Release Notes

eFLOW 5.2 SP1

Top Image Systems

Release Notes

eFLOW 5.2 SP1

Release Notes

eFLOW 5.2 SP1

Learn about the new features and revisions available in the latest eFLOW 5 update. For details on previous versions, see the Release Notes Archive.

Service Pack 1 provides the latest updates to eFLOW 5.2. This service pack contains new features and bug fixes.

These Release Notes contain only the most important information about the service pack contents; it may happen that some of the fixed issues do not appear here.

Installation Instructions

The service pack can be downloaded from the TIS FTP site.

We recommend using the Installation Launcher to perform all the necessary upgrades.

Before performing the upgrade

- Backup all eFLOW databases.
- Backup the existing collections data.
- Backup your eFLOW applications.

Note: There can be an issue updating the Microsoft Visual C++ 2005 Redistributable if Windows Updates are not fully up to date. Please ensure all updates are fully applied, or perform the installation of the Redistributable manually prior to performing the installation.

Perform the upgrade

Important: eFLOW 5.2 SP1 is not supported with SQL2008. If you are using SQL2008 you should upgrade the database engine prior to performing the upgrade to a version of SQL2012 or above.

1. Install eFLOW 5.2 SP1.

   eFLOW 5.2 SP1 is distributed as a full MSI installation package. It will either install eFLOW on clean machines or perform the upgrade on machines where the eFLOW 5.2 release is already installed.

   Take care to check all of the installation parameters and ensure they match your current configuration.

   Use the same installation procedure for the clean installation and the upgrade. See the *Installation Procedure* topic in the *eFLOW Implementation Guide* for details.

2. Update the SQL databases.

   All eFLOW databases will be upgraded automatically.

3. Upgrade the eFLOW Web Stations.

   The upgrade uninstalls the old version and installs the new one.

   If the corresponding eFLOW web station was not previously installed on the current machine, the latest version will be installed.

   The following web stations installations will be updated:

   - Web Validate
   - Web Front Office
   - Web Scan

4. Update the OCR engines installation.

   The new OCR engines installation upgrades the previous version.

   The new OCR engine MediaDrive was added to the installation.

   OCR engines are packed in a separate ZIP file. To upgrade the OCR engines using the Installation Launcher, copy the unzipped *OCRs* folder to the root service pack folder.

   Note: Updating the OCR engines via the Installation Launcher can take a considerable amount of time. Uninstalling the old version and then installing a new one may be less time consuming.

New Features

MediaDrive OCR engine

- Field OCR Engine
- Page OCR Engine

Changes and Improvements

Support for Windows Server 2016

eFLOW 5.2 SP1 runs on Windows Server 2016.

.NET framework

eFLOW 5.2 SP1 uses .NET 4.5.2.

If .NET 4.5.2 is not installed on the current machine, the eFLOW installation will install the required .NET framework version.

3rd party software

AppFabric

eFLOW server no longer requires the installation of Microsoft AppFabric.

MSDTC

MSDTC is required for eFLOW SP1. In previous versions, use of MSDTC was recommended only if it was explicitly required by the project.

Network drive storage

Previous eFLOW versions did not allow storing setup or dynamic data on network drives.

SAN storage was required when it was necessary to store data on the shared drive, for example, in cluster environments.

This limitation was removed in the current eFLOW version.

Performance improvements

Huge collections management

The internal eFLOW chunk mechanism is used when it is necessary to manipulate large collections.

This mechanism was changed significantly to achieve a performance boost:

- The data caching mechanism was discarded.
- MSDTC usage was canceled.
- The workflow database schema was changed.

Serialization performance

The default .NET serialization showed slow performance in eFLOW. In addition, it created huge serialization files.

Therefore, the default serialization mechanism was replaced by the custom binary serializers that perform much faster and use disk space more efficiently.

Moreover, the use of the deflate compression algorithm resulted in an additional decrease in serialization files size.

> **Note:** The existing collections will be automatically upgraded, but this is a one-way upgrade. It will not be possible to rollback these changes.

Core

An extra parameter *SLAID* was added to the core functions and relevant store procedures to allow filtering collections by SLA ID.

This option will provide better custom code flexibility.

Validate

By default, moving images between forms in the forms navigator window is disabled.

A new station configuration parameter *OrganizeEnabled* allows you to switch this feature on.

Control

The new configuration settings *RefreshIntervalMinutes* and *Application* allow you to set the station refresh interval per application.

Tile

A new *ZoomOutRatio* setting can be used to change the tiles zooming level by customization.

Recognize

A new FreedomActivity output argument *Match Learning template* returns the Learning template name for each page.

Organize

The *AllowPageWithoutEFI* parameter was renamed to *AllowPageWithoutFields*. This parameter can now be applied to non-Integra page recognition algorithms.

Instead of checking whether there is an EFI attached to a page, Organize now checks if there are any fields found on this page.

eFLOW API signature changes

The following API signatures have been modified in SP1:

DLL	Description	Notes
TiS.Imaging.dll	In all *TiS.Imaging.FileOP.TIPServices.TIP** methods, the *FileId* parameter type was changed from *int32* for to *IntPtr*.	The assembly can now be used in 64 bit mode (for example, in Web Front Office server) .
Tis.Core.Application.Client.dll	*IDynamicClient* interface: new *GetCollections* and *GetCollectionsEx methods* with an optional *slaId* parameter were added to query for collections by SLA ID.	These methods provide faster filtering for SLA-based operations. There is no need to recompile custom code.

