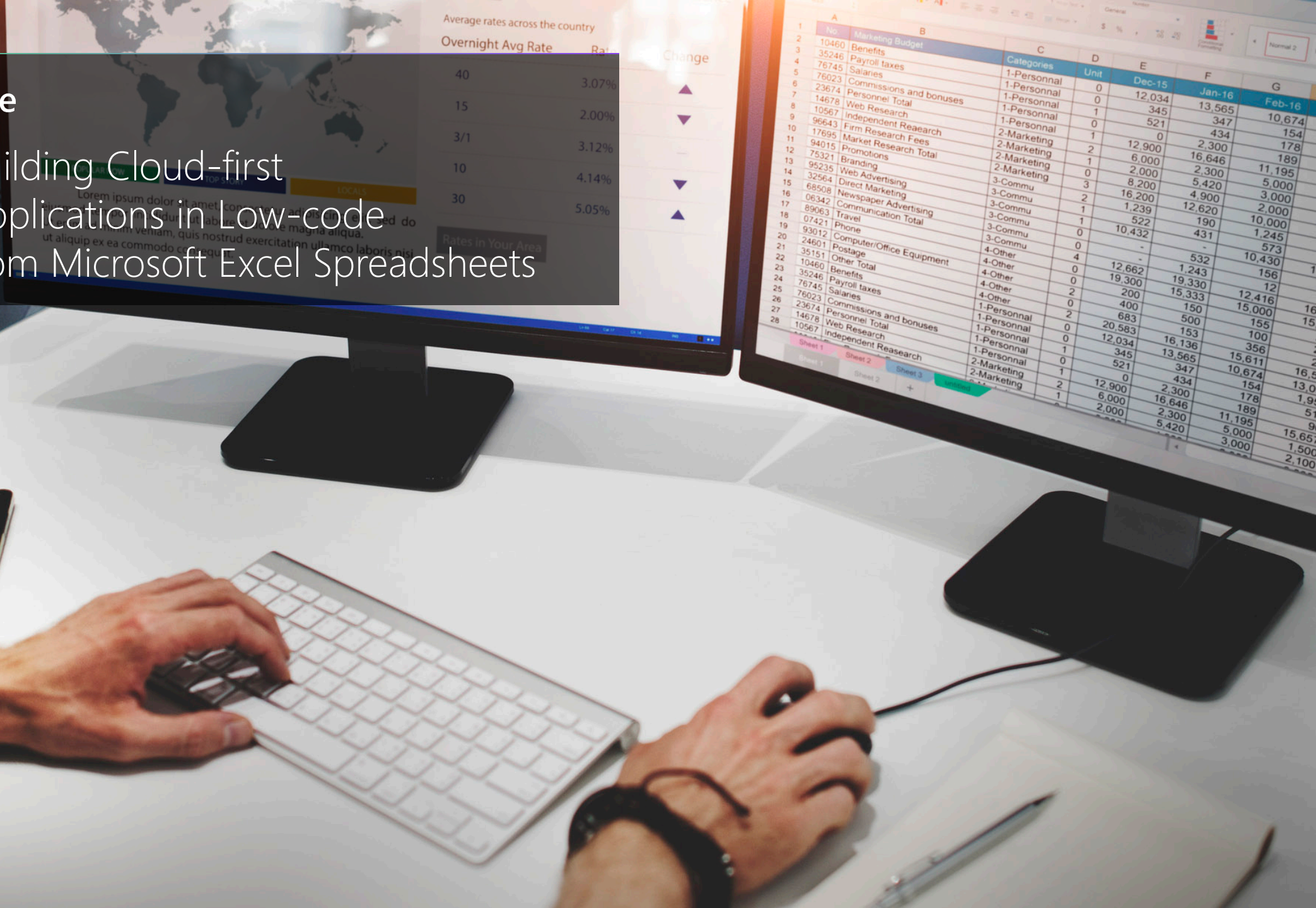




Building Cloud-first
Applications in Low-code
from Microsoft Excel Spreadsheets



Build from Excel

Cloud-first applications direct from your spreadsheets and data

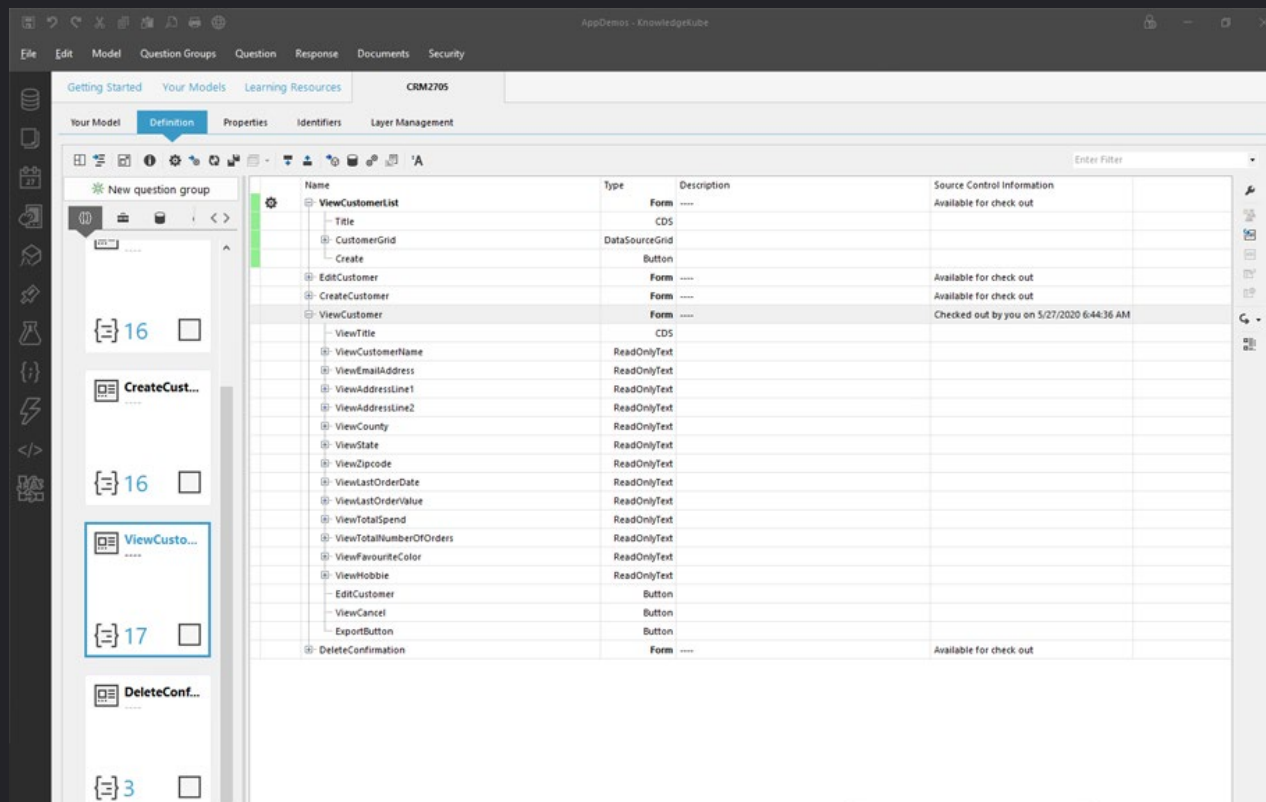
As is common in many organisations, spreadsheets are created to maintain just a few items, but they soon grow, often becoming unmanageable and unruly the bigger they get. Maintaining flexibility becomes difficult and integrating into other systems and data sources, a significant headache.

Implementing a single spreadsheet across multiple departments, maintaining brand compliance within documents and managing data and images very quickly becomes an impossible task.



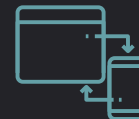
Transition from spreadsheet to scalable cloud app in under 10 minutes

