IntelliPen.net v2.3 Release Notes

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(including updates following IntelliPen.NET v2.5 release)

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Document revision history		
1.0	09-05-2018	original release version
2.0	07-05-2020	updated following IntelliPen.NET 2.5

This document only focuses upon new features and enhancements. Bug fixes completed within the version 2.3 release will be covered by a separate document that will be made available online.

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IntelliPen version 2.3 release notes

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(C) = requires configuration
Technical = information for advanced users
NEW = item added in this latest version of the document

1. Legislative background to the 2.3 release

GDPR and IntelliPen v2.3

On 25th May 2018 the General Data Protection Regulation (GDPR) comes into effect. This legislation was created by the EU to address recent technological developments and the ways that companies and organisations now routinely collect, store, process and use personal data. The primary objective is to give individuals new rights and controls over the way their personal data is used. It is also intended as a way to standardise data protection laws throughout the EU. Once the GDPR becomes law then companies must review their operational procedures and practice in respect of the legislation's requirements and make any changes necessary to ensure compliance.

It's widely acknowledged that the primary focus of this legislation are the internet and social media companies such as Google and Facebook, notable for the multitude of ways that they collect personal information and repurpose that data via individual profiling techniques to provide precisely targeted advertising services and demographic data to their clients.

One of the foremost objectives of GDPR is to give individuals the right to see what data a company holds about them, what it is used for, and who is able to see it. It will also become a requirement that data can only be collected and held once active consent has been granted (as opposed to the implied and assumed consent that has been the norm until now). Individuals will now also have the right to request that their personal data be removed at their request.

Clearly pension schemes and their administrative processes differ considerably in intent from practices such as the commercial exploitation of personal data but, nonetheless, as they too entail the storage and processing of personal information they will become subject to the GDPR legislation in exactly the same way.

Data Security
An organisation's duty of responsibility to protect personal information from unauthorised access is also central to GDPR. In the event of a security breach companies that store and process personal data will face a much higher degree of liability and potential financial penalties than they would have under previous legislation. Thus data security has become a far more pressing concern and this has been one of the principal drivers for the changes we are introducing in version 2.3 of IntelliPen.

This is EU law – what about Brexit?
Whilst the UK is still proceeding toward an exit from the EU the timing of this is such that we will be subject to EU legal requirements at the point when the new legislation comes into effect.

The UK is in the process of drawing up a new Data Protection Bill (2017) that would take over after exit from the EU, but this essentially replicates all the features of GDPR anyway, in order to provide harmonisation of data law with the rest of Europe and enable unimpeded data exchange with EU member countries to continue. Some commentators have highlighted potential areas of conflict between GDPR and other aspects of UK law (in particular some of the UK's national security legislation) but these considerations do not have a bearing on GDPR's relationship to the pensions administration process or the IntelliPen system.

So the provisions of GDPR will, in whatever form, supersede the Data Protection Act (1998) in UK law and provide new standards for compliance going forward, irrespective of the UK's relationship with the EU at that time.

Data Encryption

In response to the need for greater data security probably the single most significant change with IntelliPen v2.3 is the introduction of encryption. This means that all personally-identifiable and otherwise sensitive information held in the database will be stored in a scrambled form, rendering it inaccessible to any routines or applications that are *external* to the IntelliPen system. Any data processing activity will require that the data be decrypted first. This data encryption/decryption function is now integral to the system, functioning seamlessly and unobtrusively during normal use, and with no perceptible impact upon operational processing speeds.

Operational implications of GDPR
It is likely that GDPR will have many implications for organisations. The purpose of this document is only to provide a very high-level summary of this legislation with particular regard to the modifications we have made to the IntelliPen system in order to fulfil its requirements. You would be advised to become familiar with the legislation in detail and make your own assessment of its potential impact upon your organisation. You may find the information provided here to be a useful starting point:

https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/

With v2.3 our intention has been to provide a comprehensive response that will enable Procentia's clients to achieve GDPR compliance promptly and with the minimum amount of disruption, at least within the scope of their administrative software.

This document provides a detailed overview of the system changes introduced in v2.3 of IntelliPen and includes guidance about which elements have been adapted to achieve full compliance with GDPR legislation, together with an assessment of their practical and operational impact.

Full GDPR/encryption implementation is optional
It should be noted in advance that these GDPR-related system changes are optional. You are not compelled to implement them in order to benefit from other changes delivered with the upgrade to v2.3 of IntelliPen; you may exercise this choice at the point of upgrade. You may also opt to activate them at a later stage, after the version upgrade. You can also make selective decisions about how many and which data elements are encrypted. We would advise that such decisions should be made after giving full consideration to their implications for your organisation. Whilst the GDPR-compliant implementation of v2.3 will deliver many significant security enhancements, these enhancements will also have an impact upon the operation of a number of system functions and procedures, as described below.

2. Introduction

Configuration (C)
It should be noted that many of the new features and routines introduced with v2.3 of IntelliPen are not immediately available in the standard installation and will require some degree of configuration in order to deploy them. This may be as simple as adding a new menu item but will occasionally call for more complex modifications. In the notes which follow such items are indicated with **(C)**.

Key features overview

GDPR & Encryption
As already discussed above, it is the impact of the GDPR legislation and the essential system developments entailed in providing full compliance capability that take headline status in the v2.3 release of IntelliPen. A new GDPR Events screen has been added to the personal data area of the member record (see section 3.1.4) which fulfils the member consent requirements introduced with the GDPR rules.

In particular, whilst the introduction of encryption to the system strengthens its security it also brings a number of new considerations for the use of the system.

The use of encryption is optional. However, where it is to be used then it will have implications for many aspects of the system and is likely to require some degree of configuration and modifications to some established components, notably Search & Select, Document Production (reporting) and some workflows and calculations. Further details may be found under separate headings below, and specific considerations are addressed in section 3.

The ability to view encrypted data will also now be dependent upon the privilege level of the IntelliPen user. Where a user's privilege level is insufficient to view certain data items then they would be unable to see the values in those fields; instead the field will simply show scrambled data. The authority to access encrypted data is now applied as part of the definition of user roles; it may be necessary to review user roles if you opt to implement encryption. Further details about this below under Security & Auditing.

We anticipate that the use of encryption will have minimal impact on system processing speeds.

List of encrypted fields – these are found in the Column Configuration table. See Appendix 1 for a list of the fields that are encrypted by default within the standard v2.3 system.

Data encryption is applied according to the name of a database field. Thus any occurrence of an encrypted data item, in any location that it may appear, will be encrypted and only viewable via the IntelliPen system and only then to a user logged in with a suitable privilege level.

In addition, all workflow fields with a data type of string will be encrypted.

Note that the list of encrypted fields includes a number of database columns used to store data in xml form. This means that the following items will be encrypted:

- Wizard datastores
- Calculation results
- Any document production result sets that may be stored in the database

As it is often necessary to examine the contents of such xml data items for debugging purposes, a Quick Decrypt facility can be made available on the IntelliPen menus to clients who require it.

Encryption and IntelliCalcs

It is important to ensure that encrypted fields are not being concatenated, either within data dictionary queries or in IntelliCalcs formulas. As part of the upgrade to version 2.3 it will be necessary to review data dictionary and calculation code and amend accordingly.

Encryption and IntelliFeed

Fields in import tables with names matching entries in the ColumnConfiguration table (e.g. LastName) will automatically have encryption applied to them following the upgrade to 2.3. Import tables for interfaces should be examined to check for any fields containing data that should be encrypted but where the field names are not in the ColumnConfiguration table. Additional field names can be added to the ColumnConfiguration table if necessary.

