GRAPHITE GTC

Graphite Studio & Insurance

Insurance Q & A

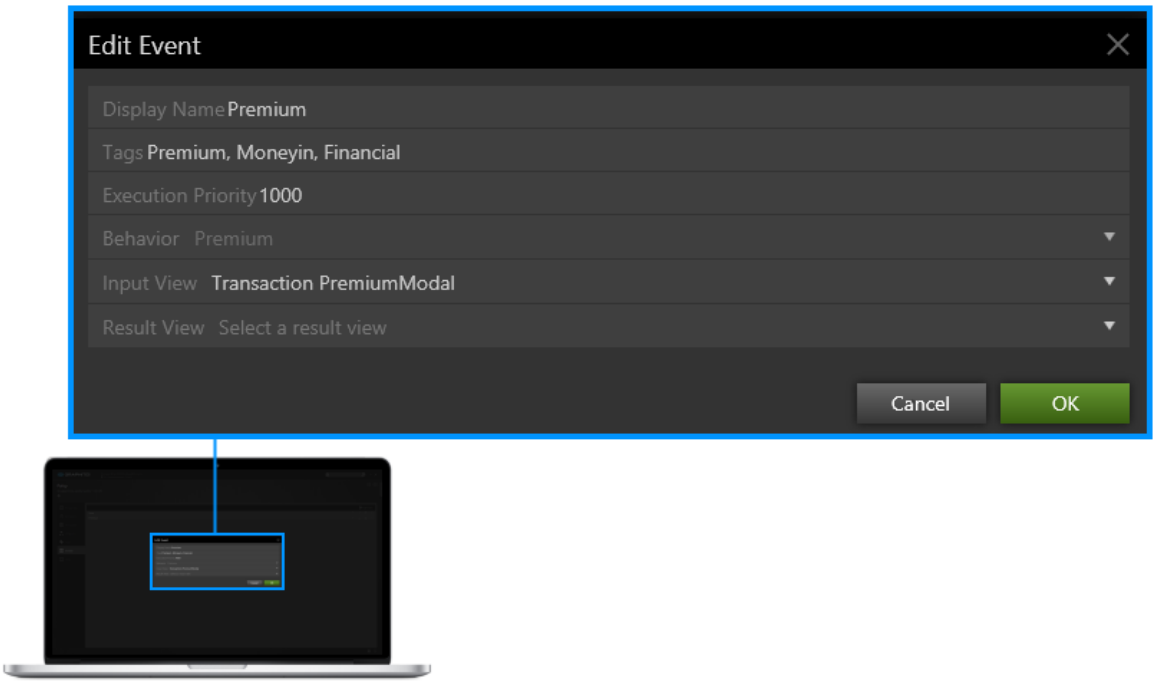
Graphite Studio Insurance Features

Business Transaction Processing

In Graphite Studio any behavior can be turned into a business transaction. These behaviors which are called Events can either be scheduled to be processed by nightly batch using the Schedule Event shape or processed immediately using the Run Event shape.

Both the Event shapes associate the processing of a behavior with a specific User and System Date. This feature allows applications built using Graphite Studio to contain a timeline of transactions for any entity.

Events processed maintain a data hierarchy of the associated Entity both before the Event is processed and after the Event was processed. This feature can be used effectively in insurance applications to show how a business transaction has affected a policy or a role or a premium and so on.



