KINETIC DATA
Your business. Your process.

Enterprise Service Integration with Kinetic Task

Introduction

In today's complex technology landscape, organizations are challenged to consistently deliver top-quality services while progressively reducing costs. The competitive marketplace requires agility to address changing business needs quickly and effectively.

Shared-service models are the corporate norm, providing key functions for HR, facilities, finance, operations, and IT in an effort to scale service delivery models. These shared service groups are using large-scale software systems designed to handle specialized requirements while meeting compliance and regulatory needs.

There is an evolving demand for integrated automation strategies to provide key business services across the enterprise. It's not just about integrating data, it's about delivering effective service.

This white paper explains why service integration is a better approach than data integration, and outlines how the Kinetic Task automation engine enables service integration across the enterprise in a scalable, flexible, and manageable manner.

The Game Has Changed

Years ago, Fortune 500 companies prided themselves on aligning with top technology vendors to provide infrastructure and applications. Large application vendors had platforms that could be leveraged for almost all of a company's business needs.

Gone are the days of a "single vendor" providing all key business applications across the organization. Operational needs and evolving corporate policy in the modern world drive the need for best-of-breed solutions that can meet complex business requirements. Modern companies demand choice.

Large companies and government agencies alike are divided into information silos across shared-services organizations. These service provider groups utilize specialized fulfillment systems to automate their processes, aligned to key best practices (ISO, CMMI, ITIL, Six-Sigma, etc.). These shared-services models require nimble and scalable strategies to respond to business needs.

These enterprise service models are highly complex, delivered via combinations of human interaction, applications to manage key functions, and automated systems for handling high-volume transactions. Services are accessed via the Web, phone, mobile apps, email and self-service with external vendor partners playing a role in many large corporate models.

To add to the in-house complexity, it's increasingly common for companies to rely on external and outsourced resources to provide key corporate functions (infrastructure, employee services, network management, payroll, security, facility maintenance, etc.).

Information Silos Example

Information technology (IT) relies on the IT service management (ITSM) platform to track incidents, assets and change requests; operations uses the enterprise resource planning (ERP) platform to run the business; human resources (HR) utilizes case management and talent management systems; while supply chain utilizes specialized logistics platforms ensuring goods and services move properly to the right locations.

The people in each of these groups are trained on those specialized systems and rely on them to do their jobs—delivering service.

Due to the complexity and scale of these delivery models, companies are faced with an ever-changing landscape of tools, systems, and software. Functions that once seemed core to the business are being evaluated for outsourcing, further blurring the lines between corporate and vendor functions. The boundaries of the enterprise shift almost daily, requiring models and tools that are scalable, flexible, and adaptable for the future.

Service vs. Data Integration

At the enterprise level, service delivery models require complex systems to interact seamlessly—with each other and with people—to deliver integrated services. This is the difference in approach between data and service integration. A "service" is not made up solely of machine-automated processes or manually delivered human services. True enterprise service models combine elements of both.

Most large organizations use a combination of commercial off-the-shelf (COTS) software and custom-built, business-specific applications, featuring a mix of on-premise and cloud-based offerings to deliver key services.

To effectively serve employees and customers alike, modern businesses need corporate systems to interact and seamlessly integrate to ensure the customer experience is consistently and efficiently delivered. Often, this includes extending corporate data to key vendor and outsourced systems to allow them to effectively manage their components of the service delivery process.

Commonly, system integrations are driven by project requirements with a focus on specific needs for shared data alone. This data-only approach quickly becomes difficult to manage, as various data sets are shared in different formats, creating maintenance and compliance challenges.

Point-to-Point Data Integration Example

A project to improve the efficiency of employee onboarding may require integration between the candidate tracking system, the ITSM platform, the CRM system, an outsourced vendor's ticketing platform, the identity management (IDM) system, and the corporate directory.

