inubit Suite

Managing Processes, Data and Rules – Integrating Business and IT for Optimal Processes

inubit AG – Member of Bosch Group

More than BPM

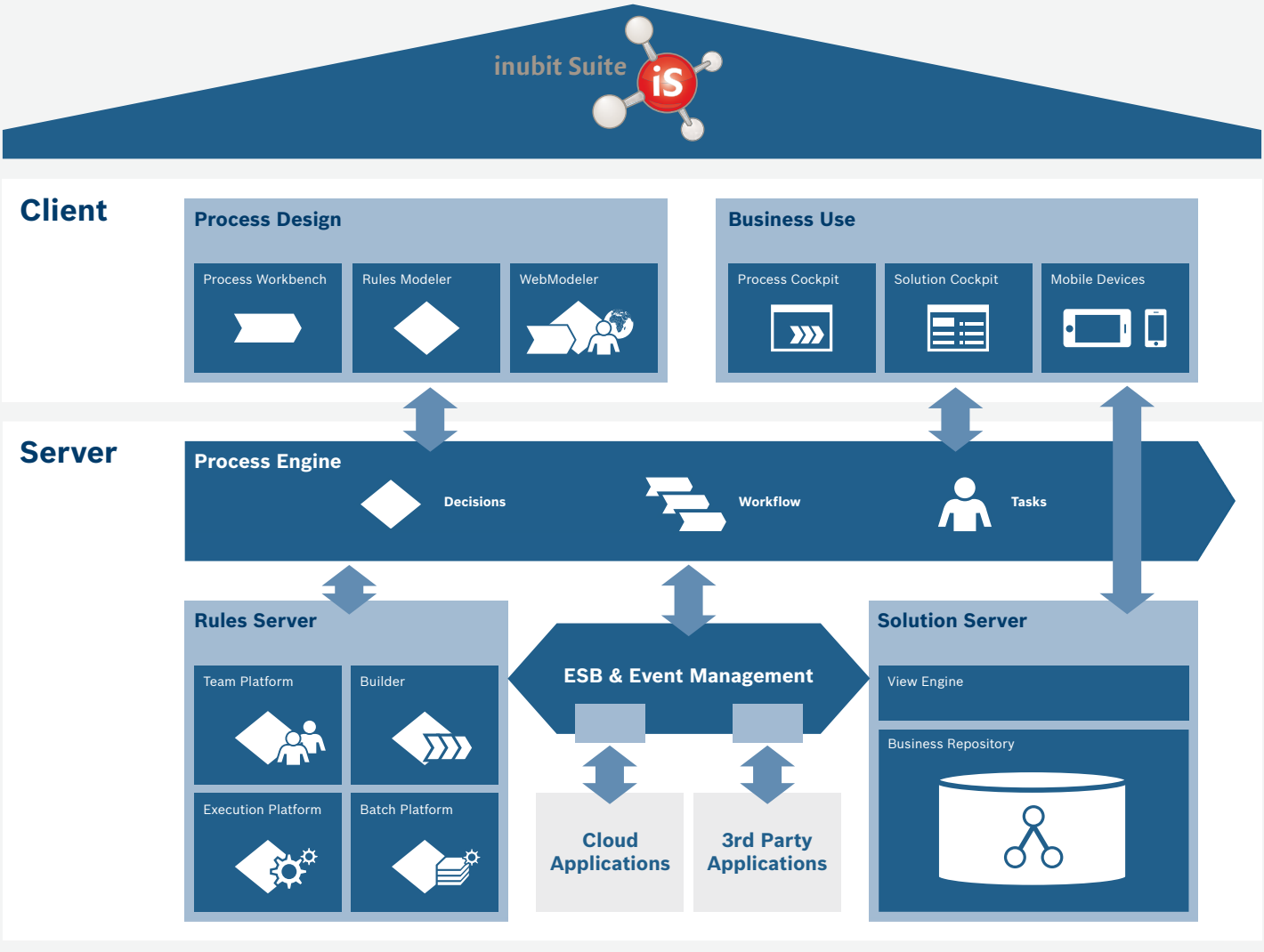
Linking Business Process Management (BPM) and Business Rules Management (BRM) is now standard in companies that value agile processes. Thanks to the perfect combination of the inubit Suite and the Visual Rules Suite from Bosch Software Innovations, we offer you the ideal technologies to prepare your business processes for the challenges and requirements of today and the future.

With the inubit Suite, our proven software for comprehensive business process management, and the Visual Rules Suite, a powerful platform for the creation, maintenance and optimization of the business logic (business rules) of software applications, companies are able to optimize their business processes.

