Inland Revenue
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Inland Revenue

Gateway Services Build Pack - TDS Overview and Transition V0.5 6 November 2017

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About this Document

This document is provided to Service providers to support their transition from TAWS to the use of Transaction Data Services (TDS). It provides an overview of TDS, describes the data which will be made available through the services, describes processes and use cases for the use of these services.

This document is part of the suite of build packs that Service Providers need for implementing interfaces between their software and IR TDS.

Document Control

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Contact	For feedback relating to this document and/or further information please contact the Inland Revenue Software Developers Liaison Unit (SDLU) E: mailto: SoftwareDevelopersLiaisonUnit@ird.govt.nz

1   Overview

Inland Revenue (IR) has a suite of digital services available for consumption by our partners that support efficient, electronic business interactions with IR. Gateway Services is a suite of these that are mostly SOAP-based (Simple Object Access Protocol) web services and also include file transfer and API services. Transaction Data Services (TDS) is a business service described in this build pack document that consists of various technical services, which in turn rely on parts of the Gateway Services suite.

This document is intended to provide a high level overview of Transaction Data Services for current users of Tax Agent Web Services (TAWS). It includes some information about data conversion from FIRST to START and how that data will appear in TDS to enable a reconciliation of data already held against data newly received.

This document should be read in conjunction with other TDS Build Packs for each available service. These contain the technical detail required to support the end-to-end use of Inland Revenue's various Transaction Data Services.

Other Gateway Services are available and have their own build pack documentation.

In the diagram below, this document describes the Business Service level – highlighted. The blue blocks have separate build packs describing them in more detail.
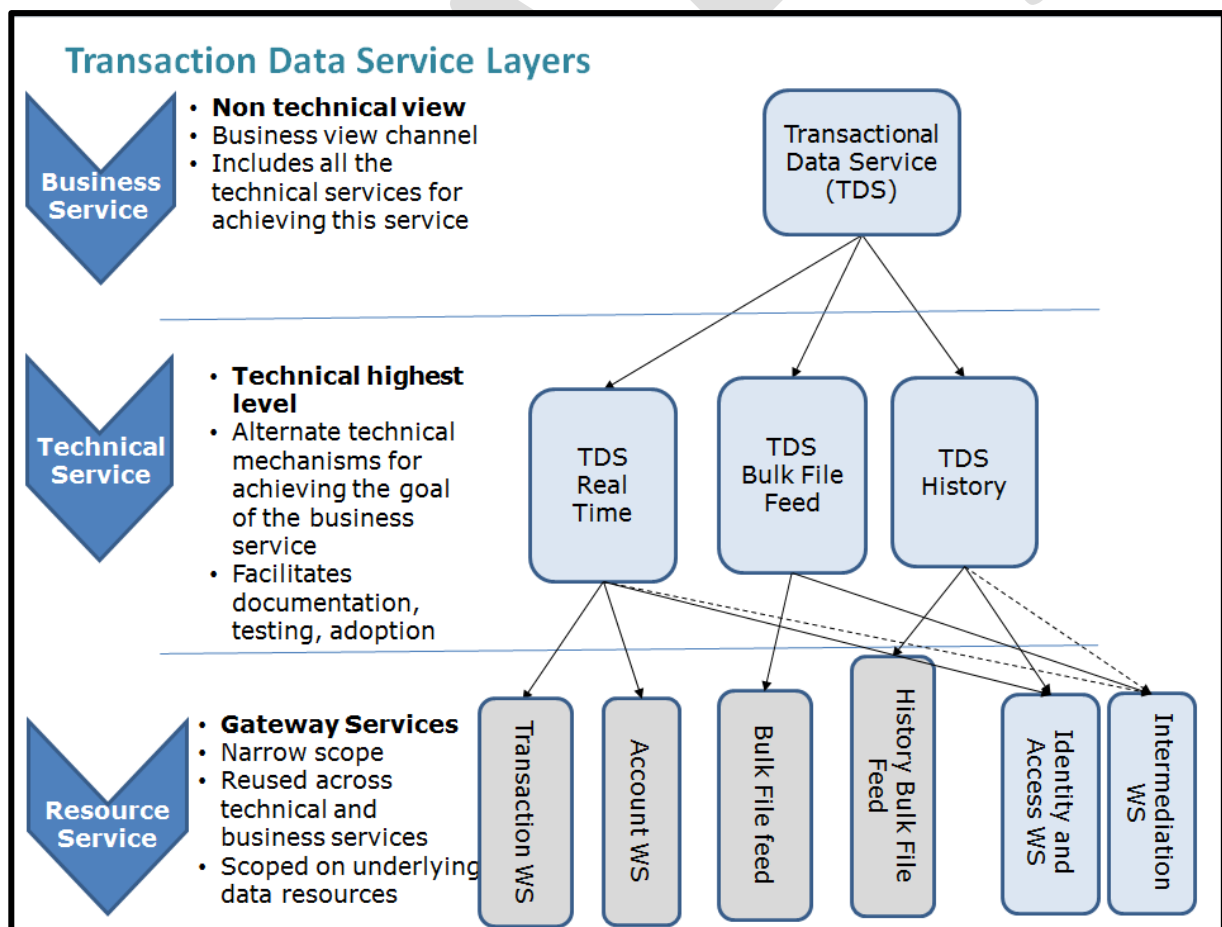
Figure 1: Transaction Data Services Layers

1.1 This solution

The following diagram outlines the sources and targets for Transaction data during the transition phase:
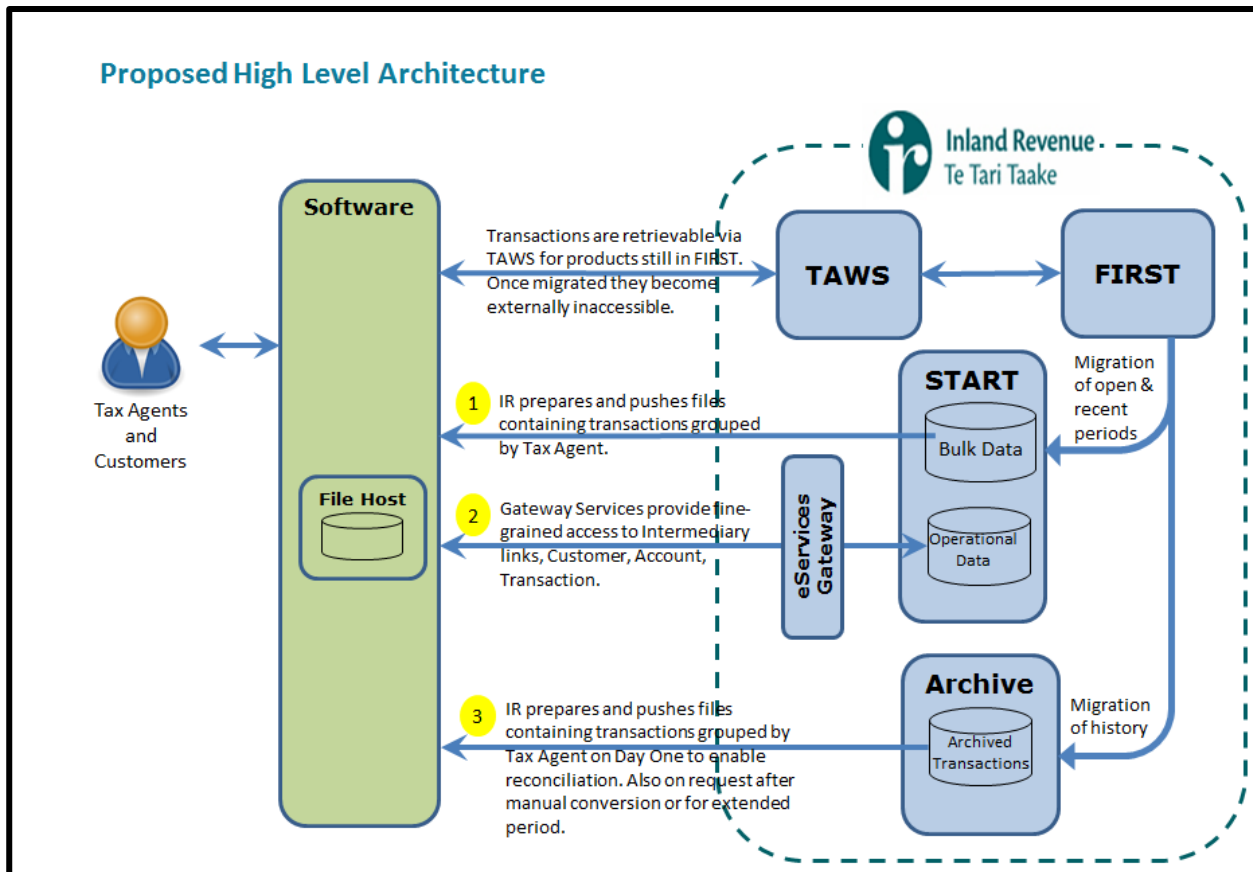
Figure 2: High Level Architecture

The service consists of the following three related business services shown above:

Technical Service	Description
1. Bulk File Feed of Transaction Data	The Bulk File Feed is an overnight file feed that pushes new transaction data to Tax Agents or Customers via the Software Providers whose software they rely on. It is designed to cater for the high volumes of transaction data IRD makes visible to authorised parties.
2. Real Time Feed of Transaction Data	The Real Time Feed gives access to transaction data to Tax Agents or Customers via web services. It is intended for real time queries that need additional information to the bulk file feed or need an urgent update related to a change event. It is not intended to be used without the bulk file feed except by small parties with small datasets to query.

Technical Service	Description
3. History Feed of Transaction Data	The History Feed is primarily a one-off SFTP providing history data for all Tax Agents/Customers included in the Bulk File at Day One. This provides access to the original transaction data history from the IRD FIRST system and allows for the update of any transactions not received through TAWS and the reconciliation of Converted transactions with previously held transactions. The History transactions will contain the START Transaction ID to which the transaction has been converted. Two additional rare use cases are also supported on request: after manual conversion or for extended timespan unconverted periods.

Table 1 – Business Services in TDS

TDS will provide data for tax types in IR's new system - START – only. The existing TAWS service will continue to provide data for those tax types managed in IR's existing system - FIRST.

1.2   Intended Audience

The solution outlined in this document is intended to be used by Service Providers who currently provide access to TAWS through their software and wish to transition their Clients to TDS.

1.3   Related Documents

The following diagram explains the relationships between the documents supporting the TDS solution: *Note : Build Packs are available on the website here:*

https://github.com/InlandRevenue/Gateway-Services/wiki
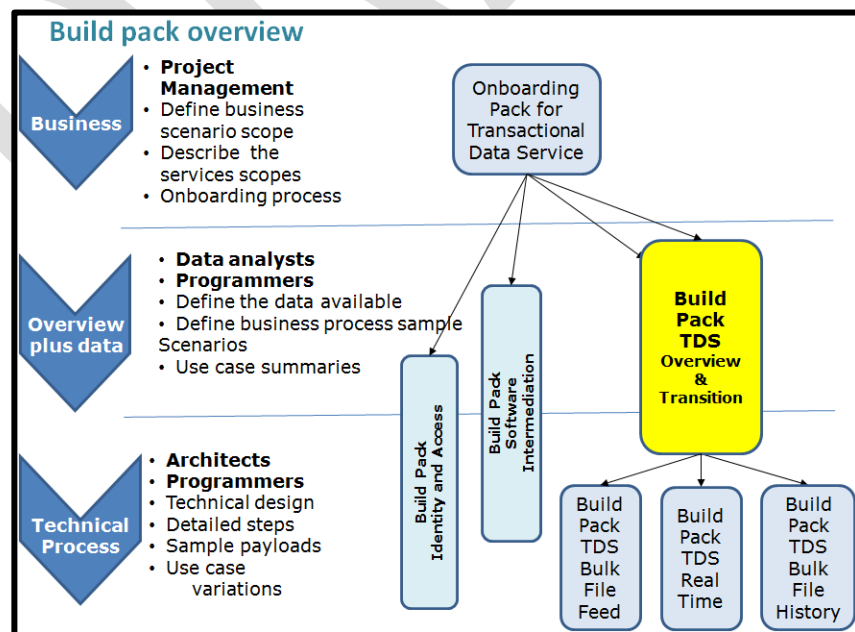
Figure 3: On-boarding and Build Pack Structure for TDS

Name	Description
TDS – Onboarding Pack	Provides the onboarding guide for consumers of the various TDS components. Gives details of prerequisites, setup requirements, testing, contact lists, etc. It is intended to get an organisation up and running using the TDS solution. This document will not be available at the link below; instead it will be sent to Service Providers when necessary.
TDS – Overview and Transition	This document - Describes the service components at a high level and provides an overview of the data available through TDS. Also contains information about how the component services that make up the TDS solution interact with each other.
TDS Bulk File Feed	Describes the technical requirements and specifications, processes and sample payloads for the TDS Bulk File Feed
TDS Real Time Build Pack	Details the technical requirements and specifications, processes and sample payloads for the TDS Real Time Service
TDS Bulk File History Build Pack	Details the technical requirements and specifications, processes and sample payloads for the TDS Bulk File History Service
Identity and Access Build Pack	Details the Authentication mechanisms used by IR.
Software Intermediation Build Pack	Details the technical requirements and specifications for the linking of Tax Agents/Customers to Service Providers to enable these links to be used by the Bulk File Feed and Bulk file History Service.

Table 2: Related Documents Descriptions

2 Data

2.1 Data Model

This section describes how the data in IR's START system is structured. The diagram below provides a high level view of the model and the following table contains explanations.
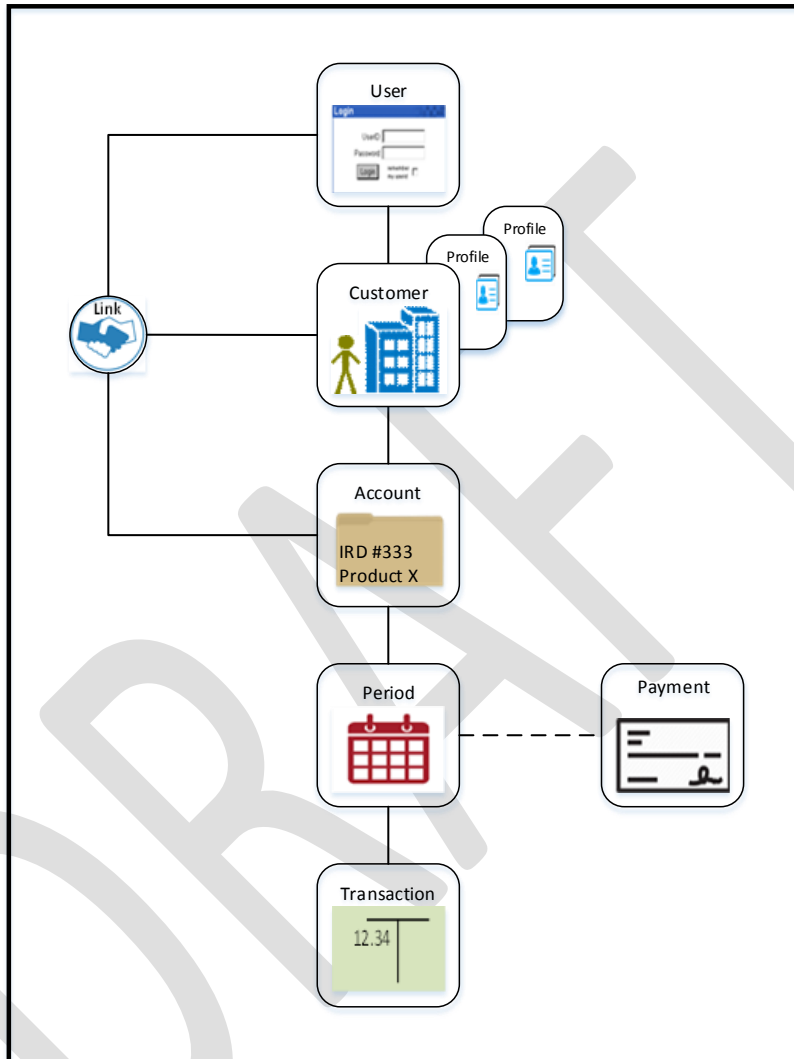
Figure 4: High Level representation of Data Model

Entity	Description

Customer	A Customer must exist in order for any of the other entities to be present.
	
