

Intella™ Release Notes



Intella™

evidence made visible

Vound, LLC email investigation and eDiscovery software

Covering versions 1.0 to 1.6.4

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For user and technical support please visit our website: http://www.vound-software.com.

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Intella 1.6.4

Highlights

Added **six new date fields** in the Date facet and Details table, covering File Created, File Last Accessed, Start Date, End Date, Due Date and Last Printed dates.

Improved indexing of **non-email artifacts in PST files**, such as calendar items, tasks, etc.

Added the ability to **export non-email artifacts to a PST file**.

Added support for indexing winmail.dat attachments.

Configurable display time zone per source.

General

Each source now has a time zone setting that can be used to indicate the suspect PC's time zone. All dates of items obtained from that source will be displayed in the specified time zone. The time zone can be changed at any time in the Source Editor.

Resolved an issue with the Intella update notification in the menu bar not being displayed.

Various performance and stability improvements.

Indexing

Improved indexing of calendar items (appointments, meetings and meeting requests), tasks, journal entries, notes and distribution lists from PST files. Earlier these were either not supported at all or only revealed properties that also occur in emails.

Added support for extracting and indexing the contents of winmail.dat attachments, also known as TNEF-encoded files.

Added indexing of PR_... fields of MSG files. These fields are visible in the Raw Data tab.

Improved the user interface for defining and editing disk image sources. Improved handling of time-outs when indexing large and/or complex files. The procedure for determining and, when necessary, increasing the time-out values has improved. When the recovery of deleted items from a PST/OST files consistently times out after the maximum number of attempts, this is now reported as a source error.

Improved the locations shown in the Source Editor window and Errors tab for nested email containers.

Resolved an issue with information entered in PDF forms not being extracted. Improved text extraction of HTML content. This applies to both emails and loose HTML files.

Resolved issues with the indexing of Chinese, Japanese and Korean documents using particular encodings.

The Generator and Template fields of MS Office documents are now also indexed.

Searching

Smart Search now automatically applies so-called stopword lists for 13 languages. These lists contain the most common words for each of these languages. Such words are generally not considered to be very informative. By filtering them out, the automatically generated smart search expression will yield higher quality results.

The Date facet can now also search on File Created, File Last Accessed, Start Date, End Date, Due Date and Last Printed dates.

Resolved an issue with the evaluation of multi-term queries where the terms occur in different document fields.

Results

The items table has been extended with File Created, File Last Accessed, Start Date, End Date, Due Date and Last Printed columns.

Resolved an issue with sorting on the Tags column in the Details table.

Resolved issues with hit highlighting spanning a larger portion of the document than necessary.

Previewer

The Character Set property is now shown for all text files.

Improved HTML text layout.

Resolved issues with missing line breaks, making the text hard to review.

Exporting

Export to PST now also supports calendar items (appointments, meetings and meeting requests), tasks, journal entries, notes and distribution lists. See the user manual for restrictions.

The last used export settings are now restored automatically when the Export window opens.

A file's creation, last accessed and last modified dates are now retained when exporting to Original Format.

Load file export now has a new custom field called "Item's best title". This automatically selects the best candidate to describe the item, based on the item's subject and file name.

The "Don't include any metadata" option in the load file export now also removes the item's title, main properties and page count from the first page.

Resolved an issue with page orientation when exporting to PDF with native rendering enabled. This applies to both load file export and regular PDF export.

Resolved an issue with Open in Application using a temporary file with a file extension that was inconsistent with the actual file type, causing the wrong native application to be used for opening the file.

Improved exporting of PST emails that lack regular mail headers.

Resolved an issue with load file export not cleaning up its temporary files.

TEAM

Resolved an issue with work report exports not correctly applying the configured filters.

Installer

Resolved an issue with the installer not being able to write a file called "88087.xml".

Upgrade Notes

Intella 1.6.4 can open cases made with all previous Intella 1.6.x versions.

For cases made with Intella 1.6.1, 1.6.2 and 1.6.3 there is in principle no need for reindexing the case. Reindexing is only recommended when the original issue had issues relating to the indexing of the case. For cases containing Chinese, Japanese and Korean

documents reindexing is recommended as the improvements for indexing these languages can affect a large portion of the case.

For cases made with Intella 1.6 we do recommend that you reindex if you have not already done so with a more recent Intella version, because of memory usage improvements that require one of the databases to be rebuild.

Please back up your cases before reindexing them.

The first time a case made with Intella 1.6-1.6.2 is opened in Intella 1.6.4, a one-time only database creation process is started. This new database will speed up the deduplication operation considerably. Creation of this database may take several minutes on large cases and slow disks.

Cases made with 1.5.x versions are shown in the Case Manager as needing conversion before they can be opened. The automated case conversion process creates a copy of the case that is subsequently indexed from scratch. The old case is left unchanged and can still be opened with the 1.5.x versions.

Cases made with older Intella versions are not supported.

Intella 1.6.3

Highlights

Indexing of disk images (EnCase Eo1 and Lo1 formats, DD format).

Indexing of Microsoft (Hotmail) and Yahoo search warrant results.

Indexing of **nested mail containers** (e.g. a zipped PST attached to an email in an Mbox file).

Keyword search improvements: search specific **fields** (From, To, etc.), use **wildcards** within phrase and proximity queries.

Officially supported **64-bit version**.

Support for 64-bit MS Office and Outlook.

Improved indexing performance.

Improved **indexing reporting**: speed graphs, overview of encountered item types and errors.

Lots of **cellphone**-related improvements, such as XRY's latest XML format.

Functionalities for **restoring tags** and other annotations from a broken case.

Added a **Spanish translation**.

General

The 64-bit version is now officially supported.

Intella's user interface is now also available in Spanish.

Several changes improving indexing and search performance, memory usage and stability.

Fixed the main window's components refusing to resize when dragging the vertical divider.

Improved the way the software deals with invalid backup paths.

The backup dialog can now be cancelled, cancelling exiting the application as well.

Resolved issues with Intella not exiting properly, resulting in files that were kept locked.

Case Management

The Case Manager now shows currently opened or shared cases as locked and disabled. This prohibits accidentally opening a case that is already open in another Intella process.

When adding a new case, the chosen case folder path is tested for being a hard disk formatted with the NTFS file system. A warning is displayed when a different type of file system or medium (removable disk, network drive, optical drive) is detected

The File menu has been extended with a Restore Annotations menu item. This option can restore the annotations (tags, flags and comments) from a case that has become corrupt (e.g. due to hardware failures or incorrect use of removable drives) into a backup of that case.

Fixed an issue with the preferences file that could result in the case refusing to open.

Indexing

Intella can now index EnCase Eo1 and Lo1 disk images, as well as images in the DD format. Various file systems are supported, including FAT16, FAT32 and NTFS.

Added support for XRY's new Extended XML format. This format has been introduced in XRY 6.4 and is strongly recommended over the old format. Intella can now index the Hotmail account dumps that Microsoft delivers in response to search warrants.

Improvements have been made to Mbox indexing to ensure that Yahoo's dumps made in response to search warrants index correctly.

To speed up indexing, an option is added to the Add Source wizard for turning off storage of the evidence files in the case folder. The drawback of not storing them is that these files need to be available in their original location in order to be exportable.

Note that items *extracted* from these evidence files, such as emails extracted from a PST file, will always be stored in the case folder. This option is only about the evidence files themselves.

The indexing progress screen has been extended with a speed graph and more detailed information about the encountered item types and errors. At the end of indexing the speed graph is also stored as a PNG in the logs folder.

NSF indexing now also detects and indexes orphaned items.

Mail containers that are not directly located in the file system are now also indexed. Examples are PST files that are zipped or attached to emails.

The indexing exception report (Sources menu \rightarrow Exception Report) has been extended and now shows information on problematic sources, as well as various statistics on the types of errors encountered. The report is now in XLSX format instead of the CSV format, to allow for a more user-friendly report that supports all Unicode character.

When indexing cellphone dumps, the phone number associated with the phone (which is typically not part of the dump) can now be specified using a separate file. This way all calls and messages can have both an Incoming and an Outgoing number associated with them.

Resolved issues with the file type detection of Cellebrite XML dumps.

Resolved duplicate indexing of items that are part of an Oxygen XML dump.

Resolved an issue with Cellebrite SMS messages listing the Incoming number as the Outgoing number.

Resolved an issue with the Company field and custom properties of MS Office documents not being extracted.

Resolved an issue with an email body failing to be indexed due to a broken MIME structure.

Resolved an issue with some facets reporting all categories as empty after a reindex.

Made the processing of email senders and receivers from PST files more robust w.r.t. syntax and encoding issues.

Added support for indexing PR_... with multiple values fields in a PST file.

Resolved an issue with certain NSF emails having incorrect Received dates.

Message hashes are now also calculated for SMS messages, but only when the sender, recipient and content are all known.

