Pentana Audit

What's New in Pentana v5.3

VERSION 5.3 – Q2 2018

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Introduction

Ideagen Pentana 5.3 is an enhancement release, available from May 2018. It is supplied as a free upgrade to existing supported customers and as standard to new customers.

This document is intended as technical information for Ideagen staff and partners, to help clients prepare for an upgrade to Pentana 5.3. It outlines the enhancements made since Pentana 5.2. Please refer to our Application or Help Guides if you need a more detailed description of general product features.

The major new features and selected minor enhancements in Ideagen Pentana 5.3 are described below. For a complete list of all enhancements please consult the Release Notes document.

Major New Features

Windows User Interface (WPF UI)

Customizable Dashboard Charts

Users can now create and share their own Dashboard Chart Tiles which can display any data previously available in the Analysis screen.
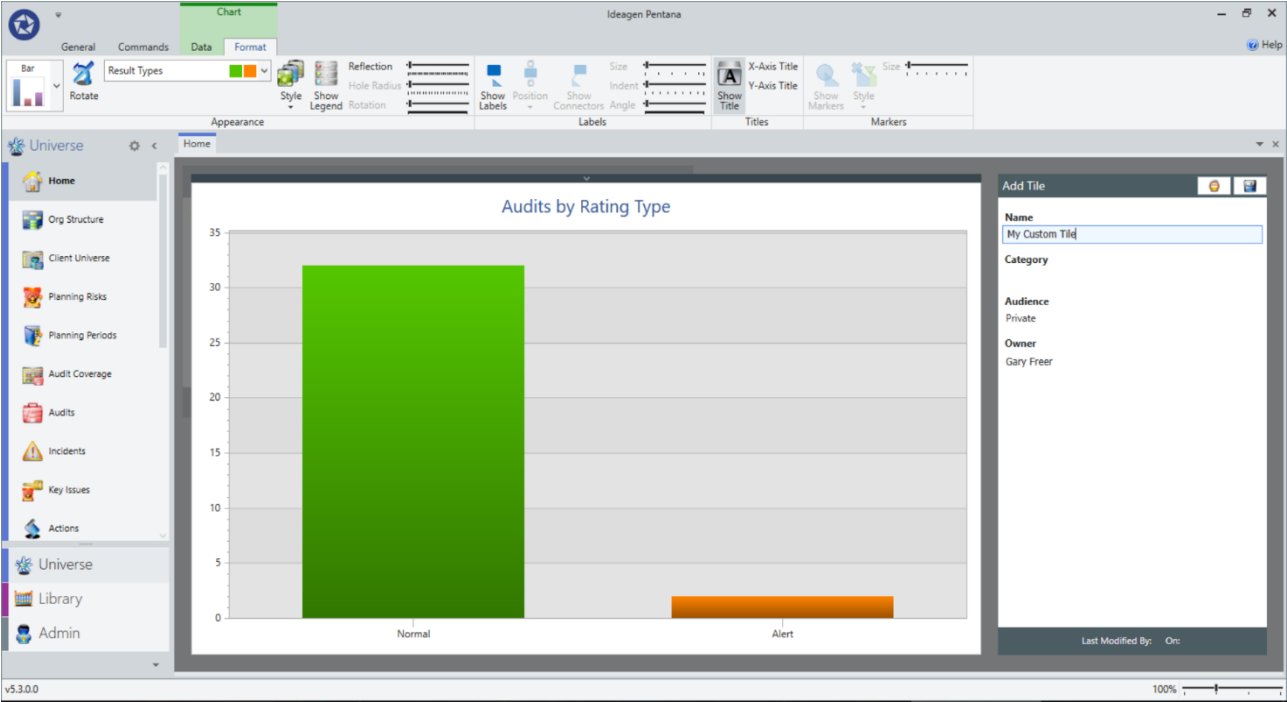
Tiles are added to the Dashboard via a new Gallery interface which includes all of those which existed in earlier versions of Pentana, plus any subsequently created Custom Tiles.

Users can also create Chart Tiles relating to an individual Audit, Entity or Client (in a Multi-Client implementation) and add to the Audit, Entity or Client Dashboard respectively.
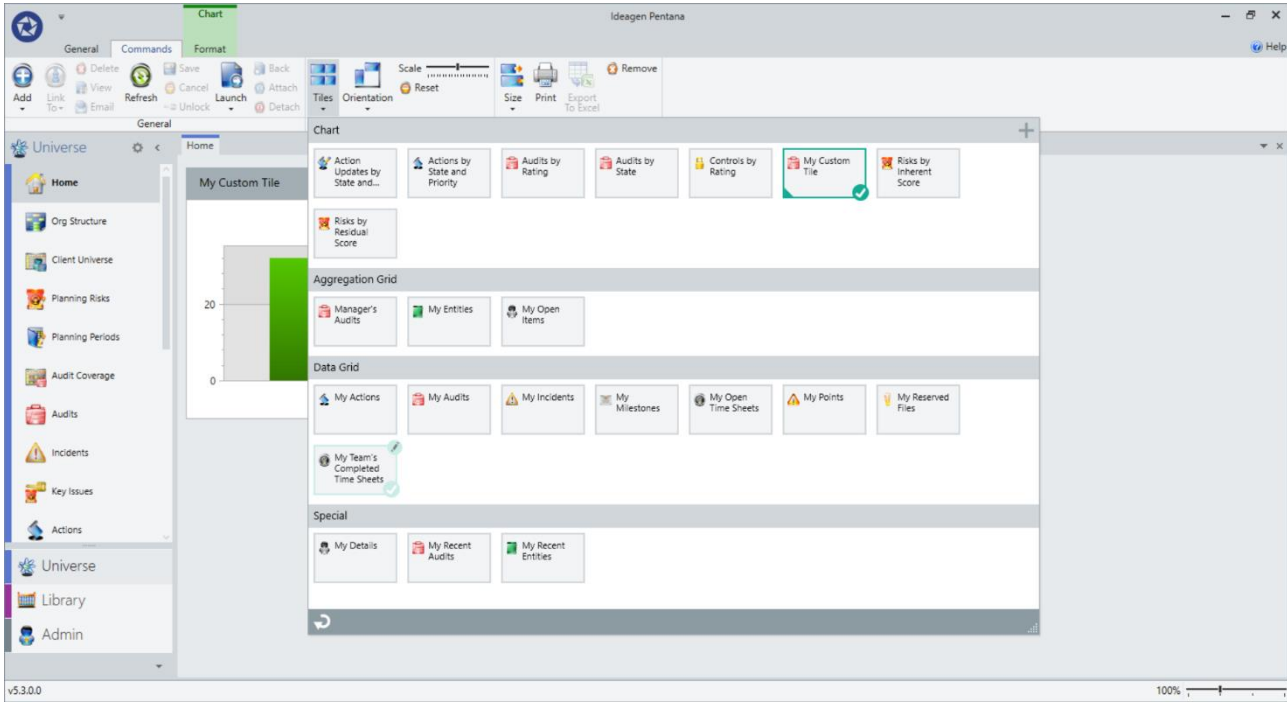
Double-clicking a Chart Tile on any Dashboard navigates the user to the corresponding Analysis screen where they can then drill into the detail and navigate to the specific records.