Model, execute and monitor business processes using the inubit Suite

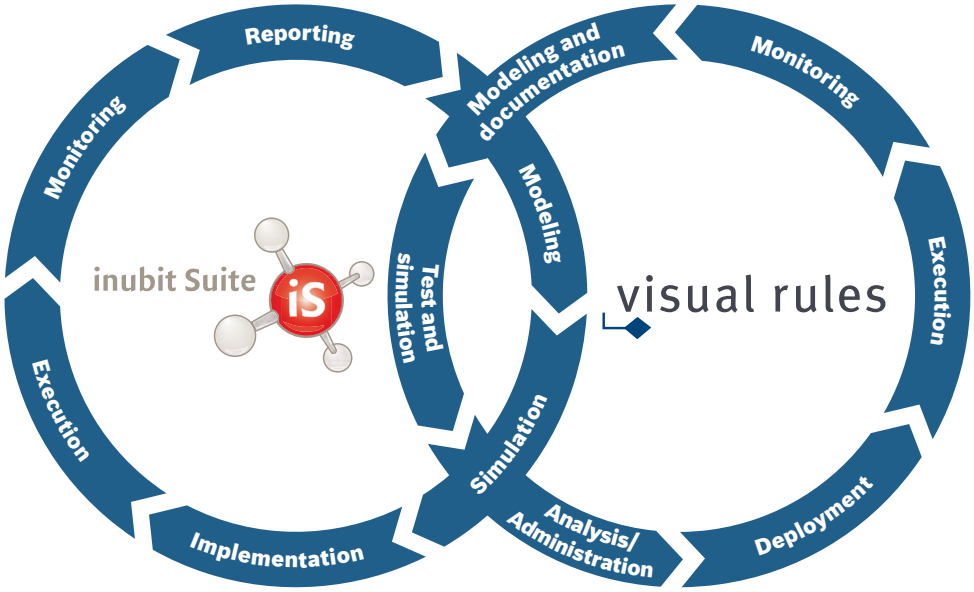
Business and IT departments together strive to design more efficient business processes and respond flexibly to new requirements.

The inubit Suite provides the necessary technological platform for this. Within a standard software, you can define business processes, simulate them before production startup, implement them technically and finally monitor them in real time.



The focus lies on the companies' core processes – involved employees, management, business partners and customers are actively integrated into the process execution and internal and external IT applications are integrated without media discontinuity.

All stakeholders can map any process requirements using a shared platform. The modular structure of the software and the license model that grows with it also make it possible to expand process management initiatives as required and thus achieve fast return on investment (ROI) for each process.



Configuration instead of programming
Using “graphic modeling,” companies' business processes can be mapped and adjusted quickly and easily.

The modeled processes are then (partially) automated and implemented in executable processes known as workflows. This technical execution may include creation of user interfaces and connections to other software applications such as the SAP system used in accounting or business partners.

The inubit Suite also enables users to collect and distribute process-related data (number of runs, acting positions, duration, costs, etc.) to management and employees responsible for processes. This enables continuous monitoring of processes to identify potential for improvement.

Application Scenarios

Quality management
- Creation of process manuals for certifications (e.g. ISO)
- Provision of processes for all employees on the intranet

Process automation
- Acceleration of company processes through (partial) automation
- Workflow-based release process
- Reduction of manual processes / Higher background processing ratio

Electronic data processing
- Connection of external business partners and customers
- Support of all common industry standards

System connection
- Integration of third-party systems, external services and devices in company processes
- Inclusion of different data sources in process execution

User interaction
- Active inclusion of users in the process via the task list
- User interaction also via smartphones

Monitoring / reporting
- Real-time monitoring of running processes
- System monitoring through central logging
- Provision of business information via dashboards

Modeling and Simulation

The inubit Suite provides the tools that are necessary to quickly and easily visualize and optimize processes, organizations, resources and IT systems. Processes within the company become transparent for employees and management alike, establishing a basis for process automation initiatives.

All model types in the inubit Suite are structured hierarchically and can be linked to each other. This enables absolute continuity from top-level processes down to detailed processes.

All models are versioned and stored in the central repository; access is governed by an integrated authorization management function. All models can be created in multiple languages and existing processes can be imported from external systems (ARIS, Adonis, Bonapart or via XPDL 2.1). The models published in the repository can be made directly accessible to different user groups on the intranet via the inubit Enterprise Portal.

Graphic mapping of business processes

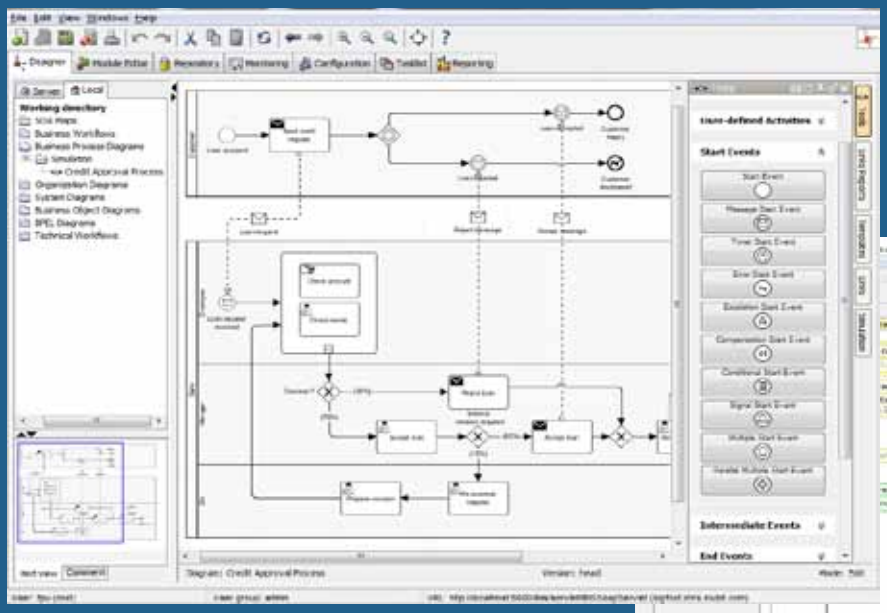
Business process models can be modeled as Business Process Diagrams (BPDs) in accordance with the BPMN 2.0 standard. An integrated validation ensures the syntactic quality of the models. This enables business users without specific BPMN knowledge to model processes themselves or collaboratively with other parties involved in the process using the inubit WebModeler. In addition to process models, process maps for visualizing the entire process landscape, including responsibilities, can also be mapped.

