Inland Revenue
Te Tari Taake

Inland Revenue

Build Pack: Return Service—Employment Information

Date: 30/11/2022

Contents

![Inland Revenue Te Tari Taake logo]

SUMMARY OF CHANGES

Changes to amendment methods as part of April Release 2023.

An EI return can be amended using reverse/replace method but only a specific line-item information has changed on the return. This behaviour causes down-stream impacts to the employees on the same return as the financial transactions are being reversed and replaced with no changes to the amounts. To avoid the unnecessary down-stream impact to the employees, the referenceId field will be a required field going forward for all file requests, which includes amendments. As a result of this change, the line number amendment method will become obsolete.

The following changes have been made to Employment Information-specific **ERROR CODES,** please refer to section 5 of this document for full list of responses:

Error code	Status	Description/ response message
137	Added	ReferenceId must be provided on all line items

V2 SERVICE UPDATES

The following key changes have been made to the Employment Information Return Service in preparation for the update to v2.

Document section	Description
3 Operations	• Updated schema to say 'ReturnEI.V2.xsd', Common.v2.xsd, and ReturnCommon.v2.xsd

3.1 File	• Requirement for amendReason and amendDetails changed to 'conditional'. If isAmended=true then amendReason and amendDetails are required. Otherwise empty values are required in the amendReason and amendDetails fields.
	• Updated existing field employeePayFrequency from 'Optional' to 'Required'
	• Added new optional field 'hoursPaid' (EI line item)
	• Added two new optional fields 'priorPeriodGrossAdjustment' and 'priorPeriodPAYEAdjustment' (EI line items)
	• Added two new optional fields 'totalPriorPeriodGrossAdjustment' and 'totalPriorPeriodPAYEAdjustment'
	• Added three new optional fields 'essEarnings', 'slcirDeductions', 'slborDeductions' (EI line items)
	• Updated employeeName to allow 255 characters, previously this was 20
	• Removed values from TaxCode table: ESS, SLCIR, SLBOR
	• Added three new optional fields:
	    ○ totalESSEarnings
	    ○ totalSLCIRDeductions
	    ○ totalSLBORDeductions.
	• Added note to clarify use of childSupportCode

Document section	Description
	• Added note to clarify use of isNilReturn • There is a behaviour change between EI v1 and EI v2. In EI v1, a return can be filed and then immediately amended after receiving a successful response. An EI v2, a return must be processed in order to be amended. Returns will process within five minutes.
3.3 Retrieve Return	• New optional fields above will also be included in the Retrieve Return response • Added note to Retrieve Return to clarify that it will return all existing fields on the return
3.4 Prepop	• Updated employeeName to allow 255 characters, previously this was 20
4.3 Retrieve Status	• Responses now include minorFormType • SubmissionKey is now optional in the request body • Now supports multiple return statuses (repeating elements)

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Document section	Description
5.3 Employment Information-specific response codes	• Added new response code 170: 'The provided tax code is invalid'. Used to detect when tax code supplied is either ESS, SLCIR or SLBOR. • Added response code 144: Return being submitted • Removed response code 166: EI temporarily locked for processing, not needed in V2 • Error code 136 added: Nil return not indicated despite missing line items.

Amendment scenarios—Differences between EI v1 and v2

Due to the introduction of Employment Information (EI) Gateway Service v2, there are specific rules that service providers must adhere to when submitting amendments for an existing EI return on a period. These rules apply both to EI returns submitted through Gateway Service v1, as well as returns that are submitted through EI Gateway Service v2.

In order to support amending prior EI returns, both EI v1 and EI v2 must be supported by service providers.

The EI version can be identified in the standard header's majorFormType field:

- EI version 1 = "EI"
- EI version 2 = "EI2".

Original Return	Amended Return (via Gateway)	Result	Action
EI v1	EI v1	Success	
	EI v2	Failure – EI v2 Response Code 169: Submitted incorrect EI version (please refer to EI v2 build pack for more information on this response code).	This action is not allowed. Returns submitted through EI v1 must be amended with EI v1.
EI v2	EI v1	Failure – EI v1 Response Code 169: Submitted incorrect EI version (please refer to EI v1 build pack for more information on this response code).	This action is not allowed. Returns submitted through EI v2 must be amended with EI v2.
	EI v2	Success	

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 Employment Information (EI) 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 of 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 EI Return Service. The reader is assumed to have a suitable level of technical knowledge in order 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.

This Return Service build pack was written using information from v1.5 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.