Resolved an issue with broken XML files triggering an infinite loop, stalling indexing.

Searching

Wildcards can now be used within phrase and proximity queries.

One can now explicitly search on specific sender and recipient fields. In older versions these fields were always bundled together in the "Authors & E-mail Addresses" field, making it impossible to search for e.g. a name or address occurring specifically in the From field. With this improvement, the From, Sender, To, Cc and Bcc fields can be searched separately.

Improved performance of the deduplication operation. This used to be slow on large cases the first time it was invoked.

Improvements to the keyword search options UI.

The Type facet's tree now has a branch for disk image types.

The Show Conversation option now also works on SMS messages.

Improved the accuracy of the Empty Documents category: some unusual Unicode whitespace characters were not yet supported, resulting in false negatives.

The Has Duplicates category in the Features facet and the corresponding table column now also take emails into account that have different MD5 hashes but

identical message hashes. Before, these would not be returned, even though the Show Duplicates search would return them.

Resolved an issue with the "Search across all fields" action in the Words tab not always searching across all fields.

Results

The Details table has been extended with IMEI and IMSI columns, relevant to cellphone data. Furthermore a Device Identifier facet has been added that shows the encountered IMEI and IMSI values and lets the user search for all related items.

Previewer

Added a scrolling tooltip in the property panel (above the tabs) so that values such as long lists of senders and receivers can be viewed completely.

The Raw Data tab now also supports the low-level data extracted from NSF emails, MS Office documents and cellphone items.

Various improvements to hit highlighting in the tabs and property panel. All date fields now show an explicit time zone.

Exporting

The PDF export, the Print command and the Preview tab, which all rely on MS Office for certain file conversions, can now use both the 32-bit and 64-bit versions of MS Office. The bit variants of Intella and MS Office do not have to match. For example, you can use the 32-bit Intella version together with 64-bit MS Office.

The 64-bit version of Intella can now also export to PST using both the 32-bit and 64-bit versions of MS Outlook. The 32-bit version of Intella still requires that you use 32-bit MS Outlook.

Removed the Vound branding from the PDFs and TIFFs produced as part of a load file.

Fixed the order of the columns when the Details table is exported to a CSV file. Resolved a MAPI_E_COLLISION error produced by Outlook when exporting to a PST file.

TEAM

The Work Report functionality has been extended to work across different cases. This lets a user create a case using evidence files already used in another case, and bring over the tags, flags and comments from that other case into the new

case. Matching items in the two cases is not trivial as item IDs and paths may be different. Any annotated items that could not be found or not with 100% certainty will be reported.

The rules regarding who can delete the tags in a case have been relaxed. When connected to a shared case, only the creator of a tag used to be able to delete that tag. Now, users with a TEAM Manager license can also delete all tags. When working with a local case, one can always delete the tags, regardless of who made them.

Improvements to the tagging progress messages when connected to a shared case. A warning dialog is now shown when you attempt to close the case sharing dialog while the case is still being shared.

Installer

The installer would always remove the last installed set of shortcuts, regardless of the chosen start menu folder. This is problematic when installing several Intella versions side-by-side and removing one of them. This has been fixed.

Upgrade Notes

Intella 1.6.3 can open cases made with all previous Intella 1.6.x versions.

For cases made with Intella 1.6.1 and 1.6.2 there is in principle no need for reindexing the case. Reindexing is only recommended when the original issue had issue that relate to the indexing of the case.

For cases made with Intella 1.6 we do recommend that you reindex if you have not already done so with a more recent Intella version, because of memory usage improvements that require one of the databases to be rebuild.

Please back up your cases before reindexing them.

The first time a case made with Intella 1.6-1.6.2 is opened in Intella 1.6.3, a one-time only database creation process is started. This new database will speed up the deduplication operation considerably. Creation of this database may take several minutes on large cases and slow disks.

Cases made with 1.5.x versions are shown in the Case Manager as needing conversion before they can be opened. The automated case conversion process creates a copy of the case that is subsequently indexed from scratch. The old case is left unchanged and can still be opened with the 1.5.x versions.

Cases made with older Intella versions are not supported.

Intella 1.6.2

Highlights

Improved the reporting of indexing errors.

Various performance and stability improvements.

An experimental 64-bit version is available on request. This version makes better use of the resources that high-end machines have to offer, such as multiple cores and large amounts of memory.

General

Several stability improvements for locally opened and shared cases.

Various improvements to logging, reducing the amount of irrelevant and innocent error messages.

Fixed an issue with Intella not exiting properly under certain circumstances.

Case Manager

Fixed an issue with the case conversion message on 1.5.x cases overlapping with the case's description.

Indexing

The Sources menu has been extended with an Exceptions Report menu item for producing a report in CSV format of all items that had issues during indexing. Each problematic item is reported together with an error code, detailed error message and information on the item's location. Issues can range from minor metadata parsing issues (e.g. a syntactically incorrect date field) to encrypted or corrupt items.

Various improvements to the indexing of Oxygen cellphone dumps.

Fixed an issue with the indexing statistics shown in the user interface counting certain items twice. The statistics reported by the facets were already accurate.

Searching

The Email Address facet now lowercases the host part (everything after the '@' sign).

The table columns and column groups shown in the Details table's column chooser now have a fixed order.

Results

The default icons in the Thumbnails view have been improved. The new icons stand out more from the already loaded thumbnails. Also a different icon is shown when the image fails to load properly, e.g. when the image file is broken. The thumbnail view no longer showed the number of embedded items found in the selected results. This functionality has been restored.

Previewing

Fixed several issues with Open in Application failing to open the item in its native application.

Open Containing Folder was sometimes incorrectly enabled in shared cases.

Exporting

Added an option to export the social graph ("who communicates with whom") of a selected set of emails to a data file. The graph can be stored in CSV, GML or GraphML format. A variety of social network analysis tools exist that can consume these formats.

Documents in landscape mode were added to exported PDFs in portrait mode. This has been resolved; the produced PDF now uses the correct orientation for every single page in the original document.

The item's ID is now included in exported PDFs.

The i2 Analyst's Notebook & iBase export now also contain cellphone-specific metadata such as phone numbers and call duration.

TEAM

Several server-side and client-side performance improvements when accessing shared cases.

Fixed an issue with the last used port and passphrase not being remembered for shared cases.

Improved memory usage of work report exporting.

Upgrade Notes

In principle, Intella 1.6.2 can open cases made with Intella 1.6 and 1.6.1 and search and export items from them, without any need for case conversion or reindexing. For 1.6.1 cases reindexing is only recommended when the original case had indexing issues for which Intella 1.6.2 contains a fix. For 1.6 cases we do recommend that you reindex if you have not already done so with Intella 1.6.1, because of memory usage improvements that require one of the databases to be rebuild. Please back-up your cases before attempting to reindex them. Cases made with 1.5.x versions are shown in the Case Manager as needing conversion before they can be opened.

Cases made with older versions are not supported.

Intella 1.6.1

Highlights

This release is backwards compatibility with cases made with Intella 1.5.x.

The Dongle Manager has been extended with proxy support.

Added "Smart Search" functionality.

Added a case backup feature that is optionally run when a case is closed.

General

Resolved an issue with Intella failing to render its UI properly when viewed through a remote desktop connection (RDP).

Various improvements to reduce the potential negative impact of virus scanners on Intella's database files.

Added links in the Help menu to the new Dongle Manager and the online Intella forum.

A warning is now shown when opening a case whose case folder is not writable.

Translations

The first time when a user starts Intella, a language chooser may pop up (depending on the Windows platform language), asking the user what display language to use.

A message is displayed when an improved translation pack is found online for the currently used Intella version. This translation pack can be installed through the Preferences window.

License Management

The Dongle Manager has been extended with support for proxies. This facilitates the use of this utility in most corporate environments.

Case Management

Cases made with Intella 1.5.x can be opened in Intella 1.6.1. Intella 1.6 did not have this ability and would show these cases as disabled.

Before a 1.5.x case can be used in Intella 1.6.1, the case needs to be converted first. This process creates a duplicate of the case that is restructured so that it can be opened in 1.6.1. This way the old case is not altered in any way and can still be used by the 1.5.x versions. During the conversion process the data will be reindexed to benefit from all improvements that 1.6 and 1.6.1 have to offer. The time needed for this conversion is roughly the same as the amount of time needed for the original indexing.

When closing a case, Intella offers the user to back up the case to the configured backup folder. This backup folder can be set in the Preferences. We recommend changing the default backup location to a folder on a separate physical disk. The Add Case dialog has been extended with a help dialog offering information on the best practices regarding hardware setup, especially for optimizing indexing performance.

Indexing

Added preliminary support for indexing Oxygen cell phone dumps (version 4.x). Various improvements in indexing of XRY cell phone dumps.

Improved the extraction of email senders and receivers of mails in a PST file, when the information in that PST file is inconsistent.