Visualizing company structures and IT landscapes

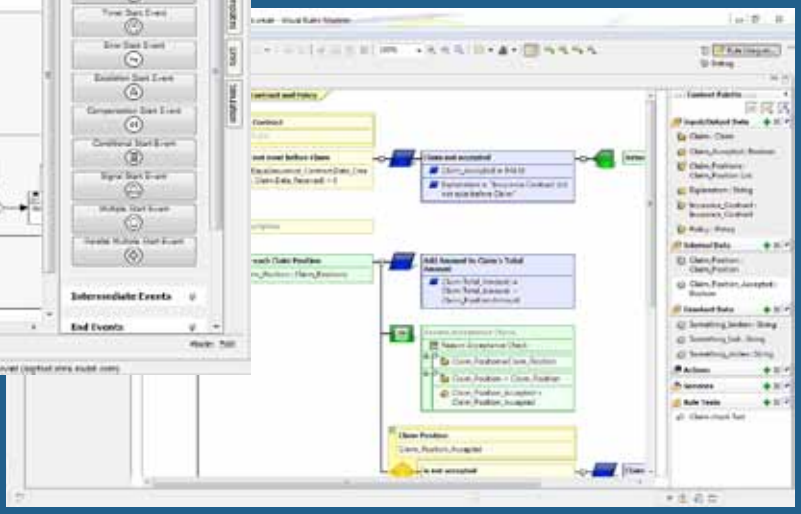
To illustrate a company's structure, organization diagrams that map the organization and define personnel resources (organizational units, roles, substitutes, employees and work times) can be modeled. Existing organization diagrams can be synchronized from primary systems such as Active Directory, LDAP or SAP HR.

Organizational structures are displayed using organization diagrams.

System diagrams also visualize the IT and service infrastructure and make it possible to configure third-party systems and manage partners. If companies want to model service-oriented IT landscapes (SOA), SOA maps can be used to map the SOA structure across different levels and



Business processes are modeled using the BPMN 2.0 standard and can then be simulated. They are also the basis for process automation.



Business rules can be modeled graphically as workflow rules and decision tables.

thus illustrate how front end, process, orchestration and service components are distributed across various applications.

The inubit WebModeler enables collaborative process model creation.

Mapping business rules for company processes

For simple business rules that refer directly to the execution of business process models, there is a business editor directly in the BPD. For modeling complex business rules such as risk assessments or insurance conditions, the BRM-Suite Visual Rules is available and can be seamlessly integrated into the inubit Suite.

Simulation of process and rule models

Modeled process flows can be simulated before the technical implementation. A step-by-step simulation validates processes in terms of their processing and determines their times and costs for individual paths in a graphic interaction with the user. You can also use extended simulation to detect possible resource bottlenecks at an early stage. This extended variant enables you to simulate the process models realistically and includes all available resources (number and working hours of staff, tools, materials). Hence, it determines the actual cycle times for a process and load capacity times of the available resources. Graphical feedback helps you analyze the results.

Documentation of company processes for quality assurance

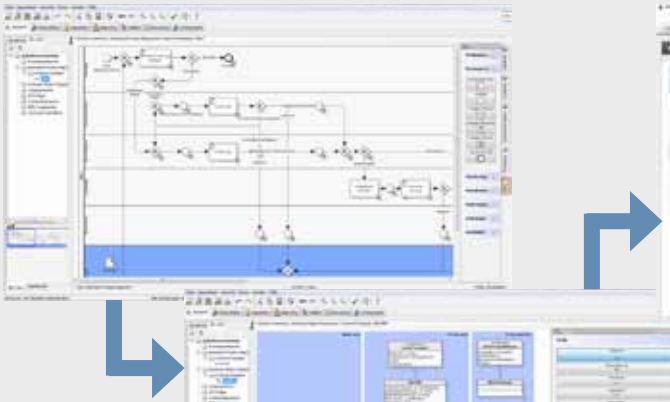
To display defined business process flows transparently to all employees or to make them available in the context of an ISO audit, all models can be published on the intranet portal using the Process Viewer. In addition, the documentation of the processes as a process manual is a permanent component of the inubit Suite. You can automatically generate the desired reports and you can individually configure the scope, layout and format.

From the process and data model to the business application

Process and data models created in special modeling views which focus on user interactions can be executed immediately following validation. For all classes defined in the data model, standard views for maintaining the corresponding instances are automatically created in the portal. The data model is linked to the corresponding business processes via an intelligent meta model so that it can be tested by the respective department.

