How to Design an IBM BPM Solution
IBM Redbooks Solution Guide

IBM Business Process Manager is a comprehensive business process management suite that provides visibility and management of your business processes. IBM Business Process Manager (BPM) supports the whole business process management lifecycle approach, which includes discover and document, plan, implement, deploy, manage, and optimize. Process owners and business owners can use this solution to engage directly in the improvement of their business processes.

IBM BPM excels in integrating role-based process design and provides a social business process management experience. It enables asset sharing and versioning through its Process Center that act as a unified repository, making it possible to manage changes to the business processes with confidence. IBM Business Process Manager supports a wide range of standards for process modeling and exchange, and built-in analytics and search capabilities help to improve and optimize the business processes.

This IBM Redbooks Solution Guide provides valuable information for project teams and business people that are involved in projects that use IBM BPM. It describes at a high level the important design decisions that you as a team will face. These decisions will invariably have an impact on the success of your project. These decisions range from the more business-centric decisions, such as which should be your first process, to the more technical decisions like solution analysis and architectural considerations.

Figure 1 depicts the IBM Smarter Process, which can help organizations to reinvent their business operations for greater customer-centricity and top line growth. IBM Smarter Process covers business process management (IBM BPM), operational decision management (IBM Operational Decision Management), and case management. IBM Smarter Process enables organizations to interact with their customers instantly and seamlessly. It also enables organizations to provide targeted and relevant information to their customers.
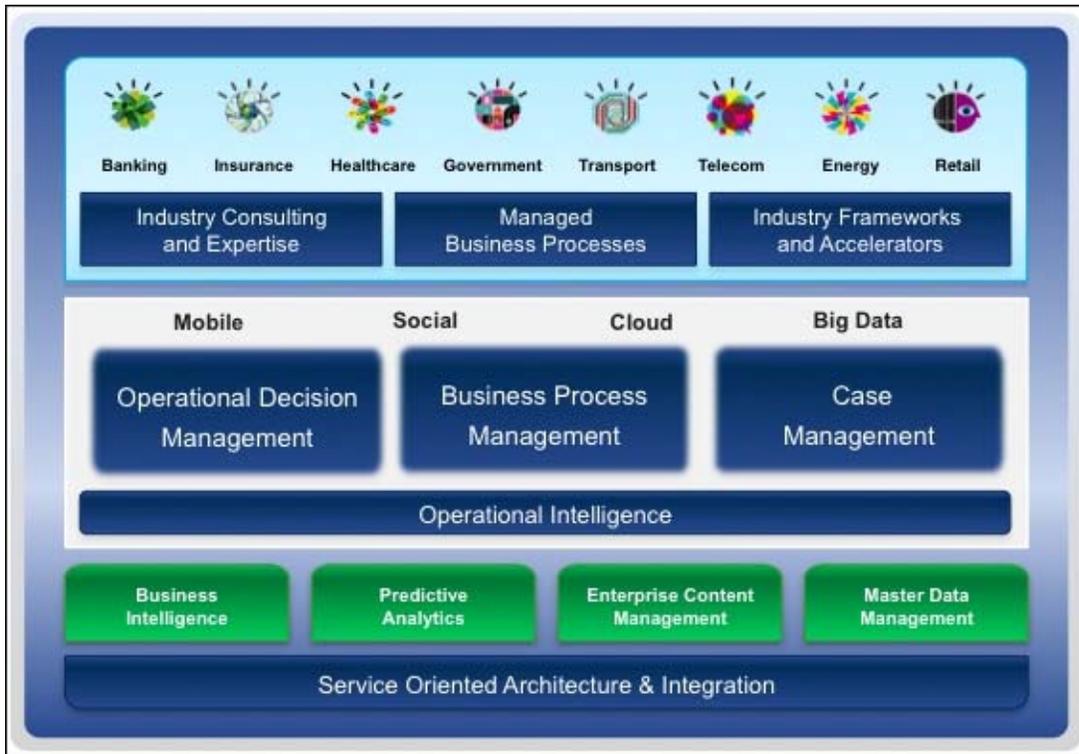

Figure 1. IBM Smarter Process-

Did you know?

The goal of a business process management implementation is to promote effectiveness and efficiency in your business processes by using measurable business value to align all projects with your corporate strategies. Business process management relies on an incremental delivery methodology that creates process visibility and enables process control in your business. The intention of a business process initiative is to deliver targeted results that directly support the strategic goals of the business. Thus, a successful business process management initiative requires close collaboration between business operations and technologists.