A warning is now shown before indexing when the remaining free space of the disk holding the case folder is less than twice the size of the evidence data.

M4R/M4A ringtone files are now detected and typed accordingly.

Resolved an issue with incorrect Location values.

The method for caching extracted items has been improved, providing better stability on very large cases.

Tokenization improvements that improve search results on complex file names. Resolved an issue with indexing folders whose name contain an exclamation mark.

Improved various logging messages, replacing long error stack traces with shorter and more meaningful errors and warnings.

Searching

Speed improvements in the population of the Email Address and Author facets. "Smart Search" replaces the old near-duplicate search with an alternative that offers configurable settings, live result previews and explainable results.

The node representing the "Others" branch in the Type facet can now also be used as a search criterion, allowing the user to gather all files with unusual types at once.

Results

When previewing emails from PST files, the Raw Data tab in the Previewer shows the raw output of what has been extracted from the PST file, including lots of PST-specific fields. This information is also indexed and made searchable with keyword search.

Usability improvements in the table sorting editor.

Tagging

In some situations newly defined tags were not added to the Quick Tags buttons in the Previewer. This has been fixed.

Tag descriptions (the optional field for documenting e.g. a tag's intended purpose and usage) can now be changed.

Exporting

When exporting the list of values of a given facet, the resulting CSV file now contains at least three rows: (1) facet value, (2) number of matching items in the entire case and (3) number of matching items in the current result set. This makes it unnecessary to do any searching before the overall counts in the case can be reported.

Added options for controlling the contents of PDFs and TIFFs that are produced as part of a load file.

The item IDs (numbers) introduced in Intella 1.6 are now used in export reports. They replace the URIs previously displayed here.

Improved the reporting of export errors on items that are inherently not exportable, e.g. files embedded in encrypted ZIP files.

Resolved an issue with the contents of PDF documents not being processed correctly when exporting to PDF. This only affected PDF documents that Intella classifies as Empty Document.

Resolved an issue with messages attached to MSG and EML mails failing to export.

Resolved an issue with items not opening properly after importing an ICF file.

Resolved an issue with reviewer comments not being added to printed items.

TEAM

Improved the usability of the case sharing setup dialog.

Improved the usability of the remote case connection dialog.

Added a version check when the Reviewer opens a connection to a shared case, so that the connection is only established when client and server use compatible protocols.

Various improvements to the user event log in shared cases.

Upgrade Notes

Intella 1.6.1 can open a case made with Intella 1.6 and search and export items from it, without any need for case conversion or reindexing. Reindexing is only necessary when one wants or needs to make use of the indexing improvements or the new Raw Data tab in the Previewer.

Cases made with 1.5.x versions are shown in the Case Manager as needing conversion before they can be opened.

Cases made with older versions are not supported.

Intella 1.6

Highlights

Share cases over a network with Intella TEAM Manager.

Index cell phone dumps made with Cellebrite and XRY. This allows for mixing call and messaging data, emails and documents in a single case, for uniform reviewing and exporting.

The new Dongle Manager lets dongle owners inspect their current licenses and fetch and apply updates from the Vound server with a single click.

Case folders are now completely self-contained, meaning that items can be exported and previewed without access to the original evidence files. This makes these operations faster and more reliable.

A translation framework allows Intella's user interface to be translated to other languages. Various translations are being worked on.

General

This release has the ability to switch between different languages, based on the language profiles that are available in the languages subfolder in Intella's installation folder. We are working with several resellers on getting Intella translated to other languages.

Contacts found in e.g. PST files, cell phones or as vCard files are now handled in a better way: they are displayed more naturally and with more detail in the Previewer, are exported as vCards when using Original Format, and can now also be exported to a PST.

All case-specific preferences like tagging settings, chosen table columns, etc., are now stored in a single, simple to understand text file, stored in the case folder as prefs\case.prefs. This allows for manual editing of the file as well as copying a template file to new cases.

Several stability and performance improvements.

Rearranged some options in the Preferences dialog.

Resolved an issue with the application not exiting properly, locking access to the case until the machine was rebooted.

License Management

Intella 1.6 starts bundling a new Dongle Manager. This application shows all connected Vound dongles and displays the licenses that they hold. When the PC running the Dongle Manager is connected to the Internet, the Dongle Manager can on the user's request contact the Vound license server to see if there are any updates available for a dongle. These updates are then downloaded and applied to the dongle fully automatically.

Resolved an issue with Intella not starting when using a Remote Desktop (RDP) session, even though a dongle with a valid license was present. This fix only applies to Intella 1.6 and newer. For Intella 1.5.x the patched dongle driver that we distribute remains necessary.

Case Management

Various buttons in the Case Manager have been grouped behind a single "Add..." button, which opens a new dialog with all case adding options and explanations. The Case Manager table has been replaced with a list that shows the details of the currently selected case only. This makes the information a lot easier to oversee, allows for better display of long textual values and was necessary to accommodate the new remote case functionality.

When opening the Case Manager, its last position, window size and last used case is restored.

The Intella version used to create a case is now shown.

The Case Manager now has its own folder with log files, independent of any casespecific log files. Any issues related to the creation, exporting or importing of cases will now be logged in these log files.

When removing a case in the Case Manager, the user now needs to mark a checkbox to explicitly trigger (and approve of) the removal of the associated case folder from the file system.

Indexing

Cell phone data extracted with Cellebrite and XRY can now be added to a case, making artifacts like phone calls, text messages, emails and images extracted from cell phones searchable. To use this functionality, export out the contents of these dumps as an XML report and add those as a Folder or Cell Phone source to the Intella case. A case can hold multiple cell phone extracts, allowing one to

investigate any number of phones at once, even mixing data obtained with both Cellebrite and XRY in the same case.

All extracted items (emails, attachments, embedded images, etc.) are now stored inside the case folder. This ensures that results can always be exported when the user upgrades to a newer version and does not reindex. Also this makes previewing and exporting faster and more reliable.

As all extracted items are now stored in the case folder, there is no need to access the original evidence files after indexing anymore, except when the user wants to reindex the case. Consequently, all functionalities related to setting evidence paths have been removed.

The Add Source wizard has been simplified by the removal of the parameters that control whether MD5 hashes, message hashes, duplicate counts and near-duplicate hashes are calculated, what the maximum size of the indexed items is and whether deleted items should be recovered from PST files. These options are typically all left on and generally did little for speeding up indexing when turned off. The "create sources for mail files" option has been renamed to "index mail archives".

Greatly improved the indexing speed of IMAP mail folders.

Resolved an issue with a case not accepting any new sources after an IMAP source had been added to it.

Improved the error that is shown when the user tries to index a write-protected NSF file.

When validation of Lotus Notes has failed, a warning is now also displayed in the folder selection screen when defining a new Folder source.

Improved the parsing of email senders and receivers to handle more standard-violating formats that we have encountered in the field.

Improved text and image extraction on MS Office and PDF documents.

Searching

Added a Phone Number facet. This facet gathers all phone numbers from cell phones as well as any phone numbers found in vCard files and PST contacts. The Date facet has been reorganized: the Sent and Received fields are now at the top of the list and have been made the default selected fields. A "Called" field has been added for searching phone calls that were made within a certain date interval.

The Type facet has been extended with several new document types, e.g. RSS feeds, faxes, voice mails, meeting requests, appointments, etc. The Messaging & Scheduling category has been split up in a Communications category and a separate Scheduling category.

The Keyword Search Quick Reference has been improved to cover wildcards and proximity searching in more detail.

Improved the Saved Searches facet to distinguish the local user's saved searches from those made by others working on the same case.

Resolved an issue with saved searches not storing a search properly when a keyword search started with a wildcard.

Tagging

Usability improvements in the tag rename dialog.

Results

Since Intella 1.5 folders can be returned as search results. Folders could not yet be tagged in the Tree tab nor where they hyperlinked. This has been fixed.

Every item in the case now has a unique item ID (a positive number) associated with it. These numbers are shown in the Previewer's window title bar, the Item ID column in the Details table, and in any user events visible to the TEAM Managers and TEAM Reviewers when connected to a shared case. One can directly open a numbered item by using the "Preview Item..." option in the View menu.

When the user moves from item to item with the Previewer's Next and Previous buttons, the currently selected tab will now stay selected.

Resolved an issue with the Tree tab in the Previewer not showing the children of folders and certain other nodes.

Resolved an issue with folder names not being shown in all appropriate places. The Name column has been renamed to File Name to make it less ambiguous.

Exporting

Contacts can now be exported to a PST file.

The content of the various load file exports has been improved based on customer feedback.

Renamed the "Terms..." option in the Export menu to "Words..." to make it consistent with the Words tab in the Previewer.

The wizard through which the Cluster Map graph could be stored has been replaced by a much simpler file chooser.

Minor usability improvements in the export of the Details table to a CSV file.