New Features - BETA

FIPS Support

Overview

eFLOW can work now on machines where FIPS encryption is enabled.

The code changes were applied to all eFLOW methods that included calls to encryption algorithms.

Release Notes
eFLOW 5.2 SP1

Warnings

- This feature is described as BETA as it has only been subject to limited testing, however, initial testing suggests that eFLOW fully supports FIPS.

- If a license was installed without FIPS, and FIPS was enabled later, the license will appear as invalid. In this case, it will be necessary to reinstall the license.

Resolved Issues

The following issues have been resolved in eFLOW 5.2 SP1.

The issue number refers to the service call number.

Core

Issue no.	Summary	Detailed information
	Collections were processed more than once if the client machine entered sleep mode while these collections were locked by the station.	When the client machine was in sleep mode, the eFLOW client was disconnected from the server by the liveliness mechanism. The problem was fixed by applying an additional session validity check.
21852 25718	Group permissions in *DomainSecurity.xml* were not working.	Fixed group membership problems when the permission level was not enough to perform a proper AD query.
24648	Primary key exception was thrown when working with SQL Dynamic chunks.	Fixed the SQL Duplicate key error when uploading the chunks to the server.
24853	Statistics: it was not possible to disable Collections Audit.	Collection Audit tables were still filled when collections were deleted, even if collection auditing was disabled in the configuration.
25256	When working with the NetTcp protocol, errors appeared in the logger and Control stopped working.	Added proper handling of the Faulted state of communication channel.

Release Notes

eFLOW 5.2 SP1

Top Image Systems

Issue no.	Summary	Detailed information
25483	eFLOW installation failed when the remote SQL server was not installed in its default location.	During the installation, eFLOW attempted to create a directory for an SQL database in the wrong location. As a result, IIS was not able to create the internal eFLOW databases on remote SQL.
25644	eFLOW statistics did not work with Windows authentication in the SQL security settings.	Added a new public property *IntegratedSecurity* to the database connection string settings.
26841	Statistics: Login information for the statistics database was not encrypted on the server.	The *StatisticsConfig.xml* file under *...\ProgramData\TIS\eFlow 5\AppData\Server\<ApplicationName>\Setup* is now encrypted. This fix is backwards compatible, as it reads an old format unencrypted XML file, and saves it as encrypted on the first save. The encryption is performed using a serializer that uses a FIPS compliant symmetric encryption algorithm.
26668	eFLOW crashed with the error "...Could not find a part of the path '...\WFU.dat"	Transactional file storage was deprecated. The problem occurred when data chunk mode was used.
27472	REG files were not deleted from the *...\TIS\eFLOW 5\AppData\Temp* folder.	Now the temporary folder is cleaned up regularly.
27824	The TIS event log contained multiple LDAP/AD error messages from TIS STS.	The issue was resolved by improving exception handling for multiple attempts to query AD for group membership.
28183	Large CAB installation failed when using dynamic SQL storage.	Fixed the local storage problem.
28546	SQL storage: The station configuration was list when installing the application.	The problem was that the station configuration files were not downloaded together with other setup attachments.

Cab Migration

Issue no.	Summary	Detailed information
	Layouts were saved in UTF-8 format, causing corruption of diacritical characters.	Fixed by saving the layouts in Unicode.
24829	CAB Migration tool crashes	Crashes in the CAB Migration tool were caused by several problems: ■ "Array out of bounds" exception in FPDict assembly. ■ An infinite loop in the FlowSet populator class. ■ German "ß" character was treated the same way as the "ss" string.

Configure

Issue no.	Summary	Detailed information
26570	Switching to a different server via the Configure tool was not working.	When changing the server name/IP address via the Configure tool, the endpoint addresses in the *ClientSection.config* and *BindingSection.config* files were not updated.

View CSM

Issue no.	Summary	Detailed information
26848	Excluding setup attachments did not affect actual attachment downloading.	The download filter is applied for specific attachment types.

Release Notes

eFLOW 5.2 SP1

Administrate

Issue no.	Summary	Detailed information
24878	Reinstalling an existing application with the *Keep existing collections* flag failed, and the application was deleted.	The problem was that the station attempted to overwrite the old *Flowset.xml* file instead of deleting it.
25500	After installing a new application, there were no views in the application workflow database.	The workflow database creation script was changed.
25733	Statistics: The **eFlow_CompareFields** table was not filled.	Fields that should be compared were not initialized properly.
27814	The Autorun configuration was removed when re-installing the application.	The Autorun stations list is saved as a part of the application data.

Design

Issue no.	Summary	Detailed information
23123	Layout designer: The *CenterOffset* property could not be changed.	*CenterOffset* was not working in simple image view.
25272	Issues with choosing the OCRB font in the OCE engine settings.	OCR language files were not loaded correctly.
27204	Contents converter failed when using one group reference as a replacement string.	If the regex was completed without any replacement, a message that the replacement failed was displayed, although there was nothing to replace.

Design Flow

Issue no.	Summary	Detailed information
25451	If the *FieldOcrActivity* mode was changed to *Advanced*, the **Settings** button was not available.	Setting the *FieldOcrMode* index during loading of *FieldOcrActivity* resolved this issue.

