Inland Revenue

Build Pack: Return Service— Investment Income Information

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Inland Revenue
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Contents

SUMMARY OF CHANGES

A number of key changes have been made to the Investment Income Information build pack since v1.0 was released.

23 March 2020

- The following forms have changed:
    - DWT and NRT
- Desciption of *numberShares* modified
- Description of *australianExchangeRate* modified

28 February 2020

- The following forms have changed:
    - AIL, DWT, NRT, RWT
- Description of *interestZeroRated* modified
- Description of *deductedAmount* modified
- Description of *grossAmount* modified
- The following error codes have been removed:
    - 978, 977, 985, 983, 995.

The following schemas have also been updated:

- ReturnAIL.v1.xsd
- ReturnCommon.v2.xsd
- ReturnDWT.v1.xsd
- ReturnNRT.v1.xsd
- ReturnRWT.v1.xsd

28 July 2020

- The following forms have changed:
    - DWT and NRT
- Desciption of *numberShares* modified
- Description of *australianExchangeRate* modified

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 Investment Income Information (III) 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 also its interaction with other build packs that cover different aspects of Gateway Services.

Before continuing, please consult
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.

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 Return Service.

The reader is assumed to have a suitable level of technical knowledge in order to comprehend the information provided. A range of technical terms and abbreviations are used throughout this document, and while most of these will be understood by the intended readers, a glossary is provided at the end.

1.3 Related services

The following application programming interfaces (APIs) complement this Gateway Service. Further details 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.

This Return Service build pack was written using information from version 1.5 of the IAS build pack.

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.

1.4 Prerequisites

Party	Requirement	Description
Service provider/ financial institution	Acquire a X.509 certificate from a competent authority for the Test and Production environments	This is required when using mutual TLS with cloud-based service providers or financial institutions. Note that the same certificate cannot be used for the Test and Production environments.

1.4.1 Mutual Transport Layer Security and certificates

Mutual Transport Layer Security (TLS) is implemented for the III Return Service. This requires the use of a publicly-issued X509 certificate from one of the trusted certificate authorities. Inland Revenue does not issue certificates to external vendors for web service security implementations.

Inland Revenue has the following minimum requirements for accepting public X509 keys:

1. Minimum Key Length: 2048
2. Signature Algorithm: SHA256[RSA]
3. Self-signed certificates are not accepted
4. Certificates issued by a private/internal certificate authority are not accepted.

In general, shorter-lived certificates offer a better security posture since the impact of key compromise is less severe but there is no minimum requirement for certificate expiry periods.

Below is a list for examples of certificate authority providers with no recommendations or rankings incorporated. It is recommended that a business researches which certificate authority meets their requirements.

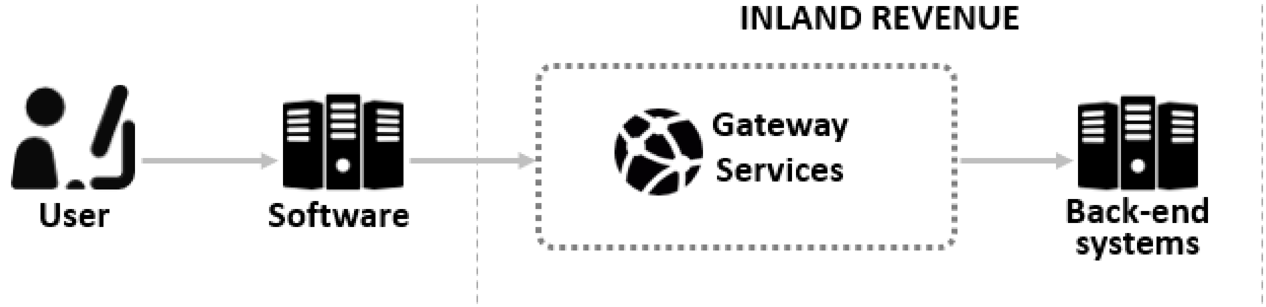
- Comodo
- GeoTrust
- DigiCert
- GlobalSign
- Symantec
- Thawte
- IdenTrust
- Entrust
- Network Solutions
- RapidSSL
- Entrust Datacard
- GoDaddy.

2 Solution design

2.1 Architecture

Inland Revenue is offering a suite of web services in order to facilitate interactions via software packages. The Gateway Services suite will be used by approved organisations to facilitate everything from registration activities, filing returns, making payments and other service offerings in order 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 III Return Service supports the following operations:

- **File:** This service is used to submit a return to Inland Revenue for a customer.
- **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.

2.3 Services not in scope

The shared Common WSDL for the Return Service contains two operations that are <u>not used</u> for III:

- **RetrieveFilingObligation:** This service retrieves the expectations for a customer to file a return.
- **Prepop:** This service is used by software to provide figures to assist in the calculation and display of return information prior to submission.

2.4 Messaging

All SOAP messages require a SOAP header containing an **Action:** parameter and a SOAP body containing a structured XML payload. Please refer to the WSDL for the correct soapAction.

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 schemas that define the requests.

