

# 3E Cloud

## Data Access and Integrations Information Guide

# Contents

- Contents..... 2
- About this document ..... 3
  - Intended readership..... 3
  - In this guide ..... 3
  - Where to find more information ..... 3
- How 3E Cloud Addresses Data Access ..... 4
- Data Access..... 5
  - User Interface ..... 5
  - 3E Reporting..... 6
  - Advanced Financial Solutions ..... 7
  - 3E Data Insights ..... 8
- Integrations ..... 9
  - Data Loads ..... 9
  - Elite Service Bus..... 10
  - Stock Integrations ..... 12
  - Custom Integrations..... 14

## About this document

### INTENDED READERSHIP

This guide is intended for current and potential customers who have technical roles such as CTO, IT Director, and the like.

### IN THIS GUIDE

Accessing and interacting with data is essential in order for you to carry out your daily tasks and to make informed business decisions. 3E Cloud provides various methods for you to access and integrate with your critical business information.

This guide discusses how data can be accessed in 3E Cloud across its portfolio solutions, and ways the offering can be integrated with to provide further interaction with this information. Among the topics covered in this guide are:

- Data access methods
  - Including our reporting tools
- Integrations
  - Including data loads, imports, and exports
  - Stock integrations
  - Custom integrations

### WHERE TO FIND MORE INFORMATION

If you are an existing customer, you can find more information about 3E Cloud in our Knowledge Base. To access it, navigate to <https://customerportal.elite.com/> and select the **Knowledge Base** option.

## How 3E Cloud Addresses Data Access

There are many methods available to get value from your 3E data with the friendlier, lower maintenance, and more secure approach of 3E Cloud.

The 3E product suite provides capabilities for data access through secured channels of REST-based APIs, file-based ETL (Extract, Transform, & Load) integration, direct export from the user interface, and advanced data analytics capabilities through 3E Data Insights and Advanced Financial Solutions.

Enabling direct access through secured channels allows you maintain and secure your data with granular control providing flexibility, speed, standardization and security across all methods of access. Real-time Monitoring and auditing allow both quick reactions to momentary events and validation of secure access models.

Another benefit of a SaaS solution is that it eliminates your need to have advanced database expertise. Our API endpoints are based on the 3E Process/Object model which simplifies the aggregation and interrogation of 3E data. For example, the Matter API brings together data from 26 database tables, organizes the data, and presents it through a single endpoint for easy utilization of core matter data.

The comprehensive solution of 3E Cloud enables firms to gather and present their data through a wide variety of methods to solve the interoperability needs that commonly arise.

This document provides an overview of these data access and integration methods.

# Data Access

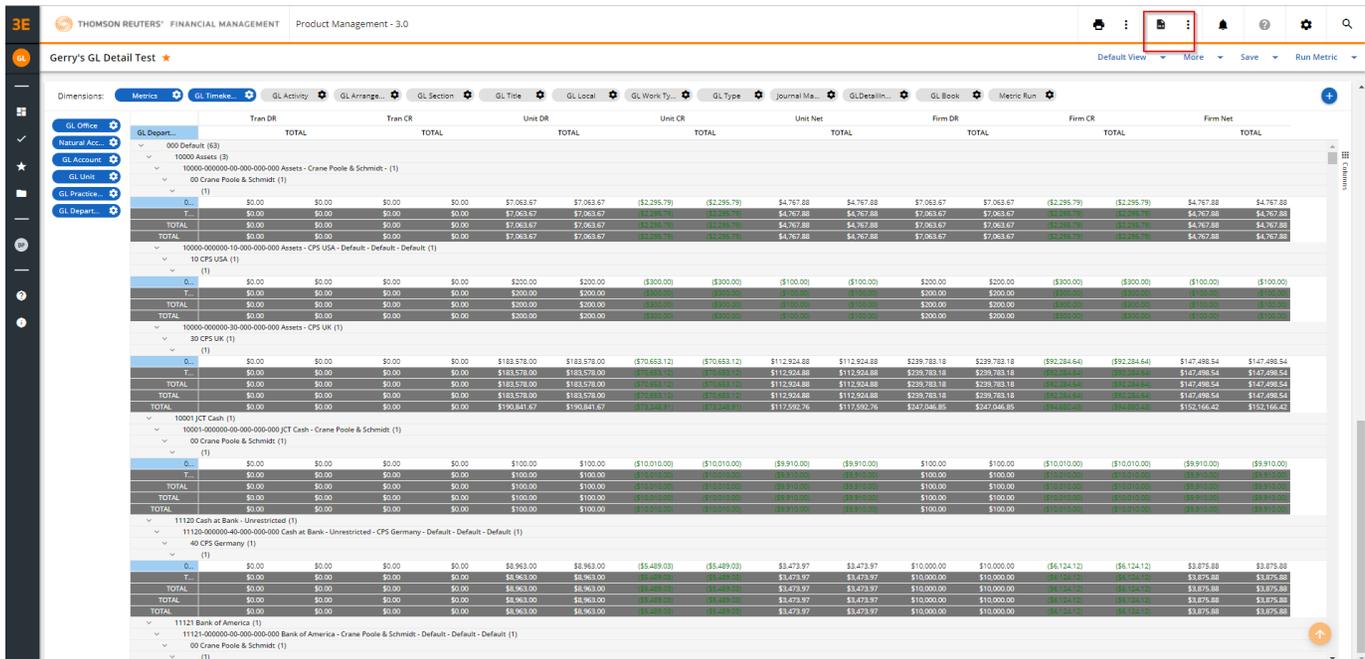
This section describes the different methods that can be used to access your data in 3E Cloud.

