

### **Cheetah Experimental Platform**

*Jakob Pinggera, Stefan Zugal and Barbara Weber*

When assessing the usability of BPM technologies enterprises have to rely on vendor promises or qualitative data rather than on empirical or experimental research. To address this need Cheetah Experimental Platform (CEP) has been developed, fostering experimental research on business process modeling. CEP provides components that are frequently used in controlled experiments and allows their assembly to experimental workflows. CEP supports experimental execution by mitigating risks endangering data validity through better user guidance. Additionally, CEP provides richer evaluation techniques compared to paper based experiments fostering the experiment's data analysis, especially focusing on how business process models are created. Moreover, the experiment's results can be exported for further data analysis. By attending this demo session participants will see how CEP facilitates the execution of controlled experiments and can be used to investigate the process of process modeling.

### **A Business Process Services Portal**

*Cedric Favre, Beat Gfeller, Thomas Gschwind, Hagen Völzer, Jana Koehler, Jochen M. Küster, Oleksandr Maistrenko, Alexandru Marinescu and Biplav Srivastava*

We introduce the Business Process Services Portal as an approach to make business processes more actionable and to reduce the entrance barrier for tool developers in adopting novel process-related technologies. The business process services portal makes various process-related web services available in a tool-independent manner, based on the BPMN 2.0 standard. The current set of services includes for example the hierarchical decomposition, control flow analysis, comparison, and summary of business processes. The provisioning as services makes it easy for third party tools to include and further compose the technologies based on their needs. In addition, a web-based interface helps human users to explore and familiarize themselves with the services. The demo targets the general BPM audience interested in technology that makes business processes more actionable. In particular, tool developers and vendors learn about reusable technologies and a web-based framework that facilitates reuse. The demo also reports on first insights on applying service-oriented architecture principles to the development of BPM tools.

### **KISSmir: A Collaborative Task Management System**

*Hans-Friedrich Witschel and Bo Hu*

We demonstrate a collaborative platform, KISSmir, that has been developed to assist a busy knowledge worker in adapting tasks according to her needs and managing/sharing process-related knowledge situated in the execution context of tasks. The KISSmir system, based on the two important concepts of agile business processes and task patterns, is one of the pioneering approaches to address the rigidity and inflexibility of the current state of the art of business process modelling. Participants in this demonstration can appraise the full functionality of the KISSmir system and thus acquire first-hand experience of our novel approach to facilitating knowledge intensive tasks in the everyday working environment.

## **ADEPT goes Mobile: Supporting Mobile Processes in Complex Environments**

*Rüdiger Pryss, Julian Tiedeken and Manfred Reichert*

Pervasive computing and process management are frequently addressed topics in information systems research. On the one hand, daily business activities (customer services, long term medical care) are often executed in a mobile manner; on the other hand, IT process support for them usually stops at workstation level. Consequently, information gathered by mobile workers or users have to be entered with delay, which entails problems like falsification, loss of information, delayed access, and lack of control. By integrating mobile devices, a new quality in human-centric process support becomes possible. For this purpose we developed the MARPLE Architecture, a process engine which is able to run process fragments on mobile devices. First case studies yielded new demands for our initially designed architecture. We demonstrate the features that resulted from this analysis along an example from the insurance domain.

## **Enabling Multi-Module Monitoring in IBM WebSphere Business Modeler**

*Geetika T. Lakshmanan, Paul Keyser and Aleksander Slominski*

The goal of our demo is to show the audience how to automatically generate monitoring models that monitor and correlate multiple business processes modeled in WebSphere Business Modeler. We provide two plugins for IBM's WebSphere Business Modeler 6.2. Our plugins provide (1) a Monitor Set editor in WebSphere Business Modeler that allows users to define a Monitor Set, and (2) a new export option that allows users to export their project to achieve end-to-end monitoring of one or more business processes guided by the keys in the Monitor Set. In this demo we guide the audience through the steps of defining their Monitor Set and automatically generating monitor models in WebSphere Business Modeler for multiple processes. We then walk the audience through the steps of importing their project into WebSphere Integration Developer (WID), and there defining Workflow Implementations for each component, generating and deploying J2EE applications for the monitoring models on to WebSphere Business Monitor server, and finally running their application in Business Process Choreography Explorer and viewing monitored instances of their application in Business Space. This demo is targeted at individuals who are interested in a user-driven approach for monitoring multi-module business processes.