In this scenario, there are six key systems requiring integration to solve one key enterprise process need. This is often solved in a point-to-point data integration approach.
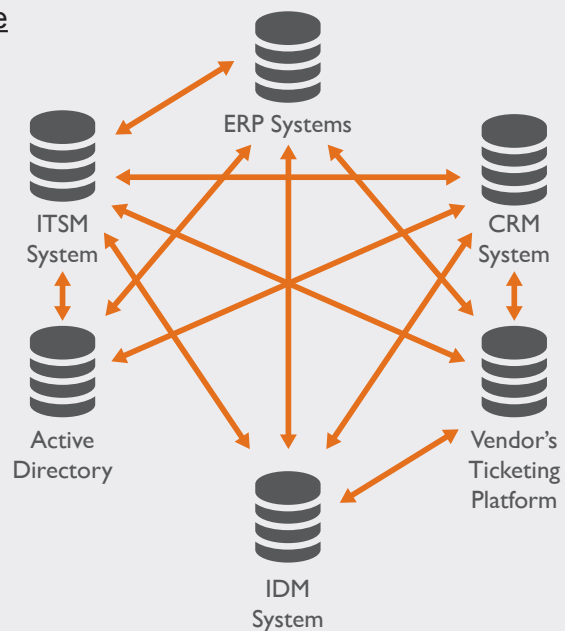
Point-to-Point Data Integration Model

However, point-to-point integration is a legacy approach to sharing data. For each new project, integration needs are typically addressed with specific connections from system to system. In the point-to-point integration model, not only is it technically challenging to maintain the model, but significant risk is introduced both from compliance and service-continuance perspectives.

A common example of this would be an HR project requiring data from a finance system to populate a cost component in the CRM tool. The IT group may choose to integrate the CRM tool to the finance system to populate a particular form. That same finance system may also be required to be integrated to an external vendor system as part of the same project. Those are two integrations for one project. When the finance system is upgraded, the integration points are likely to "break." This makes point-to-point integrations challenging to maintain and scale at an enterprise level.

To comprehend the complexity of this model from an enterprise architecture perspective, consider the mathematics of it. In the point-to-point model, where *x* is the number of systems requiring integration, the formula to calculate the number of integration points is:

$$x(x - 1) / 2$$

Extending the model to the simple example above, we find there are six total systems equating to:

$$6(6 - 1) / 2 = 15$$

Even this simple example requires **15** connections to integrate and manage—***for one project***.

If the HR system requires an upgrade but it is integrated with five other systems, all of those integration points need to be re-created, tested and redeployed to ensure service continuity. At a project level this *may* be manageable; but across the enterprise, systems are constantly being upgraded and changed, creating a never-ending cycle of new integrations needing modification and management.

A Service-Oriented Solution

Instead of approaching integration based on the sharing of data, it's better for organizations to look at the proverbial "big picture." Sharing of data between systems is not about "data." It is driven by the need to provide service. This is called service integration.

By building service models driven by business needs, the entire organization benefits through a continuous improvement approach aligned with the customer. This requires more than just data integration. The modern approach to business is all about service. Data is important, but service and the associated delivery efficiency make or break businesses. Allowing specialized applications to be used in a service-oriented architecture (SOA) is widely regarded as the best approach to enterprise service efficiency.

The service integration approach allows those key areas to utilize their systems appropriately as stakeholders in the process, delivering their service components to effectively give customers true enterprise service. This approach also allows for manual processes where necessary and can evolve as these manual processes become automated. This model provides true value to the business, without negative impact to stakeholders or customers.

By providing a centralized hub for service design and integration, companies benefit in several ways. Integrations are now manageable, centralized, and standardizable across the enterprise. Not only can data be integrated across systems, but approvals, notifications, and messaging can be centrally managed via a workflow automation engine.

Service integration allows for centralized management of business approvals, reporting, and management of enterprise services—which improves enterprise efficiency.

This service-oriented approach (service integration) provides an enterprise model allowing integrations that are manageable, secure, and scalable, while eliminating both technical and governance challenges.

Kinetic Task for Enterprise Service Integration

To meet this integration challenge, the Kinetic Task automation engine from Kinetic Data can act as the service integration hub, eliminating the complexities of managing and maintaining service integrations across the enterprise.

Kinetic Task is a service automation engine that uses a simple, configurable approach to business process automation (BPA). Kinetic Task features an open architecture designed for ease of integration, flexibility and scalability. The focus of the design is to allow organizations to extend the functionality of the engine to any systems or processes needed, both internally and outside corporate boundaries.