Encryption & IntelliCase

Although workflow fields with a string data type will now be encrypted, string manipulation and concatenation of workflow fields using SQL statements in the executable of a workflow task will still operate effectively as IntelliCase will handle the decryption prior to executing the SQL.
Amendments to workflow tasks which have an executable type of Stored Procedure will be necessary in the following scenarios:

> Data items which, according to the ColumnConfiguration table, would normally be encrypted, are being passed to a stored procedure. See section 3.5.11 Use of SQL Named Parameters in Stored Procedure Tasks for further details
>
> A workflow task is using a SQL UPDATE statement to alter the name of the case. As case names will be encrypted it is necessary to use a stored procedure with a named parameter to do this. A new standard stored procedure has been made available for this purpose, WF_UpdateCaseName, which accepts two parameters @CaseID and @CaseName.

Reporting after data encryption

Implementing encryption will have implications for the process of reporting, whether using the Report Writer or Document Production facility, in so far as certain SQL functions – notably the concatenation of data elements – will require a modified approach once such data elements have been rendered in an encrypted form within the database. Reports containing SQL queries which concatenate data items that will be subject to encryption will need to be amended to avoid doing so. See 3.6.4 PersonalDetails source type for details of a common example of this.

Scheme level access

The system now allows greater control over which schemes are visible to administrative staff, providing the facility to restrict access at the levels of Role, Team and User. Full details can be found in section 3.8.1.

PDF conversion in workflow

A new feature enhances workflow processes, allowing the automatic conversion of Word documents to PDF format and also to specify whether the documents should then be published, enabling viewing via a member, employer or trustee website. (see section 3.5.12)

New look and menu restructure

Version 2.3 also brings a new, contemporary look to the system's interface, with fresh screen styling, new icons and a revised navigation menu. (See section 3.11.5 for details of menu changes).

Investment reconciliation screen and investment profiling wizard

The system now features a stand-alone wizard for Investment Profiling, a procedure that until now had only been possible as a workflow process. The wizard provides a streamlined facility to create switches, report and reset members. (see section 3.3.1)

In addition, there is a new Investment Reconciliation screen providing a valuable overview of the unit totals for each investment on the system. (see section 3.4)

3. Specific system enhancements and new features

The following enhancements have been introduced within IntelliPen 2.3.

Key: Bug Tracker ref (BT) Apache Sub-Version ref (SVN)

3.1 Member record

3.1.1 Member Summary screen

Three new fields now appear on the Member Summary screen, under the Membership Details tab, to display the calculated values for 'Member's Age', 'Company Service' and 'Pensionable Service'.

BT: 3972 | 4309 | 4343   SVN: 10235 | 11009 | 11153

3.1.2 Leaver Data/Transfer Out (C)

There are now new fields available, under the Additional Details tab, should they be required for a scheme. These fields are configured at scheme level and will only be displayed when a scheme has been set up to use them. They comprise:

- Two date fields
- Two 10-character indicators
- Three 50-character references

Configuration information
New fields will need to be added to client-specific transfer out screen layouts if in use.

BT: 4057   SVN: 10116

3.1.3 In-progress dialog (C)

The system now displays a progress indicator when calculating the State Pension Date after changing a member's Date of Birth.

Configuration information

New function will need to be added to any client-specific personal information layout if in use.

BT: 4065 SVN: 10105

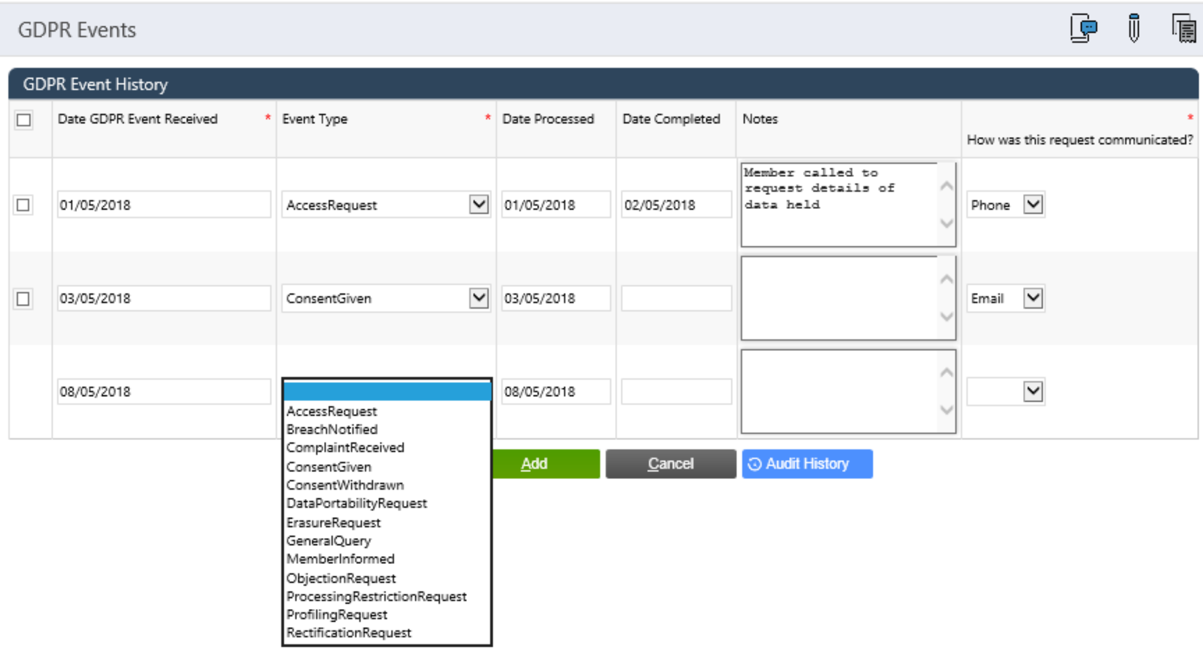
3.1.4 Personal Details | GDPR Events (C)

The Personal Details screen has been modified to organise data using three tabs to group related items. Under the 'Flags' tab there are now three new fields that reflect the consent requirements of the GDPR legislation:

- GDPR Consent (True/False/Unset)
- GDPR Processing Restricted (True/False)
- GDPR Erasure Requested (True/False)

The third of these fields (Erasure Requested) fulfils the legislative requirement for a *'Right to be forgotten'* - that is, the right of individuals to request that all personal data held about them by an organisation be erased. This is one of the provisions of GDPR that would seem an odd choice if requested by a member of a pension scheme, and indeed it seems most likely that it was conceived to apply to things such as social media posts, or other types of information that might be regarded as personally damaging. Nevertheless, it is still a compliance requirement and so we have taken steps to incorporate provision for it within the system.

As the GDPR legislation determines that consent to hold personal data cannot be assumed the values of the GDPR Consent field will remain unset in its default state. These fields reflect entries made on the new **GDPR Events** screen.



This screen is able to record details of any stipulations or requests from the member relating to their rights under GDPR. An event type for each entry may be selected from a new standard decode table. 'Date Processed' and 'Date Completed' can be used according to individual administrative office procedures.

ConsentGiven and ConsentWithdrawn entries on this screen will result in the GDPR Consent flag being set to TRUE or FALSE respectively. This flag on the Personal Details screen is read only as it should always reflect the consent status described on the GDPR Events history.

A ProcessingRestrictionRequest event will set the GDPR Processing Restricted flag on the Personal Details screen to True and an ErasureRequest event will set the GDPR Erasure Requested flag to True. As there are no standard GDPR events to reverse either of these requests, the GDPR Processing Restricted and GDPR Erasure Requested flags are also able to be updated manually as required.

