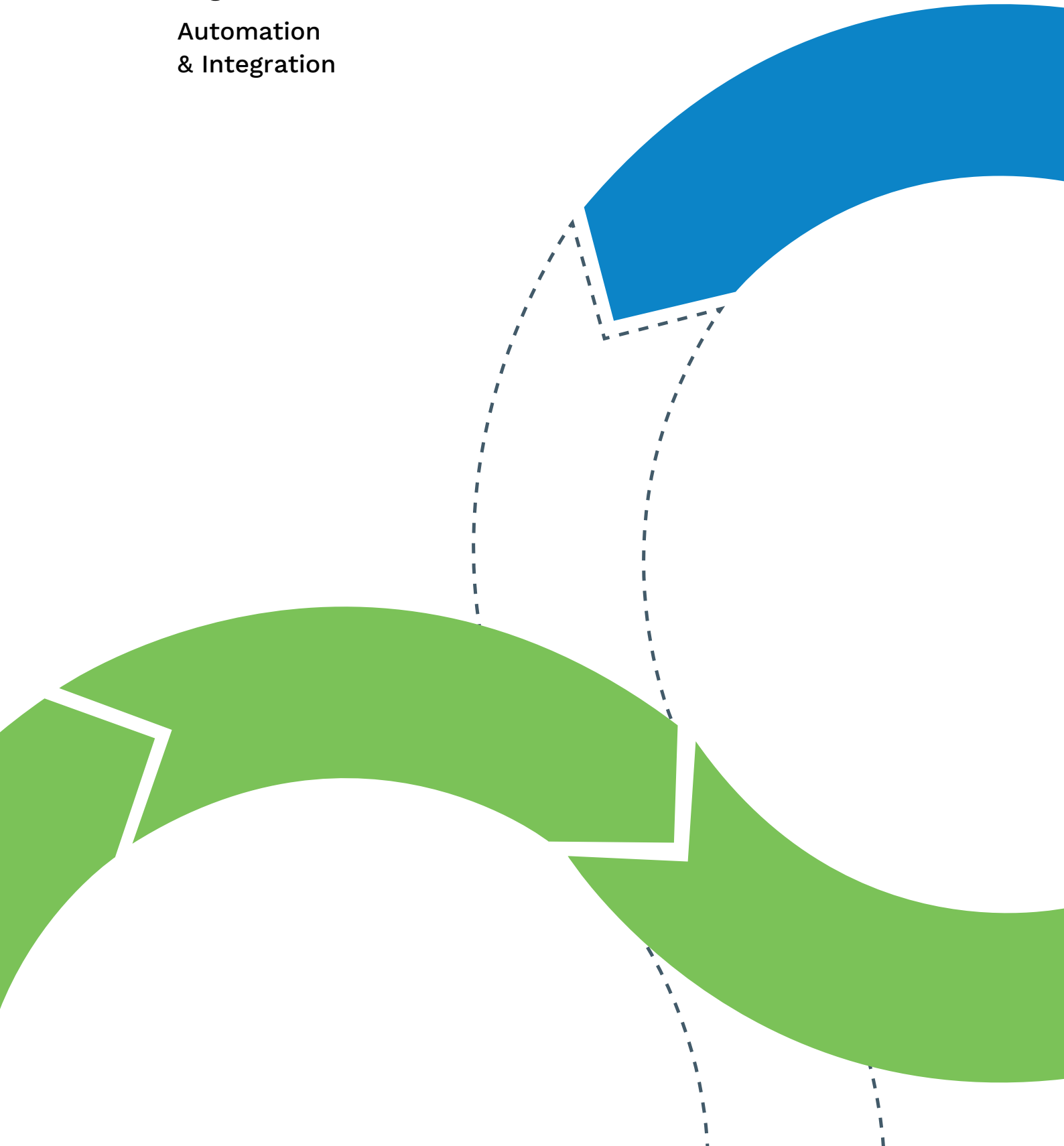




SYMPHONY

SymConnect

Automation
& Integration

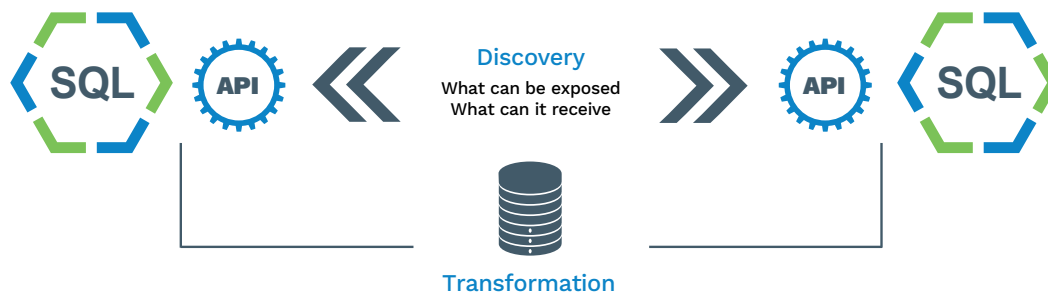


A new world conundrum

We should start with the idea that the business case around using APIs is already established – it's understood and using them is desirable. When deployed correctly, they allow for the efficient synchronisation of master records and transaction data.

