



GT eForms™ Framework Highlights

Workflow, Electronic Forms, and Custom eApp Toolkit

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GT eForms™ Features

GT eForms™ is a bolt-on workflow and electronic forms toolset for PeopleSoft applications. GT eForms™ provides a flexible framework for developing electronic forms, where business analysts can control the business process flow in setup tables, with minimal technical intervention. GT eForms™ allows for completely adaptable approval steps (workflow), configurable, step-based page navigation (pageflow), email and worklist management, home page management and seamless integration into delivered PeopleSoft components.

GT eForms™ applications reside in PeopleSoft and use native PeopleTools technology, including workflow, security, application messaging, integration broker and component interface. This allows native access to PeopleSoft data, valid values and processes, leveraging your existing PeopleSoft investment.

Using GT eForms™, companies can take any paper form and turn it into an efficient, secure and effective electronic form. Following are some of the exciting and effective features of GT eForms™.

“Implementing GT eForms™ was a home run for our organization. We were able to decentralize PeopleSoft [entry] and greatly reduce the manpower required to process payroll. We were able to eliminate faxes, emails and phone calls, and replace them with an efficient workflow.”
- Anthony Longo, PeopleSoft Programmer/ Analyst, Wakefern Food Corp.

Business Owner Control

GT eForms™ lets business owners and business analysts, who understand the business process best, to arrange in setup tables how the form will unfold to the user. This allows for the design of easy-to-follow, wizard-like eForms that guide the user through to completion. The steps the user follows can branch conditionally, letting the user see only the pages and information that pertain to them.

The business analyst can also add **context-sensitive headings, instructional text, and ad hoc questions** to the eForms, also in setup tables, with no code changes needed.

As a result, our clients have reported compelling improvements in usability and end-user satisfaction, and drastically lower error rates.

GT eForms™ allows **approval routes and workflow, email templates and email content, notification triggers, routing and email filters, conditional branches and overrides** and much more to be defined by functional users (business owners and analysts) in the online application. Changes and extensions can be implemented by functional users online and in real time.

Workflow

Customizable Online Workflow

GT eForms™ provides functionally-defined, conditionally branching, reusable **Approval Routes** that guide eForms to the right people and eventually into the target system. These Approval Routes can use PeopleSoft security roles, department security, position reports-to structures, and many other routing constructs, and through conditional branching, can manage routings of any complexity.

Easy online Approval Route setup...

Approval Steps

Approval Step	Role Name	Filter	Equally Authorized Roles
1	GT Initiator		Equally Authorized Roles
2	GT Department Approver	By Department Security	Equally Authorized Roles
3	GT HR Office		Equally Authorized Roles

Process Visualizer

1: Pronoun, Todd V (GTPRONOUT) > 2: GT Department Approver (1 minute) > 3: GT HR Office > 4: Integration Broker > 5: System

...automatically becomes easy-to-follow workflow routings

Figure 1 – GT eForms™ online Approval Route setup

Ad Hoc Reviewers and Approvers

The powerful eForm Admin Tool that is delivered with GT eForms™ 2.8 enables an administrator to manage an individual eForm in many ways, including adding ad hoc reviewers and approvers, as shown in **Figure 2**:

Worklist

User ID	Name	Role	Next Task	Short Description	Action
GTINDEPEC	Chelsea B Independent	GT Department Approver	EVL	Evaluate	[-]
GTABSOLUJ	John Absolute	GT Department Approver	EVL	Evaluate	[-]

Role: Role User

User ID: Description: *Next Task: Evaluate Add Cancel Save

Figure 2 – Adding an ad hoc approver

For an ad hoc reviewer, Next Task is set to View.

We can also enable ad hoc routing by workflow participants. At the University of Utah, our ePAF™ forms route according to the default routing rules, and then allow the initiator or approver to add additional reviewers.

Out-of-Office Routings

GT eForms™ provides several approaches to make sure work doesn't stop when someone is on vacation.

- **eForm Admin Tool** – This powerful tool allows an administrator to move a form to someone else's worklist, or simply add backup or ad hoc approvers to the form, which sends emails and adds appropriate worklist items for these approvers.
- **Alternate Workflow User** – GT eForms™ checks PeopleSoft's delivered Alternate Workflow User settings, which individual users can set in their User Configuration page. Using this, when a user goes on vacation, he or she can redirect their workflow emails and worklist items to an alternate recipient. (The alternate must still have appropriate roles and security to work the forms.)
- **Pooled Worklists and Equally Authorized Roles** – Pooled worklists allow multiple people who share a role and security settings to manage a workload together. Whoever in the pool works the form first, the step is complete and the form is removed from everyone's worklist. Equally authorized roles allow people to be authorized to work a form at a certain step without having to normally receive emails and worklist items, but when the form is routed to them by an administrator or another user, they can work it.
- **Manage Personal Workflow eForm (separate eForms Library solution)** – Developed for the University of Utah, this eForm provides a workflow user with robust features to manage workflow proxies and delegates.

Escalation

GT eForms™ can leverage PS Workflow's built-in escalation functionality to escalate eForm worklist items after a specified time period.