TEAM

When using a TEAM Manager license, the Case Manager now shows a Share button. Through this button one can provide access to the case over the network to other users that have a TEAM Manager or TEAM Reviewer license. This eliminates the need to share case files, evidence files and work reports between the investigators working on the same case. Remote case access is password-protected.

Upgrade Notes

Cases made with older Intella versions cannot be opened in Intella 1.6. In the upcoming 1.6.1 release an upgrade function will be included for upgrading cases made with a 1.5.x version to the 1.6 format.

Intella 1.5.4

General

User interface improvements that prevent it from freezing or experience similar problems on machines with slow disks or network connections.

Resolved an installer issue that broke indexing and exporting from NSF sources on some PCs.

Indexing

Improved indexing of plain text-like files like source code, shell/batch scripts, etc.

Searching

All facets now show the total amount of items in the entire case for each value. Some facets were already showing this information; this has now been extended to all facets.

Resolved an issue with the Type facet not updating immediately when a new source has been added.

Resolved an issue with the last used searches not restoring fully when the "Restore the queries that were shown last" preference option is switched on. The Tags facet no longer shows the tree expansion toggle for nodes without subnodes.

Improved the way the Date facet searches on a date range, by including the entire start and end day, rather than taking the current time of the day into account.

Results

Resolved an issue with the contents of the Details table and the selection in the Cluster Map changing when the Previewer was opened on one of those results. This happened under specific circumstances only. It affected reviewing of a list of results using the Previewer's Next and Previous button.

The List view (the Details view mode that resembles a search engine result listing) listed the source of each result using its internal identifier. This has been changed to show the source name instead, consistent with the Source column in the Table view.

Improved the indication of the found keywords in the Previewer when the shown text is initially truncated due to its length.

Exporting

Resolved an issue with the CSV export of the facet values failing, depending on which facet value was right-clicked to initiate the export.

Improved the progress notification dialog when exporting an ICF file: there was a delay between the progress dialog disappearing and the end dialog appearing, which could lead one to mistakenly believe that exporting had already completed. The audit trail used to list the identifiers of all selected items when a facet value was selected. This has been changed to only list the amount of selected items, to prevent the audit trail file from growing to impractical sizes.

Resolved an issue with CSV exporting unnecessarily validating some sources before exporting, delaying the export a bit.

TEAM

Resolved an issue with the Features facet not updating fully when an imported work report was rolled back.

Upgrade Notes

Cases made with 1.5.3 that did not have any indexing issues do not require to be reindexed when the case is opened with 1.5.4.

Cases made with 1.5, 1.5.1 or 1.5.2 can be opened and used in 1.5.4 without reindexing, but with two limitations:

- Indexing improvements that were present in 1.5.3 and older will only be effective after reindexing. See the release notes of these previous versions for full details.
- Some items may be problematic to export without reindexing the case first.

Intella 1.5.3

General

Added a date format setting in the Preferences. With this setting users can adjust the way dates are displayed to their preferred regional style. This controls both the display style used in e.g. the Details table and the Previewer as well as the format in which these dates are entered in the Date facet.

Resolved an issue with the main process not exiting properly when the user closes Intella.

Expert option: the maximum Java heap size of the main process and child processes can now be adjusted through the Intella.l4j.ini file that is located next to the Intella.exe file. This can be used to remedy certain memory issues.

Case Manager

Relaxed version check: 1.5.3 will be able to open cases made with future 1.5.x versions.

Intella's File menu has been extended with a "Close case" option, which closes the current case and returns to the Case Manager.

Cases made with 1.4.x or older can no longer be imported. Previously you were still able to import them even though you could not open them afterwards.

Indexing

Added detection of emails encrypted with Outlook Information Rights Management (IRM).

Added detection of MS Exchange database files (.edb files).

Reduced the dependency on file extensions when identifying a file's type. For example, previously MS Office files could be detected based on contents but a correct file extension was still necessary for distinguishing between Word, Excel, etc. Here, type identification is now based on contents alone.

Many minor improvements in text, metadata and image extraction quality. Reduced memory usage of indexing.

Resolved an issue with mails sent from BlackBerry phones not being identified as emails.

Improved message hashing robustness, e.g. differences in whitespaces in the body or the headers will not result in a different message hash any longer. Improved robustness of email body selection for PST, OST and MSG emails. The message bodies in these formats can be stored in plain text, HTML and/or RTF format, each of which can in theory be damaged independently of the others. Intella now uses the representation that shows the least signs of corruption. When a mail source is defined directly in the Add Source wizard, rather than inferred during processing of a Folder source, the mail file will now have a Type and MD5 hash. Previously this was only the case when a Folder source was used.

Searching

Added a Saved Searches facet: the current list of searches, includes and excludes can now be stored under a user-defined name. This list can be restored at a later time through a single click. Saved searches can be shared through export and import options that the facet offers, or as part of a work report.

Optimized the facet order: the most-used facets are now at the top of the list. Improved accuracy of near-duplicate searching.

Resolved an issue that caused some queries not to be restored when the "Restore the queries that were shown last" option was switched on.

Resolved an issue with the Show Parents function not reporting all parents.

Tagging

Added an Undo Actions item in the File menu. This opens a window that lets you undo tags, flags and comments. This is particularly helpful when a tag has been used several times on lots of items and one of those times was a mistake. Removing these tags manually would otherwise be very time-consuming and error-prone.

Resolved an issue with include and exclude searches not updating automatically when items are (un)tagged.

Results

Resolved an issue with the Details column not showing all senders and receivers of an email. Query results and the contents of the Previewer window were not affected by this.

Load file exporting

Intella 1.5.2 already added support for exporting Summation and Concordance load files. Version 1.5.3 extends this list of supported formats with Relativity and Ringtail.

Improved the design of the load file field chooser.

Increased flexibility when configuring item numbering in a load file.

Added support for JPG and PNG as load file image formats.

Summation load files can now use a user-specified encoding. This enables the export of load files that should not use the local platform code page.

Improved the contents and layout of the load file images.

Other exporting

The entire contents of the Export window, including the configuration of the load file field chooser, can now be stored as a named template.

When exporting to Original Format or PDF, either the file name/subject or a consecutive number could be used as file name. Now these two options can be combined: a third option lets you use a consecutive number followed by the original file name or email subject.

All sources used in an export are now validated (checked for presence and accessibility) before exporting. This way the user is notified of common errors within minutes after clicking the Export button rather than hours or longer. Added detection of 64-bit Outlook when exporting to a PST file. Only 32-bit Outlook is supported, 64-bit used to result in a non-descriptive error message. Reduced memory usage of exporting, fixing "out of memory" errors. Improved rendering of links in generated PDFs: the links are now blue and underlined.

TEAM

When importing a case to a device that does not have enough free space left, the user can now enter a different path. Previously only an error was displayed. Fixed failed import of cases on PCs that had no cases on them created before, or where the manually specified folder did not exist.

Upgrade Notes

Version 1.5.3 can open and search cases made with older 1.5.x versions without reindexing. However, the changes listed below "Indexing" and some of the other changes will only be effective after reindexing the case.

Due to some necessary changes in processing, the message hashes will be different in a case made with or reindexed by 1.5.3.

Intella 1.5.2

General

This version introduces a new product type: Intella Professional. Intella Professional has no hardcoded limit on the allowed maximum case size.

Indexing

Resolved issues with indexing folders in NSF files whose names contain unusual characters.

Searching

Made MD5 list search work with more plain text file encodings. This fix results in MD5 lists that are exported by EnCase to work without modifications to the file encoding.

To benefit from this improvement, currently added MD5 lists need to be re-added to the case.

Resolved a Cluster Map selection issue that was triggered by combining rightclicks with the Ctrl and Shift keys.

Exporting

Added support for exporting items as a Load File. This export is currently in the beta phase and may therefore change in future versions. Initially supported are Summation and Concordance.

Intella 1.5.2 makes the export to i2's Analyst's Notebook and iBase available to all license types. Introduced in Intella 1.5.1, this functionality was originally only available to users of Intella TEAM Manager.

Automatic numbering of exported files is now available in all product types. Minor improvements to logging, export reports and indexing of large XLSX files.

TEAM

Resolved an issue with work reports that failed to properly filter reviewer annotations by source.

Upgrade Notes

As part of its standard procedures, Intella will detect the version upgrade when you open a case made with 1.5 or 1.5.1 and suggest that you reindex the case.

- Reindexing of a case made with 1.5.1 is only necessary for cases containing XLSX files that could not be indexed. When this is not the case, reindexing can safely be skipped.
- Cases made with 1.5 will open with 1.5.2, but sorting of the Senders and Receivers columns may not work correctly until the case has been reindexed.

Cases that were made with versions older than 1.5 cannot be opened.

Intella 1.5.1

Installer

When installing on a Windows 2008 machine, the installer no longer blocks installation but instead warns the user that this is not an officially supported platform to run Intella on.

