CORNING

ETQ Import Spreadsheet Checker

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Hi everyone. My name is Tom Gee and today I'd like to present to you some of my rapid implementation utilities and tips that have helped me personally deploy dozens of modules as well as multiple implementations of Reliance.

Reliance "import" spreadsheets

- Reliance supports mass-document/record creation by filling out an import spreadsheet and having a system Administrator load the file into the application.

- Each column in the import spreadsheet corresponds to a data field on the respective form in Reliance.

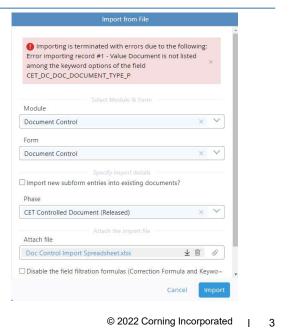|	A	B	C	D	E	F	
1	DC_DOC_CI_LEGACY_DOC_NUMBER_D	DOCWORK_TITLE	ETQSREVISION	DOCWORK_ATTACHMENT_D	DC_DOC_CI_DOC_ADMIN_D	DC_DOC_CI_DOCUMENT_TYPE_D	DOCWOR
2	Document number of existing/legacy document. *This field is optional.*	Required text, please enter the document title.	Required number, please enter the revision.	Enter the *complete* file name for the file, including the file extension. The accuracy of this field is critical to import the specific file into EtQ.	Please enter Group name of the Document Administrator.	Please enter the Document Type ID	Please en This colum
3	LL-MRD-20001	Vacation Request Policy	1		CGM-Goleta Doc Admin	Policy	EtQAdmi
4	LL-MRD-20002	80167 Glass Wafer Specification	1		CGM-Goleta Doc Admin	Material Specification	EtQAdmi
5	LL-MRD-20005	HF1 Job Change	1		CGM-Goleta Doc Admin	Work Instruction	EtQAdmi

Another powerful feature that Reliance supports to help expedite implementations are import spreadsheets.

These can be very helpful to plan the setup of all of your users and groups in a single Excel file, and the records can then be imported, in bulk, into Reliance.

In addition to setting up users and groups, import spreadsheets can also be used for importing bulk records into every single module in Reliance. As we migrate away from legacy applications and processes, and replace them with solutions in Reliance, our ability to import the historical data, by using the import spreadsheets, has been integral to the success and adoption of Reliance across Corning.
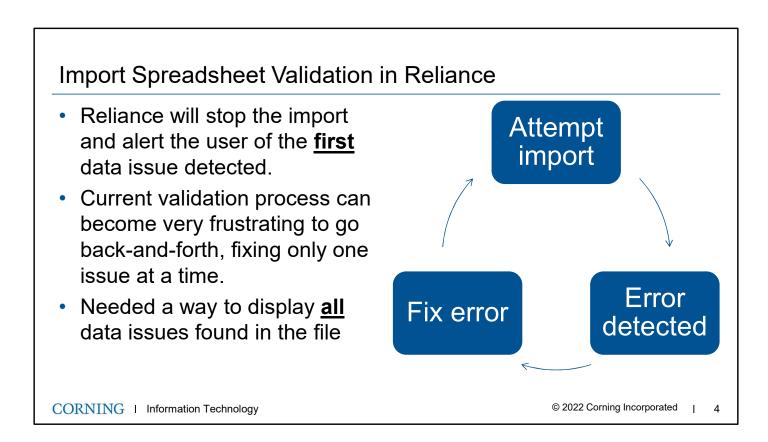
Import Spreadsheet Validation in Reliance

