Intella Connect 1.9.1 Release Notes

Highlights

- Improved e-discovery processing with the new **Batching and Coding** functionality, realized by the new **Review UI** specifically designed for the linear review by a team of reviewers.
- Added **instant messaging** functionality, facilitating communication between reviewers working on the same case.
- Added support for FTK's **AD1** disk image format.
- Added indexing of the **Windows registry**.
- Added indexing of **browser histories**.
- Added support for **MS OneNote** files.
- Added **text extraction** from unsupported binary files.
- Improved **Type facet** tree structure.
- Greatly improved **tagging speed**, often 1-2 orders of magnitude.
- **Indexing speed** improvements.
- **Load file overlay** functionality, for extending the metadata of existing items in a case.

General

- Added Batching and Coding functionality.
  Batching refers to the process of dividing up a collection of items into batches for the purpose of managing the linear (i.e., one by one) review of these items by a team of reviewers.
  A new Review UI has been introduced in this release that reduces the number of steps and mental effort needed for linear review, letting the reviewer focus instead on their primary coding responsibilities such as determining the responsiveness and subject matter of the item under review.
  Other new UIs have been created for setting up batches, assigning batches to reviewers and monitoring review progress, giving case admins a solid overview and grip on the entire review process.
- Added instant messaging functionality to the case interface.
  After logging in on a case, a reviewer can see which other reviewers are currently logged in or have access to the case and can directly exchange instant messages with them.
  Queries can be shared using drag-and-drop, e.g. by dragging a location, email address, etc. from the respective facet to the message view.
  Instant messages are relayed by the Connect server. No separate service needs to be installed and managed for this. Instant messages follow the same secure route as all other client-server communication between Intella Connect and the browser and are stored on the server for auditing purposes.
  End users need not install an instant messaging client, all is provided by the web-based front-end.
- Added an Activities sidebar panel. This replaces the Activity page found in earlier Intella Connect versions.
- Notifications displayed at the top of the user interface have been reduced to a minimum.

- Reorganized management of reviewer preferences in the user interface.
- Many other (minor) user interface improvements, improving appearance and usability.
- Resolved an issue with login failures when using Internet Explorer 11.
- Improved notifications when a valid Intella Connect license cannot be found.
- Resolved an issue with incorrect caching of HTML resources in the browser.
- Resolved an issue with Intella Connect 1.9 becoming unresponsive when opening a case made with Intella (Connect) 1.7.x or 1.8.x.
- Dropped support for Internet Explorer 8.
- Settings of the Intella Processor application such as the memory configuration can now be adjusted via the IntellaProcessor.l4j.ini file.

User and Permission Management

- Extended the set of permissions. This includes permissions to turn off the regular search UI completely for certain reviewers in order to expose only the new Review UI, or vice versa.
- Improved support for user names containing non-ASCII characters, for both local and LDAP accounts.
- Improved stability when using an LDAP service holding malformed records.
- User names are now treated in a case-insensitive manner.
- User names are now sorted alphabetically in the Authorization dialog.
- Leading and trailing whitespace in user names is now ignored.
- Added default avatars, derived from the user name.

Indexing

- Added optional indexing of all keys and values in the Windows registry. When turned off, extraction of particular artifacts necessary for the Insights tab (see the desktop release notes) will still take place.
- Added optional indexing of browser histories. Supported browsers are Internet Explorer/Edge, Chrome, Firefox and Safari.
- Added optional extraction of human-readable text from binary files whose file type is not recognized or supported by Intella. By default this option is turned off due to the impact it has on indexing speed and case size and because the outcome may be noisy and require forensic insight to interpret correctly.
- Added the ability to import a load file as an "overlay", letting it extend the metadata of existing items in a case.
- The Items sheet in the Source wizard has been extended with additional options, giving greater control of the types of items that Intella will index. Previously this sheet would let the user toggle the processing of mail archives, file archives, embedded content in documents and deleted emails. New options are:
  - Chat messages – controls the processing of Skype and Pidgin databases, Bloomberg XML dumps, WhatsApp messages in cellphone reports, etc.
  - Databases – controls the processing of non-Skype SQLite databases.
  - Windows registry – see above.
  - Browser history – see above.
  - The deleted emails option has been extended to cover Notes deletion stubs as well.
  - Text fragments from unsupported and unrecognized file types – see above.