Business value

The importance of making the right design decisions from the beginning should not be underestimated, as it can have an impact on the outcome of your project both from a cost and time perspective. It does not matter if you are implementing a single process or are starting on a broader enterprise business process management initiative. The decisions that you make up front can make your life a lot easier or cause issues later.

It is easy to see the impact on an organization when projects are not delivered on time or processes are not aligned to business goals because this can have an impact on your organization's bottom line. If the processes do not reach the performance targets, it can affect customer satisfaction and user acceptance.

Solution overview and architecture

You must make a number of different design decisions as a wider team as you embark on your business process management projects. These decisions are not only technical in nature. More business-centric decisions, such as what methodology to use, can also have an impact on the long-term viability of your business process management project or program.

This solution guide describes a number of important aspects that you should keep in mind as you start your project:

- Methodology
- Center of Excellence
- Project approaches
- Solution analysis and architecture considerations
- Design considerations and patterns
- Business-centric visibility
- Performance and IT-centric visibility

For more information about these topics, see *Business Process Management Design Guide using IBM Business Process Manager*, SG24-8282.

Methodology

The goal of business process management is to promote effectiveness and efficiency in your business processes by using measurable business value to align all projects with your corporate strategies. Business process management relies on an incremental delivery methodology that creates process visibility and enables process control in your business. The intention of a business process initiative is to deliver targeted results that directly support the strategic goals of the business. Thus, a successful business process management initiative requires close collaboration between business operations and technologists. With this in mind the selection of delivery methodology is important. Experience shows that the customers who take on an iterative approach to delivering business process management projects are the most successful.

Center of Excellence

Although most business process management projects begin as individual, loosely connected (or entirely disconnected) efforts, today's operational landscape demands scalability and enterprise-wide adoption. These demand necessitate bringing individual business process management projects together in a consolidated business process management program. To meet the demand of scalability and enterprise-wide adoption of business process management, many organizations today implement a business process management Center of Excellence (CoE). A CoE must address the following key focus areas of responsibility:

- Define a higher business goal or vision, drive business process management initiatives, and align individual projects with that vision.

- Run a scalable delivery resource model for discovering, implementing, deploying, managing, and supporting business process management initiatives.

- Administer a shared infrastructure for hosting and maintaining the solutions that are the outcomes of business process management initiatives.

Project approaches

Every organization has a different entry point into their business process management initiative, and every organization is at a different point in the journey of adopting business process management. Doing the second step first might make you stumble or fall. It is important to know where to start.

Often customers do not know which should be the first process to implement because they do not have a good understanding of what the process does in detail. Often this is because the process was only documented once many years ago and then filed away. Another common issue is customers who know that they have issues with their processes but they don't know which process to start with. They do not know which out of all process have the biggest issues and where they can gain the most benefit. If so, start with a process discovery workshop to document your processes and build a process inventory of all your processes. This analysis allows you to gain a better understanding of your processes and the issues. This in turn allows you to make an informed decision about which should be your first process.

When you have implemented your first successful project and want to take the next step on your business process journey from an enterprise perspective, start looking at the IBM project to program approach. This approach guides your organization with the best approach to scale your delivery by for example by setting up a Center of Excellence (for more information, see the previous section).

Solution analysis and architecture considerations

There are a number of practical considerations a business process management solution architect comes across during the initial stages of a project. These considerations can all have an impact on the scalability and manageability of your business process management solution, so keep them in mind.

This section outlines the most common challenges that a business process management solution architect comes across during initial stage of the project:

- **High-level solution analysis and design**. Before you start to create your solution architecture or solution design, you need to know what the solution is all about. To do this, you must have identified your process and have been through process discovery workshop where you among other things identify the following:

  - As-Is Process
  - Pain points
  - To-Be process
  - KPIs and SLAs

  The above-mentioned information can help you formulate the goal of the business process initiative, and with this, the goals of your architecture. Most often, process goals are around saving time, saving cost by being more efficient or having more automation. And this is exactly where your architecture comes into play. By analyzing your As-Is process you can identify process activities that can be executed more efficiently:

  - You can increase the level of automation by integrating with the correct system, to gather information, store information, externalize decisions, and so on.

  - You can find out whether additional services must be created or whether the current portfolio is sufficient.