## **iPB – a different BPM suite**

*Ilija Bider, Tomas Andersson, Alexey Striy and Rogier Svensson*

PB (interactive Business Process applications Builder) is an integrated web-based tool for designing, verifying, trying, and operating business processes. In this respect, it does not differ much from the dozens of tools existing in the BPM market. The difference lies in the following three dimensions: (1) focus on operation, (2) theoretical foundation, and (3) architecture. The goal of using the tool is building an application that helps process participants to run their processes in practice. The tool is based on the state-oriented view on business processes in which a business process (instance) is viewed as a trajectory in a state space rather than a sequence of operations (tasks). As a basis for its architecture, the tool employs the concept of "construction site" information logistics, and use of shared spaces for communication and information exchange between the process participants. Though any of the above three features can be found in other tools, the combination itself is unique.

## **Nitro: The Missing Link to Process Mining**

*Anne Rozinat and Christian W. Günther*

Process mining tools such as ProM offer the exciting possibility to automatically create models that visualize the process reality based on existing IT log data. But getting the data in the right format is often tedious, requires programming, and can cost up to several days or weeks. Nitro is the missing link and gets you started with process mining in a snap. With Nitro process mining is now possible for many more people because it directly imports CSV and MS Excel files, has a pleasant graphical interface that is easy to use, and it works together with all versions of the free tool ProM. We will walk you through a typical process mining scenario and show you exactly how to use Nitro and get some first results in ProM. You'll be able to follow the steps based on the example data on your own laptop. This demo is interesting for anyone who wants to explore using process mining for their own processes.

## **Sketch-based Creation of BP Models**

*Nicolas Mangano, Steffen Mazanek, Christian Rutetzki and Noi Sukaviriya*

This demo introduces two tools that support the sketch-based input of BP models with a stylus. The first tool, Inkus, uses a tagging mechanism to derive a BP model from the sketch. The second tool, BPSketch, uses recognition and analysis components in order to compute the BPEL representation of the drawn process. Both tools have their benefits and shortcomings to be discussed in this demo.

## **ProMatch.KOM: Tool Support for Process Model Analysis and Improvement**

*Melanie Siebenhaar, Michael Niemann, Julian Eckert and Ralf Steinmetz*

Due to changing market conditions, today's enterprises are constantly forced to improve the quality and efficiency of their business processes. The detection of weaknesses and improvement areas in business process models in comparison to reference models represents a major challenge. Partly automated supportive systems are of great benefit for process analysts in this context. ProMatch.KOM is a hybrid, user-friendly approach to analyse process models with respect to conformance to reference models. Central features are the combined string-based, semantic and structural comparison of two process models described as event-driven process chains (EPC), the mutual assignment of areas comprising similar activities, the computation of process area similarity values, and the identification of process area types. ProMatch.KOM has been prototypically implemented as a plug-in for the process mining framework ProM.

## **Signavio-Oryx Academic Initiative**

*Matthias Kunze and Mathias Weske*

To provide students and academics with a powerful software solution for process modeling and analysis, the Signavio-Oryx Academic Initiative (SOAI) has been established. The SOAI is a joint venture of academic and industrial partner that aims at providing a mature process modeling framework for researchers and lecturers free of charge, comprising a comprehensive assignment collection and modeling platform. The presentation will introduce the initiative and explain how the provided materials and tools can support lecturers in complementing their courses with practical exercises. We will demonstrate how to access the platform, conduct lecture assignments by solving exercise tasks in the model editor, submit them for review, and provide fine grained feedback directly in the provided model. The concept of workspaces enables students to conduct exercises in teams and collaboratively develop assignment solutions iteratively, using features for discussion and revision control.