KnowledgeKube provides everything you need to rapidly build cloud-first applications straight from Microsoft Excel complete with the 'lift and shift' of the structure and data of your spreadsheets.



Import

With only a couple of clicks, import your excel sheets structure and data, then let KnowledgeKube automatically build your base cloud application.



Deploy

Once imported, immediately publish your application to the cloud, complete with full navigation and Create, Read, Update and Delete functionality.



Expand

Low-code opens an endless world of opportunities, quickly build out your application with unparalleled scale and connectivity, then integrate technologies such as; Artificial Intelligence, Internet-of-Things, Machine Learning and more...

Ultimate flexibility with Expressions

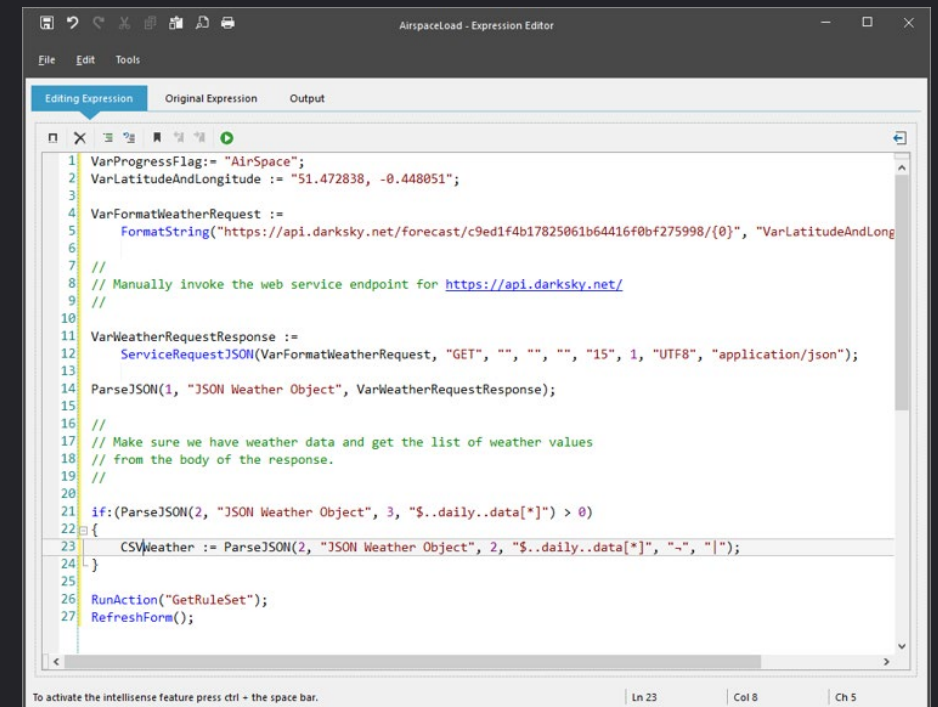
Focus on building dynamic applications from your spreadsheets without the need for a developer.