## USER INTERFACE

The primary way customers interact with their business information is via the user interfaces of the 3E Cloud applications. In addition to general application usage, the following describes specific data interaction capabilities within the product.

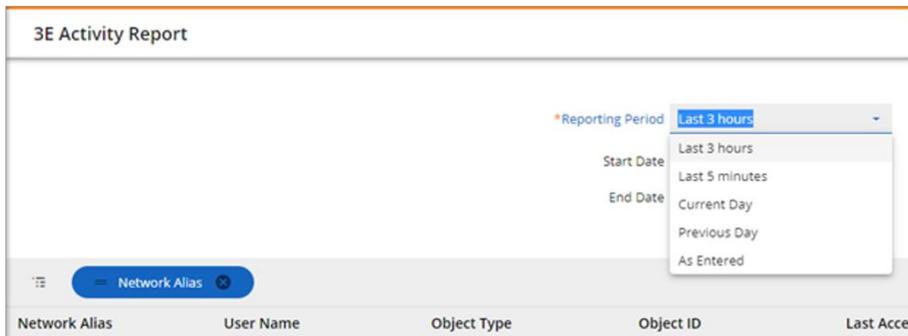
### Export to Excel

3E Cloud offers the functionality to directly export data from Process Pages, Standard Reports, and Metrics to a Microsoft Excel file format.



### Activity Logs

In addition, Activity logs can be viewed from within the 3E application. Users with appropriate permissions can access the 3E Activity Report to get information regarding specific logins and processes. They can then expand any of the users and get a detailed list of the process/actions they have selected, including Network Alias, User Name, Object Type, Object ID, Last Access Time, Object State, User's actions info, and Server Name.



## 3E REPORTING

The easiest way of accessing data in 3E Cloud is via our reporting tools.

3E provides built-in reporting for a number of areas:

- Administrative reports are available in 3E Cloud, including:
  - Attachments Finder
  - Health Monitor
  - Open Processes
  - Security
  - Users by Role
- Many reports and listings are provided for the billing functionality. For example, one report displays the daily cash receipts for a specified timekeeper, grouped by client and matter. Another report displays the WIP detail for a specified client.
- The intake process has a number of reports. One such report displays entity details, and can be used to assist in resolving duplicates during conflict searches.
- Among the accounts payable reports and listings are the Cash Source report, which displays information about the source for cash transactions, and the Check Detail listing, which displays detailed information for checks, including check totals, grouped by bank.
- Bank reports and listings provide information about bank accounts, bank groups, cash journals, and the reconciliation process.
- Metrics
- Presentations
- Dashboards
- Inquiry processes
- Queries/Worklist (and export of same)

### Standard Features

3E reporting contains the following standard features:

- A WYSIWYG report design environment:
  - Flexible field and record selection
  - Completely customizable grouping, sorting, sub-totalling and formatting
- Ability to create virtually any form of standard report, including:
  - Cross-tab
  - Conditional
  - Drill-down
  - Top N
  - Summary
  - Form
  - OLAP
  - Linked sub-reports
- Presentation and interactivity options to include:
  - Charting
  - Mapping
  - Grouping
  - Sorting
  - Alerting
  - Dynamic field highlighting
  - Running totals
  - Hyperlinks
  - Drill-down on relational and OLAP data
  - Parameter prompts and/or other forms of parameter passing
- Ability to create and apply reusable custom functions as necessary
- Ability to export reports in a variety of formats, including:

- XML
  - PDF
  - HTML
  - Excel
  - Word
  - Text
- Ability to support guided navigation by creating paths between report objects in the same or different reports.
  - Implementation of extensible Windows-based and zero-client viewers
  - Implementation of efficient, i.e., multi-threaded, processing architecture
  - Unicode support, including the ability to display multiple languages in a single report
  - Ability to support on-demand, scheduled and event-driven reporting

**Advanced Features**

3E Reporting contains the following advanced features:

- Ability to define and apply tree-like hierarchies to views of the data, for rollup and other summarization.
- Ability to recognize and respond to 3E effective dates for more relevant historical reporting
- Ability to support workflow applications (i.e. electronic routing)
- Ability to support complex distribution, including segmentation of reports (i.e. electronic bursting & routing)
- Ability to support collaborative applications (i.e. electronic annotation)
- Ability to persist some or all report objects in the form of links to text, images etc.
- Implementation of a flexible API for enhancing basic functionality in report generation and viewing
- Abstraction of the system’s data model to permit report generation by staff focused on business processes, report layout and audience scope.
- Persistence of generated reports in a format that allows user edits
- Support of the overall 3E security model
- Ability to support complex specialized reports such as checks and bills
- Ability to launch 3E processes from hyperlinks
- Ability to save a report into a document management system
- Ability to store data related comments from one report generation run to another.

**ADVANCED FINANCIAL SOLUTIONS**

Advanced Financial Solutions is a suite of four Microsoft Excel-based solutions designed to provide better visibility into your firm’s productivity, efficiency, and profitability.

3E TRANSACTION DETAIL											
Year: 2019   Period: 12   Currency: US Dollar   GL Book: Cash   Value: Month to Date   Calendar: Ending December   Natural: Cash In Bank - Operating account in USD   Office: New York   Unit: United States   Local: Non-unique description   Timekeeper: Default Timekeeper   Department: Default											
ALIAS	GL DESCRIPTION	GL DETAIL INDEX	DESCRIPTION	TRANSACTION DATE	POST DATE	TRANSACTION AMOUNT	TRANSACTION CURRENCY	FIRM AMOUNT	FIRM CURRENCY	UNIT AMOUNT	UNIT CURRENCY
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	40992	LevelCloud, 166	12/17/2019	12/17/2019	(5,000.00)	USD	(5,000.00)	USD	(5,000.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41009	Nations Lyndsey, 167	12/17/2019	12/17/2019	(600.00)	USD	(600.00)	USD	(600.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41051	Bernalillo County Metropolitan Court, 62	12/17/2019	12/17/2019	(500.00)	USD	(500.00)	USD	(500.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41076	Dion's Pizza, 168	12/17/2019	12/17/2019	(300.00)	USD	(300.00)	USD	(300.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41180	Nations Lyndsey, 169	12/19/2019	12/19/2019	(1,000,000.00)	USD	(1,000,000.00)	USD	(1,000,000.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41186	GIE Example Do Not Create Cash Journal Example	12/19/2019	12/19/2019	0.05	USD	0.05	USD	0.05	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41332	Secure	12/23/2019	12/23/2019	(100,000.00)	USD	(100,000.00)	USD	(100,000.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41285	Staples, Inc. 1000008 <Aggregated Desc>	12/23/2019	12/23/2019	(97,691.00)	USD	(97,691.00)	USD	(97,691.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	55390	Created through Bank Reconciliation.	12/23/2019	12/23/2019	(80.00)	USD	(80.00)	USD	(80.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41348	Byers Matthew, 170	12/24/2019	12/24/2019	(2,100.00)	USD	(2,100.00)	USD	(2,100.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41384	Byers Matthew, 171	12/24/2019	12/24/2019	(100.00)	USD	(100.00)	USD	(100.00)	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41342	IC IX Example	12/24/2019	12/24/2019	75,000.00	USD	75,000.00	USD	75,000.00	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41421	<RptCost><7337><552><10013-006><1014><SCost>	12/31/2019	12/31/2019	18.20	USD	18.20	USD	18.20	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41423	<RptTime><3317><131><10013-003><1014><Fees>	12/31/2019	12/31/2019	95,355.00	USD	95,355.00	USD	95,355.00	USD
10010-11-10-00000000-0000-000	Cash In Bank - Operating account in USD - New York	41425	<RptChrg><258><568><10013-001><1014><Fees>	12/31/2019	12/31/2019	109.00	USD	109.00	USD	109.00	USD
<b>TOTAL</b>								<b>(1,035,888.75)</b>		<b>(1,035,888.75)</b>	