Clients may wish to consider whether there is a requirement for any reports, workflows or interfaces should be amended in order to take account of these new settings.

Configuration information
New GDPR Events menu item.

BT: none SVN: 11201

3.1.5 Person/Employee/Scheme additional fields

Ten new Boolean fields for user configuration have been added to:

Person Additional Data
Person Additional History
Employee Additional Data
Employee Additional History
Scheme Member Additional Data
Scheme Member Additional History

BT: 4158 SVN: 11311

3.1.6 Non-UK Bank Details screen format (C)

An alternative version of the bank account screen is now available for recording non-UK account information. This new screen is capable of using the PCA web service to validate the IBAN number for bank accounts which are flagged as active. There is a flag on the screen 'UK account' - if set then the display will revert to UK details format for that record. Note that a change to the system menus will be required in order to use this screen rather than the existing UK version.

Configuration information
Implementation requires an amendment to menus.

BT: 4236 SVN: 10615

3.1.7 NEW - Member summary for people without scheme memberships

The member summary screen has been adjusted so that it works effectively for person records that have no associated scheme member records.

BT: 4682 SVN: 13401

3.1.8 NEW - Drawdown redemption strategy screen (C)

This is a screen for use with members of DC schemes who have fund holdings which are earmarked specifically for drawdown purposes. The strategy represents the instructions for proportioning drawdown amounts across multiple investments.

Configuration information

A new menu item would be required for this screen which is likely to be part of a broader range of updates for implementing drawdown processes according to scheme requirements.

BT: 7940 SVN: 14562

3.2 Search & Select

The use of data encryption will have an impact upon the operation of the search facility. Encrypted data will not be available to the search facility in quite the same way as in previous versions.

It will not be possible to search on partial values (e.g. all surnames beginning 'Th') when those data items are encrypted.

This also applies to Search & Select within the Document Scanner routine.

3.2.1 Search & Select results screen

The instant member search results screen now also shows the member status against each entry.

BT: 4196 SVN: 10555

3.3 Wizards

3.3.1 Investment Profiling (C)

A new wizard is now available, under Group Wizards, that enables you to run investment profiling (lifestyling) as a stand-alone routine (previously this was only possible as a workflow process).

There is a new screen that enables you to create new investment profiling sessions and, for each session, to perform the following actions:

- create switches
- report members
- reset members

Investment Profiling Sessions

	Selection Criteria	Date Started	From Date	To Date	Effective Date	Case ID	Status	Actions
☐	Employer: Test	16/01/2018	01/01/2017	31/03/2017	01/04/2017		Created	
☐	Scheme: IntelliPen Trust (DC); Employer: Procentia	03/10/2017	01/01/2017	31/03/2017	01/04/2017		Processed	
☐	Scheme: IntelliPen Trust (DC); Employer: Procentia	21/09/2017	01/01/2017	31/03/2017	01/04/2017		Populated	
☐	Scheme: IntelliPen Trust (DC)	05/09/2017	01/01/2017	31/03/2017	01/04/2017		Processed	

Create New

Clients who run investment profiling through workflow will not need this menu item enabled.

Configuration information
This requires setting up a new menu item.

BT: 4026 SVN: 10157

3.3.2 Modified validation behaviour in Wizard display (C)

Wizards may now be configured so that it is possible to move to a previous screen (using application's Previous button) without this triggering the screen validation.

Configuration information
A new parameter is available for use in wizard definitions. It may be applied at <wizarddefinition> level:

<SkipValidateOnPrevious>True</SkipValidateOnPrevious>
or at <panel> level:
```
<parameter name="SkipValidateOnPrevious">true</parameter>
```

BT: 4218 SVN: 10579

3.3.3 Generate member reference via Scheme or Trust level

Using the New Scheme Member Wizard it is now possible to generate a member reference for new members according to parameters at either Scheme or Trust level (e.g. prefixes or sequence numbers). This is an enhancement to the system; previously this operation was only available at Scheme level.

BT: 4222 SVN: 11312

3.3.4 Authorise Payments Wizard (C)

The Authorise Payments wizard has been enhanced so that it only displays each screen if there is data present on that screen, irrespective of whether that data requires authorisation. The exception to this is the Payroll Details screen of the wizard, which will continue to display even when no data is present, so long as pay-groups are present on the system.

Configuration information
If preferred, this behaviour can be disabled by setting the value of the ShowAll field in the wizard's datastore to 1.

BT: 4226 SVN: 10606

3.3.5 Authorise Payments - non-UK bank details (C)

The Authorise Payments wizard has also been enhanced to enable the display of a non-UK bank account screen if required, instead of the current UK bank account screen.

Configuration information

Configuration flag: systemSettings.useBankAccountNonUKFormat

(*See also:* 3**.1.6 Non-UK Bank Details screen format** BT: 4236 SVN: 10615)

BT: 4244 SVN: 10684

3.3.6 Bulk calculation definitions can now be hidden from selection drop-down

Bulk calculation definitions/templates that are no longer used can now be hidden from the drop-down selector when creating a new bulk calculation or pension increase session. Such unused definitions must remain in place as they may be associated with saved sessions or calculated results, but for operational convenience they can now be removed from view in the selection options.

BT: 4250 SVN: 11367

3.3.7 Non-UK bank account layout in Leaver Process Wizard (C)

The Leaver Process Wizard can now use a non-UK bank account layout, where this is configured. This routine also now incorporates PCA validation for IBAN, and sort code and account number fields via the PCA web service.

Configuration information

Configuration flag: systemSettings.useBankAccountNonUKFormat

If a client-specific Leaver Process is in use, this change will need to be incorporated into it if required.

(*See also*: **3.3.5 Authorise Payments**)

BT: 4349 SVN: 11169

3.3.8 New page (Upload Employee Data) allows upload of member xml files exported from another system (C)

This new routine facilitates the upload of a member data XML file that has been exported from another IntelliPen system, making the file available in the EmployeeImportExport folder on the server.

Configuration information

It is necessary to configure a new menu item to make this routine available. This routine would be required if using encryption to ensure the XML data file is stored in an encrypted format.

BT: 4280 SVN: 10954

3.3.9 NEW - Undo Leaver checks for single payments

The Undo Leaver wizard has been updated to perform checks on any single payments that have been passed across to IntelliCount for payment. If the single payment has a paid date, the undo is abandoned and the user informed. If the single payment has been passed to IntelliCount but not paid or cancelled, the user is asked to cancel the payment before proceeding with the undo.

BT: 4094 SVN: 10501

3.3.10 NEW - Drawdown redemption strategy wizard (C)

This is a wizard for use with members of DC schemes who have fund holdings which are earmarked specifically for drawdown purposes. The wizard allows the user to enter instructions for proportioning drawdown amounts across multiple investments.

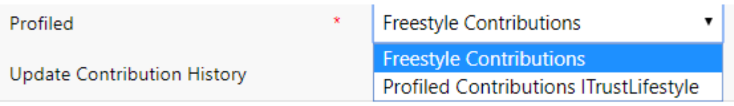
Configuration information

A new menu item would be required for this wizard which is likely to be part of a broader range of updates for implementing drawdown processes according to scheme requirements.

BT: 7940 SVN: 14562

3.3.11 NEW - Improved descriptions for profiled vehicles

The Profiled drop-down in the DC Manual Buy wizard now incorporates the name of the profile within the descriptions of profiled vehicles. This enables the user to distinguish which profile vehicle to place the investment into, particularly in situations where multiple profiles are in use within a scheme.