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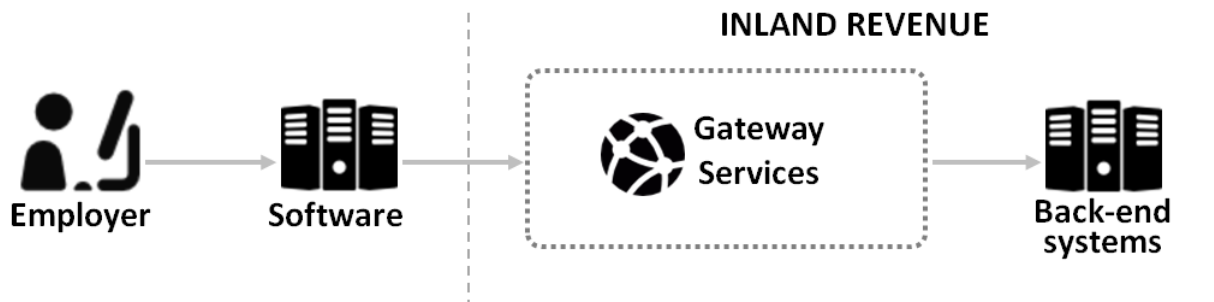
The WSDLs for the Gateway Services define an 'any' XML request and response structure, which then relies on a group of XSDs to define the data structure of those requests and responses. Each request and response type will define a lower, 'wrapper' element.

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

2.2 Service scope

This 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.

2.3   Messaging

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 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: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…
                        <…PrepopFields…>
                    </rc:formInfoRequest>
                </prep:PrepopRequestWrapper>
            </ret:ReturnPrepopRequestMsg>
        </ret:Prepop>
    </soap:Body>
</soap:Envelope>
```

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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></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 for further details.

2.4.3 Ciphers

While Inland Revenue currently supports TSL1.2, 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
Supported now and in the future	• TLS_AES_128_GCM_SHA256 • TLS_AES_256_GCM_SHA384 • TLS_CHACHA20_POLY1305_SHA256

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

Status	TLS1.2 ciphers
Supported now and in future	• TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384 • TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
Supported now but will be deprecated on 31 March 2022	• TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA • TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA • TLS_RSA_WITH_AES_128_CBC_SHA • TLS_RSA_WITH_AES_256_CBC_SHA • TLS_DHE_RSA_WITH_AES_128_CBC_SHA • TLS_DHE_RSA_WITH_AES_128_CBC_SHA256 • TLS_DHE_RSA_WITH_AES_256_CBC_SHA • TLS_DHE_RSA_WITH_AES_256_CBC_SHA256 • TLS_DHE_RSA_WITH_AES_128_GCM_SHA256 • TLS_DHE_RSA_WITH_AES_256_GCM_SHA384

Status	TLS1.2 ciphers
Supported now but will be deprecated on 31 December 2022	• TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256 • TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 • TLS_RSA_WITH_AES_128_CBC_SHA256 • TLS_RSA_WITH_AES_256_CBC_SHA256 • TLS_RSA_WITH_AES_128_GCM_SHA256 • TLS_RSA_WITH_AES_256_GCM_SHA384

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
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 set up certificate trust
Client application type	• Cloud applications	• 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

	End point for cloud-based connections	**End point for desktop connections**
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)
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 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.
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

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.

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

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 ReturnEI.v2.xsd)

NOTE: 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 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, as long as 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 for Inland Revenue front-line staff (such as in the telephone contact centre) to search.

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>
      </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>EMP</cmn:accountType>
```

Field	Description
softwareProvider	The company that developed the software
softwarePlatform	The field value will be provided by Inland Revenue during the onboarding process
softwareRelease	The version of the software package
IdentifierValueType	The ID type being submitted. This can be ACCIRD 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. Format examples: • IRD: 123456789 • ACC: 123456789EMP001
identifier	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	The account type being submitted (EMP)

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>

After October 2021, Inland Revenue will no longer issue new IRD numbers for bankrupt clients When a client's bankruptcy is finalised, the existing employer account will be closed (pre-adjudicated), and a new account will be opened (post-adjudicated) if the customer re-registers as an employer again. This will result in multiple employer accounts for a single IRD number. When specifying IRD or ACCIRD as the **IdentifierTypeValue**, the gateway will route the call to the active employer account. If the call needs to be routed to the ceased employer account, ACC needs to be used as the **IdentifierTypeValue.**

In order to reference the pre-adjudicated account, the IdentifierTypeValue will need to reference a more specific "ACC" identifier instead of "IRD" or "ACCIRD".

IRD	Type	ACC	Status	Identifier Type	Default
131-065-914	EMP	131-065-914-EMP003	Active	IRD, ACCIRD	Yes
131-065-914	EMP	131-065-914-EMP002	Closed	ACC	No

3.1 File

The File operation will be used to submit all EI 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
fileHeader	The standard header for File requests
fileBody	The standard body structure for File requests
standardFields	A group of standard fields
formFields	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>EMP</cmn:accountType>
       <rc:periodEndDate>2017-03-31</rc:periodEndDate>
       <rc:majorFormType>EI2</rc:majorFormType>
    </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	Last day of the pay date month
majorFormType	Required	The form type (EI2)

Example scenario:

- Attempting to submit an EI return for the 2018-January period.
  <cmn:accountType>EMP</cmn:accountType>
  <rc:periodEndDate>2018-01-31</rc:periodEndDate>
  <rc:majorFormType>EI2</rc:majorFormType>

<**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.

