

Most modernization projects targeting antiquated COBOL mainframe environments fail. We believe this is attributable to dated methodology-based development strategies that focus on recreating the legacy foundation in a new environment. The problem with this approach is that modern relational- and browser-based applications have a completely different structure from legacy environments. Most notably, legacy mainframes make extensive use of batch processing, which cannot be accommodated in modern transaction-based environments. This incompatibility typically causes migration efforts to lag far behind schedule and eventually become abandoned.

Potomac Information Systems created the Evolve Application Framework® to address these issues and accelerate the completion of legacy mainframe modernization projects. After soliciting input from clients in various industries, we built a framework for application modernization that can be universally adopted with some tailoring. IT personnel can progress rapidly through the build because slight modifications to existing Evolve modules replace time spent reinventing basic application structures. The Evolve Application Framework will improve modernization results by allowing your organizations to focus on defining the data, application flows, and rules that comprise your unique processing requirements.

Legacy Modernization Software Development Tasks

Without Evolve Application Framework®

- Define Data Layer with access logic
- Define Application layer with usage methodology
- Define Business layer with usage methodology
- Define Presentation layer with usage methodology
- Define & code Security handling
- Define & code demographics
- Define & code Correspondence handling
- Define & code batch process handling
- Define & code workflow handling
- Define & layout business data
- Define & layout Application flow
- Define & code business rules

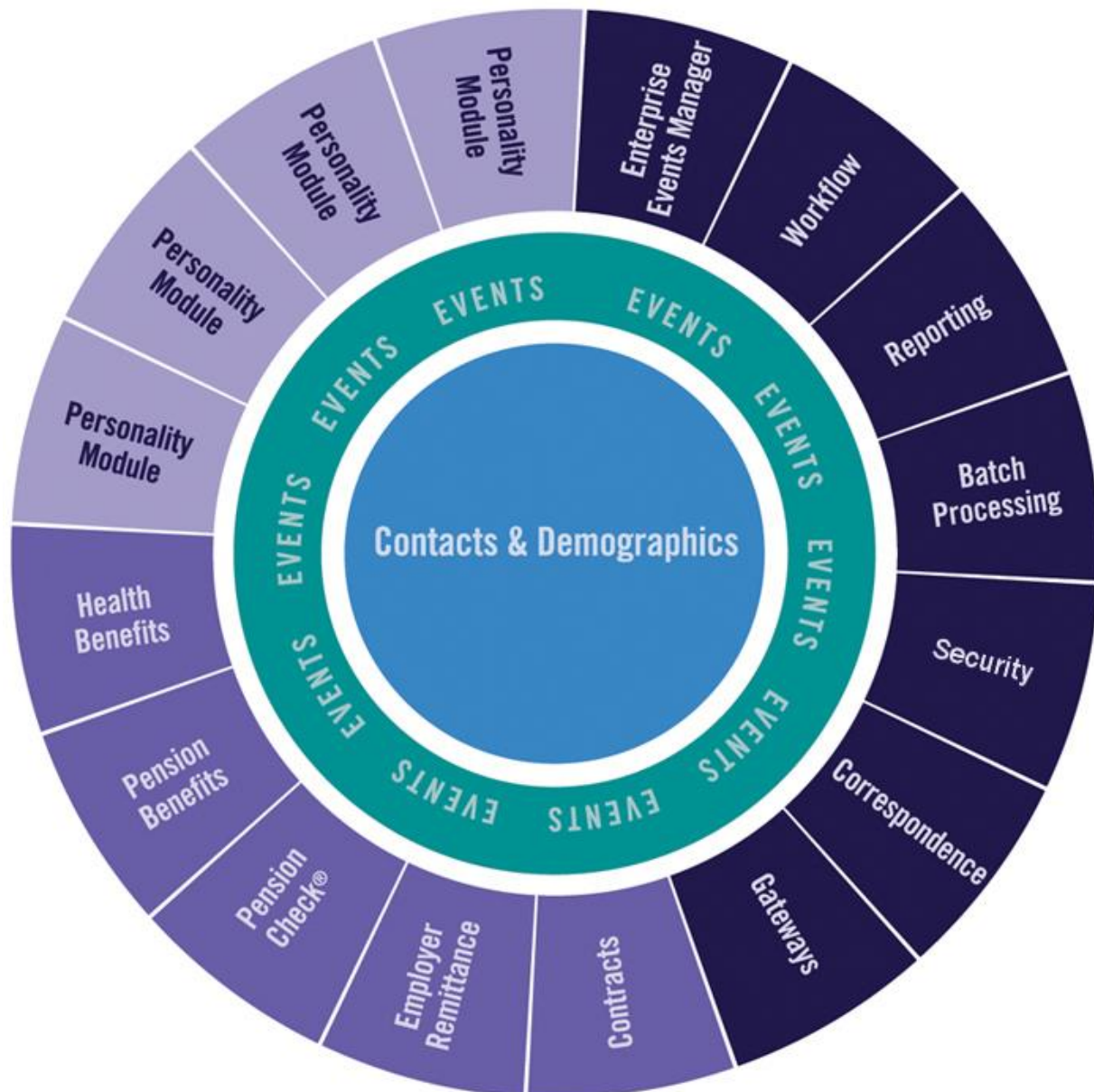
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Evolve Application Framework® is a flexible framework that can be used to develop any application. The Evolve framework contains all of the support elements needed for an enterprise application: security, configuration, data integrity, change audit, workflow, and a full suite of demographics tools.