In reality, applications are just a series of expressions and logic. Low-code allows you to focus on your processes, data, calculations and expressions while the platform takes care of the rest.

And with our fully-featured expression parser, if you can use Microsoft Excel, then you'll feel right at home writing KnowledgeKube expressions.

Include string literals and concatenation, variables, constants, arithmetic operators, parenthesis, Boolean operators, common math functions and more while also gaining access to custom roles, states and variables defined within your application.

You can even embed expressions into Microsoft Word documents, providing complete customisation and control of the data surfaced within your applications documents.



```
1 VarProgressFlag:= "AirSpace";
2 VarLatitudeAndLongitude := "51.472838, -0.448051";
3
4 VarFormatWeatherRequest :=
5   FormatString("https://api.darksky.net/forecast/c9ed1f4b17825061b64416f0bf275998/{0}", "VarLatitudeAndLong
6
7 //
8 // Manually invoke the web service endpoint for https://api.darksky.net/
9 //
10
11 VarWeatherRequestResponse :=
12   ServiceRequestJSON(VarFormatWeatherRequest, "GET", "", "", "", "15", 1, "UTF8", "application/json");
13
14 ParseJSON(1, "JSON Weather Object", VarWeatherRequestResponse);
15
16 //
17 // Make sure we have weather data and get the list of weather values
18 // from the body of the response.
19 //
20
21 if:(ParseJSON(2, "JSON Weather Object", 3, "$..daily..data[*]") > 0)
22 {
23   CSVWeather := ParseJSON(2, "JSON Weather Object", 2, "$..daily..data[*]", "-", "|");
24 }
25
26 RunAction("GetRuleSet");
27 RefreshForm();
```

To activate the intellisense feature press ctrl + the space bar. | Ln 23 | Col 8 | Ch 5

Expression Features

KnowledgeKube's Excel compatibility makes it super easy to transition to the cloud.

All the Variables you would expect; String, Decimal, Boolean, Date, Data Source (Auto Fields, Rows, Columns), Time, Stacks, and Name/Value Pairs.

Utilise the cloud to build true global solutions, and our localisation supports culture codes.

Encapsulate your business logic with Actions, Expression Groups, Scheduled Events, and Data Flow.

Generate Word templated documents on the fly complete with dynamic data and embedded document expressions.

Integrated Membership & Roles support for Expressions, States, Forms and Controls, Document Templates and Data Sources.

Include States within your expressions to provide behaviour control of your applications for elements such as visibility, flow control, content assets, access and more.

Data Sources support expression based filtering, all data expressions, UI rendering, document rendering, and cloud data publishing.

The Expression Editor

Our advanced expression editor empowers you to quickly and easily build both simple and complex expressions with the ease of Excel.