Pageflow

Easily Customizable to Collect/Present Only Appropriate Data

GT eForms™ provides the flexible toolset necessary to implement our efficiency-producing design philosophy. To accomplish the goal of only presenting the fields necessary for a certain processing step, we employ conditional branching in the pageflow of the form. For example:

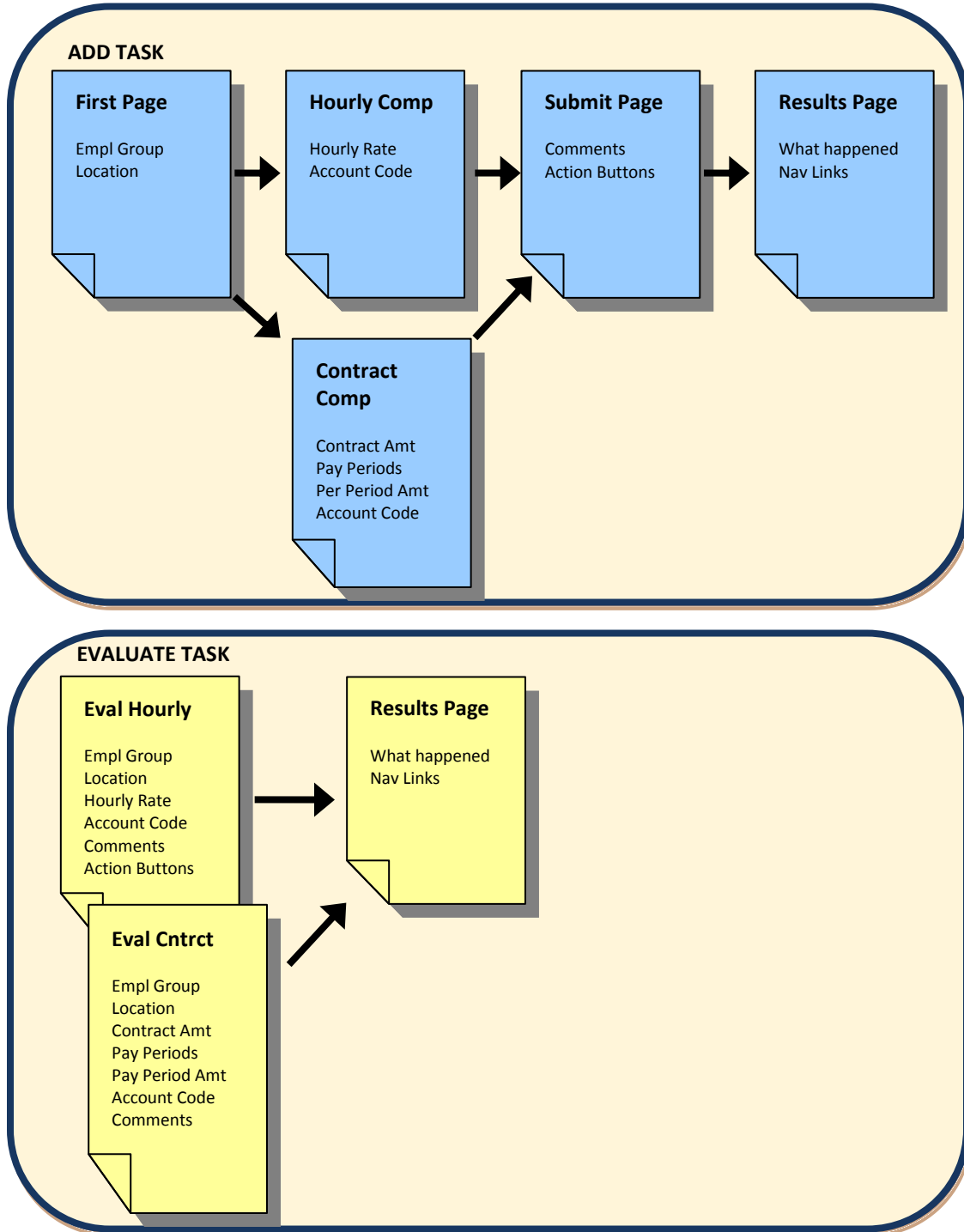


Figure 3 – Conditional branching in pageflow

At the top of **Figure 3**, the Add Task pageflow shows how different fields are needed for an Hourly as opposed to a Contract employee. To accomplish this, we create two different Compensation pages, one with the Hourly fields and one with the Contract fields. The appropriate Comp page is chosen conditionally, depending on the values chosen on the first page. The Evaluate Task also illustrates how a different first page is displayed for Hourly and Contract employees.

This conditional branching is easily customizable because it is *managed in setup tables* and can be configured by business analysts. The Hourly pageflow is defined under one Condition and the Contract pageflow under another. The developer only needs to build the pages and see that the appropriate Condition is set; at runtime, the setup tables are then read to see which path of pages to show the user. The pageflow can change dynamically as the user changes the Condition values.

The result is an eForm that only shows the appropriate fields to the user, unfolding naturally as they enter information. The complexity of the different possible paths is completely hidden from the user, and they are guided through the appropriate path based on the business process laid out by the business analyst.

