

Inland Revenue

## Build Pack: Return Service— Goods and Services Tax

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## 1 Overview

### 1.1 This solution

Inland Revenue has a suite of digital services available for consumption by our service providers that support efficient, electronic business interactions with Inland Revenue. The GST Return service described in this build pack document forms part of a suite of Gateway Services.

This is a stand-alone document intended to provide the technical details required to support the end-to-end onboarding Gateway Services. It describes the architecture of the technical solution, schemas, end points, sample payloads to use in non-production environments, and its interaction with other build packs that cover different aspects of Gateway Services.

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Before continuing, please consult  
[www.ird.govt.nz/digital-service-providers/services-catalogue](http://www.ird.govt.nz/digital-service-providers/services-catalogue)  
for business-level context, use cases and links to relevant policy.  
The information available here explains how to integrate with  
Inland Revenue's services.

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### 1.2 Intended audience

The solution outlined in this document is intended to be used by technical teams and development staff. It describes the technical interactions, including responses, provided by the GST Return service. The reader is assumed to have a suitable level of technical knowledge to comprehend the information provided.

### 1.3 Related services

The following application programming interfaces (APIs) complement this Gateway Service. Instructions on where to find the build packs for these services can be found in [section 4](#) of this document.

#### 1.3.1 Identity and Access Services (required)

The Identity and Access Services (IAS) are used to authenticate access. Authentication tokens will need to be retrieved via IAS prior to making calls to the Return Service.

#### 1.3.2 Intermediation Service (recommended)

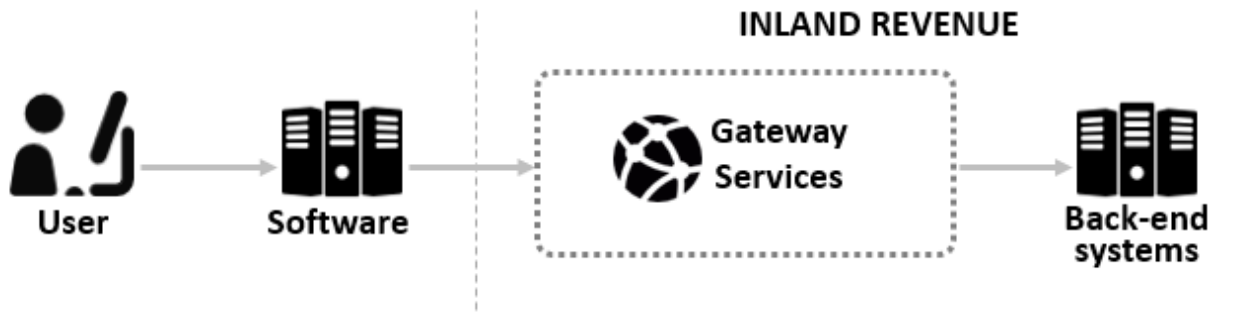
The Intermediation Service build pack supports software providers with the process of linking tax intermediaries (such as tax agents) to their clients so intermediaries can act on their behalf through the Return service.

## 2 Solution design

### 2.1 Architecture

Inland Revenue's Gateway Services suite is used by approved service providers to facilitate everything from registration activities, filing returns, making payments and other service offerings to allow customers to interact with Inland Revenue.

The diagram below illustrates the flow of data from the user to Inland Revenue.



The WSDLs for the Gateway Services define an 'any' XML request and response structure, which then relies on a group of XSDs to define the data structure of those requests and responses. Each request and response type will define a lower, 'wrapper' element.

Any malformed XML will instantly be rejected by the Gateway Services prior to any schema validation.

### 2.2 Service scope

The GST Return Service supports the following operations:

- **File:** This service is used to submit a return to Inland Revenue for a customer.
- **Prepop:** This service is used by software to provide figures to assist in the calculation and display of return information prior to submission.
- **RetrieveStatus:** This service is used by software to return a status for a particular return.
- **RetrieveReturn:** This service retrieves a previously submitted return and the values associated to that return.
- **RetrieveFilingObligation:** This service retrieves the expectations for a customer to file a return.

## 2.3 Messaging

The Return Service is a SOAP-based web service. All SOAP messages require a SOAP header and a SOAP body containing a structured XML payload. Correct values can be found in the relevant WSDL, the link to which is provided in [section 4](#) of this document.

The Gateway Services allow the consumption of any structured XML payload but will be validated against the Inland Revenue-published XSDs.

This is a late binding validation, performed after authentication has been reviewed. The message structure of these services is a simple request/response. The XML request will be checked for well-formed XML before the schema validation. Responses to these requests will be in XML format as well and will be defined in the same schema that define the requests.

Any XML submissions in the SOAP body that do not meet the provided schema will not be accepted by the Gateway Services. Incorrect namespaces will also fail validation against the published schema.

Note that the Gateway Services use the SOAP version 1.2 protocol, and the SOAP service contract is published using WSDL version 1.1.

### Example SOAP request structure

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:ret="https://services.ird.govt.nz/GWS>Returns/"
  xmlns:prep="https://services.ird.govt.nz/GWS>Returns/:types/PrepopRequest"
  xmlns:a="http://www.w3.org/2005/08/addressing">
  <soap:Header>
    <a:Action>https://services.ird.govt.nz/GWS>Returns/Return/Operation</a:Action>
  </soap:Header>
  <soap:Body>
    <ret:Prepop>
      <ret:ReturnPrepopRequestMsg>
        <prep:PrepopRequestWrapper>
          <rc:formInfoRequest xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:type="rc:formInfoRequest">
            <...PrepopFields...>
          </rc:formInfoRequest>
        </prep:PrepopRequestWrapper>
      </ret:ReturnPrepopRequestMsg>
    </ret:Prepop>
  </soap:Body>
</soap:Envelope>
```

## Example SOAP response structure

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action s:mustUnderstand="1">
      https://services.ird.govt.nz/GWS>Returns/Return/FileResponse
    </a:Action>
  </s:Header>
  <s:Body>
    <FileResponse xmlns="https://services.ird.govt.nz/GWS>Returns/">
      <FileResult xmlns:b="https://services.ird.govt.nz/GWS>Returns/:types/FileResponse"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:FileResponseWrapper>
          <fileResponse xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1">
            <statusMessage>
              <statusCode>0</statusCode>
              <errorMessage/>
            </statusMessage>
          </fileResponse>
        </b:FileResponseWrapper>
      </FileResult>
    </FileResponse>
  </s:Body>
</s:Envelope>
```

## 2.4 Security

### 2.4.1 Information classification

The information exchanged via the Return Service has an information classification of **"IN CONFIDENCE"**. The following security standards therefore apply.

### 2.4.2 Transport Layer Security and certificates

Mutual Transport Layer Security (TLS) is implemented for this service. This requires the use of a publicly-issued X.509 certificate from one of the trusted certificate authorities listed further below in this section. (Note that Inland Revenue does not issue certificates to external vendors for web service security implementations.)