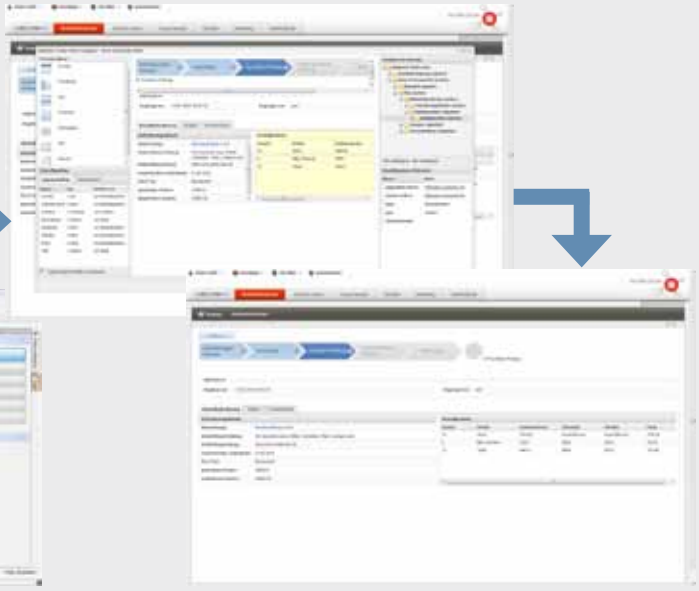
Three steps to the business solution

Step 1: Model the process



Step 2: Create a data model

Step 3: Modify the view

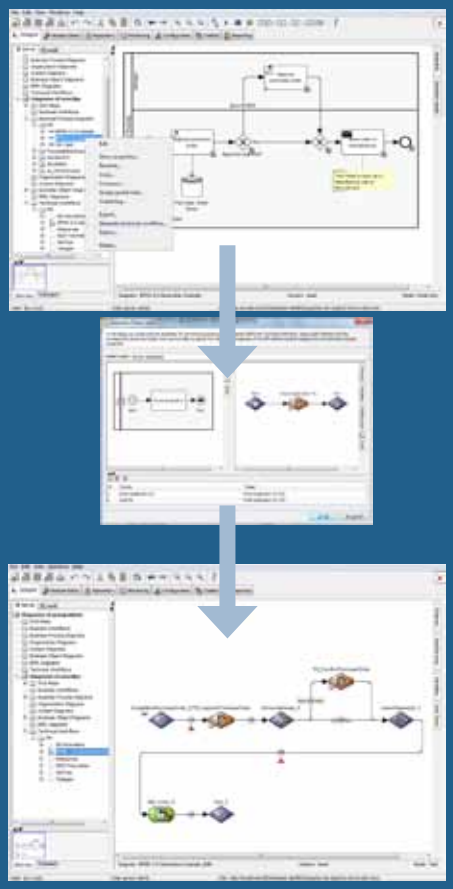


Result: Use the business solution

Implementation and Execution

Modeled business processes can be implemented quickly and easily with the inubit Suite. The graphical configuration of executable workflows without programming as well as functions associated with generating workflows notably increase efficiency in the implementation of processes.

Generating executable workflows speeds up implementation of BPM projects.



The link between business models and technically executable workflows makes it possible to navigate from the high-level business process down to an executable process via a detail process without media discontinuity. This makes it possible, for example, to categorize technical error messages and place them in the process context. Tasks in the task list and reports can likewise be linked with the corresponding process step.

Generating executable processes

You can generate technical workflows automatically from Business Process Diagrams. To generate them, numerous patterns that contain the generation logic are available. Users can also individually extend these patterns at any time.

For business objects defined in Business Object Diagrams, round-trip generation is possible with an XML schema. You can generate the persistence level as well as the CRUD Services (Create, Read, Update and Delete) from the XML schema. This enables you to quickly integrate business objects in technical processes.

Configuring technical details

To enrich automatically generated workflows with technical details, a graphic workflow designer simplifies the process of configuring workflows. This is done using user-friendly drag & drop and wizards; you do not have to write a single line of code.

All BPM artefacts are managed in a central repository. This includes version management for workflows and modules, including tagging and branching as well as the visualization

Connection using standard connectors and adapters

- **Systems:** abas, AS/400 / iSeries, Axapta, Baan, e-Gas, Gas-X, ENDUR, EnerPULS, Exchange, Gamos, ITA Archiv, IXOS, Jboss MQ, LDAP, Livelink, MFGPro, Marketing Manager, Microsoft MQ, MQ Series, MS Exchange, Navision, PSI ComCentre, PSI CONTROL, SAP ERP, SAP R/3, SAP IS-U, Saperion, Secrypt, Selenium, Sonic MQ, Topcall, UC4, Websphere MQ, Wilken Energy
- **Technology:** ftp, ftps, sftp, http, https, IMAP, JAAS, Java Reflection, JMS, JCA, MAPI, POP3, REST, SMTP, SNMP, SOAP, TCP/IP, XML-RPC, VFS, WebDAV, WS-*
- **Communication:** COM, DCOM, Fax, ICCP, ISDN, LU 6.2, OFTP, OFTP 2, OPC, SMS, Voice, X.25, X.75, X.400
- **Database:** IBM DB2, MS SQL, MySQL, Oracle, XML-DB, others via: JDBC, ODBC
- **EDI:** ANSI-X.12, BEMIS, Bordero, Datanorm, EDIFACT, Edig@s V2, Edig@s V3, Edig@s V4, EDIINT AS1, EDIINT AS2, GeLiGas, GPKE, HL7, IDoc, SWIFT, Tradacom, VDA, WebEDI
- **XML:** Baan Open World, BMEcat, CA-XML (SAP), cXML, ebXML, ESS, Opentrans, papiNet, RosettaNet, VoiceXML, xCBL
- **Others:** CSV, DICOM, Excel, Flat File, GAEB, KISS-A, KISSGAS, MIME, S/MIME, OSCI, PCL, PDF, Postscript, RTF, WML

of changes between different versions. To make adjustments to workflows audit-proof, they can be explicitly released before they are deployed.