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

Example SOAP request structure

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
          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>
     <rc:fileHeader>...</rc:fileHeader>
     <rc:fileBody>
      <rc:standardFields>
      <rc:formFields xsi:type="r:FormFieldsType">
       <...tax specific fields...>
      </rc:formFields>
     </rc:fileBody>
    </r:fileRequest>
    </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.v2">
                         <statusMessage>
                            <statusCode>0</statusCode>
                            <errorMessage/>
                         </statusMessage>
                      </fileResponse>
                  </b:FileResponseWrapper>
            </FileResult>
         </FileResponse>
      </s:Body>
</s:Envelope>
```

2.5 Security

Gateway Services requests are access-controlled using an OAuth token that identifies the user making the request. Users will authenticate using their Inland Revenue myIR credentials. For instructions on how to acquire an OAuth token, review the Identity and Access build pack (link provided in section 1.3.1). The OAuth access token is required in the HTTP header for all service requests.

Authorisation for using the Gateway Services is defined in the permissions set in myIR. Permissions will reflect those granted in myIR. For example, if a 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.

The Gateway Services use an HTTPS transport layer, with HTTP1.1 transport protocol supported.

The Gateway Services also use the SOAP version 1.2 protocol.

The SOAP Service contract is published using WSDL version 1.1.

Regarding transport layer security (TLS), note that while TLS1.3 is now an industry standard, it is not yet widely adopted, as doing so requires upgrades to perimeter security devices and software. Inland Revenue will upgrade to TLS1.3 once it is adopted widely enough, and where practical, external software partners should also anticipate upgrading to this version. TLS1.0 and TLS1.1 are not supported by myIR or Gateway Services.

Inland Revenue requires the following ciphers and key strengths to be used:

Encryption:	Advanced Encryption Standard (AES)	FIPS 197	256-bit key
Hashing:	Secure Hash Algorithm (SHA-2)	FIPS 180-3	SHA-256

There will be 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 involve mutual TLS certificates that need to be exchanged during the onboarding phase. 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,** there is a separate end point that does not use mutual TLS. For this Service, certificates do not need to be exchanged during onboarding. 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
Purpose	• Primary preferred end point to connect to from service providers for Gateway Services	• 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 setup certificate trust
Client application type	• Cloud applications and financial institutions	• Desktop/native applications • For connecting from multiple decentralised clients
Constraints	• Only for source locations with client-side TLS certificates • On the cloud end point Inland Revenue has controls to shield service providers from issues caused by heavy usage from other providers	• Less scalable • Subject to tighter security controls • On the desktop end point Inland Revenue has less ability to shield consumers of the Service from heavy usage by others • OAuth2 refresh tokens will not be offered to desktop clients
Mutual TLS	• 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	• Server-side certificates only
Minimum TLS version	• 1.2	• 1.2
URL	• Contains …/gateway/..	• Contains …/gateway2/..
Port	• 4046	• 443 (Default https port)

	End point for cloud-based connections	End point for desktop connections
Web service consumer identification	• 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	• Desktop clients will be given different client_id/client_secret credentials to cloud application clients
Firewalling in production	• No IP address restrictions • Access limited by certificate enrolment	• No IP address restrictions
Firewalling in non-production environments	• No IP address restrictions • Access limited by certificate enrolment	• Firewalled—IP whitelisting needed

Delegated permissions: The Services will allow one to retrieve all of the data for a customer that the calling user (as represented by the OAuth token) has access to. There may be additional accounts this identity does not have access to, those will not be mentioned. If an account or data in it is targeted by the request parameters but the user does not have permission an error will be returned. This access will depend on delegation permissions set up in myIR.

For updates to versions of the SOAP architecture including the communication standards, security and service end points, please follow the links provided in section 4.

3 Operations

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

ALSO NOTE

Specific fields have legislative requirements to provide information if it is held by the payer at the time of filing. Please refer to Section 6 of the *Taxation (Annual Rates for 2017–18, Employment and Investment Income, and Remedial Matters) Bill*
http://www.legislation.govt.nz/bill/government/2017/0249/latest/DLM7175913.html?search=ta_bill_T_bc%40bcur_an%40bn%40rn_25_a&p=1

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 schema aliases:

- cmn: Common.v2.xsd
- rc: ReturnCommon.v2.xsd
- r: returnSpecific.xsd (for example ReturnIPS.xsd)

Please note that some requests and responses live in ReturnCommon.v2.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 provided 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's front line staff (such as in the telephone contact centre) to search on.

For example:

```
<fileResponse
xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2">
        <StatusMessage
xmlns="urn:www.ird.govt.nz/GWS:types/Common.v2">
            <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**
- **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>IPS</cmn:accountType>
```

Field	Requirement	Description
softwareProvider	Required	The company or financial institution that developed the software
softwarePlatform	Required	The field value will be provided by Inland Revenue during the onboarding process
softwareRelease	Required	The version of the software package
identifierValueType	Requ ired	The ID type being submitted. This can be ACCIRD, IRD 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

Field	Requirement	Description
		the account type). IRD numbers that are eight digits must be padded with a leading zero.
identifier	Required	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.
accountType	Required	The account type being submitted (AIL, DWT, RWT, NRT, IPS)

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 owner or institution on whose behalf the operations are being performed.

3.1 File

The File operation will be used to submit all returns, regardless of the tax type. Note that the request and response structure is the same for all tax types.

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	Requirement	Description
fileHeader	Required	The standard header for File requests across all tax types
fileBody	Required	The standard body structure for File requests across all tax types
standardFields	Required	A group of fields standard across all tax types
formFields	Required	A wrapper that will contain tax form-specific fields

<**FileHeader**> structure:

```
<r:fileRequest namespaces...>
    <rc:fileHeader>
        <cmn:softwareProviderData>

<cmn:softwareProvider>SoftwareProvider</cmn:softwareProvider>

<cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
                <cmn:softwareRelease>v1</cmn:softwareRelease>
        </cmn:softwareProviderData>
        <cmn:identifier
IdentifierValueType="IRD">012345678</cmn:identifier>
        <cmn:accountType>IPS</cmn:accountType>
        <rc:periodEndDate>2017-03-31</rc:periodEndDate>
        <rc:majorFormType>IPS</rc:majorFormType>
        <rc:minorFormType>IPS</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
periodEndDate	Required	The period in which a return exists or the period for which it is being submitted
majorFormType	Required	The form type (IPS, AIL, RWT, DWT, NRT)
minorFormType	Required	Minor Form type (IPS, AIL, RWT, DWT, NRT)

Proper uses:

- The major and minor form types will be used together to determine the submission form. The "minorFormType" will be used when document versioning happens to be able to route incoming payloads to the correct form types.

Example scenario:

- Attempting to submit an IPS Return for the 2018-January period.

```
<cmn:accountType>IPS</cmn:accountType>
<rc:periodEndDate>2018-01-31</rc:periodEndDate>
<rc:majorFormType>IPS</rc:majorFormType>
<rc:minorFormType>IPS</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, along with most formFields. Only the income details will vary between each tax type—additional details for the FileBody will be provided in the next subsection.

<**StandardFields**> structure:

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

NOTE: Credit transfers are not supported for Investment Income. An incoming IRD transfer request will result in Error Code 150—Credit transfer requests are not supported.

Field	Requirement	Description
isAmended	Required	This allows for a return to be filed as an amendment. **NOTE:** If isAmended=true then amendReason and amendDetails are required. Otherwise empty values are required in the amendReason and amendDetails fields.
amendReason	Conditional	This is attached to the amendmentRequest as the reason for the amendment. This can be either KEY (incorrect amount), MATH (calculation

Field	Requirement	Description
		error), OTHER or TRNSPO (transposition error).
amendDetails	Conditional	This allows for any further details on the amendmentRequest
creditTransferRequest	Optional	This is not supported for Investment Income
isNilReturn	Optional	This is not supported for Investment Income
isFinalReturn	Optional	This is not supported for Investment Income

Proper uses:

- Most standard submissions will require isNilReturn to be *false*, isFinalReturn to be *false*, and isAmended to be *false.*
- When attempting to amend an IPS return, supply the following fields similar to this:

  <rc:isAmended>true</rc:isAmended>
  <rc:amendReason>*KEY*</rc:amendReason>
  <rc:amendDetails>*Explanation of the reason for amending.*</rc:amendDetails>

3.1.1 FileBody fields

For Investment Income, all the formFields are standard except for the information in the income details section.

3.1.1.1 Common fields

These formFields are common to all Investment Income types. (*The sections that follow contain the specific formFields for each investment income type.*)

<**FormFields**> Example structure (for Investment Income):