Managing Business Process Complexity

Most institutions do not have the luxury of getting rid of all the complexity in their business processes. Most of it is there for a good reason – you need it! Hiring a salaried administrator has to be different than hiring a part-time hourly employee. A funding change in one department may have a good reason to require different fields than a funding change in another. The easiest way to organize a crowded workshop is to throw everything away, but then you’ve defeated the purpose.

Using GT eForms™, we build solutions that store your business process complexity in a logical setup table structure, like shelves in the workshop. When the complexity is organized and well defined, it can be managed by business analysts, and more importantly, it can be hidden from the end users! The eForms can follow their defined paths and branches without requiring the end user to know about the branches, or even know they exist.

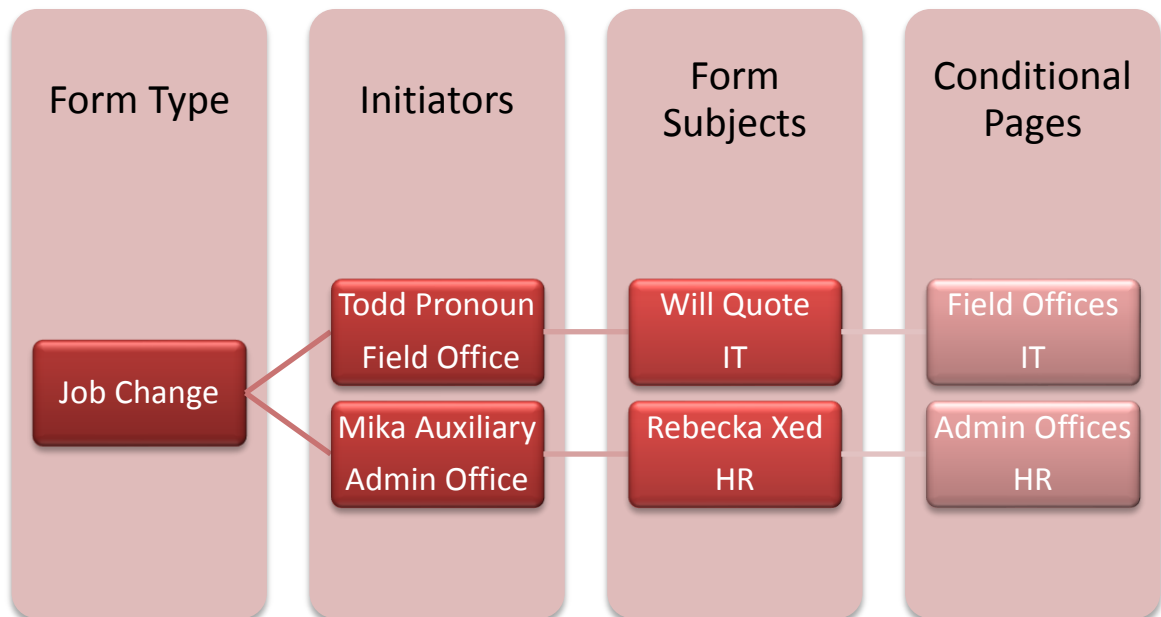


Figure 4 – Different conditions display different pages

For example, in [Figure 4](#) – Different conditions display different pages, the Job Change eForm can respond dynamically to the location the Initiator works at, and the department the Form Subject works in, to display conditional pages with only the fields necessary for the given location and department.

Where to Store Your Complexity?

GT eForms™ has several levels of definitions that allow you to organize a business process of any complexity.

- **Form Type** – Create separate forms for discrete business processes. If two processes have very little in common with each other, it makes good sense to separate them. Remember that doing so increases the options end-users must choose among.
- **Form Condition** – Major divisions or paths through a given Form Type. This could distinguish among divisions, between exempt and non-exempt, etc. If a characteristic changes both workflow and pageflow, it is a good candidate for a Form Condition.
- **Form Task** – Defines what pageflow, form messages, and notifications a given user will see.
- **Visual IF** – A “Yes or No” question to turn on or off a step in the workflow, the pageflow, form messages, notifications, and more.

Routing Complexity

Most organizations have approval routings that have varying levels of approval. Here is an extreme example:

The University of Oklahoma at Norman had an established PAF form routing protocol that included twenty-four possible approval stops. After careful review they wanted to keep all the steps in their ePAF™ system.

GT streamlined the process from a possible twenty-four sequential steps down to a maximum of ten, by:

- Moving some Approvers out of the critical path by making them Reviewers, for whom the form didn't wait.
- Combining a group of Approvers into a simultaneous pool who all receive the form at once. All must approve before the form moves on.

GT eForms™ has many robust routing features to support any routing need.

Cloning and Modifying eForms

GT eForms™ reduces the overall effort needed to develop and maintain solutions by reusing as many components of the solution as possible. The ability to clone and modify business processes is one of those ways.

Different eForm processes are defined in GT eForms™ as **Form Types**. Form Types can easily be copied and modified to fit another purpose.