Inland Revenue has the following requirements for accepting public X.509 keys:

- ECDSA (preferred) key length: 384 bits (or RSA key length: 2048 bits)
- Self-signed certificates are not accepted
- Certificates issued by private/internal certificate authorities are not accepted
- The same certificate cannot be used for the Test and Production environments.

Inland Revenue has adopted a trust-based authentication model and will only accept certificates that contain a pre-approved subject common name and have been issued by one of the following root certificate authorities, trusted and approved by Inland Revenue:

- [Amazon](#)
- [Comodo](#)
- [DigiCert](#)
- [Entrust](#)
- [GeoTrust](#)
- [Let's Encrypt](#)
- [Sectigo](#)
- [Thawte](#).

Inland Revenue expects Digital Service Providers to use their Inland Revenue Developer Portal account to create their common name for both Test and Production certificates. Please refer to the [Digital Service Providers](#) pages on the Inland Revenue website or contact your Inland Revenue onboarding representative at [GatewayServices@ird.govt.nz](mailto:GatewayServices@ird.govt.nz) for further details.

### 2.4.3 Ciphers

While Inland Revenue currently supports TLS1.2, it is migrating to TLS1.3 which specifies a much smaller and more prescriptive suite of ciphers. As Inland Revenue's security gateways do not currently support the CCM mode (*counter with cipher block chaining message authentication code*) of operation, only the following ciphers will be supported over TLS1.3:

Status	TLS1.3 ciphers
<b>Supported now and in the future</b>	<ul style="list-style-type: none"> <li>• TLS_AES_128_GCM_SHA256</li> <li>• TLS_AES_256_GCM_SHA384</li> <li>• TLS_CHACHA20_POLY1305_SHA256</li> </ul>

The following TLS1.2 ciphers are currently supported but some will be deprecated as below:

Status	TLS1.2 ciphers
<b>Supported now and in the future</b>	<ul style="list-style-type: none"> <li>• TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384</li> <li>• TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256</li> </ul>
<b>Supported now but will be deprecated on 31 March 2022</b>	<ul style="list-style-type: none"> <li>• TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA</li> <li>• TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA</li> <li>• TLS_RSA_WITH_AES_128_CBC_SHA</li> <li>• TLS_RSA_WITH_AES_256_CBC_SHA</li> <li>• TLS_DHE_RSA_WITH_AES_128_CBC_SHA</li> <li>• TLS_DHE_RSA_WITH_AES_128_CBC_SHA256</li> <li>• TLS_DHE_RSA_WITH_AES_256_CBC_SHA</li> <li>• TLS_DHE_RSA_WITH_AES_256_CBC_SHA256</li> <li>• TLS_DHE_RSA_WITH_AES_128_GCM_SHA256</li> <li>• TLS_DHE_RSA_WITH_AES_256_GCM_SHA384</li> </ul>

Status	TLS1.2 ciphers
<b>Supported now but will be deprecated on 31 December 2022</b>	<ul style="list-style-type: none"> <li>• TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256</li> <li>• TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384</li> <li>• TLS_RSA_WITH_AES_128_CBC_SHA256</li> <li>• TLS_RSA_WITH_AES_256_CBC_SHA256</li> <li>• TLS_RSA_WITH_AES_128_GCM_SHA256</li> <li>• TLS_RSA_WITH_AES_256_GCM_SHA384</li> </ul>

#### 2.4.4 End points

There are two end points, which are summarised in the bullet points below (the table immediately afterwards provides more detail):

1. There is an end point to which service providers' centralised **cloud** locations can connect. This will require X.509 certificates for mutual TLS with an agreed common name, however certificates no longer need to be exchanged with Inland Revenue. On the cloud end point, Inland Revenue has controls to shield service providers from issues caused by heavy usage from other providers.
2. For service providers connecting from **desktops/native apps** that are unable to securely store certificates and access tokens. There is a separate end point that does not use mutual TLS and therefore does not require certificates. On the desktop end point, Inland Revenue has less ability to shield consumers of the service from heavy usage by others.

	End point for cloud-based connections	End point for desktop connections
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Primary preferred end point to connect to from service providers for Gateway Services</li> </ul>	<ul style="list-style-type: none"> <li>• Additional transitory end point provided to facilitate connecting from desktops which might be high volumes of sources addresses, transient DHCP addresses, not realistically associated with client-side TLS certificates, not individually onboarded to set up certificate trust</li> </ul>
<b>Client application type</b>	<ul style="list-style-type: none"> <li>• Cloud applications</li> </ul>	<ul style="list-style-type: none"> <li>• Desktop/native applications</li> <li>• For connecting from multiple decentralised clients</li> </ul>
<b>Constraints</b>	<ul style="list-style-type: none"> <li>• Only for source locations with client-side TLS certificates</li> <li>• On the cloud end point Inland Revenue has controls to shield service providers from issues caused by heavy usage from other providers</li> </ul>	<ul style="list-style-type: none"> <li>• Less scalable</li> <li>• Subject to tighter security controls</li> <li>• On the desktop end point Inland Revenue has less ability to shield consumers of the service from heavy usage by others</li> <li>• OAuth2 refresh tokens will not be offered to desktop clients</li> </ul>



	End point for cloud-based connections	End point for desktop connections
<b>Mutual TLS</b>	<ul style="list-style-type: none"> <li>Inland Revenue explicitly trusts the certificate the service provider associates with the TLS connection as client for Mutual TLS connections and uses it to identify the service provider in conjunction with the web service identification below</li> </ul>	<ul style="list-style-type: none"> <li>Server-side certificates only</li> </ul>
<b>Minimum TLS version</b>	<ul style="list-style-type: none"> <li>1.2</li> </ul>	<ul style="list-style-type: none"> <li>1.2</li> </ul>
<b>URL</b>	<ul style="list-style-type: none"> <li>Contains .../gateway/..</li> </ul>	<ul style="list-style-type: none"> <li>Contains .../gateway2/..</li> </ul>
<b>Port</b>	<ul style="list-style-type: none"> <li>4046</li> </ul>	<ul style="list-style-type: none"> <li>443 (Default https port)</li> </ul>
<b>Web service consumer identification</b>	<ul style="list-style-type: none"> <li>To be identified in web service calls—each cloud application will be given client_id/client_secret credentials during onboarding to allow it to call this end point</li> </ul>	<ul style="list-style-type: none"> <li>Desktop clients will be given client_id/client_secret credentials in the same manner as cloud application clients. However, desktop clients will not be able to redeem refresh tokens to obtain a new OAuth token when it expires.</li> </ul>
<b>Firewalling in production</b>	<ul style="list-style-type: none"> <li>No IP address restrictions</li> <li>Access limited by certificate enrolment</li> </ul>	<ul style="list-style-type: none"> <li>No IP address restrictions</li> </ul>
<b>Firewalling in non-production environments</b>	<ul style="list-style-type: none"> <li>No IP address restrictions</li> <li>Access limited by certificate enrolment</li> </ul>	<ul style="list-style-type: none"> <li>Firewalled—IP whitelisting needed</li> </ul>

---

### 2.4.5 Authentication and authorisation

Authentication and authorisation are the mechanisms by which the consumer of the service is identified, and their access rights enforced. The Return Service uses the standard OAuth2 authorisation code flow. For instructions on how to acquire an OAuth access token, and the properties of this token (eg its expiry and refresh parameters) please refer to the Identity and Access build pack.