	 A Customer is a person or an organisation which:
	
	     Has an IRD Number
	     May have Users, but not necessarily
	     May have many Accounts, but not necessarily
	     May be linked to other Customers by a variety of types of relationships
	     May have many profiles

Entity	Description
Profile	A Profile is a particular instance of a Customer, often a branch or location e.g. a large corporate could have a Head Office as the Customer and each branch can be a Profile. Each Profile can have separate accounts (e.g. for GST and FBT) and they will only be able to view the data for their Accounts. A Tax Agent can be linked to an account type for a profile but not be linked to the Customer i.e. Customer A has INC, GST, FBT **and** Customer B (Subsidiary of Customer A) has GST and FBT accounts **and** the Tax Agent is linked to Customer B accounts only
User	This is a web identity/credential associated to an actual person. It is owned by one Customer but can be Linked to Accounts belonging to other Customers. A User cannot exist without a Customer
Account	This is a ledger with an Account ID which includes the IRD Number Unlike FIRST a Customer might have many Accounts for a product/tax type – e.g. large corporate with many profiles. The old notion of multiple Locations is implemented as Profiles which are groupings of Accounts. Users can be linked to Accounts e.g. a Tax Agent linked to INC only for a Customer.
Link	Delegating access creates Links which can associate Users, Customers, Profiles and Accounts. Links allow Intermediaries to act on behalf of the Customer. The Intermediary must be "linked to" (i.e. have been delegated access to) the Customer or the Customer's account(s).
Periods	Transactions are partitioned by period. Different accounts have different periods e.g. INC has a 12 month period, GST can have 2 months, 6 months, etc. See Data Scenarios for an example of the data associated with a period.
Transactions	An individual activity recorded with a unique identifier on a specific day, relating to a specific Transaction Type with a specific Amount and Effective date. See Data Scenarios for an example of the data associated with a period.
Payments	Payments can be Pending, Suspended, Locked or applied to a period. While pending or suspended (i.e. received but not yet created as a transaction in a period), payments do not appear as Transactions in the Accounts. Locked payments occur when a payment has been applied to a period where there is, as yet, no assessment. The payment is locked to ensure it cannot be applied against another outstanding amount. See Data Scenarios below for an example of the data associated with the above situations.

Table 3: Data Entity Descriptions

2.2 Data Items available through TDS

The following data items will be available through TDS:

Note: Not every field is available in every file. Check the Build Pack for each file to clarify the data provided with each feed.

Attribute	Description	Data Type	Length
Account			
IRD Number	Standard IRD Number	String	9
Account Type	The type of account – e.g. GST, INC	String	6
Filing Frequency	The filing frequency for the Account – See Appendix B Filing Frequency Codes	Char	8
Account ID	The Identifier of the Account	String	30
Commence	Commencement Date of the Account	Date	8
Cease	Cessation Date of Account	Date	8
Balance	The Balance for the account in total	Currency	8
MaxActivity	The last date/Time of Activity on this Account	DateTime	8
Conversion	The last date that data was converted into this Account	DateTime	8
Period - * Short Period Summary data			
Period *	The filing period of the Account – usually the last day of the period	Date	8
Filing Frequency	The filing frequency for the Account/period – See Appendix B Filing Frequency Codes	Char	8
Period Begin	The first day of the period	Date	8
Period End	The last day of the period	Date	8
Assessment	The amount assessed	Currency	8
Penalty	The amount of Penalty that has been applied	Currency	8
Interest	The amount of interest that has been applied	Currency	8

Attribute	Description	Data Type	Length
Other	Amounts other than penalty, interest, payments or credit transfers in that have been applied to this period e.g. remission, write off or credit transfer out	Currency	8
Credit	Payments or credit transfers in which have been made for this period	Currency	8
Balance *	The Balance for the period	Currency	8
Max Period Activity *	The last date/time of activity on the account. This date should be compared to the last set of data received – not the last transaction Process date	DateTime	8
Bank Account Transactions			
Transaction ID	Transaction ID of the Refund which used this Bank Account	String	30
Direct Credit Bank Account Standard	The Country of the Bank Account to which any credits will be paid	Char	12
Direct Credit Bank Account Routing Number	The branch number of the bank for the Direct Credit Bank Account	String	30
Direct Credit Bank Account Number	Number of the bank account	String	34
Pending Payment			
Payment ID	The unique identifier for the payment	String	30
Pending Amount	The amount of the payment	Currency	8
Pending Since	The date the payment was placed in pending	Date	8
Transfer			
IRD Number	The IRD number of the account to which the money went or from which the money came	String	9
Transfer Account	The Account to which the amount was applied or from which it was received	String	6
Transfer Period	The period for that Account to which the amount has been applied – Period above	Date	8
Transaction ID	The unique identifier for the transaction	String	30

Attribute	Description	Data Type	Length
Bill – Transactions are organised by Bill			
Bill ID	The Bill Number – each bill has a different due date	String	30
Bill Due Date	The due date for the Bill	Date	8
Bill Credit	The amounts paid towards the Bill	Currency	8
Bill Balance	The Balance due on the Bill	Currency	8
Transaction - Organised by Bill Number			
Amount	The amount of the transaction	Currency	8
Transaction ID	The unique identifier for the transaction	String	30
Trans Type	The code for the Type of Transaction	String	6
Posted Date	The Posted Date for this transaction	DateTime	8
Effective Date	The Effective Date for this transaction	Date	8
Link ID	The unique identifier for a linked transaction – e.g. a transaction which has been reversed by this transaction	String	30

Table 4: Data available through TDS

2.3   Accounts

In START since April 2017

FIRST Tax Type	START Account Type	Description	Notes	Amount of data available
GST	GST	Goods and services tax	Already in START and will be made visible in Transaction Services. GST will have only one return assessment transaction other than reassessments. Where there is a 'return credit' transaction, there will also be a $0.00 'return debit' transaction – this is true for all 'return credits' as it enables the assignment of a Bill Number to cater for the possibility of the credit being reversed.	All periods ending 30-Apr-2014 and onwards and prior periods which were still open at the time of conversion

FIRST Tax Type	START Account Type	Description	Notes	Amount of data available
	GSD	GST on Goods sold in satisfaction of debt	GSD enables a third party to account for and pay to IR, the GST from goods sold in satisfaction of debt. GSD can have multiple assessment transactions from the same return type. This is because each return can capture a separate transaction. Therefore a period can have multiple 'Return debit' transaction.	All periods ending 28-Feb-2017 and onwards
	LGL	Legal Costs and Charges	The amounts determined by the Court to be charged for particular items such as Damages and Restitution. These will now be charged to a separate Account.	All daily periods 7 Feb 2017 and onwards

Being migrated to START in April 2018

FIRST Tax Type	START Account Type	Description	Notes	Amount of data available
DWT	DWT	Dividend withholding tax	Only one return assessment transaction other than reassessments.	All periods ending 30-Apr-2015 and onwards and prior periods which were still open at the time of conversion
IPE	IPE	Interest PAYE Exempt Receipts	A Customer can claim an over deduction of withholding throughout the year. This means multiple claims for different withholding could be in one period. A Customer can also apply for an exemption certificate.	
RWT	RWT	Resident Withholding Tax	Withholding tax which can have an annual reconciliation assessment and other regular assessments which can occur in the same period. The normal periodic return will create a 'Return debit' or 'Return Credit' transaction. The annual reconciliation return will post 'Annual return debit' or 'Annual return credit'.	
NRT	NRT	Non Resident Withholding Tax		
IPS	IPS	RWT deductions on interest		
RLT	RLT	Resident Land Withholding Tax(RLWT)	Multiple assessment transactions from the same return type. This is because each return can capture a separate transaction. Therefore a period can have multiple 'Return debit' transactions.	

FIRST Tax Type	START Account Type	Description	Notes	Amount of data available
AIL	AIL	Approved issuer levy	Only one return assessment transaction other than reassessments.	All periods ending 30-Apr-2015 and onwards and prior periods which were still open at the time of conversion
FBT FBA FBI	FBT	Fringe Benefit Tax FBA – Annual FBI–Income Year	Migrating as FBT and will have 3 assessment codes and the possibility of two assessments in one period. The normal quarterly return will have 'Return debit' or 'Return credit'. The annual return will have 'Annual return debit' or 'Annual return credit' The income year return will have 'Income year return debit' or 'Income year return credit'	All periods ending 30-Apr-2015 and onwards and prior periods which were still open at the time of conversion
GMD	GMD	Gaming machine duty Problem Gambling Levy – aka PGL GST on PGL	Only one return assessment transaction other than reassessments.	All periods ending 30-Apr-2015 and onwards and prior periods which were still open at the time of conversion
PIE	PIE	Portfolio investment entity tax	Only one return assessment transaction other than reassessments.	All periods ending 30-Apr-2015 and onwards and prior periods which were still open at the time of conversion
	PRS	Payroll Subsidy	This is a subsidy for customers who use a payroll intermediary to do their PAYE. Claims are received, validated against the PAYE employer monthly schedules received and paid out.	No data will be migrated. This account will start from a point in time.

Table 5: Accounts available in START

In general, Tax Types in FIRST will become Account Types in START. However, in START some FIRST Tax Types have been amalgamated e.g. FBT, FBA and FBI. Examples of how these Accounts will appear in TDS are included in Data Scenarios below.

Current Accounts will become available through TDS as they are migrated to IR's START system. Prior to inclusion in TDS, Tax Types remaining in FIRST will continue to be available through TAWS.

Once the data is available through TDS it will no longer be available through TAWS. The table above details which Tax Types/Accounts will be included in TDS at April 2018. This table will be updated each time new Accounts become available through TDS.

2.4   Business Rules and Interpretation of Transaction Data from April 2018

With the transition to the new IR system there are some particular conditions which will be managed in a different manner than the current system and which need to be taken into consideration.

2.4.1 Transfer Transactions
Technical constraints mean that destination/source information for Transfers between FIRST and START will not be available immediately through TDS. See Section 2.3 above for the Accounts for which full information will be available.

Where a transfer has occurred within START, TDS will provide IRD Number, Account , Period and Transaction ID.

Where a transfer has occurred from START to FIRST or from FIRST to START, TDS will provide the same data but there may be a delay in providing the Period Data. Specifically, we will show FIRST to START transfers as soon as they are posted into a START account. A transfer will trigger a credit into the START period which would be immediately reflected in the bulk feed that night. For transfers from START to FIRST there may be a delay of at least 24 hours and possibly 48 hours before the Period will be shown in the Bulk File or Real Time Feed.

2.4.2 Multiple Assessment Transactions
2.4.2.1   Audit Assessment for GST
For April 2017 to April 2018 GST audit assessments will have their own separate Assessment transaction. This means it will be possible to have an actual assessment and an audit assessment in the same return period. In FIRST the old assessment would reverse and a new assessment would be applied.

From April 2018 an Audit Assessment for all Accounts in START (including GST) will reverse and replace the existing assessment (unless it is an increased debit in which case the Audit Assessment will be for the difference between the original assessment and the audit assessment).
Note: If an audit credit is applied a debit will not be applied as well – i.e. to enable a Bill to be available for any future changes.

2.4.2.2   FBT Assessments
FBT, FBA and FBI Tax Types have been consolidated into one account type in START – FBT. There will be three assessment Transaction Type Codes with the possibility of two assessments in one period.

2.4.2.3   Withholding Tax
RWT, NRT and IPS Withholding Taxes can have an annual reconciliation assessment and other regular assessments which can occur in the same period. The normal periodic return will create

a 'Return debit' or 'Return Credit' transaction. The annual reconciliation return will post 'Annual return debit' or 'Annual return credit'.

RLT (or Resident land Withholding Tax – RLWT) can have multiple assessment transactions from the same return type. This is because each return can capture a separate transaction. Therefore a period can have multiple 'Return debit' transactions

2.4.3   Bill

A bill is a series of transactions due on specific date, including the liability owing and any penalties and interest calculated. A period can be divided into a number of bill items to enable correct calculation of penalties for the due date of the bill. TDS will record against each transaction the bill to which it relates and will also provide Bill reconciliations for each Period.

2.4.4   Pending payments

A payment may not be automatically applied to the period to which it relates until there is an assessment against which that payment can be recorded. Therefore payments are not always recorded as transactions until after the assessment transaction has been processed. For the time from receipt to the assessment being recorded as a transaction the payment is classed as Pending. TDS will record any such payments in a period each time transactions are sent for that period.

2.4.5   Direct Credit Account

Direct Credit account is the Bank Account Number used for any direct credits for the Period. The Transaction ID for the refund will be included with the Bank Account details to which the refund was paid.

2.4.6   Rounding

Any penalty and interest calculation provided has been calculated using "bankers" or "guassian" rounding.

2.4.7   Multi Payment Option – used to be Bulk Payment

A Multi Payment Option (MPO) is a new Account Type which will be able to be entered through eServices. A schedule will be uploaded with the payment and an MPO Account will be created for the record of the payment and the distribution.

When credited to the individual accounts there will be an MPO Payment Type code and description associated with the transaction.

2.4.8   Transaction Items not sent

In TAWS when Clients are in Account Review or have an Account Halt in place no data is available. This will not apply in TDS.

2.4.9   Filtering of Inactive Transactions

Previously some transactions were filtered as inactive in certain types of TAWS requests for Data. In TDS all transactions (i.e. everything START considers a transaction) will be sent through TDS. This includes all Reversals.

2.5   New tax types to be included

GSD and LGL Account transactions will be available through TDS.

2.6   START Transaction Codes

A full list of START Transaction Codes is included in Appendix C of this document.

2.7 Data Integrity

IR will be providing all transaction data through TDS and will make every effort to ensure it is accurate, timely, consistent and complete. IR wishes to be transparent about their activity with Customers and to ensure Service Providers, Tax Agents and Customers are provided with the most up to date and accurate data possible.

All TDS data will be sent from a copy of IR data made every evening. Therefore any data sent/received through TDS will be from close of business the previous day.

Despite best efforts inconsistencies can arise from time to time between the data held by the Service Provider/Tax Agent/Customer and Inland Revenue's master data set. Detecting and resolving inconsistencies is critical to the integrity of TDS.

Several mechanisms exist to assist in doing this:
- The check that all data held by IR has been received by the Service Provider. To enable this check TDS Period Summaries include a 'period activity date'. This date is time stamped and represents the date and time of processing of the last transaction recorded at IR for that period. This date and time should be recorded to check for a match each time data is received. If this does not match there is new transaction data. Note: The Period Summary also includes the Period Balance which is a secondary check. If this discrepancy has been detected a query should be made to the Real Time Feed for this Client, Account, Period to retrieve the latest data and reconcile.
- For Real Time calls if IR detects errors in the request, such as invalid IRD numbers; this will be reported back to the requestor. In this case the query should be retried using the correct data. The error codes are defined in the Build Packs for those services. If the Requestor does not receive any response to a request, it is RECOMMENDED that the request be re-tried.
- When business processing error conditions are detected by Inland Revenue e.g. error in SFTP of ZIP files, IR will contact the parties concerned. If a file fails to send, an alert is raised at IRD and contact will be made by IR. The available business condition status codes and the recommended action to be taken in each case are defined in the Build Pack for the Bulk File.
- In general if an anomaly is found please notify IR through normal channels.

2.7.1 Channel Consistency

It is possible for a Client of an Intermediary to query their own tax information and come up with seemingly 'different' data. This is not likely to occur unless the eServices check has been made on a different day from when the Intermediary has received data from TDS; any activity in the intervening days could provide inconsistency.

