

ABSTRACT

Worksoft Analyze™ uses a shared repository approach for organizing and promoting collaboration in business process discovery and analysis among users in the enterprise. This paper explores how this information is stored in Analyze and offers some best practices for using the solution and workspace concept.

INTRODUCTION

The design of Worksoft Analyze allows any number of individuals to collaboratively drive discovery and accurate documentation of actual business process as conducted by real users in the enterprise. Worksoft Analyze accomplishes this without requiring someone to manually document business processes. Instead, Analyze achieves this by programmatically observing end users interacting with typical business software applications and surfacing this discovery automatically through standard business process diagrams and documentation.

Knowledge of business processes is distributed across the enterprise due to role specialization. Sales people sell, warehouse managers store and ship, and operations runs the business. A truly end-to-end understanding of a non-trivial business process involves many individual actors across different departments and numerous software systems. In addition, within any single department are tens or hundreds of small variations in the conduct of business process. Some of these variations will be legitimate to the business, such as special handling for hazardous cargo. Others will be inadvertent variation to the intended practice with both beneficial and detrimental outcomes possible.

Given this, a comprehensive understanding of as-is business process becomes possible with a large enough sample size to have observed these variations over a sufficiently broad range of roles and invocations. Accuracy in understanding the “happy path” or common exceptions occurs with statistically interesting quantities of these observations over time. Only with a broad enough sample size over a wide enough audience can the expectations of the business be compared to reality, and an ideally prioritized set of best practices and automation candidates identified. Although this is an incredible amount of data in most large enterprises, Worksoft Analyze easily solves this problem.

THE WORKSOFT ANALYZE APPROACH

Worksoft Analyze begins with a few basic assumptions:

- Business process knowledge is inherently distributed and also departmental (“siloes”) in the enterprise.
- Few people, if any, know an entire end-to-end business process across the enterprise.
- Few people, if any, understand the scope of practice knowledge available across the enterprise.
- Analysts depend on using the same discovered knowledge in different ways to achieve any number of different observations and conclusions.
- The potential quantity of data is vast
- The quality of any discovery or analysis is higher when a larger distribution of contributors is considered.

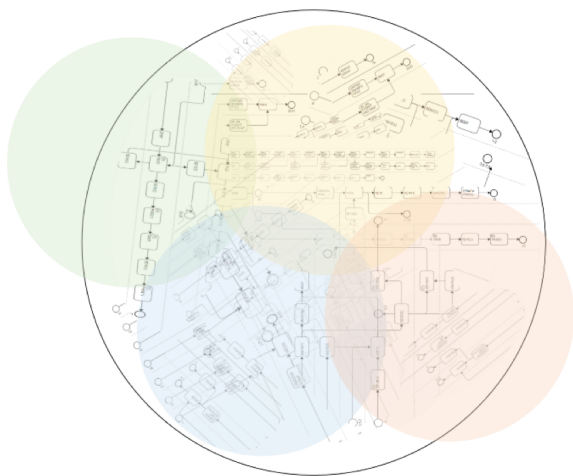
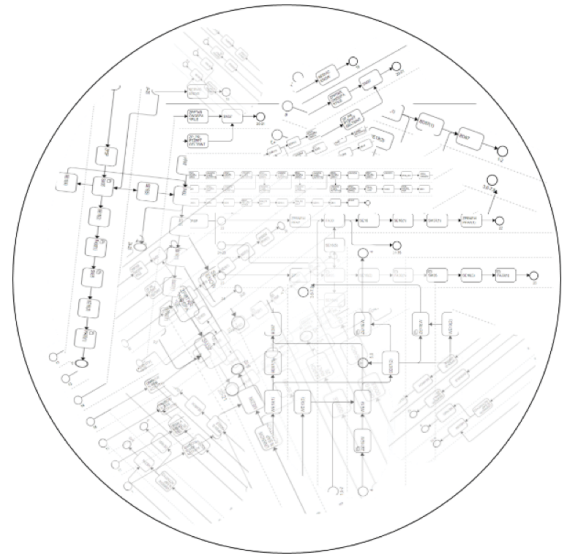
SHARED REPOSITORY

The design of Worksoft Analyze assumes collaboration is essential to solving this problem, and uses a shared repository approach to organizing business process discovery and knowledge in the enterprise. As an analogy, think of all knowable business processes and variations making up a business process knowledge universe. That universe is the Analyze shared repository.