```
<rc:formFields xsi:type="r:FormFieldsType">
    <r:submissionKey>1684930560</r:submissionKey>
    <r:isReverseReplace>false</r:isReverseReplace>
    <r:lineItems>
        <r:referenceId>REF123</r:referenceId>
        <r:amendType>A</r:amendType>
        <r:externalID>EXT123</r:externalID>
        <r:primaryIRD>123456789</r:primaryIRD>
        <r:primaryDateOfBirth>1987-12-31</r:primaryDateOfBirth>
        <r:primaryName>John Doe</r:primaryName>
        <r:primaryPhone>025555555</r:primaryPhone>
        <r:primaryEmail>example@domain.com</r:primaryEmail>
        <r:primaryCountry>NZ</r:primaryCountry>
        <r:primaryAddress>a</r:primaryAddress>
        <r:accountHolders>
```

```
            <rc:irdNumber>123456789</rc:IrdNumber>
            <rc:dateOfBirth>1967-12-31</rc:dateOfBirth>
            <rc:name>c</rc:name>
            <rc:address>a</rc:address>
            <rc:phone>025555555</rc:phone>
            <rc:email>example@domain.com</rc:email>
        </r:accountHolders>
        <r:accountHolders>
            <rc:irdNumber>123456789</rc:IrdNumber>
            <rc:dateOfBirth>1967-12-31</rc:dateOfBirth>
            <rc:name>c</rc:name>
            <rc:address>a</rc:address>
            <rc:phone>025555555</rc:phone>
            <rc:email>example@domain.com</rc:email>
        </r:accountHolders>
        <r:incomeInformation>
            … (See details for tax type)
        </r:incomeInformation>
        <r:incomeInformation>
            … (See details for tax type)
        </r:incomeInformation>
    </r:lineItems>
    <r:lineItems>
        <r: lineItemAmendType >D</r: lineItemAmendType >
        <r:externalID>c65</r:externalID>
        <r:primaryIRD>123456789</r:primaryIRD>
        <r:primaryDateOfBirth>9999-12-31</r:primaryDateOfBirth>
        <r:primaryName>b-namenew</r:primaryName>
        <r:primaryPhone>025555555</r:primaryPhone>
        <r:primaryEmail>example@domain.com</r:primaryEmail>
        <r:primaryCountry>NZ</r:primaryCountry>
        <r:primaryAddress>b</r:primaryAddress>
        <r:incomeInformation>
            … (See details for tax type)
        </r:incomeInformation>
    </r:lineItems>
    <r:lineItems>
        <r:lineNumber>1252389563</r:lineNumber>
        <r:amendType >U</r:amendType>
        <r:primaryIRD>123456789</r:primaryIRD>
        <r:primaryDateOfBirth>9999-12-31</r:primaryDateOfBirth>
        <r:primaryName>c-name</r:primaryName>
        <r:primaryPhone>025555555</r:primaryPhone>
        <r:primaryEmail>example@domain.com</r:primaryEmail>
        <r:primaryCountry>NZ</r:primaryCountry>
        <r:primaryAddress>c</r:primaryAddress>
        <r:accountHolders>
            <rc:irdNumber>123456789</rc:IrdNumber>
            <rc:dateOfBirth>1967-12-31</rc:dateOfBirth>
            <rc:name>c</rc:name>
            <rc:address>a</rc:address>
            <rc:phone>025555555</rc:phone>
            <rc:email>example@domain.com</rc:email>
        </r:accountHolders>
        <r:incomeInformation>
            … (See details for tax type)
        </r:incomeInformation>
```

```
        <r:incomeInformation>
            … (See details for tax type)
        </r:incomeInformation>
    </r:lineItems>
</rc:formFields>
```

3.1.1.2 Form Fields structure

Field	Requirement	Description
submissionKey	Optional	An Inland Revenue-generated number for uniquely identifying a return. Inland Revenue will return the submission key in every successful response. This field is required for amendments where the financial institution is a supplemental filer.
isReverseReplace	Optional	If "isAmended=true", the isReverseReplace flag can be used to reverse *all* previously sent line items and replace with line items in the current submission. Using reverse/replace is supported, but is a heavy operation as it requires a full resubmission of the full form. A more efficient update is to use the **AmendType** (see description below).
lineItems	At least one	Repeating element for line item details
lineNumber	Optional	An internally generated I64 unique identifier for the line item, used to target line items for amendments.
referenceId	Optional	An externally supplied unique identifier, used to target line items for amendments.
amendType	Optional [A,D,U]	If "IsAmended=true", the "lineItemAmendType" indicator can be used to signify an add, update, or delete. This operation requires either a **lineNumber** or **referenceId** in order to correctly target the exact record to update. The **lineNumber** fields are generated when the submission is processed by IR. They are included in the "retrieveReturn" operation. **referenceId** fields are supplied along with the file operation, allowing software providers and financial institutions to use their own internal keys to reference specific line items.

Field	Requirement	Description
externalID	Required	A unique identifier that identifies the investment account—can be bank account or any other unique customer reference number
primaryIRD	Optional	Primary account holder's IRD if held by the Payer
primaryDateOfBirth	Optional	Primary account holder's date of birth if held by the Payer. Cannot be in the future
primaryName	Required	Primary account holder's name
primaryPhone	Optional	Primary account holder's mobile phone number (see note in primaryAddress below).
primaryEmail	Optional	Primary account holder's email address (see note in primaryAddress below)
primaryCountry	Optional	Primary account holder's abbreviated country **NOTE:** If country is unknown use "XX"
primaryAddress	Optional	Primary account holder's address NOTE: This field or one of either primaryEmail or primaryPhone must be filled out.
accountHolders	Optional	Repeating element for joint account holders
irdNumber	Optional	Joint account holder's IRD number
dateOfBirth	Optional	Joint account holder's date of birth. If provided, cannot be in the future.
name	Optional	Joint account holder's name
address	Optional	Joint account holder's address
phone	Optional	Joint account holder's phone.
email	Optional	Joint account holder's email address
incomeInformation	At least one	Repeating element for income details

3.1.1.3 Base "IncomeInformation" fields

Income information fields are defined in ReturnCommon and additional fields are extended by these base fields for each specific account type when necessary.

Field	Requirement	Description
incomeType	Optional	Income type is an optional field as some account types support multiple income types. For accounts that support multiple income types, a value must be supplied. If the account type only supports a single income type, then the value will be calculated and will not need to be provided.
grossAmount	Required	The amount of the transaction.
deductedAmount	Optional	The amount of any deductions applied—can be a positive or negative amount or zero.
rate	Optional	The rate at which the transaction amount was calculated

3.1.1.4 Income types

Account type	Income type	Description
IPS	NZINT	Income earned from an interest-bearing investment
RWT	DIVINT	Income from dividends treated as interest. Dividends are part of a company's profits that it passes on to its shareholders. Unit trust distributions are treated as dividends.
RWT	MAORI	Income received as a beneficiary of a Māori authority
DWT	DIVIDN	Income from dividends. Dividends are part of a company's profits that it passes on to its shareholders. Unit trust distributions are treated as dividends.
NRT	ROYALT	Income from the use or right to use a copyright, patent trademark or other similar property of right
NRT	COPYRT	Income from Copyright (cultural royalties). **NOTE:** When providing an income type of "COPYRT" when filing it will be translated "ROYALT" when retrieved.
NRT	NRDIV	Income from dividends. Dividends are part of a company's profits that it passes on to its shareholders. Unit trust distributions are treated as dividends.
NRT	NRINT	Income earned from an non-residents interest-bearing bank account

Account type	Income type	Description
AIL	NZINT	Income earned from an interest-bearing investment

3.1.1.5 Line item amendments

The amendType is used to determine how incoming amendment records should be processed. These values are not reflected in the **retrieveReturn** operation and are only used for **file/amend**. As well as specifying an amendType, a lineItemNumber or referenceId must be provided to target a unique certificate.

Amend Type	Code	Description
Add	A	The incoming record is new
Update	U	The incoming record is an update to an existing record
Delete	D	The incoming record should delete an existing record

3.1.1.6 Interest Pay-as-you-earn (IPS)