Note: The Transaction Types in eServices are coded at an aggregated level and do not have the level of detail present in TDS Transaction Types. The aggregated Transaction Type Descriptions however, ensure although they are recognisable.

2.8 Data Scenarios

The Data scenarios for data in Transaction Services are as follows:
- Late Payment Penalties
- OUM Over Time
- Reassessment
- Default Assessment
- Transfer
- Writeoff
- Remission
- Payment
- FBT
- GSD
- RWT
- DWT

The detail of how these Accounts will translate into data in Transaction Services is shown in the following document.

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2.9   Data Conversion from FIRST to START

The conversion of IR data to START in February 2017 (GST only) and April 2018 will cause some differences between TAWS and TDS data when converted information is involved. These differences are identified below (See Data Conversion Scenarios below for examples).

2.9.1 Penalty transactions

The initial 1% late payment penalty, initial 4% late payment penalty and the monthly incremental late payment penalties have been combined into one 'converted penalty' transaction. This transaction will have a Transaction Type CNVPNL Converted penalty.

Penalty remissions have been combined into one 'converted penalty remission' transaction. This transaction will have a Transaction Type CNVRPN Converted penalty remission.

2.9.2 Increased debit reassessments

Where a period being converted contains more than one assessment and the later assessment is for an increased amount, the conversion of the increased assessment will not include a reversal of the first assessment and will include another assessment of the difference between the two amounts. This allows for different due dates for each amount. The FIRST assessment and reassessment transaction will both have a START Transaction Type RTNORI Return debit. This will not be an automatic match for data previously retrieved through TAWS.

2.9.3 Unique transaction identifier

The sequential transaction numbering used in TAWS has been replaced with a unique identifier in START which will not be sequential. Service Providers may have used this sequential numbering to check they are not missing any data from IR. This is not able to be accommodated by IR within TDS.

TDS is offering a different mechanism for checking for missing transactions where each period summary will include the process date and time of the last transaction in the Account. The date/time can be checked against the last period summary to verify it has not changed. Full period summary details will be provided in the weekly Bulk File Feed.

At the time of conversion any aggregated transactions will, in the History Transactions Service, contain the unique transaction ID of the START transaction in which they have been aggregated. This will allow Service Providers to support reconciling between TAWS and TDS data.

2.9.4 Conversion Scenario

This spreadsheet contains an example of data conversion where there was an original assessment converted with Late Payment Penalties and UOMI and then further Late Payment Penalties and UOMI were applied after conversion. *Note: Penalty and UOM Interest calculations are estimates only*

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3 Use cases

The Transaction Data Services provide data for an overall business process that is controlled by the Service Provider software and user, rather than IR.

This chapter introduces the overall typical sequence of events, then the use cases. The next chapter strings those together into sample processes and scenarios.

3.1 Overall typical sequence of events

A very simplified overall sequence of typical events is described below for the TDS Bulk Feed, History Bulk Feed and the Real Time Service.

3.1.1 High level typical bulk feed sequence

The overall sequence is described below:
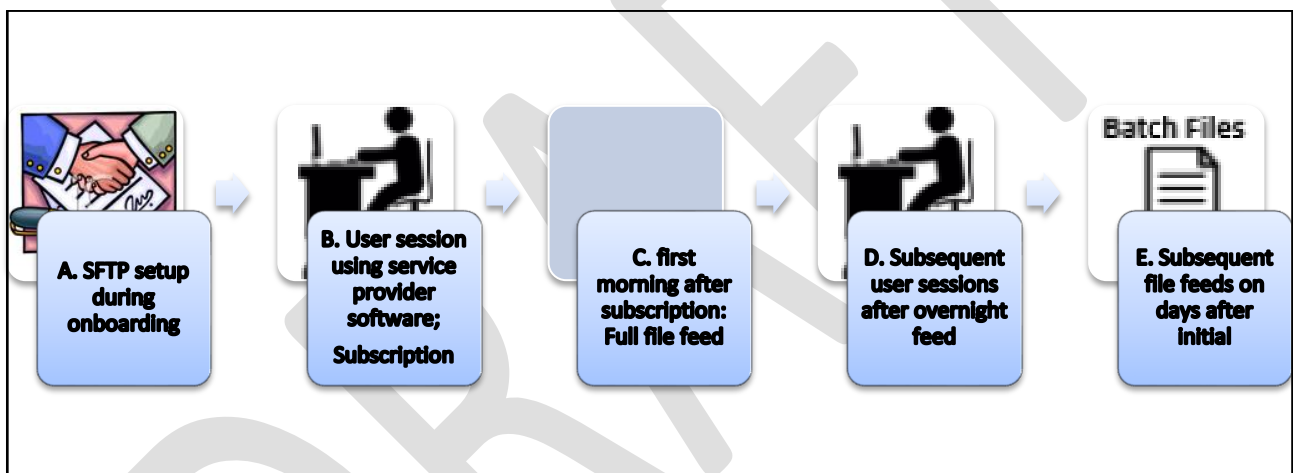
Figure 5: Sequence of Bulk File Feed

Versions of this diagram and the steps involved are used in explaining the sample scenarios in the sections below.

- **Stage A:** This is the initial on-boarding of a Service Provider that wishes to consume the TDS Bulk File Feed. For more on stage A refer to the TDS Onboarding Pack.

- **Stage B**: The User can access IR via the TDS Real Time service. For regular daily updates on high volumes of Customer data a bulk file feed needs to be set up. For IR to know which Customer information to send to a given Service Provider, a link is required between the Service Provider and their Tax Agents or their direct Customers Accounts. This link is created via the Intermediation Service initiated by the customer via the Service Provider software. Full details of the Intermediation service are provided in the Intermediation Build Packs. Once linked, the next Bulk File will include details for this User's Customers.

- **Stage C:** An initial file transfer occurs, containing a full set of Customer data – Both Converted and History.

- **Stage D:** When the user logs in to the software again, the content of the bulk files will be incorporated by the Service Provider software into what the user can see. They can still augment that with Real Time calls.

- **Stage E:** This is an incremental file transfer, containing data that has changed since the previous file was provided. Again the Service Provider software will incorporate that for the user to have access to on their next login.

There can be many variations to this process. For more detail in the case of a Tax Agent see sample process scenario 1 below – Section 4.2.1.

3.1.2 High level typical real time sequence

Below is an outline of the process for an organisation that chooses to use TDS for their own data and does not enlist for the bulk file feed. A simplified onboarding stage will precede access to the TDS Real Time Service in this case. See sample process scenario III below – Section 4.2.1.

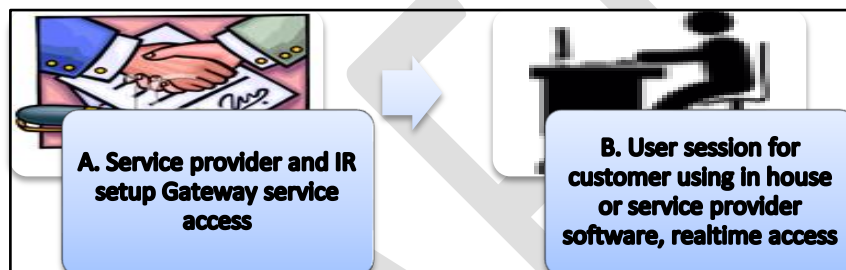**Figure 6: Sequence of Real Time access only**

- **Stage A:** This is the initial onboarding of a Service Provider that does not wish to consume the TDS Bulk File Feed. This only then requires the ability to call Gateway Services. The overview process for this will be included in the TDS Onboarding Pack.

- **Stage B**: The user can access IRD via the TDS Real Time service.

3.3 Use Cases

The types of use case within this overall business process are many and diverse. An effort has been made below to generalise these to ensure IR provides sufficient detail for Service Providers.

In support of this the following diagram illustrates the multiple levels of use cases involved in TDS and how they are related to each other. Refer to the table following it for an explanation:

3.3.1 Use Case Diagram
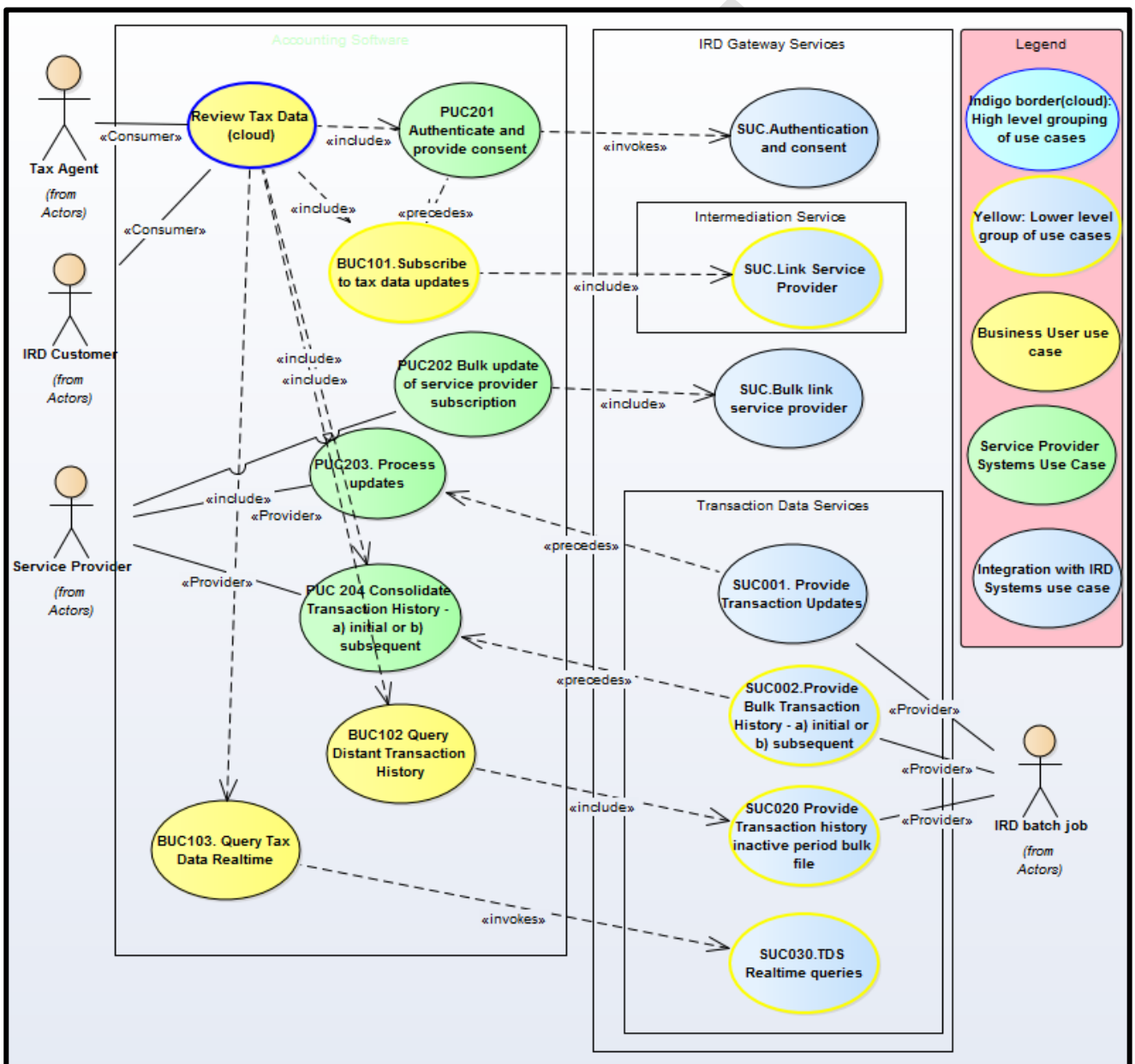
Figure 7: Use Case Diagram

3.3.2 Use Case Types

Use cases have been classified into the following types:

Use case Group	Description	Colour	Use Case	Build Pack
Tax Agent /Customer	Use cases specific to the Customer / Tax Agent point of view	Yellow	BUC101 Subscribe to tax data updates	This document
			BUC102 Query Distant Transaction History	This document
			BUC103 Query Tax Data real-time	This document
Service Provider	Some systems use cases on the Service Provider side are not user driven and broader than the integration with IR	Green	PUC201 Authenticate and provide and consent	This document
			PUC202 Bulk update of service provider subscription	This document
			PUC203 Process updates	This document
			PUC204 Consolidate Transaction History - a) initial or b) subsequent	This document
Systems use cases	The corresponding technical steps inside the above use cases which are required to integrate with IR	Blue	SUC Authentication and consent	Identity & Access Build Pack
			SUC Link Service Provider	Software Intermediation BP
			SUC Bulk Link Service Provider	This document, see PUC202
			SUC001 Provide Transaction Updates	TDS Bulk File Build Pack
			SUC002 Provide Bulk Transaction History - a) initial or b) subsequent	TDS Bulk File History Build Pack
			SUC020 Provide transaction history inactive period bulk file	TDS Bulk File History Build Pack
			SUC030 TDS real-time queries	TDS Real-time Build Pack

Table 6: Use Case Types and related documentation

3.4   Use cases described

3.4.1 Use Case PUC201 Authenticate and provide consent

This use case is included here at a high level for completeness. Full details of authentication are in the [Identity and Access Build Pack](#).

PUC201 – Authenticate and provide consent	
Primary Actor	Customer/Tax Agent
Secondary Actor	Service Provider or Accounting Software IR Identity and Access Service
Description	The goal of the user is to provide security details which enable the request for transactional details to be processed.
IR systems involved	START, GWS
Pre-Conditions	User is licensed and has access to Service Provider or Accounting Software and is authenticated, authorised and logged-in to that software. User has IR online service credential with delegated access to related tax accounts. This might be as employee of the entity or as employee of a Tax Agency. Service Provider or Accounting Software is Onboarded and therefore authorised to communicate with TDS [(See Onboarding Pack for TDS).](#) The user has taken an action in the Service Provider or Accounting Software that indicates they wish to receive tax data that they have access to at IR. The Service Provider or Accounting Software Provider has explicit consent from the user for receiving data for their clients. The party whose data is to be subscribed to needs to be identified – one the user has delegated access to.
Triggers	The request is sent using user's Service Provider or Accounting software.
Constraints	
Post-Conditions	The user request is accepted for processing
Use Case Scenarios	
1. Normal Flow	1. The user lodges a valid request with IR 2. IR provides a valid unexpired OAuth2 token to the user. 3. IR records successful validation. 4. Use Case Ends.

PUC201 – Authenticate and provide consent	
2. Exception Flows	In all the cases below the relevant error code will be returned. Request could be rejected because of: 1. Invalid Service Provider ID or incomplete onboarding 2. Invalid Tax Agency or Customer ID 3. Missing delegated permissions for logged in user to see tax information of the requested Tax Agency or Customer - eServices portal can be used to validate the information provided 4. Unavailability of or internal error on the gateway services. Please contact IRD support. 5. The request message is garbled /unreadable - IR sends the user a Signal Error Response Message. 6. There is an internal error within IR IT - IR IT responds to user with appropriate message. 7. The User name and/or password are incorrect - IR IT responds to user with appropriate message and records the access attempt. 8. The user is valid, however doesn't have the correct permissions to use this service - For example: Is not a Tax Agent. Or, User has had their access revoked. IR records the access attempt. 9. The structure of the information in the User Request is invalid. (i.e. does not conform to XML standard) - IT records failure and responds to user with appropriate message. 10. The request information fails data validation checks - For example: Client IRD number is not 8-9 digits, fails modulus 11 checks - IR IT fails request, records failure and responds to user with appropriate message
Alternative Flows	

Table 7: Use case PUC201 Authenticate and provide consent

3.4.2 Use Case BUC101- Subscribe to tax data updates

BUC101- Subscribe to tax data updates	
User/Actors	Customer/Tax Agent
Secondary Actors	Service Provider or Accounting Software IT Transaction Data Services
Description	The user goal is to subscribe to bulk transaction updates for their Customers or Organisation. It is expected all Service Providers in the initial uptake of the bulk feed or history bulk feed provide IRD with a list of users to invoke PUC202 - Bulk Update of Service Provider Subscription in advance of the first full file feeds. This use cases is for connections not established during that time.
IR systems involved	IR's Gateway Intermediation Service, Identity and Access Service
Pre-Conditions	User is licensed and has access to Service Provider or Accounting software and is authenticated, authorised and logged-in to that software. User has IR online service credential with current authorised access to relevant tax accounts. This might be as employee of the entity or as employee of a Tax Agency. Service Provider or Accounting Software is Onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS).
Triggers and Constraints	The user takes an action in the Service Provider or Accounting Software that indicates they wish to have the tax data that they have access to at IRD pushed regularly to the Service Provider software. Depending on how the Service Provider software is structured this might be on first logging in, on first requesting IRD data to be pulled in, or an explicit request to have updates happen in the background. Whichever way this is done, the Service Provider needs explicit consent from the user for subscribing to updates.