Tiles can also now be resized and removed via buttons in their top right corner (as well as via the Ribbon).

Rich Text Editor

Historically the Rich Text fields were edited directly from the Property Grid, but this had certain usability issues arising from the limited space and counter-intuitive pop-up menu for the formatting tools.

In v5.1 the behavior was changed so that Rich Text fields are edited via a full screen editor which makes better use of the screen real-estate and allows for the formatting tools to appear in the Ribbon. The experience is more now more like using a basic word processor for editing Rich Text.

However, feedback from the users suggested that there are scenarios where editing via the Property Grid was preferable (e.g. when the user intended to only enter a small amount of non-rich text or if the user needs to cross-refer to other records on the screen).

Therefore, in v5.3 it is now possible to edit the Rich Text in either the Property Grid or the full screen editor, with the full set of Ribbon options available in both cases, thus giving the users the best of both worlds.

Auto-Review on Approval

Until now the option to "Add Review" to an item (e.g. Step) has been optional and entirely independent of that item's Sign Offs, i.e. "Set as Completed" and "Set as Approved".

This meant, however, that "Approved" items would often appear to be "Not Reviewed" unless they were also explicitly Reviewed by someone prior to their Approval.

In v5.3 an item is automatically marked as "Reviewed" at the point it is "Set as Approved" if it has not already been "Reviewed" by another user. This means that, at the end of the Audit, all items appear both "Reviewed" and "Approved".

Quick Undo Sign Offs

Until now, a common complaint has been that it is too difficult to "Undo Complete" a Test (for example), to make an edit, if the parent Objective, Risk and Control are also already "Set as Completed". The user was required to locate each of the parent objects in turn and "Undo Complete" them before returning to the Test to "Undo Complete" and then edit it.

In v5.3 this process is greatly simplified by a prompt, which is shown when the user attempts to "Undo Complete" a Test:
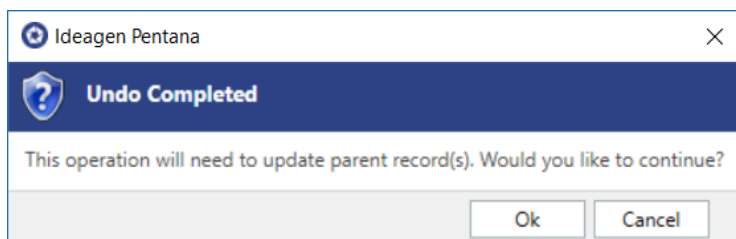
If they choose to continue all objects are updated in one batch allowing the user to immediately then edit the Test.

This affects all parent/child relationships (e.g. ORCTs and Work Plan/Steps) and all types of Sign Off (i.e. Prepare, Confirm, Complete and Approve). In all cases only the immediate parent objects have their Sign Offs removed, any sibling records remain unaffected.

Questionnaire Sign Offs

Until now, another common complaint has been that when answering a Single-Section Questionnaire (e.g. typical Satisfaction Survey) it is confusing that the users need to Complete (and then Approve) the Questionnaire Section and then the overall Questionnaire.
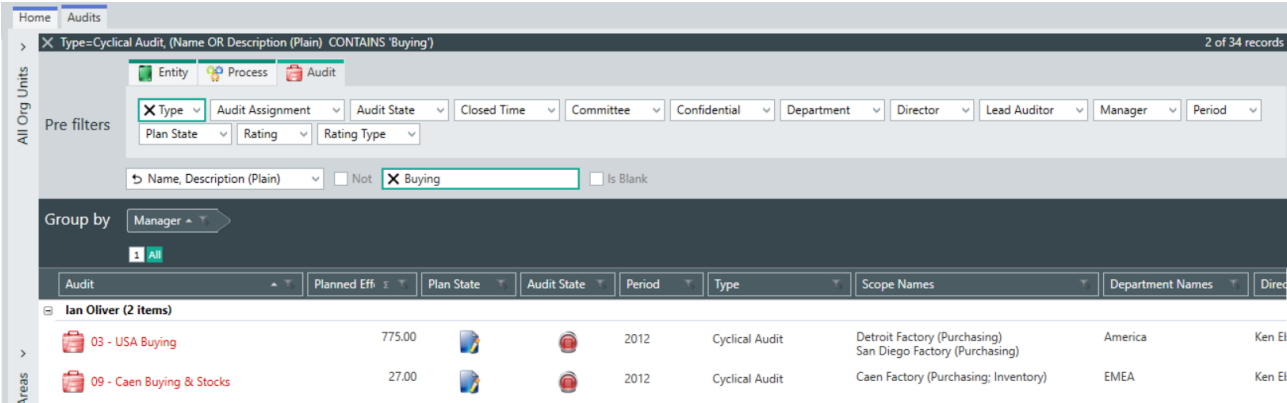
In v5.3 the Questionnaire Section has been made effectively invisible for Single-Section Questionnaires making them much easier to Sign Off.

Multi-Section Questionnaires (with a Tailoring Section) have also been changed so that it is easier to Sign Off the Tailoring Section (which then populates the rest of the Questionnaire).

Multi-Section Questionnaires (without a Tailoring Section) are unaffected by these changes.

Filtering Improvements

The Filter Bar has been improved in several ways to make it easier to manage the filters:

- Fields which have a filter applied now move to the front of the list (and are highlighted)
- Individual fields can have their filter removed by clicking the "X" on their own control
- Filters are now always shown in alphabetical order, so they are easier to find
- Filters now wrap vertically so the user does not have to scroll left/right to search for fields
- Text filtering is now part of the Filter Bar, so gets applied server-side, improving performance
- Text filtering allows the user to enter a string to match on or to search for "blanks"
- Text filtering allows the user to look for records which do "not" match the criteria
- Text filtering can now also search in fields relating to a parent (or child) table

Text filtering is now also available on the Filter Bar for Charts and Hierarchy Matrices (rather than just Data Grids).