One of the solutions is Advanced Financial Reporting, which enables you to analyze and compare your organization’s financial data. The following reports are available:

- Comparative Balance Sheet by Account Type or Account Class
- Comparative Income Statement by Account Type or Account Class
- Trial Balance by Account Type or Account Class
- General Ledger Summary

- Transaction Detail

With the Budgeting & Forecasting solution, you can do the following:

- View summary data and identify monthly trends in the annual budget
- Manage and plan for capital expenditures and depreciation
- Perform what-if analysis on different budgeting scenarios
- Drill down summary values to view cost breakdowns and transaction-level details

You can use Cost Accounting to generate accurate cost rates by leveraging direct and indirect cost data.

Partner Compensation & Accounting produces reports that help you manage compensation for the firm's leadership, as well as view year-end financial data for partners.

### 3E DATA INSIGHTS

In combination with Microsoft Power BI Desktop, 3E Data Insights users can create interactive and drillable reports, without needing to write any code. The available reports include:

- Client Summary
- Matter Summary
- Billing Timekeeper
- Originating Timekeeper
- Firm Insights

#### Data Insights Datamart

We recognize that customers may still wish to access their data to satisfy a number of additional reporting needs.

To meet this need, Thomson Reuters can provide an OData API to the Data Insights Datamart (requires Data Insights). When Data Insights is enabled, customers can take advantage of this API to access data for reporting needs, including SQL Server Reporting Services (SSRS), other data warehouses, Power BI, Excel, and many other use cases.

There are numerous opportunities within the Data Insights Data Warehouse Console, to transform reporting data into a database view and use the API to extract that data with an OData connector for delivery to the receiving application.

The API exposes the Data Insights Datamart tables and views, while providing OData endpoints to the client user(s) to connect to the Data Insights Datamart.

For more information and to request access to the Data Insights API, visit the following website:

- [3E Data Insights API: \(https://developerportal.thomsonreuters.com/3e-data-insights-api\)](https://developerportal.thomsonreuters.com/3e-data-insights-api)

## Integrations

Integrations are ways of connecting information and applications with 3E Cloud. They provide a means of enabling new functionality by integrating different systems, their datasets, and other information, together to improve overall productivity and efficiency.

### DATA LOADS

Data load functions are provided in 3E Cloud to facilitate simple data integration from an importing standpoint. The following data loads are available from within the user interface:

Data Load Type	Description
<b>Timekeeper Rate Load</b>	This process is an easy option for inserting large volumes of new Timekeeper rates and/or Effective Dated records or update existing ones, typically done at year end. Additionally, the process can be used to add new rows on the grid.
<b>Rate Exception Group Load</b>	This process is an easy option of loading all exception rate changes and additions (with detail records) that typically occur at year end. The load will insert new records or update existing records with changes. The load is done via a .csv file.
<b>Rate Exception Load – Client Maintenance</b>	In the same process, there is an option to load the Client Exception Rates. A separate .csv file allows the user to then load a list of Clients to assign the new or updated Rate Exception Groups. Note: You can load Client and Matter Exception Rates together in one .csv file.
<b>Rate Exception Load – Matter Maintenance</b>	In the same process, there is an option to load the Matter Exception Rates. A separate .csv file allows the user to then load a list of Matters to assign the new or updated Rate Exception Groups. Note: You can load Client and Matter Exception Rates together in one .csv file
<b>Conflicts Search Names</b>	Allows the loading of a file containing search names for use in 3E Conflicts.
<b>Conflicts Search Terms</b>	Allows the loading of a file containing search terms for use in 3E Conflicts.
<b>Conflicts Related Party Links Bulk Add</b>	Allows the loading of a file containing Related Party links for use in 3E Conflicts.

## ELITE SERVICE BUS

The Elite Service Bus (ESB) is 3E's file-based ETL (Extract, Transform, & Load) integration solution for the importing and exporting of data. Many data level integrations can be created for 3E Cloud via ESB.