But, it's not all good news.

Integration Challenge



Technical Challenge

APIs differ widely in their scope, quality and ease of use. It is rarely immediately obvious which data elements can and can't be integrated. It is often a very skilled technical task to deploy a connection between APIs.

Some APIs contain technical functions which demand a deep level of coding expertise to manage the connections. Only very few firms have these resources available in their business – and even if they do, they are always highly sought-after for many projects.

Security

Some applications demand that specific security protocols are implemented, often unavailable or difficult to deploy inside the relevant APIs – even with the relevant technical skills.

Just as software platforms are constantly evolving, so are the APIs. They change and not always at the same time or in step with their parent applications. This change needs to be recognised and managed.

Some applications don't have APIs and connections need to be built between an API and a target system with say, stored procedures.

Managing API's

As APIs become more widely deployed, and more numerous, it becomes ever more challenging to see which systems are joined to which, for which specific data elements and when those interactions actually take place. Today's API functionality makes this proliferation inevitable. There is typically no single register where this information is collated and more importantly, kept up-to-date. GDPR has placed an even greater responsibility on all firms to know where their PII data is stored, shared and also by which systems this data is updated.

Error Trapping and Reporting

When APIs work well, organisations and users can gain enormous value from the interactivity of applications from multiple providers. But, when they fail – and they do – it is not always obvious when or how they have failed. Error reporting inside APIs differs even more widely than the functionality. Some report, some don't. There is generally an expectation that the application will recognise, report and manage any failure conditions. But the reality is that the majority of applications don't do this for all conditions. The impact of this is that the reliance which a firm would like to place on the certainty of APIs is optimistic, and that API errors are occurring all the time without consistent reporting to the relevant people.

How do we fix this

From a technical perspective, we've created a Browser-based UX, cloud-deployed platform, using a server-less architecture. This means it's always available everywhere, it's low-friction, scalable and very high-speed. The key modules / functions are:-



Discovery

Our functionality will interrogate the target APIs and visually expose the datasets and permissible functions in a browser side-by-side. This means that the quality of documentation in the APIs (often poor and always at risk of being out-of-date) becomes far less important than if a technical resource was trying to discern the possibilities manually.



Security

A vital part of a safe integrated environment is security. Wherever secure tokens are required for the movement and receipt of data, we ensure that these tokens are passed without intervention and check for any unauthorised decryption or re-encryption.



Transit

The user can create connections between the relevant datasets directly or with complex filters and rules. For instance, at a simple level, a name in the source system might be stored differently than in the target system. Using our Transformation Library users can manage these issues without creating new bespoke code. We also allow for complex code-based transformation rule sets to be inserted so if a firm has already built such complexity, it can be re-used.



Traffic Manager

Whilst we are generally dependent on the triggers within the applications to instigate an API transaction to take place, there are occasions when API transactions need to be queued or scheduled. As those transactions are being processed, we track and count success and failures and provide notifications / alerts and reports to the end-user in a real-time on-demand reporting platform. A firm would always be able to see the number of transactions being processed between connected systems and when.



Connectors

Thanks to our 20 years of experience in this sector, we already know which applications are most widely used, which APIs are most in demand and which systems need to integrate with each other. We have built and continue to expand our Connector Library. This means that for the most part, users will be able to deploy a new API with the minimum of effort. It could mean as little as adding the security credentials to each side and the connection would be made. The platform also allows users to copy, modify and save these connectors in case of any specific requirements not generally deployed.

Integration Scenarios



Scenario 1

Software authors have connected their systems but data exchange and integration is fixed. Firm needs to wait for enhancements to benefit from specific data integration requirements



Scenario 2

API's exist but the software authors have not connected their respective systems. Internal IT resource lacks the capability to integrate the systems. Any work is bespoke and susceptible to breaks if APS's change



Scenario 3

Much the same as scenario 2 except security firewalls need to be respected between systems



Scenario 4

One or more of the internal systems lack an API. Internal IT resource lacks the ability to create solid stored procedures that in turn need to connect to API

The case for synchronisation

Database synchronisation is the process of establishing data consistency between two or more databases, automatically copying changes back and forth. ... One of the most difficult challenges for firms is creating the desired connections between the various systems they have.

Creating the desired integrated flow of prospect and client information, will be a key driver for improving sales, client service, management and engagement.

With SymConnect a prime unified platform has been developed to provide firms the ability to maintain and access data safe in the knowledge that key systems are being maintained and are accurate.

Industry Specific Integrations