Filter by Person Improvements

When filtering a Data Grid by any field which is a link to the Person table (e.g. Audit.Director) there are now additional options to make it easier to find the required records:
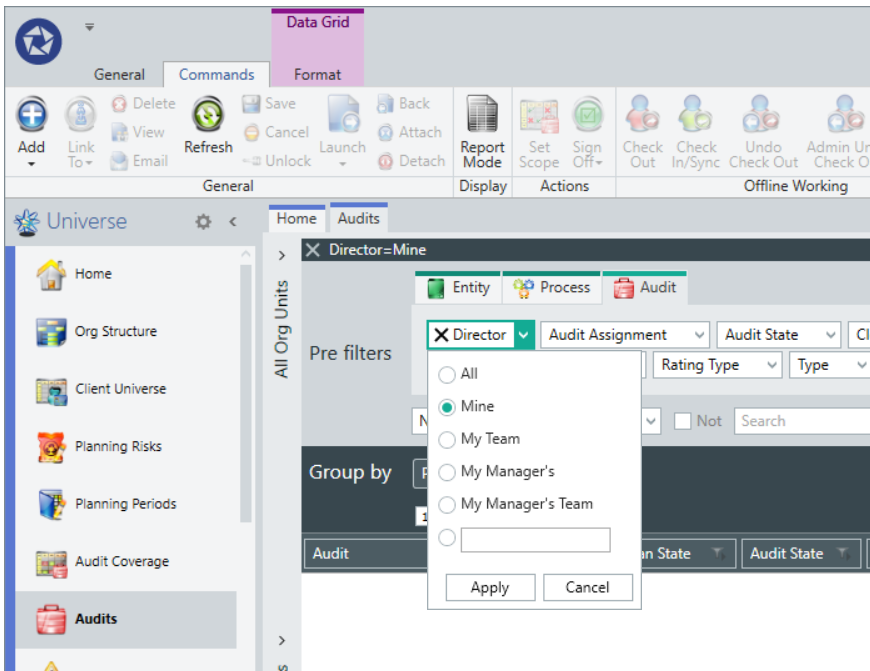
The options now include:

- All – no filter applied
- Mine – records linked to the current user
- My Team – records linked to anyone whose Manager is the current user
- My Manager's – records linked to the Manager of the current user
- My Manager's Team – records linked to anyone whose Manager is the same as the current user

There is also an option to perform a text search if, for example, you know the name (or part of the name) of a specific individual whose records you need to locate.

Record Count

The Data Grid header now displays the record count even when the Filter Bar is collapsed:
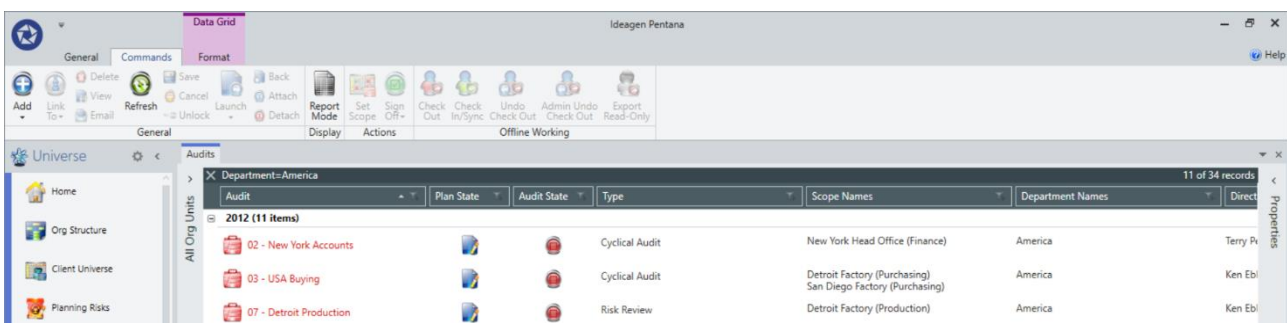
The count includes the number of records being displayed and (if a filter is applied) the total number which would be displayed if the filter were removed.

Unlike in previous versions, these counts now consider Filters applied through both the Filter Bar and on-grid Column Filters.

Find on Set Scope dialog

When the Audit Universe is particularly large it can be difficult to locate the Entity, you wish to include in the Audit Scope on the Org Unit tree. In v5.3 there is a "Find" option on the Set Scope dialog which filters the tree to show only matching Org Units and Entities:
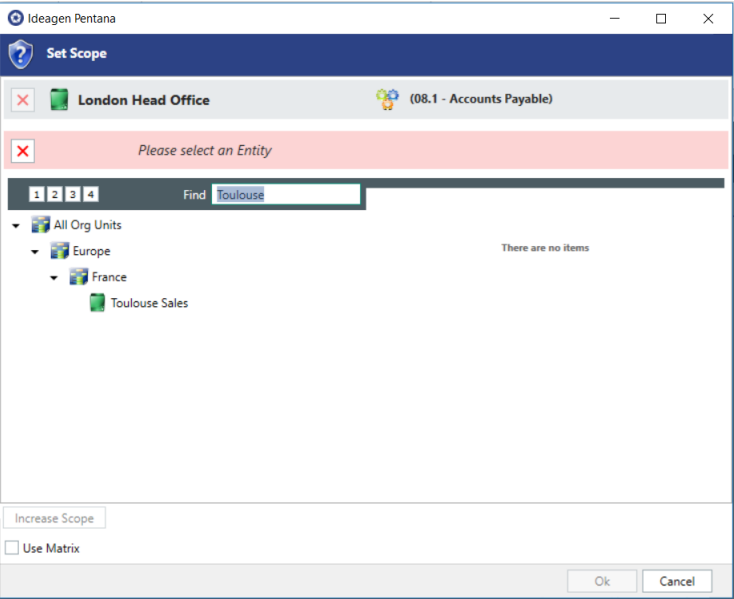
Reporting by Many-to-Many Relationships

The Pentana schema includes several pairs of tables which have a many-to-many relationship to each other, e.g. Key Issues can link to many Entity Risks, and vice-versa.

In many cases these relationships were previously only available to analyse by in one direction, but this limitation has now been removed making it possible to produce even more powerful reports.

