

Extension of the inubit BPM-Suite: inubit Solution Center

Quickly Implementing High Quality Intelligent Business Solutions

Business Process Management (BPM) aims to optimize processes “end-to-end.” Process and application silos are integrated here, processes automated and made accessible via a process portal. The challenge is that there are differences between processes. On the one hand, processes can be very structured and regulated. On the other hand, many processes in companies are very dynamic and situation-specific.

(Fully-) Automated Processes	Decision-intensive Processes	Case Management
Electronic invoice data exchange	Accounting control	Product development
Automated claims settlement	Claims investigation by experts	Help Desk
Automated tendering	Staffing	Complaints management
Charging Prepaid card	Lending processes	Tender preparation

Highly structured and regulated processes

Highly dynamic, ad-hoc, case-dependent processes

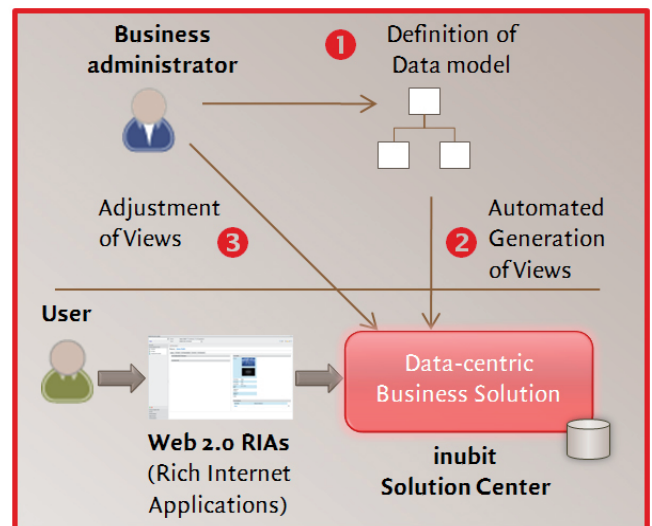
Highly structured, frequently occurring processes require different implementation strategies than unstructured, situation-specific processes. Purely data-centric application cases have different requirements yet again. Intelligent **Business Solutions** must cover these different aspects completely. In order to be able to better respond to all requirement variants in the future, inubit has further enhanced the inubit BPM-Suite with the inubit Solution Center and thus facilitates the flexible optimization of different process types. The inubit Solution Center enables you to better integrate master and transaction data into the process flows and also makes it easy to implement data-centric application cases.

Implementing Business Solutions in a Matter of Days

In order to be able to implement individual, Web 2.0-based process- or data-centric specialized applications with high productivity and quality, the inubit Solution Center supports **Rapid Solution Development**. That makes it possible to develop and implement functionally-rich business solutions in a matter of days. Extensions and adjustments can then be implemented within a couple of hours.

It takes just three steps to implement business solutions. The business administrator models the desired data model (step 1). This model is used to automatically generate the

views (Web 2.0-based user interfaces) of the business solution (step 2). Adjustments regarding the fields and data relationships to be displayed can then be made directly in the portal (step 3).



Three steps to the business solution

For the first time, business administrators without computer science training can implement the applications themselves. The complete Web-based administration interface of the inubit Solution Center does not require knowledge of programming languages or SQL/ XML.

The inubit Solution Center Offers the Following Advantages

- Implementation of high quality business solutions that cover both process-oriented and data-centric elements
- High productivity thanks to rapid solution development on the basis of data models and automatic generation of database structures and Web 2.0-based interfaces.
- Definition of the required data logic without the need to program, enabling execution by the business administrator



Application Example: Purchase Requisition

The following screenshots show a complete example that was implemented using the inubit Solution Center:

1. Data model: definition of the data model for the purchase requisition
2. View Editor: creation of views for editing and displaying purchase requisitions
3. Business process monitor: list of purchase requisitions plus details of a selected process

Defining the Data Model

First, the data model is defined (1). In the example, this is a purchase requisition with attributes such as overall costs and technical status. The purchase requisition is marked as "ProcessBO." This makes it clear that it is the central business object of a process. A purchase requisition can include purchase order items (including unit, quantity and unit price).