<**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
isNilReturn	Required	This allows for a nil return to be submitted. NOTE: If no line items are being provided in the return payload, the value of this field should be 'true'.
isFinalReturn	Optional	This field notes that the account is ready to be closed after this filing period
isAmended	Required	This allows for a return to be filed as an amendment. NOTE: If isAmended=true then amendReason and amendDetails are required.
amendReason	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).
amendDetails	Conditional	This allows for any further details on the amendmentRequest
creditTransferRequest	Optional	These fields can be added to transfer the refund to another START account. Any number of credit transfers from 0 to 10 can be submitted for every file operation. NOTE: Credit transfer requests are not supported and will result in error code: 150 - Credit transfer requests are not supported

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 an EI 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 updated pay information</rc:amendDetails>

Multiple EI returns can be submitted for each payDayDate.

Note that an employer cannot commence payday filing part way through a month—payday filing must start with the very first payday in the month.

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

```xml
<r:fileRequest xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
        xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
        xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
        xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2">
    <rc:fileHeader>…</rc:fileHeader>
    <rc:fileBody>
        <rc:standardFields>…</rc:standardFields>
            <rc:formFields xsi:type="r:FormFieldsType">
             <r:submissionKey/>
             <r:isReverseReplace/>
             <r:payDayDate/>
             <r:piIrdNumber/>
             <r:contactName/>
             <r:contactPhoneNumber/>
             <r:contactEmail/>
             <r:employeeFields>
                    <r:employee>
                            <r:lineNumber/>
                            <r:referenceId/>
                            <r:irdNumber/>
                            <r:employeeName/>
                            <r:taxCode/>
                            <r:payPeriodStartDate/>
                            <r:payPeriodEndDate/>
                            <r:employmentStartDate/>
                            <r:employmentFinishDate/>
                            <r:employeePayFrequency/>
                            <r:grossEarnings/>
                            <r:earningsNotLiableACC/>
                            <r:lumpSumIndicator/>
                            <r:payeSchedularTaxDeductions/>
                            <r:childSupportCode/>
                            <r:childSupportDeductions/>
                            <r:studentLoansDeductions/>
                            <r:kiwisaverEmployerContributions/>
                            <r:kiwisaverDeductions/>
                            <r:essEarnings/>
                            <r:slcirDeductions/>
                            <r:slborDeductions/>
                            <r:taxCreditPayrollDonations/>
                            <r:esctDeducted/>
                            <r:familyTaxCredits/>
                            <r:hoursPaid/>
                            <r:priorPeriodGrossAdjustment/>
                            <r:priorPeriodPAYEAdjustment/>
                    </r:employee>
            </r:employeeFields>
            <r:totalGrossEarnings/>
            <r:totalEarningsNotLiableACC/>
            <r:totalPAYESchedularTaxDeductions/>
            <r:totalChildSupportDeductions/>
            <r:totalStudentLoansDeductions/>
            <r:totalKiwisaverEmployerContributions/>
            <r:totalKiwisaverDeductions/>
            <r:totalESSEarnings/>
            <r:totalSLCIRDeductions/>
            <r:totalSLBORDeductions/>
            <r:totalTaxCreditPayrollDonations/>
            <r:totalESCTDeducted/>
```

```
                              <r:totalFamilyTaxCredits/>
                              <r:totalAmountPayable/>
                              <r:totalPriorPeriodGrossAdjustment/>
                              <r:totalPriorPeriodPAYEAdjustment/>
                    </rc:formFields>
          </rc:fileBody>
    </r:fileRequest>
```

Fields	Requirement	Description
submissionKey	Optional	This field only be used when amending EI returns
isReverseReplace	Optional	This field is required on amendments. Signifies if amendment method is reverse/replace.
payDayDate	Required	Payday means the day on which an employer makes a PAYE income payment to an employee. NOTE: The payday date must be within the same month as the period end date.
piIrdNumber	Optional	PAYE intermediary IRD number
contactName	Optional	Name of payroll contact person
contactPhoneNumber	Optional	Payroll contact phone number
contactEmail	Optional	Payroll contact email
lineNumber	Optional	Inland Revenue-generated unique line item identifier. ~~This field should only be used when amending EI returns.~~ This will be ignored if provided since referenceId will become source of truth.
referenceId	Required	Unique employee reference field created by the software provider. Can be submitted on initial file, then used as the unique line item identifier for amended lines instead of using the Inland Revenue-generated lineNumber. This field is case-sensitive, so REFID1 and refid1 will be considered as two different referenceIds.
irdNumber	Required	IRD number of the employee—it can be zeros if IRD number not known