* 4-way split view

* IntelliSense

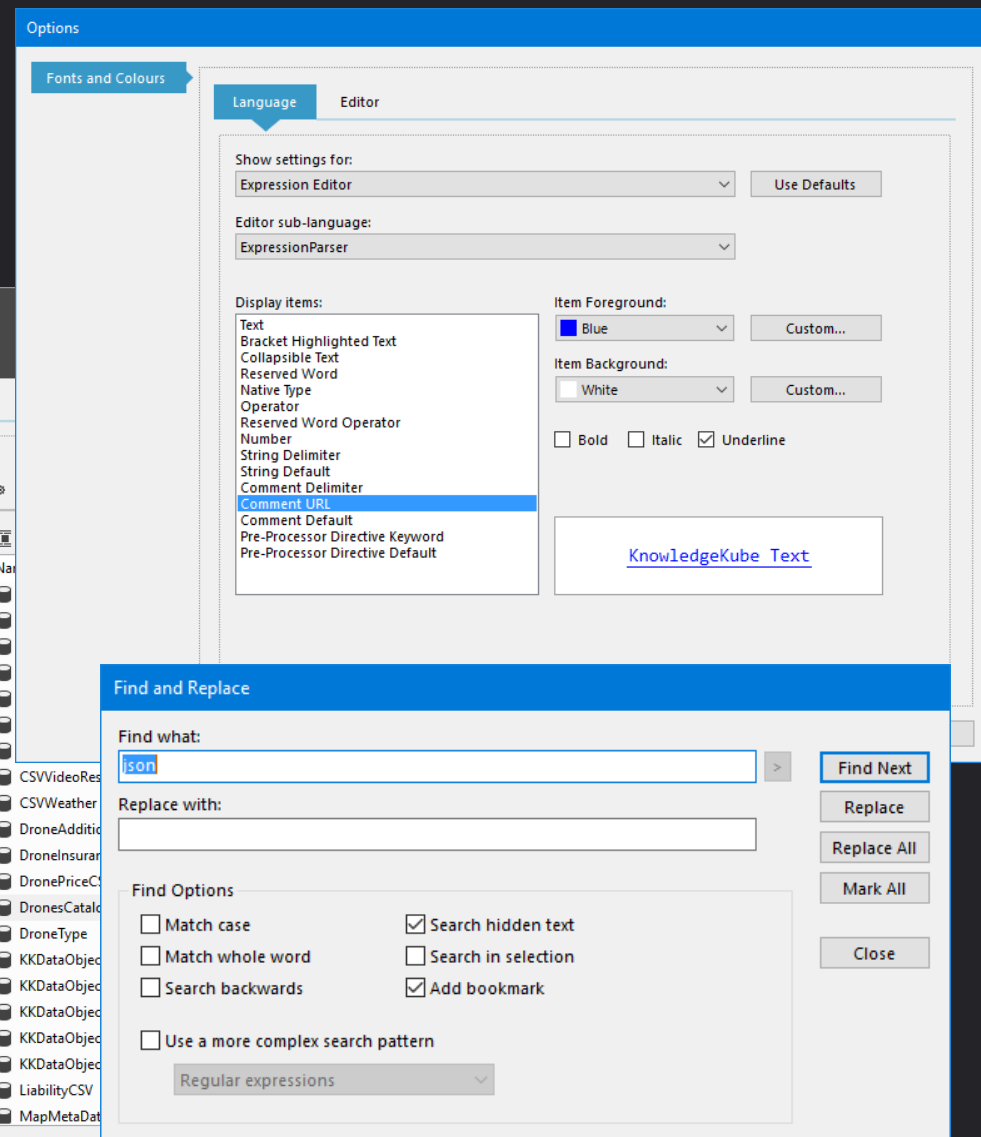
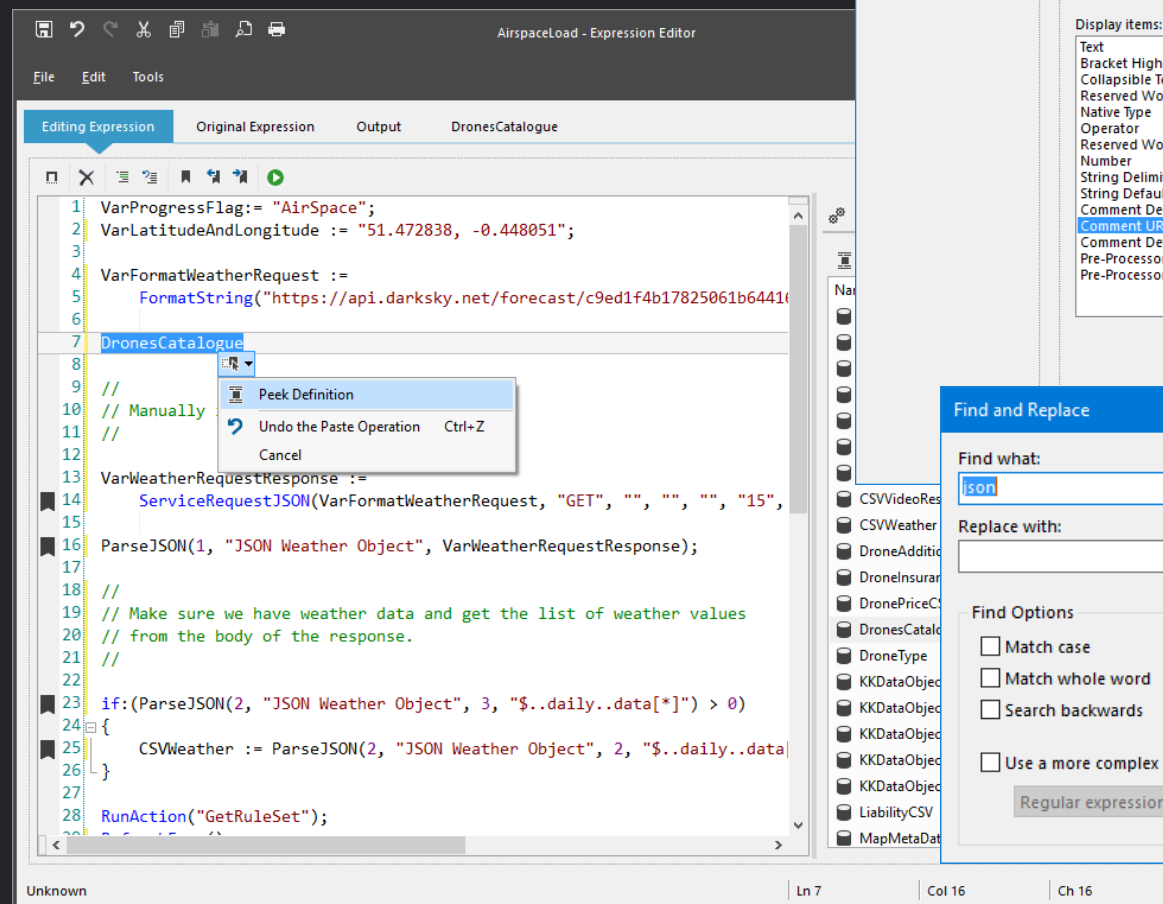
* IntelliPrompt