- Reliance will stop the import and alert the user of the **first** data issue detected.
- Current validation process can become very frustrating to go back-and-forth, fixing only one issue at a time.
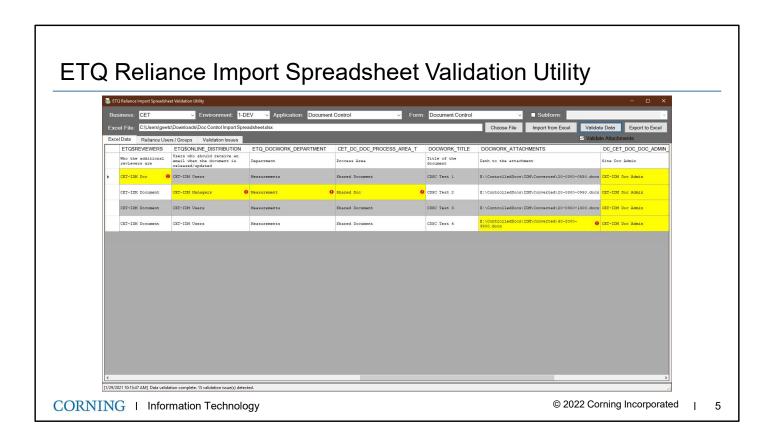- Needed a way to display **all** data issues found in the file

While the import spreadsheet functionality is extremely powerful, it comes with one major challenge, and that is data accuracy. For example, if you are trying to import a list of controlled documents into Reliance, you typically have a number of fields that are bound to either a keyword list or a User or Group name list in the system. As a result, if you have any typos in your file, or values in the spreadsheet that do not match an allowed value in the system, the entire import will fail, and you are notified of the first error, and only the first error, that was detected in the file.

Import Spreadsheet Validation in Reliance

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- Needed a way to display **all** data issues found in the file

Attempt import

Error detected

Fix error

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This can be very frustrating if you have a lot of data issues in your file, because of the amount of time spent going back-and-forth between the spreadsheet and to re-run the import process after fixing one issue at a time.

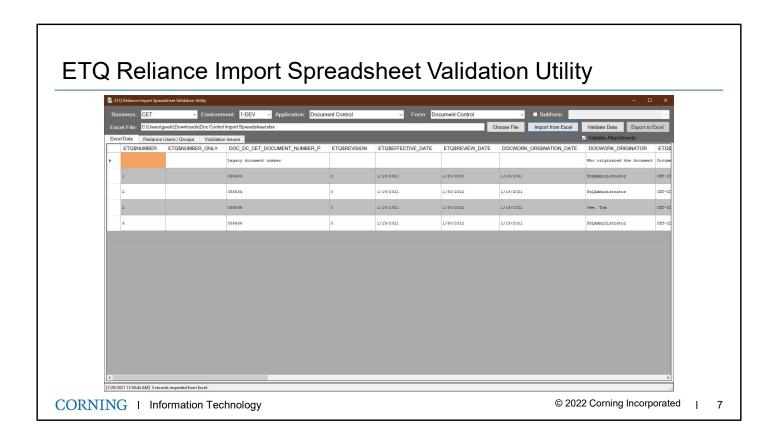# ETQ Reliance Import Spreadsheet Validation Utility

Therefore, I developed a dynamic import spreadsheet validation utility that shows me ALL of the data-related issues in my spreadsheet *before* I try importing it into Reliance.
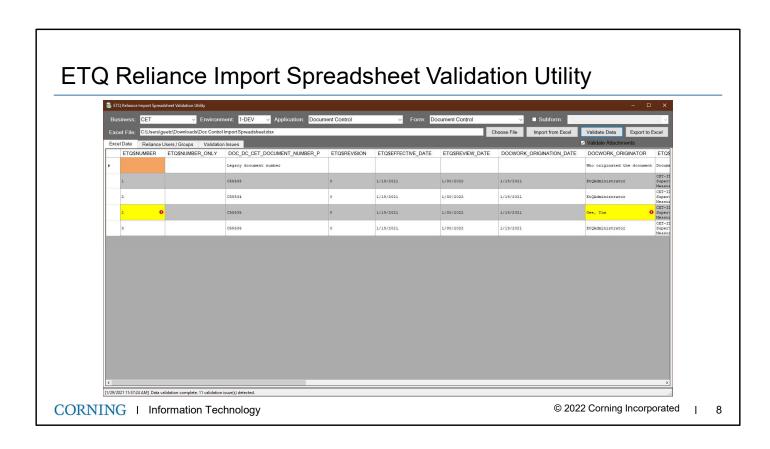
I also built this application so that it would work against *any* of our 8 Reliance implementations, and against any environment, be it Dev, Test, or Production.