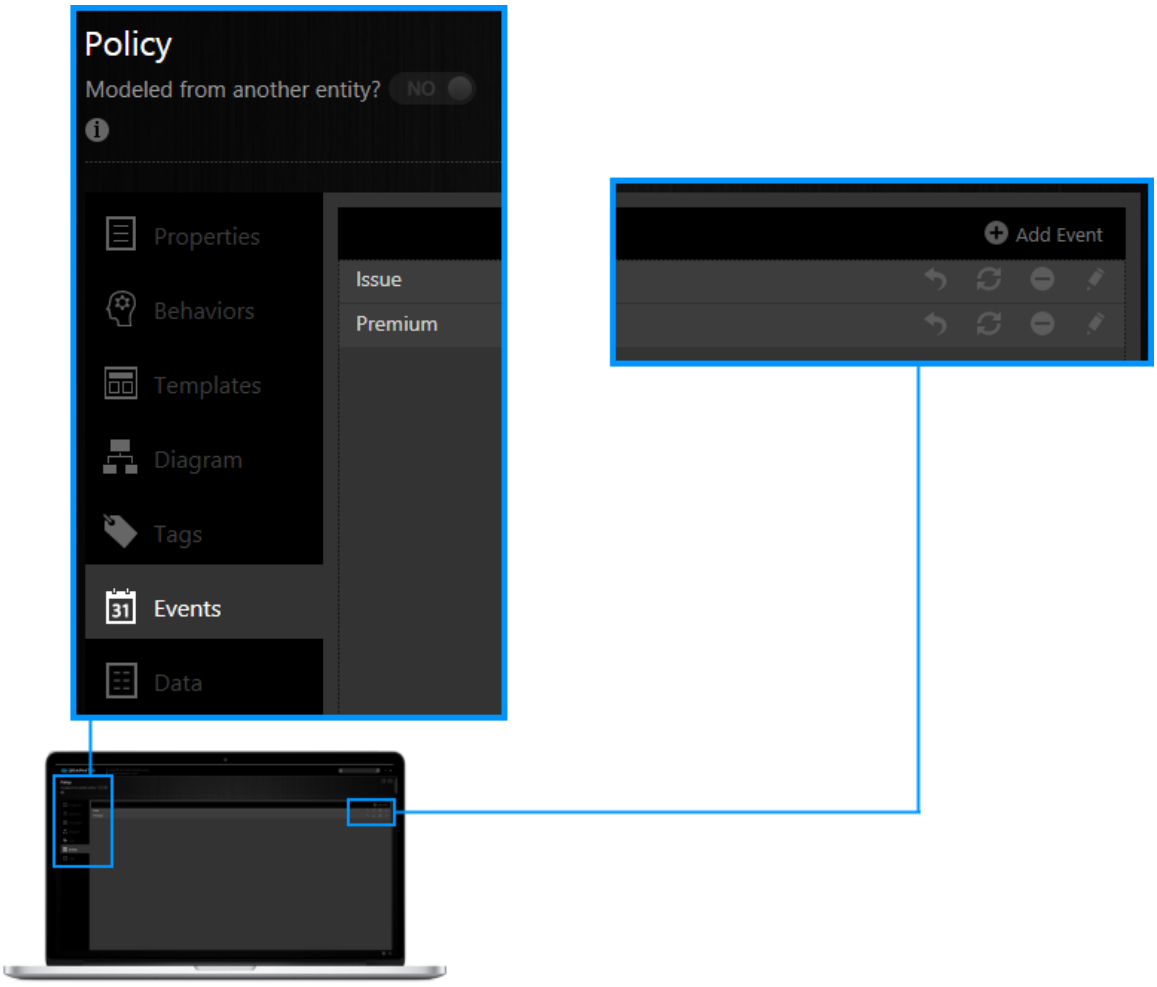
The Event setup dialog allows a content developer to setup execution priority, custom input and result Views for each of the Events.

Events can also be exposed as SOAP or REST services. This is enables the development team to create a services layer using Graphite Studio at a rapid speed.

Undo/Redo – Custom Undo/Redo Behaviors

Once an Event is processed it can be reversed to move the Entity back to the state it existed before the processing of the Event. This feature is commonly used in insurance applications that will need to provide for a clean reversal of financial processing when an error has occurred due to bad data entry or other business circumstances. In most cases each of these undone Events have to be reprocessed once the error has been addressed. Graphite Studio provides the capability to automatically add a pending Event that can be used to fix the error and reprocess the Event.

In some cases, such a disbursement processing a simple Undo of an Event will not suffice. Custom logic will be needed during the Undo and the Redo process. Graphite Studio provides the capability to build a custom Undo Behavior and/or a custom Redo which will be automatically invoked when an Event is undone or reprocessed.