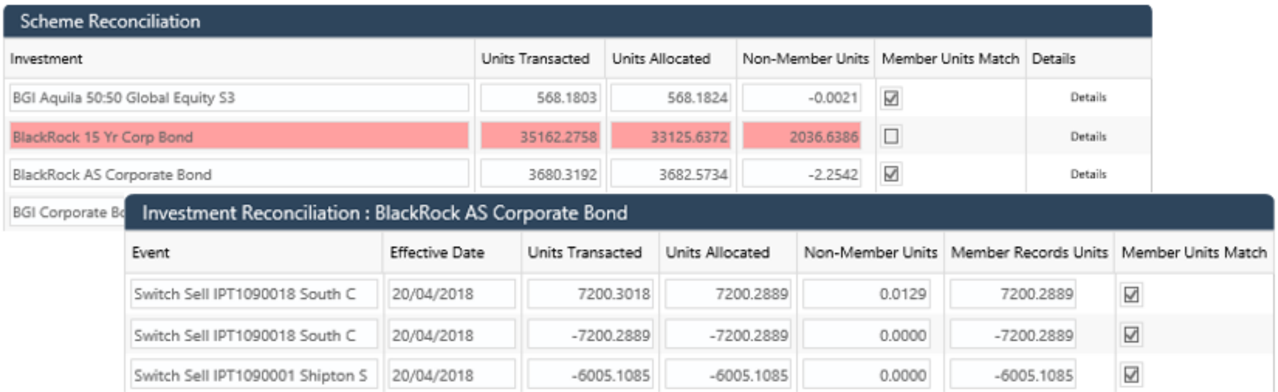


BT: 7991 SVN: 15170

3.4 Banks/Establishment Data

3.4.1 New Investment Reconciliation screen (C)

There is now a new menu item under Group Wizards that provides scheme level unit totals for each investment together with a complete transaction history plus an indication of any differences between units transacted and units allocated.



Scheme Reconciliation

Investment	Units Transacted	Units Allocated	Non-Member Units	Member Units Match	Details
BGI Aquila 50:50 Global Equity S3	568.1803	568.1824	-0.0021	☑	Details
BlackRock 15 Yr Corp Bond	35162.2758	33125.6372	2036.6386	☐	Details
BlackRock AS Corporate Bond	3680.3192	3682.5734	-2.2542	☑	Details
BGI Corporate Bo					

Investment Reconciliation : BlackRock AS Corporate Bond

Event	Effective Date	Units Transacted	Units Allocated	Non-Member Units	Member Records Units	Member Units Match
Switch Sell IPT1090018 South C	20/04/2018	7200.3018	7200.2889	0.0129	7200.2889	☑
Switch Sell IPT1090018 South C	20/04/2018	-7200.2889	-7200.2889	0.0000	-7200.2889	☑
Switch Sell IPT1090001 Shipton S	20/04/2018	-6005.1085	-6005.1085	0.0000	-6005.1085	☑

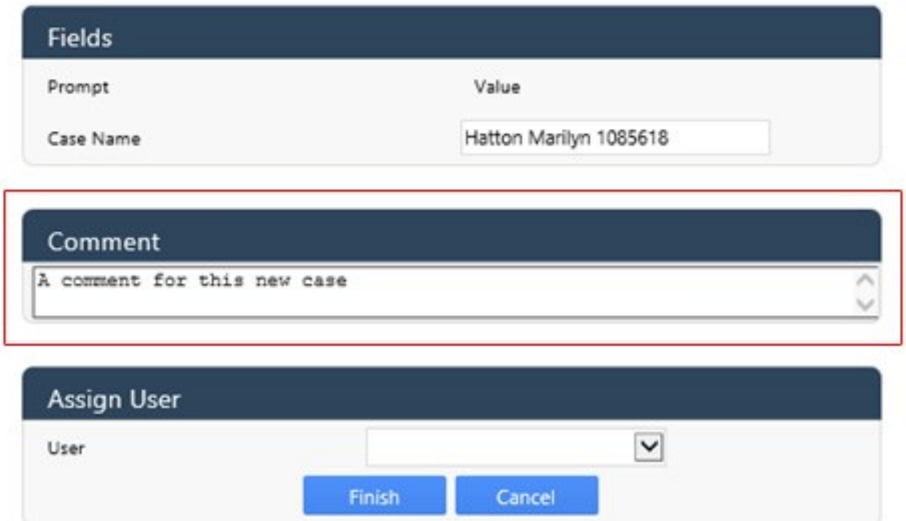
Configuration information
This requires setting up a new menu item.

BT: 4075 SVN: 10570

3.5 Workflow

3.5.1 Add notes when creating a new case (C)

This extends the ability to add notes to a case that was introduced in v2.2. For 2.3 this has now been enhanced to enable the addition of notes at the point of creating a new case in the Create Case routine. A new field 'Comment' is now available on the screen:



Information entered via this field will be visible on the 'Case Notes' tab of that case.

Configuration information
Configuration flag: intelliCaseSettings/enableCaseNotes

BT: 114   SVN: 10363

3.5.2 Workflow Dashboard – Cases due tomorrow

The Cases dashboard display now includes cases due today and tomorrow under the SLAs section, with an active link to display the case details.

BT: 2906 SVN: 10647

3.5.3 Work Desk responsive to lower resolution screen displays

The Work Desk now detects screen display dimensions and adapts where space is limited (such as on a laptop). In order to provide a more legible display the date columns will be hidden on the Work Desk; the dates will be visible on the case information card which is available on mouse hover over the case entry.

BT: 4129 SVN: 10396

3.5.4 Date validation added to Case Work Holidays

Validation is now performed when calculating suspension end dates to ensure that any holiday dates entered are forwardly sequential to avoid the issue where a mis-typed date could cause problems with the operation of Work Desk. This validation check also applies to the Case Work/Case definitions/Holidays screen.

BT: 4271 SVN: 10893

3.5.5 Case reassign privilege modified

Users with access to the WF – Allow Assign privilege will no longer be able to assign a case from the results of a Find Case search if the case resides in a queue which the user is not allowed to view. Queues to which a user does not have access will no longer appear in the drop-down list of queues under the Queues tab.

BT: 4348 SVN: 11187

3.5.6 User role privilege to escalate a workflow case

A new WF – AllowEscalate privilege has been defined. Only users with access to that privilege will be able to escalate cases.

BT: 95 SVN: 11321

3.5.7 Search result display of *all* WorkItems within a case

If a workflow case contains more than one workitem (that is, concurrent strands of processing) then, when searching for the case in the work desk, the user is informed of the location of all the case's workitems. Previously only the first workitem found was being listed.

BT: 1337 SVN: 11366

3.5.8 Case assignment shown on all tabs in Workflow Dashboard

In the Workflow Dashboard Cases display all tabs now identify the user that the case is assigned to (with the exception of Completed and Terminated cases).

BT: 3973 SVN: 11362

3.5.9 Case Definitions/Process set-up – behaviour change (C)

This routine has been modified to make it possible to view the process details when there is a status of ‘Production’ and live cases are in progress. It’s necessary to protect a process with ‘Production’ status from modification, but it is now possible to view the current version in read-only mode for reference purposes, without the need to create a new version of the process.

This new behaviour takes effect if the user answers ‘No’ when asked whether to create a new version of the process. The screens of the process definition will be made available, but without the option to make any changes.