The Evolve framework is based on a relational database with a web GUI as a target. Using a web-based framework allows for rapidly changing hardware and software, while keeping deployment times to a minimum.

ENVIRONMENT	ARCHITECTURE	SERVICE MODULES	ENTERPRISE STRATEGY
Industry Standard Browser Based Relational Database	Content Centric Event Driven Context Aware	Cooperative Complementary Autonomous	Knowledge Center Rapid Deployment Business Evolution



Key Components of the Evolve Application Framework®

Contacts & Demographics

The purpose is maintenance of identities, relationships, and relevant life events of persons. The types of information handled by this component mainly includes common types of elements, such as names, Social Security numbers, dates of birth and death, spouse relationship details, child relationship details, beneficiary details, and other. The demographics component can be easily customized.

Enterprise Events Manager

Supports the workflow aspects of the framework. It handles simple tasks, such as record Demographics life events and prerequisites for more complex business tasks. It also facilitates more complex tasks, including tracking of batch process parameters and the state of a batch process.

Workflow

Handles series of activities that are necessary to complete a task. Each step in a workflow has a specific step before it and a specific step after it. The steps are coordinated through the event manager. Workflow is automated using business rules to decide when one step has been completed successfully and the next step can begin.

Reporting

Features functionality to manually execute any individual report, as well as to automatically generate a series of reports, output as PDF files.

Batch Processing

Handles all the automated and volume processing, such as volume data processing, report and correspondence generation. A batch process can consist of built-in and custom steps. Batch Processing component contains a set of common built-in batch process steps: a step to generate a particular type of letter, a step to generate a particular type of report, and so on. A simple batch process can be configured with little or no programming, using the built-in batch process steps. A custom step has to be programmed and then registered with the Batch Processing component. After the development team has configured a batch process by specifying parameters and steps, designated users can then execute and monitor its progress.

Security

Provides system-wide access control, configurable at several levels – module level, screen level, screen control level (i.e. button or a text field).

Correspondence

Allows for creating and printing manual and automatic letters. It features user work-in-progress queues, letter approval, and printing, including multiple print queue support. Correspondence output consists of PDF files. The Correspondence component of the framework facilitates integration with third-party enterprise printing solutions via print queues and custom instruction sets that are embedded in the output PDF files.

Gateways

The application gateways are developed to work at various levels from simple – CSV file output – to complex – web service calls and methods. The application framework communicates to external applications in on-demand or manual methods.

Administration

Serves two purposes: configuration and control. From the configuration standpoint, the Administration component concentrates all of the various configuration interfaces for each of the framework components.

On the control side, Administration component includes control interfaces for execution and monitoring of correspondence printing and batch processing.

Personality Modules

These are the modules that are developed by or for the client to incorporate their business rules. These modules are the lifeblood of the application that will support and drive the client's business for years to come.