BUC101- Subscribe to tax data updates	
Constraints	The request must be sent using user's Service Provider or Accounting Software.

User must have a valid login token. (This could happen at just prior to the start of this use case or might have happened previously.

That login token must be available to the Service Provider or Accounting Software. If that login has timed out it might need to be repeated.)

The party whose data is to be subscribed to needs to be identified – one the OAuth2 token user has delegated access to.

User must be authorised at IR as a Tax Agent for that Customer (or delegated employee of the Customer), and therefore authorised to view data for that Customer and Account. |
| **Post-Conditions** | A subscription link will be in place between the Service Provider or Accounting software and the party the user credential represents – whether Tax Agency or Customer.

This subscription link will cause a file with an initial full dump and then daily updates to be added to any zip files the Service Provider is receiving from IRD daily.

This content will be assimilated by the Service Provider so the user on subsequent sessions using the Service Provider or Accounting software will see recent changes and new transactions reflected. |
| **Use Case Scenarios** | |
| 1. Normal Flow | See the systems use case in Software Intermediation Build Pack for the single step of interacting with IRD.

The steps before and after that depend on the Service Provider or Accounting software, and are summarised in the preconditions and post conditions above. |
| 2. Exception Flows | The variations depend on Service Provider and Accounting software. See the systems use case in Software Intermediation Build Pack for exception flows around calling the IRD technical service. |
| 3.Alternatives | It is expected all Service Providers in the initial uptake of the bulk feed or history bulk feed provide IRD with a list of users to in advance of the first full file feeds – see PUC202 - Bulk Update of Service Provider Subscription |

Table 8 : BUC101- Subscribe to tax data updates

3.4.3 Use Case PUC202 Bulk Update of Service Provider Subscription

Also 'SUC Bulk Link Service Provider'

Note: This is a Transition Use case for the one off purpose of loading Links between Service Providers and their Customers. In future this will be managed by SUC010 – detailed in the Bulk File Feed Build Pack.

PUC202 - Bulk Update of Service Provider Subscription	
User/Actors	Service Provider
Secondary Actor	START
Description	The goal of the Service Provider is to update multiple IR links at once at between Service Provider and Tax Agent or Service Provider and Customer Account. *Note: This is expected to be a one-off service provided at transition*
IR systems	START
Pre-Conditions	Service Provider is Onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS) It is expected all Service Providers that are part of the initial uptake of the bulk feed or history bulk feed provide IRD with a list of users to link in advance of the first full file feeds. It is expected that the Service Provider has explicit consent from the Tax Agent or Customer to create a link between them.
Triggers	File sent from Service Provider of the IRD Numbers of all their Customers to be linked. For Customers this list will need to include the Account types as well.
Constraints	This bulk linking will happens once only during each group of tax type transition to the new IRD systems.
Post-Conditions	A subscription link will be in place between the Service Provider or the Accounting software and the Tax Agencies or Customers using their software.
Use Case Scenarios	
1. Normal Flow	1. Service Provider provides IR with Customer list to be uploaded 2. IR uploads file and creates link between Service Provider and Customer Account/Tax Agent (SUC Bulk Link Service Providers) 3. Use case ends
2. Exception Flows	This is a one off exercise and any fallout from the upload will be communicated directly to the Service Provider concerned
3. Alternatives	No alternatives for initial Service Provider transition. For additional users linked later the web service will be used – see BUC101.

Table 9 : PUC202 Bulk Update of Service Provider Subscription

3.4.4 Use Case PUC203 Process Updates

PUC203 – Process Updates	
User/Actors	Service Provider Software or Accounting software
Secondary Actor	IR Transaction Data Services
Description	The user goal is to process data received from TDS for later presentation through their software.
IR systems involved	Bulk File
Pre-Conditions	Service Provider or Accounting Software is Onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS) The Service Provider or Accounting Software is set up as a receiver of daily transaction data updates from IR as bulk files over SFTP It is expected all Service Providers in the initial uptake of the bulk feed or history bulk feed provide IRD with a list of users to invoke PUC202 - Bulk Update of Service Provider Subscription in advance of the first full file feeds.
Triggers	IR daily batch processing for Service Provider subscription generates PGP signed and encrypted files. These files are added to zip files which are sent to the Service Provider at an onboarded SFTP location waiting for it. This subscription link will cause a file with an initial full dump and then daily updates to be added to any zip files the Service Provider is receiving from IR daily.
Constraints	
Post-Conditions	The updates have been assimilated within the Service Provider or Accounting Software so a Tax Agent or Customer on subsequent sessions using the Third Party Software will see the data reflected.
Use Case Scenarios	
1. Normal Flow	The steps after the SFTP transfer completes depend on the Service Provider or Accounting Software Once all the file content has been transferred the Service Provider will process the file content and make it available to the software instances used by the users of the requesting organisation.
2. Exception Flows	The variations depend on Service Providers software and Accounting software.
3. Alternatives	No alternatives

Table 10: PUC203 Process Updates

3.4.5 Use Case PUC204 Consolidate Transaction History

PUC204 - Consolidate Transaction History	
User/Actors	Service Provider or Accounting Software
Secondary Actor	IR Transaction Data Services Tax Agent
Description	The user goal is to consolidate transaction history data for a Customer for later presentation through their software. Note: This use case is for Tax Agents using Service Provider software where they already have Customer data from TAWS and where they have annotated or linked to this TAWS data. This use case facilitates replacing that TAWS data with new migrated TDS START data. The use case plugs possible gaps in the history for that period previously received and relates it to the new transaction IDs. This allows the Service Provider software and or Tax Agent to move the annotations or links from the TAWS data to the new TDS START data and use that as the point of reference going forward.
IR systems	Intermediation Service, Identity and Access Service (IAS)
Pre-Conditions	Service Provider or Accounting Software is Onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS) Either the Customer or the Tax Agent has been linked to the Service Provider for their use of that Service Provider's software in IR's Intermediation Service – See Onboarding and Build Pack for Intermediation Service.
PUC204 a)	**Consolidate Transaction History – a) initial**
Pre-Conditions	In addition to the above note the Service Provider has to be linked to the Tax agent or Customer at the time of cutover to be included in this bulk once off feed. This requires the Service Provider to provide relevant Tax Agent or user IRD numbers to IRD to bulk link them
Triggers	The Third Party Software receives Transaction History Bulk File from TDS
Constraints	
Post-Conditions	The Transaction History data has been assimilated within the Service Provider or Accounting Software so a Tax Agent or Customer on subsequent sessions using the Service Provider or Accounting Software will see the historic data reflected.
Use Case Scenarios	

PUC204 - Consolidate Transaction History	
1. Normal Flow	1. Service Provider or Accounting Software receives Transaction History Data through TDS History Feed - see the systems use case (SUC 002 in [TDS History Feed Build Pack](#)) for details 2. The steps within the Service Provider or Accounting Software depend on that software. 3. Use case ends
2. Exception Flows	The variations depend on Service Provider or Accounting Software See the systems use case (SUC 002 in [TDS History Feed Build Pack](#)) for exception flows around the use of the TDS History Feed technical service.
3. Alternatives	No alternatives

PUC204 b)	Consolidate Transaction History – a) Subsequent
Pre-Conditions	In some rare cases audits or other events cause IRD to have to manually convert additional history periods into START. This data will show up in the TDS bulk feed. In cases where the Tax Agent in the Service Provider software already had equivalent TAWS data and also have annotations or links next to it requiring consolidation rather than just replacement of the data this use case can be invoked
Triggers	The Third Party Software receives Transaction Bulk File from TDS that contains a new converted period, correlating with TAWS data already existing in that package and already annotated or linked
Constraints	
Post-Conditions	The Transaction History data has been assimilated within the Service Provider or Accounting Software so a Tax Agent or Customer on subsequent sessions using the Service Provider or Accounting Software will see the historic data reflected.
Use Case Scenarios	
1. Normal Flow	1. Tax Agent or Customer request history bulk file for period from IRD through process set up by service provider and agreed during onboarding phase 2. Service Provider or Accounting Software receives Transaction History Data through TDS History Feed - see the systems use case (SUC 002 in [TDS History Feed Build Pack](#)) for details 3. The steps within the Service Provider or Accounting Software depend on that software. Use case ends
2. Exception Flows	The variations depend on Service Provider or Accounting Software 1. See the systems use case (SUC 020 in TDS Bulk History Feed Build Pack) for exception flows around the use of the

PUC204 - Consolidate Transaction History	
	TDS History Feed technical service.
3. Alternatives	No alternatives

Table 11: PUC204 – Consolidate transaction history

Use Case BUC102 Query Distant Transaction History

BUC102 - Query Distant Transaction History	
User/Actors	Customer/Tax Agent
Secondary Actor	Service Provider or Accounting software IR Transaction Data Services
Description	The user goal is to look at old transaction history that is not available in TDS START data or in eServices and that they did not already have from TAWS. This data is not part of an active open period and therefore not expected to be processed by the Service Provider, merely displayed to the user. An example might be where a Tax Agent looks at open income tax periods and wants to look at the history of very old GST periods. This use case would be for Service Providers shortly after conversion to provide a longer view into the history but it requires processing data in TAWS format.
IR systems	Gateway Services, Identity and Access Service (IAS)
Pre-Conditions	User is licensed and has access to Service Provider or Accounting Software and is authenticated, authorised and logged in to that software User has IR online service credential with current authorised access to relevant tax accounts. This might be as an employee of the Customer or as an employee of a Tax Agency. Service Provider or Accounting Software is Onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS)
Triggers	The user requests transaction detail for a specific Customer by Account and by Period through the Service Provider or Accounting Software for a period older than what is available in START and TDS Real Time or TDS Bulk.
Constraints	
Post-Conditions	The data requested by the User is presented by the Service Provider or Accounting Software.
Use Case Scenarios	

BUC102 - Query Distant Transaction History	
1. Normal Flow	1. User initiates request for data for a specific customer, tax type and period in their Service Provider or Accounting Software 2. The process whereby the user makes this ad hoc request and sends it to IRD will be agreed during the onboarding phase with the Service Provider 3. Service Provider or Accounting software receives that data in file from TDS - See systems use case SUC 020 4. Service Provider or Accounting Software receives the response 5. Service Provider or Accounting Software assimilates the data 6. Service Provider or Accounting Software presents the data to the user 7. Use case ends
2. Exception Flows	Any variations depend on Service Providers and Accounting Software packages.
3. Alternatives	No alternatives

Table 12: BUC102 Query Distant Transaction History

3.4.6 Use Case BUC103 Query Tax Data Real Time

BUC103 - Query Tax Data Real Time	
User/Actors	Customer/Tax Agent
Secondary Actor	Service Provider or Accounting software IR Transaction Data Services
Description	The user goal is to be presented with up to date real time data for a specific Customer for a specific Account and Period.
IR systems	Gateway Services, Identity and Access Service (IAS)
Pre-Conditions	User is licensed and has access to Service Provider or Accounting Software and is authenticated, authorised and logged in to that software User has IR online service credential with current authorised access to relevant tax accounts. This might be as an employee of the Customer or as an employee of a Tax Agency. Service Provider or Accounting Software is onboarded and therefore authorised to communicate with TDS (See Onboarding Pack for TDS)
Triggers	The user requests transaction detail for a specific Customer by Account and by Period through the Service Provider or Accounting Software
Constraints	The request must be sent using the user's Service Provider or Accounting Software User must have a valid login token. (This could happen at just prior to the start of this use case or might have happened previously. That login token must be available to the Service Provider or Accounting Software. If that login has timed out it might need to be repeated.) User must be authorised at IR as a Tax Agent for that Customer (or delegated employee of the Customer), and therefore authorised to view data for that Customer and Account. The request is only for a single client of the User. Only Transactions which have been posted to the Customer's Account will be provided to the User at the time of the request.
Post-Conditions	The data requested by the User is presented by the Service Provider or Accounting Software.
Use Case Scenarios	

BUC103 - Query Tax Data Real Time	
1. Normal Flow	1. User initiates request for data for a specific customer, tax type and period in their Service Provider or Accounting Software 2. Service Provider or Accounting Software invokes that request to TDS - See systems use case (SUC 030 in TDS Real Time Feed Build Pack) for details 3. Service Provider or Accounting Software receives the response 4. Service Provider or Accounting Software assimilates the data 5. Service Provider or Accounting Software presents the data to the user 6. Use case ends
2. Exception Flows	Any variations depend on Service Providers and Accounting Software packages. See the systems use case SUC 030 in Real Time Feed Build Pack for exception flows around the use of the TDS Real Time Feed technical service.
3. Alternatives	No alternatives

Table 13: BUC103 Query Tax Data Real Tim

4 Processes

Note: The processes in this section are illustrative and represent possible sequences in which the Gateway Services could be used. Variations are possible and expected.

The Transaction Data Services provides automated lookup abilities to external parties to incorporate into their accounting software and processes. As such the end to end process of the customer is not controlled by, or visible to IRD. The points those processes can interact with TDS data are many and are individually considered use cases in these build packs.

This section aims to help clarify the overall flow of how those use cases could to be sequenced in order to dovetail into the external party process controlled by the software or people. It also aims to progressively create a context for understanding the usage of the various components through the following steps:

1. The typical overall flow and sequence of events are summarised from an abstract and then from a relatively technical perspective in Section 3.1 above".

2. Section 4.1 "Sample process scenarios and technical components" introduces the sample process scenarios and maps out which processes use which technical components and identifies the services being used.

3. Section 4.2 "Sample process scenarios and related use case walk-throughs" details a walkthrough of each of these sample process variations introduced referencing the steps in the scenario and the use cases applied.

4. The technical service and resource service build packs (as listed under Related documents) then describe each of those use cases in more detail in terms of what the exact interaction and exception variations could be and what sample payloads look like.

4.1 Sample process scenarios and technical components

Some sample end to end process scenarios have been defined to show how the various use cases line up to help facilitate that scenario. The intention of these processes is to show enough variation of how they would typically be used. This will make it easier to identify the relevant use cases and sequences for specific processes an external party might use.

Section 4.2 below works through the process scenarios and relates them to the use cases in Section 3 above.