Issue no.	Summary	Detailed information
25055	It was not possible to assign the list of EFIs dynamically in the Integra activity using the *IList<string>* variable type.	The expression type was missing in the activity XAML.
25450	If the *Split collection after every N forms* value was not set in *CollectionSplitterActivity*, Recognize returned an error at runtime.	Added handling for negative *defaultCollection* criteria.
28818	Could not save the activity using the *ForEach* loop.	The problem was solved.

Analyze Recognition

Issue no.	Summary	Detailed information
24393	Analyze Recognition failed when trying to apply the Dynamic Template activity.	Analyze Recognition now works properly when the recognition workflow contains the Dynamic Template activity.
25033	Recognition flow analyzing failed on the *FormType* activity.	The *FormType* activity was trying to print during the Analyze recognition run, which resulted in the error message "Object reference not set to an instance of an object". The problem was solved.
27209	Failed to run and issued an error message about *TiS.RecognitionWorkflow.Activity. FormSplitter.FormSplitterService*.	The form splitter service was not initialized properly. The relevant initialization code was added.
28255	After closing Analyze Recognition, the number of currently used stations did not decrease for a long time, as if the station were still in use.	The license was waiting to be released by the server. Now the station logs out actively.
28866	Failure to fire Recognize station events.	The problem occurred because the *Temp* folder was not created correctly.

Release Notes

eFLOW 5.2 SP1

Analyze Free

Issue no.	Summary	Detailed information
24289	Error after changing the configuration and running Analyze Free again.	Fixed an error in the internal OCR rectangle data class.
24291	When both **DataID** and **Script** were selected, the script selection was not correct.	The problem occurred because Analyze Free results contained the last FFS and not the best FFS (in case the best is not the last).
26861	Crashes when working with images.	The station was not looking for TIFF file in the correct location.
27575	Analyze Free crashed on certain images.	An unrecognized character ignored the confidence value on voting.
28299	In certain applications, when trying to test any collection, the station failed with the error message "Value cannot be null".	Analyze Free was crashing when there was no completion station defined in the application. The problem occurred because it tried to open the Completion runner module.

Control

Issue no.	Summary	Detailed information
24109	Filtering collection by their status was not working. The following error message appeared in the log: "Invalid column name 'Status'".	Fixed the internal stored procedure *UnitMetatag_ Select_ByFilter* to accept more selection parameters. Now it is possible to filter collections by status.
24311	Selecting a collection in the Collections view did not highlight the station which contains the selected collection.	Fixed.
25182	Collection Viewer application crashed while closing.	Improved image handling.

Issue no.	Summary	Detailed information
25559	Control was not displaying the workload information.	If the station caption differed from the station name, Control did not display collections in queue.
27115	The station configuration file was sometimes corrupted.	The problem is with the 3-rd party software (DevExpress). The error handler was added to prevent the station form crashing. Still, the exact station configuration will be lost in case of configuration file corruption.
28026	The station queue refresh was very slow.	Station performance improved.
28717	The user could open different applications regardless of the given permissions and roles.	The station did not check the user authorization level.

Launch/LaunchPro

Issue no.	Summary	Detailed information
25107	Launch/LaunchPro did not show any applications when the user was defined only in a specific application section in the *Domain Security.xml*, and was not defined in the general section *(AppName="")*.	The problematic station behavior was fixed by improving the station selection algorithm.
26123	Stations that were not connected to the workflow were not shown in Launch/LaunchPro.	All stations are now shown in the station list.
26649	The application names list sometimes did not contain all the installed applications.	Some applications with very long names would disappear from the dropdown application list. The issue was resolved by changing the font size of application names to fit the launcher.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
26829	Every 60 seconds a message containing application data was sent from the server to the client. Memory consumption of Launch was high and the traffic over the network was slow due to this behavior.	For complex applications, the size of the message was huge (for example, 180 MB). To fix the problem, new configuration settings were added. *RefreshIntervalMinutes* and *Application* now allow you to set the station refresh interval per application.

Scan

Issue no.	Summary	Detailed information
25378	Barcode separation always left the back side of the separated page in the collection.	The **Discard Page** separation option now correctly discards both sides of the page, and not only the front side, as before.
25380	Sending batches to the server was sometimes very slow.	Removed an unnecessary call to the persistent cache.
26681	Memory leak when using image thumbnails.	The loading of thumbnails is now managed in a cache.
26895	Collections were missing if the server connection was interrupted while sending the collection.	Fixed the *Retry* method.
27295	The station crashed with an OutOfMemory exception if collection sending was interrupted.	Improved error handling in cases when the station was disconnected from the network while sending the scanned item.

Release Notes

eFLOW 5.2 SP1

Collect

Issue no.	Summary	Detailed information
22762	Sometimes collections were not created, while the original image was deleted.	The problem occurred when the station was working under a heavy load. Fixed by adding a check whether the file could be moved.
25041	Some of the Jpeg files were not imported when the Collect station was configured to import both TIFF and Jpeg files, and run as an autorun station.	When there were more than 100 Jpeg files to import, the station stopped working. The issue was solved by changing the input files handling procedure. Recommended station configuration settings: ■ Turn off *Skip missing attachments*. ■ Increase *Max file count* to 200 to improve the station performance.
26015	By default, the station looked for new files in the eFLOW *Bin* folder.	The default path now points to the *My computer* folder.
26130	When file names contained more than one decimal point, they did not appear in the file list view.	Improved the memory handling for very big files.
27234	Sometimes the TIFF file was deleted from the input folder, but the collection was not created.	Due to a synchronization problem, the viewer tried to view an image that was not yet loaded.
27731	"Out of memory" exception when the station attempted to load a file with 240 pages.	