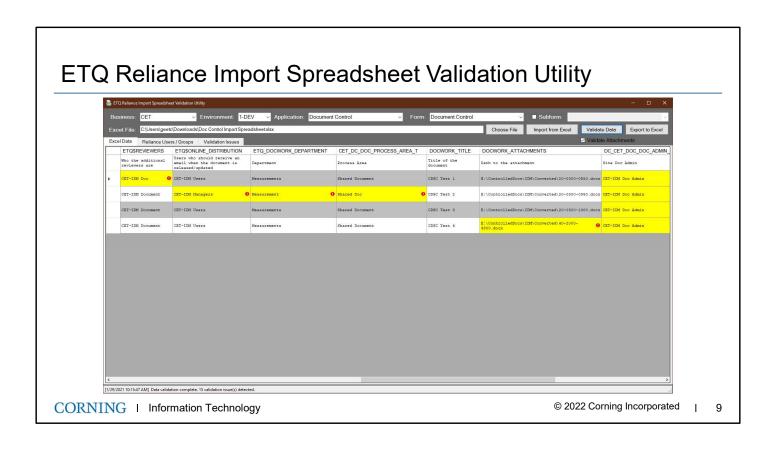# ETQ Reliance Import Spreadsheet Validation Utility

When starting the application, the user simply selects the desired business and environment. Next, the application connects to the backend SQL database for the selected Reliance environment, and retrieves the list of modules, forms, and subforms available. After choosing the related Application and Form, the user would select the Excel file they wish to validate and import the values from the spreadsheet directly into a data grid within the application.

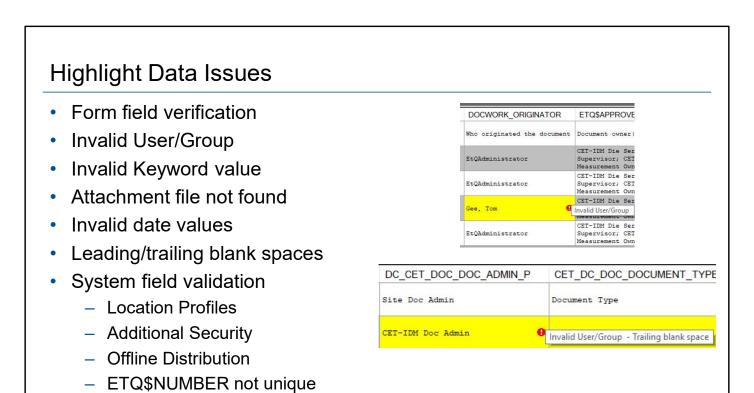# ETQ Reliance Import Spreadsheet Validation Utility

Once the validation process begins, the utility iterates through every single column in the import spreadsheet, one at a time, and checks the Reliance system tables to determine the type of field, and as well as the allowable values for the related field. The application then iterates through every row in the column, and compares the value entered against the allowable values in Reliance.

ETQ Reliance Import Spreadsheet Validation Utility

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For example, if it's a dialog or combobox field, the program pulls the list of allowable values from the related Master Keyword List in Reliance.
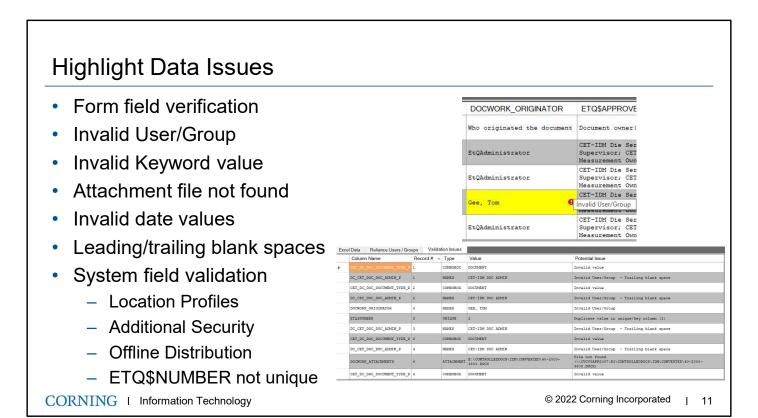
ETQ Reliance Import Spreadsheet Validation Utility