Fields	Requirement	Description
employeeName	Required	Name of the employee (255 characters)
taxCode	Required	The tax code of the employee (see table below for list of acceptable values)
employmentStartDate	Optional	Employee start date
employmentFinishDate	Optional	Employee end date NOTE: Field not to be supplied if there is no end date
payPeriodStartDate	Required	The first day of the pay period for which the employee was paid. NOTE: The pay period start date cannot be after the pay period end date, otherwise a 104 error will be returned.
payPeriodEndDate	Required	The last day of the pay period on which the employee was paid
employeePayFrequency	Required	Pay frequency/cycle for employee (see table below for list of acceptable values)
grossEarnings	Optional	Gross earnings/scheduler payments
earningsNotLiableACC	Optional	Earnings not liable for ACC earner's levy
lumpSumIndicator	Optional	Boolean for indicating lump sum
payeSchedularTaxDeductions	Optional	PAYE/scheduler tax deductions
childSupportCode	Optional	Child support code (see table below for list of acceptable values) NOTE: If there is no value for childSupportCode then omit this element.
childSupportDeductions	Optional	Child support deductions (sequenced with child support code)
studentLoansDeductions	Optional	Student loan deductions
kiwisaverEmployerContributions	Optional	Net KiwiSaver employer contributions
kiwisaverDeductions	Optional	KiwiSaver employee deductions
essEarnings	Optional	Employee share scheme earnings (ESS tax code equivalent)

![Inland Revenue Te Tari Taake logo]

Fields	Requirement	Description
slcirDeductions	Optional	Student loans compulsory additional deduction (SLCIR tax code equivalent)
slborDeductions	Optional	Student loans voluntary deduction (SLBOR tax code equivalent)
taxCreditPayrollDonations	Optional	Tax credits for payroll donations
esctDeducted	Optional	Employer superannuation contribution tax
familyTaxCredits	Optional—to be filled in by MSD ONLY	Family tax credits
hoursPaid	Optional	Number of hours paid to the employee in the pay period
priorPeriodGrossAdjustment	Optional	Adjustment to the Gross Earnings made in a prior period. NOTE: Negative values are accepted.
priorPeriodPAYEAdjustment	Optional	Adjustment to the PAYE/Schedular Tax Deductions made in a prior period. NOTE: Negative values are accepted.
totalGrossEarnings	Compulsory	Total gross earnings
totalEarningsNotLiableACC	Compulsory	Total earnings not liable for ACC earner's levy
totalPAYESchedularTaxDeductions	Compulsory	Total PAYE (including tax on schedular payments)
totalChildSupportDeductions	Compulsory	Total child support deductions
totalStudentLoanDeductions	Compulsory	Total student loan deductions
totalKiwisaverEmployerContributions	Compulsory	Total net KiwiSaver employer contributions
totalKiwisaverDeductions	Compulsory	Total KiwiSaver deductions
totalESSEarnings	Optional	The total of all employees' ESS earnings
totalSLCIRDeductions	Optional	The total of all employees' SLCIR deductions
totalSLBORDeductions	Optional	The total of all employees' SLBOR deductions
totalTaxCreditPayrollDonations	Compulsory	Tax credit payroll donations total

Fields	Requirement	Description
totalESCTDeductions	Compulsory	Total ESCT deducted
totalFamilyTaxCredits	Compulsory	Total family tax credits
totalAmountPayable	Optional	Total amount payable
totalPriorPeriodGrossAdjustment	Optional	Total Gross Earnings adjustments from prior periods. NOTE: Negative values are accepted.
totalPriorPeriodPAYEAdjustment	Optional	Total PAYE/Schedular Tax Deduction adjustments from prior periods. NOTE: Negative values are accepted.

Accepted tax codes:

- CAE
- EDW
- ND
- MESL
- MSL
- SH
- SB

- SBSL
- ST
- WT
- SSL
- ME
- NSW
- M

- SHSL
- STC
- S
- STSL
- SA
- SASL

Child support code	Description
C	Ceased Employment
A	Advanced Payment
P	Protected Earnings
S	Short Term Absence
D	Deducted Previously
O	Other

Employee pay frequency	Description
WK	Weekly
4W	Four-weekly
FT	Fortnightly
MT	Monthly
DA	Daily
AH	Ad hoc/Irregular
HM	Half-monthly (twice a month)

A submissionKey will be provided on file operations of EI returns. This submissionKey will be used to identify the specific EI return on a given filing period for amendment, status and retrieve return requests.

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3.1.1 Amendment methods

There are two ways to amend an EI return. Both necessitate populating submissionKey, setting isAmended to true, and filling out amendReason/amendDetails.