  - You can improve the level of data aggregation or service orchestration and make sure it is being done at the correct level (service versus process).

- **Application architecture considerations** . There are a number of high-level decisions with regards to your application architecture that you must consider. They can all potentially have a significant impact on the solution if they are overlooked or not properly addressed.

    - Using IBM Business Process Manager Coaches versus building custom user interfaces

    - Design considerations around Top Down versus Bottom Up approaches

    - Choosing between IBM Business Process Manager Standard and IBM Business Process Manager Advanced

    - Choosing between IBM Business Process Manager Advanced and IBM Integration Bus

    - Considering IBM Business Process Manager rules versus IBM Operational Decision Manager

- **Security architecture considerations** . Consider the fundamental need for securing your BPM systems. IBM Business Process Manager is based on Java 2 Enterprise (J2E) technologies, and is delivered largely through HTTP protocols. Therefore, it has the same security requirements as any other J2E enterprise-ready application. Authentication, authorization, and protection of sensitive data are all topics that are common to any J2E application, and so many casual observers might stop their inquiry there.

    However, in many ways IBM Business Process Manager is not just another J2E application. When you look at an organization's existing software systems, you typically find applications that are single-purpose built. Hacking these applications could expose the process' data, but it is hard to conceive of how such a breach could expose the actual business steps, decision points, or overall operational strategy of a department's business functions. This is not true of IBM Business Process Manager. IBM Business Process Manager encapsulates more than just a process' data. IBM Business Process Manager process applications capture the very essence and details of a department's way of doing business. IBM Business Process Manager paints easy-to-understand flowcharts of process steps, which employee groups are entitled to run particular steps, the decision points, and details of how those decisions are evaluated.

- **External System of Records considerations** . As one of the key aspects of the IBM Business Process Manager solution design, the external system of record (SOR) plays an important role in overall IBM Business Process Manager process application solution landscape. There are a number of points you should consider while designing your IBM Business Process Manager process application data persistence layer:

    - Business entities
    - IBM Business Process Manager Business Object Model design considerations
    - Accessing existing SORs
    - Locking mechanism for concurrent access
    - Accessing reference data

- **Integration architecture considerations** . Developing a new business process often involves varying degrees of process integration complexity. Requirements for process integration can range from simple web-service-based connectivity with an external system to a complex orchestration component that can not only start the services in the correct order, but also handle failure, errors, and any other challenges that come along, when there are many services on many different platforms in many different locations. the following are some examples of the different types of integration requirements associated with a business process and the IBM products that can be used to address those requirements:

    - Brokerage and connectivity requirements can be typically implemented using IBM Integration Bus or IBM Business Process Manager Advanced ESB. Examples of brokerage and connectivity requirements include:

        - Message routing
        - Message transformation
        - Connectivity across platforms and protocols

- Application-specific connectivity using adapters
- Content-based routing of messages

- Enterprise application integration requirements can be typically implemented using IBM Business Process Manager Advanced Business Process Execution Language (BPEL) and IBM Business Process Manager Advanced ESB. Examples of enterprise application integration requirements include:

  - Event driven data synchronization
  - Asynchronous data aggregation

- Service exposition requirements that include:

  - Business processes providing services externally (acting as a service provider) can be handled using IBM Business Process Manager Advanced Service Component Architecture (SCA), BPEL, and IBM Business Process Manager Advanced ESB.

  - Business processes acting as service requesters can typically consume services that are implemented using IBM Integration Bus or IBM Business Process Manager Advanced ESB.

- Service orchestration and choreography requirements that include:

  - Straight through processing of business processes with the ability to maintain process state and support for transactions can be implemented using IBM Business Process Manager Advanced BPEL.

  - Straight through processing of stateless services can be implemented using IBM Integration Bus or IBM Business Process Manager Advanced ESB.

- **Infrastructure architecture considerations** . The key architectural considerations in building your IBM Business Process Manager infrastructure are high availability, sizing, scalability, disaster recovery, security, ease of maintenance and administration, optimal use of system resources, and optimization of licensing fees. It is important that you align your infrastructure requirements with these considerations individually, as discussed below.

  - The important components upon which IBM Business Process Manager is built that provide redundancy for failover and high availability include:

    - WebSphere Application Server
    - Databases
    - Messaging engines
    - Web servers
    - Network infrastructure

    Your infrastructure architecture considerations typically include a strategy to address each of these components with your high availability requirements in mind. For example, your high availability requirements can lead you to pick an active/passive configuration for your database.