All business process knowledge for an entire enterprise is stored in this universe. In this repository could be "Captures" – individual performances of business process execution captured at the desktop by Worksoft Capture technology – or Worksoft Certify® tests, automation and execution history, and additional sources of business process knowledge such as Document Data from SAP or manual processes identified by end users.

This universe contains all the knowledge available at any one time. The knowledge is shared among all users, promoting the betterment of the business through collaboration among departments while avoiding the traditional manual discovery and documentation manual activities required before Analyze.

The drawback of this approach is the quantity of information – even smaller enterprises can easily produce a repository so vast no one could consume it all in one sitting. So, this is where the Analyze Workspace concept plays a role.



ANALYZE WORKSPACE

If all the business process knowledge in Worksoft Analyze is the universe, then the Analyze workspace is the telescope. When a user creates a workspace in Analyze it is not a storage location. The workspace views the data already in Worksoft Analyze, usually a subset of the total business process knowledge universe.

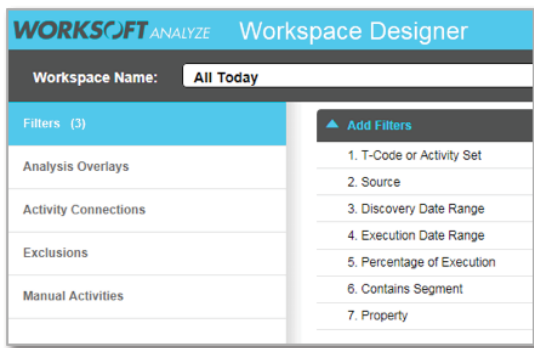
Users of Analyze create different workspaces for looking at and using business process knowledge. Workspaces can and often do overlap, allowing the same underlying business process knowledge to support many different projects and investigations.

Each view is unique, with a set of filters provided by the workspace owner to narrow the focus of the view. It can be as broad as the entire universe of knowledge, or as narrow as a single business process – like a set of coordinates in the night sky. This allows knowledge from multiple users and sources to be evaluated collectively, enabling reuse of the same knowledge for different analysis and research. This is what makes workspaces both flexible and powerful.

IN PRACTICE

Worksoft Analyze users should create a different workspace for each unique way of looking at business process knowledge useful to the organization or individual. For example, a user might have workspaces named “Sales Processes,” “Inventory” and “Quarter Close.” In each workspace, filters select the business processes of interest from the underlying store of business process knowledge. Depending on how the filters are set, the workspaces themselves may also be dynamic, so as new business process discovery is performed, they are automatically updated with the additional knowledge with no effort required by the Analyze user.

Workspaces have no impact on the underlying data, and there are no performance implications for each user having their own collection of useful workspaces in the system. Additionally, if a given workspace is especially useful, it can be shared making it available to other Analyze users, or as a starting point for additional unique workspace creation.



Within the workspace, there are a number of filtering capabilities useful for narrowing the focus of what process knowledge is visualized and surfaced to the Analyze user at any given moment.

Using the Analyze Workspace Designer, a user constructs a workspace ideal for the given task.

Source selects the sources of business process knowledge to be used in the workspace. The most common sources are Captures and Worksoft Certify processes, though other sources such as SAP Document Data or Impact Analysis may be available depending on the deployment options of Analyze. All workspaces need at least one source, since this is the foundation of business process knowledge used.

T-Code or Activity Set allows the user to define a specific set of business activities of interest and see only the business processes containing the activity. For example, a user looking for sales and distribution processes may decide to visualize business processes containing VA01 (Create Order), VA02 (Update Order), VL02N (Delivery) and so on. This is the most commonly used filter as it effectively sets the scope or focus of the workspace on a particular area of the business.

Discovery Date Range is specific to Captured business processes, and sets the range of dates acceptable in the visualization. The Discovery Date Range features a dynamic setting allowing the Analyze user to see automatically updated time windows including “Today,” “This week” and “This month.” Using these settings means a workspace always reflects current discovery with no changes required by the user. Using a setting for dates in the past stabilizes a workspace, since it is impossible to additionally capture business processes in the past. This feature is useful for creating a workspace reflecting a permanent record of business process knowledge at a specific point in time.

Execution Date Range is similar to Discovery Date Range, but specific to Certify processes included as a source in the workspace. This can be useful when reducing the scope of execution history to reflect recent execution and accurately calculate functional testing coverage using the coverage analysis features of Worksoft Analyze.