If it's an attachment field, the application actually verifies if the file exists on the remote application server.

Highlight Data Issues

- Form field verification
- Invalid User/Group
- Invalid Keyword value
- Attachment file not found
- Invalid date values
- Leading/trailing blank spaces
- System field validation
  - Location Profiles
  - Additional Security
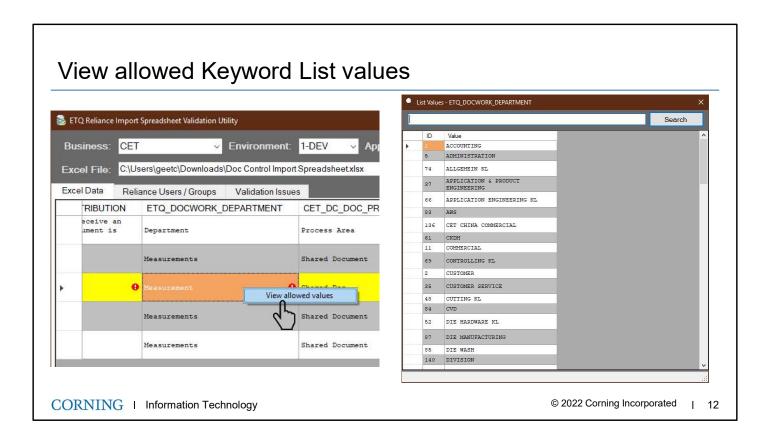 - Offline Distribution
  - ETQ$NUMBER not unique

Any data issues that are detected are automatically highlighted in the data grid with a pop-up description of the issue. If an issue is detected, I perform an additional check to see if there might be a blank space at the beginning or end of the value, and pass that information back to the user.

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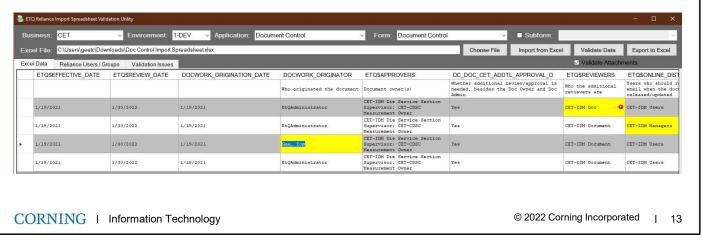 - Offline Distribution
  - ETQ$NUMBER not unique

In addition to highlighting detected issues in the data grid, I also included a consolidated "Validation Issues" report within the application that summarizes all issues identified, including the row and column where the error was detected.

View allowed Keyword List values

Furthermore, in an effort to expedite data-corrections, if an issue was detected with a dialog, combobox, or names field, the user can right-click on the cell and display a searchable list of the allowed values defined in Reliance for that field.

Editable Data Grid

- Make corrections directly in data grid
- Re-run validations against updated data grid values
- Export data grid contents to Excel

The data grid inside the application not only displays the values from the Excel file, but it also allows the user to make edits to the values directly in the grid. This makes corrections faster because you can make your updates within the program and then re-run the validations to see if it resolved the issue.

Once everything has been corrected, the user can simply click the Export to Excel button to save an updated copy of their import spreadsheet.

GitHub source code: [corning-incorporated/ETQImportSpreadsheetChecker: Utility to validate all of the values in an import spreadsheet before attempting to import the data into ETQ Reliance. (github.com)](github.com)