The DXtera Integration Framework

The DXtera[sm] integration framework is a software solution designed to facilitate secure, extensible and scalable real-time information exchange between academic and student support services and applications. The framework is designed to allow educational institutions, government entities and private organizations to deliver more direct and real-time information to their students, communities and customers through next generation user applications.

The framework uses openly licensed educational business models and software service contracts to describe the common services provided by educational enterprise systems. Implementations of these contracts (Java interfaces) plug into the framework to integrate and configure access to existing or new infrastructure. Third-party application developers can securely consume data through [RESTful or SOAP-based] protocols, other evolving protocol technologies (for example, Protocol Buffers, GraphQL), standards-based protocols, or bespoke application protocols to meet the evolving needs of next generation student success applications.
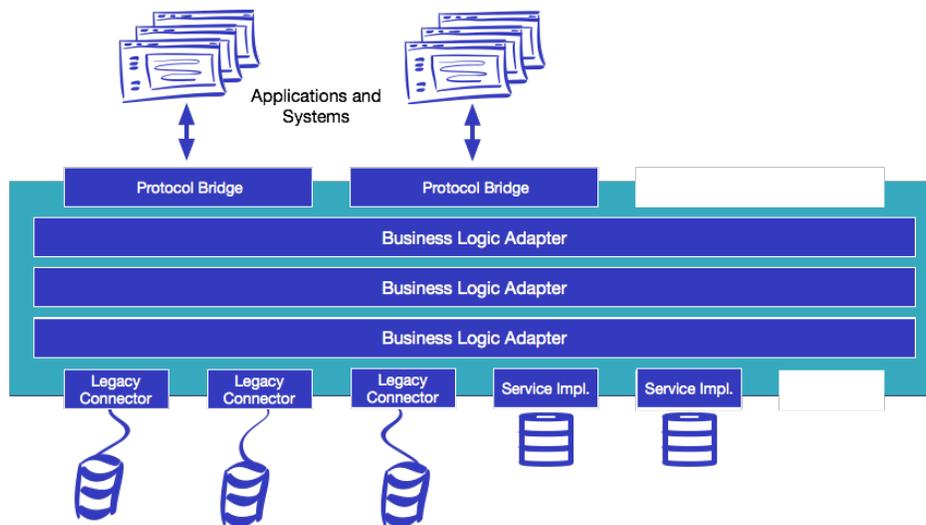
Modular. Unlike other integration solutions, DXtera's integration framework is completely modular. Every component, from the runtime, to the business logic adapters, legacy connectors and native service implementations, can be update, enhanced or even replaced as required. This is possible through ubiquitous use of the openly published service contracts at the core of its architectural design.

Member-owned. The DXtera framework is owned and managed by the not-for-profit DXtera Institute[sm], consisting of institutional members that share similar challenges, sensitivities and business requirements when it come to digital exchange. The member-owners of the software

solutions and integration adapters means that DXtera has been designed for education, by education.

Extensible. The technology landscape is ever-changing. Great ideas come and go. To make matters worse, institutional requirements are always evolving to meet the changing demands of faculty, students and communities. DXtera understands this, and has designed its framework to change and evolve with the times.

Built for our Business. The DXtera integration framework is not just another ESB or technical integration platform. It is built to the business models of education institutions. Based on years of domain modeling with input from multiple institutions in multiple countries, DXtera is built on the most complete models of the educational enterprise in the industry.