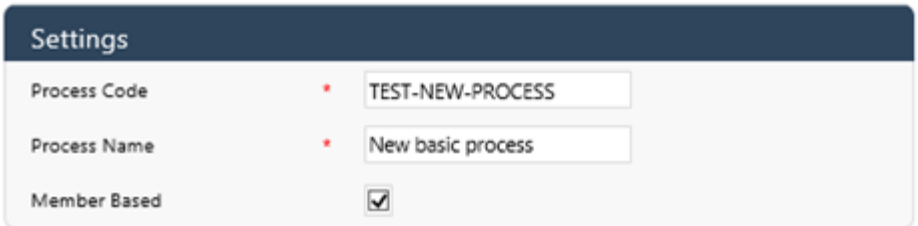
Configuration information

The Process Setup menu item must be amended to incorporate a new AllowReadonlyView property, and must also be assigned a specific privilege, preferably the WF - Workflow Developer privilege.

BT: 4067 SVN: 10391

3.5.10 New wizard – Create Process Template (C)

This enables the creation of a simple, basic workflow process that contains a single activity, task and termination transition, plus relevant fields to link it to a member. It streamlines the set-up of a workflow by incorporating all of the necessary initial steps in the process.



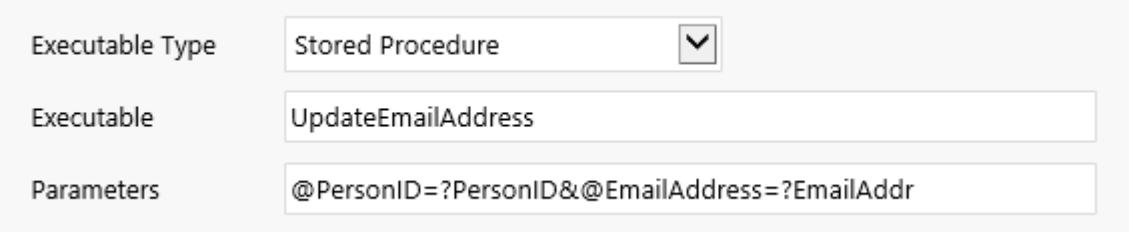
Configuration information

Requires the addition of a new menu item.

BT: 4089 SVN: 10574

3.5.11 Use of SQL Named Parameters in Stored Procedure Tasks

Workflow tasks that run stored procedures can now accept the use of named parameters. This is to ensure that data items being passed to a stored procedure can be passed as encrypted where necessary. The relevant fields of the task definition should be set up as per the following example:



For encryption to be enforced when the data is passed to the stored procedure, the name of the parameter must match a field name in the ColumnConfiguration table.

BT: 4245 SVN: 10688

3.5.12 Word to PDF conversion (C)

Workflow processes may now be configured to automate the conversion of selected Word document attachments to PDF and the publishing of those documents so that they will be available for viewing via a member, employer or trustee website. This may be programmed to happen at any stage of a workflow, perhaps following checking or at the end of the process when all documents have been created. This new option allows for the user to select which of the case's attachments are to be converted to PDF and which are to be published. The resulting PDFs will also be attached to the case, with visibility settings according to the requirements for the process.

Two new executable types are now available to workflow task definitions:

Choose Attachments to Convert
Convert to PDF

Parameters may be used with these executable types to specify wording to be presented to the user and to determine whether documents are to be converted only or converted and published, also to define visibility settings for the converted documents.

Note that if you are using Word templates with conditions, and you wish to produce a PDF file output, then in order for this process to operate successfully certain specific criteria must be obeyed within the Word template. Details of these criteria can be supplied on request. Alternatively, it may be preferable to generate PDF documents natively instead of routing via Word, as the intermediate use of Word is only really applicable where human operators are editing and checking document output.

Configuration information

The systemSettings/PDFConversionMethod configuration flag must be populated, plus the systemSettings/PDFConversion_WinnovationKey setting if appropriate, in order to enable the PDF conversion function.

BT: 4376 SVN: 11334

3.5.13 NEW - Scheme name on work desk

A new column has been added to the work desk, displaying the name of the relevant scheme for each case.

BT: 4048 SVN: 10394

3.5.14 NEW - Dynamic SLA End Date field (C)

The work desk is now able to display a date when the SLA on a case is due to expire, as an alternative to displaying the number of days to expiry. When cases enter and leave the diary the date reacts accordingly. The choice between displaying SLA days or date is a system-wide option.

Configuration information

To display an SLA Date rather than SLA Days on the work desk, the intelliCaseSettings/workDeskDisplaySLADate configuration flag should be set to True

BT: 7814 SVN: 15082

3.5.15 NEW - Work Desk date display changes (C)

It is now possible to suppress the display of the Date Queued, Date Dequeued and Date Last Resourced columns from the work desk on a system-wide basis. It is also possible to define an alternative label for the Date Due column, for example it could be relabelled as Disclosure Date.

Configuration information

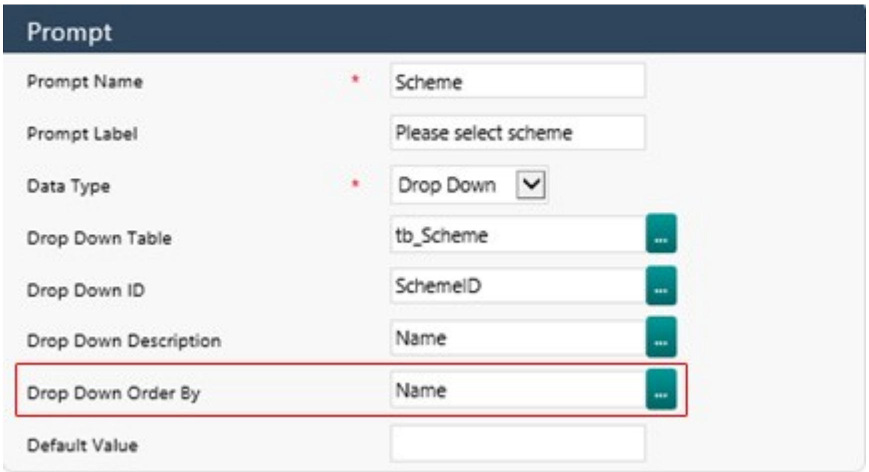
Relevant configuration settings are:
intelliCaseSettings/removeExtraDatesFromWorkDesk
intelliCaseSettings/workDeskDateDueColumnLabel

BT: 7860 SVN: 15082

3.6 Reporting

3.6.1 Report Writer prompt drop-down list

It is now possible to specify the order in which the values in a drop-down prompt list are displayed. This is now controlled from a new field in the prompt definition 'Drop-down order by'.



BT: 1200 SVN: 10533

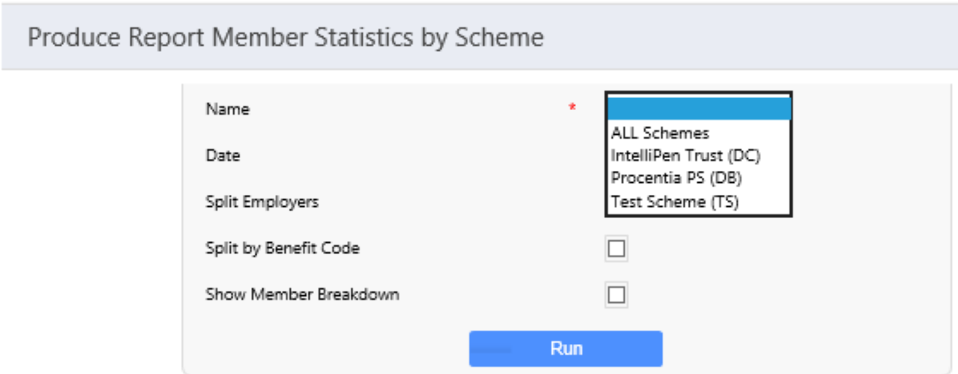
3.6.2 Scheduled Reports with prompts

It is now possible to run reports in scheduled mode that include prompts; previously this had caused runtime errors.