Form Type	ROLE	Update Roles
Form Type Action	Copy	
New Form Type	UPDTCLASS	

Copy Form Type

Figure 5 – Copy Form Type page

While the form pages in GT eForms™ are really regular PeopleTools pages as built in Application Designer, the **workflow** and the **pageflow** for the whole eForm business process are defined and controlled in the Form Type setup tables. This allows a business analyst to define what pages appear in what order to what users, what approval route the eForm will follow under what conditions, and much more, all without changing code (see [Workflow](#) and [Pageflow](#) sections above).

This whole setup architecture can easily be copied as shown in [Figure 5](#) to help create a similar eForm process.

Conditionally Manage Pages Field-by-Field

eForm pages can be reused and repurposed by conditionally managing how the fields appear on the page in different circumstances. For example, at one location the Salary Admin Plan may need to be gathered on the form, while at a different location it can always be defaulted. Using Form Conditions, the same page can be used in both cases, and the Salary Admin Plan field conditionally hidden for the location where the user doesn't need to see it.

Page Name: G_FORM_HIRE_A_JB

Page Version: Find | View All | First 1 of 1 | Last

Version: ACADEMIC-NON

Version Type: HIRE JOB

Load Fields

Record Name: [Search] Load Fields

Version: [Search] Load Fields

SeqNum	Record (Table) Name	Field Name	Field Display
1	G_FORM_EPAF_DR	G_ACAD_INFO_LNK	Invisible
2	G_FORM_HIRE	POSITION_NBR	Invisible
3	G_FORM_HIRE	BUSINESS_TITLE	Enabled
4	G_FORM_HIRE	REG_TEMP	Invisible
5	G_FORM_HIRE	JOBCODE	Required
6	G_FORM_HIRE	DEPTID	Required
7	G_FORM_HIRE	SAL_ADMIN_PLAN	DisplayTxt
8	G_FORM_HIRE	COMP_FREQUENCY	DisplayTxt
9	G_FORM_HIRE	G_STEP	Invisible
10	G_FORM_HIRE	FULL_PART_TIME	Invisible
11	G_FORM_HIRE	STD_HOURS	Invisible
12	G_FORM_HIRE	FTE	Invisible

Customize | Find | First 1-15 of 15 | Last | Delete All Fields

Figure 6 – Conditionally manage field behavior on a page

eForms in Action

Many of the robust features of GT eForms™ come into play as you put the workflow platform to use in real life. Some of these features are detailed below.

In-line Instructions

The Form Type setup tables allow a business analyst to control the display of many aspects of an eForm, including what instructions are presented on what page. The setup works like this:

Form Type Table									
Form Rule Tasks									
Form Task Navigation									
Form Task Messages									
Form Nav Setup									
Workflow Form Type:		HIRE		Hirea					
Form Tasks									
Find First 1-5 of 5 Last									
*Form Task:		Add		Task Title: Hire an Employee					
Step	Up	Down	Count?	*Step Title	Descr	Nav	Visual If		
1	↑	↓	✓	Candidate Search	Descr	⌘	If		+ -
2	↑	↓	✓	Job Information	Descr	⌘	If		+ -
3	↑	↓	✓	Compensation	Descr	⌘	If		+ -
4	↑	↓	✓	Finalize Form	Descr	⌘	If		+ -
5	↑	↓	✓	Form Finalized	Descr	⌘	If		+ -

Figure 7 – Updating page instructions in the Form Type setup tables

The Form Type Table has a Step entry for each form page. When you select the Descr button...

Step Instructions

Indicate the type of employee you are hiring by choosing a value in the Empl Group field. For employee groups where Position Number is required, it will appear. Fill out the rest of the fields, and choose Next.

OK Cancel

Figure 8 – Entering instructions to display on the form page

...you can enter the instructional text you want to appear for that page. When a user brings up the form...

ORACLE

Favorites | Main Menu > Department Self Service > ePAF Home Page

Hire an Employee

Authorized by
GIDEON TAYLOR

Step 2 of 5: Job Information

Indicate the type of employee you are hiring by choosing a value in the Empl Group field. For employee groups where Position Number is required, it will appear. Fill out the rest of the fields, and choose Next.

Personal Info

Name:	Chun Adverbs	Empl ID:	0997530
Cit Status:	Citizen	Personal Data Job Data Additional Pay	
Email Address:	chun@gideontaylor.com		

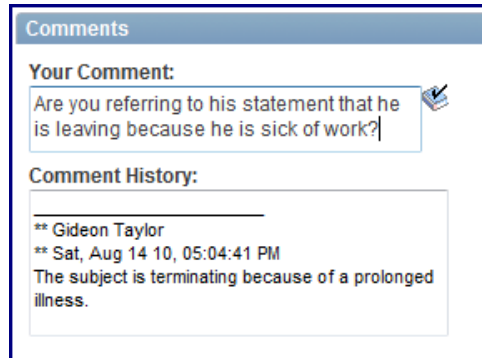
Figure 9 – Entered instructions automatically display in context

...the text you entered automatically displays.