Authentication and authorisation are described in terms of two parties:

- **Consumer**—this is the party under whose identity the interaction is being transacted (the party who has been authenticated)
- **Resource**—this is the data entity/object being accessed (eg created, read, updated or deleted) via the service.

When using OAuth, the consumer is authenticated using their Inland Revenue myIR credentials and their access is authorised using the same access rights as myIR. For example, if a myIR user does not have permission to file a return online, they will not be able to file a return via Gateway Services either. This applies to users who are granted access as staff inside an organisation or as staff in a tax agency.

The following steps are applied by the Gateway Services when authorising access by the consumer to a resource:

1. If the consumer is the resource owner then access to the resource is authorised (ie the consumer is authorised to manage their own affairs).
2. Otherwise, if the consumer's myIR credential has been granted access to the resource, with the appropriate level of access, then access is authorised.
3. Otherwise, if the consumer is an intermediary of an appropriate type who has been delegated access by being linked to the resource, with the appropriate level of access, then access is authorised.
4. Otherwise access is denied.

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## 3 Operations

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### IMPORTANT

The schemas and WSDLs listed here are subject to change.

For the authoritative definitions, please visit

[www.ird.govt.nz/digital-service-providers/services-catalogue](http://www.ird.govt.nz/digital-service-providers/services-catalogue)

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The structures of all Gateway Service operations are intended to produce the most efficient requests and responses. Any common structures and fields will be used across many schemas and tax types through an intentional inheritance method. The section below describes the structure of each operation and the scenarios in which certain fields will be used in XML requests and responses.

This section contains the following schema aliases:

- Cmn: Common.v1.xsd
- Rc: ReturnCommon.v1.xsd
- R: returnSpecific.xsd (for example ReturnGST.v1.xsd)

NOTE: Some requests and responses live in ReturnCommon.v1.xsd but can still be generated from an inheriting return-specific XSD. This could mean the schemaLocation could be different, depending on where the payload was generated from. Any method of generating these payloads is accepted. This applies to the fileResponse XML directly below.

The response structure for all File requests will use the two default service response fields: **statusCode** and **errorMessage**. The identifier for this XML is fileResponse in the ReturnCommon namespace.

The response structure for all File requests will have the **gatewayId** field populated. The gatewayId is a unique identifier passed back in the responseBody, assuming the response code for the request is zero (refer to [Chapter 5 Responses](#)). The gatewayId should be recorded and can be used by technical teams for troubleshooting. The gatewayId will not appear in search results when searching myIR. The gatewayId is also not available to Inland Revenue front-line staff (such as in the telephone contact centre) to search on.

The response structure for a successful File request (one where the statusCode is 0) will also contain a populated **submissionKey** field. This submission key can be used in the Document Service to upload and retrieve documents for this return. When a return is amended, the submission key will not change.

**Note:** Due to processing times, a document cannot be submitted through the Document Service with a submission key while the status of the return is 'Submitted'.

For example:

```
<fileResponse xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <StatusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1">
    <statusCode>0</statusCode>
    <errorMessage></errorMessage>
  </StatusMessage>
  <responseBody>
    <gatewayId>0000 002J ZJ5N 6</gatewayId>
    <submissionKey>2027618304</submissionKey>
  </responseBody>
</fileResponse>
```

All operations for the Return service will contain two standard header fields:  
**softwareProviderData** and **identifier**.

The **identifier** field is common across all Gateway Services but refers to different parties in different services. In all cases it is the party with delegated permissions to whom an OAuth token is provided. If the value cannot be resolved to a known context, or if it can but the provided OAuth token does not have the necessary delegated permissions then the error code 4 "unauthorised delegation" is returned. Please refer to individual operations for the nature of the identifier expected in this parameter in any given context.

For example:

```
<cmn:softwareProviderData>
  <cmn:softwareProvider>SoftwareProvider</cmn:softwareProvider>
  <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
  <cmn:softwareRelease>v1</cmn:softwareRelease>
</cmn:softwareProviderData>
<cmn:identifier IdentifierValueType="ACCIRD">012345678</cmn:identifier>
<cmn:accountType>GST</cmn:accountType>
```

Field	Description
<b>softwareProvider</b>	The company that developed the software
<b>softwarePlatform</b>	The field value will be provided by Inland Revenue during the onboarding process
<b>softwareRelease</b>	The version of the software package
<b>IdentifierValueType</b>	The ID type being submitted. This can be ACCIRD, NZBN or ACC. The value submitted for this field should contain only digits, with no dashes (with the exception of the ACC field, which may contain letters to identify the account type). IRD Numbers that are eight digits must be padded with a leading zero.
<b>identifier</b>	The value submitted for this field should contain only digits, with no dashes. IRD Numbers that are eight digits must be padded with a leading zero.
<b>accountType</b>	The account type being submitted (GST).

Proper use:

- The only softwareProviderData fields users will be able to input are the ones that were provided to Inland Revenue at the time of on-boarding.
- The identifier is that of the taxpayer on whose behalf the operations are being performed.

Example scenario:

- Third party with IRD 898989898 submits for client IRD 121212121
  - Third party calls /Returns/File/ with  
`<cmn:identifier IdentifierValueType="ACCIRD">121212121</cmn:identifier>`

### 3.1 File

The File operation will be used to submit GST returns.

Base structure:

```
<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
        <...tax specific fields...>
      </rc:formFields>
    </rc:fileBody>
  </r:fileRequest>
```

Field	Description
<b>fileHeader</b>	The standard header for File requests
<b>fileBody</b>	The standard body structure for File requests
<b>standardFields</b>	A group of standard fields
<b>formFields</b>	A wrapper that will contain tax form-specific fields

## <FileHeader> structure:

```
<r:fileRequest namespaces...>
  <rc:fileHeader>
    <cmn:softwareProviderData>
      <cmn:softwareProvider>Software1</cmn:softwareProvider>
      <cmn:softwarePlatform>Software1Package</cmn:softwarePlatform>
      <cmn:softwareRelease>v1</cmn:softwareRelease>
    </cmn:softwareProviderData>
    <cmn:identifier IdentifierValueType="ACCIRD">012345678</cmn:identifier>
    <cmn:accountType>GST</cmn:accountType>
    <rc:periodEndDate>2017-03-31</rc:periodEndDate>
    <rc:majorFormType>GST</rc:majorFormType>
    <rc:minorFormType>101A</rc:minorFormType>
  </rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
        <...tax specific fields...>
      </rc:formFields>
    </rc:fileBody>
  </r:fileRequest>
```

Field	Requirement	Description
<b>periodEndDate</b>	Required	The period in which a return exists or the period for which it is being submitted.
<b>majorFormType</b>	Required	The form type (GST)
<b>minorFormType</b>	Required	The form number to the major form type, for example 101A vs 103G.

