGVuIHNIc2FtZQ==**

Format:

Key: Authorization

Value: Basic [username:password (Base64 encoded)]

The username and password are concatenated with a colon and then Base 64 encoded.

**\*\*Note:** The usernames and passwords used to access the API cannot use a colon, as it is used as a separator in the standard specification.

## Additional Headers

Calling applications should additionally provide the Content-Type Header with the value “application/json” to all calls.

**Content-Type: application/json**

## Example Code

EXAMPLE .NET CODE

```
var webRequest = WebRequest.Create("https://uat.underwriting.medvirginia.com/v1/pad/status");
webRequest.Headers["Authorization"] = "Basic " + Convert.ToBase64String(
    Encoding.Default.GetBytes(username + ":" + password));
webRequest.Headers["Content-Type"] = "application/json";
webRequest.ClientCertificates.Add(myCertificate); //Add for X509 certs
webRequest.Method = "POST";
```

## API SPECIFICATION

### INTAKE Method

The first step in the request process is to create and send an Intake request to the UG. The intake method is responsible for initiating a request in the system and will be performed regardless of whether the push or pull model is being followed.

#### Request

METHOD

POST

URL

<https://underwriting.uat.medvirginia.com:9443/v1/pad/intake>

#### Fields

Field	Data Type	Required	Size/Format	Description
<b>transactionid</b>	string	Y	50 characters Unique  We recommend you use a GUID	Transaction id associated with this patient request. This should be unique and will be used to subsequently retrieve completion status and to download documents.
<b>applicantid</b>	string	Y	50 characters	Policy number for additional tracking
<b>username</b>	string	Y	50 characters	Username from carrier who submitted the request
<b>patient</b>	Object	Y		Contains patient information
<b>patient.ssn</b>	string	Y	9 digits	social security number
<b>patient.dob</b>	date	Y	YYYY-MM-DD	Date of birth
<b>patient.firstname</b>	string	Y	50 characters	Given Name
<b>patient.lastname</b>	string	Y	50 characters	Family Name
<b>patient.middlename</b>	string	N	50 characters	Middle Name
<b>patient.gender</b>	string	Y	1 character, valid values: M=Male, F=Female,	Gender

			U=Undifferentiated,	
<b>patient.telephone</b>	string	N	10 digits	Telephone number
<b>patient.email</b>	string	Y/N	254 characters	May be required by a search participant
<b>patient.addresses</b>	array	Y		List of addresses
<b>patient.addresses.address</b>	string	Y	500 characters	Street address line
<b>patient.addresses.city</b>	string	Y	255 characters	City name
<b>patient.addresses.state</b>	string	Y	2 characters	State code
<b>patient.addresses.zipcode</b>	string	Y	5 digits	Postal code
<b>authdocuments</b>	Array or objects	Y		Authorization documents
<b>authdocumentdata</b>	String	Y	Source document actual: 10 MB max	Base64 encoded document of the signed patient authorization form
<b>authdocumentname</b>	string	Y	50	name of document
<b>authdocumenttype</b>	string	Y	Valid values: PDF= pdf document	Type of document for the signed patient authorization form

**Example**

[POST] <https://underwriting.uat.medvirginia.com:9443/v1/pad/intake>

```
{
  "transactionid": " BFFFDDC5-5732-4B92-AA47-2ECB4CC84FF5",
  "applicantid": " CaseNumber123ABC",
  "username": "adminUser",
  "patient": {
    "ssn": "123456789",
    "dob": "1977-01-01",
    "firstname": "John",
    "lastname": "Doe",
    "middlename": "Test",
    "gender": "M",
    "telephone": "8045551212",
    "email": "support@clareto.com",
    "addresses": [{
```

## Underwriting Gateway

```
"address": "123 somewhere",  
"city": "Richmond",  
"state": "VA",  
"zipcode": "23505"  
}  
  
,  
"authdocuments": [{  
  "authdocumentdata": " ODENCiUIRU.....9GDQo=",  
  "authdocumentname": "test.doc",  
  "authdocumenttype": "PDF"  
}]}
```

## RESPONSE

Field	Data Type	Size/Format	Description
<b>success</b>	bool	True/false	Determine if the call is successful
<b>message</b>	string	2000 characters	A system generated error message

## Example Response

200 OK

```
{  
  "success": true,  
  "message": null  
}
```

## PUSH NOTIFICATIONS

Functionality exists in the Underwriting Gateway (UG) to utilize a Push notification to send documents directly to a customer's system instead of using a polling methodology. The specification allows customer's systems to accept documents directly by hosting a simple web application with an agreed upon contract that the UG gateway will send documents to.

## API Specification

The Underwriting Gateway Push Notification web application utilizes a standard HTTP POST of JSON data to send documents and the status of transactions submitted via the UG Intake process. The insurance carrier must provide the ability to be receive a REST call from Clareto. Due to the sensitivity of the documents being submitted, we require that the network traffic communication be encrypted with TLS 1.2 and X509 certificates. The customer must submit their link to Clareto support so that it can be configured in our system and exchange X509 certificates for security.

Example link (may be determined by underwriter):

<https://underwriter.com/UGIntegration/Notify>

### Exposed URL Endpoint

This method is responsible for accepting status updates and medical documents for a previously submitted PAD intake.

## Notify

This method must be created to receive documents as they become available and/or at the conclusion of the search. The URL is variable and will be determined by the underwriter. Once created, it will be provided to Clareto.