Using the Condition feature in the Form Type Table, you can even have different text appear in different contexts on the same page – for example, instructions for hiring a Union employee could be different than those for a Non-Union employee, even though they are using the same eForm and the same page!

Attaching Notes

Notes can easily be added to any eForm using the Comments feature. Comments can be used to communicate with other participants in the eForms' workflow, explain the reasons for a change or otherwise note information that doesn't belong in any of the eForms' standard fields. Comments are stored permanently with the eForm.



Comments

Your Comment:

Are you referring to his statement that he is leaving because he is sick of work?

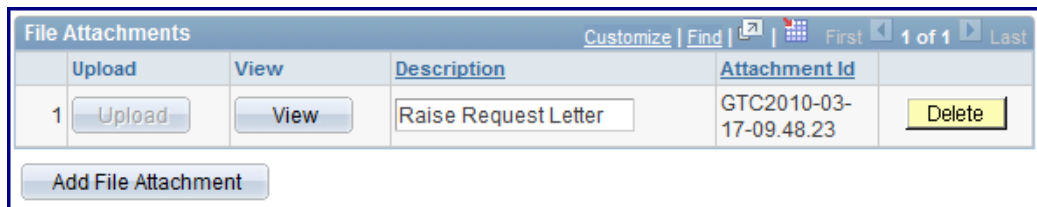
Comment History:

** Gideon Taylor
** Sat, Aug 14 10, 05:04:41 PM
The subject is terminating because of a prolonged illness.

Figure 10 – Notes in the Comments and Comment History fields

Attaching Documents

GT eForms™ includes basic document management support. Attachments (scanned or desktop documents) can be uploaded and associated with an eForm. These attachments can be stored in the database (for low-volume and non-production systems) or on network-addressable file storage (strongly recommended for production systems). Users with access to evaluate or view the eForm can view and download the associated attachments.



Upload	View	Description	Attachment Id	Delete
1 <input type="button" value="Upload"/>	<input type="button" value="View"/>	Raise Request Letter	GTC2010-03-17-09.48.23	<input type="button" value="Delete"/>

Figure 11 – eForm Attachment feature – to display the attachment, click View

GT eForms™ also integrates easily with full-featured document management systems. When our clients have implemented DMS systems, GT can store uploaded attachments directly to the DMS, store links to the DMS-based documents with the eForm, and retrieve the attachments from the eForm with a click. GT implemented such an integration solution for the University of Houston.

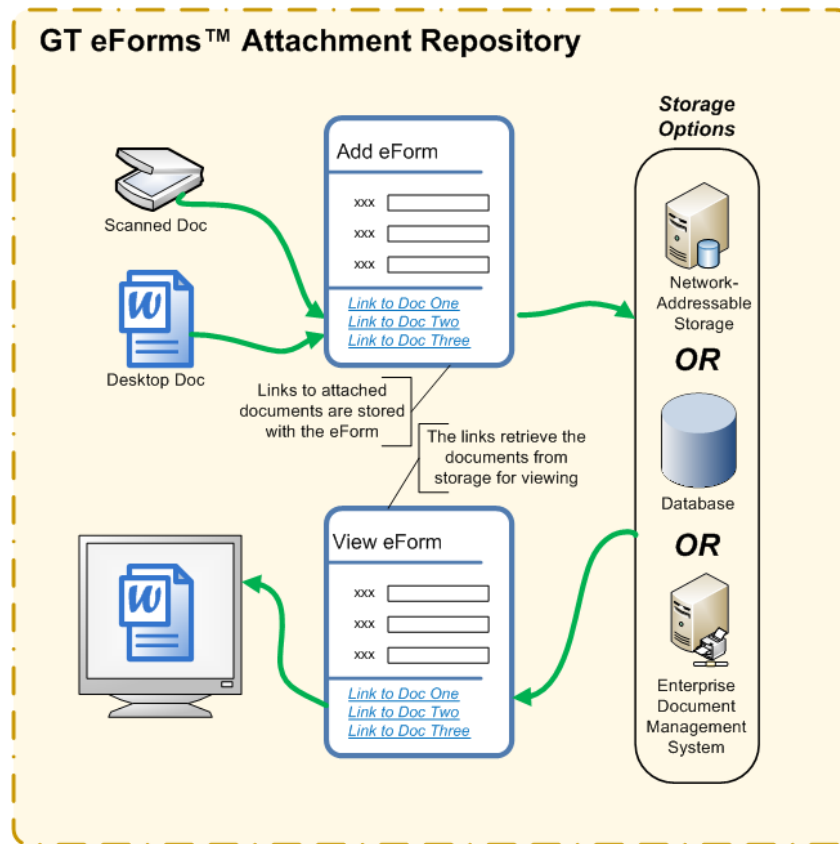


Figure 12 – Process flow for GT Attachment Repository

Tracking an eForm

GT eForms™ applications keep everyone involved in a business process active and informed in its progress. Users from any area or department that have security access to view an eForm process can check its progress. Progress can be viewed by form, by employee ID, by time outstanding, or any number of other search criteria.

Progress is displayed in an easy to understand, graphical tool called the Process Visualizer (**Figure 13**). It displays all the past, present, and future participants in the process; shows how long the form was in process at each step; and indicates who can perform the next task.