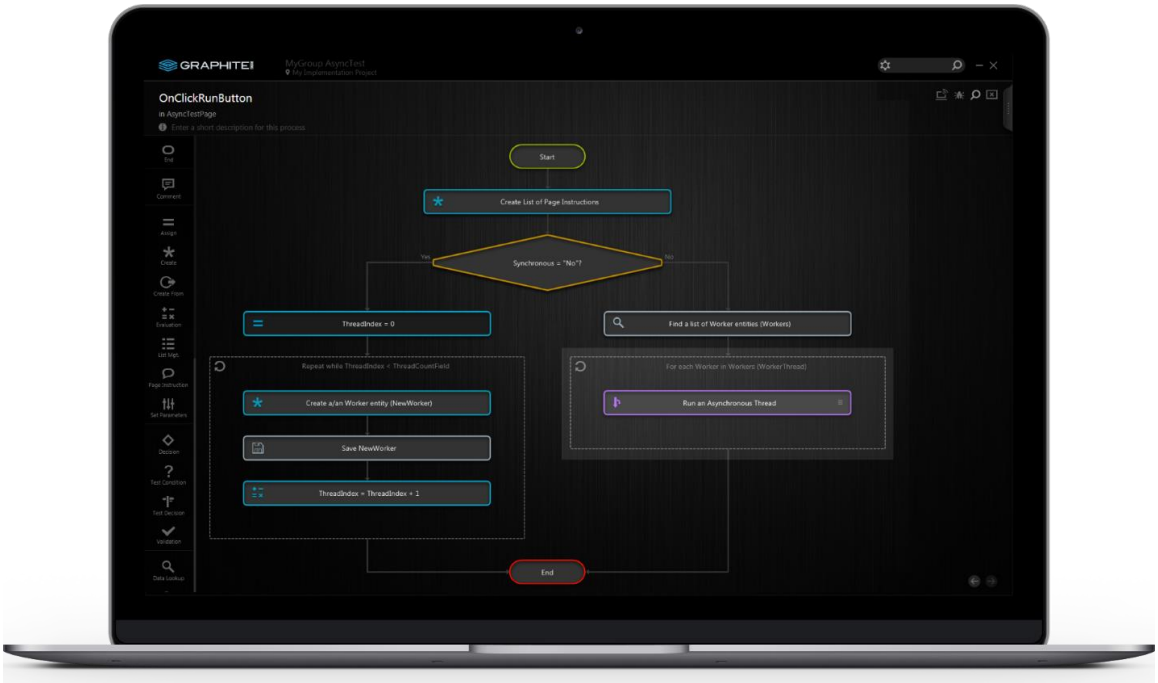


Nightly Batch / Asynchronous Processing

The Graphite Studio platform comes with a windows service based batch processing mechanism. This services run across a webserver cluster to facilitate the batch processing to scale horizontally.

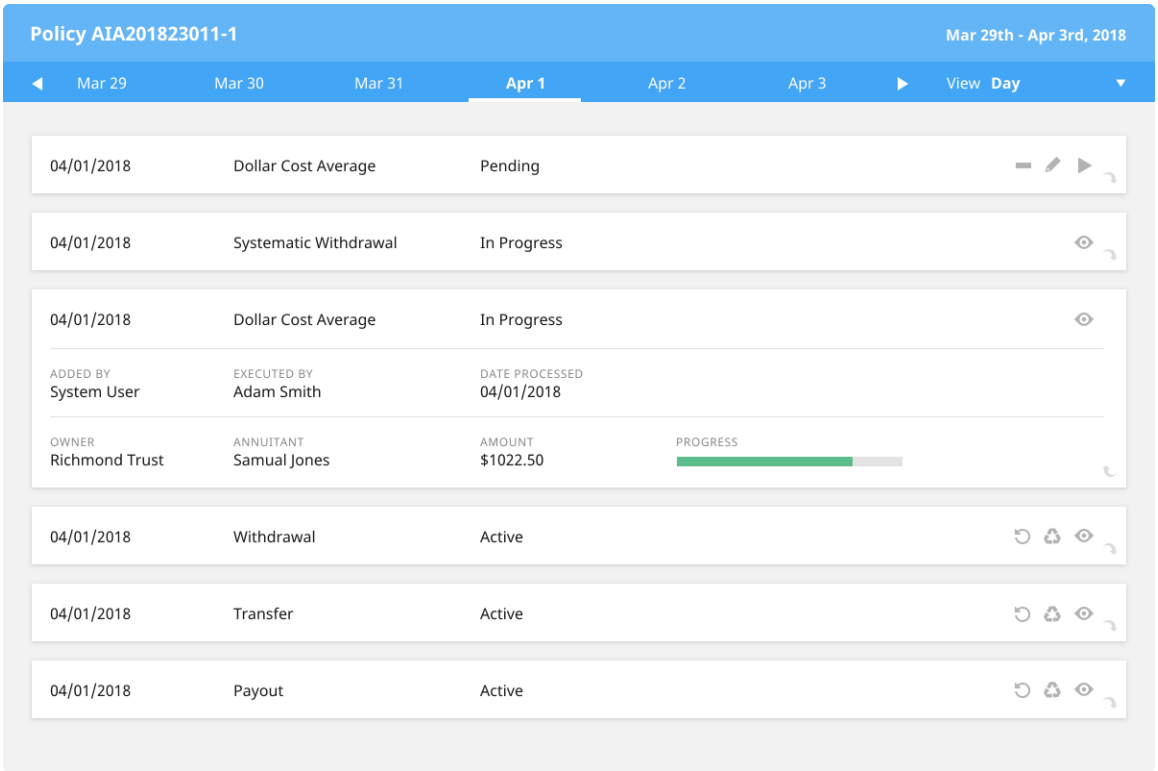
The batch processing windows service is light weight and simply contains a scheduling mechanism to process the schedule Events.