### Fields

Field	Data Type	Size/Format	Description
<b>transactionid</b>	string	50 characters Unique	Transaction id associated with this patient request. This should be unique and will be used to subsequently retrieve completion status and to download documents.
<b>complete</b>	bool	True/false	Determine if the all documents have been retrieved that may be retrieved.
<b>notificationtype</b>	string	50 characters	<b>Complete</b> (when no documents are available), <b>Document</b>



## Underwriting Gateway

			(when the payload is a document)
<b>participants</b>	array		List of responding participants
<b>participants.name</b>	string	100 characters	The name of the responding participant
<b>participants.status</b>	string	50 characters	The status of the participant's request
<b>participants.message</b>	string	2000 characters	A system generated error message
<b>participants.authstatus</b>	string	100 characters	The authorization status
<b>participants.deniedreason</b>	string	50 characters	The reason for the denial
<b>participants.documents</b>	array		List of documents from the participant
<b>participants.documents.id</b>	string	50 characters	A unique document ID
<b>participants.documents.filename</b>	string	250 characters	The document file, including file extension
<b>participants.documents.filesize</b>	int		The size of the file
<b>participants.documents.documenttype</b>	string	100 characters	The document mime type
<b>participants.documents.documentdata</b>	string	Base64 Encoded 40 MB max	Base64 encoded document

### Example

[POST] <https://underwriter.com/UGIntegration/Notification>

```
{
  transactionid: true,
  complete: true,
  notificationtype: "Document"
  participants:[
    {
      name: "Org A",
      status: "Ready",
      message: null,
      authstatus: "Approved",
      deniedreason: "",
      documents :[
        {
          id: "ABCD1234",
```

```
        filename: "test.xml",
        filesize: 112233,
        documenttype: "text/xml",
        documentdata: "Qd1vWxhZGR[---SNIP---]pbjpvGvUHNlc2FtZQ=="
    }],
}],
}
```

## RESPONSE

### Example Response

```
200 OK
```

## POLLING RETRIEVAL API SPECIFICATION

The polling method is used to retrieve documents if the push method is not desirable. After an Intake is performed, the client must perform a Status calls to retrieve the status of the previously initiated Intake process. Once the return value of the Status call indicates one or more documents may be downloaded, a Document call is performed to retrieve the document(s).

### STATUS Method

The status method is used to check the completion status of an Intake request and to see a list of available documents. Polling interval to be agreed upon by both insurance carrier and Clareto at a later date. Transactions will be available for 30 days, unless configured otherwise.

#### Request

METHOD

POST

URL

## Underwriting Gateway

<https://underwriting.uat.medvirginia.com:9443/v1/pad/status>

### FIELDS

Field	Data Type	Size/Format	Description
<b><u>transactionid</u></b>	string	50 characters	Transaction id associated with a previously submitted intake.

### Example Request

[POST] <https://underwriting.uat.medvirginia.com:9443/v1/pad/status>

```
{
  "transactionid": "BFFFDDC5-5732-4B92-AA47-2ECB4CC84FF5",
}
```

### Response

#### FIELDS

Field	Data Type	Size/Format	Description
<b>success</b>	bool	True/false	Determine if the call is successful
<b>message</b>	string	2000 characters	A system generated error message
<b>complete</b>	bool	True/false	Determine if the all documents have been retrieved that may be retrieved.
<b>participants</b>	array		List of responding participants
<b>participants.name</b>	string	100 characters	The name of the responding participant
<b>participants.status</b>	string	50 characters	The status of the participant's request
<b>participants.message</b>	string	2000 characters	A system generated error message
<b>participants.authstatus</b>	string	100 characters	The authorization status
<b>participants.deniedreason</b>	string	50 characters	The reason for the denial
<b>participants.documents</b>	array		List of documents from the participant
<b>participants.documents.documentid</b>	string	50 characters	A unique document ID
<b>participants.documents.filename</b>	string	250 characters	The document file, including file extension
<b>participants.documents.filesize</b>	int		The size of the file

<b>participants.documents.documenttype</b>	string	100 characters	The document mime type
--	--------	----------------	------------------------

### Example Response

200 OK

```
{
  success: true,
  message: null,
  complete: true,
  participants:[
    {
      name: "Org A",
      status: "Ready",
      message: null,
      authstatus: "Approved",
      deniedreason: "",
      documents :[
        {
          documentid: "ABCD1234",
          filename: "test.xml",
          filesize: 112233,
          documenttype: "text/xml"
        }
      ]
    }
  ],
}
```

### DOWNLOAD Method

The document download method is response for downloading a document.

**Request**

METHOD  
POST

URL  
https://underwriting.uat.medvirginia.com:9443/v1/pad/download

**FIELDS**

Field	Data Type	Size/Format	Description
<b>transactionid</b>	string	50 characters	Transaction id associated with a previously submitted intake.
<b>documentid</b>	string	50 characters	The system generated document id

**Example Request**

```
[POST] https://underwriting.uat.medvirginia.com:9443/v1/pad/download  
  
{  
  
  transactionid: "BFFFDDC5-5732-4B92-AA47-2ECB4CC84FF5",  
  documentid: "ABCD1234"  
}
```

**Response**

**FIELDS**

Field	Data Type	Size/Format	Description
<b>success</b>	bool	True/false	Determine if the call is successful
<b>message</b>	string	2000 characters	A system generated error message
<b>documentdata</b>	string	40 MB max	Base64 encoded binary file data

**Example Response**

```
200 OK  
  
{  
  
  success: true,  
  message: "",  
  documentdata: "Qd1vWxhZGR[---SNIP---]pbjpvGvUHNlc2FtZQ=="
```

}