Below are some sample process scenarios showing which technical components might be utilised to fulfil the scenario:

Sample process scenarios	Technical component / Implications	Service Provider Linking / Intermediation GWS	Agent to Client Linking / Existing Agents List	Delegation in eServices / eServices portal	Full file push / Bulk file Feed	Daily Push / Bulk file Feed	Query accounts / Accounts GWS	Query transactions / Transactions GWS	History Feed / History GWS	Full File Push / History File
I. Tax Agent starts using Service Provider software to look at data of current clients, subscribes for updates, repeatedly has sessions to look at the data over subsequent days	Data for all linked clients, will be provided through bulk file feed the next morning, with daily updates thereafter	Y			Y	Y	Y	Y		Y
II. Delegated employee accesses IR through Service Provider software and subscribes for updates; repeatedly has sessions over subsequent days	The data for the organisation is provided through bulk file feed the next morning, with daily updates thereafter	Y		Y	Y	Y	Y	Y		Y
III. Delegated employee accesses IR transaction feed through Service Provider software and does NOT subscribe for updates, but repeatedly has sessions to look at the data over subsequent days using real-time access only	Suitable for smaller organisations with small datasets and infrequent need to query	Y		Y				Y		
IV. New Client is adopted by Tax Agency	As part of on-going daily file feeds the next morning would have the full data for the newly added client		Y	Y	Y				Y	

Table 14 : Sample process scenarios and technical components

4.2 Sample process scenarios and related use case walk-throughs

4.2.1 Sample Scenario I – Tax Agent to Service Provider Linking and Subscription

Description Scenario I	**Tax Agent starts using Service Provider software to look at data of current Clients, subscribes for updates and repeatedly has sessions to look at the data over subsequent days.** This extended use case covers the five stages (see figure below) of the general process following on from the initial trigger: A. FIRST USER SESSION (ON RELATED CLIENT, IN SPECIFIC SERVICE PROVIDER SOFTWARE PRODUCT) B. EXTENDED USER SESSION HOURS LATER C. NEXT MORNING, FIRST ONE AFTER SUBSCRIBING D. SUBSEQUENT USER SESSIONS AFTER FIRST OVERNIGHT RUN E. SUBSEQUENT DAYS
Actors	▪ Tax Agent
Systems	▪ Software Provider software ▪ Inland Revenue – Gateway Services, TDS bulk file feed
Pre-conditions	Tax Agency is registered with IR as Tax Agent, and linked to Clients for Tax Types for whom data will be being requested. Tax Agent has a valid IR online services credential with current authorised access to relevant tax accounts
Triggers	Login of Tax Agent into Service Provider software that is integrated with IR Transaction Data Services
Post-conditions	Service Provider software has received accurate, complete data for the Client(s) requested and subscribed for future transaction data updates in that software

Table 15: Sample Process Scenario I
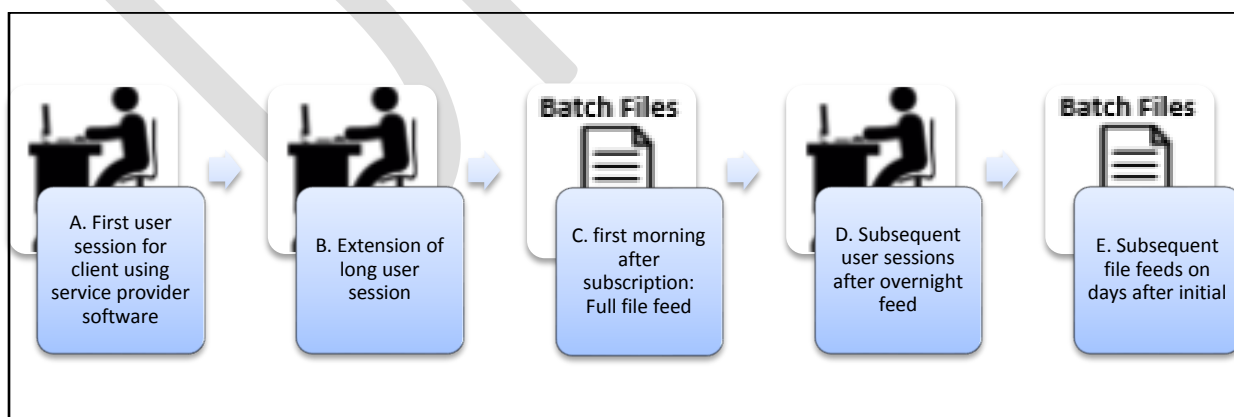
Figure 8: Process steps – Sample Scenario I - Tax Agent to Service Provider Linking and Subscription

The steps identified above are shown below associated with the relevant use case described in Section 3. The use cases are identified in the scenario flow detailed in Section 4.2.1.1 below:

Functionality	Authorisation and authentication	Service Provider Linking	Delegation in eServices	Daily Push	Query accounts	Query transactions	Full File Push
Technical component	Identity and Access	Intermediation GWS	eServices portal	Bulk file Feed	Accounts GWS	Transactions GWS	History File
A. First User Session using software							
Simple user login to software							
PUC201 Authentication and consent	Y		Y				
BUC101 Subscribe to tax data updates		Y					
BUC103 Query Tax Data real-time			Y		Y	Y	
SUC030 TDS real-time queries			Y		Y	Y	
B. Extension of user session							
PUC201 Authentication and consent	Y						
BUC103 Query Tax Data real-time			Y		Y	Y	
SUC030 TDS real-time queries			Y		Y	Y	
C. Next Day session – Full File Feed							
SUC001 Provide transaction updates				Y			
PUC203 Process Updates				Y			
SUC002 Provide transaction history			Y				Y
PUC204 Consolidate Transaction History							Y
D. Subsequent sessions - Same as B							
E. Subsequent file feeds - Same as C							

Table 16 : Use Cases across Sample Scenario I - Tax Agent to Service Provider Linking and Subscription

Step	Actor	System	Description	Output
A. FIRST USER SESSION USING SOFTWARE				
1	Tax Agent	Service Provider Software	**Tax Agent logs in** to a service provider product that is integrated to IR TDS	Service provider session
2	Tax Agent	Service Provider Software	**Software gets tax agent to consent** to access tax agency customer data.	Consent
3 **Use Case PUC201**	Tax Agent	IR Authentication service	**The Service Provider software redirects/launches the user browser to IR Authentication (XIAMS) sequence** where the user logs in (and accepts a consent page) and is redirected back to the Service Provider software with an access token that is to be used for IR web service calls	IR session token
4 **Use Case BUC101**	Tax Agent	Service Provider Software	**Software gets Tax Agent to consent** to subscribe for daily updates on Tax Agency customer data. *If consent is not given then steps to link and processing of daily update files will be skipped*	Confirmation
5 **Use Case BUC101**	Service Provider Software	IR Intermediation service	**Service Provider software calls IR Intermediation service** using user access token, **to link Service Provider and Tax Agency list(s) which creates** subscription to daily updates. *This data will not be available until the next day*	Confirmation
6 **Use Case BUC103**	Tax Agent	Service Provider Software	**Tax Agency staff member selects a client to look at in more detail in this session and decides to request more detail from IR**	Selected client IRD number
7 **Use Case BUC103**	Service Provider Software	IR Account service	Service Provider Software queries Account service for the visible list of accounts for the Client	List of client accounts
8 **Use Case BUC103**	Tax Agent	Service Provider Software	Agency staff member selects the **account and period to look at in more detail** Service Provider software queries the account and transaction services to drill down to the level of detail required	Account, Period and Transaction data as selected

Step	Actor	System	Description	Output
9 **Use Case SUC030**	Service Provider Software	IR Gateway Services (GWS)	IR queries the account, period, and transaction services to drill down to the level of detail required	Period and Transaction data as selected are returned
10	Tax Agent	Service Provider Software	Tax Agent does **other work with Client and in software** related to advising client on position and steps to take	
B. EXTENSION OF USER SESSION				
11 **Use Case PUC201**	Service Provider Software	IR Gateway Services (GWS)	If the Tax Agent login in the Service Provider software lasts for 8 hrs the token will expire. At that point in time the session might need to be extended by getting a new token – see Identity and Access Build Pack	Token expiry notification or elapsed time
12 **Use Case PUC201**	Service provider software	IR Authentication service	**The Service Provider software does a web service call to the IR Authentication gateway service** where it passes in a code received after the initial user login to IR (XIAMS) in order to get a new session token see Identity and Access Build Pack	New IR session token
13 **Use Case BUC103**	Tax Agent	Service Provider Software	Tax Agency staff member selects a client to look at in **more detail** in this session and decides to request more detail from IR	Selected client IRD number
14 **Use Case BUC103**	Service Provider Software	IR Account service	Service Provider Software queries Account service for the visible list of accounts for the Client	List of client accounts
15 **Use Case BUC103**	Tax Agent	Service Provider Software	Tax Agency staff member selects the **account and period to look at in more detail** Service Provider software queries the account and transaction services to drill down to the level of detail required	Account, Period and Transaction data as selected
16 **Use Case SUC030**	Service Provider Software	IR Gateway Services (GWS)	IR queries the account, period, and transaction services to drill down to the level of detail required	Period and Transaction data as selected are returned

Step	Actor	System	Description	Output
C. NEXT DAY SESSION – FULL FILE FEED				
17 **Use Case SUC001**	IR	Service Provider central software and file location	For the next morning, (the first one after the software was subscribed to for the Tax Agency Client(s) for daily updates), **IR batch processing will generate export files for each subscribing Tax Agency, including this one. Any Clients that were newly added to the subscription will be added in full to this export file.** (All subscribed accounts, all period and transaction detail and all history kept in START will be included in this file). The file is sent to the Service Provider central location.	Service provider central location has full export of client data related to recently subscribed client accounts.
18 **Use Case PUC203**	Service Provider central software and file location	Service Provider software	Based on triggers that see the daily file upload from IR is completed, **Service Provider centrally running software will process and import the file content** in a way that makes it available for the Tax Agency users through their software.	Data ready for viewing by Tax Agent
19	Tax Agent	Service Provider session	Tax Agent decides they need more data related to data conversion and historic TAWS transactions and wants to review and reconcile **History data**	Account and Transaction data as selected
20 **Use Case SUC002**	IR	Service Provider central software and file location	After data conversion, TDS Bulk History has provided the converted data in TAWS format to Service Providers.	Service provider central location has full export of client history related to recently subscribed client accounts.
21 **Use Case PUC204**	Service Provider central software and file location	Service Provider software	**Service Provider centrally running software will process and import the file content** in a way that makes it available for the Tax Agency users through their software.	Data available for Tax Agent to view
22			Tax Agent does other work and repeats steps above if necessary.	

Step	Actor	System	Description	Output
D. SUBSEQUENT SESSION				
23	Tax Agent	Service Provider software	Tax Agent logs into the Service Provider software again and **accesses the centrally processed data from the previous step to show the user a navigable view of all the client data** with no need to query IR for it or log in to IR to get a token.	User view of all the client data for all subscribed accounts and periods and transactions
24 **Use Case BUC103**	Tax Agent	Service Provider software IR Gateway Services	Should the user have an event such as a payment run that makes them **believe the data has changed since the overnight run they can select the specific account and period and request a real time refresh from IR**, steps similar to those listed above including logging in to IR.	This is covered in [TDS Real Time Feed Build Pack](#)
E. SUBSEQUENT FILE FEEDS				
25 **Use Case SUC001**	IR	Service Provider central software and file location	Subsequent mornings, when the software was not subscribed to for any additional Tax Agency clients for daily updates, **IR batch processing in START will generate export files for each subscribing Tax Agency, including this one.** **Period summaries and new transactions will be included in the weekly file. New Transactions only will be included in the daily file.** This file is sent to the Service Provider central location in the same way as the initial export file.	Service Provider central location has full export of client data related to recently subscribed client accounts.
26 **Use Case PUC203**	Service Provider central software and file location	Service Provider software	Based on triggers that see the daily file upload from IR is completed, **Service Provider centrally running software will process and import the file content** in a way that makes it available for the Tax Agency users and the software they use. The transactions provided for modified periods, and tax period summaries received for unmodified periods will be sufficient to pick up if a gap in transmission has arisen between what IR has versus what the Service Provider has cached. Such periods could be marked for remediation when the user next logs in.	Further uploads if necessary

Step	Actor	System	Description	Output
27	Tax Agent	Service Provider software	Tax Agent logs into the Service Provider software again and **accesses the centrally processed data from the previous step** with no need to query IR for it or logging in to IRD to get a token. Changes in the data due to the overnight run are made available and cached locally if needed. Part of the data transferred is whether there is a period marked as out of synch.	User view of all the client data for all subscribed accounts and periods and transactions
28 **Use Case BUC103**	Tax Agent	Service Provider software IR Gateway Services	If there is a period marked as out of synch the Service Provider software will **immediately after login or when triggered by user interest, call IR TDS to get a full update on that period** and to cache that locally, including centrally and removing the out of synch flag.	Update of period data for out of synch periods

Table 17: Sample Scenario I in detail – Tax Agent to Service Provider Linking and Subscription

4.2.2 Sample Scenario II - Customer to Service Provider Linking and Subscription

Description Scenario II	Organisation staff member accesses IR transaction feed through Service Provider software and subscribes for updates, then repeatedly has sessions to look at the data over subsequent days
	
	This sample process variation covers 5 typical stages following on from this initial trigger:
	
	    A. FIRST USER SESSION IN SPECIFIC SERVICE PROVIDER SOFTWARE PRODUCT
	    B. EXTENDED USER SESSION HOURS LATER
	    C. NEXT MORNING, FIRST ONE AFTER SUBSCRIBING
	    D. SUBSEQEUNT USER SESSIONS AFTER FIRST OVERNIGHT RUN
	    E. SUBSEQUENT DAYS FILE FEEDS

Actors	▪ Delegated employee of a large organisation
Systems	▪ Software Provider software ▪ Inland Revenue – Gateway Services, TDS bulk file feed, START
Pre-conditions	Delegated employee has a valid eServices login Delegated employee login has a valid IR online services credential with current authorised access to relevant tax accounts Delegated employee has a Service Provider software login, internet access
Triggers	Login of delegated employee into Service Provider software that is integrated with IR Transaction Data Services
Post-conditions	Service Provider software has received and displayed accurate and complete data for the organisation requested and subscribed for future updates in that software

Table 18: Sample Process scenario II - - Customer to Service Provider Linking and Subscription
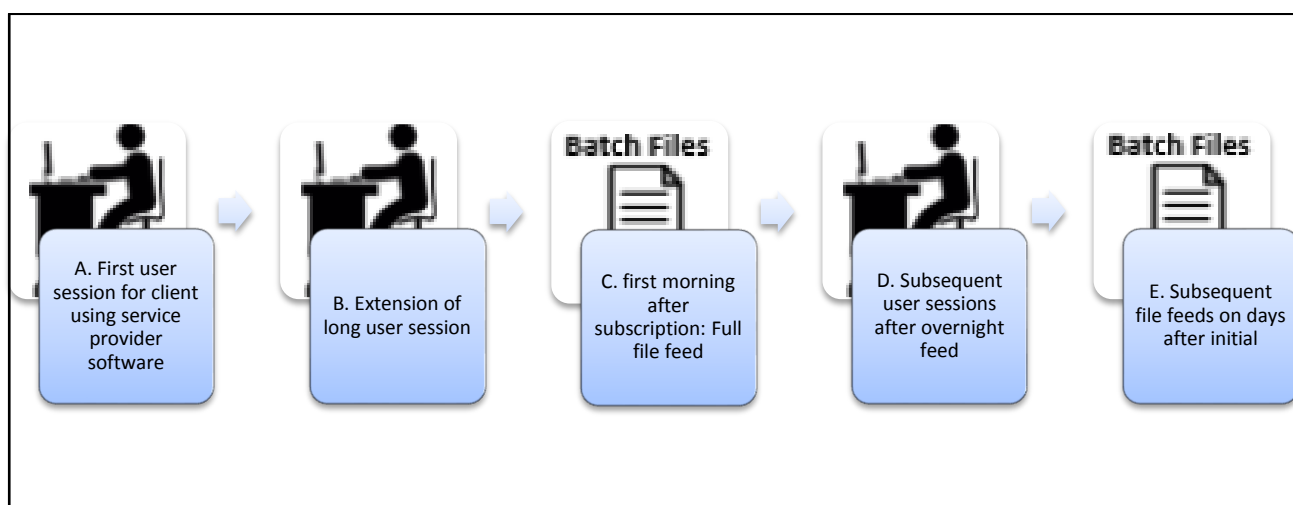
Figure 9: Process Steps - Sample process scenario II - Customer to Service Provider Linking and Subscription