Creating the Views

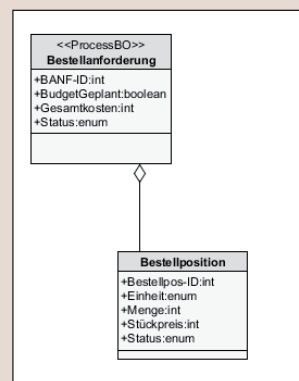
The data model is deployed into the inubit Solution Center. This makes the purchase requisition available immediately as a process with its transaction data – attributes of

the purchase requisitions and corresponding purchase order items. From the "Process" class included in the inubit Solution Center, a view template is copied which already contains a technical overview as well as detailed views including tabs for attachments and the technical process flow. The overview is adjusted, and in addition a new "Purchase order items" tab is created in which the purchase order items can be displayed and edited. This is done using drag and drop in the browser-based view editor (2). The process logic (e.g. releases and forwarded) is implemented in the inubit Process Engine as a Technical Workflow.

Executing

The result is a solution based on the business process monitor (3). A list of process instances is displayed, which can be filtered as desired. The list display can include attributes of the ProcessBO object (e.g. budget). For the selected purchase requirement, the details are displayed in a preview. In this example the "Purchase order items" tab is open. Actions such as editing or adding documents are automatically available via the action buttons and do not require programming.

Step 1: Define the data model



Solution Center View Editor

BANF: **EWRserver**

Banf-ID: 1 Status: Freigegeben
 Anforderer: Alex Reinhardt Gesamtpreis: 3299

Übersicht Bestellpositionen Bestellungen Anhang Verlauf

Banf-ID: 1
 Beschreibung: EWRserver
 Budget geplant: Ja
 Gesamtpreis: 3299
 Status:
 Anforderer: Alex Reinhardt

Step 2: Creating the Views

View Elements

Title	Category
checkbox	atomicvalue
textarea	atomicvalue
int	atomicvalue
enum_dropdown	atomicvalue
attachment_img	atomicvalue
attachment_download	atomicvalue
enum_list	atomicvalue

Step 3: Overview of purchase requisitions

inubit Solution Center

Company: **inubit**

Bestellanforderungen

Bestellanforderung	ID	Budget	Gestartet am	Beendet
Blumenbewässerung	1	12.12.12	2010-07-	2010-07-
Buch Enterprise ERP	2	12.12.12	2010-07-	2010-07-
Bürostuhl	3	12.12.12	2010-07-	2010-07-
Cisco IP Phone	4	12.12.12	2010-07-	2010-07-
Dell TFT Display	5	12.12.12	2010-07-	2010-07-
Entwicklungsrechner	6	2010-07-21	12:12:12	2010-07-
Laptop D	7	2010-07-21	12:12:12	2010-07-
Lenovo T410s	8	2010-07-21	12:12:12	2010-07-
EWRserver	1	2010-07-21	12:12:12	2010-07-

BANF: EWRserver

Banf-ID: 1 Status: Freigegeben
 Anforderer: Alex Reinhardt Gesamtpreis: 3987

Übersicht **Bestellpositionen** Bestellungen Anhang Verla

Artikel-Nr.	Artikel	Menge	Einheit	Preis
78964588	r610 6C L5640, 12 G	1	Stück	3299
58964566	4 Jahre Support	1	Stück	688

Features of the inubit Solution Centers in Detail

Efficient Management of Networked Business Objects

Modern business solutions must be able to efficiently manage complex networks of business objects. To do so, the inubit Solution Center uses a business repository, which is set up for managing large quantities of business objects and documents with complex interrelationships.

The business administrator graphically models the structure of the business objects as a domain model. This can be immediately stored in the database and filled with data. Domain models support all important types of relationships between objects, incl. associations, aggregation and specialization.

Intelligent View Mechanism

The visualization and editing of business objects in Web applications are based on an innovative view mechanism that makes it possible to create different views for partial sections of the object network. The views are always displayed on an automatically generated page, which also has editing functions. This makes it possible to easily create and manage different user or application views on individual partial sections of the object network.