XML, XSLT and XPath technologies are used to map input and output messages as well as process control. Processes can be controlled using branches, parallel processing and summarization. The inubit Suite supports all popular workflow and EAI patterns for this purpose.

Connecting external services, systems and devices

The inubit Suite provides more than 70 standard connectors and adapters for the integration of external services, systems and devices and the use of a large number of different communication protocols. The modules are configured using wizards and graphical interfaces.

Supplemented with format adapters for all non-XML formats and an SDK for developing your own plug-ins, it offers unlimited options for implementing even the most complex SOA, EAI and B2B scenarios.

Legacy systems can be optimally integrated using a decentralized remote connector. Embedded partner management makes it possible to manage the master data for a large number of business partners. Powerful test and debugging functions are available at the level of the individual modules as well as generally in the form of the iS-Unit tests.

Different communication variants are possible: push/pull, synchronous/asynchronous as well as event-driven or time-controlled. The integration of the electronic signature and the integration of fax, SMS and voice systems and RFID solutions are also supported. Documents can be generated as PDF (also PDF/A) and other formats such as RTF and Postscript, and data can be encoded and decoded as well as compressed and extracted.

The functionality can be enhanced during operation (hot deployment). A REST-based interface makes it possible to address technical workflows from outside.

The inubit Suite also provides a comprehensive SOA infrastructure. It unites all mechanisms required to implement and operate a service-oriented IT landscape. It provides not only a plethora of convenient tools, but also has the ability to quickly and easily enable existing applications for web services.

Task list in the inubit Enterprise Portal

Connecting users

The interaction with users and therefore the integration of users into processes is one of the main elements of process automation. The Human Workflow functions of the inubit Suite support the task-oriented processing of process steps and provide configurable task lists in the inubit Enterprise Portal or other portlet-compatible portals that can be used for editing the corresponding tasks and forms.

Tasks are assigned via roles. Rules and rule sets define forwarding and task assignment. The underlying organization diagrams are used for delegation and escalation as well as for substitution rules. As soon as new tasks are available, the user automatically receives a notification, which includes the specified processing times.

User interaction can also take place using mobile devices (cell phones, PDAs, etc.). A native iPhone app is available for using Apple devices.

Employees can also be integrated in company process flows using smartphones.

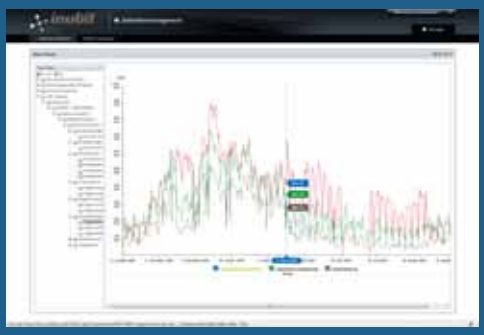
Evaluation and Monitoring

To enable continuous evaluation and optimization of processes from both a technical and business perspective, required data can be collected by the inubit Suite while the system is running and made available in real time.

Business reports

In addition to the task list and the Process Viewer in which business process models are displayed, the inubit Enterprise Portal also includes the Report Viewer. The Report Viewer provides information about the executable processes that can be visualized as personalized dashboards. All information available in the portal is linked to the underlying process models. Users can thus easily put the information in the process context.

Business reports are provided by the Report Viewer

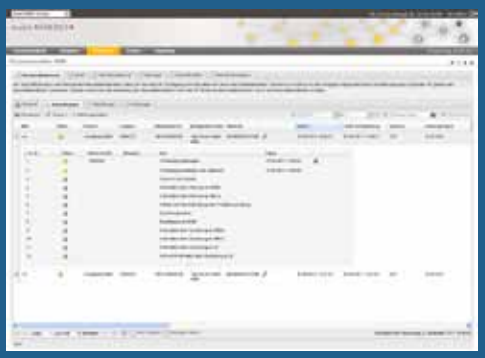


The comprehensive reporting functions of the inubit Suite can be used not only to visualize the actual data from the processes but also to analyze it in numerous ways using Key Performance Indicators (KPIs). Business reports provide key users and management with valuable information about processes in real time.

The Process Data Logger enables the flexible acquisition of process data from the running process instances. This can be compared to target data from the process model. Animated diagram types visualize the collected process data and drilldowns for detailed information can be defined.

Dashboards visualize business information in real time

The "inubit Process Monitor" process package is a powerful solution that enables key users to also monitor running processes from a business perspective. Hence, the available information is not limited to the current process step. Detailed information can also be queried and key users can actively control the processes, i. e. intervene.