GT eForms™ proactively notifies requested participants via email as the form progresses. Setup-configurable notifications allow functional users to define who gets these FYI emails.

Automatic Audit Record

Everything that happens to an eForm is automatically audited and logged. As shown in **Figure 13**, audit data includes date/time stamp, the role acted in, the User ID and description, the form action taken, and the resulting form status.

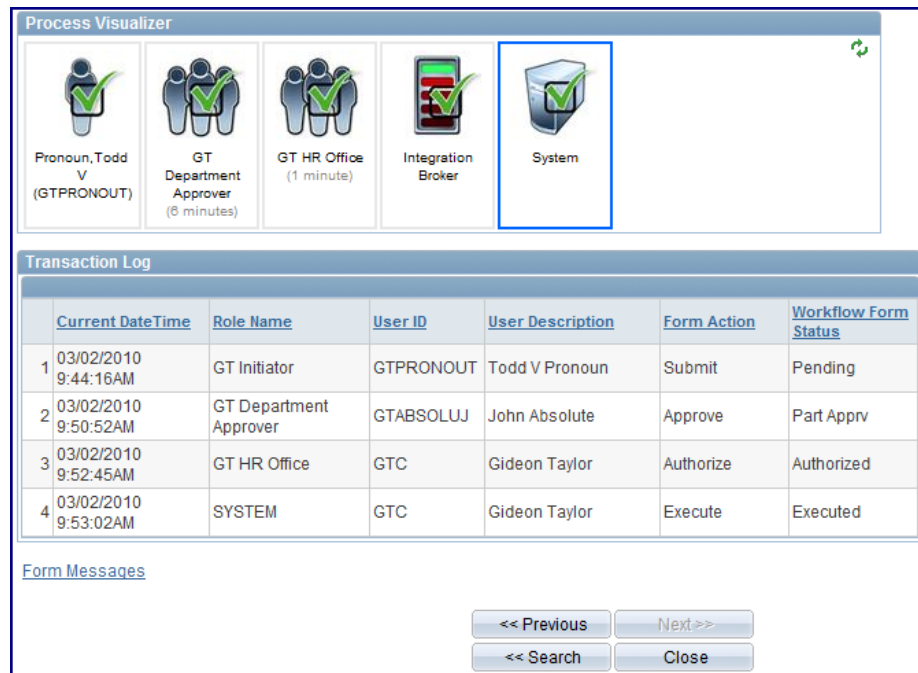


Figure 13 – Process Visualizer and Log

This audit record is permanently stored with the eForm, and can be checked by anyone with appropriate security access.

Electronic Signatures

Gathering and storing electronic signatures is a key feature of GT eForms™. GT eForms™ provides multiple electronic signature modalities. These include:

- Identity-Verified Actions** – Every user action on an eForm is automatically tracked and stored in a signature transaction log, including the user name and ID, the PeopleSoft security role they are acting in, and a date-time stamp. In this way, everything they do is signed electronically – it was done while they were logged in with their unique user name and password, and we stored what they did and when.

When eForm users click Approve or Deny, they are electronically signing that they are taking that action.
- Click-to-Agree Signatures** – Our Form Messages feature can require a click to acknowledge a statement or message before the accompanying eForm can be signed, like initialing a statement on a paper form.
- Click-to-Sign Signatures** – For extra emphasis, GT eForms™ can require a Click-to-Sign signature. These are employed in the GT Paperless I-9™ solution. The user is required to re-enter their user name and password, firmly establishing their identity and that they are still in control of the user session. The Click-to-Sign button is then replaced with a graphic representing the electronic signature.

I am aware that federal law provides for imprisonment and/or fines for false statements or use of false documents in connection with the completion of this form.

I attest, under

- A citizen of
- A noncitizen
- A lawful permanent resident
- An alien at large

Employee's Signature

[Click to Sign](#)

Figure 14 – Click to Sign

Employee's Signature
Enter Electronic Signature

By entering my User ID and Password below, I acknowledge that I have read the preceding attestation, and that I so attest under penalty of perjury.

User ID:

User Password:

[Sign](#) [Cancel](#)

Figure 15 – User must re-enter ID and password

I am aware that federal law provides for imprisonment and/or fines for false statements or use of false documents in connection with the completion of this form.

I attest, under

- A citizen of
- A noncitizen
- A lawful permanent resident
- An alien at large

Employee's Signature

Electronically signed 2009-03-18 03:58:26 by
Irma Krantz 1 - eVerify
Emplid 0050, User ID GTKRANTZI

Figure 16 – Graphic replaces Click to Sign button

Generally User ID- and password-based electronic signatures are appropriate for electronic transactions, as evidenced by millions of legal and financial transactions that take place over the internet every day.

Updating PeopleSoft and Other Applications

GT eForms™ applications can easily update PeopleSoft using the gold-standard Integration Broker / Component Interface method. Any other application can be updated through Web Services or legacy integrations. See section **Error! Reference source not found.** below for a detailed discussion of GT Forms™ integration capabilities.