- **Adaptability**
- **Scalability**
- **Manageability**

Adaptability

Kinetic Task can connect to any application or database to extend the benefits of BPA to any processes across the enterprise. The engine is designed to be extended not only to COTS systems but to any system that can communicate via common methodologies such as APIs, Web Services, REST, or SOAP. This strategy applies to both triggering systems and systems involved in the fulfillment or completion of the process.

Enterprise Service Integration with Kinetic Task

This strategy benefits from a large library of "task handlers" that allow Kinetic Task to not only interact with systems, but also orchestrate actions like corporate approvals, messages, and task assignments, making it easy to configure automated workflows seamlessly across the enterprise.

The architecture of the task engine is designed to be adapted across heterogeneous corporate systems. In scenarios wherein customized systems are handling key functions, the engine can easily be extended to work with those systems. If a system has a method for communicating with other systems, it can be included in processes managed by Kinetic Task.
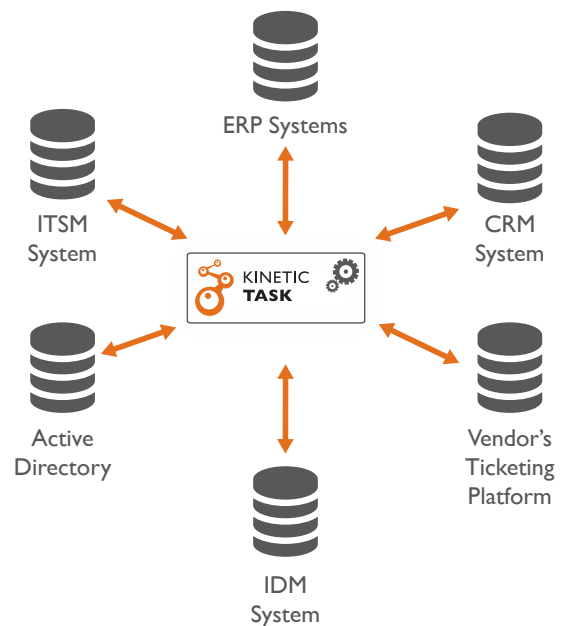
Additional information on publicly available Task Handlers can be found on the Kinetic Community site:

http://help.kineticdata.com/task/handlers

Scalability

Kinetic Task can be scaled both horizontally and vertically to meet almost any enterprise need. Many Fortune 500 companies and several of the largest U.S. federal government agencies already use Kinetic Task to manage everything from simple two-step processes to complex processes involving hundreds of unique automation steps.

Kinetic Task Setup
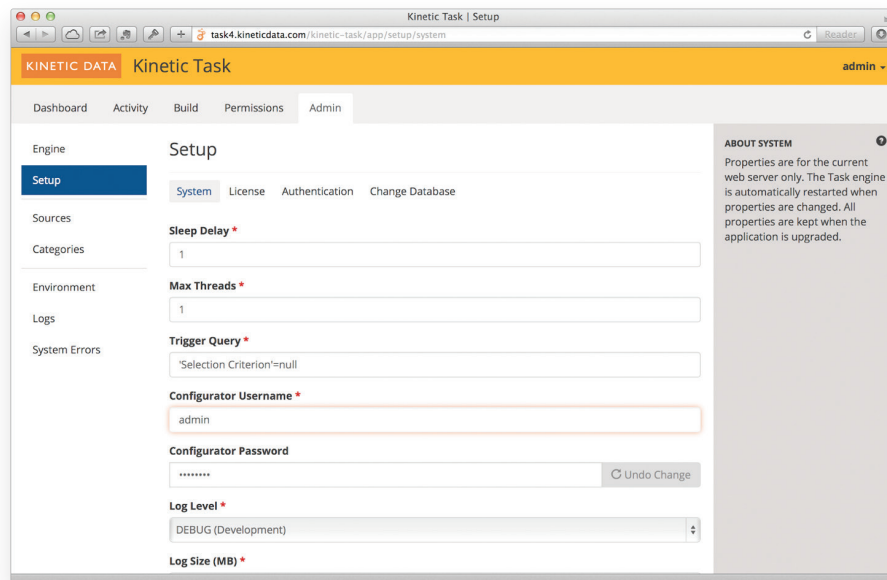
Each Kinetic Task engine can be managed independently with specific policies and security options, enabling robust management of key service designs across the enterprise.This design is ideal for highly regulated business models including healthcare, insurance and governmental agencies.