* Peek at Source

* Visualise Data Values

* Advanced Find and Replace

* Bookmarks



Expression Driven Derived Columns



Create high performance, in-memory data sources on the fly

- + Create dynamically from expressions
- + Create from JSON
- + Create from service results



Modify any data source schema result set



Fully supports Create, Read, Update, Delete operations



Snapshot any data source schema and data keeping the original in tact



Create expression driven derived columns



Apply expression driven dynamic filters



Apply expression driven dynamic sort orders



Apply dynamic aggregates

- SUM, AVG, MIN, MAX, COUNT, STDEV, VAR



Bind to any UX control



Bind to any visualisation



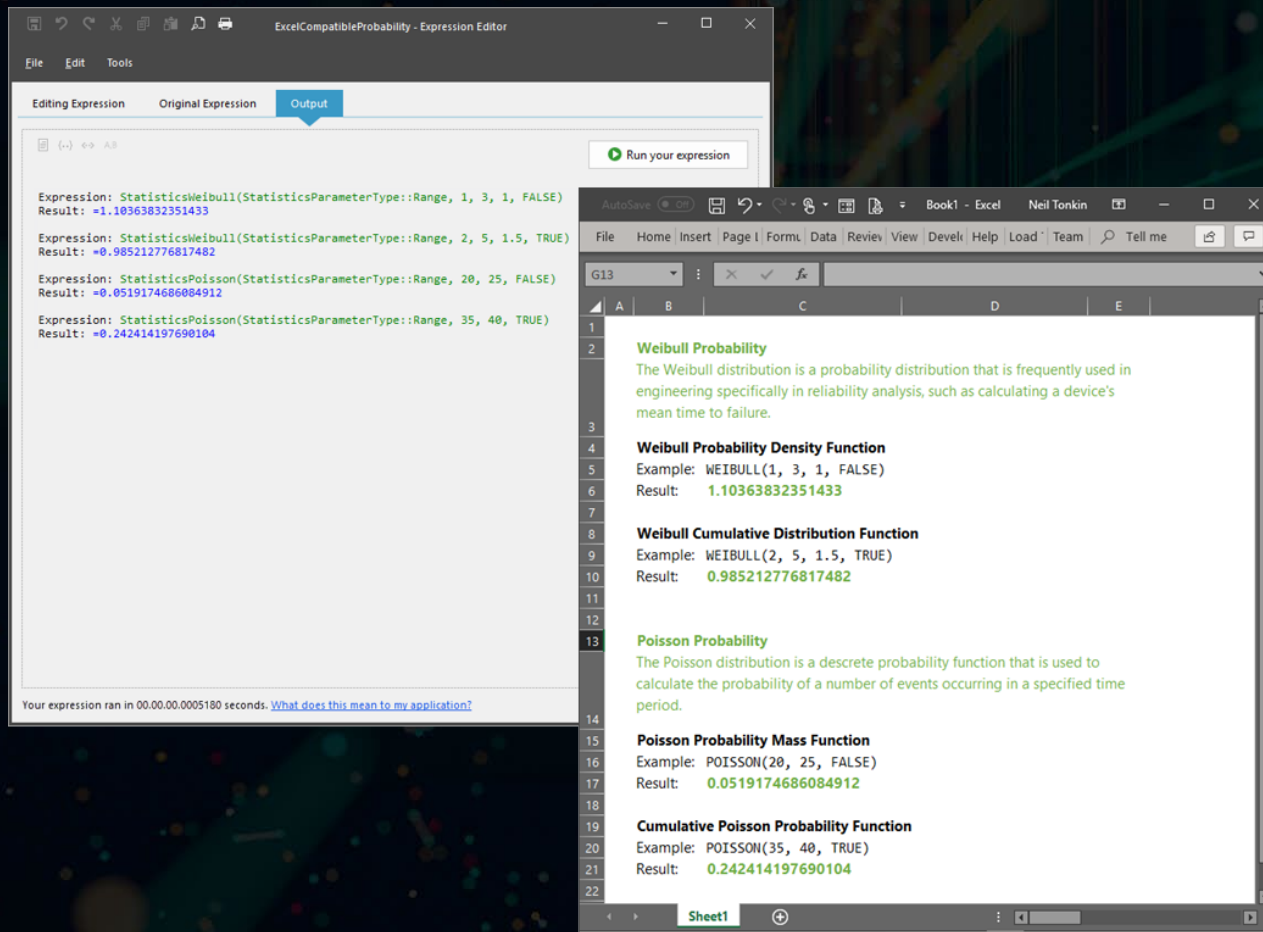
Embed in documents



Publish as RESTful services

What about complex formulae?

KnowledgeKube can work with formulae and also comes with Excel/numerically compatible statistical functions without the need for Microsoft Excel.