For example, one could produce a Risk Matrix including only the Entity Risks which are linked to a Key Issue for which you are the Owner:
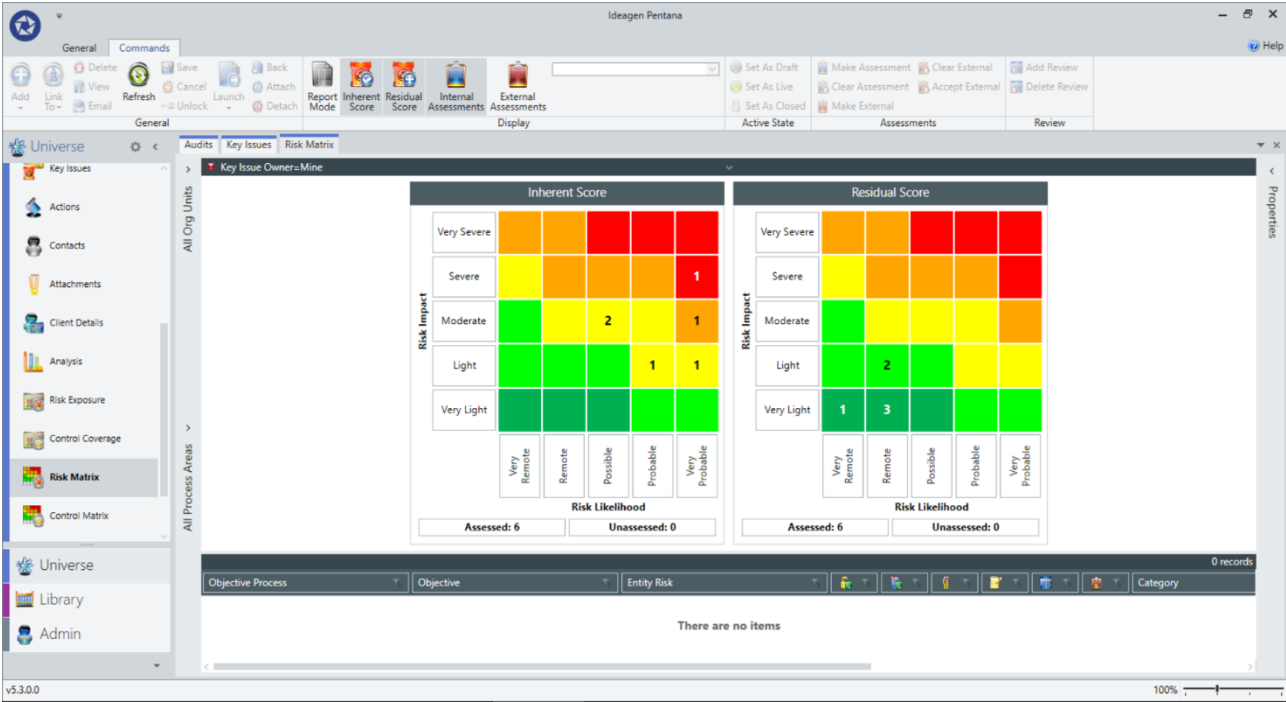
Or analyse the Risk Exposure in each Risk Category across each Key Issue:
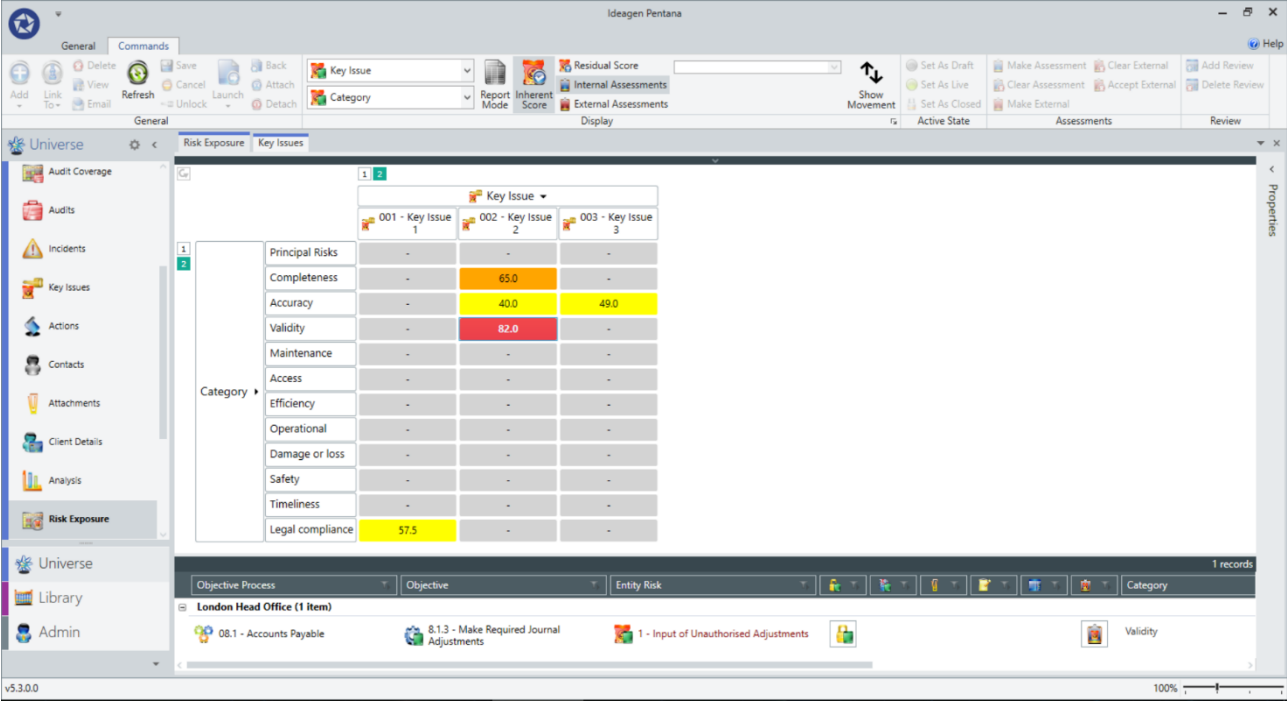
Launch in New Tab

It is now even easier than before to open the same Audit in a second Tab due to the addition of a new right-click menu on the Spine:
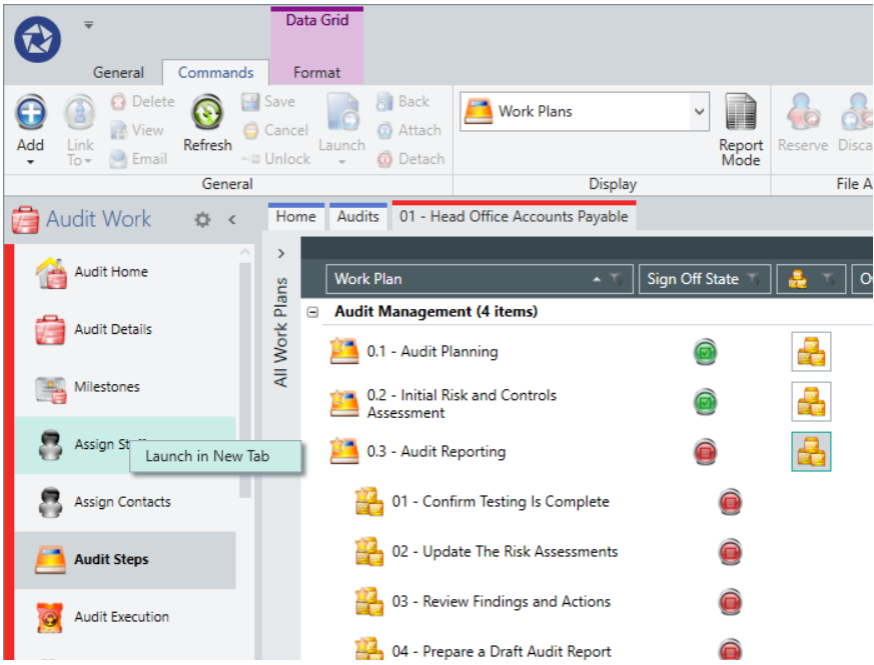
This option is also available on the Universe Spine allowing more than one instance of the Analysis screen, for example, to be opened at once for comparison.