### Proper uses:

- The major and minor form types will be used together to determine the submission form.

### Example scenario:

- Attempting to submit a GST103H for the 2018-January period.
 

```
<cmn:accountType>GST</cmn:accountType>
<rc:periodEndDate>2018-01-31</rc:periodEndDate>
<rc:majorFormType>GST</rc:majorFormType>
<rc:minorFormType>103H</rc:minorFormType>
```

**<FileBody>** structure:

```
<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
        <...tax specific fields...>
      </rc:formFields>
    </rc:fileBody>
  </r:fileRequest>
```

FileBody is simply the wrapper of standardFields and formFields. The standard fields will be constant in every fileBody, but the formFields will be overridden by each tax type.

**<StandardFields>** structure:

```
<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:isNilReturn>>false</rc:isNilReturn>
      <rc:isFinalReturn>>false</rc:isFinalReturn>
      <rc:amendmentRequest>
        <rc:isAmended>>false</rc:isAmended>
        <rc:amendReason></rc:amendReason>
        <rc:amendDetails></rc:amendReason>
      </rc:amendmentRequest>
      <rc:creditTransferRequest>
        <rc:transferIRD></rc:transferIRD>
        <rc:transferAccountType></rc:transferAccountType>
        <rc:transferFilingPeriod></rc:transferFilingPeriod>
        <rc:associatedCustomer></rc:associatedCustomer>
        <rc:transferAmount></rc:transferAmount>
      </rc:creditTransferRequest>
    </rc:standardFields>
    <rc:formFields xsi:type="r:FormFieldsType">
      <...tax specific fields...>
    </rc:formFields>
  </rc:fileBody>
</r:fileRequest>
```

Field	Requirement	Description
<b>isNilReturn</b>	Required	This allows for a nil return to be submitted
<b>isFinalReturn</b>	Required	This field notes that the account is ready to be closed after this filing period.
<b>isAmended</b>	Required	This allows for a return to be filed as an amendment. <b>NOTE:</b> If isAmended=true then amendReason and amendDetails are required. Otherwise empty values are required in the amendReason and amendDetails fields.

Field	Requirement	Description
<b>amendReason</b>	Conditional	This is attached to the amendmentRequest as the reason for the amendment. This can be either KEY (incorrect amount), MATH (calculation error), OTHER, or TRNSPO (transposition error).
<b>amendDetails</b>	Conditional	This allows for any further details on the amendmentRequest.
<b>creditTransferRequest</b>	Optional	These fields can be added to transfer the refund to another START account. Any number of credit transfers from 0 to 20 can be submitted for every file operation.

Proper uses:

- Most standard submissions will require isNilReturn to be *false*, isFinalReturn to be *false*, and isAmended to be *false*.

Example scenario:

- Attempting to amend a GST return due to lack of information from client.

```

<rc:isNilReturn>false</rc:isNilReturn>
<rc:isFinalReturn>false</rc:isFinalReturn>
<rc:isAmended>true</rc:isAmended>
<rc:amendReason>KEY</rc:amendReason>
<rc:amendDetails>Client withheld receipts of large business costs purchased during this GST
filing period</rc:amendDetails>
  
```

For GST, the formFields consists of three groups: gstSpecificFields, provSpecificFields, and transitionalFields.

**<FormFields>** structure (for GST):

```

<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
        <r:gstSpecificFields/>
        <r:provSpecificFields/>
        <r:transitionalFields/>
      </rc:formFields>
    </rc:fileBody>
  </r:fileRequest>
  
```

Field	Requirement	Description
<b>gstSpecificFields</b>	Required	The fields in the group are standard GST101 fields
<b>provSpecificFields</b>	Optional	The provisional tax fields required for any GST103 form
<b>transitionalFields</b>	Optional	Additional fields used for a transitional period return



## <gstSpecificFields> structure:

```

<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
    <rc:formFields xsi:type="r:FormFieldsType">
      <r:gstSpecificFields>
        <r:totalSales>61223.50</r:totalSales>
        <r:zeroRatedSupplies>2210.55</r:zeroRatedSupplies>
        <r:debitAdjustments>
          <r:privateUsePeriodAdjustment>123.45</r:privateUsePeriodAdjustment>
          <r:privateUseOneOff>123.45</r:privateUseOneOff>
          <r:assetsAfterCease>123.45</r:assetsAfterCease>
          <r:entertainment>123.45</r:entertainment>
          <r:changeAccountingBasis>123.45</r:changeAccountingBasis>
          <r:exemptSupplies>123.45</r:exemptSupplies>
          <r:currentRateGSTAdjustments>123.45</r:currentRateGSTAdjustments>
          <r:other>123.45</r:other>
          ...OR....
          <r:totalDebitAdjustment>321.45</r:totalDebitAdjustment>
        <r:totalExpenses>6001.20</r:totalExpenses>
        <r:creditAdjustments>
          <r:useOfPrivateGoods>123.45</r:useOfPrivateGoods>
          <r:privateAssetsForBusiness>123.45</r:privateAssetsForBusiness>
          <r:changeAccountingBasis>123.45</r:changeAccountingBasis>
          <r:currentRateGSTCredits>123.45</r:currentRateGSTCredits>
          <r:other>123.45</r:other>
          ...OR...
          <r:totalCreditAdjustment>321.45</r:totalCreditAdjustment>
        <r:totalGST>123456.78</r:totalGST>
      </r:gstSpecificFields>
    </rc:formFields>
  </rc:fileBody>
</r:fileRequest>
  
```

Field	Requirement	Description
<b>totalSales</b>	Required	Total sales and income for the period (GST and zero-rated supplies)
<b>zeroRatedSupplies</b>	Required	Zero-rated supplies included in totalSales
<b>debitAdjustment</b>	Required	Calculation fields for determining debit adjustments OR the debit adjustment total
<b>totalExpenses</b>	Required	Total purchases and expenses (including GST) for which tax invoicing requirements have been met
<b>creditAdjustment</b>	Required	Calculation fields for determining credit adjustments OR the debit adjustment total
<b>totalGST</b>	Required	Total GST collected on sales and income

## <transitionalFields> structure:

```

<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
        <r:gstSpecificFields/>
        <r:transitionalFields>
          <r:totalSales>1324</r:totalSales>
          <r:zeroRatedSupplies>123</r:zeroRatedSupplies>
          <r:debitAdjustments>
            <r:privateUsePeriodAdjustment></r:privateUsePeriodAdjustment>
            <r:privateUseOneOff></r:privateUseOneOff>
            <r:assetsAfterCease></r:assetsAfterCease>
            <r:entertainment></r:entertainment>
            <r:changeAccountingBasis></r:changeAccountingBasis>
            <r:exemptSupplies></r:exemptSupplies>
            <r:currentRateGSTAdjustments></r:currentRateGSTAdjustments>
            <r:other></r:other>
            ...OR....
            <r:totalDebitAdjustment>321.45</r:totalDebitAdjustment>
          </r:debitAdjustments>
          <r:totalExpenses>123</r:totalExpenses>
          <r:creditAdjustments>
            <r:useOfPrivateGoods></r:useOfPrivateGoods>
            <r:privateAssetsForBusiness></r:privateAssetsForBusiness>
            <r:changeAccountingBasis></r:changeAccountingBasis>
            <r:currentRateGSTCredits></r:currentRateGSTCredits>
            <r:other></r:other>
            ...OR...
            <r:totalCreditAdjustment>321.45</r:totalCreditAdjustment>
          </r:creditAdjustments>
          <r:totalGST>123</r:totalGST>
          <r:totalTransitionalAndStandardGST></r:totalTransitionalAndStandardGST>
        </r:transitionalFields>
      </rc:formFields>
    </rc:fileBody>
  </r:fileRequest>

```

Field	Description
<b>totalTransitionalAndStandardGST</b>	This field is the sum of the totalGST fields from the standard GST and the transitional GST sections.