The image shows two overlapping windows. The top window is the 'ExcelCompatibleProbability - Expression Editor'. It has a menu bar (File, Edit, Tools) and tabs for 'Editing Expression', 'Original Expression', and 'Output'. The 'Output' tab is active, showing a list of expressions and their results:

```

Expression: StatisticsWeibull(StatisticsParameterType::Range, 1, 3, 1, FALSE)
Result: =1.10363832351433

Expression: StatisticsWeibull(StatisticsParameterType::Range, 2, 5, 1.5, TRUE)
Result: =0.985212776817482

Expression: StatisticsPoisson(StatisticsParameterType::Range, 20, 25, FALSE)
Result: =0.0519174686084912

Expression: StatisticsPoisson(StatisticsParameterType::Range, 35, 40, TRUE)
Result: =0.242414197690104

```

Below the list is a 'Run your expression' button. The bottom window is an Excel spreadsheet titled 'Book1 - Excel' by 'Neil Tonkin'. It shows a table with statistical information:

1	
2	Weibull Probability
3	The Weibull distribution is a probability distribution that is frequently used in engineering specifically in reliability analysis, such as calculating a device's mean time to failure.
4	Weibull Probability Density Function
5	Example: WEIBULL(1, 3, 1, FALSE)
6	Result: 1.10363832351433
7	
8	Weibull Cumulative Distribution Function
9	Example: WEIBULL(2, 5, 1.5, TRUE)
10	Result: 0.985212776817482
11	
12	
13	Poisson Probability
14	The Poisson distribution is a discrete probability function that is used to calculate the probability of a number of events occurring in a specified time period.
15	Poisson Probability Mass Function
16	Example: POISSON(20, 25, FALSE)
17	Result: 0.0519174686084912
18	
19	Cumulative Poisson Probability Function
20	Example: POISSON(35, 40, TRUE)
21	Result: 0.242414197690104
22	

- + Add Excel compatible mathematical and statistical functions to your KnowledgeKube applications
- + If you know the name of the Excel function, then you know the name of the KnowledgeKube equivalent
- + High performance
- + Parameters
 - + StatisticsParameterType::Range
 - + StatisticsParameterType::DataSource
- + Output results
 - + Scalar
 - + Data source

Better manage, maintain and control your data

Building Apps with our low-code platform KnowledgeKube enables you to maintain better and do more with your data compared to using traditional spreadsheets.

Cloud-first applications ensure everyone is using the latest version, no errors exist or are introduced into the calculations, and more importantly, no-one can subsequently tamper with those calculations. And because these apps are so intuitive to use, adoption increases, meaning everyone can access and update your data with ease.

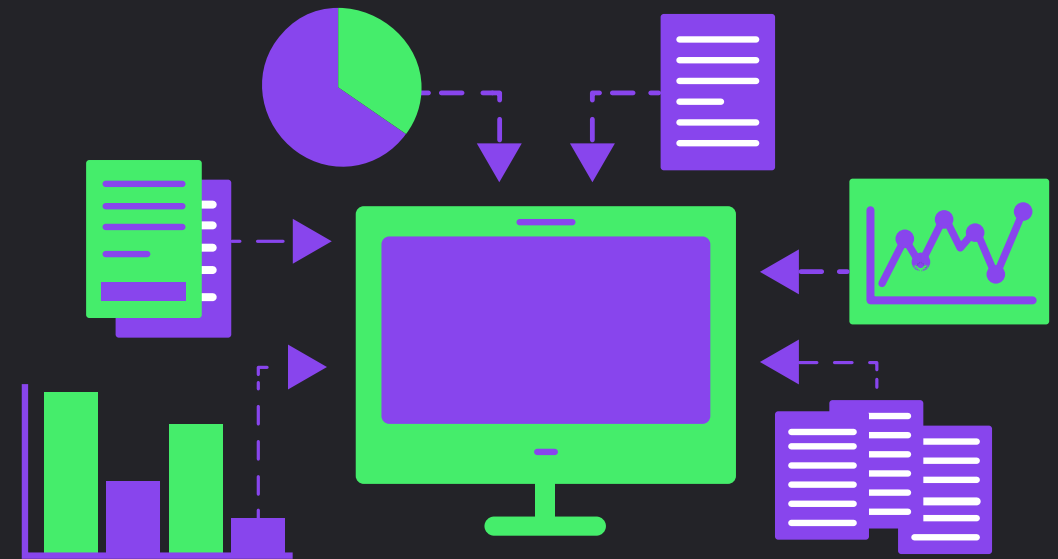


Manage best practice and workflows with ease

Spreadsheets are only typically part of an overall business process.

KnowledgeKube applications are different, providing a full end-to-end optimised solution to your processes and workflows. With its unrivalled connectivity, it can also easily slot into your current environment to join existing systems and processes together.

If your organisation is struggling with compliance and data protection, if your data sits within numerous unprotected spreadsheets for anyone to modify or copy, then KnowledgeKube can quickly remove this headache by providing fully secured applications that deliver role-based views and data complete with full historical tracking and auditability.

