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*EIS Integration with JCA through Customization and Componentization of Resource Adapter*

## ***ABSTRACT***

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Any software applications developed undergoes changes. These changes become inevitable because of unknown requirement arise with time. Taking this to higher level any organization need to develop new application because of its interest new business area requiring new information system to be incorporated into the existing one. As the former information system has been developed without any foreseen possibilities of integration. So to develop entirely new information systems for existing business process and newly added one, incur high cost, more development time and effort. So the need for integration arises to reuse the existing services, data exchange and business processes. The Java Connector architecture provides solution in term of resource adapter and imposes constraints on application developer and client to develop it according to the standard interface provided by JCA. This thesis focuses on the applicability of JCA in EIS integration and explores the scope of this framework for accommodating various design patterns. This thesis unearths the possible hot spots in JCA and taking the work to how to form the components out of adapter. Further it explains how design by contract will help us to dig out the requirements from the available components and map the evolved requirements with the guarantee of leaving the framework with same robustness and correctness.