The generic type load configurations were introduced to simplify and expedite common customizations into generic type configurations achievable directly within the 3E ESB user interface. This simplicity, along with the need to restrict access to a managed cloud infrastructure, makes ESB generic loads the right solution for many data import needs.

The screenshot displays the 3E ESB user interface. At the top, there's a navigation bar with the 3E logo and 'THOMSON REUTERS® FINANCIAL MANAGEMENT'. Below this, the main header shows 'ESB Integration Configuration' with a search icon and a 'Worklist' dropdown. A table lists configurations with columns: Code, Description, Version, Notification Role, 3E Web Service URL, Enable Email, and Email On Failure. One configuration is visible: '1 Standard - Generic - CostL...' with version 2.7 and URL 'http://[3E Instance]/WebUI...'. Below the table, there's a section for 'BIZTALK IMPORT CONFIGURATIONS' with a count of 1. The main content area is titled 'Generic Flat File Import Configuration' and contains an 'Import File Mapping (8)' table. This table maps import fields to 3E fields, including fields like 'Matter Number', 'Cost Type', 'Date', 'Quantity', 'Rate', 'Total Charge', 'Timekeeper ID', and 'Narrative'.

The following is a listing of the ESB (generic type) sample configurations available to use as a starting point. Additional ESB generic configurations can be created if needed as part of a services engagement.

Load / Export	Standard ESB Generic Load Name	Notes
<b>Cost Load</b>	Standard - Generic - CostLoad.L2 PTA	
	Standard - Generic - CostLoad.L2	
	Standard - Generic - CostLoad.Equitrac	
	Standard - Generic - CostLoad.Equitrac PTA	
<b>Time Load</b>	Standard - Generic - TimeLoad	
	Standard - Generic - TimeLoad With PTA	
<b>General Ledger Budget Load</b> - Version - Amounts - Lines	Standard - Generic - GL Budget Version	
	Standard - Generic - GL Budget Amounts Load	
	Standard - Generic - GL Budget Lines Load	
<b>General Journal Load</b>	Standard - Generic - Excel General Journal Load	

<b>Currency Load</b>	Standard - Currency.OANDA	
<b>Matter Load (create and update)</b>		ESB Generic Excel Trainable Solutions - requires specific instruction from Services, but no technical development
<b>Client Load (create and update)</b>		ESB Generic Excel Trainable Solutions - requires specific instruction from Services, but no technical development
<b>Timekeeper Load</b>		Excel format, assumes entities exist in 3E
<b>Lock Box</b>		ESB Generic Excel Trainable Solutions - requires specific instruction from Services, but no technical development
<b>Voucher Load</b>	Standard - Generic - Excel Voucher Load (Excel XLSX)	
<b>Timekeeper Objectives Load</b>	Standard - Generic - Excel Timekeeper Objectives Load	Excel format, into Objectives Setup 3E process. Once data is loaded, use Objectives Metric to set up report to view data
<b>Search Names</b>		A sample configuration is not included but is supported via the generic load for names contained in an Excel document
<b>Bank Statement (Single Column and Debit/Credit Columns)</b>		A sample configuration is not included but is supported via the generic load bank statements contained in an Excel document and based on the ESB BankStmt.Excel3E.Amt.DebitCreditColumn configuration
<b>Records Inventory</b>	Standard - Generic - Records Inventory	Excel format
<b>Conflicts Sanctions List (OFAC, UK HMT)</b>	Standard - Generic - Excel Sanction Load	The "Standard" ESB configuration is supported with 3E Cloud. The ability to configure the sanction load configuration via a "Generic" ESB configuration
<b>Client Export</b>	Standard - Client Export	
<b>Matter Export</b>	Standard - Matter Export	
<b>Timekeeper Export</b>	Standard - Timekeeper Export	

<b>Non-parameter-based exports</b>		Static XOQL statements only (e.g., select A, B, C from a table where Z is true; no substitution of the Z value for Y)
<b>GL Accounts Export</b>		Generic Flat File added to support Chrome River
<b>Paid Vouchers Export</b>		Generic Flat File added to support Chrome River
<b>Chrome River Expense Load</b>	Standard - Generic - Chrome River Voucher Load	Specialized ESB load to support common load formats from Chrome River
<b>Australia / New Zealand Region Specific Bank Statement Loads</b>	Standard - Generic - NAB Connect Load Standard - Generic - BAI2 Load Standard - Generic - Westpac Connect Load Standard - Generic - ANZ Transaction Load	Region-specific Bank Statement Loads to help support Australia and New Zealand
<b>Belgium / The Netherlands (coming soon)</b>	Standard - Generic - MT940 Load	Region-specific Bank Statement Load to help support Belgium and The Netherlands

## STOCK INTEGRATIONS

This section describes the integrations that are available out of the box with 3E Cloud.