- Added support for MS OneNote Notebooks. Supported versions are OneNote 2010, 2013 and 2016.
- Added support for indexing Mac OS property lists (.plist files). The ASCII, XML and binary variants are all supported.
- Improved detection of MS Office formats, relying less on known file extensions.
- Added support for AD1 (v3 and v4) disk images.
- Added support for ExFat file systems.
- Added support for the LZMA2 and PPMd compression methods.
- Added support for XZ archives.
- Improved support for broken ISO archives.
- Added support for indexing Pidgin chat logs and accounts.
- Various indexing speed improvements, e.g. better multi-threading on disk image indexing, reduced overhead on large sets of loose files, reduced indexing time of very large archives, removed multi-threading bottlenecks on NSF files, cellphone report and Sametime dumps.
- Several refinements to EDB file processing.
- Several refinements for rendering and text extraction of MS PowerPoint files.
- Several refinements to the indexing of SQLite databases.
- Improved processing of generic Notes documents.
- When defining a File or Folder source, one can now indicate whether subfolders and hidden folders and files should be indexed.
- Verified that files made with MS Office 2016 will index properly.
- Resolved an issue with indexing tasks defined during source definition not being stored correctly. This affected cases where multiple sources were defined in sequence and indexed all at once using the "Re-index" button.
- Resolved an issue with the "Include subfolders" and "Include hidden folders and files" options in a File or Folder source being ignored.
- Resolved an issue with certain HTML and XML files not being classified as such.
- Resolved an issue with HTML files using UTF-16 encoding failing to index.
- Resolved an issue with UTF-16 text files containing non-ASCII characters not being classified properly.
- Resolved an issue with indexing becoming unstable when encountering IBM Notes deletion stubs.
- Resolved an issue with crawling terminating immediately when a single file or folder in the evidence folder is being denied access to.
- Resolved an issue with the associated phone number file not being taken into account when indexing an UFDR cellphone report.
- Resolved an issue with the importing of load files containing images in PDF format.
- Resolved an issue with the importing of load files causing existing tag group columns to disappear.
- Resolved an issue with importing load files that contain hierarchical tags.
- Resolved an issue with certain PDF metadata fields not being full-text indexed.
- Resolved an issue with the port configuration of an IMAP source not being used.
- Resolved an issue with certain encrypted NSFs not being detected as encrypted, causing the decryption step to be skipped.

- Resolved an issue with encrypted (and possibly decrypted) NSF files not being marked as such in the results list and item properties.
- Resolved an issue with the importing of OCR-ed items replacing rather than extending the existing stored text for those items.
- Resolved an issue with Window directory junction file system links being followed during crawling.
- EDB sources are no longer labeled as "experimental".

Searching

- The tree structure of the Type facet has been reorganized to make it easier to oversee and to better suit investigator needs.
- Added an "All Items" branch to the Features facet.
- Improved the loading speed of the Location facet.
- One can now search for a specific facet value by dragging the value to the Searches panel.
- The Saved Searches facet now has a separate branch for the default saved searches, keeping them separated from the user-defined saved searches. The "Default searches" node is the first in the list, followed by the user branches in alphabetical order.
- The accounts in the Chat Account facet now have a suffix indicating the chat client, e.g. Skype, ICQ, Jabber, …
- Resolved an issue with duplicate entries in the Saved Searches facet.
- Improved portability of saved searches that originate from a different case and that refer to tags defined in that case.
- Improved handling of unusual quote characters in keyword queries.
- Resolved an issue with the Show Parents search option not functioning correctly on items originating from DD disk images.

Results

- All item views now support selecting all items using Ctrl+A. Previously this was only supported by the Table view.
- Added a Native ID column. Currently this shows the IBM Notes UNID (Universal Notes ID) values from an NSF file. In the future this column may show the "native" IDs from other formats as well. A "Show Native ID Duplicates" search function has also been added, which in case of Notes UNIDs can be used to locate Notes deletion stubs.
- Added Recovered, Attached and Content Analyzed columns.
- Improved the speed of sorting on Family Date.
- Renamed the "Parent ID" column to "Direct Parent ID" and renamed "Child IDs" to "Direct Child IDs".
- Improved the display of hierarchical tags in the List view.
- Resolved an issue with the Table and List views not clearing the set of selected items when the sort order is changed.
- Resolved an issue with incorrect counts being shown in the Duplicates column.
- Resolved an issue with excluded paragraphs not being taken into account with keyword searches containing wildcards.
- Resolved an issue with the Language column always showing "Unidentified".

- All child items of a cellphone report now inherit the IMEI and IMSI properties.
- Custom table column widths are no longer reset when switching views or when toggling deduplication or irrelevant items filtering.
- Removed the Export ID column, which is no longer functional.

Tagging

- Greatly improved tagging speed, typically with two orders of magnitude or more.
- The Quick Tag buttons in the Previewer and the tag names shown in the Searches list now take the tag hierarchy into account.
- The Remove Tags dialog now shows the tree structure of the tags.