Case Management

Added a column in the case manager that shows the last version used to open a case.

Resolved rendering issues in the case table when a case is imported or renamed.

Indexing

Improved the error messages shown when an NSF file is locked by another application or for some other reason appears to be inaccessible.

Removed the "Add..." button from the Source Editor. The only way to add a source is by using the "Add New..." option in the File menu or through the Ctrl-N shortcut. This allows for a more streamlined user experience, as the indexing process that typically follows after adding a source blocks the main window.

Searching

Resolved an issue with keyword lists that were not being stored, due to illegal characters or other technical reasons.

Results

Improved sorting performance in the Details table. Both single column sorting and multi-column sorting benefit from major improvements in this area.

The component that lets the user select the visible columns in the Details table has been redesigned to allow for the growing number of columns. The columns are now grouped into five meaningful categories.

The Details table can now be configured what to show in the Senders and Receivers columns: email addresses, contact names or both.

Right-clicking on a cluster in the Cluster Map now automatically selects that cluster when it is not part of the current selection. This prevents potential confusion on what the selected operation in the popup menu is going to work on.

Exporting

Added a fourth export type: iBase & Analyst's Notebook. This exports out information in a format that can be imported into these applications with the use of the provided templates and import specifications.

Added a UTF Byte Order Mark to all generated CSV files. This improves how these files are displayed in Excel, especially when containing non-Latin characters.

Added a template facility to the table CSV export: a specific arrangement of columns can now be stored under a user-defined name. This facilitates optimizing frequent export tasks such as exporting MD5 and message hash lists.

Improved the performance of the first phase of exporting, where the items are sorted and prepared in other ways for exporting.

The "Export..." menu option in the table's popup menu and other places is now explicitly disabled when you have selected a folder.

Resolved an issue with exporting items that have an exclamation mark in the file name, under some circumstances these files refused to export.

Improved the error messages shown during exporting that are due to NSF files being locked or that for some other reason are inaccessible.

Resolved an issue with exporting mails from Mbox files to a PST file when the Mbox file comes from a UNIX/Linux machine. The difference in the encoding of end-of-lines between these platforms corrupted the display of certain mails.

TEAM

Resolved an issue with work reports failing to import due to tag names that are already in use. This can happen when (1) a tag with that name is added to the master case after creation of the ICF file that the reviewer is using, or (2) when a work report imported earlier introduced a tag with the same name. Such tags can now be renamed or merged with an existing tag during importing.

Upgrade Notes

As part of its standard procedures, Intella will detect the version upgrade when you open a case made with 1.5 and suggest that you reindex the case. The case will work without reindexing, but sorting of the Senders and Receivers columns may not work correctly.

Cases that were made with versions older than 1.5 and could not be opened with 1.5 (grayed out in the Case Manager) remain inaccessible with version 1.5.1.

General

Resolved an issue with Intella 1.4.3 failing to start on some PCs, exiting immediately with the message "Could not create Java virtual machine".

Reduced memory usage of the application, allowing larger cases to be handled.

Performance improvements throughout the application, making especially search operations and listing of facet values faster.

Improved number formatting throughout the application.

Indexing

Improved the robustness of text, metadata and image extraction of files such as PDF, Word and ZIP files.

Improved the extraction of deeply nested items in MS Office files.

Improved indexing speed on PST and NSF files. A speed improvement of 10-50% can be expected on most PST and NSF files.

Reduced duplicate messages extracted from NSF files.

Added support for indexing Hangul word processor documents (HWP file format).

Indexing speed statistics are logged to a CSV file in the logs folder, to facilitate the analysis of indexing performance bottlenecks.

Improved the UI messages that are shown during (re)indexing.

Resolved an issue where certain characters in an NSF file name or characters in a folder name inside an NSF file resulted in the file not being indexed.

The folder tree in the Add Source wizard can now be refreshed to reflect changes in the file system. Right-click and choose Refresh, or move the wizard one step back and forth.

Fixed missing message hashes in certain border cases, e.g. recovered mails.

Improved parsing and handling of email senders and receivers that do not comply with the email standards.

Improved error messages on files that are broken or otherwise impossible to index.

When adding a new Folder source while using a license with a case size limit, a folder size check is always performed, to see if the chosen folder is larger than the remaining allowed case size. This check now shows a progress screen and can be skipped.

All time-outs used during indexing can now be adapted if necessary.

Searching

Search performance has been greatly optimized through the use of a new, highly tuned database. Search results will now show almost instantly in the Cluster Map and Details views.

The Source and Location facets have been merged. PST files and other mail container files now show up as nodes in a single folder tree, rather than as independent roots.

Folders in the Location facet can now be searched with or without the inclusion of their subfolders.

Folders can now be returned as search results.

Improved the results of the Show Children operation on items containing folders, such as certain ZIP files.

The Date facet now offers a calendar component for choosing the start and/or end date.

Added categories in the Type facet for Contacts and Tasks extracted from PST files.

Tagging

Resolved an issue where the OK button in the Add dialog would not be enabled if any of the selected results already had the selected tag.

Resolved an issue with the Remove Tags dialog showing tag counts that were too large.

Tags that are already applied to all selected items are now disabled in the Add Tags dialog.

Adding and removing tags has become faster.

Results

The Title/Subject column has been split into separate Title and Subject columns, as some document types support both fields.

The counts shown in the Duplicates column (formerly the Copies in Source column) now reflect the number of duplicates in the entire case, rather than the number of duplicates within the same source.

Resolved an issue with the deduplication function not removing all duplicates of an item.

Enforced consistency between the Type facet's Images branch and the Thumbnail view: every item that is classified as an Image will now be displayed in the Thumbnail view, even when the Thumbnail view does not support that image format. In that case a generic icon is displayed.

Improved image-related operations such as the Thumbnail viewer and the export to PDF when image caching is switched off.

Exporting

All terms in the index can now be exported to a text file, e.g. for use in a password cracking tool. For each term the field name (corresponding with the options in the Search options panel) and document frequency is optionally listed. When these options are used, the result will be a comma-separate value file (CSV format), with each keyword described on a single line.

Additionally, the terms of a selected set of results can be exported.

Improved the folder layout of the generated folders to more closely reflect the location of an item in the original evidence file.

Resolved an issue where the generated PDF of a TIFF image would contain a barely readable image. The full resolution is now retained.

The folder being exported to no longer has to be empty. A warning is now produced when the folder is not empty. Note that each export run will start new export reports, they are not merged.

Concatenated PDFs can optionally be split in chunks of a given size. This improves stability of the export process.

Fixes for various time-out issues. All time-outs used during exporting can now be adapted if necessary.

Previewer

Added a Words tab. This tab shows all terms in the full-text index that are associated with this result, ordered by field name. These fields correspond with the options in the Search options panel. The Words tab can be used to find out

why certain queries won't match a particular document. The terms can be exported to a CSV file, together with their field names and other statistics.

The tree structure shown in the Tree tab now fully corresponds with the tree structure shown in the Location facet.

Improved the accuracy of hit highlighting for phrase searches.

The Expand button in the Tree tab now has a corresponding Stop button, which lets you interrupt loading of the entire tree. The entire tree may be very large for file types like ZIP files.

Enabled previewing of CSV and TSV files in their original layout.

On small screens the default Previewer size will be reduced to fit on the screen. Resolved various memory leaks.

Case Management

The Case Manager disables (grays out) cases made with Intella 1.4.3 or older. Not only are the case data files incompatible with this release, opening them with Intella 1.5 might also damage these files. Please use Intella 1.4.3 to open these cases.

When opening a case, Intella would already check the presence of evidence files relevant for this case and give the user the opportunity to relocate the files, to work around changed folder names and drive letters. When relocating such a file, the file name and size of the chosen file is now checked against the name and size that the file had during indexing. A warning is displayed when these do not match.

Resolved an issue with cases failing to correctly export to an ICF file due to the presence of certain non-ASCII characters in evidence file names.

The audit trail now lists for each tagging action what tagging settings were used, i.e. what type of tagging inheritance was used (upwards/downwards/none) and whether automatic tagging of duplicates was used.

When removing a case, the Case Manager now shows an animated indicator during the entire operation. Before, it would freeze until deletion had completed. Fixed an issue where exporting an ICF file failed due to lack of disk space, even though the free disk space was actually sufficient to hold the ICF file.

Made the Attach Evidence dialog able to handle multiple sources with the same file path.

Licensing

Intella is now distributed as a single installer that automatically runs as the product edition licensed to you (e.g. Intella Viewer, Intella TEAM Manager, etc.). When licenses can be found on the connected dongle(s) for multiple product editions, a window is opened that lets the user choose the desired license. The trial license is now limited to indexing 10 GB of evidence files per case and can export maximally 1000 items at a time.

The HASP Admin Control Center sometimes used to show product numbers instead of product names in various overviews. This has been fixed; the product name should now always be shown.