Release Notes

eFLOW 5.2 SP1

Recognize

Issue no.	Summary	Detailed information
24132	Sometimes the data was recognized correctly but the ROI was shifted from the correct position.	The issue was resolved by adding *SnippetRectangle* and *SnippetImage* data to fix the ROI calculation.
24284	The Recognize station issued error messages related to the Abbyy OCR engine.	In certain cases, the Abbyy SDK function *CreateTextOrientation* returned NULL, resulting in errors being logged to the TIS event log. This issue was resolved by proper handling of these cases.
24406	The Thai language was not supported by the Omnipage OCR engine.	The issue was resolved by adding support for all Asian languages to the eFLOW Omnipage wrapper code.
24453	The Recognize station crashed due to invalid Integra activities names.	The station crashed when one of the Integra activities' name contained the "+" character.
24455	When running the same image through recognition, in eFLOW 4.5 the EFI matched, but in eFLOW 5.2 the EFI was not matched.	The ROI index on dropout EFI was not calculated correctly.
24760	"Out of memory" exception issued by the Freedom activity.	The exception was caused by a memory leak in the Freedom activity when the *FddbFolder* property was used to define the folder at runtime per collection.
25543	The station hung with the error "SQL Server error is: 8152".	This error was displayed when the meta tag was too long for the *Form type* property.
25596	Recognize stopped with the error "The process cannot access the file because it is being used by another process". The collection in use was locked.	Sometimes Recognize failed to delete the TRM and attempted to send corrupted collections to the server.
25677	FieldOCRActivity Advanced mode did not allow selecting OMR recognition.	The OMR check setting is loaded from setup if not configured by the application.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25707	DataMatrix recognition was not working.	Increased the field results buffer from 1000 to 2000 characters to accommodate more data.
25783	FieldOCR stuck on the second page in an application that was upgraded from eFLOW 4.5.	There was no timeout for sending messages to the UI. Now the timeout prevents the station from hanging.
26121	FieldOCR activity: *Insert Chars/Insert Position* functionality was not working.	*InsertChar* was not applied on ROIs when Integra and FieldOcr activities were running on two separate stations.
25677	The Integra activity used the same ROIs in different fields when the field names were similar.	The problem occurred in *the ForceEFI* API when one field name contained the other field name.
25677	FieldOCR recognized only the first ROI although the field included multiple ROIs.	The *GetFieldsSettingsFromEfiFull()* API method used only the first ROI. Now it is allied to all ROIs.
25876	After applying the JustICR data source file (JDB), the normal voting method was not working correctly.	The station now resets the character confidence if it is below the recognition threshold.
26210	Some ROIs were not processed during recognition.	Only the 10 first ROIs were processed, due to a data parsing error. The error was fixed.
26284	FieldOCR activity in Advanced mode was much slower than in Default mode.	Improved performance for pages with many ROIs.
26248	The *TemplateName* property was not exposed in FreedomActivity.	Now a new FreedomActivity output argument *Match Learning template* returns the Learning template name for each page.
26363	The Omnipage OCR Engine did not recognize barcode data when applied in the Recognize station, although the data was recognized in Recognition Test.	Fixed the Omnipage wrapper problem.

Issue no.	Summary	Detailed information
26673	No exception handling was applied when PRV creation failed. Thus, some PRVs were missing from collections.	Methods of saving PRD and DRD were improved, and low resource (CPU, memory) handling was added.
26748	Learning took two licenses, and did not release them when closed.	The Learning Manager now actively logs out instead of waiting for the server to log it out.
26830	"Out of memory" exception caused by the Split Collection activity.	The Split Collection activity caused a memory leak.
27024	Manually applied EFI names were cleared after leaving the station.	Manually applied EFI names are now saved.
27024	FieldOCRActivity did not return OCR results.	The *Advanced* mode ignored the original field rectangle.
27155	Some collections were sent to the Reject station after Recognize.	Set additional NULL value checks.
27308	A collection was split into single page collections without the Split activity in the workflow.	The problem was that the Split action metadata was removed from collections that were exported and then imported, and the default action (splitting into 1-page collections) was applied.
27517	The OCE engine was not able to recognize Czech specific characters like ž.	The Kadmos OCR engine converts some of the characters to Unicode.
27575	Asterisks (*) were not recognized as valid characters even if another character was defined as "Unrecognized character" in Visual Designer.	Recognition returned invalid results because unrecognized characters were ignored during voting.
25271	Recognize did not take into consideration the licensed speed of OCR engines.	Incorrect parsing of speed from the license string caused Recognize to ignore the speed of OCR engines.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25808	The Recognize station returned a "System.OutOfMemoryException" exception.	The problem was caused by a memory leak in the Integra activity.
25845	The value of the *args.PageRecognition.PhysicalIndex* property in the *PostPageMatch* event in the Freedom activity was always zero.	Page information was not set properly in the *PostPageMatch* event arguments.
26284	FieldOCRActivity was working slowly.	Improved performance using the activity API.
26302	Images were de-skewed or rotated during the Integra activity, but the Validate station showed the original image.	PRV/TIFF were not updated in accordance with the Integra image enhancements.
26419	The Kadmos OCR engine returned an error during recognition if the ROI was set manually.	ROI info was in some cases not calculated correctly. The problem in FieldOcrBaseActivity was fixed.
27491	An automatically rotated TIF image was not saved in PageOcrActivity.	Fixed the page recognition transformation bug: the *Rotation* property was not saved, as well as other transformations.
27628	Duplicate ROI capturing for some fields.	ROIs were duplicated when their names included field names.
27778	When an ROI contained more than 256 characters, the collection data was corrupted.	The value of *XmlDictionaryReaderQuotas MaxArayLength* was doubled to handle more data.
28087	Error message "No such interface supported".	Set *UseShellExecute = false* when launching a new process.
28113	The FormType activity did not accept variables.	Fixed the serialization and backward compatibility problems in the FormType activity, and removed non-serializable interfaces.

