Every IT organization has a large number of different processes, systems and active persons. This makes it essential for process managers to know the latest status of processes at all times. In handling processes and numerous interrelated tasks, service staff (users) need to know when what task is due, with what the tasks are to be performed, what steps are still to carry out, how long they will take to complete and who is to then assume responsibility. That can only be done with clearly defined, standardized processes which you can model flexibly and execute automatically for the most part.

Valuemation enables you to:

- Improve efficiency in IT service management by means of clearly defined, standardized and largely automated processes
- Minimize disruptions to operation, since employees perform their tasks with highly reliable processes and so avoid mistakes
- Create a high level of process transparency by being aware of the status of all running process instances and having an overview of relationships and dependencies at all times
- Avoid negative impacts on service availability, since you can measure your processes, control them by means of KPIs and optimize them if necessary

Detailed modeling and description of processes
Objectives

You use the Valuemation Business Process Manager to model and implement business-oriented IT service processes. As part of that, you define interactive user tasks as well as automated, workflow-based steps in Valuemation or external systems designed to work across modules and systems. The process engine is the key core component of the Valuemation Business Process Manager. The engine is responsible for the automation and secure execution of all process steps.

Graphical Modeling of Processes

The Valuemation Business Process Manager (VM BPM) is based on the graphical specification language BPMN (Business Process Model and Notation). That means you use a standardized, graphical process notation with which processes are both modeled and implemented, as well as being executed automatically. This standard also ensures that processes are correctly and precisely modeled and can then be run by the process engine. A defined graphical process is provided in Valuemation with additional technical details (such as data objects, conditions, parameters, function macros, etc.). Serial and parallel process threads, loops and multiple instances, returns and business rules as well as routing rules can be employed.

Definition of Processes

A process can be modeled in hierarchical fashion and can include two different types of subprocesses: In the case of complex detailed flows, tasks are encapsulated for clearer interpretation and represented as embedded subprocesses; in contrast, the global processes are parameterized subprocesses that compile recurring process sequences and in this way enable modularity and reusability. All tasks and activities are assigned to roles that designate the persons responsible for their execution. The organization and grouping of tasks are visualized as swimlane charts. The process definitions can be exported in XPDL format (e.g., for further use in ARIS) or printed out in PDF.

Control of Processes Across Systems

With the VM BPM you can transfer your specialized organizational processes to technically executable process models. These processes are then interpreted and handled by the Valuemation process engine. The process engine works with a combination of automatically run tasks, assignments of tasks to users (interactively) and process-oriented integration of internal or external systems that...
are invoked over interfaces. Not only Valuemation-specific processes and handling of them can be controlled with the VM BPM, but also all other relevant processes – regardless of the IT systems used. The process controlling is supported by the permanent monitoring of individual process instances and the provision of process-relevant key performance indicators.

**Effective Support for Process Chains**

The VM BPM supports different commercial and technical process chains with approval steps of any complexity, such as the commercial procurement process (from the requisition/request, to inventory check, initiation of an order, subsequent assignment of the procured IT element to a new or existing contract, through to configuration of the system), the technical delivery and configuration process (from delivery of the hardware with an inventory check/adjustment, through software rollout and saving of configuration data in the CMDB), operative processes in release and change management and control processes for the planning, budgeting, calculation and accounting of IT costs and most.

**Automation of Processes**

Simple scripts can be integrated directly in order to automate processes. Defined function macros are provided for more complex changes. The macros contain parameterized Valuemation workflows. They are used to make changes, such as to the system configuration, status changes, creation of a new system, etc. in Valuemation. Similarly, interfaces can be invoked in this way with parameters and return values in order to transfer an order to an external system – for example, for software distribution, for identity management, etc. Synchronous or asynchronous communication with other applications can also be implemented by means of web services.

**Transferring Processes to Production**

In order to avoid errors during running of processes, error cases and events can be explicitly modeled and user tasks validated before being acknowledged. The process lifecycle (development, testing, release through to the productive process) is controlled by means of different status indicators. Changes to the process design can be tracked at any time thanks to the versioning process.
Execution of Processes

Processes can be manually started or begin when triggered by an event or due to defined start conditions which generate a process instance. Execution of the processes is controlled by the process engine: It drives the VM BPM and is the central component in process execution and automation, generating process instances for every individual process cycle. In addition, it calculates the control flow and always knows what action is next to be carried out. It controls the data flow in the process. With the end-to-end mapping of processes, a list of tasks to complete is created for each user. When opening a task, users can see at any time from the displayed bar how far the corresponding process has progressed. The task is then processed in accordance with the definition and description, and is then acknowledged or concluded. This is in turn the signal for the process engine to process the result of the completed task and to determine the next defined process step.

Monitoring of Processes

Measurement points can be defined at individual steps in the processes and, on that basis, measurement sections can in turn be defined to determine key performance data for process execution. You know at all times due to continuous monitoring where the relevant instance is in the process, what data the process contains or for whom the process has come to a halt. The VM BPM features a monitoring component which monitors the process engine and the active processes in order to quickly obtain an overview of their latest status – for example, which have no errors and for which warnings or errors occurred. The process instances are visualized in an overview to provide transparency regarding the current process step and further actions at all times. The cycle time, standstill time and processing time are recorded for each process step and can be used in process analyses.

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Other relevant modules:
- Service Request Manager
- Procurement Manager
- Change Manager