### Proper uses:

- The transitionalFields should only be used in the case of a national GST ratio change. If the ratio changes in the middle of a filing period, the next return submission would include these transitional fields. These fields are a copy of the GST-specific fields with the totalTransitionalAndStandardGST field at the end.

<provSpecificFields> structure:

```
<r:fileRequest namespaces...>
  <rc:fileHeader>...</rc:fileHeader>
  <rc:fileBody>
    <rc:standardFields>
    <rc:formFields xsi:type="r:FormFieldsType">
      <r:gstSpecificFields/>
      <r:transitionalFields/>
      <r:provSpecificFields>
        <r:ratioTaxPercent></r:ratioTaxPercent>
        <r:ratioLastMonthTotalSales></r:ratioLastMonthTotalSales>
        <r:ratioMultiBranchTotalSales></r:ratioMultiBranchTotalSales>
        <r:ratioAssetAdjustment></r:ratioAssetAdjustment>
        <r:provTaxInstalmentAmount>123.45</r:provTaxInstalmentAmount>
        <r:instalmentDueOrVoluntaryPayment></r:instalmentDueOrVoluntaryPayment>
        <r:refundTransferAmountToProv></r:refundTransferAmountToProv>
        <r:totalGSTandProvToPay>12345.56</r:totalGSTandProvToPay>
      </r:provSpecificFields>
    </rc:formFields>
  </rc:fileBody>
</r:fileRequest>
```

Fields	Requirement	Description
<b>ratioTaxPercent</b>	Optional	Ratio percentage
<b>ratioLastMonthTotalSales</b>	Optional	Total sales and income for the previous month's return
<b>ratioMultiBranchTotalSales</b>	Optional	If user has more than one branch, total sales and income for all other branches/divisions
<b>ratioAssetAdjustment</b>	Optional	If an asset has been sold in the last two months, an adjustment for the asset's worth can be made in this field
<b>provTaxInstalmentAmount</b>	Required	The ratio percentage multiplied by the difference between the asset's adjustment and total sales and income
<b>instalmentDueOrVoluntaryPayment</b>	Optional	If the user makes a voluntary payment, the amount can be specified in this field
<b>refundTransferAmountToProv</b>	Optional	If the user is expecting a refund, an amount to be transferred to provisional tax can be specified in this field
<b>totalGSTandProvToPay</b>	Required	The combination of the provisional tax instalment due and either a GST refund or GST to pay

When submitting the GST101 form the optional provisional fields should be left blank, unless submitting a GST103 form.

## 3.2 Prepop

The Prepop operation will be used to acquire a specific subset of fields for a given return. This operation uses the `<retrieveFormInfoRequest>` structure for the request which will have a unique response across tax types.

`<retrieveFormInfoRequest>` structure:

```
<rc:formInfoRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v1"
xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <cmn:softwareProviderData>
    <cmn:softwareProvider>SoftwareProvider</cmn:softwareProvider>
    <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
    <cmn:softwareRelease>V1.1</cmn:softwareRelease>
  </cmn:softwareProviderData>
  <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
  <cmn:accountType>GST</cmn:accountType>
  <rc:periodEndDate>2018-01-31</rc:periodEndDate>
  <rc:majorFormType>GST</rc:majorFormType>
</rc:retrieveFormInfoRequest>
```

If the requested customer qualifies for provisional tax, then the XML response will include provisional data—otherwise it will only include standard GST fields.

`<prepopResponse>` structure:

```
<prepopResponse xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1">
    <statusCode>0</statusCode>
    <errorMessage>Success</errorMessage>
  </statusMessage>
  <responseBody xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnGST.v1"
    xsi:type="r:PrepopResponseBodyType">
    <r:accountId>123456798GST001</r:accountId>
    <r:periodEndDate>2018-01-31</r:periodEndDate>
    <r:filingFrequency>Two monthly – periods ending odd months</r:filingFrequency>
    <r:dueDate>2018-02-28</r:dueDate>
    <r:expectedMinorFormType>101A</r:expectedMinorFormType>
    <r:multiBranch>>false</r:multiBranch>
    <r:provFiler>true</r:provFiler>
    <r:provOption>ratio</r:provOption>
    <r:compulsory>true</r:compulsory>
    <r:provTaxInstalmentAmount>123</r:provTaxInstalmentAmount>
    <r:ratioTaxPercent>40.1</r:ratioTaxPercent>
    <r:hospiceFiler>true</r:hospiceFiler>
    <r:hospiceType>HOSPTL</r:hospiceType>
  </responseBody>
</prepopResponse>
```

Field	Requirement	Description
<b>accountId</b>	Required	The account ID for the account
<b>periodEndDate</b>	Required	End date for the filing period
<b>filingFrequency</b>	Required	The filing frequency for this account
<b>dueDate</b>	Required	The due date for the return
<b>multiBranch</b>	Required	If the customer is a multi-branch filer
<b>expectedMinorFormType</b>	Required	The minor form type the customer is expected to file
<b>provFiler</b>	Required	If the customer is a provisional filer
<b>provOption</b>	Optional	The provisional type of the customer
<b>compulsory</b>	Optional	If the customer is a compulsory filer
<b>provTaxInstalmentAmount</b>	Optional	The instalment amount for provisional filers
<b>ratioTaxPercent</b>	Optional	The tax percentage if the customer is a ratio provisional filer
<b>hospiceFiler</b>	Optional	If the customer is a hospice filer
<b>hospiceType</b>	Optional	The hospice type of the customer

The Prepop operation will be used to acquire a specific subset of GST fields for a return. If the requested customer qualifies for provisional tax, then the XML response will include provisional data—otherwise it will only include standard GST fields. If there is no data for a specific field, that field will not be returned in the Prepop response (MinOccurs = 0).

### 3.3 RetrieveStatus

The RetrieveStatus operation will allow the status of a given return to be queried.

A **submissionKey** field will be included in the response structure for all GST returns, regardless of filing channel (paper, myIR, etc). This submissionKey can be used in the Document Service, but the status of the return cannot be 'Submitted'.

Note: For returns **not** submitted through the GWS Return Service, the submissionKey may change over time, so it is recommended to use the RetrieveStatus operation before submitting a document through the Document Service. Again, this is only for returns filed through another channel, such as myIR.