Graphite Studio also provides the capability to process Behaviors asynchronously. The Asynchronous shape can be used in a Behavior to invoke any Behavior in an asynchronous fashion.



Since the Asynchronous shape uses the underlying Graphite GTC batch windows service asynchronous processing can be spread across webservers. Thus truly providing a scalable multi-threading architecture.

Timeline



Graphite Studio provides a set of powerful UI widgets that can be used to process Events and display Event details. The Timeline View Element provides the ability to display Events in a chronological order. The Event Display Panel/Detail View Elements provide the capability to process, show business validations, reverse and redo an Event.

Insurance Q &A

1. What features exist to support automated deployment pipeline?
    a. Test Driven Development?
    Graphite Studio promotes Test driven design by offering the capability to visually create unit tests during the development process. These unit tests are executed and validated prior to deploying to a server for Quality Assurance Testing.

    b. Automated regression testing?
    Graphite Studio will directly fit into your current Software Development Life Cycle shortening the development and unit testing phases. If a customer currently has a methodology for regression testing, Graphite Studio will not change the customers approach.

    c. Build automation?
    Graphite Studio provides a headless service that can be used to build and deploy applications. If a customer currently has a methodology for build automation, Graphite Studio will not change the customers approach.

    d. Containerization?
    Since all Graphite Studio generated applications are standard .NET Web Applications they can be containerized just as any .NET Web application can be containerized.

2. How does the product scale?
    a. Can session state get managed across a server cluster?
    Graphite Studio generated applications are completely state-less on the server side. This allows Graphite Studio applications to scale horizontally without a need to worry about server-side sticky sessions or other mechanisms for the preservation of server-side state between calls.

    b. How do you scale?
    Graphite Studio generated applications scale horizontally on the Web-tier through the use of web server clusters and as Database requests/demand increases we recommended scaling vertically by increasing the resources available to the Database Server. This is in-line with traditional Microsoft recommendations; scale-out in the Web-tier and scale-up in the Database-tier.

3. How flexible is the UI design facility?
    a. Can we implement our Enterprise Style and Pattern libraries easily? (Custom java script components)
    Graphite Studio offers an extensive amount of User Interface Elements from our libraries. These UI Elements are used to visually create custom screens based on the customer's needs. If a new UI Element is needed, the customer can

easily include it by writing a small amount of JavaScript and CSS. In fact Graphite Studio provides a conduit to bring in any traditionally developed artifact.

4. Can we implement our AppDynamics monitoring solution easily?
    a. JavaScript beacon, CLR monitoring, etc…
    Graphite Studio generates a standard MVC web based application with HTML5, CSS3 and JavaScript. Hence any industry standard monitoring tools can be used to monitor the generated application at every tier.

5. What Databases are supported?
    Graphite Studio directly supports SQL Server Enterprise, SQL Server Standard, SQL Server Express and Azure SQL. However additional databases can be supported by writing a custom Repository layer leveraging our extensibility or service features.

6. What API / web service capabilities exist?
    a. Can we expose reusable components to external consumers? (i.e., micro service architectures supported?)
    When using Graphite Studio the customer can create projects that are small to large scale applications. Graphite Studio also provides support to build libraries that can be used to share functionality across projects. Any behavior in a library or a project can be exposed as a web service with a push of a button, both SOAP and REST. REST Services generate OpenAPI (Swagger) documentation.

    b. How easily can the product consume 3rd party APIs and SOAP services?
    Graphite Studio's Extensibility and Services features makes it incredibly easy to integrate with any third party system or middle ware.