Custom Roles

Administrators can now create a Custom Role, based upon an existing Standard Role, if the number of out-of-the-box set Roles is insufficient within their organization.

The Permissions for a Custom Role can be varied up or down with respect to the original Standard Role and there is no limit to the number of Custom Roles which can be created for a given Standard Role or in total.

Roles now also have an Active flag so that they can be hidden if they are no longer in use.

People can be assigned to Custom Roles in any place they could previously be assigned to a Standard Role, e.g. Staff or Contacts screen or for a specific Audit Assignment, etc. Custom Roles can also be mapped to an LDAP Group in the same way as any other Role.

Audit Trail

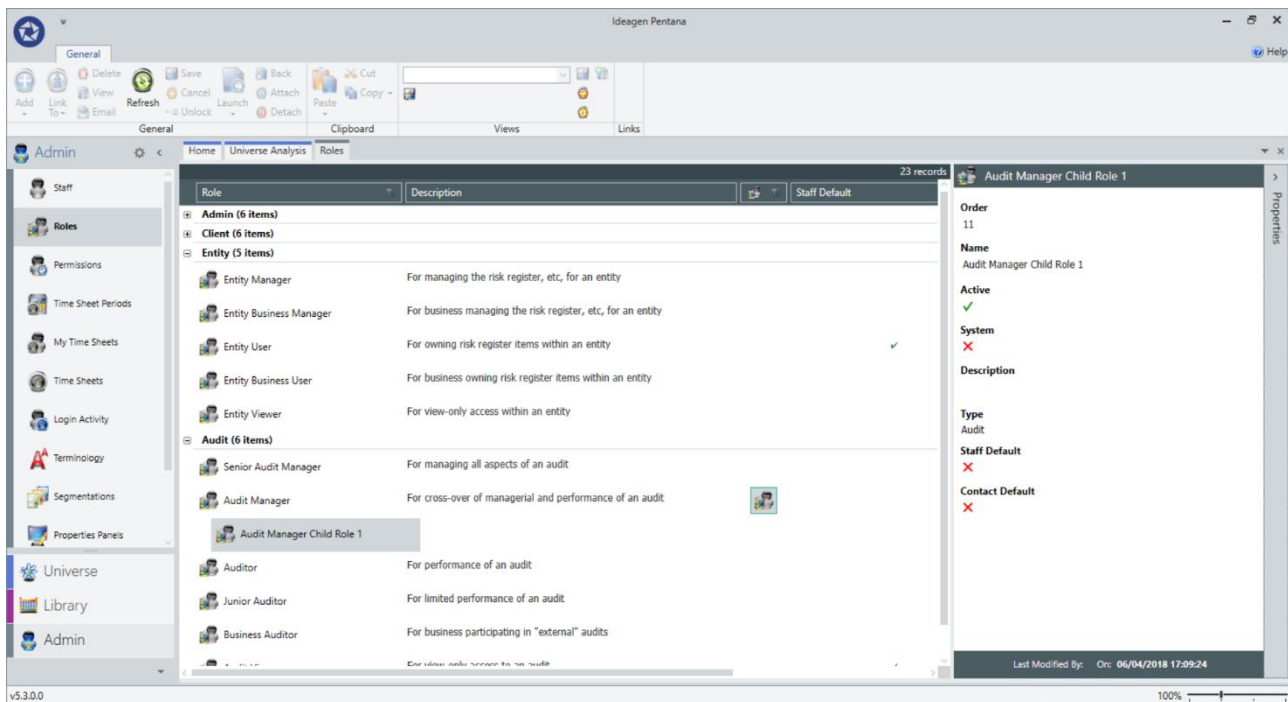The Audit Trail dialog, which shows the history of changes to the currently selected record, has been improved so that the user can filter to show only the changes between any two dates or show only the changes made by themselves or by a specific other person. The contents of the dialog can also now be easily exported to Excel for further manipulation.

Logging is now also available on a selection of "system" tables including Permission Setting and System Setting (although there does not yet exist an interface within the application for viewing those changes).

These changes are in response to the new GDPR requirements and pave the way for allowing the user to view changes made in a given period (or by a given user) across all records (rather than just the currently selected one) which will be coming in a future enhancement.

Web User Interface (Web UI)

Questionnaires

Web Users (typically Business Users) can now answer (and Sign Off) Audit Questionnaires which have been assigned to them by the Audit team.

Initially these are likely to be Satisfaction Surveys or SOX Certification Questionnaires, but they do support logic and most of the other functionality allowed when answering a Questionnaire within the WPF UI, i.e. Attachments, Notes, etc. so can be used for more substantial Questionnaires in due course.
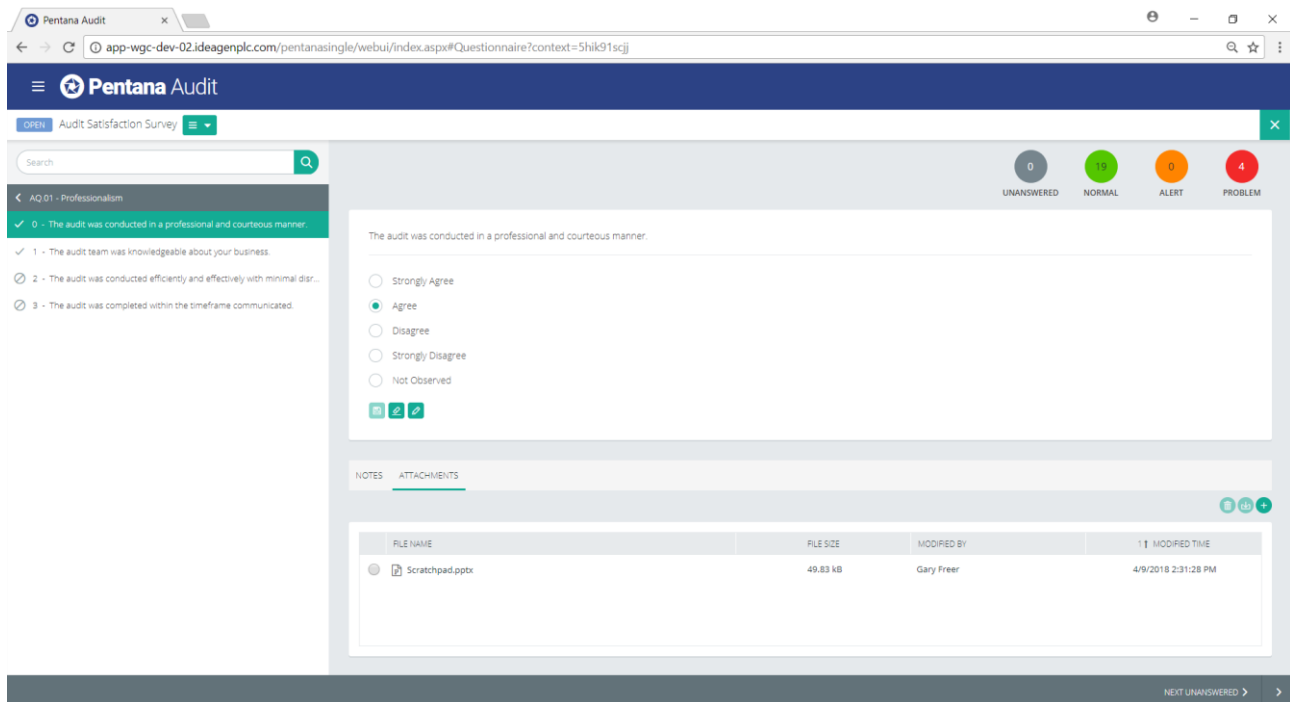
The answering interface consists of a single Question per page plus a Navigation tree to allow the user to move between Sections/Folders and see their progress through the Questionnaire, i.e. it broadly matches the Pentana Disclose interface.