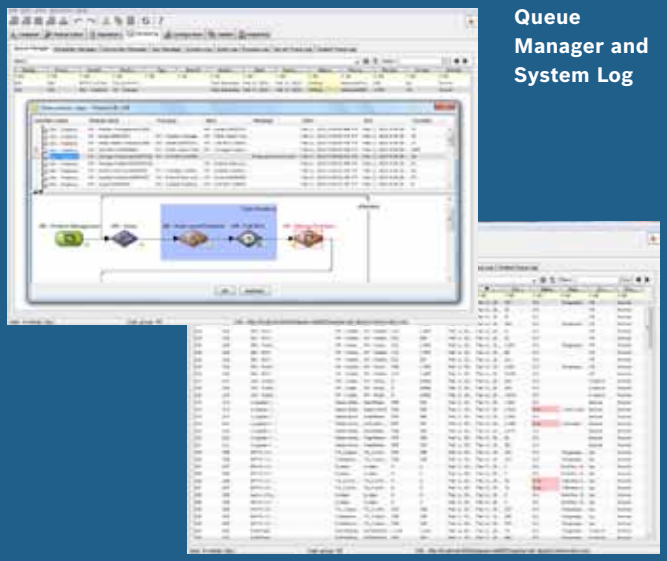


Business process monitoring using the inubit Process Monitor

Technical monitoring

The inubit Suite ensures the technical traceability of the processes through comprehensive logging and monitoring.

The Queue Manager enables you to see the status of all not yet successfully completed and waiting processes, stop processes, restart them, continue or delete them, or analyze errors. The system log shows technical workflows and system processes that have already been executed. Detailed information, such as status, priority and process ID, is available for each entry. The audit log makes it possible to monitor all administrative activities that users carry out on the server (e. g. login / logout) as well as changes to module and workflow configurations.



Queue Manager and System Log

Architecture and Operation

The smooth introduction and reliable operation of the inubit Suite are important criteria for controlling complex and critical business processes.

System environment

The inubit Suite complies with numerous standards and has an open architecture. The concept is based entirely on Java/J2EE. XML is the central data format. Thanks to its platform independence, the inubit Suite can be operated on Windows, Linux and Solaris and can operate with all popular databases. The inubit Suite features a command cell client (CLI), SNMP support and full 64bit support. It can also be administered remotely and is client-capable.

Supported operating systems

- Windows 32-bit: 2000, XP (SP3), Server 2003, Server 2003 R2, Vista, Windows 7 (SP1), Server 2008, Server 2008 R2
- Windows 64-bit: XP (SP3), Server 2003, Server 2003 R2, Vista, Windows 7 (SP1), Server 2008, Server 2008 R2
- Linux x86/x64
- Solaris x86/x64
- Solaris Sparc

The multi-step, fine-grained rights system ensures secure data storage and user management. Alternatively, user management can be carried out via LDAP. All administrative actions by users can be reconstructed using the audit log. System security is ensured by supporting the electronic signature, SSL, S/MIME, client server authentication, security token service, central key management and password security.

Minimum system requirements

- Pentium IV 2,5 GHz (or comparable)
- Complete installation and Modeling Center: 8 GByte RAM, 10 GByte available hard drive space
- Process Center, Solution Center and Integration Center: 2 GByte RAM, 10 GByte available hard drive space
- inubit Workbench/clients: 512 MB RAM, 1 GByte available hard drive space

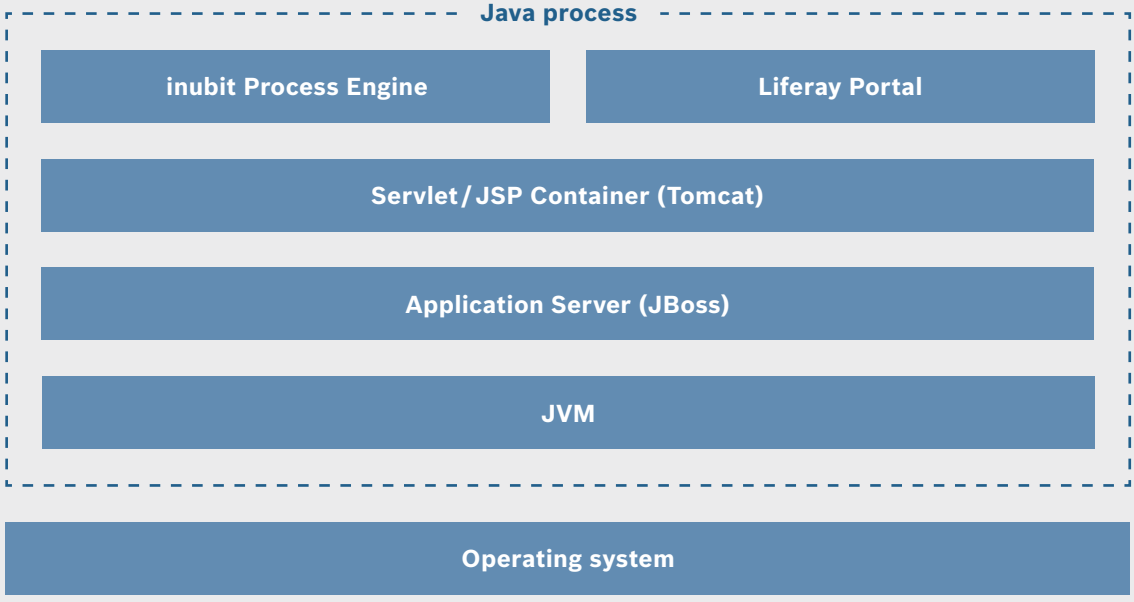
Scalability and high availability

Its scalability and high availability ensure that it can also be used for complex and critical business processes. Particularly in the enterprise environment it is important that the inubit Suite is well-suited to handling large volumes of data. Clustering for load distribution is possible at any time. The Remote Server (for use in the DMZ) is available to support security concepts.