## **PNav: Process Navigator for the Design of New Business Process Models**

*Maya Lincoln and Avigdor Gal*

Enterprise process repositories contain hundreds of business processes, developed over the years to support enterprise activities. Such repositories contain a large number of activities that can be reused when redesigning existing processes or whenever the need for new processes arises. Process modeling is considered a manual, labor intensive task, whose outcome depends on personal domain expertise with errors or inconsistencies that may lead to bad process performance and high process costs. Hence, reuse of activities can save design time and support non-expert designers in creating new business process models. In this demonstration we introduce a prototype of PNav, a process navigator that assists designers in designing new process models. To do that, PNav generates activity suggestions for the newly generated process models. The business logic for such suggestions is extracted from process repositories through the analysis of existing business process model activities.

## **Enabling Process Support for Advanced Applications with the AristaFlow BPM Suite**

*Andreas Lanz, Ulrich Kreher, Manfred Reichert and Peter Dadam*

A process-aware information system (PAIS) will be not accepted by end users if its software clients do not support their native workflows or are too complex for them. When implementing business processes based on process management technology important issues are therefore how end-users can participate in the execution of the processes and how this can be done as intuitively as possible. This becomes extremely important if high flexibility demands need to be fulfilled during process execution, while PAIS robustness and error-safety need to be assured. In this software demonstration we show how the AristaFlow BPM Suite – an adaptive process management system developed by us – was applied to challenging applications in domains like healthcare, logistics, disaster management, and software development. The implementation of adaptive software clients in these different applications particularly proves the benefits provided by an open application programming interface (API) as offered by AristaFlow.

## **MarcoFlow: Modeling, Deploying, and Running Distributed User Interface Orchestrations**

*Florian Daniel, Stefano Soi, Stefano Tranquillini, Fabio Casati, Heng Chang and Yan Li*

This demo introduces the idea of distributed orchestration of user interfaces (UIs), an application development approach that allows us to easily bring together UIs, web services and people in a single orchestration logic, language, and tool. The tool is called MarcoFlow, and it covers three main phases of the software development lifecycle: design (by means of a dedicated, visual editor), deployment (by means of a set of code generators), and execution (by means of a distributed runtime environment for UI orchestrations). We showcase the benefits of MarcoFlow in each of the phases by developing and running a practical and expressive application for the management of home assistance and by explaining, in each phase, which are the challenges, which the intuitions, and which the solutions. The demo targets the development of mashup-like applications that require (distributed) process support and, hence, targets researchers and practitioners interested in mashups, lightweight process design, web services, and innovative (and free) ways of providing process support.

## **Smart Process Management: Automated Generation of Adaptive Cases based on Intelligent Planning Technologies**

*Arturo González Ferrer, Juan Fdez-Olivares, Inmaculada Sánchez-Garzón and Luis Castillo*

This demo presents a proposal for the seamless integration of Intelligent Planning techniques into the life-cycle of BPM. The integration is intended to leverage current BPM techniques by allowing them to manage smart processes as adaptive business cases that can be automatically generated from original process models and executed in standard BPM runtime engines. The integration of such intelligent techniques is based on a two-fold transformation process: from business models into planning domains, and from plan representations into executable processes.

## **ProM 6: The Process Mining Toolkit**

*Eric Verbeek, Joos Buijs, Boudewijn van Dongen and Wil van der Aalst*

The ProM demo showcases the ProM 6 toolkit, consisting of ProM, XESame and the Package Manager. Although this toolkit is the successor of earlier ProM toolkits, the emphasis of the demo is not on process mining as such, but on the changes which make this toolkit stand apart from its successors. Compared to ProM 5.2, major changes to the architecture, user interface, and functionality have been made to address requirements related to distribution and embedding functionality. ProM itself is the main framework in which many process mining algorithms, as well as many other algorithms, have been implemented. Furthermore, the Package Manager allows updating plugins, as well as installing new plugins at runtime, i.e. without the need of manually downloading new versions of plugins. Finally, the XESame tool allows users to convert legacy data into the ProM native XES format, which is an extensible format for storing event logs.