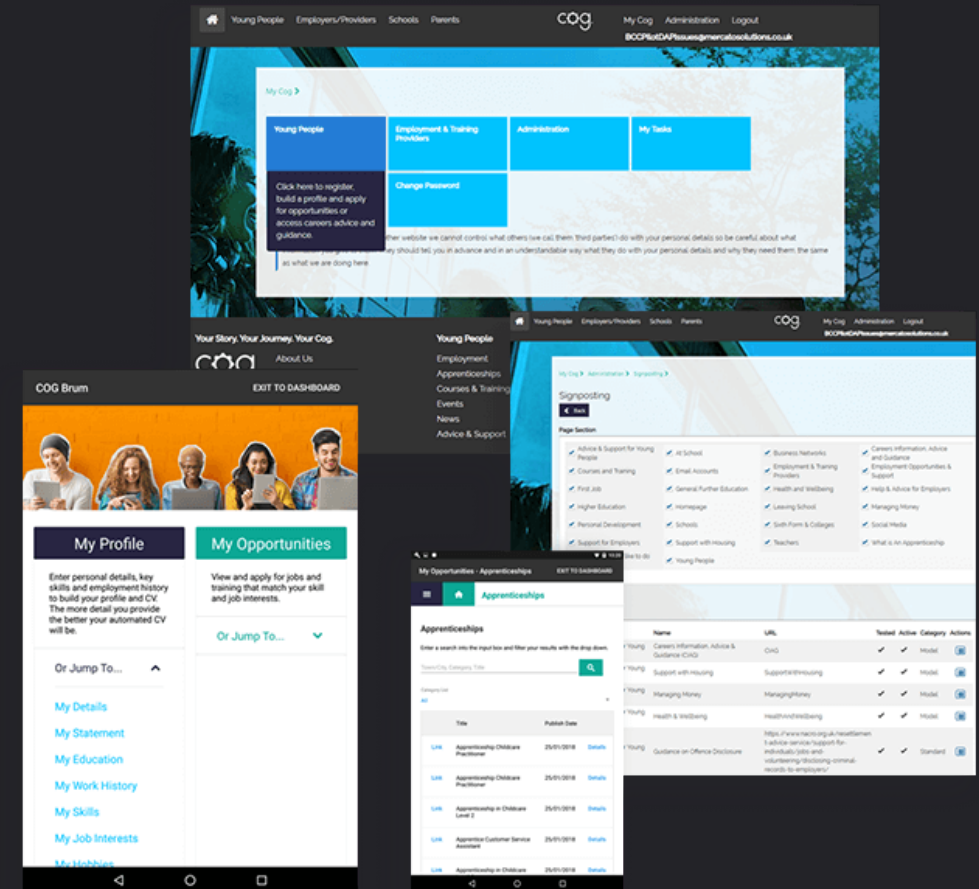


Provide a better experience to your customers

The digital landscape has changed; customers now expect more...

Visible management of processes within spreadsheets, lack of interactive options for customers, limited business rules, user governance, lack of protection and ability for malicious manipulation can all make for poor user experience and overall impression.

By utilising low-code, secured cloud-first apps can easily be updated via web and mobile devices, combine these with great looking user interfaces makes for the very best customer experience possible.



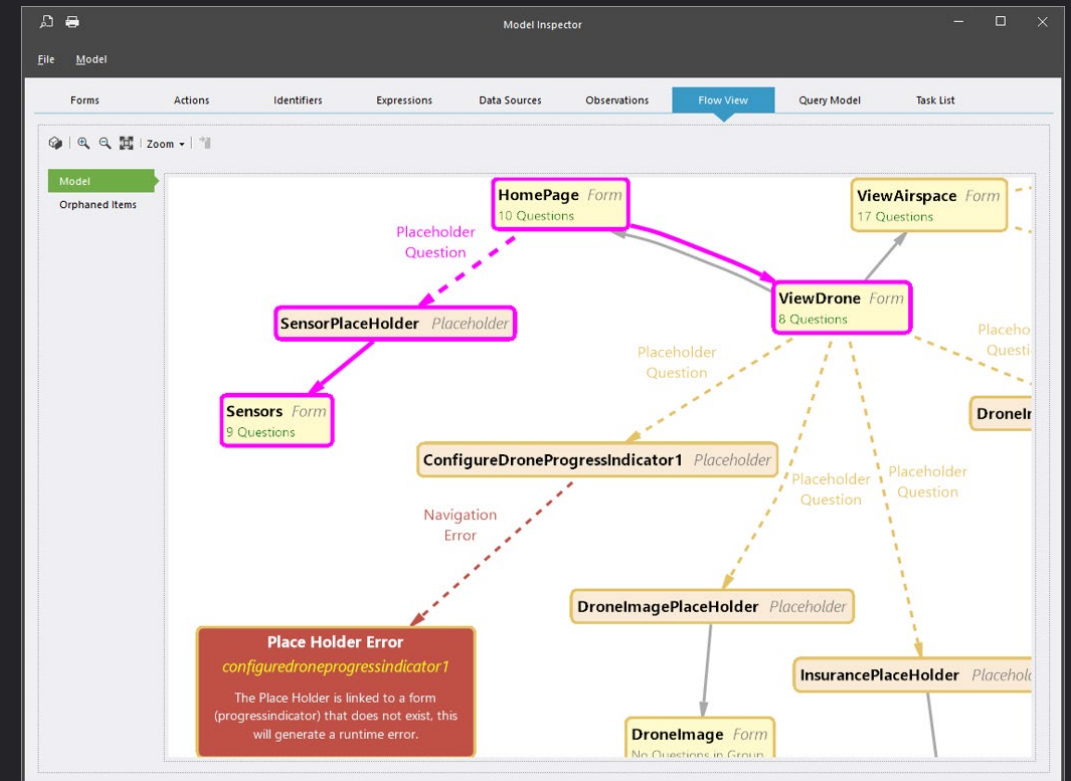
Build and Streamline your Workflows

KnowledgeKube provides first-class support for designing and building workflows, helping you to define and manage interactions as part of your applications.