1. **referenceId method:** referenceId must be provided for all lines submitted with the initial return, including amended lines. referenceId is then used to uniquely identify individual line items if provided in an amendment request later. Only lines that require amendments should be provided with this method. New line items can be submitted using a new referenceId. There is no way to amend the referenceId itself with this method. If a new referenceId is submitted to amend a previously submitted referenceId, that line will be treated as new. If multiple lines contain the same referenceId then the response 131 – 'Duplicate line items' will be returned. The duplicate referenceIds must be corrected before the submission is allowed.

2. **Reverse/Replace method:** isReverseReplace must be set to true for this amendment method. From the referenceIds provided in the amendment request, the line items will be compared against the existing referenceIds from the initial return, and will be added, amended, or reversed accordingly. All line items, not just lines that require amendments, must be provided with this method. referenceId is required and lineNumbers are optional.

Examples of amendment methods:

referenceId	isReverseReplace	Expected outcome
Not provided	true	Amendment request will be rejected with error code 137
Not provided	false	Amendment request will be rejected with error code 137
Provided	true	Software is using reverse/replace method as the amendment method. Line items will be added, amended, or reversed based off the referenceIds provided in the amendment request.
Provided	false	Software is using referenceId method. Line items will be added or amended based off the referenceIds provided in the amendment request.

Sample response on successful EI file operations:

```
<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>1829404672</submissionKey>
    </responseBody>
</fileResponse>
```

3.2 RetrieveStatus

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

<**retrieveEIRequest**> structure:

```
<r:retrieveEIRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
          xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
          xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2">
     <cmn:softwareProviderData>
          <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
          <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
          <cmn:softwareRelease>V1.1</cmn:softwareRelease>
     </cmn:softwareProviderData>
     <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
     <cmn:accountType xmlns:com="urn:www.ird.govt.nz/GWS:types/Common.v2" >EMP</cmn:accountType>
     <rc:periodEndDate>2018-01-31</rc:periodEndDate>
     <rc:majorFormType>EI2</rc:majorFormType>
          <r:payDayDate>2018-01-12</r:payDayDate>
          <r:submissionKey>12345678</r:submissionKey>
</r:retrieveEIRequest>
```

Field	Requirement	Description
submissionKey	Optional	A unique identifier used to target a specific return