4.2.2.1 Base Flow for sample Scenario II - Customer to Service Provider Linking and Subscription

Step	Actor	System	Description	Output
A. FIRST USER SESSION USING SOFTWARE				
1	Delegated employee	Service Provider Software	**Delegated employee logs in** to a Service Provider product that is integrated to IR TDS	Service Provider session
2 **Use Case PUC201**	Delegated employee	IR Authentication service	**The Service Provider software redirects/launches the user browser to IR Authentication(XIAMS) sequence** where the user logs in (and accepts a consent page) and is redirected back to the Service Provider software with a limited period access token that is to be used for IR web service calls	IR session token
3 **Use Case BUC101**	Delegated employee	Service Provider Software	**Software gets delegated employee to** subscribe for daily updates on customer data. *If subscription is not requested then steps to link and processing of daily update files will be skipped*	Confirmation
4 **Use Case BUC101**	Service Provider Software	IR Intermediation service	**Service Provider software calls IR Intermediation service to link service provider to organisational or account IDs** to subscribe for daily updates, using user token. *This data will not be available until the next day*	Confirmation
5 **Use Case BUC103**	Delegated employee	Service Provider Software	Delegated employee selects a period to look at in more detail and decides to **request further detail from IR**	Selected client IRD number
6 **Use Case BUC103**	Service Provider Software	IR Account service	Service Provider software queries Account service for the visible list of accounts for the customer	List of client accounts
7 **Use Case BUC103**	Delegated employee	Service Provider Software	Delegated employee selects the **account and period to look at in more detail** Service Provider software queries the account and transaction services to drill down to the level of detail required	Account, Period and Transaction data as selected

Step	Actor	System	Description	Output
8 **Use Case SUC030**	Service Provider Software	IR Gateway Services (GWS)	IR queries the account, period , and transaction services to drill down to the level of detail required	Period and Transaction data as selected are
9	Delegated employee	Service Provider Software	Delegated employee does **other work in software** related to organisation, including tax position and steps to take	
B EXTENSION OF USER SESSION				
10 **Use Case PUC201**	Service Provider Software	IR Gateway Services (GWS)	If the staff member login in the service provider software lasts for 8 hrs the token will expire. At that point in time the session might need to be extended by getting a new token – see Identity and Access Build Pack.	Token expiry notification or elapsed time
11 **Use Case PUC201**	Service Provider software	IR Authentication service	**The Service Provider software does a web service call to the IR Authentication gateway service** where it passes in the code received after the initial user login to IR (XIAMS) in order to get a new session token	New IR session token
12 **Use Case BUC103**	Delegated employee	Service Provider session	Delegated employee selects a client to look at in **more detail** in this session and decides to request more detail from IR	Selected client IRD number
13 **Use Case BUC103**	Delegated employee	Service Provider Software	Delegated employee selects the **account and period to look at in more detail** Service Provider software queries the account and transaction services to drill down to the level of detail required	Account, Period and Transaction data as selected
14 **Use Case SUC030**	Service Provider Software	IR Gateway Services (GWS)	IR queries the account, period, and transaction services to drill down to the level of detail required	Period and Transaction data as selected are returned
15	Delegated employee	Service provider session	Delegated employee does **other work** and repeats steps above if necessary for day, eventually logging off.	

Step	Actor	System	Description	Output
C. NEXT DAY SESSION – FULL FILE FEED				
16 **Use Case SUC001**	IR	Service provider central software and file location	The next morning **IR batch processing in START will generate export files for each subscribing organisation, including this one. Any organisations that were newly added to the subscription will be added in full to this export file.** (All subscribed accounts, all period and transaction detail and history kept in START will be included in this file). This file is sent to the Service Provider central location.	Service provider central location has full export of relevant subset of organisation tax data.
17 **Use Case PUC203**	Service Provider central cloud software and file location	Service Provider software	Based on triggers that see the daily file upload from IR is completed, **Service Provider centrally running software will process and import the file content** in a way that makes it available for the organisation employees and accountants that have delegated access and are Service Provider software users.	Data ready for viewing by Accountant or organisation employee
18	Delegated employee	Service Provider session	Delegated employee decides they need more data related to data conversion and historic TAWS transactions and wants to review and reconcile **History data**	Account, Period and Transaction data as selected
19 **Use Case SUC002**	IR	Service Provider central software and file location	After data conversion, TDS Bulk History has provided the converted data in TAWS format to Service Providers. See [Bulk History Feed Build Pack](#)	Service provider central location has full export of client history data related to recently subscribed client accounts.
20	Delegated employee	Service Provider software	Delegated employee logs into the Service Provider software again and **accesses the centrally processed data from the previous step to show the user a navigable view of all the client data** with no need to query IR for it or log in to IR to get a token.	User view of organisation data for all subscribed accounts, periods and transactions

Step	Actor	System	Description	Output
D. SUBSEQUENT SESSION				
21 **Use Case BUC103**	Delegated employee	Service Provider software IRD gateway services	Should the user have an event such as a payment run that makes them **believe the data has changed since the overnight run they can select the specific account and period and request a real time refresh from IR**, steps similar to those listed above including logging in to IR.	This is covered in TDS Real Time Feed Build Pack
E. SUBSEQUENT FILE FEED SESSIONS				
22 **Use Case SUC001**	IR	Service Provider central software and file location	Subsequent mornings, when the software was not subscribed to for any additional subsets of data for that organisation for daily updates, **IR batch processing in START will generate export files for each subscribing organisation, including this one.** **Only period summaries and new transactions will be included** (For all subscribed accounts, all period summaries and for modified periods transaction detail and history kept in START). This file is sent to the Service Provider central cloud location in the same way as the initial export file.	Service Provider central location has full export of organisation al tax data related to any subscribed organisation al accounts.
23 **Use Case PUC203**	Service Provider central cloud software and file location	Service Provider software	Based on triggers that see the daily file upload from IR is completed **Service Provider centrally running software will process and import the file content** in a way that makes it available for the organisational employees and the software they use. The transactions provided for modified periods, and tax period summaries received for unmodified periods will be sufficient to pick up if a gap in transmission has arisen between what IR has versus what the Service Provider has cached. Such periods can be marked for remediation when the user next logs in.	Further uploads if necessary

Step	Actor	System	Description	Output
24	Delegated employee	Service Provider software	Delegated employee logs into the Service Provider software again and **accesses the centrally processed data from the previous step to show the user a navigable view of all the client data** with no need to query IR for it or logging in to IR to get a token. Changes in the data due to the overnight run are made available if needed. Part of the data transferred is whether there is a period marked as out of synch.	User view of all the client data for all subscribed accounts and periods and transactions
25 **Use Case BUC103**	Delegated employee	Service Provider software IR Gateway Services	If there is a period marked as out of synch, the Service Provider software will **immediately after login or when triggered by user interest, call the IR TDS to get a full update on that period** and remove the out of synch flag.	Update of period data for out of synch periods

Table 19 : Sample Scenario II - Customer to Service Provider Linking and Subscription

4.2.1 Sample Scenario III – Customer using frequent Real Time Sessions

Note: Suitable for smaller organisations with small datasets and an infrequent need to query.

Description
 	
Scenario III
	Delegated employee accesses IR transaction feed through Service Provider software and does NOT subscribe for updates, but repeatedly has sessions to look at the data over subsequent days using real-time access only
	
	This scenario covers the 2 stages (see figure below) of the general process following on from the initial trigger:
	    A. FIRST USER SESSION (ON RELATED CLIENT, IN SPECIFIC SERVICE PROVIDER SOFTWARE PRODUCT)
	    B. ACCESS TDS REAL TIME SERVICE

Actors	▪ Delegated employee employed by a large organisation
Systems	▪ Software Provider software ▪ Inland Revenue – Gateway Services, START
Pre-conditions	Delegated employee has a valid eServices login Delegated employee login has a valid IR online services credential with current authorised access to relevant tax accounts Delegated employee has a Service Provider software login, internet access
Triggers	Login of Delegated employee into Service Provider software that is integrated with IR Transaction Data Services
Post-conditions	Service Provider software has received and displayed accurate and complete data for the organisation requested

Table 20 : Sample Process scenario III - Customer using frequent Real Time Sessions
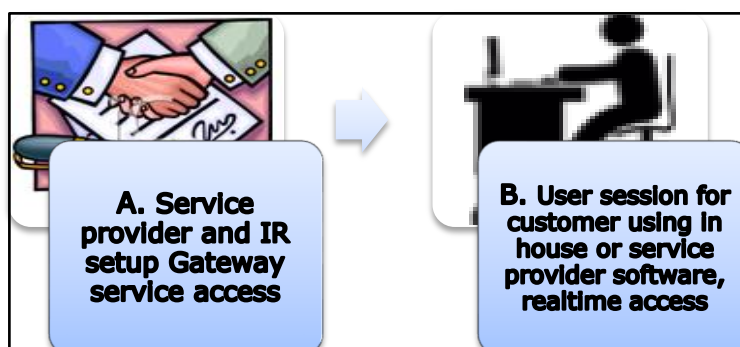
Figure 10: Process Steps - Sample Process scenario III - Customer using frequent Real Time Sessions

Step	Actor	System	Description	Output
A. FIRST USER SESSION USING SOFTWARE				
1	Delegated employee	Service Provider Software	**Delegated employee logs in** to a Service Provider product that is integrated to IR TDS	Service Provider session
2 **Use Case PUC201**	Delegated employee	IR Authentication service	**The Service Provider software redirects/launches the user browser to IR Authentication(XIAMS) sequence** where the user logs in (and accepts a consent page) and is redirected back to the Service Provider software with a limited period access token that is to be used for IR web service calls	IR session token
B. ACCESS TRANSACTION DATA SERVICES REAL TIME SERVICE				
3 **Use Case BUC103**	Delegated employee	Service Provider Software	Delegated employee selects a period to look at in more detail and decides to **request further detail from IR**	Selected client IRD number
4 **Use Case BUC103**	Delegated employee	Service Provider Software	**Delegated employee** selects the **account and period to look at in more detail** Service Provider software queries the account and transaction services to drill down to the level of detail required	Account, Period and Transaction data as selected
5 **Use Case SUC030**	Service Provider Software	IR Gateway Services (GWS)	IR queries the account, period , and transaction services to drill down to the level of detail required	Period and Transaction data as selected are

Table 21 : Sample Process Scenario III - Customer using frequent Real Time Sessions

4.2.1.2   Sample Scenario IV - New Client is adopted by Tax Agency

Description Scenario IV	New Client is adopted by Tax Agency (As part of on-going daily file feeds the next morning would have the full data for the newly added client) This scenario covers the 2 stages (see figure below) of the general process following on from the initial trigger: A. FIRST USER SESSION (ON RELATED CLIENT, IN SPECIFIC SERVICE PROVIDER SOFTWARE PRODUCT) B. NEXT MORNING, FIRST ONE AFTER SUBSCRIBING
Actors	▪ Tax Agent
Systems	▪ Software Provider software ▪ Inland Revenue – Gateway Services, TDS bulk file feed, START
Pre-conditions	Tax Agency is registered with IR as Agent, and not yet linked to the Client in this scenario for Tax Types for whom data will be being requested. Tax Agent has a valid IR online services credential with current authorised access to relevant tax accounts Tax Agency is already linked to Service Provider software Tax Agent has a Service Provider software login and internet access
Triggers	Login of Tax Agent into Service Provider software that is integrated with IR Transaction Data Services
Post-conditions	Service Provider software has received accurate, complete data for the Client(s) requested and subscribed for future transaction data updates in that software

Table 22 : Sample Process scenario IV - New Client is adopted by Agency
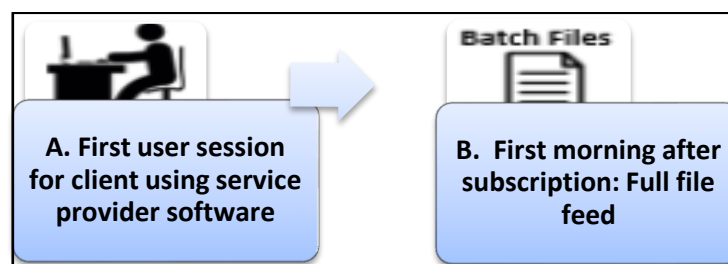
Figure 11: Process steps – Sample process scenario IV - New Client for Agency

4.2.1.3   Base Flow for sample Scenario IV - New Client is adopted by Agency

Step	Actor	System	Description	Output
A. FIRST USER SESSION USING SOFTWARE				
1	Tax Agent	eServices	Tax Agent uses IR eServices and **adds Customer to their Agents List** *This process continues as it is now and is not impacted by TDS*	Confirmation
B. NEXT MORNING, FIRST ONE AFTER SUBSCRIBING				
2 **Use Case SUC001**	IR	Service Provider central software and file location	For the next morning, (the first one after the software was subscribed to for the Tax Agency client(s) for daily updates), **IR batch processing in START will generate export files for each subscribing Tax Agency, including this one. Any clients that were newly added to the subscription will be added in full to this export file.** (All subscribed accounts, all period and transaction detail and all history kept in START will be included in this file). The file is sent to the Service Provider central location.	Service provider central location has full export of client data related to recently subscribed client accounts. This is covered in TDS Real Time Feed Build Pack
3 **Use Case PUC203**	Service Provider central software and file location	Service Provider software	Based on triggers that see the daily file upload from IR is completed, **Service Provider centrally running software will process and import the file content** in a way that makes it available for the Tax Agency users through their software.	Data ready for viewing by Tax Agent

Table 23 : Sample Process Scenario IV

5 Appendix A - Glossary

Acronym/Term	Definition
Authentication	The process of verifying an identity claimed by or for a system entity. [RFC 2828]
Authorisation	A right or a permission that is granted to a system entity to access a system resource. [RFC 2828]
Build Pack	Details the technical requirements and specifications, processes and sample payloads for the specified activity
Business Processing	Processing by Inland Revenue systems in retrieving data and constructing the Payload (business information content) of a message.
Business Service	An integration interface (description) of the Solution which provides a set of business data and information in fulfilling the Service and is specified in this document. The Solution may offer more than one Business Service.
Confidential Information	Means, in relation to a party, any information (in any form whether written, electronic or otherwise): (a) relating to the business or operations of that party or its suppliers or customers; (b) disclosed by that party to the other party on the express basis that such information is confidential; or (c) which might reasonably be expected by that party to be confidential in nature;
Customer	A Customer is the party who is a taxpayer or a participant in the social policy products that are operated by Inland Revenue. The Customer might be a person (an "individual") or a non-individual entity such as a company, trust, society etc. Practically all of the service interactions with Inland Revenue are about a Customer (e.g. their returns, accounts, entitlements etc.) even though these interactions might be undertaken by an Intermediary such as a Tax Agent on their behalf.
Credentials	Information used to authenticate identity, for instance an account username and password.
Data integrity	The property that data has not been changed, destroyed, or lost in an unauthorized or accidental manner. [RFC 2828]
Digital certificate	A certificate document in the form of a digital data object (a data object used by a computer) to which is appended a computed digital signature value that depends on the data object. [RFC 2828]
Digital signature	A value computed with a cryptographic algorithm and appended to a data object in such a way that any recipient of the data can use the signature to verify the data's origin and integrity. [RFC 2828]