BT: 2386 SVN: 10545

3.6.3 Scheme selection available in Membership Statistics report

There is now an alternative version of the standard Membership Statistics report, Member Statistics By Scheme, that allows the report to be run for specific schemes by means of a new selector.



BT: 4270 SVN: 11348

3.6.4 *PersonalDetails* source type

In order to take account of encryption it will be necessary to modify data source definitions that output concatenated data, where these are comprised of – or include – encrypted data fields. A common instance of this would be combining 'title', 'first name' and 'last name' fields to form a full name or a salutation. To enable the continued use of this approach in an encrypted environment a new ‘source type’ has been introduced: ‘PersonalDetails’. This can be utilised within a new sub-section of relevant data source definitions, with the effect of decrypting the data in order to fulfil the operation.

Configuration information

See example code in Appendix 2.

BT: 4290 | SVN: 10980

3.6.5 Querying saved reports

Data encryption will extend to the output from Document Production reports. Whereas previously it has been possible to access these saved reports via the User Area on the server it will now be the case that you can only view the reports from *within* IntelliPen, as they will need to be decrypted for display.

3.6.6 Standard Reports: Membership Movement Report

It is now possible to run the Membership Movement Report across all schemes by selecting ‘All’ in the scheme selector drop-down (previously this report could only be run on a scheme-by-scheme basis).

There is now a member movement summary section included in the output from this report that provides opening and closing balances for each status and a breakdown of movements in and out of each status, according to status reason.

An example of the new display:

Member Movement Summary

Movement Description	Number of Records
Active Opening Balance	294
Active (New Joiner)	12
Closed (Death With Dependants) from Active	4
Closed (Death with No Dependants) from Active	2
Closed (Small Pot Lump Sum) from Active	2
Closed (Transfer Out) from Active	5
Deferred () from Active	1
Deferred (Deferred Pension) from Active	3
Deferred (Leaver with Deferred Pension) from Active	2
Retired (Late Retirement) from Active	1
Active Closing Balance	286

BT: 4083 | 4254 SVN: 11286

3.6.7 NEW - Handling mail merge IF statements (C)

IntelliPen.NET v2.3 contains enhancements to IntelliPen's mail merge functions to improve the handling of IF statements in Word templates. An option has also been included for this functionality to be disabled if preferred.

Technical __________________________

This item applies to document production reports using a server-side mail merge processing definition.

Configuration information

systemSettings/disableMailMergeProcessingOfIFStatements

BT: 4186 SVN: 10465

3.6.8 NEW - Ensuring post codes remain in upper case

An underlying function used in reports for converting data fields into proper case has been adjusted to preserve upper case in data items which appear to be post codes.

Technical __________________________

The function concerned is fn_ProperCase(), which is available be used as part of the SQL in the configuration of a report.

BT: 7818 SVN: 14083

3.7 Document Management

3.7.1 Document Scanner

The 'Settings' tab has been removed from this application as its function had become redundant and configuration is now managed elsewhere.

BT: 4050 SVN: 10845

3.7.2 Document Scanner

In the Document Scanner application, when a member is selected, the row in the member list now stays highlighted.

BT: 4303 SVN: 11092

3.7.3 IntelliScan – document overwrite privileges (C)

It is now possible to overwrite an existing document with an edited or new version of the document whilst retaining the same underlying unique identifier.

Configuration information

A new Overwrite Documents privilege is now available. A user with access to that privilege may overwrite any other user's documents. Where no privilege is assigned then a user may still overwrite *their own* documents but not those of any other user, provided the following configuration flag is set True: intelliScanSettings/allowUsersToOverwriteOwnFiles

BT: 4330 SVN: 11103

3.7.4 IntelliScan – stored file extensions (C)

IntelliScan is now able to store files with their appropriate file extensions.

Configuration information

Configuration flag: documentLibrarySettings/fileSystemStoreWithFileExtension. Note: once an environment is live this setting should not be changed.

BT: 4333 SVN: 11107

3.7.5 Content Type Extensions (C)

It is now possible to define default file extensions for IntelliScan documents with a content subtype that is unrecognised by the server. This enables these files to be given the correct extension when downloaded.

Technical __________________________

Configuration information

This configuration setting is made in 'systemSettings/defaultMimeContentTypeExtensions'.
For example:

Adding '*/mp3:.mp3,text/plain:.txt' to the configuration file will mean that any content type with a sub-type of /mp3 will be correctly labelled with its .mp3 extension; any content type of text/plain will be stored with the .txt extension.

BT: 4197 SVN: 10491

3.7.6 Patch Codes for Auto Loader (C)

It is now possible to specify alternative formats for patch code generation for use by the Auto Loader application. The use of an alternative format has been made available to avoid the issue of Code 128-type barcodes becoming too long to be read correctly by the Auto Loader application when they contain larger amounts of data.

Configuration information

Configuration is set via the 'autoLoaderSettings/separatorBarCodeType'.

Three options are now available:
1. Code 128
2. PDF417
3. QRCode

BT: 4208 SVN: 10521

3.7.7 NEW - Security update to tif viewer (C)

A background setting has been introduced which controls whether the tif viewer is available to users who are no longer logged in to IntelliPen.

Configuration information
tifViewerSettings/requiresUserLogin

BT: 4212 SVN: 10569

3.7.8 NEW - Default naming of manually uploaded documents

When uploading a document to the Personal Documents screen or to a workflow case as an attachment, the default title for the document is now the name of the source file.

BT: 4356 SVN: 11189

3.7.9 NEW - Improved display order

Documents on the Personal Documents screen, and in the repository window of the Document Scanner, are now displayed in descending date order.

BT: 4579 SVN: 12690

3.7.10 NEW - Searching for documents using meta data (C)

The Document Search page, on the Document Scanner menu, has been enhanced so that it is able to present criteria options to the user which are based on meta data labels in use for all the documents that are stored.

Configuration information
The above behaviour applies if no standard meta data labels are defined in the intelliScanSettings/metaDataLabels configuration setting.

BT: 7921 SVN: 15178

3.8 Security & Auditing

The implementation of data encryption requires that a number of new privileges be defined as standard to specify which user roles will be able to see different types of encrypted data. These include:

Encrypted Bank Data
Encrypted Data
Encrypted Payslip Data
Encrypted Security Data

Where a user's privilege level does not permit access to certain data elements they will only see encrypted information displayed in protected fields.

It may be necessary to review existing roles on your system in the light of these changes, assigning appropriate access to encrypted data.

3.8.1 Scheme-level access restrictions

It is now possible to restrict user access to specific schemes.

Access restrictions to a Scheme can be made at three different levels: Role, Team, User.

Additionally, a new privilege has been added called “Access All Schemes”. If a user has Access to this new Privilege, then all Scheme Level Access is ignored, and they are granted access to all the Schemes. This privilege should be applied to all user roles who require access to all schemes.

Where a user is denied access to a scheme, when using search and select, unavailable members are shown to the user, but they cannot select them. It would however be possible to amend the IntelliPen styling so that unavailable members are not visible at all.

Technical

There is a detailed document that covers how to implement scheme level access restriction in terms of user set-up and within the Report Writer, including advice on amendments to document production reports, client-specific screen layouts and IntelliFeed definitions.