<**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></errorMessage>
     </statusMessage>
     <responseBody>
          <returnStatus>
            <status code="OPRCD">Ontime-processed</status>
            <submissionKey>1861250688</submissionKey>
            <minorFormType>EI2</minorFormType>
          </returnStatus>
          <returnStatus>
            <status code="OPRCD">Ontime-processed</status>
            <minorFormType>EI2</minorFormType>
          </returnStatus>
        </responseBody>
     </responseBody>
</statusResponse>
```
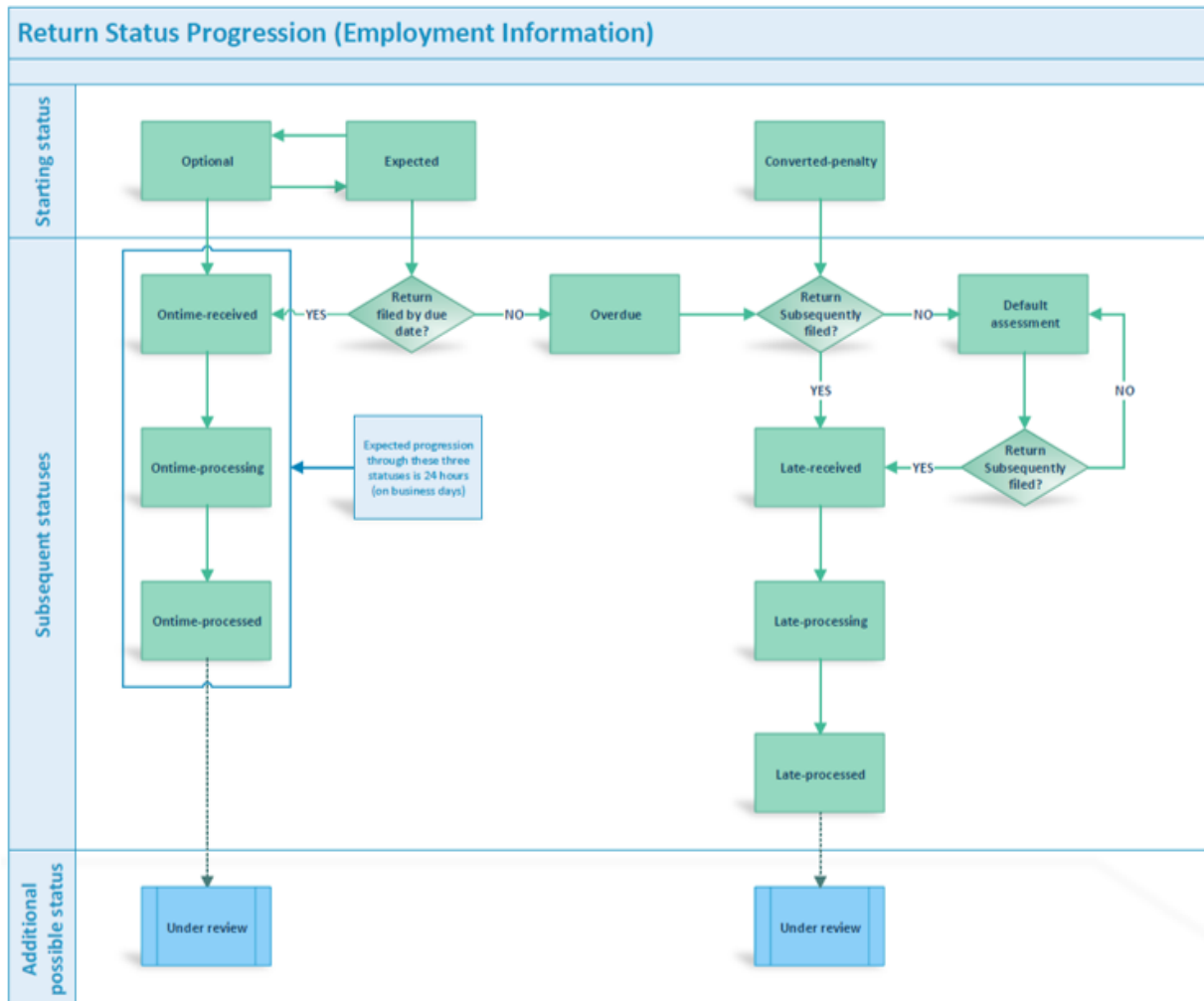
Field	Requirement	Description
status.code	Required	A code representing the status of the return
status	Required	A description of the return's status
submissionKey	Optional	A submissionKey of the return, if available
minorFormType	Required	The majorFormType supplied in the File operation will be returned in the minorFormType of the RetrieveStatus with either: • EI • EI2.

Status	Description
Amended	This status is displayed when the return is amended
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
Converted-penalty	This status is displayed when the return was not filed but created in the conversion process to house a late file penalty
Expected	This status is displayed when the return has generated return expectation
Processing	This status is displayed when the return is processing
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
New	This status is displayed when the return is not processed
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
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 EI return has been received and initial processing has completed. During co-existence, the EI return will be held and forwarded for further processing at the end of the period.
Submitted	This status is displayed when the return is submitted by the customer
Posted	This status is displayed when the return is posted
Processed	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'.

![Inland Revenue Te Tari Taake logo]

This diagram outlines the process flow of the statuses listed in the table on the previous page:

Return Status Progression (Employment Information)

All retrieve operations for EI use <retrieveEIRequest> instead of the standard <retrieveFormInfoRequest>. retrieveEIRequest contains the payDayDate and submissionKey fields that are used to identify a return.

<**retrieveEIRequest**> structure:

```
<r:retrieveEIRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
            xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
            xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2">
    <cmn:softwareProviderData>
        <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
        <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
        <cmn:softwareRelease>V1.1</cmn:softwareRelease>
    </cmn:softwareProviderData>
    <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
    <cmn:accountType>EMP</cmn:accountType>
    <rc:periodEndDate>2018-01-31</rc:periodEndDate>
    <rc:majorFormType>EI2</rc:majorFormType>
    <r:payDayDate>2018-01-01</r:payDayDate>
    <r:submissionKey>34534523</submissionKey>
</r:retrieveEIRequest>
```

![Inland Revenue Te Tari Taake logo]

Field	Requirement	Description
payDayDate	Required	The pay day period of the return
submissionKey	Required	The submissionKey is required for the retrieveStatus operation. Only the status of the return with the corresponding submissionKey will displayed.

3.3   RetrieveReturn

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

All retrieve operations for EI use <retrieveEIRequest> instead of the standard <retrieveFormInfoRequest>. retrieveEIRequest contains the payDayDate and submissionKey fields that are used to identify a return.

<**retrieveEIRequest**> structure:

```
<r:retrieveEIRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
            xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
            xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2">
    <cmn:softwareProviderData>
        <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
        <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
        <cmn:softwareRelease>V1.1</cmn:softwareRelease>
    </cmn:softwareProviderData>
    <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
    <cmn:accountType>EMP</cmn:accountType>
    <rc:periodEndDate>2018-01-31</rc:periodEndDate>
    <rc:majorFormType>EI2</rc:majorFormType>
    <r:payDayDate>2018-01-01</r:payDayDate>
    <r:submissionKey>34534523</r:submissionKey>
</r:retrieveEIRequest>
```

Field	Requirement	Description
payDayDate	Required	The pay day period of the return
submissionKey	Optional	If submissionKey is provided, only the return with that submission key will be displayed. If only a payDayDate is provided, all returns with the corresponding payDayDate will be provided.

![Inland Revenue Te Tari Taake logo]

<**retrieveReturnResponse**> structure:

```
<retrieveReturnResponse 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 xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
                      xsi:type="r:RetrieveReturnResponseBodyType">
          <r:standardFields>
                <isNilReturn xmlns="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"/>
          </r:standardFields>
          <r:formFields>
                <r:employeeFields>
                        <r:employee>
                                <r:irdNumber></r:irdNumber>
                                <r:employeeName></r:employeeName>
                                <r:taxCode></r:taxCode>
                                <r:payPeriodStartDate></r:payPeriodStartDate>
                                <r:payPeriodEndDate></r:payPeriodEndDate>
                        </r:employee>
                        <r:employee>
                                <r:irdNumber></r:irdNumber>
                                <r:employeeName></r:employeeName>
                                <r:taxCode></r:taxCode>
                                <r:payPeriodStartDate></r:payPeriodStartDate>
                                <r:payPeriodEndDate></r:payPeriodEndDate>
                        </r:employee>
                </r:employeeFields>
          </r:formFields>
        </r:responseBody>
</r:retrieveReturnResponse>
```

NOTE: The response above is an example and contains only the fields required on the return. The retrieveReturnResponse will retrieve all fields on the return, including optional fields if they exist.

3.4   Prepop

The Prepop operation will be used to acquire a specific subset of fields for a given return. All retrieve operations for EI use <retrieveEIRequest> instead of the standard <retrieveFormInfoRequest>. retrieveEIRequest contains the payDayDate and submissionKey fields that are used to identify a return.

<**retrieveEIRequest**> structure:

```
<r:retrieveEIRequest xmlns:cmn="urn:www.ird.govt.nz/GWS:types/Common.v2"
            xmlns:rc="urn:www.ird.govt.nz/GWS:types/ReturnCommon.v2"
            xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2">
        <cmn:softwareProviderData>
            <cmn:softwareProvider>SoftwareCompany</cmn:softwareProvider>
            <cmn:softwarePlatform>SoftwarePlatform</cmn:softwarePlatform>
            <cmn:softwareRelease>V1.1</cmn:softwareRelease>
        </cmn:softwareProviderData>
        <cmn:identifier IdentifierValueType="ACCIRD">123456789</cmn:identifier>
        <cmn:accountType>EMP</cmn:accountType>
        <rc:periodEndDate>2018-01-31</rc:periodEndDate>
        <rc:majorFormType>EI2</rc:majorFormType>
        <r:payDayDate>2018-01-01</r:payDayDate>
</r:retrieveEIRequest>
```

Field	Requirement	Description
payDayDate	Required	Payday means the day on which an employer makes a PAYE income payment to an employee

<**prepopResponse**> structure:

```
<prepopResponse 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 xmlns:r="urn:www.ird.govt.nz/GWS:types/ReturnEI.v2"
                xsi:type="r:PrepopResponseBodyType">
            <r:accountId>123456798EMP001</r:accountId>
            <r:employee>
                <r:irdNumber>123456789</r:irdNumber>
                <r:employeeName>MarkTwain</r:name>
                <r:taxCode>M</r:taxCode>
                <r:employmentStartDate></r:employmentStartDate>
                <r:employmentFinishDate></r:employmentEndDate>
            </r:employee>
            <r:employee>
                <r:irdNumber>123456789</r:irdNumber>
                <r:employeeName>SamualClemens</r:name>
                <r:taxCode>M</r:taxCode>
            </r:employee>
        </r:responseBody>
</r:prepopResponse>
```

Field	Description
irdNumber	The IRD number of the employee—if no IRD number is available, 000000000 will be returned
employeeName	The name the employee is known as on the EI (255 characters)
taxCode	The tax code under which the employee falls
employmentStartDate	The start date of the employment (if date is not known, nothing will be returned)
employmentFinishDate	The cease date of the employment (if employment is still on-going, nothing will be returned)

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 the EI Return Service import a common.xsd which has some data types specific to Inland Revenue. The 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 this section 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/?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">
```

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 ReturnEI.v2.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.v2.xsd, ReturnCommon.v2.xsd and ReturnEI.v2.xsd.

See beginning of section 4 for instructions on where to find WSDLs for this service.

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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.

NOTE: *These response codes are subject to change and additional codes may be added from time to time. Software consuming this service* **must** *be able to account for additional responses that may not have been specifically coded.*

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 or agency
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.
5	Unauthorised vendor	The vendor provided is not authorised to use these suite of services

Standard codes	Standard message	Description
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 2018 this will be any account type other than AIL, AIP, BPA, MPO, CRS, DWT, FAT, FBT, GMD, GSD, GST, INC, IPS, NRT, PIE, PRS, PSO, EMP, RLT, RWT.
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
(none)	(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.
(none)	(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 GatewayServices@ird.govt.nz.