```
<r:incomeInformation>
      <rc:grossAmount>400</rc:grossAmount>
      <rc:deductedAmount>40</rc:deductedAmount>
      <rc:rate>17.5</rc:rate>
</r:incomeInformation>
```

Field	Requirement	Description
incomeType	Optional	This will automatically be calculated to ‘NZINT’. No need to supply a value.
grossAmount	Optional	The amount of the transaction.
deductedAmount	Optional	The amount of any deductions applied
rate	Optional	This field is the rate applied to the gross amount.

3.1.1.7 Approved Issuer Levy (AIL)

```
<r:incomeInformation>
      <r:grossAmount>500.99</r:grossAmount>
      <r:interestZeroRated>0.99</r:interestZeroRated>
</r:incomeInformation>
```

Field	Requirement	Description
IncomeType	Optional	This will automatically be calculated to 'NZINT'. **Do not provide this field.**
grossAmount	Required	The amount of the transaction
interestZeroRated	Required	The amount of zero-rated interest
deductedAmount	Not Used	This field does not apply to AIL. **Do not provide this field.**
rate	Not Used	This will automatically be calculated to 2%. **Do not provide this field.**

3.1.1.8 Dividend Withholding Tax (DWT)

```
<r:numberShares>4</r:numberShares>
<r:paymentDate>2019-03-31</r:paymentDate>
<r:dividendDeclaredDate>2019-03-31</r:dividendDeclaredDate>
<r:bonusIssue>false</r:bonusIssue>
<r:incomeInformation>
      <rc:grossAmount>5000</rc:grossAmount>
      <rc:deductedAmount>5000</rc:deductedAmount>
      <rc:rate>3.15</rc:rate>
      <r:imputationCredits>5000</r:imputationCredits>
      <r:creditRatio>5</r:creditRatio>
      <r:australianDividendsPaid>true</r:australianDividendsPaid>
      <r:australianExchangeRate>500</r:australianExchangeRate>
</r:incomeInformation>
```

Field	Requirement	Description
numberShares	Required	Number of shares. **NOTE:** Only required if dividend income information exists. If the account is filed by a custodian*, this field is not required. Also, a value can only be submitted if dividend income exists. If dividend income does not exist, then the default value is allowed.

Field	Requirement	Description
paymentDate	Required	Must be on or after the dividend date and before the filing period date **NOTE:** Only required if dividend income information exists. **NOTE:** Can only submit value if dividend income exists. If dividend income does not exist, then the default value is allowed.
dividendDeclaredDate	Required	Provide the Dividend Record date where available. If a Dividend Record date is not available provide the Dividend Declaration date. Must be after 2015 and should not be in the future. **NOTE:** Only required if dividend income information exists. **NOTE:** Can only submit value if dividend income exists. If dividend income does not exist, then the default value is allowed.
bonusIssue	Optional	Bonus issue **NOTE:** Can only submit value if dividend income exists. If dividend income does not exist, then the default value is allowed.
incomeType	Optional	This will automatically be calculated to 'DIVIDN'. **NOTE:** Do not provide this field.
grossAmount	Required	The amount of the transaction
deductedAmount	Optional	The amount of any deductions applied
rate	Optional	The rate at which the transaction amount was calculated
imputationCredits	Optional	Imputation credits
creditRatio	Optional	Credit ratio
australianDividendsPaid	Required	Australian dividends paid
australianExchangeRate	Optional	Required if australianDividendsPaid is true. **NOTE:** If the account is filed by a custodian*, this field is not required.

* Custodians or custodial institutions are a group of payers that act as a middle party between the actual payer of the dividend and the end recipient.

3.1.1.9 Resident Withholding Tax (RWT)

Beneficiary of a Māori authority (IncomeType=MAORI)

```
<r:incomeInformation>
    <rc:incomeType>MAORI</rc:incomeType>
    <rc:grossAmount>5000</rc:grossAmount>
    <rc:deductedAmount>5000</rc:deductedAmount>
    <rc:rate>5</rc:rate>
    <r:maoriAuthorityCredits>3000</r:maoriAuthorityCredits>
    <r:creditRatio>5</r:creditRatio>
</r:incomeInformation>
```

Income from dividends (IncomeType=DIVINT)