GT Analytics™ Reporting and Business Intelligence

The GT Analytics™ provides a simple way to monitor the workflow queues associated with eForms. This powerful tool searches eForms based on criteria such as form type and status, date ranges, participants, etc. and shows summary charts and eForm details of the search results. Charts give your managers a visual picture of your automated processes, with graphical comparisons to the broader organization. Drill down to the Admin Tool to act on an individual eForm, approving it or communicating with approvers.

- GT Analytics™ has pre-defined searches for the most common monitoring tasks, including an eForms Aging search and an eForms Error search.
- Custom searches can bring up workflow queues for individual approvers, departments, form subjects or form types.
- A one-click drilldown from the detail grid takes the user to the Admin Tool for that eForm, where many actions can be taken.

Operational Reports

These reports can be generated from the GT Analytics™ and either reviewed online or run to Excel for offline use, printing or distribution.

- **eForms Aging Report** – Lists eForms that are pending by their age.
- **eForms Error Report** – Lists eForms that are in an error state.
- **Custom eForms Report** – Search by any of the GT Analytics™ query fields to generate a custom list of eForm transactions.

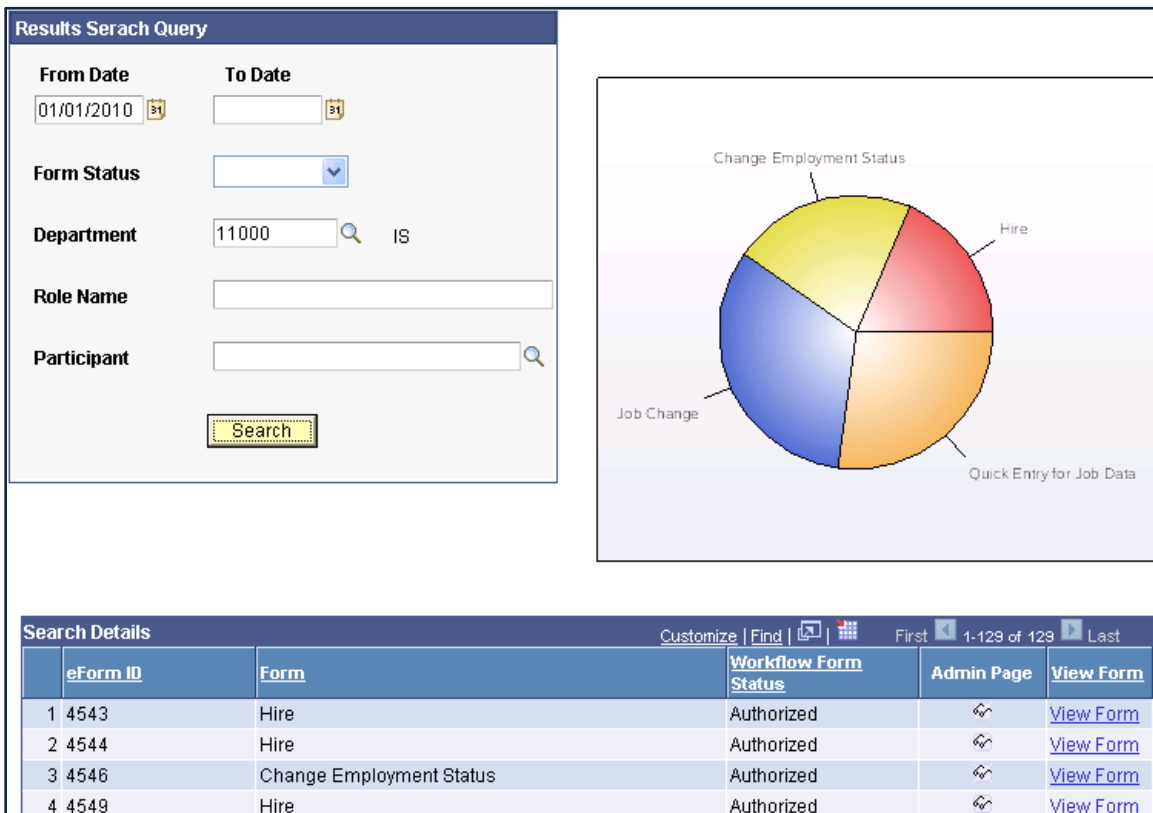


Figure 17 – GT Analytics™ Custom Chart and List

Statistical Reports

GT Analytics™ includes several online statistical reports that give an overall view of eForms transactions, and that help management identify training needs and track institutional progress toward ideal efficiency.

- **Baseline Compare** – This graphical charting tool allows management to compare a subsection of the organization, like a specific department or members of a given role, against the baseline of the whole organization. Comparison is made on **Average Cycle Time, Average Response Time, Error Rate and Correction Rate**.
- **Form Type Distribution** – Graphical display of eForm traffic in the organization or a subset thereof by Form Type.
- **Aging Summary** – Shows a bar chart of the number of eForms transactions that are in process by how old they are. Combined with operational detail and the ability to drill down into the Admin Tool to approve, reroute or communicate about individual eForms, this is a great tool for keeping business processes flowing freely.