### eBillingHub

eBillingHub is the leading electronic billing solution designed specifically for law firms. eBillingHub is tightly integrated into the 3E Cloud framework. Proformas can be validated against a set of rules and submitted to eBillingHub. Once you have completed your edits and billed your proforma, you can go into invoices. The status management process enables you to track invoices through to the vendor.

The following is a list of processes updated:

Set\System Options: Three new fields are available

Validation of Time\Cost cards in the following processes

- Time: Workspace, 3E Time Entry, Time Modify, Proforma Generation, and Proforma Edit Time
- Cost: Proforma Generation and Proforma Edit

Validate Proformas

- Proforma Generation
- Proforma Edit

Invoice Submission

- Proforma Edit
- Proforma Submission
- Proforma Resubmission
- Bill Submission

- Invoices Process
- EBH Status Management

Invoice Status\Tracking

- EBH Status Management
- Invoices Process

EBH Arrangement List

EBH Electronic Mapping

Client and Vendor Synchronization

- EBH Client List
- EBH Vendor

Extended Fields Synchronization

Invoices Status Synchronization

- EBH Invoice Status List

EBH Integrity Health Check

Collections:

- Invoice Status\Tracking

This integration requires additional configuration and setup. For more information, see the Knowledge Base article #TR-18661 entitled '3E EBilling Guide'.

### Chrome River

3E Cloud includes an integration for the Chrome River expense management system. The Chrome River integration offered is via a combination of common exports and specialized ESB generic loads.

Timekeepers, offices, matters, and other 3E entities can be exported from 3E Cloud to Chrome River. Firms can run the exports manually or automatically.

Vouchers can also be imported into 3E Cloud from Chrome River.

### iManage DMS

3E Cloud provides integration with an iManage On-Premises or iManage Cloud (dedicated database version) repository. **(Coming soon)** Support for iManage Cloud (full SaaS version) is targeted for release in 2022.

Our current integration with iManage is via the iManage APIs. This functionality allows bills from 3E Cloud to be saved to an iManage repository. Also, the functionality provides the ability to create a link between a 3E record and an iManage document. For example, attaching the printed invoice that is saved in the DMS to the 3E invoice record.

### NetDocuments DMS

**(Coming soon)** Billing analysts will be able to automatically save and update invoices into the NetDocuments document management system (DMS) with the required profiling settings. As a result, documents such as bills, proformas, etc. will always be available in the centralized DMS and will not require manual synchronization.

This integration is being built out in two phases:

- For distribution of 3E Templates generated documents such as Invoices, Proformas, Collection Letters, etc. – This will be available with the upcoming 3E 3.0.2 release.
- For 3E Attachments (e.g. pointing 3E to a NetDocuments document) – This is currently planned for the 3E 3.0.3 release with an expected target date later in 2022.

**LawPay**

(Coming soon) This integration will enable the export of setup and transactional data from 3E to LawPay (formerly known as ClientPay), and the import of transactional data from LawPay to 3E. The integration will be available as a services engagement.

**Global Exchange**

(Coming soon) This integration will enable the import of voucher information from Global Exchange to 3E, and the export of Payee and Vendor information from 3E to Global Exchange.

**CUSTOM INTEGRATIONS****REST APIs**

3E Cloud APIs are the modern way to integrate. They enable 3E Cloud to offer discrete communication points with Thomson Reuters and third-party applications and can be used in situations that require more control than what ESB provides – for example, creating a 3E Client based on an event from the firm's CRM.

Customers can use the public API endpoints for such integration needs. Our API documentation can be found at the following website:

- [3E API: \(https://developerportal.thomsonreuters.com/3e-api\)](https://developerportal.thomsonreuters.com/3e-api)

The following REST APIs are available. They represent commonly accessed or created 3E Cloud data when implementing integrations. Additional 3E APIs are planned and will be made available periodically.