```
<r:incomeInformation>
    <rc:incomeType>DIVINT</rc:incomeType>
    <rc:grossAmount>5000</rc:grossAmount>
    <rc:deductedAmount>5000</rc:deductedAmount>
    <rc:rate>5</rc:rate>
    <r:imputationCredits>4000</r:imputationCredits>
    <r:creditRatio>5</r:creditRatio>
</r:incomeInformation>
```

Field	Requirement	Description
incomeType	Required	[DIVINT, MAORI]
grossAmount	Required	The amount of the transaction
deductedAmount	Optional	The amount of any deductions applied
rate	Optional	The rate at which the transaction amount was calculated.
imputationCredits	Optional	Imputation credits—optional **NOTE:** Do not provide for MAORI.
maoriAuthorityCredits	Optional	Maori Authority credits **NOTE:** Do not provide for DIVINT.
creditRatio	Optional	Credit ratio **NOTE:** Do not provide for DIVINT.

3.1.1.10 Non-Resident Withholding Tax (NRT)


```
<r:numberShares>4</r:numberShares>
<r:paymentDate>2019-03-31</r:paymentDate>
<r:dividendDeclaredDate>2019-03-31</r:dividendDeclaredDate>
<r:bonusIssue>false</r:bonusIssue>
<r:incomeInformation>
    <rc:incomeType>NRDIV</rc:incomeType>
    <rc:grossAmount>6000</rc:grossAmount>
    <rc:deductedAmount>6000</rc:deductedAmount>
    <rc:rate>5</rc:rate>
    <r:imputationCredits>0</r:imputationCredits>
    <r:creditRatio>5</r:creditRatio>
<r:australianDividend>true</r:australianDividend>
    <r:australianExchangeRate>1.30</r:australianExchangeRate>
</r:incomeInformation>
```


Field	Requirement	Description
numberShares	Required	Number of shares **NOTE:** Only required for IncomeType= NRDIV. If the account is filed by a custodian*, this field is not required. Also, a value can only be submitted if dividend income exists. If dividend income does not exist, then the default value is allowed.
paymentDate	Required	Must be on or after the dividend date and before the filing period date. **NOTE:** Only required for IncomeType= NRDIV. **NOTE:** Can only submit value if dividend income exists. If dividend income does not exist, then the default value is allowed.
dividendDeclaredDate	Required	Provide the Dividend Record date where available. If a Dividend Record date is not available provide the Dividend Declaration date. Must be after 2015 and should not be in the future**.** **NOTE:** Only required for IncomeType= NRDIV. **NOTE:** Can only submit value if dividend income exists. If dividend income does not exist, then the default value is allowed.
bonusIssue	Optional	Bonus issue **NOTE:** Can only submit value if dividend income exists. If dividend

Field	Requirement	Description
		income does not exist, then the default value is allowed.
incomeType	Required	[NRDIV, NRINT, ROYALT, COPYRT]
grossAmount	Required	The amount of the transaction
deductedAmount	Optional	The amount of any deductions applied
rate	Optional	The rate at which the transaction amount was calculated
imputationCredits	Optional	Imputation credits. **NOTE:** Only valid for IncomeType= NRDIV. **NOTE:** Do not provide for income types other than NRDIV
creditRatio	Optional	Credit ratio
australianDividend	Optional	Australian dividend
australianExchangeRate	Optional	Required if australianDividend is true. **NOTE:** If the account is filed by a custodian*, this field is not required.

* Custodians or custodial institutions are a group of payers that act as a middle party between the actual payer of the dividend and the end recipient.

3.2 RetrieveStatus

The RetrieveStatus operation will allow the status of a given return to be queried. The request and response structures are the same for all investment income tax types.

<**retrieveFormInfoRequest**> structure:

```
<rc:retrieveFormInfoRequest
xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2">
      <cmn:softwareProviderData>
            <cmn:softwareProvider>softwareProvider</cmn:softwareProvider>

<cmn:softwarePlatform>softwarePlatform</cmn:softwarePlatform>
            <cmn:softwareRelease>1</cmn:softwareRelease>
      </cmn:softwareProviderData>
      <cmn:identifier
IdentifierValueType="ACCIRD">123456789</cmn:identifier>
      <cmn:accountType>IPS</cmn:accountType>
      <rc:periodEndDate>2017-12-31</rc:periodEndDate>
      <rc:majorFormType>IPS</rc:majorFormType>
      <rc:submissionKey>2027618304</rc:submissionKey>
</rc:retrieveFormInfoRequest>
```

Field	Valid values
accountType	IPS, AIL, DWT, RWT, NRT
majorFormType	IPS, AIL, DWT, RWT, NRT
submissionKey	Supplemental filers only. If no submissionKey is provided, a list of submitted returns will be returned with status and submissionKeys displayed. If a submissionKey is provided the targeted return's status will be returned.

<**retrieveStatusResponse**> structure:


```
<retrieveStatusResponse
xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2">
        <statusMessage
xmlns="urn:www.ird.govt.nz/GWS:types/Common.v2">
                <statusCode>0</statusCode>
                <errorMessage>Success</errorMessage>
        </statusMessage>
        <responseBody>
                <status code="PRCD">Processed</status>
                <submissionKey>2027618304</submissionKey>
        </responseBody>
</statusResponse>
```


Status	Description
Interim-processing	This status is displayed when an income tax return is received, but the customer has not yet fulfilled their filing obligation.
Interim return	This status is displayed when an income tax return is received, but the customer has not yet fulfilled their filing obligation.
Under review	This status is displayed when the return is included in audit
Default assessment	This status is displayed when the return is a default assessment
Expected	This status is displayed when the return has generated return expectation
Late-processing	This status is displayed when the return is received late and processing
Late-processed	This status is displayed when the return is processed late
Late-received	This status is displayed when the return is received late
Optional	This status is displayed when the return is not required to be filed, but the customer may choose to file anyway
Ontime-processing	This status is displayed when the return is received on time and processing

Status	Description
Ontime-processed	This status is displayed when the return is processed on time
Ontime-received	This status is displayed when the return is received on time
Overdue	This status is displayed when the return is overdue
Submission received	This status is displayed when the return has been received
Submitted	This status is displayed when the return is submitted
Processed	This status is displayed when the return is processed

3.3 RetrieveReturn

The retrieveReturn operation allows for any previously-submitted return to be viewed. For supplemental filers, a return submissionKey must be supplied to retrieve the targeted return on the specified period.

<**retrieveFormInfoRequest**> structure:

```
<rc:retrieveFormInfoRequest
xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2">
        <cmn:softwareProviderData>
                <cmn:softwareProvider>softwareProvider</cmn:softwareProvider>
                <cmn:softwarePlatform>softwarePlatform</cmn:softwarePlatform>
                <cmn:softwareRelease>v1</cmn:softwareRelease>
        </cmn:softwareProviderData>
        <cmn:identifier
IdentifierValueType="ACCIRD">123456789</cmn:identifier>
        <cmn:accountType>IPS</cmn:accountType>
        <rc:periodEndDate>2018-01-31</rc:periodEndDate>
        <rc:majorFormType>IPS</rc:majorFormType>
        <rc:submissionKey>0</rc:submissionKey>
</rc:retrieveFormInfoRequest>
```

Field	Valid values
accountType	IPS, AIL, DWT, RWT, NRT
majorFormType	IPS, AIL, DWT, RWT, NRT
submissionKey	This field is required for retrieving a return where the financial institution is a supplemental filer

Generic RetrieveReturn example:

```
<rc:responseBody xsi:type="r:RetrieveReturnResponseBodyType">
	<rc:standardFields/>
		<r:formFields>
			<r:submissionKey>36383546</r:submissionKey>
			<r:lineItems>
				<r:lineNumber>123234732</r:lineNumber>
				<r:referenceId>REF123</r:referenceId>
				<r:externalID>EXT123</r:externalID>
				<r:primaryIRD>123123123</r:primaryIRD>
				<r:primaryDateOfBirth>1978-03-
28</r:primaryDateOfBirth>
				<r:primaryName>Jane Doe</r:primaryName>
				<r:primaryPhone>0255555555</r:primaryPhone>

	<r:primaryEmail>example@domain.com</r:primaryEmail>
				<r:primaryCountry>NZ</r:primaryCountry>
				<r:primaryAddress>a</r:primaryAddress>
				<r:accountHolders>
					<rc:irdNumber>111111111</rc:irdNumber>
					<rc:dateOfBirth>1967-12-24</rc:dateOfBirth>
					<rc:name>John Smith</rc:name>
					<rc:address>123 Ocean Ave</rc:address>
					<rc:phone>025555555</rc:phone>
					<rc:email>example@domain.com</rc:email>
				</r:accountHolders>
				<r:incomeInformation>
					…(See details for tax type)
				</r:incomeInformation>
			</r:lineItems>
		</r:formFields>
</rc:responseBody>
```

3.3.1 Interest Pay-as-you-earn (IPS) responses

```
<r:incomeInformation>
	<rc:incomeType>NZINT</rc:incomeType>
	<rc:grossAmount>5000</rc:grossAmount>
	<rc:deductedAmount>1230</rc:deductedAmount>
	<rc:rate>5</rc:rate>
</r:incomeInformation>
```

3.3.2 Approved Issuer Levy (AIL) responses

```
<r:incomeInformation>
	<rc:incomeType>NZINT</rc:incomeType>
	<rc:grossAmount>4500</rc:grossAmount>
	<rc:rate>2</rc:rate>
	<r:interestZeroRated>500</r:interestZeroRated>
</r:incomeInformation>
```

3.3.3 Dividend Withholding Tax (DWT) responses

```
<r:numberShares>50</r:numberShares>
<r:paymentDate>2019-04-10</r:paymentDate>
<r:dividendDeclaredDate>2019-04-01</r:dividendDeclaredDate>
<r:bonusIssue>false</r:bonusIssue>
<r:incomeInformation>
        <rc:incomeType>DIVIDN</rc:incomeType>
        <rc:grossAmount>10000</rc:grossAmount>
        <rc:deductedAmount>3000</rc:deductedAmount>
        <rc:rate>5</rc:rate>
        <r:imputationCredits>2000</r:imputationCredits>
        <r:creditRatio>5</r:creditRatio>
        <r:australianDividendsPaid>false</r:australianDividendsPaid>
        <r:australianExchangeRate>0</r:australianExchangeRate>
</r:incomeInformation>
```

NOTE: When retrieving a DWT return, numberShares, PaymentDate, dividendDeclaredDate and bonusIssue fields are only returned if a dividend income value exists.

3.3.4 Resident Withholding Tax (RWT) responses

```
<r:incomeInformation>
        <rc:incomeType>DIVINT</rc:incomeType>
        <rc:grossAmount>2000</rc:grossAmount>
        <rc:deductedAmount>1000</rc:deductedAmount>
        <rc:rate>5</rc:rate>
        <r:imputationCredits>200</r:imputationCredits>
        <r:maoriAuthorityCredits>0</r:maoriAuthorityCredits>
        <r:creditRatio>0</r:creditRatio>
</r:incomeInformation>
```

3.3.5 Non-Resident Withholding Tax (NRT) responses

```
<r:numberShares>50</r:numberShares>
<r:paymentDate>2019-04-10</r:paymentDate>
<r:dividendDeclaredDate>2019-04-01</r:dividendDeclaredDate>
<r:bonusIssue>false</r:bonusIssue>
<r:incomeInformation>
        <rc:incomeType>NRDIV</rc:incomeType>
        <rc:grossAmount>5000</rc:grossAmount>
        <rc:deductedAmount>2000</rc:deductedAmount>
        <rc:rate>5</rc:rate>
        <r:imputationCredits>0</r:imputationCredits>
        <r:creditRatio>5</r:creditRatio>
        <r:australianDividend>true</r:australianDividend>
        <r:australianExchangeRate>100</r:australianExchangeRate>
</r:incomeInformation>
```

NOTE: When retrieving an NRT return that was submitted with “COPYRT” income, this will be shown as “ROYALT” income. Also, numberShares, PaymentDate, dividendDeclaredDate and bonusIssue fields are only returned if a dividend income value exists.

4 End points, schemas and WSDLs

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 End points

See instructions above for where to find end points for this service.

4.2 Schemas

All schemas for the Return Service import a Common.v2.xsd which has some data types specific to Inland Revenue. This Common.v2.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.v2.xsd imports the Common.v2.xsd and creates data types to be used across all tax types and return types. ReturnCommon.v2.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.v2.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.v2.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.

4.3 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/?singleWsdl

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:service name="Return">
```

Investment income (return submissions for AIL, DWT, IPS, NRT and RWT) only supports the following operations:

- File
- RetrieveStatus
- RetrieveReturn

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 corresponding investment income schema. For example, 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.v2.xsd and investment income schema (ie ReturnRWT.v1.xsd, ReturnIPS.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
-1	An unknown error has occurred	This error will be logged by the Gateway Services and evaluated the next business day
0		0 indicates a successful web service call. Note: 0 does not display a standard message.
1	Authentication failure	Authentication failure means the token provided is not a valid token
2	Missing authentication token(s)	No OAuth token in HTTP header
3	Unauthorised access	The logon making the call does not have access to make the request on behalf of the client
4	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: • The submitted cmn:identifier has an invalid value. • The identifier type (IdentifierValueType attribute on cmn:identifier) supplied is invalid. • The AccountType supplied does not exist for that identifier. • All the values above are valid but the provided OAuth token does not have delegated access to that Customer or Account.