Percentage of Execution is useful when reducing a discovered business process set to the most commonly executed paths. For example, after discovering dozens of variants, one wishes to see the set of variants comprising the top 80% of actual invocations. This feature is quite useful in environments with very large discovered business process data sets across a large number of unique actors, but less useful in situations with smaller Analyze user communities – less than 10 or 15 – or in new users of Analyze, as there’s simply not enough data volume to warrant the feature.

Contains Segment allows the Worksoft Analyze user to set the workspace scope to business processes containing a specific series of business activities. For example, a user may want to review all discovered business processes containing a change to an order. In this case, the sequence would be VA01 (Create Order), VA02 (Change Order), and Analyze would only return business processes containing that sequence of activities.

Property filters allow the identification of business processes by metadata. The most common use of this filter identifies business processes by user. The filter supports the following metadata options:

Worksoft Certify automation process metadata:

- Process Name
- Folder Name
- Process Creation Date
- Process Modification Date
- Process Attribute Values

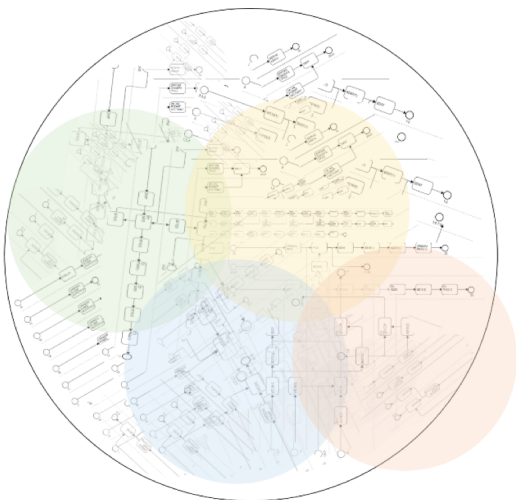
Captured business process metadata:

- Windows User Name
- Windows Domain Name
- Worksoft Analyze User Name

NEW DISCOVERY

One unique property of the workspace approach is the living, dynamic nature of workspaces and filters. When the body of business process knowledge increases, Analyze workspaces grow with them and accommodate this additional insight into business process knowledge as if it were there all along.

When new business process discovery comes to the Worksoft Analyze knowledge repository, it is automatically included in any workspace view where it passes filters defining the boundary of the workspace.



This feature means workspaces, unless specifically bounded by a date range filter, never become stale. Analyze always reflects a full understanding of the known business process knowledge without requiring intervention or change by the Analyze user. To take advantage of this property fully, create workspaces with filters designed around business practice or functional boundaries parallel to divisions within the company. When filters are set this way, new knowledge of business process will automatically associate (or “make”) the appropriate workspaces in Analyze.

Users should avoid setting filters on technical boundaries where practical. Filters using individual usernames or test cases are useful for generating documentation

and automation from a specific use case, but prevent the use of Analyze for general business process discovery and knowledge since filter properties are set on technical grounds, not business criteria. In most workspaces, avoid the hide/exclude feature: though useful for extracting unwanted variants from stabilized workspaces, it will prevent the discovery of new business processes functionally identical to the excluded variant.

CONCLUSION

The Worksoft Analyze workspace concept is the key to controlling business process visibility and analysis in Analyze. The dynamic nature of workspaces allows Analyze users to establish perspectives for the discovery and analysis of business process, then use and share those insights with other individuals inside and outside of Analyze. Once a workspace has utility for the Analyze user, the use of additional Analyze features including heat maps, documentation and automation complete a path from business process discovery to successfully implementing robust test automation with comprehensive coverage for the business.

ABOUT WORKSOFT, INC.

Worksoft® is a leading global provider of automation software for high-velocity business process testing and discovery. Enterprises worldwide use Worksoft intelligent automation to innovate faster, lower technology risk, reduce costs, improve quality, and deeply understand their real end-to-end business processes. Global 5000 companies across all industries choose Worksoft for high speed process discovery and functional testing of digital, web, cloud, mobile, big data, and dozens of enterprise applications, including SAP®, Oracle, and Salesforce.com.

For more information, contact Worksoft at info@worksoft.com or visit www.worksoft.com.

CORPORATE HEADQUARTERS

15851 Dallas Parkway
Suite 855
Addison, Texas 75001
ph. +1.972.993.0400
ph. +1.866.836.1773
info@worksoft.com

CUSTOMER SUPPORT SERVICES

ph. +1.800.858.0813
support@worksoft.com