BT: 4024 SVN: 11451

3.8.2 Columns now sortable in Security Administration > Users

To make it easier to find a specific user in the list a new feature has been added to enable the columns to be sorted by ‘Single sign-on ID’ and ‘User ID’. It is not possible to sort on UserName as the information in this column is subject to encryption.

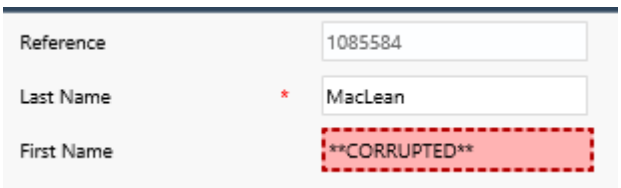
BT: 4267 SVN: 11052

3.8.3 Managing corruption of data in encrypted systems

One of the potential issues that follows from the use of data encryption within IntelliPen is how to deal with encrypted data items should they become corrupted for any reason. In this event the system would be unable to decrypt the data. *Whilst we do not anticipate any corruption of encrypted data occurring during normal operation of the system, because of the potential severity of this were it to happen we have included tools to provide early warning and the means to address this.*

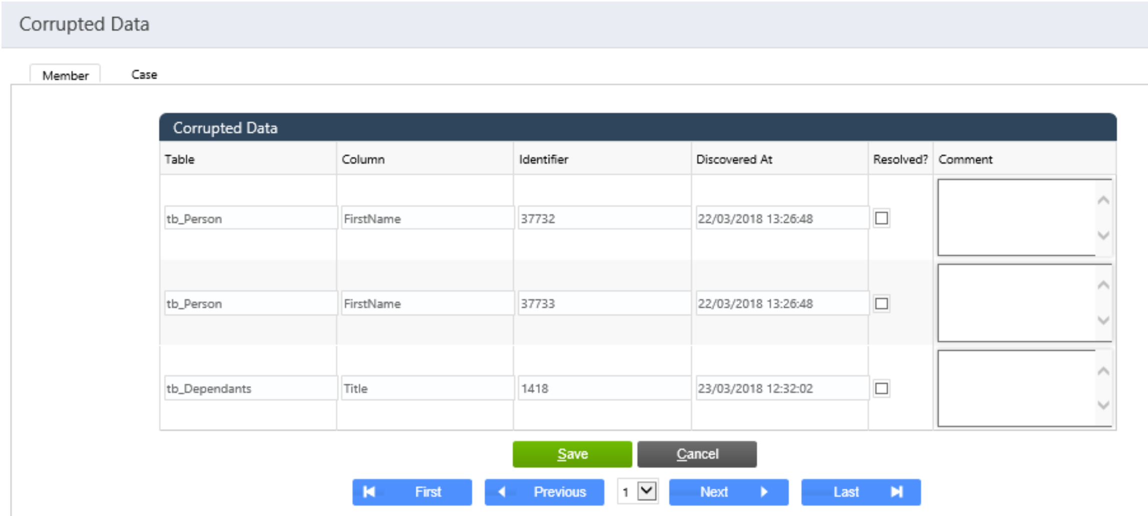
As a response to this possibility we have incorporated a background batch process into the system to check the database every 5-10 minutes to ensure that all items can still be successfully decrypted. If this routine encounters a problem it will provide two visual indications, as well as the option for additional email notification:

1. The data field itself will be highlighted:



2. An icon will display in the header indicating the presence of a corruption.

Clicking on this icon will take you to an overview screen with details about any issues on the system:



This overview screen can also be accessed from the Security & Auditing menu. Once affected records have been analysed and corrected, they can be marked as resolved on the above screen, including a comment as required.

3. It is also possible to configure an email notification to be sent in the event that a data corruption is identified. This email address is specified in the config setting: securitySettings/securityEmailAddress. For those clients using our hosted servers it is recommended that this be set to include support@procentia.co.uk.

BT: 4282 SVN: 11051

3.8.4 NEW - Security of IntelliPen cookies

All cookies are now being set with HttpOnly = True

BT: 6783 SVN: 14823

3.9 Member Web Sites

Where data encryption has been applied to the IntelliPen database it will become necessary to review any associated member websites and assess whether changes are required to enable it to continue working with the encrypted database. One option that may be available is to switch to use a ‘gateway’ service to manage communication between a member web site and the database. The gateway will provide an encryption/decryption mechanism for data exchange, without the need to incorporate this function into the web site itself. This gateway mechanism is a tried and tested configuration option that has been deployed effectively on previous system versions and is a preferred approach for clients with member web sites who will be using data encryption once they have upgraded to version 2.3 of IntelliPen, although some member websites may not be able to function fully using this.

3.9.1 IntelliSite CMS password policy (C)

User log-in to the IntelliSite Content Management System will now be subject to the same password policy options as IntelliPen, including preventing the re-use of passwords based on a stored password history.

Configuration information
Addition of password policy settings in the cms config file

BT: 4036 SVN: 10378 | 10382

3.9.2 Pre-population of data fields via data dictionary query (C)

Where a wizard is being used on a member website, it is now possible for data items within the wizard to be pre-populated via a data dictionary query. Previously this was only possible for member websites which were not utilising the gateway data web service to connect to the IntelliPen database

BT: 4107 SVN: 10295

3.10 IntelliPay

3.10.1 Confirmation check added before final RTI submission to HMRC Gateway

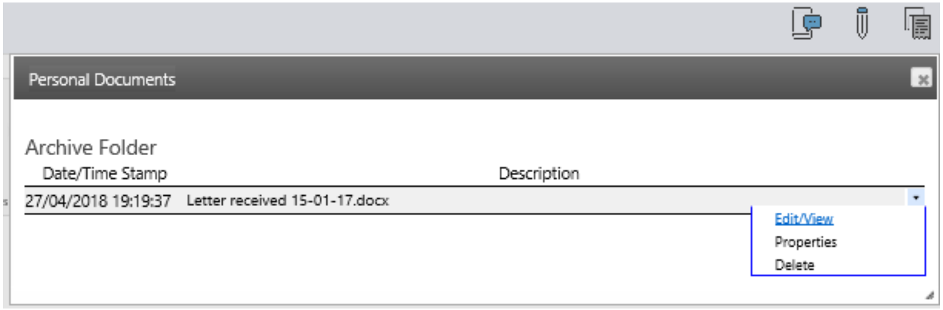
Now, when submitting an RTI file to HMRC via the payroll desktop, a pop-up will appear requesting confirmation that you really do want to send the file before it is despatched.

BT: 4084 SVN: 10267

3.11 Miscellaneous items

3.11.1 New icon to display member personal documents (C)

There is now an icon, top right of the main screen title bar, that will display all personal document records associated with the member.

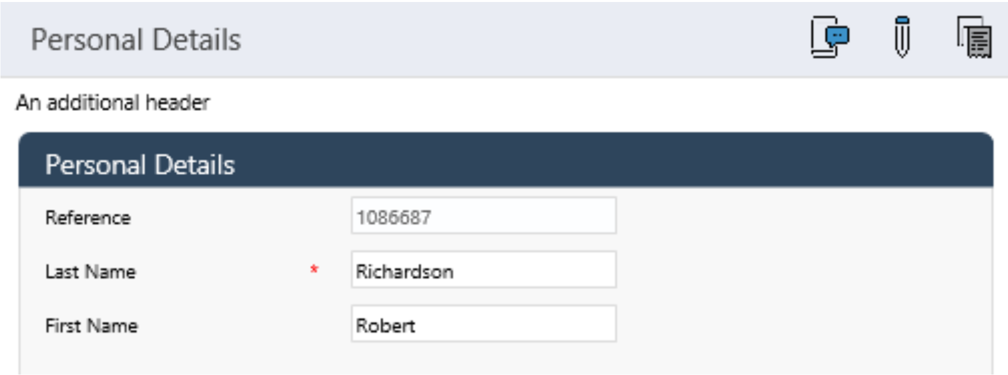


Configuration information
new setting: webSettings/documentID_PersonalDocuments

BT: 2891 SVN: 10850

3.11.2 HTML customisation of layout data screen (C)

It is now possible to customise an IntelliPen screen layout by defining some html to appear above the main form in the layout, perhaps in order to include some introductory text or some additional heading information:



Configuration information

The html may be added using a new <layoutheader> element within the <layout> element of the layout, e.g.