In addition, task engines can also be clustered to handle high volumes of transactions using the same business rules and work queues for both speed and redundancy while still providing individual control for worker threads and business logic.

Useful exception handling, robust logging, database interoperability, node and process pausing, import and export capabilities, and other enterprise-level features provide large, complex organizations peace of mind when operating at scale.

Manageability

With Kinetic Task, service processes can be triggered from any application or data source, allowing companies to leverage existing investments in people, processes, and technology.

Services across the enterprise can range from simple product-based service requests to highly complex business processes like employee onboarding. Kinetic Task is designed to be managed by nontechnical process owners, allowing for distributed management by nonspecialized resources, supporting both top-down and bottom-up service execution.

Kinetic Task features an intuitive interface, the Kinetic Task Builder, which is designed to allow a nontechnical person to effectively build services. The builder allows drag-and-drop configuration of services integrated in an end-to-end approach geared towards iterative improvement.

Kinetic Task Builder
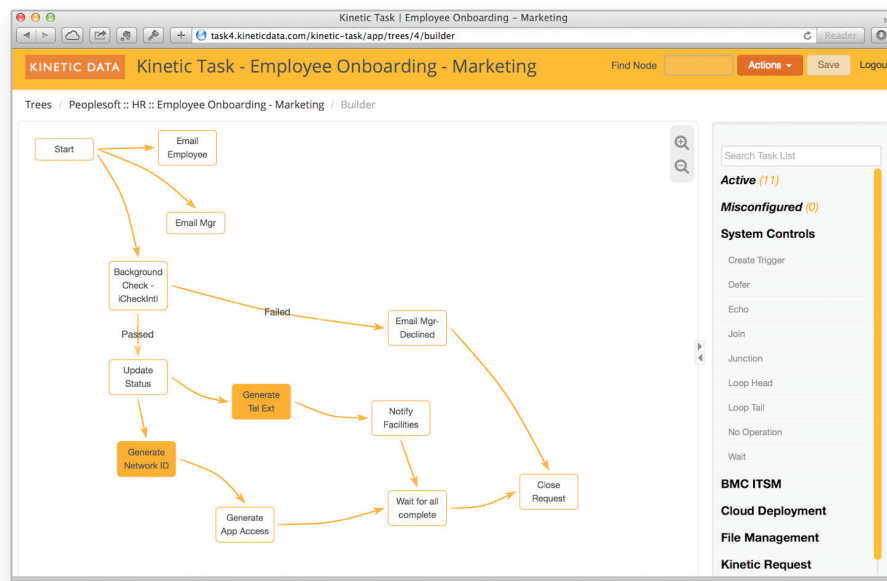
Kinetic Task Handlers are connectors that are configured to execute specific functions in the task tree. Handlers can be configured to perform activities like interacting with fulfill-ment systems, sending notifications, and executing logical process rules and functions. The open architecture allows task trees to easily be configured to execute specialized service functions, enabling organizations to provide a flexible and scalable integration model.

Conclusion

By employing a service integration strategy with Kinetic Task, organizations can build, improve, and reuse complex services in a distributed model.

The end result is rapid return on investment, improved service delivery, and enhanced competitiveness, achieved in a scalable and compliant manner.

About Kinetic Data

Kinetic Data has helped hundreds of Fortune 500 and government customers—including General Mills, Avon, Intel, 3M and the U.S. Department of Transportation—implement enterprise request management (ERM), an integrated system with a centralized request portal for automating request management. Kinetic Data was named "Innovator of the Year" in 2009 by enterprise software users, and it also has been recognized with awards for its superior customer service and support. The company serves customers from its headquarters in St. Paul, Minn., offices in Sydney, Australia, and through a network of reseller partners.

For more information, visit www.kineticdata.com, or contact us at sales@kineticdata.com or **1-651-556-1030**.