**<retrieveFormInfoRequest>** structure:

```
<rc:formInfoRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v1"
  xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnGST.v1">
  <cmn:softwareProviderData>
    <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
    <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
    <cmn:softwareRelease>V1.1</cmn:softwareRelease>
  </cmn:softwareProviderData>
  <cmn:identifier IdentifierValueType="NZBN">9412345678900</cmn:identifier>
  <cmn:accountType>GST</cmn:accountType>
  <rc:periodEndDate>2018-01-31</rc:periodEndDate>
  <rc:majorFormType>GST</rc:majorFormType>
</rc:formInfoRequest>
```

**<retrieveStatusResponse>** structure:

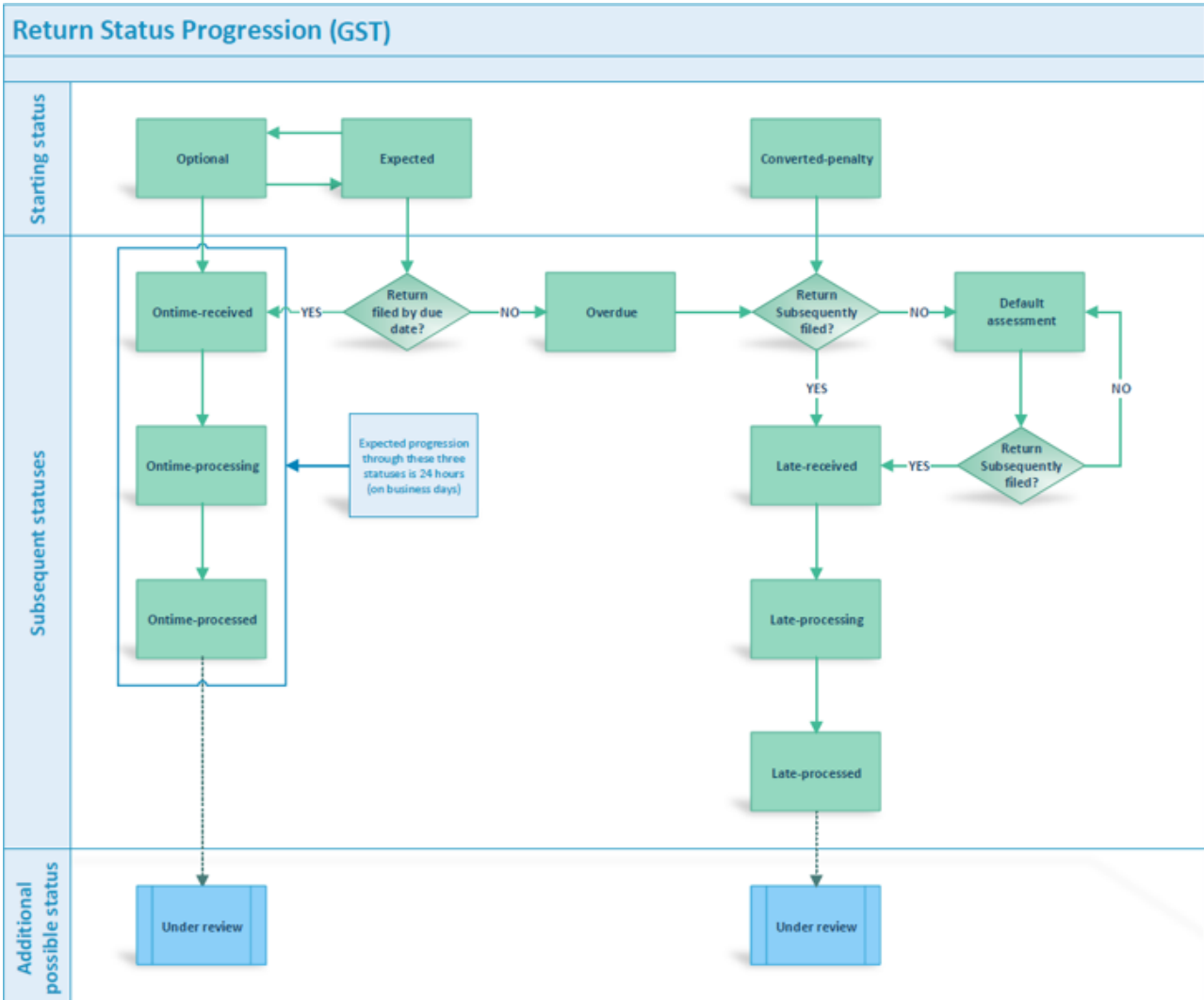
```
<retrieveStatusResponse xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1">
    <statusCode>0</statusCode>
    <errorMessage>Success</errorMessage>
  </statusMessage>
  <responseBody>
    <status>Processed</status>
    <submissionKey>2027618304</submissionKey>
  </responseBody>
</statusResponse>
```

Status	Code	Description
<b>Amended</b>	AMN	This status is displayed when the return is amended
<b>Under review</b>	REV	This status is displayed when the return is included in audit
<b>Default assessment</b>	EST	This status is displayed when the return is a default assessment
<b>Converted-penalty</b>	CONV	This status is displayed when the return was not filed but created in the conversion process to house a late file penalty

Status	Code	Description
<b>Expected</b>	EXP	This status is displayed when the return has generated return expectation
<b>Processing</b>	PRCG	This status is displayed when the return is processing
<b>Late-processing</b>	LPRCG	This status is displayed when the return is received late and processing
<b>Late-processed</b>	LPRCD	This status is displayed when the return is processed late
<b>Late-received</b>	LRCVD	This status is displayed when the return is received late
<b>New</b>	NEW	This status is displayed when the return is not processed
<b>Optional</b>	NRQD	This status is displayed when the return is not required to be filed, but the customer may choose to file anyway
<b>Ontime-processing</b>	OPRCG	This status is displayed when the return is received on time and processing
<b>Ontime-processed</b>	OPRCD	This status is displayed when the return is processed on time
<b>Ontime-received</b>	ORCVD	This status is displayed when the return is received on time
<b>Overdue</b>	OVERDU	This status is displayed when the return is overdue
<b>Submitted</b>	SUB	This status is displayed when the return is submitted by the customer
<b>Posted</b>	POST	This status is displayed when the return is posted
<b>Processed</b>	PRCD	This status is displayed when the return is processed

**NOTE:** Once a return has been filed it can take up to 24 hours for the status to change from 'submitted'.

The diagram on the following page outlines the process flow of the statuses listed in the table above:





### 3.4 RetrieveReturn

The retrieveReturn operation allows for any previously-submitted return to be viewed.

**<retrieveFormInfoRequest>** structure:

```
<rc:formInfoRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v1"
  xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnGST.v1">
  <cmn:softwareProviderData>
    <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
    <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
    <cmn:softwareRelease>V1.1</cmn:softwareRelease>
  </cmn:softwareProviderData>
  <cmn:identifier IdentifierValueType="NZBN">9412345678900</cmn:identifier>
  <cmn:accountType>GST</cmn:accountType>
  <rc:periodEndDate>2018-01-31</rc:periodEndDate>
  <rc:majorFormType>GST</rc:majorFormType>
</rc:formInfoRequest>
```

The RetrieveReturn operation is used to acquire a full GST return. The RetrieveReturn response is delivered in the same format as the File request.