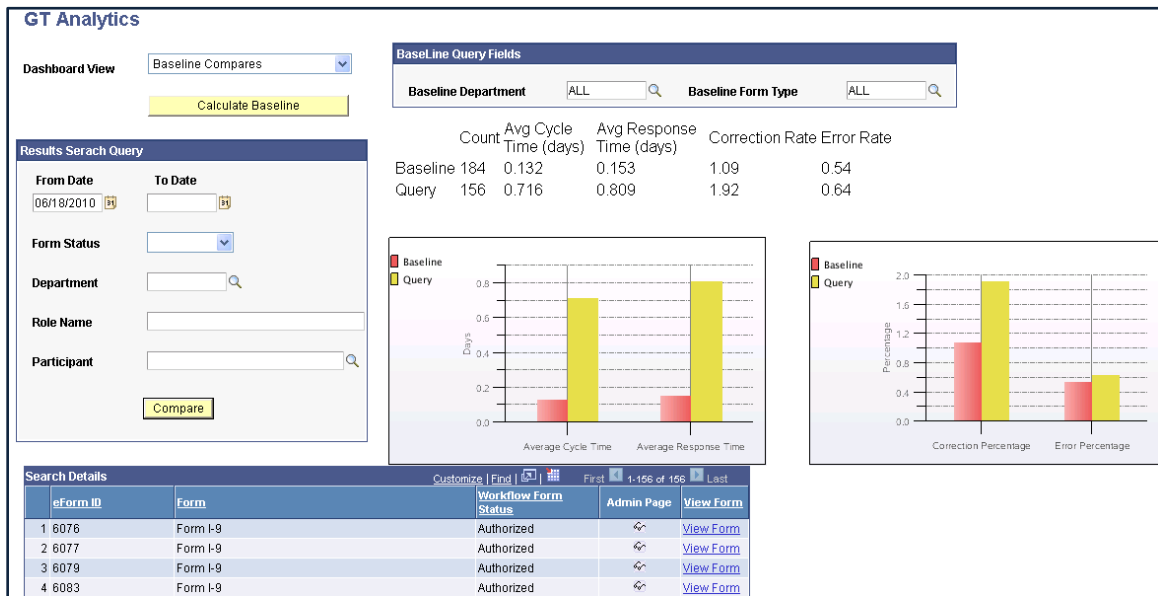


Figure 18 – GT Analytics™ Baseline Report

Additional GT eForms™ Features

GT eForms™ is the most robust workflow and electronic forms development platform available for PeopleSoft. GT eForms™ offers many powerful features supporting not only the extension and maintenance of Gideon Taylor’s delivered eForm products, but the development of entirely new workflow-based automation solutions.

Here are a few of the additional features GT eForms™ provides:

- **eForm Admin Tool** – Administrator has total control of eForm routing and processing
- **FewSteps Workflow** – Business owners can add workflow routings to PS-delivered components without mods
- **GT Parts Gallery** – Users can define the components of their workflow solution as reusable parts that can avoid duplication and maintain consistent behavior across multiple business processes. The GT Parts Gallery includes setup for:
 - **GT Approval Routes** – Easy online definition of workflow processes.
 - **GT SmartSources** – Define a data source for easy reuse in an Email Template, a Visual IF, PeopleCode, or elsewhere. The data source can be a PS query, a SQL query, a PeopleCode method, a constant or a component record / field reference.
 - **GT Email Templates** – Build branded HTML email templates that can easily be copied and reused.
 - **GT Filters** – Reusable definitions of who gets worklist routings or emails. Define the recipient population using a PS query, a SQL query, a PeopleCode method, a constant or a component record / field reference.

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- **GT Visual IFs** – A reusable logical test to determine whether an approval step gets used, a page gets displayed, an email gets sent, etc. Visual IFs can be defined as a PS query, a SQL query, or a PeopleCode method, and can be combined to manage complex logical expressions in user-friendly language.
- **Quick Entry Pages** – Build a simplified entry page for complex PS-delivered components
- **GLIB App Class Hierarchy** – Developers can organize code for easy reuse and add custom features without modifying GT-delivered code
- **Home Page Management** – Setup table-based, great look and feel navigation pages that don't require developers to build
- **Development Utilities** – A range of utilities that are useful for any PeopleTools-based development

These extra software features extend additional functionality, allowing greater control, better solutions, smarter development, cleaner look and feel and more power to the business owner.

Conclusion

GT eForms™ adds a rapid workflow development toolset to PeopleSoft. We've proven time after time that GT eForms™ can shorten time to production and increase the effectiveness of PeopleSoft solutions many times over. We look forward to seeing what it can do for your organization!

Contact Us

Gideon Taylor can also perform a live webcast for your organization to demonstrate GT eForms™ and any of our business process solutions. Please contact us at info@gideontaylor.com or 801-434-7260 to schedule.

*"If you have a need to make your work processes more efficient and effective, you owe it to yourself and to your organization to talk with Gideon Taylor."
- Julius Hilburn, Associate Vice President / Chief HR Officer, University of Oklahoma*