Upgrade notes

Intella 1.5 is not backwards-compatible: cases made with Intella 1.4.3 or older cannot be opened. This is because of the massive changes that were needed to improve search performance.

Starting with version 1.5, sources can no longer be removed from a case, only added.

The installer now refuses to install on Windows 2008. This has always been an unsupported platform on which the correct execution of the application cannot be guaranteed.

Case Manager

The Case Manager now shows the full product name (including product edition) and the product version.

The Case Manager now shows whether a trial license is used or, when running on a dongle, what the ID of the dongle is.

Indexing

Various stability improvements, including processing of very large XLSX files. Resolved an issue where words in DOCX files were concatenated in the extracted text.

Improved text extraction quality on XLSX files.

Resolved several text extraction issues with certain mails, including Chinese mails using GB2312 encoding.

Resolved an issue with encrypted ZIP files not being classified as encrypted.

Resolved an issue with incorrect dates in PST files. Before, a broken Date header could lead to an email not having a Sent date in the results list. Now, when a Date header is broken, the PR_CLIENT_SUBMIT_TIME field is used instead as the Sent value.

Resolved an issue with PST/OST files failing to index because of non-ASCII characters in the name of the PST/OST file.

Searching

Resolved an issue where the "Restore the queries that were shown last" option was set and tag queries failed to be restored.

The keyword search history now looks up previous searches in a case-sensitive manner.

Results

Added a Source Path column to the Details table. This shows the full path of the source (e.g. the PST file). This improves reviewing of items from a large collection

of evidence files, where the automatically chosen source name does not provide enough information to discern the origin of the information.

Speed improvements for reviewing large documents.

Speed improvements for quickly iterating over a list of results.

Encrypted items are now displayed with a lock icon, to make it instantly apparent why no extracted content can be displayed.

Applied whitespace normalization to the Contents tab: multiple blank lines are reduced to one line; multiple spaces are reduced to one space, etc.

Reduced memory usage of previewing items.

File type icons are now shown in the Type column and in the Type facet. The icon depends on the application that is associated with that file type on the local machine.

The set of near-duplicates of an item no longer contains the item itself.

Improved the automatically generated name of a set of near-duplicates.

Resolved an issue with the Attachment tab in the Previewer failing to print.

Tagging

The tagging dialogs no longer have a shortcut button that opens the Tagging Preferences. Instead, the "Override tag preferences" subpanel has been extended with a "remember these settings" checkbox.

Resolved refresh issues in the tags list and quick tags buttons shown in the Previewer.

Resolved an issue with tags not always being propagated to other parts of the same mail.

Resolved an issue where the Previewer window would disappear behind the main window after applying a tag.

Improved the display of long tag names in the Previewer.

Exporting

Added support for export reports in HTML format.

Stability improvements for exporting large result sets.

Added the ability to let the generated PST be split automatically in chunks of a given size. This also improves stability of the export process. The export report mentions which PST an item was exported to.

Optimized the layout of the exported PDFs to improve readability and reduce the number of pages.

Applied whitespace normalization to exported PDFs: multiple blank lines are reduced to one, multiple spaces are reduced to one, etc. This improves readability.

When exporting to both original format and PDF at the same time, the PDF can now optionally link to the corresponding original format file.

Resolved an issue where the elapsed time and remaining time of exporting were not displayed.

When exporting a single item, the mouse cursor now changes into a busy cursor while it is creating the file.

Resolved an issue where an item could not be exported to a PST because the parent email could not be found.

Resolved an issue where printed results were lacking images.

Resolved an issue where embedded items were not exported to a PDF when the "Include embedded items" option was switched on.

Attachments from EML and MSG files that are exported to original format now go into a folder nested in the message's folder and named after the message's subject (similar to PST, NSF, etc.). Before they would go into a numbered folder in the source root folder.

When an item fails to export due to some error, it is no longer given the Exported status.

The Export dialog now has an inline help option to explain what happens with email dates when exporting to a PST file.

Rephrased some Export to PDF options for clarification.

Improved export status messages.

The default export folder has been changed from the user's home folder to the Desktop folder.

General

Improved various error messages.

Various changes were made to protect Intella's databases against file corruption when an Intella process is terminated through the Task Manager.

Improved automatic clean-up of temporary files, usually made during indexing and exporting.

Various improvements to the information in the log files.

TEAM

The file numbering option in the Export dialog is now only enabled when Original Format and/or PDF is selected.

The Tags and Features facets make a better distinction between tags, flags and comments made by the case manager and by a reviewer. Before, the difference was only clearly visible to the case manager.

Indexing

Optimized memory usage of indexing of PST/OST/NSF files.

Improved text and image extraction accuracy of PDF and MS Office files.

Improved folder extraction of PST files that are made using the Hotmail Connector plugin for MS Outlook.

Resolved an issue with near-duplicate hashing, where generated mail sources did not inherit the setting of the original Folder source.

Resolved an issue with the Refresh operation incorrectly reporting removed items.

Search and Review

The date facet now allows the user to search a date range using multiple date attributes simultaneously. Prior to Intella 1.4.2, a drop-down list of attributes was provided, allowing the user to use only a single attribute per search.

The user now has the ability to sort columns in the Details list by selecting the new Sort Table button. The user can sort based on multiple search criteria in both ascending and descending order. The Sort Table button is located in the upper-right corner of the details pane.

The Intella Previewer contains a new tab called Tree. This tab allows the user to see the entire path, from root to descendants, of the selected item being reviewed, along with clickable file names and email subjects.

The tab shows a column with checkboxes that can be used to tag multiple items at once. The user can also right-click and choose to select all above or select all below the clicked item

The ability to search for child items is now available by

- Right-clicking the search results in the details list and selecting Show children.
- $\circ\quad$ Selecting Show children from the Explore tab of the Previewer.

Show children can search for directly or indirectly nested children. The preferred method can be specified in every search or set in the Search preferences.

The Show parents option now allows the user to specify the level of search by selecting top-level parents or direct parents of the selected items. This option also allows the user to only consider the emails in the path (ignores items that are not email items) and to add all items that are already top-level items to the result. The number of copies is now displayed correctly in the Previewer when the number of copies equals 1 (two items with the same hash).

Resolved an error that could occur during importing of large Intella case files (.icf file extension). Importing of these files would typically exit immediately with an error message stating that the case file is not valid. ICF files on which this error occurred will have to be recreated with version 1.4.1.

Phrase searches using smart quotes are now supported. Such quote characters are typically inserted by word processors like Microsoft Word when typing the quote character.

Resolved an issue with recovered mails from PST/OST files that could not be exported.

Resolved an indexing error that occurred on empty folders in PST/OST files. Intella cannot export to PST files when the full path to the PST file is longer than 256 characters. Attempting to do so would result in a cryptic export error. Intella now checks the length of the path and gives a more informative error message. This allows the user to fix the path before proceeding with the export. Improved PST/OST indexing debug messages.

Upgrade Notes

As always, a full re-index of the case is necessary to benefit from the changes in this version. After re-indexing a case made with version 1.4.0, the database IDs of recovered mails may have changed. Consequently, the tags, flags and comments of these recovered mails may be lost.

Regular (non-recovered) PST/OST mails as well as mails from other mail sources are not affected; their tags, flags and comments will be retained during a full reindex.

Intella 1.4 delivers significant new features, enhancements and performance improvements to Intella. Version 1.4 also introduces a new product: Intella TEAM.

Intella TEAM enables multiple individuals (reviewers, investigators, paralegals, etc.) to review evidence independently and simultaneously. Their individual work products can then easily be merged into a single result. Intella TEAM has two components:

- Intella TEAM Manager is the primary component and performs three critical functions:
 - a. Indexing & preparation of the case data or evidence
 - b. Sharing of the case data among others
 - c. Combining the work product of others
- 2. Intella TEAM Reviewers provide the ability to independently search, filter, bookmark, tag, and comment on the case data and transfer the results of that work back to the TEAM Manager.

Important Note: Intella TEAM Reviewers CANNOT index or re-index the case data. Only the TEAM Manager can index data.

Case Management

Indexed evidence files may now be moved and accessed more easily. Previous Intella versions required that evidence files were to always be found at the same location, the initially used for indexing. That restriction made moving evidence difficult.

Intella will now detect moved files during startup and open a dialogue that will enable the user to locate the drives, folders, or files.

Allows for browsing to existing case folders.

Case importing and exporting now checks for available storage space before starting the operation.

Case importing and exporting operations now include progress monitors and the ability to interrupt the process.

When importing cases, the target location can now be specified. (Previously, only the default location was possible.)

Importing now accepts ZIP files containing an entire case.

When importing a case that is already present, a warning is now given.

The "Remove" button is renamed "Delete" and a clear warning message is provided.

Error fixes were applied to:

- Keyword search history and other stored preferences related to exporting a case
- A log file issue related to the use of brackets or other special characters in a case name.

