Blockchain technology is booming. Maturity and innovation are accelerating, as is the growth in number of platforms. That’s a good thing. Looking beyond a “one size fits all” platform has sparked new possibilities and may lead to platform innovations we can’t yet imagine.

But as ecosystems develop around platforms, they must also interact. If they can’t, blockchain won’t achieve its full potential.

So how do we establish the ability for current—and future—DLT platforms to interoperate? Without adding complexity or compromising blockchain’s unique attributes?

Accenture has developed a solution that enables two or more DLT platforms to work together, enabling interaction between ecosystems, while still maximizing DLT’s benefits.

A digital object can be transferred between different platforms, and maintain its uniqueness and consistent state, at data element level, so stakeholders see the same thing, simultaneously across different DLT ecosystems.

While designed to work with permissioned systems and ground rules must be established up front, no changes to the platforms included in the interoperating networks is required.

How?

Through a trusted interoperability node. This special node provides the lines of communication between platforms.

Whether performing a transfer of a digital object from one platform to another or sharing information across platforms simultaneously, these intentions will be communicated to, verified and enabled by the interoperability node.

It interacts with the nodes in each platform through a special gateway node set up in each platform.

When a change in DLT A that is relevant to DLT B is initiated, control passes to the interoperability node to facilitate the appropriate data element creation or update on DLT system B.

Let’s say ABC corporation needs to transfer digital object D, using DLT A, to XYZ company, which uses DLT B. A sender node and receiver node are put into action and agree to the change of state of digital object D.

The transfer is initialized. The reference data is moved to the portal sending a request to create digital object D on DLT B. Once its successfully created, the transfer is finalized.

Depending on the rules of the transaction, this change in state is propagated across all nodes that have access or just to select nodes.

Let’s say digital object B is returned to ABC corporation when a related transaction is initiated. Both transactions can happen simultaneously, even though they are treated as independent transactions.
What if ABC Corporation and XYZ Company want digital object D to maintain an “active state” between DLT A nodes and DLT B nodes, keeping them synchronized between both DLTs? The system allows for that, too.

This working prototype is already being tested with partners to assure its effectiveness with leading platforms. It’s a first step to assuring innovation continues to flourish across this dynamic space, while still allowing it to scale and achieve its fullest potential across a global network of ecosystems.