Standard codes	Standard message	Description
5	Unauthorised vendor	The vendor provided is not authorised to use these suite of services
7	Account type not supported	This code will be returned for queries on account types not supported in any gateway services web services. For April 2019 this will be any account type other than AIL, AIP, BPA, MPO, CRS, DWT, FAT, FBT, GMD, GSD, GST, INC, IIT, ITN, IPS, NRT, PIE, PRS, PSO, EMP, RLT, RWT. For specific services some of the account types above may not be supported—please see the related documentation and the service-specific response codes below.
20	Unrecognised XML request	The XML submitted is not recognisable and no schema can be determined
21	XML request failed validation	The XML structure did not meet the definition laid out by the schemas published by Inland Revenue. Schema validation starts on the payload at the root level element. Validation errors will provide line items from this root level element onwards.
22	Invalid payload IRD number	Any IRD submitted as a part of the payload body will have a modulus check done against it. Invalid IRDs that do not pass this check will get this error code (with all 0's as an exception).
(none)	(non XML)	In some scenarios where the request message does not have a well-formed XML structure, is not valid or does not adhere to the SOAP protocol formats, the framework will generate a parsing exception that is not wrapped in XML, nor has a response status code.
HTTP Status 429	(SOAP fault) UnAuthorised	When maximum concurrency has been exceeded by the service provider, this SOAP fault will be returned

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5.2 Generic returns response codes

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

Standard codes	Standard message	Description
100	Invalid request data	Could not extract data from XML payload
101	Unable to file return	An error has occurred while filing return. This may be due to invalid information in the specific return form fields.
102	ID/Account type not valid	The account type/ ID submitted does not exist
103	No return found	No return exists on the selected filing period
104	Invalid filing period	The periodEndDate did not match a valid filing period for the account
105	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.
106	Operation not available for major form type	The operation performed does not exist for the major form type submitted
107	Duplicate return	This does not apply to supplemental filers. 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.
109	Invalid Amend Reason	While amending there must be a valid amend reason (KEY, MATH, OTHER, TRNSPO)
140	Invalid Minor Form Type	The value provided as a Minor Form Type was invalid
150	Credit transfer requests are not supported	Credit transfer requests are not supported for the form type

5.3 Investment Income-specific response codes

The following response codes are specific to Investment Income Gateway Service calls:

Standard codes	Standard message	Description
971	Invalid payment date	Payment date must be on or after the dividend declared date and within the filing period date. **NOTE:** This only applies to DWT and NRT.
972	Payment date is required	Payment date is required. **NOTE:** This only applies to DWT and NRT.
973	Invalid dividend declared date	Dividend declared date must be after 2015 and should not be in the future. **NOTE:** This only applies to DWT and NRT.
974	Dividend declared date is required	Dividend declared date is required. **NOTE:** This only applies to DWT and NRT.
975	Number of shares, payment date, dividend declared date and bonus issue fields only valid when dividend income type exists	Number of shares, payment date, dividend declared date and bonus issue fields only valid when dividend income type exists. **NOTE:** This only applies to DWT and NRT.
976	Number of shares is required	Number of shares is required. **NOTE:** This only applies to DWT and NRT unless the filer is a custodian, in which case this is not validated.
979	primaryDateOfBirth cannot be in the future	When provided, the primaryDateOfBirth cannot be in the future
980	Submission key is required when retrieving returns for multi-month filers	If the account is registered to submit multiple returns per month then a submission key is required when retrieving a return
981	dateOfBirth cannot be in the future	When provided the dateOfBirth of the joint account holder cannot be in the future
982	AUS Exchange Rate Required	When an Australian dividend is received, the exchange rate is required unless the filer is a custodian, in which case this is not validated.
984	Provided country code does not exist	The country code specified is not valid according to ISO2A: https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2

Standard codes	Standard message	Description
		NOTE: If country code is unknown enter “XX”
986	No return found for supplied submission key on this period	The supplied submission key does not correlate to a return for this filing period
987	AmendType must be provided for amend line items	When providing an amendment record, the AmendType [A,D,U] must be provided
988	Invalid income type found	Invalid income type specified
989	Contact details are required	One of the following must be supplied: email, address or phone
990	Same AmendType operation specified multiple times for the same line item	It appears that multiple supplied line items AmendTypes are attempting to update/delete/add the same line item. Please verify supplied line numbers and reference IDs have a distinct operation.
991	Multiple AmendType operations specified for the same line item	Multiple AmendType operations [D,U] have been specified for the same line item. Please verify all supplied reference IDs and line numbers.
992	Amendments that are not reverseReplace need either referenceID or lineNumber	In order to target amendment line items, when reverseReplace=false, the referenceID or lineNumber must be provided.
993	Supplied Reference ID conflicts with another active record	The provided reference ID conflicts with another record’s reference ID. Note that once provided, the reference ID may not be changed.
994	Could not find associated line item for amendment operation	Could not find an associated line item for the amendment operation. Please verify the line number/reference IDs provided. Note that line items cannot be amended once deleted.
996	Invalid AUS Exchange Rate	The AUS exchange rate cannot exceed 100
997	Submissionkey must be provided on amendment	Submissionkey must be provided for amendments
998	Non-distinct reference ids provided	Reference IDs must be unique if provided on line items
999	Return submission in error	The return created by your submission is in error

5.4 Investment Income line item error responses

The following detail will be provided in response whenever a line item is in error:

Field	Description
Line Item Sequence Number	The position of the line item in the request
Line Item Reference ID	This is the reference ID supplied by the payer. It is an optional field and will be blank if not provided in the request.
Line Item Number	This is Inland Revenue's internally-generated line number and will only be supplied when an amendment is in error. This field will not be populated if a filing submission is in error, as the line item line number would not exist in Inland Revenue's database.