Indexing

Added extraction of images from PDF files.

Added support for Foxmail email boxes (.box). Because Intella Rel.1.4 treats .box as a special subtype of Mbox files, use the Mbox source type when indexing. When .box files are contained in a folder, Intella will generate the required Mbox source automatically.

Added support for Apple Mail email boxes (.emlx files). Because Apple Mail stores every email as a single .emlx file, use the Folder source to index.

Added detection of AppleDouble header files containing Apple Resource Forks. Added support for older Outlook Express 4 (.mbx files).

Intella-generated source names are now always unique. Thus multiple and different Outlook.pst files will result in sources of differing names, e.g. "Outlook.pst" and "Outlook.pst (2)", etc.

Added an artificial X-Intella-Type header to items that actually represent other PST/OST artifacts such as notes, tasks, contacts, meeting requests, etc.

Error fixes were applied to:

- o Time-out issues with certain email files.
- Enabled indexing of PSTs containing unnamed folders.
- Enabled proper indexing of emails with no subject lines.

Searching and Reviewing

Added a Preview tab in the Previewer window, rendering the selected item in its original layout, limited to the first few pages (hence "Preview"). For example, the

first few pages of a Word document can be shown with its original formatting, embedded images, etc. This functionality is limited to Word, Excel, PowerPoint, PDF, RTF, HTML, OpenOffice and WordPerfect files. The Preview capability requires MS Office to be installed (Office 2007 requires PDF Add-in).

Added new categories to the Features facet:

- o "Previewed" shows all items that have been opened in the Previewer.
- "Opened" shows all items that have been opened in their native application.
- "Exported" shows all items that have been exported.
- "Unread" shows all emails that have an unread status in the evidence file (applicable to PST/OST only).
- "Empty Document" identifies all items that have no text but where text
 would normally be expected. A common scenario is a PDF file where all
 text is contained in images, typically a scanned document. The results of
 this category are typically candidates for OCR or encryption cracking
 tools.

Several of the Features facets are now "multi-user aware." That is, after importing one or more work reports in the Team Manager version, you can see which files were previewed, tagged, etc. and by whom.

Improved memory usage when querying large amounts of items.

The Auto-Advance option in the Previewer window has been made persistent. The Previewer now checks for unapplied comments before allowing the user to close the window.

As a precaution, the tagging, commenting and flagging code verifies that those annotations are stored accurately and shows an error message when this is not the case.

The "Copies" column has been renamed to the more accurately "Copies within source". Also "Show copies" has been renamed to "Show copies within source". The semantics of the Copies column and Show Copies functionality has been changed: when searching for all copies of an item, the item itself is no longer returned. Thus the count is one less than before.

The "MD5 Hash" facet has been renamed to "MD5 and Message Hash". Changed the Location facet to show the source file names as the roots for PST, OST and NSF files. This solves the problem of a large list of folders all named "Ext-Root," now making it apparent which email file they relate to.

Error fixes applied to:

- Hit highlighting in the Previewer
- o Missing file names for EML and MSG files in the Previewer
- o Incomplete highlighting of values in the Location facet

Exporting

Improved the layout of the export dialog to more efficiently use the available window space.

Exporting to PST has a revised set of options, giving more control over what is exported into the PDF.

Added the ability to add the original rendering of an item to the exported PDF, i.e. the contents of a Word document is shown exactly as Word shows it.

In Team Manager and Team Reviewer only: added the ability to consecutively number exported files, optionally with a prefix and given start number.

Exported PDFs have simplified headers and footers – optionally only the consecutive number is displayed in the footer.

The export order has been improved:

- o First, all items are sorted by source.
- o Next, emails are sorted by Sent date.
- Each email is immediately followed by its attachments.
- Each attachment is directly followed by any embedded items.

The order is relevant for export reports and when concatenating all exported PDFs into a single PDF.

Exporting of results into their original format has been made much faster. Improved memory usage when exporting large amounts of items. When exporting items while memory usage is already high, Intella may suggest removal of the search results from the screen before continuing with exporting the selected set. This frees memory for the export process.

Improved validation of user-entered information in the export dialog. Added a CSV export report type. The CSV report lists all item metadata, accompanied by the names of the exported files in original format and PDF format. When using consecutive numbering of exported files, the prefix and number is listed as a separate column. Finally, the last column contains any export errors that occurred.

PDF and RTF export reports now show a divider between the item sets of different sources. The PDF report uses headings that appear in Adobe Acrobat as bookmarks. This can be used to quickly jump to the items of a specific source. Improved the export folder layout. Items in their original format, PDFs and PSTs, are clearly separated.

Error fixes applied to:

- Fixes for multipart/alternative emails that were missing HTML parts when exported.
- o Fixes for exporting emails with non-Latin content to PDF.

This release contains a fix that ensures that folder names inside PST and OST files are indexed, so that you can find emails using keyword search on the folder names. Previously this was not done for PST and OST files. Other mail formats did not have this problem.

Further improvements in recovery of deleted mail from PST/OST files.

User Interface Improvements and Fixes

Tagging Fix: The "Tags" line in the properties panel of the Previewer updates correctly now when the last tag is removed from a tagged item.

Lotus Notes validation: Improved user notification makes it clearer that Lotus Notes application files are missing or that the detected Lotus Notes version doesn't meet the required minimal (most current) version.

Menu Bar Update Notification Fix: When the "Update Notification Message" on the Menu Bar is selected in Windows 7 the correct browser window (on the Vound website) now opens.

Case Importing Fix: A network connection is NOT required when importing a case.

Indexing Improvements and Fixes

Lotus Notes indexing fixes:

Fixed missing last modification dates for attached messages in an NSF file.

Fixed missing inline images in RichTextItems in an NSF file.

Stability improvements for memory-intensive indexing tasks.

Improved PDF text and metadata extraction accuracy.

Removed all quotes from the displayed contact name in the Sender and Receiver columns in the Details Panel and the Email Address Facet

Exporting Improvements and Fixes

Stability improvements for the PST creation process.

Improved the recovery of deleted mail from PST files, resulting in more extracted mail and attachments.

Corrected issue that caused exported messages to be labeled "unread" when opened in Outlook 2007 and earlier versions.

Mbox mail fix: Corrected folder path of exported Mbox mail to remove the path of the Mbox source file.

New Features

Comments can now be added to items in the Previewer. Comments are searchable, displayed as a column in the Results table and can be exported. Import and Export Cases via the Case Manager to allow cases to be shared among multiple reviewers. An exported .icf file allows easy transportability and ensures integrity of the exported case. The import button allows the reviewer to select an .icf file for importing into the cases folder.

TimeLine View can now be exported as a PNG image

Search History can now be selected or turned off by user preference.

Message ID Column is added to the Results table to display the value of the email's message ID. If no such header is present in an email, the column shows the Mapi-Smtp-Message-Id or Mapi-125-Message-Id header.

Improved and Enhanced Features

The MD5 column in the Results table now only shows the MD5 hashes of binary items (attached files and electronically stored information). A new Message Hash column shows hashes for email messages.

The Message Hash algorithm has been rewritten so that the Message Hash values will remain constant when a case is reindexed with a newer Intella version.

Improved the ability to recover deleted mails from PST and OST files.

Exporting results as PDF files includes several refinements:

- All PDF output can be concatenated into a single file instead of one file per result.
- Options have been added to control the inclusion of email headers, extended properties and comments in the PDF document.

Results tables that are exported to CSV now use a date format recognized by Excel, making it possible to accurately sort on these values.

The ability to export lists of facet fields and their counts has been expanded to all facets. Enabling a reviewer, for example, to export a all document types and their counts, document authors and their counts, email addresses and their counts.

The Case Manager now shows the size of each case. A feature of particular importance to Intella 10 users.

The indexing statistics shown on the interface at the conclusion of indexing (number of files, messages, elapsed time, etc.) are now added to the log file and available for viewing.

Because some facets take additional time to initialize, user activity in this state is now disabled so as to prevent incomplete CSV exports of these values.

The text and metadata extraction accuracy of OpenXML files, also known as the MS Office 2007 formats (.docx, .pptx, .xlsx, ...) has been improved.

Improved the extraction of values from vCards.

Renamed the "Index images inside documents" option to "Index content embedded in documents," to more accurately describe what is controlled by this option.

Fixes

Fixed a problem with PST, OST or NSF files that failed to index due to a "No response from external process" error.

Fixed broken Export to PST functionality due to a conflict with another installed application.

Fixes for missing receivers in mails from PST/OST files.

Fixes for missing dates in MSG files.

Fixes for incorrect decoding of mail subjects, senders, receivers and dates.

Fixes for incorrect representation of encrypted messages in PST/OST files.

Fixes for incorrect attachments in NSF files.

Fixes for the incorrect representation of attached messages in NSF files.

Fixed problems with previewing mails that lack a subject.