Issue no.	Summary	Detailed information
28253	The OCE engine ignored the mask "0-9A-ZÁČĎÉĚÍŇÓŘŠŤÚŮÝŽ", recognizing also characters that were not defined in the mask.	The OCE engine used ANSII code in the character mask, but ignored the Czech codepage. Fixed by handling the mask properly in the IPE code.

Validate

Issue no.	Summary	Detailed information
23431	Zoom level customization applied on *OnPostGetCollection* did not change zoom levels correctly.	Added a new zoom out ratio setting to the station configuration parameters.
24010	The station crashed when discarding a collection immediately after getting it.	The asynchronous validation caused the station to crash on discard.
24134	After getting a collection, users immediately saw the get-put pop up dialog, allowing them put the collection even with invalid fields.	When there was no layout to display, the **Get/Put** dialog was shown twice, allowing the user to put the collection.
24416	An error was issued when custom code did not allow getting collections.	Preventing the *Get collection* action using custom code was handled as a generic error. Now the station checks the cancellation status before issuing an error.
24509	Rotating an image multiple times resulted in a memory leak and the station crashed.	Garbage collector was not working fast enough to release memory when rotating the image.
24643	When a user wanted to get a new collection after canceling *Put Collection* for the previous one, the previous collection was sent to the server.	The problem occurred when *AutoGetPut* was applied. Now the station checks the status of the previous collection before putting it.

Release Notes

eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
24670	The Validate station was crashing if in *DomainSecurity.xml* the user was not defined as administrator in the *System settings* section.	Client folder access required special permissions. The problem was fixed by adding STS permission attributes to the relevant methods.
24723	A station with many lookup tables sometimes crashed.	The station crashed because lookup tables were opening too many connections. To fix this problem, the connection is closed now after every query.
24793	When the station was configured to import non-TIFF page attachments, it imported only the last attached page instead of all attached pages.	Validate was not able to import non-image file formats as page attachments.
24781	In a tabbed layout, when a single page had fields on two tabs, on one tab the image was rotated, but on the other tab the image was not rotated.	The rotation of the image in tabbed layout was fixed to reflect the same rotation in the image viewer.
24848	An "Insufficient Memory" exception was returned when the layout contained too many images.	Every field has an image viewer linked to it. Every image viewer in the layout held its own copy of the image in the memory. Now image viewers share the same image and Validate uses cache when moving between forms and layouts.
24887	Editing the first table cell was disabled when Form navigation view was open.	Clicking on the cell that is currently the current field is now handled correctly.
24899	Selecting an item from a legacy lookup table resulted in a crash.	The station crashed when the selected lookup item had the same prefix as one of the other items.
25046	When using custom code to change between layouts, switching between one form and another with the TAB key placed the cursor in the wrong field.	The problem was fixed.

Release Notes

eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25105	The image viewer did not properly load the images of the current collection when there were several collections in the queue.	The *PageCount* property in the image viewer was not reset after sending the collection to the server.
25204	Validate sometimes crashed when trying to get a collection with a table integrated in the layout.	An empty field in a layout resulted in an unhandled exception and the station crashed.
25234	Without PRV attachment, the image viewer either did not show the field image or showed the same image for all fields.	When the station was configured to receive PRV and TIFF as attachments, the image viewer miscalculated the shown page number.
25257	Station tooltips were shown in English instead of the local language.	Localized language strings were not loaded correctly.
25258	The station crashed during initialization without any messages in the event log.	The station crashed due to errors in custom events. A try/catch exceptions mechanism was added to prevent this crash.
25291	A duplicated collection did not stop in Validate.	Added *setupName* to serialization to handle the collection duplication properly.
25464	The current collection name was not shown if *Immediate Transfer* was set to *True*.	It is necessary to start getting collections only after the UI loading is finished.
25509	The station crashed when the current form was changed manually.	
25520	The station crashed after navigating through some fields and leaving the station open.	Fixed the Null Reference exception.
25520	An unexplained layout error was written in the log.	The station issued an error or failed to move to the next form if there was an invalid field in the current form.
25606	The station did not take collections automatically, although *Immediate Transfer* was enabled.	*Get collection* action synchronized correctly.