API Endpoint	Overview
<b>3E Clients</b>	Get, create, retrieve 3E Cloud clients
<b>3E Matters</b>	Get, create, update 3E Cloud matters
<b>3E Timekeepers</b>	Get, create, update 3E Cloud timekeepers
<b>3E Cost</b>	Get, create, update 3E Cloud cost cards
<b>3E Time</b>	Get, create, update 3E Cloud timecards, pending and posted
<b>3E NBI Workflow</b>	Create an NBI Workflow for processing in 3E Cloud. Get, Get Template, Create
<b>3E Related Party</b>	Get, post, patch 3E Cloud related parties
<b>Data Insights Datamart</b>	<i>(Included here for completeness - <a href="#">see the earlier section for more information</a>)</i> Connect to Data Insights warehouse to access information optimized for reporting. The Data Insights API produces OData output. The API allows query-like functionality through a secure REST endpoint and facilitates data access with tools like Power BI and Excel.

To access the 3E Cloud API, you must use the OpenId Connect and the OAuth 2.0 authorization process. This process includes such steps as obtaining OAuth credentials for your application, defining callback URLs, downloading the OAuth library, preparing the authorization request, redirecting to the Thomson Reuters authorization server, obtaining an access token, and handling the authorization server response.

For detailed information, see [https://developerportal.thomsonreuters.com/3e-api/getting\\_started/02---api-authentication-and-access](https://developerportal.thomsonreuters.com/3e-api/getting_started/02---api-authentication-and-access).

A sample application is available to help you get started with the 3E Cloud API. The application can be used for 3E data generation or as a source reference for any third-party client library intended to utilize the API capabilities.

You can read about and download the application from <https://developerportal.thomsonreuters.com/3e-api/download/sample-app>.

## Extensions

Through the 3E Cloud APIs, you can leverage the full power of tools such as Microsoft Power Platform to extend the 3E Cloud functionality.

Microsoft Power Platform enables you to reach users in Microsoft applications such as Teams, Office, SharePoint, and OneDrive. The resources you need to create workflows are easy to find, given the no-code/low-code approach to development. Write it once and it works across mobile, desktop, web, and cloud.

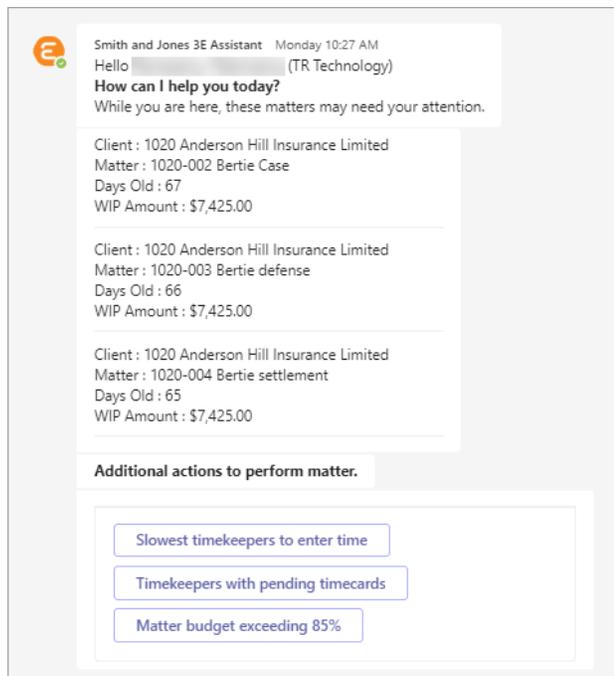
For more information about Microsoft Power Platform, see <https://azure.microsoft.com/en-us/services/developer-tools/power-platform/>.

### Example: Chatbot

As a proof of concept for how you can extend 3E Cloud, Thomson Reuters developed a chatbot with the Power Automate and Power Virtual Agent components of Microsoft Power Platform. The Microsoft components call the 3E Data Insights API to respond to a set of defined prompts via Microsoft Teams.

NOTE: This chatbot was an internal project. It is not included with 3E Cloud.

In the below image, the chatbot provides a list of matters that may need attention, followed by the defined prompts from which the user can select.



### Example: Event-Driven Actions

Microsoft Power Automate can be used to initiate actions based on events that take place in 3E Cloud.

For example, you could indicate that whenever someone creates a new client, a message will be automatically posted in a Microsoft Teams channel.

Variations on this scenario include:

- Post a message when a new matter is created
- Post a message when a client is updated, deleted, or read
- Post a message when the status field of a client is updated
- Add a document to SharePoint (in addition to or instead of posting a message)

These event-driven actions can be configured in Power Automate without having to write code.