Acronym/Term	Definition
Encryption	Cryptographic transformation of data (called "plaintext") into a form (called "cipher text") that conceals the data's original meaning to prevent it from being known or used. If the transformation is reversible, the corresponding reversal process is called "decryption", which is a transformation that restores encrypted data to its original state. [RFC 2828]
eServices	START's authenticated customer-facing portal - myIR.
Gateway	START's web services gateway.
GWS	Gateway Services—the brand name for the suite of web services that IR is providing.
HTML	Hypertext Markup Language.
HTTP	Hypertext Transfer Protocol is a networking protocol and is the foundation of data communication for the World Wide Web.
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 Build Pack	Identity and Access Build Pack
Intermediary	A party who interacts with Inland Revenue on behalf of a Customer. Inland Revenue's Customer is a Client of the Intermediary. There are several types of Intermediary including Tax Agents, PTSIs, PAYE Intermediaries etc.
Intermediation Service	The Intermediation Service is a new Gateway Service for creating and maintaining delegated access relationships between intermediaries and their clients. These relationships enable access by the intermediary to a resource (e.g. an account, correspondence etc.) that belongs to their client. There are several types of intermediaries such as Tax Agents, book keepers, PAYE Intermediaries.
IP	Internet Protocol—the principal communication protocol in the Internet protocol suite for relaying datagrams across networks.
IR	Inland Revenue
MEP	Message Exchange Pattern.
MSH	Messaging Service Handler.
Mutual authentication	Mutual authentication refers to two parties authenticating each other at the same time, being a default mode of authentication in some protocols (e.g. SSH) and optional in other (TLS)

Acronym/Term	Definition
Non-repudiation	Protection against false denial of involvement in a communication. [RFC 2828]
NSP	Inland Revenue's New Services Platform—includes START, XIAMS, the Application Publishing Service and supporting infrastructure.
NZISM	NZ Information Security Manual—the security standards and best practices for Government agencies. Maintained by the NZ Government Communications Security Bureau (GCSB).
OAuth2	An HTTPS based protocol for authorising access to a resource, currently at version 2.
Operational Commencement	The commencement of Service.
Pattern	A constraint on data type values that require the string literal used in the data type's lexical space to match a specific pattern.
Payload	The business information content of the message and/or file(s) between IR and a Business Partner. This refers to the data contained within the messages that are exchanged when a web service is invoked. Messages consist of a Acronym/term Definition header and a payload.
Schemas	An XML schema defines the syntax of an XML document, in particular of a payload. The schema specifies what a valid payload (such as a GST return) must/can contain, as well as validating the payload.
Service	The exchange, as enabled by the Solution, of information, data and/or funds for the purpose of Clients' tax administration by Tax Agents.
Service Provider Software	A Client Application is an operating instance of Software that is deployed in one or more sites. A number of deployment patterns are possible: 1. A single cloud based instance with multiple tenants and online users, 2. An on-premise instance (e.g. an organisation's payroll system) 3. A desktop application with an online user. This is the computer software that contains interfaces to (consumes) the services that Inland Revenue exposes. Software is developed and maintained by a Software Developer and subsequently deployed as one or more Client applications.
SFTP	Secure File Transport Protocol. SFTP 3.0 is used.
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.

Acronym/Term	Definition
SOAP	Simple Object Access Protocol (SOAP) is a protocol specification for exchanging structured information in the implementation of Web Services in computer networks.
Solution	The technology components, systems and interface specifications constituting the Tax Agent Web Services capability which enables integration and communication across the Gateway channel between Inland Revenue and Tax Agents for the purpose of providing the Service.
Software Developer	The developer of a software package and its Gateway Channel integration capability which forms part of the Solution.
SSH	**Secure Shell** (SSH) is a cryptographic network protocol for operating network services securely over an unsecured network. Version 2.0 is used.
SSL	Secure Sockets Layer (SSL) is a cryptographic protocol that provides security for communications over networks such as the Internet.
START	Simplified Taxation and Revenue Technology—IR's new core tax processing application. It is an implementation of the GenTax product from FAST Enterprises.
System	The parts of the Solution operated by a single Business Partner; typically this term means the Business Partner's MSH.
TAWS	Tax Agents Web Service
Tax Agent	A Tax Agent who is formally registered as such with Inland Revenue.
TDS	Transaction Data Services
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.
User	The user referred to in this document is the user of the software provider accounting or tax package. This user needs delegated permissions on Customer tax accounts (potentially via a tax agency or other intermediary) in order to use TDS. The web logon used in eServices needs to be used in making IRD queries. This web logon must be granted permission there to access Customer Accounts. It is owned by one Customer but can be Linked to Accounts belonging to other Customers.
WSDL	Web Services Description Language (WSDL) is an XML-based language that provides a model for describing Web Services.
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 X509 certificate to which it is bound tells us whose key it is, who issued it, when it expires etc. When we receive a counterparties' X509 digital certificate we take their public key out of it and store

Acronym/Term	Definition
	the key in our keystore. We can then use this key to encrypt and sign the messages that we exchange with this counterparty.
XIAMS	External IAMS—an instance of IAMS that authenticates and authorises access by external parties, i.e. customers, trading partners etc. as opposed to internal parties such as staff.
XML	EXtensible Markup Language
XSD	XML Schema Definition—the current standard schema language for all XML data and documents

6 Appendix B—Filing Frequency Codes

Account type	Filing Frequency Code	Filing Frequency Description	eServices Description
AIL	AIL6M3	Six monthly Mar/Sep	Six Monthly
AIL	AILI	Irregular	Irregular
AIL	AILMO	Monthly	Monthly
AIL	AIP1A	Annual	Annual
MPO	BPAMO	One monthly	Monthly
CRS	CRS1A	Annual	Annual
DSB	DSBMO	Monthly	Monthly
DWT	DWTMO	Monthly	Monthly
FATCA	FAT1A	Annual	Annual
FBT	FBT3M	Quarterly	Quarterly - Jun/Sep/Dec/Mar
FBT	FBT3MA	Quarterly/Annual combination	Quarterly/Annual
FBT	FBTA01	Annual/Income - January	Annual/Income - Jan
FBT	FBTA02	Annual/Income - February	Annual/Income - Feb
FBT	FBTA03	Annual/Income - March	Annual/Income - Mar
FBT	FBTA04	Annual/Income - April	Annual/Income - Apr
FBT	FBTA05	Annual/Income - May	Annual/Income - May
FBT	FBTA06	Annual/Income - June	Annual/Income - Jun
FBT	FBTA07	Annual/Income - July	Annual/Income - Jul
FBT	FBTA08	Annual/Income - August	Annual/Income - Aug
FBT	FBTA09	Annual/Income - September	Annual/Income - Sep
FBT	FBTA10	Annual/Income - October	Annual/Income - Oct
FBT	FBTA11	Annual/Income - November	Annual/Income - Nov
FBT	FBTA12	Annual/Income - December	Annual/Income - Dec
FBT	FBTAN	Annual	Annual - year ending March
FBT	FBTM01	Quarterly/Income - January	Quarterly/Income
FBT	FBTM02	Quarterly/Income - February	Quarterly/Income
FBT	FBTM03	Quarterly/Income - March	Quarterly/Income
FBT	FBTM04	Quarterly/Income - April	Quarterly/Income
FBT	FBTM05	Quarterly/Income - May	Quarterly/Income

Account type	Filing Frequency Code	Filing Frequency Description	eServices Description
FBT	FBTM06	Quarterly/Income - June	Quarterly/Income
FBT	FBTM07	Quarterly/Income - July	Quarterly/Income
FBT	FBTM08	Quarterly/Income - August	Quarterly/Income
FBT	FBTM09	Quarterly/Income - September	Quarterly/Income
FBT	FBTM10	Quarterly/Income - October	Quarterly/Income
FBT	FBTM11	Quarterly/Income - November	Quarterly/Income
FBT	FBTM12	Quarterly/Income - December	Quarterly/Income
FBT	FBTS01	Income Year - January	Income Year
FBT	FBTS02	Income Year - February	Income Year
FBT	FBTS03	Income Year - March	Income Year
FBT	FBTS04	Income Year - April	Income Year
FBT	FBTS05	Income Year - May	Income Year
FBT	FBTS06	Income Year - June	Income Year
FBT	FBTS07	Income Year - July	Income Year
FBT	FBTS08	Income Year - August	Income Year
FBT	FBTS09	Income Year - September	Income Year
FBT	FBTS10	Income Year - October	Income Year
FBT	FBTS11	Income Year - November	Income Year
FBT	FBTS12	Income Year - December	Income Year
GMD	GMDMO	Monthly	Monthly
GSD	GSDMO	One Monthly	Monthly
GST	GSC2M1	Unpoliced Two Monthly Odd	Two Monthly
GST	GSC2M2	Unpoliced Two Monthly Even	Two Monthly
GST	GSC6M1	Unpoliced Six Monthly Jan/Jul	Six Monthly
GST	GSC6M2	Unpoliced Six Monthly Feb/Aug	Six Monthly
GST	GSC6M3	Unpoliced Six Monthly Mar/Sep	Six Monthly
GST	GSC6M4	Unpoliced Six Monthly Apr/Oct	Six Monthly
GST	GSC6M5	Unpoliced Six Monthly May/Nov	Six Monthly
GST	GSC6M6	Unpoliced Six Monthly Jun/Dec	Six Monthly
GST	GSCMO	Unpoliced One Monthly	Monthly
GST	GST2M1	Two Monthly Odd	Two Monthly

Account type	Filing Frequency Code	Filing Frequency Description	eServices Description
GST	GST2M2	Two Monthly Even	Two Monthly
GST	GST3M	Quarterly	Quarterly
GST	GST6M1	Six Monthly Jan/Jul	Six Monthly
GST	GST6M2	Six Monthly Feb/Aug	Six Monthly
GST	GST6M3	Six Monthly Mar/Sep	Six Monthly
GST	GST6M4	Six Monthly Apr/Oct	Six Monthly
GST	GST6M5	Six Monthly May/Nov	Six Monthly
GST	GST6M6	Six Monthly Jun/Dec	Six Monthly
GST	GSTMO	One Monthly	Monthly
GST	GSXCDA	Non standard accounting period	Non Standard
IPE	IPEMO	Monthly	Monthly
IPS	IPS6M3	Six Monthly Mar/Sep	Six Monthly
IPS	IPSI	Irregular	Irregular
IPS	IPSIN3	Irregular Excluding March	Irregular Excluding March
IPS	IPSMO	Monthly	Monthly
LGL	LGLDAY	Daily	Daily
NRT	NRT6M3	Six monthly Mar/Sep	Six Monthly
NRT	NRTI	Irregular	Irregular
NRT	NRTIN3	Irregular Excluding March	Irregular Excluding March
NRT	NRTMO	Monthly	Monthly
PIE	PIE1A	Annual - Income Tax	Annual - Income Tax
PIE	PIE3M	Quarterly	Quarterly
PIE	PIEA01	Annual - Jan balance date	Annual - Jan
PIE	PIEA02	Annual - Feb balance date	Annual - Feb
PIE	PIEA03	Annual - Mar balance date	Annual - Mar
PIE	PIEA04	Annual - Apr balance date	Annual - Apr
PIE	PIEA05	Annual - May balance date	Annual - May
PIE	PIEA06	Annual - Jun balance date	Annual - Jun
PIE	PIEA07	Annual - Jul balance date	Annual - Jul
PIE	PIEA08	Annual - Aug balance date	Annual - Aug
PIE	PIEA09	Annual - Sep balance date	Annual - Sep

Account type	Filing Frequency Code	Filing Frequency Description	eServices Description
PIE	PIEA10	Annual - Oct balance date	Annual - Oct
PIE	PIEA11	Annual - Nov balance date	Annual - Nov
PIE	PIEA12	Annual - Dec balance date	Annual - Dec
PIE	PIEMO	Monthly	Monthly
PRS	PRSMO	Monthly	Monthly
RLT	RLTM1	Monthly	Monthly
RLT	RLTMO	Monthly	Monthly
RWT	RWTMO	Monthly	Monthly

7 Appendix C—START Transaction Codes

Note – this list is likely to have more entries as conversion plans are finalised

Transaction Type	Short Description	Description
ADSOTC	Audit settlement offset	Offset used to reduce liability due to an audit settlement adjustment.
AUDDPC	Audit dispute credit	Records an audit dispute credit transaction from the audit worksheet
AUDDPD	Audit dispute debit	Records an audit dispute debit transaction from an audit worksheet.
AUDFOR	Audit forecasting transaction	This trans type is used to manage the forecasting of interest for audits.
AUDTXC	Audit credit	Records when a decrease to the debit portion of the assessment is added by an audit
AUDTXD	Audit debit	Records when an increase to the debit portion of the assessment is added by an audit
BPAXFB	Multi payment direction, no lock	Portion of multi payment allocated to this period
BPAXFBREVCRD	Reverse - Bulk payment transfer in, Bill	
BPAXFO	Multi payment transfer out	Credit from multi payment account allocated to other accounts.
BPAXFOREVOTC	Reverse - Bulk payment transfer out	
BPAXFR	Multi payment direction, lock	Portion of multi payment allocated to this period for a return.
BPAXFRREVCRD	Reverse - Bulk payment transfer in, Return	
CNVAJC	Converted adjustment, credit	Adjustment to a debit transaction converted from the heritage system
CNVAJD	Converted adjustment, debit	Adjustment to a credit transaction converted from the heritage system
CNVCRT	Converted court cost	Records a court cost transaction converted from the legacy system
CNVDOD	Converted deferral of tax credit	Records a deferral of tax transaction converted from the legacy system
CNVDOT	Converted deferral of tax	Records a deferral of tax transaction converted from the legacy system
CNVDSB	Converted disbursement	Records a disbursement transaction from the legacy system
CNVDTD	Converted deferral tax due	Records a deferral tax due transaction converted from the legacy system
CNVEWH	Converted Excess Withholding Credit	Converted Credit transaction for IPE credit claims.
CNVINC	Converted credit interest	Records credit interest that was converted from the heritage system

Transaction Type	Short Description	Description
CNVINT	Converted interest	Records interest that was converted from the heritage system
CNVLTF	Converted late filing penalty	Records the late filing penalty that was converted from the heritage system
CNVPLF	Converted late filing penalty	Records the late filing penalty that was converted from the heritage system. This penalty is not tied to the return and is manually reversible.
CNVPNL	Converted penalty	Records penalty that was converted from the heritage system
CNVPYM	Converted payment	Records a converted payment transaction as a transaction. This payment was manually converted.
CNVRID	Converted interest remission	Records an interest remission transaction converted from the legacy system. This remission is not tied to the return and is manually reversible.
CNVRIN	Converted interest remission	Records an interest remission transaction converted from the legacy system
CNVRLF	Cnv late filing penalty remission	Records a penalty remission transaction converted from the legacy system
CNVRPF	Cnv late filing penalty remission	Records a penalty remission transaction converted from the legacy system. This remission is not tied to the return and is manually reversible.
CNVRPN	Converted penalty remission	Records a penalty remission transaction converted from the legacy system
CNVRPP	Converted penalty remission	Records a penalty remission transaction converted from the legacy system. This remission is not tied to the return and is manually reversible.
CNVSBD	Converted small balance offset debit	Records a small balance offset transaction converted from the legacy system. This is a debit transaction offsetting a credit.
CNVSBO	Converted small balance offset	Records a small balance offset transaction converted from the legacy system
CNVSHR	Converted shortfall penalty	Records a shortfall penalty that was converted from the heritage system.
CNVSOL	Converted solicitor's fee	Records a solicitor's fee transaction converted from the legacy system
CNVSPT	Converted special tax	Records a special tax transaction converted from the legacy system
CNVTBR	Converted time bar	Time bar offset for a credit transaction
CNVTXC	Converted return credit	Records a tax credit that was converted from the heritage system
CNVTXD	Converted return debit	Records a tax debit that was converted from the heritage system
CNVWOC	Converted write-off	Records a write-off credit transaction converted from the legacy system
CNVWOD	Converted write-off of credit	Records a write-off debit transaction converted from the legacy system
CNVWTH	Converted withholding tax	Records a withholding tax transaction converted from the legacy system