Release Notes

eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25675	While moving between fields with lookups, the station was crashing with an "Out of memory" error.	Each field held a lookup table, and it caused large memory consumption. Now all the fields with the same lookup table share the same table kept in memory.
25780	An "unhandled exception" error was returned when a row was added programmatically to the existing table.	The problem occurred when the table contained only one row and one column.
25861	Loading a collection failed under .NET framework 4.6.	The Windows grid control used by Validate was changed. Now the station uses the new property instead of the obsolete one.
25924	The focus was not set on the first field when switching between tabs.	The wrong field was focused when moving between tabs.
26030	The image viewer did not show any images in *GroupShowAll* mode.	The image bitmap was loaded correctly.
26125	Validate lookup refresh issue: SQL lookup was not refreshed even after reopening the station.	The local table cache was not updated correctly.
26523	After using the *OnKey* event customization to move to the next table row, the user was not able to type in the cell.	Menu items were taking the focus after pressing the ALT key, thus the user was not able to type in the table cell.
26553	Navigation was very slow when the layout contained several SQL lookups and multiple fields.	Improved DB access cache performance.
26682	A discarded collection remained on the client machine causing "double locking".	Fixed Client/Server transactions behavior in the case of exceptions during workflow operations (that is, Create, Get, Put, Discard, Save).
26859	A wrong line was recognized instead of the one that was selected during OCR-on-the-Fly.	*TableOnTheFly* saved the results in the wrong columns.

Release Notes

eFLOW 5.2 SP1

Top Image Systems

Issue no.	Summary	Detailed information
26912	Failed to get collections when using multiple lookup tables.	The problem occurred when the last lookup table update time from the server was NULL.
27246	SQL Lookup: the *queryWhereClause* in the *PreQuery* event did not work.	The *PreQuery* event did not work when LIKE was used.
27411	TIS legacy lookup tables crashed when the user had restricted permissions.	The station attempted to apply system security instead of the application specific security settings.
27583	Lookup tables *Post/PreQuery* events stopped working after some time.	Fixed cache and memory consumption issues in lookup tables.
27583	When using *PreQuery* in lookup, the value was set automatically instead of just showing the values.	Fixed the *PreQuery* filter settings.
27583	An SQL lookup query failed when complex SQL statements were applied by custom code.	Fixed the SQL parser to allow more complex queries in customization.
27643	The Validate station crashed sometimes with an "unhandled exception" error message.	Added error handling for errors during bitmap creation.
27650	When the *AutoGetPut* setting was *False*, an irrelevant pop-up dialog appeared while trying to get the next collection.	The **Put Batch** pop-up dialog was disabled when *AutoGetPut* is set to *False*.
27700	Cannot get collection after applying OCR-on-the-Fly.	The problem occurred when OCR-on-the-Fly was followed by Save, Discard and Get collection actions. Added another check for collection page count.
27762	Lookup tables were working with real tables only, and not views.	The schema name was searched only for the table database objects. A search for the views was added.

Release Notes

eFLOW 5.2 SP1

Top Image Systems

Issue no.	Summary	Detailed information
27826	Issue with validation threads causing a station crash.	A code change was made to prevent a race condition on the validation results.
28093	After switching to JPG view, when the user navigated with the mouse to the next tab, the field ROIs were not set correctly.	Fixed multiple issues with images loading and caching, and also improved performance.
28250	The user was not able to scroll using the mouse wheel in the forms navigation window.	The problem was fixed.
28251	In some cases, after completing few forms, the current form was no longer in the visible area in the forms navigator.	This was resolved by adding a handler that ensures that the current page is visible and scrolls the current form into the visible area when switching forms.
28257	Closing the station did not show the standard Windows behavior.	The window was closed on mouse click, instead of waiting for mouse button release.
28273	The station crashed when dragging & dropping images between forms.	The problem occurred because when the name of a dragged item changed, the key in the item collection did not change. **Note:** This feature is now disabled by default. Use the new station configuration parameter OrganizeEnabled to allow moving images between forms.
28468	The image viewer crashed on the *OnIdle* event.	Added handling for null variables.
28615	**Ready** in the bottom status bar was not translated to the local language.	**Ready** is now translated.
28830	TIS legacy lookup tables issued an error if one of the fields was empty.	The SQL query that resulted in the error was fixed.

Release Notes

eFLOW 5.2 SP1

TIS Top Image Systems

Escalate

Issue no.	Summary	Detailed information
24114	Escalate crashed when hovering over the collection name.	Fixed the collection tool tip error.
24486	Escalate crashed on putting the collection if the last field had a mask.	In cases where the field textbox was small, and the field had a mask, the station crashed when editing the field.
25314	The **SwitchToJPG** button was not shown although *AllowSwitchToJPG* was set to *True*.	Added missing *CommandCaptionSwitchToJpeg* command.
27192	The *OnExiting* event was fired before the *OnEnter* event.	The problem occurred only in the first field of the layout. Fixed by adding checks before firing field events.

Tile

Issue no.	Summary	Detailed information
23431	Customization for tiles zooming level applied on *OnPostGetCollection* did not change zoom levels correctly.	Added a new ZoomOutRatio setting to station configuration to fulfill the need for this feature.
24383	The preview window showed the previous collection instead of the current one.	The preview window now shows the current collection.
25401	The Tile station crashes while processing some collections.	Tile crashed on fields where the character rectangle on the snippet was slightly bigger than the snippet image.
25522	Moving between pages was very slow.	Changed the way the Tile objects are cleared to make it work faster.
25881	The yellow mark for ROI on the image was too big.	The image viewer ROI location mechanism was rebuilt to resolve this issue.