Staging and deployment

Staging and deployment can take place inclusive of automatic value changes (adjustment of the configurations). Integrated backup & restore is possible while the solution is running and point-in-time (PiT) recovery enables you to restore the system as it was at a certain point in time.

Technical architecture of the inubit Suite



inubit Center or Individual Components

In addition to the full version, inubit offers preconfigured installation sets for the various use scenarios in order to make it easier for users to select the iS components required for their projects. Companies can choose between the following product variants:

inubit Modeling Center

The inubit Modeling Center supports companies with ISO-compliant documentation of their processes. You can create a handbook on a flexible basis from these models (house of processes). In addition to modeling, the inubit Modeling Center allows you to simulate the processes in order to locate bottlenecks and vulnerabilities in the defined processes. The inubit Modeling Center also supports standard governance processes and allows you to implement releases relating to all aspects of the models.

inubit Solution Center

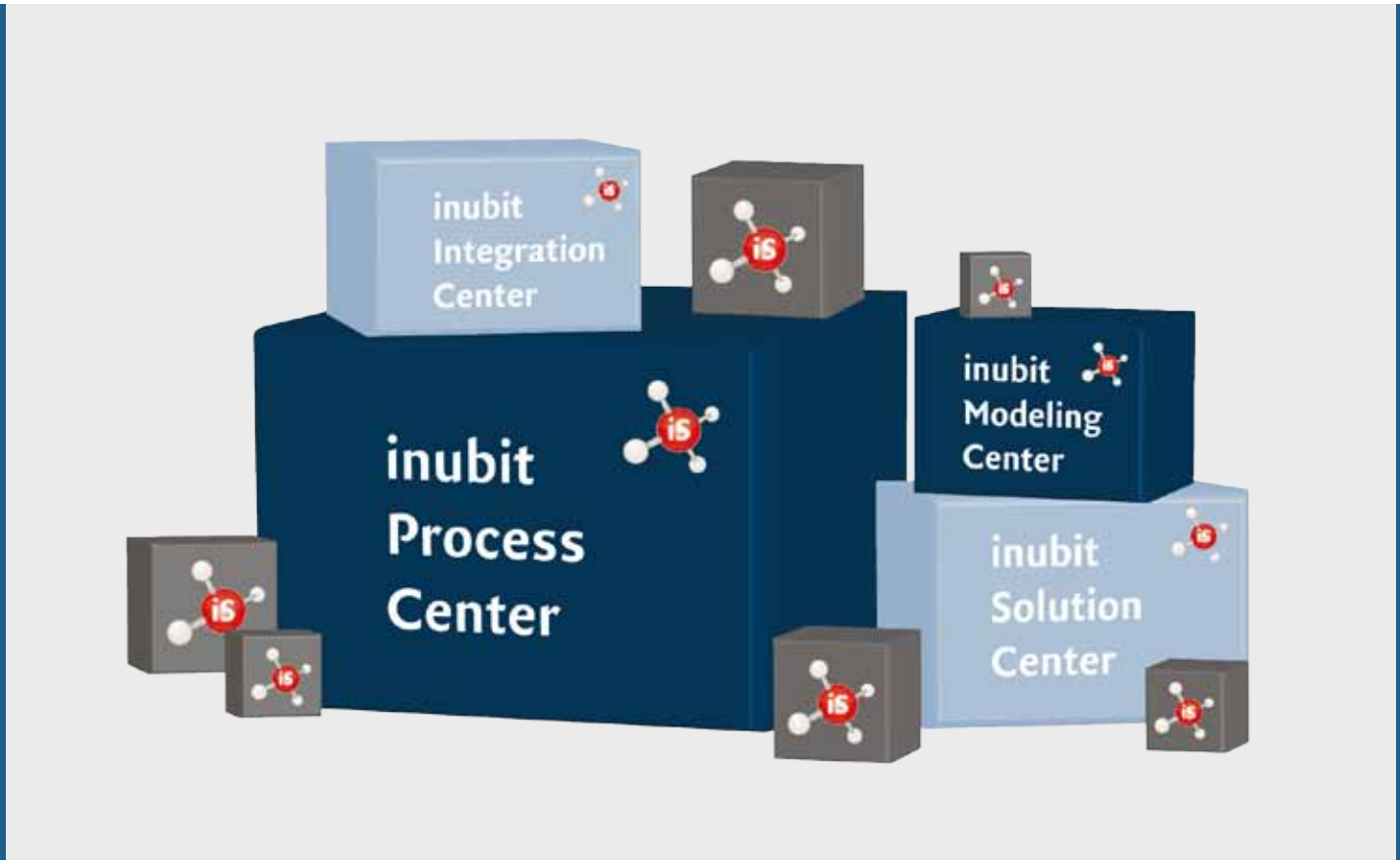
Using the inubit Solution Center, key users can create practice-oriented, process- and data-centric business solutions at the press of a button. These solutions can then be executed as Business Solutions directly in the inubit Solution Cockpit.

inubit Process Center

With the inubit Process Center, you have access to all necessary components of the inubit Suite for modeling, validating, and simulating processes, generating executable technical workflows, executing and controlling processes using the inubit Process Engine, involving employees in the processes using Human Workflow, integrating other IT systems and services through the Enterprise Service Bus, and monitoring the process execution in real time.

inubit Integration Center

The inubit Integration Center provides a range of connectors for integrating IT systems and using a large number of different communication protocols. This enables comprehensive system integration, and processes from the areas of EDI and background processing can be implemented using technical workflows.