## **Business Process Modeling and Quick Prototyping with WebRatio BPM**

*Marco Brambilla, Stefano Butti and Piero Fraternali*

WebRatio BPM is an innovative Model-Driven development environment for building Business Process Management applications in Web/SOA environments. The tool allows one to capture requirements into models and to generate automatically the application code. Moreover, it provides two orthogonal levels of modelling: a first level based on the BPMN standard for expressing the Business Process requirements; a second level based on the WebML modelling language for expressing the functional requirements and application details. Both levels contribute to generate the final application. The result is a perfectly standard Java Web application, with no proprietary runtime or components that can be deployed on any Java application server. The development environment is open, generation rules can be extended and completely customized and the development team has always the full control of the generated code. Thus, WebRatio BPM allows the production of BPM applications completely tailored to final customer's needs, desires and constraints. Customization is guaranteed on any aspect of the application, such as functional specifications, layout, integration or executing environment.

## **bflow\* Toolbox – an Open-Source Business Process Modelling Tool**

*Heiko Kern, Stefan Kühne, Ralf Laue, Markus Nüttgens, Frank J. Rump and Arian Storch*

The bflow\* Toolbox is a modelling tool for the business process modelling language Event Driven Process Chains (EPCs). In this demo, we show three innovative features of this modelling tool. First, the modeller continuously gets feedback about possible modelling problems. Second, there is an option to construct a large part of a model with input from the keyboard only, i.e. without ever touching the mouse. Third, new features can be added to the tool very easily – without the need to be familiar with the Eclipse development.

## **Scenario-based process modeling with Greta**

*Dirk Fahland and Matthias Weidlich*

Designing understandable business process models is one of the key factors to successful business process management. Current modeling practices advocate the use of block-oriented concepts and subprocesses to structure complex process models. However, such guidelines cannot be applied in any case as case studies in process mining have shown. Previously, we proposed the scenario-based paradigm to structure models of complex processes in behavioral fragments, i.e., scenarios. This demo presents Greta as a tool that supports scenario-based process modeling and execution. In this tool demo, we show how to structure models of complex processes in scenarios. We demonstrate the interactive, graphical tool Greta and its main features for (1) modeling scenarios of processes, (2) modeling variants of scenarios, (3) executing scenarios, (4) modeling process exceptions, (5) dynamically adapting scenario-based process models, and (6) synthesizing classical process models from scenarios. This demo aims at researchers and practitioners who are interested in solutions for flexible process modeling.

## **The PrICE Tool Kit: Tool Support for Process Improvement**

*Mariska Netjes, Hajo A. Reijers and Wil M.P. van der Aalst*

Process improvement is an important means to obtain competitive advantage and improve customer satisfaction. A common approach in practice is the use of a workshop to come up with alternative processes. Popular as this approach may be, it is questionable whether it leads to an alternative process that will perform better than the as-is process. The PrICE tool kit is a research prototype that has been developed to provide tool support for process improvement. The tool kit supports the creation and evaluation of one or more process alternatives from an as-is process model. The as-is model should contain information on the control flow, the data, the resources and the performance of the process. The use of multiple process perspectives enables the creation of realistic and meaningful process alternatives. The PrICE tool kit is implemented as part of the Process Mining (ProM) framework. The tool demonstration is interesting for participants from industry that would like to improve their business processes. Also, researchers that are interested in the challenges of bringing theory and practice together will benefit from participating.

## **service-technology.org/live – Replaying tool experiments in a Web browser**

*Niels Lohmann*

During the previous years, the theory of programming research groups at the University of Rostock and the Humboldt-Universität zu Berlin presented several results concerned with various issues related to the correctness of models for business processes and services. For most of the results, we presented software prototypes and experimental evidence for the computational capabilities of our approaches. The challenges and the lessons learned during the development of the service-technology.org tool family in an academic environment are presented in this year's conference paper "How to Implement a Theory of Correctness in the Area of Business Processes and Services". This tool demonstration intends to accompany the paper's presentation with a hands-on session. We shall present several members of the tool family, the settings they can be used in, and their interplay. In particular, we demonstrate instantaneous soundness verification of industrial business processes with the tool LoLA and the integration of several service verification and synthesis tools in ProM. In addition, we shall introduce service-technology.org/live, a Web site hosting the tools to replay experiments. Finally, we sketch the integration into other tools such as Oryx.