Release Notes

eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25990	The image preview was not focused on the relevant ROI.	Sometimes the vertical character size in the preview image was too small.
25995	The yellow mark on the image preview was not correctly centered on the shown character.	To resolve this issue, the mechanism of image viewer ROI location was rebuilt from scratch.
26117	The status toolbar value did not change during page navigation.	The current character index in the toolbar was not refreshed when moving to the next screen.
26672	Some dialog messages were not localized.	Added localization to station dialogs.
26720	Sometimes empty cells were shown.	If the character was marked as * (asterisk), the character count did not increase, and images were shifted.
27032	The image preview was not focused on the ROI correctly.	Fixed the image viewer ROI location mechanism.
27035	The characters were set for verification in the wrong order.	Added *CultureInfo* parameter to comparison methods.
27483	When navigating to a page with less tiles then the previous one, empty tiles were shown on the new page.	The tiles cache was not cleared properly. Empty tiles are no longer shown.
27698	The station sometimes showed empty cells.	The problem occurred at ZoomOutRation > 1. Fixed.
28248	If the user changed the position of the image, closed the image viewer and re-opened it, the last image position was not saved.	Now the Tile image viewer behaves exactly as it did in previous eFLOW versions.
28249	The image viewer was always shown on top of all the other windows.	Set the *Topmost* window property correctly.

Release Notes

eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
28256	There was regression in Tile paging speed compared to previous versions.	Image width was calculated for each snippet when navigating, even though it was already calculated and held for each snippet.
28257	The station window closed on mouse click, instead of waiting for mouse button release.	Standard Windows behavior was implemented.
28798	Manually identified forms contained empty cells.	The problem occurred because the station did not check if there was an image in the snippet.

Organize

Issue no.	Summary	Detailed information
23692	The station crashed with a "CollectionOrganizer is NULL" error.	Added error handling for cases when a collection was already taken by the station, but the *CollectionOrganizer* object was not set yet.
24310	The selected page view in a re-opened collection still displayed pages that were already deleted.	The memory cache was not cleared after saving the collection. This resulted in the station displaying images that had been modified.
24970	When using PRV, the displayed ROI did not fit the image.	When PRV was used as a main attachment, in certain cases the ROI location was not calculated correctly.
25630	The station displayed forms without a form type, even if *DisplayOnlyFormWithoutFormType* was set to *True*.	This setting worked only for Integra page recognition. Now *AllowPageWithoutEFI* was replaced with *AllowPageWithoutFields*.
26323	The station crashed when selecting filters for collections created by custom code.	When collections were created by customization code, the *TemplateName* property was NULL; now it is an empty string.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25886	The *Insert Chars/Insert Position* methods did not work in the IntegraActivity when *RunFieldOCR* was enabled.	The *FieldEngineOCRHelper* class was added to fix the problem.
26491	The *PageId* property was empty on pages where the EFI was selected manually.	*TisPageData.PageId* now contains the selected EFI name.
27012	Some GUI settings were not saved correctly when the station closed.	Added *IsVisibleClassification* property to control the classification view visibility via custom code.
27315	Memory leak.	The filter cache was not cleared properly.
27669	Keyboard events were not captured when the focus was in the **EFI/Form/Classification** window.	Resolved by adding a keyboard filter to the Organize UI. The function keys are captured and passed directly to the collection organizer, ignoring the hierarchical control events.
28349	The **Put** button was not enabled for forms with no fields even if station filters were set to ignore these forms.	Organize default behavior now is to suppress the validation of filtered forms or pages. If the form or page is not visible in the UI, it will not be validated.
28420	The following message appeared as an error in the log: "Form bad parameters (no fields in group)".	The message severity was changed to Debug.
28444	Sometimes when it was needed to focus the view by the custom code, the edit box did not get the focus.	Organize commands were not fired when windows were docked.
	Put collection was very slow after rotating the image.	Restored C++ logic for image rotation.

Release Notes
eFLOW 5.2 SP1

Dynamic Template

Issue no.	Summary	Detailed information
24078	Changing the location of one ROI moved all other ROIs after discarding.	While moving the ROI, the wrong image type was loaded. To fix the problem, the PRV image type was replaced by the TIFF image type.
24450	An attempt to get a collection while there were no collections in the queue resulted in the station crashing.	The issue was resolved by checking whether the queue is empty before attempting to get collections.
24886	Sometimes when processing a collection in Template Build (Free Build), the station issued a "System.NullReferenceException".	Fixed a bug in serialization of the empty rectangle data.
25287	Dynamic Template was not learned after the Collect Free station.	Improved the Dynamic Template learning model.
25598	The DynamicTemplate activity crashed when processing a blank page.	The service now checks if the page is empty before it starts processing.
26248	The *TemplateName* property was not exposed in the FreedomActivity.	A new FreedomActivity output argument *Match Learning template* returns the Learning template name for each page.