Previewer

- Resolved an issue with the Next and Previous buttons becoming ineffective when the Previewer has not been used for two hours.
- The Actions tab now also displays information on tagging, flagging, commenting, redaction and OCR actions that have taken place on the item. The timestamp is no longer displayed. To obtain this information, one can use the new event export functionality.
- Resolved various hit highlighting issues, e.g. queries involving phrase or proximity queries containing nested Boolean expressions, queries involving escaped wildcard characters, text fragments including HTML markup symbols, phrases lacking hit-highlighting in the Redaction tab.
- Several item loading and hit highlighting performance improvements.
- Resolved an issue with the Thumbnails and Entries tabs becoming empty when the entire webpage is reloaded by the user.
- Resolved an issue with redaction not working in the MS Edge browser.
- Resolved an issue with redaction rectangles not appearing in the correct location when the page format of a native PDF document differs from the format set in the user preferences.
- Improved the embedded PDF viewer's ability to handle broken or incomplete PDF documents.

Exporting – General

- A "Redacted items" sheet has been added to the Export wizard. The available options in this sheet depend on the chosen export format:
    - For Original Format export:
        - "Use redacted images when available" checkbox.
        - "Suppress redacted items" checkbox.
    - For PDF export:
        - "Use redacted images when available" checkbox.
    - For PST and i2 iBase/ANB exports:
        - "Suppress redacted items" checkbox.
    - For Load File export:
        - "Use redacted images when available" checkbox.
        - "Suppress natives for redacted items" checkbox.
        - "Suppress text for redacted items" checkbox, with a sub-option for specifying a placeholder text.

- Export packages are now sorted by creation date.
- Resolved an issue with the normalization procedure on exported file names inadvertently dropping the file extension on very long file names.
- Resolved an issue with incorrect file extensions being added to the names of exported files.
- Resolved an issue with certain load file export templates not loading completely.

Exporting – PDF
- Added an option for controlling whether OCR-produced text for images is exported.
- Resolved an issue with pages being scaled incorrectly when the evidence page format and export page format do not match.
- Several improvements for displaying MS Office documents.

Exporting – PST
- Improved exporting of emails containing a broken plain body and a correct RTF body.
- Added support for exporting to PST with MS Office 2016 installed.

Exporting – Load Files
- All changes related to PDF exporting.
- Added three new custom field types:
  - EXTRACTED_TEXT
  - BEG_ATTACH
  - END_ATTACH
- Resolved an issue with exporting failing to start when the "Use current table row order" option is used and the table is still in its default order.

Upgrade Notes

Internet Explorer 8 – Internet Explorer 8 is no longer supported. Intella Connect will still appear to open but certain functionalities may no longer work as expected or even at all. Users are strongly urged not to use Internet Explorer 8 anymore in conjunction with Intella Connect 1.9.1 and future releases. When using Internet Explorer, we recommend using version 11 or newer.

User names – Leading and trailing whitespace in user names is now ignored. Prior to the migration to Intella Connect 1.9.1 we advise users who are seeing duplicated user names in their user interface to backup their existing case and resolve this issue manually (e.g. tag items tagged by "John " as "John" and delete the former taggings), as after the upgrade one cannot use logins with spaces anymore.

Undoable annotations (for instance "Previewed" actions) cannot be fixed this way.

Action timestamps – To realize the much-desired tagging speed improvements, it was necessary to remove the timestamps column in the Previewer's Actions tab. This functionality may be reinstated in a future release. As a workaround, exporting of the event log to CSV format may provide this information.

Backwards compatibility – Intella Connect 1.9.1 can open cases made with the Intella 1.7.x, 1.8.x and previous Intella Connect 1.9.x versions (i.e. Intella Processor 1.9.x). Cases made with beta versions are not supported and should be recreated.

Cases made with Intella 1.7.x or 1.8.x do not require any case conversion or re-indexing. However, some functionalities and improvements may not be available for such cases.

Cases made with Intella 1.7.x cannot be re-indexed or extended with additional sources. These restrictions do not hold for cases made with Intella 1.8.x, i.e. they can be re-indexed and have new sources added to them.

Cases made with Intella 1.6 or older are not supported. One can however use Intella 1.7.3 to convert these cases to the 1.7 format and then open them in Intella Connect 1.9.1.

While we aim to ensure full backwards compatibility with older cases and older Intella Connect versions where we reasonably can, opening a case made with an older version in a newer version may result in that case no longer opening properly in the older version. We strongly recommend to always create a backup of the case before upgrading.