Efficiently manage step orientated workflows with expressions and built-in actions complete with connectivity and integration to over 150 applications and services out of the box.

Use actions to simplify tasks such as sending e-mails, accessing remote storage or calling 3rd party services, and you can even generate Microsoft Word, Excel and Adobe PDF documents with dynamic data on the fly.

Workflows can also be scheduled allowing your applications to process recurring tasks, reminders and other forms of temporal workflows.



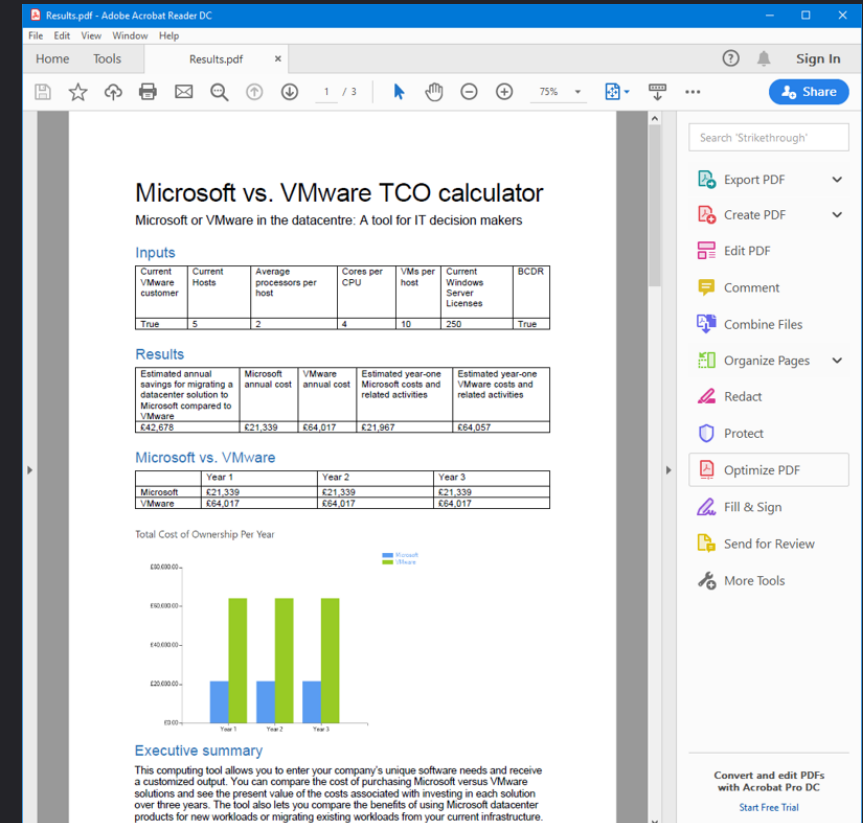
Document and Report Creation

Whatever your document or report requirements, KnowledgeKube can handle with ease, providing high fidelity document generation to your applications.

Leverage your current knowledge by utilising Microsoft Word as your document designer, incorporate expressions, application data, external data and a variety of assets.

And with conditional processing, you are provided with the ability to activate and de-activate content blocks such as text and images as well as the ability to incorporate other templates to construct full documentation packs.

We also support multiple languages and globalisation, providing the ability for your apps to dynamically produce localised documentation and reports.



Microsoft vs. VMware TCO calculator
Microsoft or VMware in the datacentre: A tool for IT decision makers

Inputs

Current VMware customer	Current Hosts	Average processors per host	Cores per CPU	VMs per host	Current Windows Server Licenses	BCDR
True	5	2	4	10	250	True

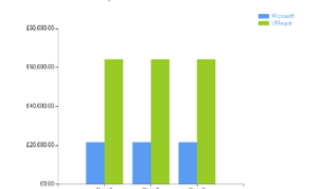
Results

Estimated annual savings for migrating a datacenter solution to Microsoft compared to VMware	Microsoft annual cost	VMware annual cost	Estimated year-one Microsoft costs and related activities	Estimated year-one VMware costs and related activities
£47,078	£21,339	£64,017	£21,967	£64,057

Microsoft vs. VMware

	Year 1	Year 2	Year 3
Microsoft	£21,339	£21,339	£21,339
VMware	£64,017	£64,017	£64,017

Total Cost of Ownership Per Year



Executive summary

This computing tool allows you to enter your company's unique software needs and receive a customized output. You can compare the cost of purchasing Microsoft versus VMware solutions and see the present value of the costs associated with investing in each solution over three years. The tool also lets you compare the benefits of using Microsoft datacenter products for new workloads or migrating existing workloads from your current infrastructure.

Empower your team to start innovating with Low-code

In this New Technology led world, low-code deliverables will be expected...

Low-code is emerging as a primary strategy in reducing app delivery times to support digital business transformation.

With the potential to build enterprise-ready applications ten times faster than traditional methods, it's imperative to look now to adopt a low-code platform.





www.knowledgekube.co.uk/features/build-from-excel