Example responses when line item is in error:


```xml
<statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v2">
    <statusCode>991</statusCode>
    <errorMessage>Multiple AmendType operations specified for the same line item</errorMessage>
    <errorDescription>[LineItemSequence: 1, LineItemReferenceID: ABCD, LineItemLineNumber:
    54347125656]</errorDescription>
</statusMessage>
```

```xml
<statusMessage xmlns="urn:www.ird.govt.nz/GWS:types/Common.v2">
    <statusCode>992</statusCode>
    <errorMessage>Amendments that are not reverseReplace need either referenceID or
    lineNumber</errorMessage>
    <errorDescription>[LineItemSequence: 2, LineItemReferenceID: , LineItemLineNumber:
    51475121211]</errorDescription>
</statusMessage>
```

6 Glossary

Acronym/term	Definition
ACC	Account ID
ACCIRD	Account IRD
AIL	Approved Issuer Levy
AIM	Accounting Income Method—a method that businesses can use for calculating and paying provisional income tax. Participating businesses are required to file a Statement Of Activity.
API	Application Programming Interface—set of functions and procedures that allow applications to access the data or features of another application, operating system or other service.
Authentication	The process that verifies the identity of the party attempting to access Inland Revenue
Authorisation	The process of determining whether a party is entitled to perform the function or access a resource
DWT	Dividend Withholding Tax
EI	Employment Information
End points	A term used to describe a web service that has been implemented
FIPS	Federal Information Processing Standard—a suite of IT standards from the US Federal Government
Gateway	Inland Revenue's web services gateway
GWS	Gateway Services—the brand name for the suite of web services that Inland Revenue is providing. The Return Service is a Gateway Service.
HTTP, HTTPS	Hyper Text Transmission Protocol (Secure)—the protocol by which web browsers and servers interact with each other. When implemented over TLS1.2 HTTP becomes HTTPS.
IAMS	Identity and Access Management—a logical component that performs authentication and authorisation. Physically it is a set of discrete hardware and software products, plug-ins and protocols. Usually implemented as separate External IAMS (XIAMS) and Internal IAMS.
IAS	Identity and Access
III	Investment Income Information
INC	Inland Revenue's abbreviation for Income Tax
IP	Internet Protocol—the principal communication protocol in the Internet protocol suite for relaying datagrams across networks
IPS	Interest Pay-as-you-earn
IRD	Inland Revenue Department (ie IRD numbers)
MSD	NZ Ministry of Social Development

Acronym/term	Definition
NRT	Non-Resident Withholding Tax
NZBN	New Zealand Business Number
OAuth	An HTTPS based protocol for authorising access to a resource, currently at version 2
Payloads	This refers to the data contained within the messages that are exchanged when a web service is invoked. Messages consist of a header and a payload.
RWT	Resident Withholding Tax
Schemas	An XML schema defines the syntax of an XML document, in particular of a payload. The schema specifies what a valid payload must or can contain, as well as validating the payload.
SHA	Secure Hashing Algorithm. There is a family of them that provide different strengths. SHA-2 is currently favoured over SHA-1, which has been compromised.
SOAP	Simple Object Access Protocol—a set of standards for specifying web services. GWS uses SOAP version 1.2
SSL	Secure Sockets Layer certificates—used to establish an encrypted connection between a browser or user's computer and a service or website
START	Simplified Taxation and Revenue Technology—IR's new core tax processing application. It is an implementation of the GenTax product from FAST Enterprises.
TLS1.2	Transport Layer Security version 1.2—the protocol that is observed between adjacent servers for encrypting the data that they exchange. Prior versions of TLS and all versions of SSL have been compromised and are superseded by TLS1.2.
URL	Universal Resource Locator—also known as a web address
WSDL	Web Service Definition Language—an XML definition of a web service interface
X.509 certificate	An international standard for encoding and describing a digital certificate. In isolation a public key is just a very large number, the X.509 certificate to which it is bound identifies whose key it is, who issued it, when it expires etc. When a counterparty's X.509 digital certificate is received, the recipient takes their public key out of it and store the key in their own keystore. The recipient can then use this key to encrypt and sign the messages that they exchange with this counterparty.
XIAMS	External IAMS—an instance of IAMS that authenticates and authorises access by external parties, for example customers, trading partners etc, as opposed to internal parties such as staff
XML	Extensible Mark-up Language—a language used to define a set of rules used for encoding documents in a format that can be read by humans and machines
XSD	XML Schema Definition—the current standard schema language for all XML data and documents

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7 Change log

This table lists all material changes that have been made to this build pack document since the release of v1.0. It does not encompass non-material changes, such as to formatting etc.

Version	Date of change	Document section	Description
V1.0	28/07/20	3.1.1.8 3.1.1.10	• Descriptions of *numberShares* and *australianExchangeRate* changed • Note regarding custodians added at end of each section: * Custodians or custodial institutions are a group of payers that act as a middle party between the actual payer of the dividend and the end recipient.
		5.3	• Descriptions changed for error codes 976 and 982
		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.
		4	• Removed boxed instructions on where to find current end points, schemas and WSDLs and updated with new instructions.
		4.3	Removed redundant note at end of section regarding WSDLs. Added following text: • *See beginning of section 4 for instructions on where to find WSDLs for this service.*
		4.1	Text updated to this: • *See instructions above for where to find end points for this service.*
		4.2	Note added: • *See instructions at beginning of section 4 for where to find schemas for this service.*
		2.4	Note added at end of section: • *For updates to versions of the SOAP architecture including the communication standards, security and service end points, please follow the links provided in section 4.*
		3	• Updated hyperlink in boxed text at start of section
	28/02/20	Summary of changes	• Summary of changes section added
		3.1.1.6 3.1.1.8	• *grossAmount* description modified

Version	Date of change	Document section	Description
		3.1.1.9 3.1.1.10	
	21/02/20	5.3	• The following error codes have been removed: 978, 977, 985, 983, 995
		3.1.1.7	Description of *interestZeroRated* modified
		3.1.1.7 3.1.1.8 3.1.1.9	Description of *grossAmount* modified to remove note that amount 'must be greater than zero'
		3.1.1.3	Description of *deductedAmount* modified
	27/01/20	3.1	• Updated note in description of isAmended field: • **NOTE:** If isAmended=true then amendReason and amendDetails are required. Otherwise empty values are required in the amendReason and amendDetails fields.
			• Changed requirement details in amendReason and amendDetails fields from 'optional' to 'conditional'
		2.5	• 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	3.1.1.2	• Added country code "XX" for unknown or overseas countries.
		5.3	
	04/10/19		• Version 1.0 released