Over 450 Successful BPM Projects

Over 450 German and international companies of all sizes from a wide array of industries are already optimizing their processes with the solutions and products from inubit. The following selection of customers represents a few of the industries in which we are active.

Automotive & Logistics

Berger Logistik, Carrier Sütrak, DB Systel, Fr. Meyer´s Sohn, Gebrüder Weiss, GO! General Overnight, HAVAG, Huf Hülsbeck & Fürst, Komatsu Hanomag, KSM Castings, MAGNA STEYR Fahrzeugtechnik, RECARO Aircraft Seating, Sidler Automotive

Energy

Austrian Gas Grid Management, Bayerngas, EconGas, Efforte, EGL Grid, EKS – Elektrizitätswerk des Kantons Schaffhausen, EKZ – Elektrizitätswerke des Kantons Zürich, ENERVIE-Gruppe, E.ON Ruhrgas, E.ON Gas Storage, Erdgas Münster, ewz – Elektrizitätswerk der Stadt Zürich, GAZPROM Germania, GRT gaz Deutschland, NetConnect Germany, Open Grid Europe, RWE Supply & Trading (D, NL, CZ), Salzburg AG, SN Energie, swissgrid, SWM Stadtwerke München, Thyssengas, Verbundnetz Gas, Wilken, WINGAS Handel, WINGAS Transport

Retail

3e Handels- und Dienstleistungs AG, Andreae-Noris Zahn, Bartels-Langness Unternehmensgruppe, EDEKA Minden-Hannover IT-/Logistik, Einkaufsverband Deutscher Einzelhändler, ERIKS Holding Deutschland, FALKE, Fliesen-Zentrum Berlin, Freiberger Lebensmittel, hagebau Datendienst IT-Service, Heusinger + Salmon Mangelsdorf, OBI, REWE Dortmund Großhandel, Tönnies Software Innovation, WASGAU Produktions & Handels AG, Zweygart Fachhandelsgruppe

Public & Health Care

Abraxas Informatik, Acqua Klinik, Ärztekammer Westfalen-Lippe, BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend, Bundesamt für Familie und zivilgesellschaftliche Aufgaben, DVZ Datenverarbeitungszentrum Mecklenburg-Vorpommern, gsub – Gesellschaft für soziale Unternehmensberatung, InterComponentWare, IT-Dienstleistungszentrum Berlin, Klinik für MIC, Ministerium für Inneres und Sport Mecklenburg-Vorpommern, OLYMPUS Winter & Ibe, PADline, wheel-it, ZHAW–Zentrum für Wirtschaftsinformatik

Telco & High Tech

Alcatel-Lucent Network Services, artelis group, austriamicrosystems, Calltrade Carrier Services, Comline Elektronik Elektrotechnik, envacom Service, E-Plus Mobilfunk, EWE TEL, FRIWO Gerätebau, HL komm Telekommunikation, Rutronik Elektronische Bauelemente, SBB – Schweizerische Bundesbahnen, T-Systems do Brasil

Insurance

Barmenia Krankenversicherung, Continentale Krankenversicherung, Credit Life International, Delvag Luftfahrtversicherung, HanseMerkur Versicherungsgruppe, Heidelberger Lebensversicherung, IDEAL Lebensversicherung

Others

adidas, ALBA Management, ARAGOFAR COOPERATIVA FARMACÉUTICA ARAGONESA, Axia Value Chain, Bahlsen, B.& C. Tönnies Fleischwerk, Burda Digital Systems, Canda International, centerra, Cobeca Occidente, GEMA, Farmacias Arrocha, Heinze Kunststofftechnik, Mepha Pharma, Meister-Werke Schulte, MHM Holding, Moldex-Metric, ProMinent Dosiertechnik, Siemens, Sopharma Trading, Steuler Industriewerke, Tyco Holding

HanseMerkur Wins Gold with inubit Solution at the Global Awards for Excellence in BPM & Workflow

The HanseMerkur Insurance Group has been honored with the Europe Gold Award for its automation project in claims processing. The jury of representatives of the Workflow Management Coalition and BPM.com recognized companies that were able to achieve their strategic goals in a verifiable manner through the use of an innovative business solution.

Thanks to automated processes in claims processing on the basis of the inubit Suite and Visual Rules from Bosch Software Innovations, HanseMerkur was able to handle revenue growth of 15-20 percent with comparable growth in the number of cases without increasing staffing levels.

In his acceptance speed, Dr. Horst Karaschewski, head of application development at HanseMerkur, again emphasized the cooperation within the entire project team of all companies involved: *“It was wonderful to see such good cooperation within an interdisciplinary team consisting of billing specialists, business architects, software architects, and others working toward a common goal. In the process we broke the mold, both technologically and on the management level.”*

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inubit AG is a leading provider of holistic process management solutions. From the inubit Suite as the technological backbone, to BPM methodology and a wide range of services, inubit supports companies in all phases of business process management. To achieve sustainable results, inubit merges the requirements from IT and business departments and implements them in continuously applicable products and solutions with a good price-performance ratio.

inubit is present in over 10 countries with its regional companies and local partnerships and has more than 450 customers worldwide. Since October 2011, inubit AG has been a company of the Bosch Group.

For more information, go to www.inubit.com

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