High Quality and Productivity in UI Design

Many classical form designers have the prerequisite that fine-grained user interface (UI) elements have to be arranged on a grid precise to the pixel and that complex mappings to data structures are defined then. This approach does offer a lot of freedom but often leads to high expenses and unsatisfactory user-friendliness because many developers do not have sufficient awareness of UI design principles.

The inubit Solution Center starts on the next higher level of abstraction and offers a set of mature UI modules, which cover most of the requirements of business applications. The modules are well designed graphically, interact perfectly and support all the properties of the data domains. Examples of UI modules are: Fact Sheet, Journal, Overview, Wizard, Tab, List.

Embedded in the view mechanism, the UI modules facilitate the fast and high quality design of Web applications. Each module can contain references to objects for which in turn a view is defined. If the user selects the object, it is displayed

in the view that was defined in the UI module. Thanks to that, there is no need for time-consuming and error-prone manual programming of page flows.

Full Support of Web 2.0 Technologies

Web 2.0 technologies – in particular Ajax – are the basis for modern Rich Internet Applications (RIAs), which distinguish themselves by being very user-friendly. The problem with RIAs is that they can be very expensive to implement because the communication between UI elements and the backend always has to be individually optimized with Ajax technology.

The close interlinkage of UI modules and the business repository means that the inubit Solution Center can spare the business administrator the complexity of Ajax programming and nonetheless provide the end user with user-friendly RIAs. The corresponding interfaces in the frontend and backend ensure that manual adjustments can still be made if necessary.

Managing Documents and Using the Dropzone to Add Documents

These days, it is a prerequisite of many business applications that business objects can be associated with documents. For example, the scanned-in document belongs to a structured incoming invoice. In the inubit Solution Center, it is very easy to link business objects and documents: Each business object can automatically be associated with documents. All you have to do is activate the corresponding perspective in the view on the business object. This makes it possible to add new documents using drag and drop in a dropzone and then manage them with a clear version audit trail.

Integrating Processes into Business Solutions

The inubit Solution Center is the basis for data- and document-oriented solutions. Optimal interaction with the inubit Process Engine enables you to implement business solutions that bring the processes and data into perfect union. Data and processes can interact on different levels:

- Almost every automated process needs **master data**. This master data can be managed in the business repository and be merged from external systems when necessary. The view mechanism facilitates the quick creation

of applications for the master data management for these processes.

- You can also use the inubit Solution Center to manage the underlying **transaction data** of these processes. The view mechanism is used to visualize or edit the transaction data in the process portlets.

In the process automation area, the inubit Solution Center offers a high degree of prefabrication. You can use three predefined UI modules for different process portlets in order to embed individual transaction data into standardized process portlets. Among other things, these predefined solution templates offer an overview of the process, process details and corresponding transaction data (incl. attachments, business process history and process documentation) as well as an action field. This ensures user interfaces of the highest productivity and quality in the context of process automation as well.

Federation Makes it Possible to Use Diverse Data Sources

Unlike known RAD products (Rapid Application Development), which are based only on a central database, inubit technology also facilitates federated business solutions where data is merged from several data sources or primary systems. The advantage is that the development of applications uses a uniform domain model here. Business administrators can generate the views based on this model. A tech-

nical integration expert integrates external systems into the business domains. This division of labor makes it possible to verify solutions at an early stage and to minimize risks.

Ideal Addition to the inubit BPM-Suite

With the inubit BPM-Suite enhanced with the inubit Solution Center, you have a complete set of tools for all process types and intelligent business solutions. inubit thus combines the best of both worlds: BPM (Business Process Management) and RAD (Rapid Application Development). The compact solution thus makes the complexity of company process flows and procedures manageable.

The modularity of the BPM-Suite makes it possible to expand the solution step-by-step, making it the ideal platform – not just technically but also from a business perspective – for generating sustainable added value thanks to the combined view of processes, data and applications.

Enhancing the inubit BPM-Suite with the inubit Solution Center