**<retrieveReturnResponse>** structure:

```
<retrieveReturnResponse xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1">
    <statusCode>0</statusCode>
    <errorMessage>Success</errorMessage>
  </statusMessage>
  <responseBody xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnGST.v1"
    xsi:type="r:RetrieveReturnResponseBody">
    <r:standardFields>
      <isNilReturn xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1"/>
    </r:standardFields>
    <r:formFields>
      <r:gstSpecificFields>
        <r:totalSales></r:totalSales>
        <r:zeroRatedSupplies></r:zeroRatedSupplies>
        <r:debitAdjustments>
          <r:privateUsePeriodAdjustment></r:privateUsePeriodAdjustment>
          <r:privateUseOneOff></r:privateUseOneOff>
          <r:assetsAfterCease></r:assetsAfterCease>
          <r:entertainment></r:entertainment>
          <r:changeAccountingBasis></r:changeAccountingBasis>
          <r:exemptSupplies></r:exemptSupplies>
          <r:currentRateGSTAdjustments></r:currentRateGSTAdjustments>
          <r:other></r:other>
        </r:debitAdjustments>
        <r:totalExpenses></r:totalExpenses>
        <r:creditAdjustments>
          <r:useOfPrivateGoods></r:useOfPrivateGoods>
          <r:privateAssetsForBusiness></r:privateAssetsForBusiness>
          <r:changeAccountingBasis></r:changeAccountingBasis>
          <r:currentRateGSTCredits></r:currentRateGSTCredits>
          <r:other></r:other>
        </r:creditAdjustments>
      </r:gstSpecificFields>
      <r:totalGST></r:totalGST>
```

```
</r:gstSpecificFields>
<r:provSpecificFields>
  <r:ratioTaxPercent></r:ratioTaxPercent>
  <r:ratioLastMonthTotalSales></r:ratioLastMonthTotalSales>
  <r:ratioMultiBranchTotalSales></r:ratioMultiBranchTotalSales>
  <r:ratioAssetAdjustment></r:ratioAssetAdjustment>
  <r:voluntaryPayment></r:voluntaryPayment>
  <r:provTaxInstalmentAmount>123.45</r:provTaxInstalmentAmount>
  <r:refundTransferAmountToProv></r:refundTransferAmountToProv>
  <r:totalGSTandProvToPay>12345.56</r:totalGSTandProvToPay>
</r:provSpecificFields>
</r:formFields>
</r:responseBody>
</r:retrieveReturnResponse>
```

### 3.5 RetrieveFilingObligation

The retrieveFilingObligation operation is used to retrieve the date on which the next return is due, as well as any overdue returns for a specified account. This operation has the same request and response structure for all tax types.

**<retrieveFilingObligationsRequest>** structure:

```
<rc:retrieveFilingObligationsRequest
  xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v1"
  xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnGST.v1">
  <cmn:softwareProviderData>
    <cmn:softwareProvider>SoftwareComany</cmn:softwareProvider>
    <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
    <cmn:softwareRelease>V1.1</cmn:softwareRelease>
  </cmn:softwareProviderData>
  <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
  <cmn:accountType>GST</cmn:accountType>
  <rc:majorFormType>GST</rc:majorFormType>
</rc:retrieveFilingObligationsRequest>
```

**<retrieveFilingObligationsResponse>** structure:

```
<retrieveFilingObligationsResponse xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v1">
  <statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v1" >
    <statusCode>0</statusCode>
    <errorMessage>Success</errorMessage>
  </statusMessage>
  <responseBody>
    <filingObligation>
      <periodEndDate>2017-01-31</periodEndDate>
      <status>Overdue</status>
      <dueDate>2017-02-15</dueDate>
    </filingObligation>
    <filingObligation>
      <periodEndDate>2018-06-30</periodEndDate>
      <status>Expected</status>
      <dueDate>2018-07-15</dueDate>
    </filingObligation>
  </responseBody>
</retrieveFilingObligationsResponse>
```

---

## 4 Additional development resources

Current environment information for this service—including the end points for each environment, schemas and WSDLs—is available within the relevant Software Development Kit (SDK).

To access the SDK, do one of the following:

- Go to <https://github.com/InlandRevenue> and select this service
- Go to <https://developerportal.ird.govt.nz> and click the link to the SDK within the Gateway Service documentation (please register first).

### 4.1 Schemas

All schemas for this service import a Common.xsd which has some data types specific to Inland Revenue. This Common.xsd will be used in other gateway services outside of the /Returns/ namespace so it must be kept up-to-date, without numerous redundant versions remaining.

The ReturnCommon.v1.xsd imports the Common.v1.xsd and creates data types to be used across all tax types and return types. ReturnCommon.v1.xsd also includes two request elements and two response elements. These requests are retrieveFormInfoRequest and retrieveFilingObligationsRequest, while the responses are retrieveFilingObligationsResponse and retrieveStatusResponse.

The reason for adding root-level elements in the ReturnCommon.v1.xsd is due to the fact that these request and response structures will never change, regardless of the tax type. This allows Inland Revenue to keep a uniform request and response structure across all current and future tax types.

Importing from ReturnCommon.v1.xsd will be schemas that require more fine-grained detail. These will primarily define the request for the File operation, the response for RetrieveReturn and the response for Prepop.

*See instructions at beginning of section 4 for where to find schemas for this service.*

---

## 4.2 WSDLs

The Returns Gateway Service has one WSDL, which has a target namespace of <https://services.ird.govt.nz/GWS>Returns> and can be found at <https://services.ird.govt.nz:4046/gateway/GWS>Returns/?singleWsdI>

**Note:** The production URL above will not work until you have onboarded with Inland Revenue.

All WSDL messages follow this naming convention:

```
Return_<operation>_InputMessage or Return_<operation>_OutputMessage.
```

```
<wsdl:portType name="Return">
  <wsdl:operation name="File">
    <wsdl:operation name="Prepop">
    <wsdl:operation name="RetrieveStatus">
    <wsdl:operation name="RetrieveFilingObligations">
    <wsdl:operation name="RetrieveReturn">
</wsdl:portType>
<wsdl:service name="Return">
```

A development version of the WSDL is provided with this build pack. For easier WSDL consumption, the `<xs:any>` structure has been replaced with a reference to the corresponding element in the `ReturnGST.v1.xsd`. This will allow any tools that consume the WSDL to automatically pull in the data structures from the XSD. To use this, ensure the WSDL provided by Inland Revenue is in the same directory as `Common.v1.xsd`, `ReturnCommon.v1.xsd` and `ReturnGST.v1.xsd`.

See beginning of [section 4](#) for instructions on where to find WSDLs for this service.