<layoutheader><p>An additional header</p></layoutheader>

BT: 4262 SVN: 10788

3.11.3 User time-out display settings (C)

It is now possible to customise the display of the user inactivity countdown timer. There is now a configuration option in webSettings that can be set to reveal the time-out display *x* seconds before the user will be timed-out.

Configuration information

new config setting: webSettings/secondsLeftBeforeTimeoutShown. Note that if this is unset, or set to 0, the timeout display will behave as previously.

BT: 4366 SVN: 11266

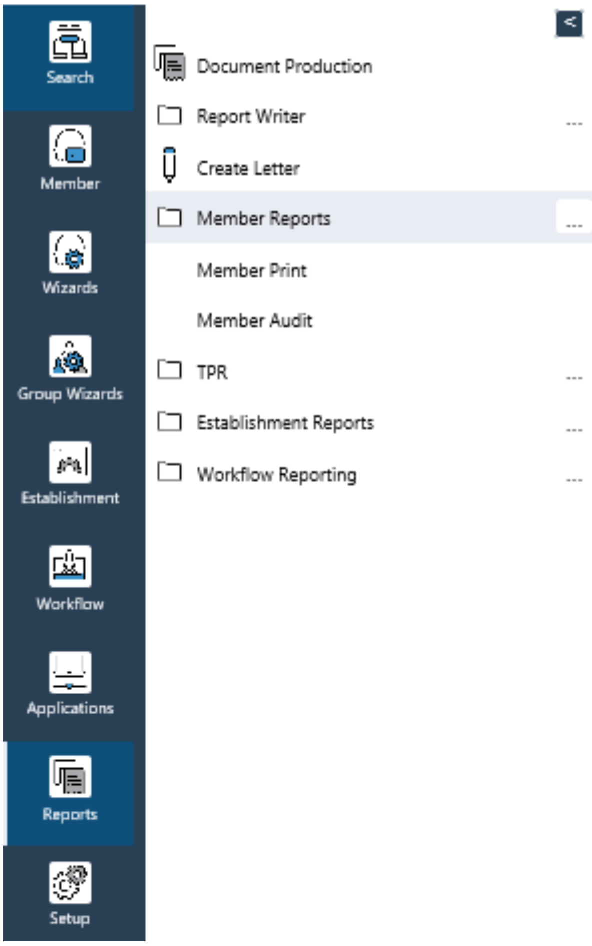
3.11.4 Amendment to IntelliPen Scheduler warning

Previously, when running a batch job for longer than 10 minutes, IntelliPen would sometimes display a warning that the scheduler was offline. Now, when batch jobs take longer than 10 minutes to run then, as long as the scheduler continues to run, no warnings will be displayed.

BT: 4272 SVN: 11062

3.11.5 Revised menu structure and styling

IntelliPen's menus have been reformatted to maximise screen space and to be more in line with current trends in website design. High level menu groupings are represented in a slimmer side bar than previously, with menu items for the currently selected group listed in a collapsible section alongside:



Taking advantage of these new-style menus will involve importing the current standard structure for menu items and groupings, then the addition of any client-specific menu items and groups into agreed positions within the new structure.

Clients who would prefer not to overhaul the structure of their IntelliPen menus may instead opt to retain the existing operation of the menu bar but with the new styling and icons.

3.11.6 NEW - Virus scanning settings for uploaded files (C)

Configuration options have been added to allow for virus scanning to take place on any files uploaded using IntelliPen.

Technical ___________________________

This functionality assumes the virus scanner in use is one that can be run as a command line application, such as the ESET virus scanner. Procentia may need to undertake some additional configuration and testing work in situations where the virus scanner on the server cannot easily be run from the command line.

Configuration information

A new set of <virusScannerSettings>.configuration settings have been added. A setting for validating the content types of files being uploaded has also been added, webSettings/validContentTypesForUpload

BT: 4694 SVN: 13538

Appendix 1 – List of encrypted fields in IntelliPen v2.3

With standard encryption implemented the following data fields will be stored in an encrypted form and only accessible via the IntelliPen system – no external query mechanism will be able to access this data.

Please note that this list could be subject to change, with further fields included in the future. It is also possible for clients to request the inclusion of additional fields to meet their own requirements.

RecordNumber/FieldName

1	Subject	38	TitleSuffix
2	Message	39	NINumber
3	DataStore	40	Relationship
4	Line1	41	Notes
5	Line2	42	BeneficiaryName
6	Line3	43	BeneficiaryInitials
7	Line4	44	BeneficiaryNINumber
8	City	45	BeneficiaryTitle
9	County	46	BeneficiaryForenames
10	Country	47	Text4
11	TelephoneNumber	48	Text5
12	FaxNumber	49	Text6
13	MobileNumber	50	Text7
14	PostCode	51	Text8
15	PolicyReference	52	Text9
16	Text1	53	Text10
17	Text2	54	PolicyNumber
18	Text3	55	ProviderName
19	AccountName	56	Provider
20	RollNumber	57	LeadProvider
21	BankSwiftID	58	UserName
22	BankRoutingCode	59	EmailAddress
23	OverseasAccountNumber	60	ActivationCode
24	AccountNumber	61	Note
25	RawDATA	62	AlternativePayee
26	XmlDATA	63	PayrollReference
27	Assumptions	64	PaymentReference
28	results	65	CourtesyName
29	Summary	66	FamiliarName
30	Surname	67	PassportNumber
31	Title	68	DependentReference
32	ChequeNumber	69	Reference1
33	LastName	70	Reference2
34	PreviousLastName	71	ReceivingSchemeReference
35	FirstName	72	AdviserName
36	OtherFirstNames	73	Comments
37	Initials	74	EncryptedSearch

Appendix 2 – New PersonalDetails source type

Example use of the PersonalDetails source type in a data source definition:

```xml
<?xml version="1.0"?>
<DocumentSource id="">
        <Name>PersonalDetailsExample</Name>
        <Description>Personal Details Example</Description>
        <Sections>
                <Section id="Data" type="Form" repeat="" allfields="yes">
                        <Source type="PersonalDetails"/>
                </Section>
        </Sections>
</DocumentSource>
```

Example of the results:

```xml
<data>
  <Record>
    <Data id="Data" type="Form">
      <FirstName>Daphne</FirstName>
      <LastName>Schultz</LastName>
      <OtherFirstNames>Jean</OtherFirstNames>
      <Title>Mrs</Title>
      <Initials>DJ</Initials>
      <TitleName>Mrs Daphne Schultz</TitleName>
      <FullName>Mrs Daphne Jean Schultz</FullName>
      <TitleSurname>Mrs Schultz</TitleSurname>
      <InitialsName>DJ Schultz</InitialsName>
      <JustName>Daphne Schultz</JustName>
      <TitleInitialsName>Mrs DJ Schultz</TitleInitialsName>
    </Data>
  </Record>
</data>
```