Transaction Type	Short Description	Description
CNVXFI	Converted transfer in	Records a credit transfer in transaction from the heritage system.
CNVXFO	Converted transfer out	Records a credit transfer out transaction from the heritage system.
CRDEWH	Excess Withholding Credit	Credit transaction for IPE credit claims.
CRDNTE	GST Credit Note	Transaction to add when adding a credit note activity in the taxpayer rulings case.
CROOTD	Converted remission offset	Records a debit transaction that offsets a converted remission when it has a balance
CSOOTC	Converted small balance offset offset, credit	Records a credit transaction that offsets a converted small balance offset when it has a balance
CSOOTD	Converted small balance offset offset, debit	Records a debit transaction that offsets a converted small balance offset when it has a balance
CWOOTC	Converted write-off offset, credit	Records a credit transaction that offsets a converted write-off when it has a balance
CWOOTD	Converted write-off offset, debit	Records a debit transaction that offsets a converted write-off when it has a balance
DSBCBD	Disbursement, international manual	Disbursement issued to the customer via citi direct portal
DSBCHQ	Disbursement, cheque	Disbursement issued to the customer via cheque
DSBDIR	Disbursement, direct credit	Disbursement issued to the customer via direct credit
DSBIAC	Disbursement, international ACH	Disbursement issued to the customer via international ACH
DSBIBD	Disbursement, bank draft	Disbursement issued to the customer via international bank draft.
DSBIBDREVOTC	Reverse - Disbursement, bank draft	
DSBSEP	Disbursement, SEPA	Disbursement issued to the customer via SEPA
DSBTTR	Disbursement, telegraphic transfer	Disbursement issued to the customer via telegraphic transfer (SWIFT)
DSXCPR	FIRST Child Support Receiving Career Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXCSE	FIRST Child Support Employee Deductions Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXFAM	FIRST Working for Families Tax Credit Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXFIR	Disbursement intercept, FIRST	A portion of the disbursement has been intercepted to be sent to FIRST

Transaction Type	Short Description	Description
DSXICA	FIRST Imputation Credit Account Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXINC	FIRST Income Tax Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXKSE	FIRST KiwiSaver Employee Deductions Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXKSR	FIRST KiwiSaver Employer Contribution Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXMAC	FIRST Maori Authority Credit Account Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXNCP	FIRST Child Support Payment Parent Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXPAY	FIRST Pay As You Earn Income Tax Deductions Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXPRV	Disbursement intercept, Provisional Tax	A portion of the disbursement has been intercepted to be sent to FIRST for provisional tax.
DSXQCT	FIRST Qualifying Company Election Tax Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXREB	FIRST Tax Credit Overpayments Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXSHR	FIRST Shareholder Premium Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXSLE	FIRST Student Loan Employee Deductions Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXSLS	FIRST Student Loans Annual Account Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
DSXSSC	FIRST Specified Superannuation Contribution Intercept	A portion of the disbursement has been intercepted to be sent to FIRST
EXGCRC	Ex gratia credit	Ex gratia credit that is used to decrease a debit transaction
FEEAPC	Application fee credit	Credit note for tru application fee
FEEAPP	Application fee	Fee associated to an application.
FEECCC	Court awarded costs, credit	Credit that is awarded to the customer by the courts.

Transaction Type	Short Description	Description
FEECCD	Court awarded costs, debit	Fee added as part of a legal action
FEEDMG	Damages and restitution costs	Costs that are applied as part of a damage or restitution case
FEEDSB	Legal disbursements	Court Filing Fee and Court Sealing Fee for bankruptcies or liquidations
FEEDSC	Legal disbursements credit note	Legal disbursements for issuing credit note in binding ruling case
FEEEXC	External costs credit note	External costs incurred by binding ruling case credit note
FEEEXT	External costs	External costs incurred by Departmental and passed on to the customer
FEEGSC	Goods and Service Tax Charged Credit	The amount of GST tax charged credit note
FEEGST	Goods and Service Tax Charged	The amount of goods and service tax that was charged as part of the service provided.
FEELQD	Liquidation costs	Costs that are applied as part of the liquidation process
FEESCR	Services provided credit note	Credit note for fee evaluated during binding ruling case
FEESEC	Security fee	Fee based on a security that has been issued
FEESOL	Solicitor's costs	Solicitor's Fees awarded by the Court
FEESVC	Services provided	Fee evaluated during the binding ruling process for services provided.
FRSCRD	Credit transferred from FIRST	Credit that was transferred from FIRST
FWDAIL	Transfer to AIL	Debit transaction used to offset a credit transaction when being transferred to a Account Issuer Levy account
FWDAILREVOTC	Reverse Transfer to Account Issuer Levy	
FWDAIP	Transfer to AIP	Debit transaction used to offset a credit transaction when being transferred to an Account Information Provider account
FWDAIPREVOTC	Reverse - Transfer to Account Information Provider	
FWDCRS	Transfer to CRS	Debit transaction used to offset a credit transaction when being transferred to a Common Reporting Standard account
FWDCRSREVOTC	Reverse - Transfer to Common Reporting Standard	
FWDDWT	Transfer to DWT	Debit transaction used to offset a credit transaction when being transferred to a Dividend Withholding Tax account
FWDDWTREVOTC	Reverse - Transfer to Dividend Withholding Tax	

Transaction Type	Short Description	Description
FWDFBT	Transfer to FBT	Debit transaction used to offset a credit transaction when being transferred to a Fringe Benefit Tax account
FWDFBTREVOTC	Reverse - Transfer to Fringe Benefit Tax	
FWDGMD	Transfer to GMD	Debit transaction used to offset a credit transaction when being transferred to a Gaming Machine Duty account
FWDGMDREVOTC	Reverse - Transfer to Gaming Machine Duty	
FWDGSD	Transfer to GSD	Debit transaction that transfer a credit to a Goods Sold in Satisfaction of Debt account
FWDGST	Transfer to GST	Debit transaction used to offset a credit transaction when being transferred to a Goods and Services Tax account
FWDIPE	Transfer to IPE	Debit transaction used to offset a credit transaction when being transferred to a Interest PAYE Exemption account
FWDIPEREVOTC	Reverse - Transfer to Interest PAYE Exemption	
FWDIPS	Transfer to IPS	Debit transaction used to offset a credit transaction when being transferred to an RWT - deductions from interest (IPS) account
FWDIPSREVOTC	Reverse - Transfer to RWT - deductions from interest (IPS)	
FWDLGL	Transfer to LGL	Debit transaction used to offset a credit transaction when being transferred to a legal costs account
FWDNRT	Transfer to NRT	Debit transaction used to offset a credit transaction when being transferred to a Non-Resident Withholding Tax account
FWDNRTREVOTC	Reverse - Transfer to Non-Resident Withholding Tax	
FWDPIE	Transfer to PIE	Debit transaction used to offset a credit transaction when being transferred to a Portfolio Investment Entity account
FWDPIEREVOTC	Reverse - Transfer to Portfolio Investment Entity	
FWDPRS	Transfer to PRS	Debit transaction used to offset a credit transaction when being transferred to a Payroll Subsidy account
FWDRLT	Transfer to RLT	Debit transaction used to offset a credit transaction when being transferred to a Residential Land Withholding Tax account

Transaction Type	Short Description	Description
FWDRLTREVOTC	Reverse - Transfer to Residential Land Withholding Tax	
FWDRUL	Transfer to RUL	Debit transaction used to offset a credit transaction when being transferred to a Rulings & Determinations account
FWDRWT	Transfer to RWT	Debit transaction used to offset a credit transaction when being transferred to an RWT - Specified Dividends account
FWDRWTREVOTC	Reverse - Transfer to RWT - Specified Dividends	
GLDCRD	GL disbursement credit	Credit that has been generated by a GL disbursement activity.
INTCRD	Use of money credit interest	Use of money interest that is calculated on credit transactions
INTMNC	Manual credit interest	Manually posted credit interest transaction
INTMND	Manual debit interest	Manually posted interest transaction
INTSTD	Use of money debit interest	Use of money interest that is calculated on debit transactions
INTWTH	Tax withheld on credit interest	Records the amount that is to be withheld from credit interest
MNLLTF	Late filing penalty	Penalty recorded when a return or form is filed late
OFFBRP	Proceeds on bankruptcy, offset	Offsetting transaction used to record when a payment has been received for proceeds on a bankruptcy
PNLFPY	Failure to Meet Requirements	This transaction is used to apply a Failure to Meet Requirements' penalty to CRS accounts.
PNLFRC	Failure to Take Reasonable Care	This transaction is used to apply a 'Failure to Take Reasonable Care' penalty to CRS accounts.
PNLIPP	Information Provider Penalty	This transaction is used to apply a 'Information Provider Penalty' to AIP accounts.
PNLLFE	Late filing penalty evaluation	This transaction is used to apply late filing penalty when no return has been added
PNLLFR	Late filing reconciliation penalty evaluation	This transaction is used to apply late filing penalty when no reconciliation return has been added
PNLLTF	Late filing penalty	Penalty recorded when a return or form is filed late
PNLLTP	Late payment penalty	Penalty recorded when a payment is deemed late
PNLMNL	Manual penalty	Manually posted penalty transaction
PNLSHR	Shortfall penalty	Records the shortfall penalty that is due
PRTOTC	Deferral of tax in dispute offset	Credit transaction that is used to mark a deferral of tax debit transaction that is under dispute.
PRTOTD	Deferral of tax in dispute offset, debit	Debit transaction that is used to mark a deferral of tax credit transaction that is under dispute.
PYMACC	Account payment	Credit resulting from a account payment voucher
PYMAUD	Audit payment	Credit resulting from an audit payment voucher

Transaction Type	Short Description	Description
PYMBKD	Deduction Payment	Credit resulting from a deduction payment voucher
PYMBKDREVCRD	Reverse - Deduction Payment	
PYMBLK	Multi Payment	Credit resulting from a multi payment voucher
PYMBLKREVCRD	Reverse - Bulk Payment	
PYMBRP	Proceeds on bankruptcy, payment	Credit resulting from a proceeds on bankruptcy payment voucher
PYMCOL	Collection payment	Credit resulting from a collection payment voucher
PYMCST	Customer payment	Credit resulting from a customer payment voucher
PYMEST	Estimated Payment	Credit resulting from a estimated payment voucher
PYMESTREVCRD	Reverse - Estimated Payment	
PYMLCA	Locked payment, audit	Offsets a payment transaction so that it does not offset other debit transactions until the audit transaction posts.
PYMLCR	Locked payment, return	Offsets a payment transaction so that it does not offset other debit transactions until the return transaction posts.
PYMPLN	Instalment arrangement payment	Credit resulting from a instalment arrangement payment voucher
PYMPRD	Period payment	Credit resulting from a period payment voucher
PYMRTN	Return payment	Credit resulting from a return payment voucher
RECAIL	Transfer from AIL	Credit transaction received from a different account or period that posts from a Account Issuer Levy account
RECAILREVCRD	Reverse - Transfer from Account Issuer Levy	
RECAIP	Transfer from AIP	Credit transaction received from a different account or period that posts from an Account Information Provider account
RECAIPREVCRD	Reverse - Transfer from Account Information Provider	
RECCRS	Transfer from CRS	Credit transaction received from a different account or period that posts from a Common Reporting Standard account
RECCRSREVCRD	Reverse - Transfer from Common Reporting Standard	
RECDWT	Transfer from DWT	Credit transaction received from a different account or period that posts from a Dividend Withholding Tax account
RECDWTREVCRD	Reverse - Transfer from DWT	

Transaction Type	Short Description	Description
RECFBT	Transfer from FBT	Credit transaction received from a different account or period that posts from a Fringe Benefit Tax account
RECFBTREVCRD	Reverse - Transfer from FBT	
RECGMD	Transfer from GMD	Credit transaction received from a different account or period that posts from a Gaming Machine Duty account
RECGMDREVCRD	Reverse - Transfer from GMD	
RECGSD	Transfer from GSD	Credit transaction received from a different account or period that posts from a GSD account
RECGST	Transfer from GST	Credit transaction received from a different account or period that posts from a Goods and Service Tax account
RECIPE	Transfer from IPE	Credit transaction received from a different account or period that posts from a Interest PAYE Exemption account
RECIPEREVCRD	Reverse - Transfer from Interest PAYE Exemption	
RECIPS	Transfer from IPS	Credit transaction received from a different account or period that posts from a RWT - deductions from interest (IPS) account
RECIPSREVCRD	Reverse - Transfer from RWT - deductions from interest (IPS)	
RECLGL	Transfer from LGL	Credit transaction received from a different account or period that posts from a Legal Costs account
RECNRT	Transfer from NRT	Credit transaction received from a different account or period that posts from a Non-Resident Withholding Tax account
RECNRTREVCRD	Reverse - Transfer from Non-Resident Withholding Tax	
RECPIE	Transfer from PIE	Credit transaction received from a different account or period that posts from a Portfolio Investment Entity account
RECPIEREVCRD	Reverse - Transfer from Portfolio Investment Entity	
RECPRS	Transfer from PRS	Credit transaction received from a different account or period that posts from a Payroll Subsidy account
RECRLT	Transfer from RLT	Credit transaction received from a different account or period that posts from a Resident Land Withholding account

Transaction Type	Short Description	Description
RECRLTREVCRD	Reverse - Transfer from Resident Land Withholding Tax	
RECRUL	Transfer from RUL	Credit transaction received from a different account or period that posts from a Ruling and Determinations account
RECRWT	Transfer from RWT	Credit transaction received from a different account or period that posts from a RWT - Specified Dividends account
RECRWTREVCRD	Reverse - Transfer from RWT - Specified Dividends	
REVCRD	Reverse credit transaction	Debit transaction used to offset a credit transaction that is reversed
REVINC	Reverse interest transaction	Credit transaction used to offset an interest debit transaction that is reversed
REVIND	Reverse credit interest transaction	Debit transaction used to offset an interest credit transaction that is reversed
REVOTC	Reverse other transaction	Credit transaction used to offset another debit transaction that is reversed
REVOTD	Reverse credit other transaction	Debit transaction used to offset another credit transaction that is reversed
REVPNC	Reverse penalty transaction	Credit transaction used to offset a penalty debit transaction that is reversed
REVTXC	Reverse assessment transaction	Credit transaction used to offset a primary debit transaction that is reversed
REVTXD	Reverse credit assessment transaction	Debit transaction used to offset a primary credit transaction that is reversed
RTNAMA	Amended annual return debit	Standard transaction for amended annual return forms that result in an increase of debit.
RTNAMI	Amended income year return debit	Standard transaction for amended income year return forms that result in an increase of debit.
RTNAMR	Amended return debit	Standard transaction for amended return forms that result in an increase of debit.
RTNANC	Annual return credit	Standard transaction for annual return forms that result in a Credit.
RTNAND	Annual return debit	Standard transaction for annual return forms that result in a debit.
RTNCRD	Return credit	Standard transaction for return forms that result in a Credit.
RTNDAC	Default assessment credit	Transaction that is posted from a default assessment when it results in a credit.
RTNDAD	Default assessment	Transaction that is posted from a default assessment when it results in a debit.
RTNINC	Income year return credit	Standard transaction for income year return forms that result in a Credit.
RTNIND	Income year return debit	Standard transaction for income year return forms that result in a debit.

Transaction Type	Short Description	Description
RTNORI	Return debit	Standard transaction for return forms that result in a debit.
SBOOTC	Small balance offset	Credit transaction that is used to offset a small debit transaction
TBROTD	Time bar	Time bar offset for a credit transaction
WAVOTC	Remission	Offsets a penalty or interest transaction that has been remitted.
WOOTC	Other write-off	Write-off another transaction type
WOSOTC	Other system write-off	System write-off of another transaction type
XFRDSC	Disbursement transfer source credit	Credit transaction that is posted when a disbursement is transferred
XFRIN	Credit transfer in	Credit transfer into a period from a different period on the same account
XFROUT	Credit transfer out	Credit transfer from this period to a different period on the same account

8   Appendix D - Document History

Version	Date	Description
0.1	15 Aug 2017	Internal only
0.2	8 Sep 17	Draft for initial feedback
		Updated with SME changes Inserted Sections 2.4, 2.5, 2.6 and 2.7
0.5	Oct/Nov 2017	Removed financial descriptions Updated scenarios and use cases Finalised various sections ready for review