![Inland Revenue Te Tari Taake logo]

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	Filing period does not exist (eg attempting to file for a filing period such as 17-Feb-2019)
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	There is already a return for this period/paydate (for EI). An amendment to a return that has already been submitted must be submitted with isAmended as true.
108	Return locked for processing	Return locked for processing—try again later
109	Invalid Amend Reason	When amending a return there must be a valid amend reason.
140	Invalid minor form type	Invalid minor form type
144	Amendment of this return is blocked until the initial return has been processed	This return cannot be amended until the initial return has been processed—try again in five minutes or, if the return was filed during the overnight batch, try again in the morning.
145	Return held for processing	The return is not visible because it is in a non-amendable error.
146	KiwiSaver Status Required	A KiwiSaver status is required when KiwiSaver Eligibility 'NE' is provided

5.3 Employment Information-specific response codes

The following response codes are specific to EI Return Service calls:

Standard codes	Standard message	Description
131	Duplicate line items	There were two line items with the same referenceId in the same submission
132	Reverse/replace can only be used for an amendment	Customer tried to reverse/replace a return without amending the return
134	Invalid employee IRD number	A provided employee IRD number is invalid. **Note:** IRD number must pass modulus 11 digit check
136	Nil return not indicated despite missing line items	The value of 'isNilReturn' must be 'true' if no line items are provided. When no line items are provided, 'employeeFields' does not contain any 'employee' elements.
137	ReferenceId is required for all line items	referenceId must be provided in all file requests
150	Credit transfer requests are not supported	Credit transfer requests are not supported for the form type
160	Duplicate payday submission	A payday submission has already been submitted for the same account, period, paydate, and request payload in the last hour.
161	Payday date not in filing period	The payday date is not in the same month as the filing period (eg payday date 31/03/2019 and filing period 30/04/2019)
162	Period has non-payday return	The return filing period already has an EMS / IR348 filed.
163	Pay period end date before pay period start	The value of 'payPeriodEndDate' must be on/or after the 'payPeriodStartDate'.
164	Period too far into the future	The requested filing period is too far into the future and unavailable for filing at this time (maximum two months in advance)
167	Return is reversed	The return has been manually reversed and cannot be amended. The submission key is no longer valid.
168	Return is transferred	The return has been manually transferred to another account or period. If this is incorrect please

Standard codes	Standard message	Description
		contact Inland Revenue (either via Phone or MyIR)
169	Submitted incorrect EI version	The payday return was previously submitted as a different version of EI. • EI v1 cannot be used to amend or retrieve EI v2 • EI v2 cannot be used to amend or retrieve EI v1
171	Tax code unsupported EI version 2	The provided tax code is not supported **Note:** In v2 of EI, it is not possible to add an additional line item with tax code of either ESS, SLCIR, or SLBOR
173	Account was not active for the period submitted	Account was not active for the period submitted
180	Return is time-barred	Amendments are prevented because the return was originally filed more than four years ago
200	Invalid adjustment: Exceeds gross/PAYE	The value of the adjustment for the line exceeds the corresponding value for Gross or PAYE for the line

6 Change log

This table lists all changes that have been made to this build pack document since v2.0 was released.

Date of change	Document section	Description
30/11/22	5.3	• Updated description for error code 131 • Added error code 137
	3.1.1	• Removed line number amendment method
	3.1	• Updated referenceId field to be a required field • Provided additional notes for lineNumber and referenceId
26/01/22	5.3	• Error code 180 added
17/09/21		• October 2021 release changes
	3	• Added description at end of section to cover bankruptcy after October 2021
	5.3	• Error codes 200 added
	3.1	Following fields now accept negative values: • priorPeriodGrossAdjustment • priorPeriodPAYEAdjustment • totalPriorPeriodGrossAdjustment • totalPriorPeriodPAYEAdjustmentS
		• Glossary removed
	2.3	• Removed 'To:' parameter from first sentence and also from example SOAP request structure • First paragraph updated
	3.1	• Typo corrected in essEarnings field description
04/06/21	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

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Date of change	Document section	Description
	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

	3.1	• Note added to isNilReturn field description: NOTE: If no line items are being provided in the return payload, the value of this field should be 'true'.
	5.3	• Error code 136 added – 'Nil return not indicated despite missing line items'
03/02/21	3.1	• Accepted tax codes updated to include SA and SASL
18/11/20	5.2	• Message and description of error code 144 updated
21/10/20	V2 SERVICE UPDATES	• Amended minor typo
25/08/20	V2 SERVICE UPDATES	• Removed comment that a return can take up to a day to process. • Added comment that returns will process within 5 minutes
28/07/20	5.3	• New error code 173 added
	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:

Date of change	Document section	Description
		• *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
03/04/20		• V2 released