The Web Users can also "Complete" the Questionnaire ready for the Auditor to "Review" or "Approve" (via the WPF UI).

There is also a Questionnaires Tile on the Home page and a Questionnaires Dashboard containing relevant Widgets to match the other existing Web UI modules.

Confirm Actions

Until now the entire Action life-cycle could be performed via the Web UI except for "Set as Confirmed" and "Undo Confirmed" which could only be done via the WPF UI.

Although this step is normally performed by the Audit team it may now also be done via the Web UI thus completing the life-cycle.

Home Tile Permissions

Each Home Tile (i.e. Action Tracking, Incident Reporting, Entity Risk Management and Questionnaires) now has an associated Permission so that the Administrator can choose specifically which modules are visible to which Roles. This is analogous to how they can already control which Spine Items are visible to which Roles in the WPF UI.

Customizable Dashboards

Until now the Dashboard screens in the Web UI have displayed their Widgets in a fixed layout (i.e. they could not be moved or hidden) and, therefore, often showed data which was not relevant to all users.

For example, a typical Business User would not be interested in the Action Tracking Chart Widgets which are designed to be useful to the Business Manager.

In v5.3 the user can choose which of the available Widgets they have visible on each of the Dashboards and in which order they appear. This applies to the Action Tracking, Incident Reporting, Entity Risk Management and (new) Questionnaires Dashboard:
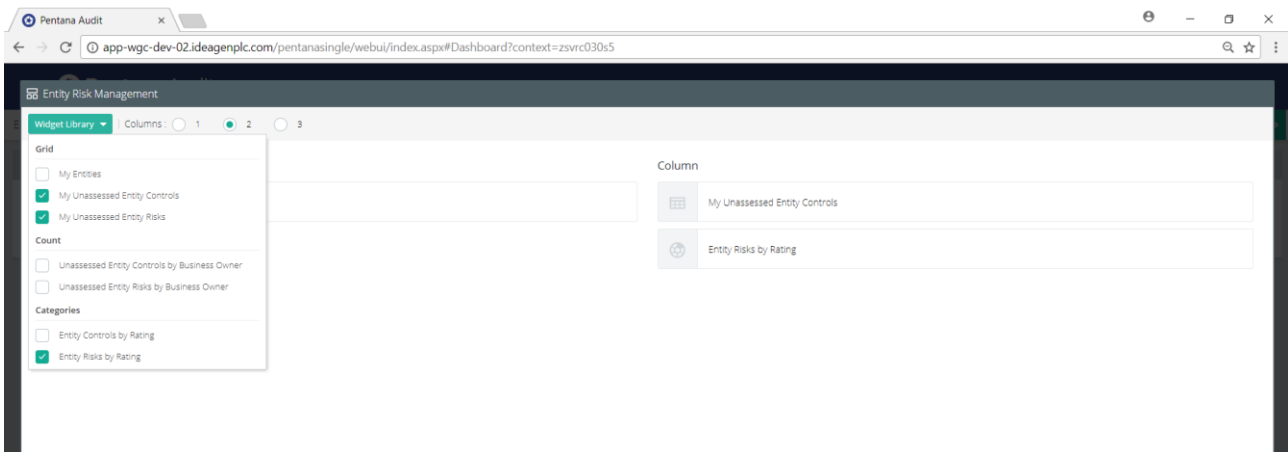
The set of available Widgets remains fixed, for now, but allowing users to create their own Widgets (as described above for the WPF UI) is a possible future enhancement.

The default layout of each Dashboard has also been stripped back to include only the Widgets applicable to the most basic Business Users (i.e. who are just required to respond to items directly assigned to them), but more advanced users are now free to add the other Widgets if desired, and even Load/Save UI Views of those Dashboards if they have more than one set of useful Widgets.

Filtering Improvements

Various improvements have been made to the Data Grid Filter Bar which improve the usability and allow the Web UI to be run on low-resolution screens:
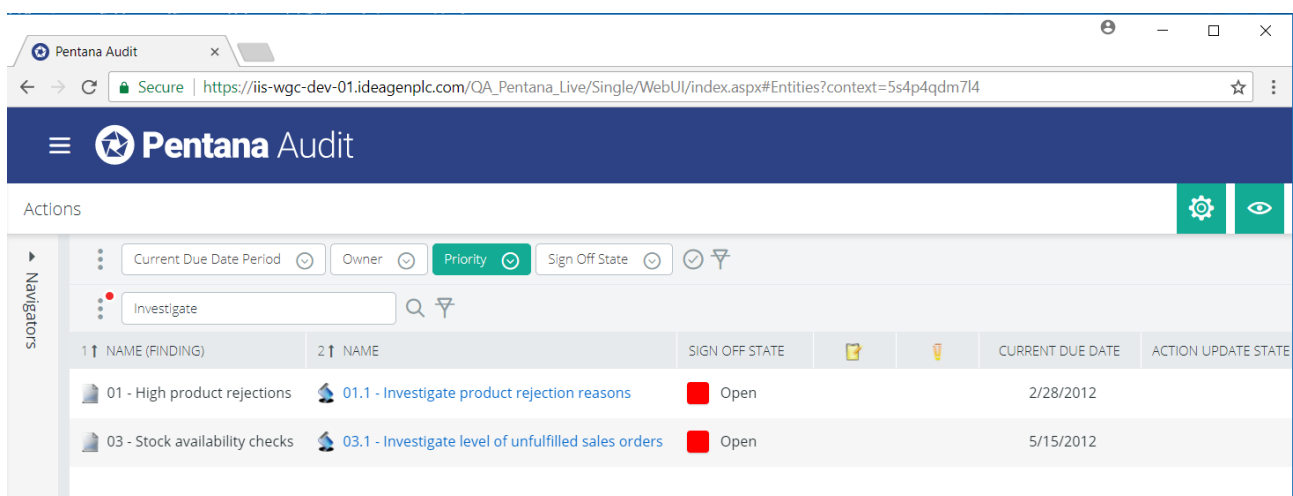
The changes are:

1. More Filters are now added via the three-dot icon on the left-hand side.
2. When more Filters are added they appear to the right of the existing ones.
3. When lots of Filters are added they wrap underneath so always appear on low-resolution screens.
4. The "Apply" button is now a tick on the right-hand side.
5. The "Clear" button is now a struck through filter on the right-hand side.
6. The Text Search bar is now positioned underneath the other filters.
7. Text fields are also chosen via the three-dot icon to its left-hand side.
8. The Column Picker has been moved up to the Header Bar.

The same new Person Quick Filters described above as part of the WPF UI have also been applied to the Web UI.

Attachments

Attachments are now added/removed immediately rather than waiting in the "Pending" state until the next time the parent record is saved. This makes them consistent with all other types of object in the Web UI and was necessary to allow Attachments to be added against Question Answers in the new Web Questionnaire interface.
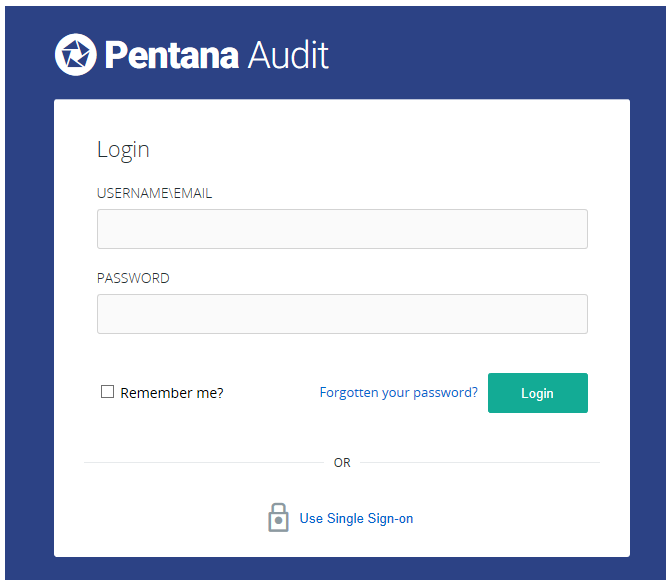
Read-Only Items

Records which are visible in the Web UI, but which can also be Checked Out to be worked on Offline (via the WPF UI) and are hence read-only, are now indicated as read-only in the Web UI to avoid confusion.

Technical

Single Sign On

When customers use Pentana in a hosted environment their users previously had to use FBA (or Certificates) to login to the application. The introduction of Single Sign On (SSO) means that they can now effectively use Windows Authentication with the users being authenticated against the customer's own domain.

When SSO is configured for the Web UI an additional option appears on the Login dialog. Since a typical implementation may involve some SSO users (typically the "internal" Audit team) and some FBA users (typically "external" Business Users) the dialog needs to cater for both:

Pentana Audit

Login

USERNAME\EMAIL

PASSWORD

☐ Remember me?   Forgotten your password?   **Login**

OR

🔒 Use Single Sign-on

FBA users enter their credentials and click "Login" while SSO users click "Use Single Sign On" which authenticates them automatically as described above.

When SSO is configured for the WPF UI the user starts the application as usual and is not required to enter their credentials. If the WPF UI users require a mixture of SSO and FBA (or Windows Authentication) it is currently necessary to create two separate Client packages (with different configuration files) and deploy them to the necessary users.

When Pentana is installed on-premise the new SSO functionality would allow them to authenticate users using any of their own authentication providers, subject to them being SAML2.0 compliant, including ADFS.

At present the SSO functionality currently only supports a single authentication provider. If the users cannot all be authenticated using them same provider, then FBA must be used for the time being. Extending SSO to support multiple providers is on the product roadmap and may be added in due course.

Performance Telemetry

When performance is poor in a customer's environment it has previously been difficult to ascertain where the bottleneck is or to verify that the Pentana Service is not being saturated, for example.

Pentana v5.3 comes with a new server-side performance monitoring component which allows the administrator to chart in real-time certain key metrics (e.g. number of SQL transactions, etc.) via a Telemetry Dashboard to confirm that the Pentana Service is coping with demands being placed on it by the Client application(s):
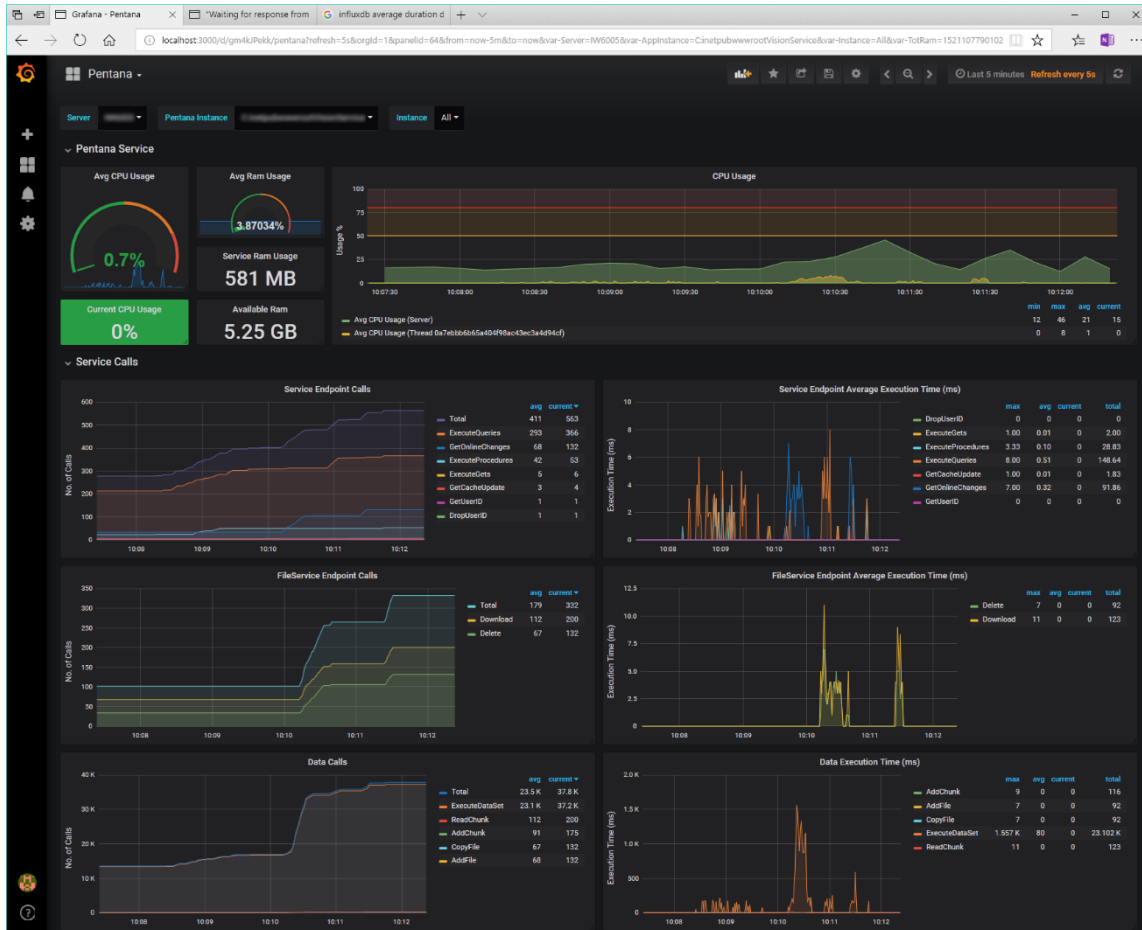
WCF/MVC Toggle and Multiple Services