Fixed failing indexing of evidence files that have a hash character ('#') in their paths.

Fixed errors with exporting mails from Mbox sources.

The Thumbnails tab in the Previewer was sometimes not reset, resulting in the Thumbnails of the previous result being shown as part of the current result.

Korean characters in case names were replaced by dashes in the suggested case folder.

When Intella detects a version upgrade when you open a case, a dialog is opened that suggests reindexing of the case. A problem where this dialog appeared every time the case was opened has been fixed.

When a case was moved to a different location, the ability to show thumbnails was lost due to the use of absolute paths in the database. Those absolute paths have been replaced by relative paths.

Near-duplicate hashes are no longer calculated for items without text. This prevents these items from being considered to be near-duplicates.

The counts in the Features facet were not updated instantly when results were tagged, flagged or commented on.

The Tags facet should show user names of tag creators, not their UUIDs. This only affects exported cases that contain tags.

Export reports (RTF and PDF) should use relative paths in their links to the exported files, not absolute paths.

The Print Preview dialog will now always fit the current display, so that no buttons are truncated.

Upgrade Notes

As usual, when you open a case made with an earlier Intella version in Intella 1.3.1, Intella will detect the version upgrade and suggest that you reindex. Reindexing is necessary to make use of the many improvements outlined above. Two aspects are important to consider:

After reindexing, the message hashes will differ. We have redesigned the algorithm so that this is not likely to occur with future version upgrades. Due to the requirement of a particular fix for indexing NSF files, some internal IDs of items extracted from these NSF files may differ. A consequence of this is that tags pointing to items from NSF files may become incorrect: they may no longer connect to an item at all or may connect to a different item. Should you have cases involving tagged items from NSF files, we recommend you continue using the previous version for that case or, alternatively, completely rebuild the case with Intella 1.3.1.

Improved case management now allows better editing of case details, including investigator name and a case description.

Improved feedback on indexing. Better progress reporting and statistics. The dialog that shows during indexing is no longer blocking. You can minimize the window now.

Improved folder selection in New Source wizard

Completely reworked Previewer. Now tasks like tagging, flagging, and finding copies of an item are offered in a strip of grouped buttons organized in three categories: Review, Explore, and Produce.

Previewer is now the central instrument for productive reviewing of items allowing direct inspection of relations between items. For example: the relation between a zip-file and its entries.

Previewer indicates the position of search terms in the scrollbar, and has Next and Previous buttons to quickly browse search term hits.

Previewer indicates existence and allows you to navigate to duplicates (copies), near duplicates, emails in the same conversation, and parent items.

Each Previewer can loop over its own results list, so changes in the results table have no impact on the operation of the Next and Previous buttons of existing Previewers. If the table is still showing the same list as when the Previewer was opened, table selection will be updated when the Next or Previous buttons are clicked.

Improved thumbnail view. Thumbnails are now opened in separate previewer window. Like in table view, direct flagging of thumbnails and context menu operations are now possible.

Thumbnail view shows not only the selected images, but also the images embedded in selected documents. This happens recursively, e.g., an image embedded in a MS Word document that is attached to an email is shown when the email is selected.

Extensive tagging functionality added. Tagging can now be done with fast tag buttons and keyboard shortcuts in the previewer.

New export option added: Export to PDF. This option exports all the selected items to separate PDF documents.

Item printing added. You can now print the contents of a previewer tab or print a report of the entire item. Added a print preview dialog.

Ability to find near-duplicates of an item.

Features facet added. This facet groups the following items: encrypted, flagged, tagged and items that have copies.

MD5-list option added. You can now upload a list of MD5-hashes to see if these hashes match with the hash value of items in your case.

Combined keyword lists are now supported. You can combine the results of all the keywords in your list in one results set.

Many stability improvements. Lotus Notes 8.5 or higher is now required for processing NSF files.

Sources panel is now automatically expanded when "No sources selected" warning is shown.

The Sources facet is now the default facet when a new case is opened.

New manually defined PST sources have the recovery switch by default set to "on."

Intella now automatically detects if Lotus Notes is installed on the computer. It is now very simple to configure Intella for Lotus Notes NSF files.

Support for iCal and vCard added.

More information is extracted from PST and OST files, e.g. meeting requests, tasks, contacts, and appointments.

More information is extracted from Office files: various types of embedded objects.

Case size limits are added. The evaluation version is limited to 10 GB. The dongle-controlled version will come in various case size limits.

Added a License tab in the About dialog (Help > About), showing details of the currently active license.

Many fixes for non-Latin languages.

Support for Intella on Windows 7.

As always, many stability improvements!

Notes on backward compatibility

When opening a case made with Intella version 1.2.2 or earlier, tags made in these versions will not be recognized.

The MD5 hashing of email messages is changed in 1.3. The MD5 hash value of email message made with Intella version 1.2.2 or earlier will be different from the MD5 hash value created with version 1.3.

Some items will have different URI's compared to URI's created in older Intella versions.

Stability improvements have been made for Lotus Notes (NSF) file indexing and exporting. In earlier releases, on rare occasions, an NSF file (usually a corrupt file) caused Lotus Notes to crash. When that happened, Intella would be shut down as well. Enhancements in Release 1.2.2 will prevent Intella from crashing under that circumstance. Under that circumstance, Intella will now continue processing the remainder of the file.

Note that the Vound Forum contains a number of tips for fixing corrupt NSF files. You can register on the Vound Forum at this location: http://support.vound-software.com

New automatic updater that periodically checks for a newer version of Intella over the internet. This option may be switched off.

The Previewer features several improvements:

- For archives (e.g., ZIP files), an Entries tab is shown that lets the user see and navigate the contents of the file.
- o The Properties tab shows an additional number of metadata fields.
- Icons are shown for known file types, making, e.g., Word files instantly recognizable.
- Finally, a number of usability improvements have been made.

Previously, during a Refresh operation Intella would occasionally mistakenly report changed items when the evidence files had, in fact, not been changed. This has been fixed.

The Add Source wizard remembers the last path of the chosen source files. When navigating with the Previewer from result to result, the Results table will now adapt its selected row accordingly.

The "Export to PST" option is now explicitly disabled when Outlook cannot be found, rather than producing errors during export.

A number of fixes have been made for retrieving and interpreting mail messages and for indexing corrupt ZIP files.

Indexing

Extraction and indexing of Word revision logs, consisting of the last 10 authors and full paths saved to. All authors are listed as contributors in the Author facet and both authors and save paths can be found using keyword search. Note that not all Word versions maintain such a log.

Added support for Word 6/Word 95 documents.

Prevent caching of images that are directly available in the file system.

Show elapsed time during indexing.

Mistakenly reported unchanged items during indexing of archive entries.

Broken body extraction of multipart/related messages.

Searching

Split up the People facet in separate Email Address and Author facets.

Extended the Email Address facet with lists of all From, Sender, To, Cc and Bcc values.

Added exporting of encountered email addresses with their occurrence count.

The Date facet no longer offers pre-defined date ranges. Instead, the custom date range selector has been given a more prominent place in the interface.

Extended searching for dates: specify whether you want to search for file last modification dates, content created or last modified, sent or received dates.

Previewing & Results

Added columns for File Last Modified, Content Created, Content Last Modified, Sent and Received dates.

Show the full date and time of a timestamp in the Results table, rather than only the date.

Added Attachments column, showing the names of the attachments of a mail.

The Attachments tab of a previewed mail now shows the subjects of the attached messages.

The row number in the flagged column did not match the row number shown in the Previewer.

Exporting

Added "Create new folder" button in the Export dialog.

Add all known timestamps (created, last modified, etc.) of each exported result in an export report.

Export to PST: emails with non-Latin subjects could not be exported.

Fixed broken export of Chinese mails from NSF to EML.

Some emails exported to EML format lacked a Date header.

Messages with missing content could not be exported.

Miscellaneous

HASP license server installation fixes.

Some preliminary Windows 7 fixes. Intella now runs on Windows 7 with a small number of known issues left to be worked out: no log file is stored; opening of results in their native application sometimes fails.

Added an option to recover the deleted items from PST and OST files.

Index partial mails found in PST and OST files.

Added support for indexing Mbox files.

Index a folder of mail files: New sources are created automatically for each mail

file, you are no longer required to add them one-by-one.

Export search results to PST files.

Filter visualized results with includes and excludes sets.

Added a Timeline view as a fourth type of result view.

Added the Keyword Lists facet: search using keywords lists.

Better performance and stability with new PST and OST crawler.

Support for MS Outlook Express DBX files.

Support for RAR archives.

Preview shows extracted text with search term highlighting.

Image extraction from Word, Excel, PowerPoint and OpenXML.

Thumbnail viewer as an alternative for the table and list views.

Support for Asian languages.

Search on arbitrary date ranges in the Date & Time facet.

Support for queries that start with a wildcard ('*' or '?').

First publicly available release.