Deliver/Deliver2ERP

Issue no.	Summary	Detailed information
25191	The XSL transform requested format was not affecting the exported XML file.	The transformed data was not serialized and passed out from the Export Formatter, which resulted in ignoring the requested output of XSL transformation.
25560	The Deliver station created XML files using ANSI encoding instead of UTF-16 encoding.	The exported XML is now created and encoded as requested.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
25867	One running instance of Deliver2ERP counted as two instances in License management.	Removed the license feature usage increment.
26528	The encoding of the created XML file was not one that was defined in XSL file.	All transformed files are saved now with actual encoding by reading the XML of the transformation output and using the encoding specified there for saving the file.

Custom Station

Issue no.	Summary	Detailed information
24477	Set eFLOW *Bin* as the default folder for the custom station if the path is not defined in Design.	Now eFLOW checks that the custom station path is valid, and if it is not, it attempts to load the custom station from the eFLOW *Bin* folder instead.

Web Validate/Web Front Office

Issue no.	Summary	Detailed information
28495	Web stations were not able to get large collections.	Handling large collections (100 pages and more) was not supported by the web stations.
28494	Web stations were not able to retrieve error messages from the server side.	Added the ability to pass a message to the client from custom events.
28492	Custom layout switch did not work in Web Validate and Web Front Office.	Resolved by allowing the user to switch between layouts per form and not just per form type.
26165	Field image viewer modifications.	The image viewer at field level behaves as a simple image viewer with disabled scrolling and zoom.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
26403	Toolbar commands stay blocked when WebValidate has already taken the collection.	The toolbar is designed to be blocked when a blocking action (for example, the transaction) is in progress. Each image viewer starts a transaction to get the image from server. The problem occurred due to some race condition scenarios when the image viewer started a transaction even though it already had the image. To fix the problem, the amount of image viewer transactions was decreased by sharing cached images across all image viewer controls.
26593 28532	Web Validate was extremely slow to load documents with many table rows.	The station performance was improved with the help of various code changes. For example, all table cells computed styles were inserted to the DOM at once; the *ko.mapping* library was replaced by another implementation; layouts are now switched without sending the collections to the server.
26676	Web Validate did not properly display lookup tables that had to be applied to several fields.	Now a lookup item is updated in accordance with the previous one.
26709	Web stations showed an "unexpected error occurred" message, without providing any useful information.	Now it is easier to identify the error, and more information about the error reason is logged. The possibility to disable the display of unexpected errors was also added.
26759	When a new table row was added in Web Validate, the exceptions were copied from the existing row to the new one.	
26913	New table rows in Web Validate were created without pre-defined validations.	Fields were not validated correctly on creation.

Release Notes
eFLOW 5.2 SP1

Issue no.	Summary	Detailed information
27531	The image viewer was losing the zoom in Web Validate while changing the field.	The problem occurred because one of the mentioned fields had no pageIndex, so the image viewer was jumping to page 0. Now, if there is no pageIndex on the newly selected field, the page is not switched.
27714	After a batch was processed in the WebValidate station, it could not be opened in desktop Validate.	
28855	Web Front Office and Web Validate did not save form level user tags.	The problem was that user tags were not stored together with collection data.

Known Issues

Installation

Problem

The error message *Microsoft Visual C++ 2015 Redistributable Setup Failed* is shown sometimes during the eFLOW installation.

Reason

The problem occurs on machines with Visual Studio 2015 installed, due to C++ redistributables incompatibility.

Workaround

You can ignore this error and continue with installation.

Recognize/Design Flow

Problem

An error occurs: *Unable to Load DLL "Freeform DLL" when running Recognise or Design Flow*.

Reason

The problem occurs when the Microsoft Visual C++ 2005 Redistributable is not installed correctly.

Workaround

Check that all Windows Updates are applied and reinstall the Visual C++ 2005 Redistributable. If the problem persists then you may need to follow manual instructions for the Redistributable installation.

TIS Fuzzy Server

Currently, the eFLOW server *web.config* file contains the following default TIS Fuzzy Server configuration:

```
<endpoint address="http://localhost:55333/TisFuzzyApp/TisFuzzyService.svc" binding="basicHttpBinding" con-
tract="TiS.TisFuzzyService.ITisFuzzyService" name="TisFuzzyService_BasicHttp"/>
```

After installing TIS Fuzzy Server, it is necessary to update its address manually on the eFLOW server.

Control station

Problem

Sometime in the Control station, you cannot see the collections in the station queue or drag collections into the queue.

Reason

The eFLOW application workflow definition is corrupted.

Solution

1. Open the Design module and click the **Workflow Designer** button .

2. In the workflow window, click on any station, then in the **Options** menu, select **Display node label**.

3. Change the existing **Caption** property, or add a value if the property is empty.

4. Save your changes.

Known Issues Under Investigation

The following non-critical issues have been reported and are still under investigation. Where appropriate, hotfixes will be provided.

Issue no.	Description
29040	OCR engines randomly stopped giving results under specific conditions.
27155	Recognize: Collection goes to Reject station after running in Recognize station.
28547	Recognize: Collection is sent to Reject station, and its number of forms is doubled.
29358	Deliver2ERP shows an error: *A problem occurred while creating the shared memory segment*.
29404	A2IA Engine not returning spaces.
28401	Deliver Database exporter: When selecting a form to see the fields, the list of fields is not filtered.

Issue no.	Description
29383	Deliver: Database exporter is not working.