Communication between the client applications (primarily the WPF UI) and the Pentana Service has, until now, always used WCF. However, since it has proven impossible for us to configure our Multiple Services functionality (i.e. the ability to scale-out to use more server-side processors to increase capacity) to be compatible with WCF and since WCF is also a technology which Microsoft are deprecating we are now preparing to retire it and replace it with MVC.

To allow for a period of transition v5.3 supports both WCF and MVC6 and the various configuration files will control which protocol to use. For now, the default will continue to be WCF.

Initially, Ideagen would recommend switching to MVC only if customers have been experiencing a performance issue related to network communication or if they need to enable Multiple Services due to their Pentana Service being saturated (i.e. if this has been revealed to be the case by the Performance Telemetry).

Additional Password Rules

The set of password rules supported when using FBA has been increased to include:

- Force it to not be (or contain) user name
- Force it to be a mixture of upper and lower case
- Force it to contain at least one numeric
- Force it to contain at least one non-alphanumeric
- Force it to contain at least one alpha and one numeric
- Force it to contain at least three of the four categories (lower, upper, numeric, non-alphanumeric)

Log Failed Logins

In v5.3 the Activity Log now records both successful and failed login attempts so the administrator can view (and report on) attempts to use the application by users with no valid Identity.

This log only records attempts where the request makes it to the Pentana Service so would not, for example, include an invalid FBA password being entered where the request would be rejected prior to reaching Pentana. These are logged separately in the FBA database.

Install Log Fails

To mitigate against customers attempting to continue to use a Pentana database after it has been involved in a failed Upgrade or Customization (the required action is to rollback that database and try again) from v5.3 onwards the Pentana Service will no longer start if the database contains such an error.

A message is displayed to the end user (like if there is no server-side license file) and the UI will immediately close until the database has been checked/fixed.

Note: If any customer is aware that their Install Log contains such an error already they are advised to contact Ideagen Support to arrange a session to investigate the cause of their error and ascertain if the database integrity has been compromised.

App Manager Logging

For security (and debugging) reasons whenever an Upgrade, Customization, etc. is run the current user name and exact App Manager Version (including patch number) is now written to the Install Log.

This information helps Ideagen Support diagnose problems since they are often caused by old versions of the App Manager being used to perform these operations.

Outgoing Email Logging

Several of Pentana's Robot Jobs are responsible for sending out emails to notify end users (typically Business Users) that there is an item which requires their attention. These can already be configured to be Cc'd to a fixed email address but, to aide debugging, it is now possible to also record all such emails in a server-side log file which can be checked if there is any doubt that the Pentana Robot sent the email correctly.

The new log file records the date/time of each out-going email along with the Email From/To Address and Subject (which is enough to identify which Robot Job produced it). It does not include the Body or Attachments to keep it small/readable and it can be opened in Excel (as a CSV file) for further analysis if required.

Certificate Authentication

Now that Pentana supports both FBA and Single Sign On there is no remaining business case for continuing to support Certificate-based Authentication so we plan to retire this from v5.3 onwards.

Any hosted customers who are using Certificates in Rackspace will be converted to use FBA (or Single Sign On) as part of their migration to AWS.

Note: Any on-premise customers who are currently using Certificate-based Authentication should contact Ideagen Support to discuss how best to migrate away from this as part of the upgrade to v5.3.

Minor Enhancements

The following is a selection of other minor enhancements in Pentana 5.3:

Attach Existing Dialog – The dialog shown when attaching an existing item (e.g. Finding, Action, Attachment, etc.) now warns the user if the chosen item is already linked to something else (and will therefore be detached from that in the process).

Upload Cross References to Entity – Cross References between ORCTs which were added during an Audit are now included in the upload to Entity (at the end of the Audit) and Library.

Execution Sign Off System Settings – There are new System Settings, one for each object, to control which Sign Off (Completion or Approval) is the one which causes the Execution Section of that object to go read-only.

Entity Budget Effort – The Budget Effort for each Entity/Process is now rolled up to a calculated field at Entity-level which can then be used for reporting, etc.

Candidate Audit Planned Date Period – There is a new calculated field on Candidate Audit (like Due Date Period) allowing the user to analyze when during the Planning Period the Audits are due to Start/End.

UI View/Tile Audience – When choosing which other users (if any) can use your UI View or Tile there is now an "Audience" control which simplifies the process compared to the previous Public, Global and Roles controls. This change has been made to both the WPF and Web UI.

UI View Export/Import – It is now easy to export/import UI Views from one database to another via specific controls on the Ribbon. It is no longer necessary to do this manually by manipulating the data and using the Excel Importer.

Wide Dashboard Tiles – Tiles which contain many columns, but few rows can now be made "wide" to better use the screen real estate.

Spell Checking – This can now be enabled/disabled on a user-by-user basis.

My Client Tile – This now lists Clients (in a Multi-Client) implementation to which the current user is Assigned (rather than just those for which they are the Owner).

Analyze Time Sheet Lines by Type – Time Sheet Lines can now be charted (and filtered) by Type, i.e. if they are time recorded against an Audit or a Task.

Export Time Sheet to Excel – Time Sheets can now be exported to an Excel spreadsheet for further manipulation, if required.

Result Sets – These are now maintained via the Segmentations screen like any other pick-list.

Universe Role Names - The "Universe" Permission Type and "Client Universe Administrator" Role have been renamed to "Admin" and "Client Administrator" respectively to avoid the confusing use of the word "Universe".