## 5 Responses

The response message from the Gateway Services will always include a status code and status message. These values will describe the successes or failures of your web service call. Following the status message will be the responseBody, which will return the data for the given operation.

### 5.1 Generic gateway response codes

The following response codes are common to all Gateway Service calls. The operations on the Return Service all have framework security validation applied at Account level and that is reflected in the descriptions of the codes below:

Standard codes	Standard message	Description
<b>-1</b>	An unknown error has occurred	This error will be logged by the Gateway Services and evaluated the next business day
<b>0</b>		0 indicates a successful web service call. Note: 0 does not display a standard message.
<b>1</b>	Authentication failure	Authentication failure means the token provided is not a valid token
<b>2</b>	Missing authentication token(s)	No OAuth token in HTTP header
<b>3</b>	Unauthorised access	The logon making the call does not have access to make the request on behalf of the client or agency
<b>4</b>	Unauthorised delegation	Access is not permitted for the requester to perform this operation for the submitted identifier. This code will be returned in any of these situations: <ul style="list-style-type: none"> <li>The submitted cmn:identifier has an invalid value.</li> <li>The identifier type (IdentifierValueType attribute on cmn:identifier) supplied is invalid.</li> <li>The AccountType supplied does not exist for that identifier.</li> <li>All the values above are valid, but the provided OAuth token does not have delegated access to that Customer or Account.</li> </ul>
<b>5</b>	Unauthorised vendor	The vendor provided is not authorised to use these suite of services
<b>7</b>	Account type not supported	This code will be returned for queries on account types not supported in any gateway services web services. For April 2018 this will be any account type other than AIL, AIP, BPA,

Standard codes	Standard message	Description
		MPO, CRS, DWT, FAT, FBT, GMD, GSD, GST, INC, IPS, NRT, PIE, PRS, PSO, EMP, RLT, RWT.
<b>20</b>	Unrecognised XML request	The XML submitted is not recognisable and no schema can be determined
<b>21</b>	XML request failed validation	The XML structure did not meet the definition laid out by the schemas published by Inland Revenue
<b>(none)</b>	(non-xml)	In some scenarios where the request message does not have a well-formed XML structure or is not valid or does not adhere to the SOAP protocol formats, the framework generates a parsing exception that is not wrapped in XML nor has a response status code.
<b>(none)</b>	(SOAP fault) UnAuthorised	An unexpected technical fault has been detected. Depending on the context (eg if an online user is waiting), try the request again after at least five seconds. If the fault recurs then please contact <a href="mailto:GatewayServices@ird.govt.nz">GatewayServices@ird.govt.nz</a> .

## 5.2 Generic returns response codes

The following response codes are specific to Returns Gateway Service calls:

Standard codes	Standard message	Description
<b>100</b>	Invalid request data	Could not extract data from XML payload
<b>101</b>	Unable to file return	An error has occurred while filing return. This may be due to invalid information in the specific return form fields.
<b>102</b>	ID/Account type not valid	The account type / ID submitted does not exist
<b>103</b>	No return found	No return exists on the selected filing period
<b>104</b>	Invalid filing period	The periodEndDate did not match a valid filing period for the account
<b>105</b>	No filing obligations found	No valid filing obligations were found. This could be completely acceptable if they were not expecting to have any filing obligations.
<b>106</b>	Operation not available for major form type	The operation performed does not exist for the major form type submitted
<b>107</b>	Duplicate return	There is already a return for this period. An amendment to a return that has already been submitted must be submitted with isAmended as true.

## 6 Change log

This table lists all changes that have been made to this build pack document since 06/10/2017 (most recent changes listed first).

Date of change	Document section	Description
29/06/21	2.4	Security section restructured – now contains sub-sections on information classification, transport layer security and certificates, ciphers, end points, and authentication and authorisation
	2.4.2	New information added to provide for Inland Revenue's support for TLS1.3, and deprecation of certain TLS1.2 ciphers
		Updated end point information on web service consumer identification for desktop connections (in table)
		Updated list of recommended certificate authorities
		Updated list of requirements for accepting public X.509 keys – now includes ECDSA
	1	Moved 'Mutual Transport Layer Security and certificates' section into section 2.4
		'Prerequisites' table removed and absorbed into section 2.4.2
	4	Renamed 'End points, schema and WSDLs' section to 'Additional development resources'
		Removed section with redundant reference to end points
	5.1	Updated description of following response code: (none) (soap fault) UnAuthorised
	6	Glossary removed
08/12/20	3.3	Updated table of valid return statuses to include the status code that will be returned in addition to the status
13/10/20	4, 4.1, 4.2	Sections updated with new URLs
	1.1	Updates made to boxed instructions for where to find additional information such as business-level context, use cases and links to relevant policy.
	1.3	Updated instructions on where to find related build packs.
	2.4	Paragraph added at end of section with information on where to find updates to SOAP architecture
	3	Boxed text at start of section updated with new URL
04/08/20	3, 3.3	Added new submissionKey field to File and RetrieveStatus operation responses. Also updated ReturnCommon.v1.xsd with this change



Date of change	Document section	Description
09/07/20	3.1	Increased maximum number of transfers from 10 to 20. Also update ReturnCommon.v1.xsd with this change
27/01/20	3.1	<ul style="list-style-type: none"> <li>Note updated for isAmended field description:  <b>NOTE:</b> If isAmended=true then amendReason and amendDetails are required. Otherwise empty values are required in the amendReason and amendDetails fields.</li> <li>Requirement for amendReason and amendDetails changed to 'conditional'</li> </ul>
	2.4	Updated TLS information to reflect use of TLS1.3
	1.4	Note added to Prerequisites table: Note that the same certificate cannot be used for the Test and Production environments.
07/10/19	3	Updated field description for <b>IdentifierValueType</b> :  The ID type being submitted. This can be ACCIRD, NZBN or ACC. The value submitted for this field should contain only digits, with no dashes (with the exception of the ACC field, which may contain letters to identify the account type). IRD Numbers that are eight digits must be padded with a leading zero.
13/09/19	3, Glossary	Changed ACCID to ACC
08/04/19	3.2	In <prepopResponse> structure sample, multiBranch line moved to be below expectedMinorFormType
	Entire document	References to Common.xsd, ReturnCommon.xsd and ReturnGST.xsd updated to Common.v1.xsd, ReturnCommon.v1.xsd and ReturnGST.v1.xsd (respectively) in order to reflect schemas.
	2.4	Sentence removed: <i>For TDS Real Time web service requests, an OAuth token is required in the HTTP header.</i>
	5.1	Error code 6 removed (authentication expired)
	7	API added to glossary
	1.3	<ul style="list-style-type: none"> <li>1.3 section heading changed from 'Related build packs' to 'Related services'</li> <li>1.3.1 Identity and Access Services wording changed</li> <li>1.3.2 section added to include Intermediation Service</li> </ul>
26/02/19	3	Description of softwarePlatform in table removed: <i>"The software package that is making the request".</i>  Replaced with new description:

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Date of change	Document section	Description
		"The field value will be provided by Inland Revenue during the onboarding process."