  - The sizing of your platform is driven by your requirements that can include number of concurrent users at peak load, number of users logged in to the system during peak hours of the day, contingency requirements, maximum number of active process instances, and so on. It is important that the estimates you use for your sizing exercise align closely with expected production load.

  - The scalability considerations for your platform are driven by your requirement to start with a few users and then expand to support many users over time. To meet this requirement, your scalability design must include the ability to easily add resources such as hardware, network capacity, memory, and so on.

  - Your requirement to recover the environment even if part or all of the original system is lost will typically drive your disaster recovery considerations. For an example of how your disaster recovery requirement can affect your IBM Business Process Manager topology, see the IBM developerWorks article "Faster disaster recovery in IBM Business Process Manager" at http://www.ibm.com/developerworks/bpm/bpmjournal/1308_zhang/1308_zhang.html.

Design considerations and patterns

You need to keep a number of design considerations in mind as you start on your business process management project. All of these have an impact on the scalability of your solution and on the ease of maintenance. This is especially important if you are starting on an enterprise business process management journey where you roll out multiple projects across your organization. The design decisions also have an impact on how easy it is to reuse assets.

- **Product installation considerations** . Decide your business process management topology in advance with an eye on the future state of your environment. It is always much harder to change the topology at a later stage when you also must take into account inflight instances. With regards to the actual installation, make sure to automate the installation and configuration, as this will reduce the chance for errors. It also makes it a lot easier to stand up new and identical environments.

- **Business Process Design** . Make sure that the process you want to implement really is a business process and that it brings business value. Here are a number of characteristics of a business process:

  - Performing the process provides value to the business
  - The process contains individually business relevant steps
  - Business relevant data flows through the process
  - The process follows a relatively structured path
  - The steps within the process are performed by multiple roles or teams
  - The process changes over time as a result of changes in the business

  If the process you are thinking about implementing does not at least apply to a couple of the points above, you might want to rethink your decision on what tool to use.

- **Service Design** . Service design comprises human services and system services. These are the implementation artifacts in IBM Business Process Manager that are called services (human services and system services). These are not necessarily services in the sense of service-oriented architecture. When designing your services, try to make them as clear and simple as possible because this helps other people understand what you are building. It also helps with maintenance and reusability. Here are some simple guidelines when designing a service:

  - Never copy paste - Put it in a service and reuse it instead.

  - Do not cross lines - Because if you do, you most likely reach a complexity that is worth breaking up into smaller pieces. Also, do not forget the rule of seven.

  - One coach per service - If you have many coaches within one service, all the navigation, and data initialization and validation will cause a lot inconvenience for anyone who tries to change the service. Wrap the coach into a separate human service. You might want also to reuse it as a stand-alone module.

- **Data Flow Design** . A process without data is barely a process. However, how much data should be in the process? Too much data can negatively affect performance, whereas too little decreases the value for the business. From a design perspective, you must look at the data from these different perspectives:

  - Data in processes - To manage the flow of data objects that are required inside the process, two major approaches are used: Call by reference and call by value. Call by reference means that the object model on the process layer contains only the bare minimum. Call by value means that the object model on the process layer contains the sum of all information that are necessary to perform its tasks. The process passes all required information to the task and the task returns all changed information.

    A common misconception is that the complete business object model lives in the process (in this case, the BPD layer). In fact, the process layer must have only the information that is necessary to run this process.

- Data in services - Similarly to the data flow in the process layer, the service layer has different implementation whether reference or value has been chosen as the desired data flow pattern.

- Data in coaches - The rules that apply for data flow on the process and service level apply similarly for coaches. The larger the business object, the slower the coach renders. The more network calls (for example Ajax) are run on the coach, the more the user interface performance will be affected.

- **Toolkit Design**. A toolkit is an IBM Business Process Manager mechanism for sharing assets across different process applications and other libraries. Although, toolkits can contain the same type of artifacts as process applications, toolkits are non-executable assets and cannot be deployed on their own to the runtime server.

  The design of toolkits has significant impact on maintainability, serviceability, and scalability of the process application solution. The design of toolkits should be carefully considered during initial process and integration solution architecture.

  Because toolkits are, per design, meant for reuse purposes, the most common challenge during initial process application design is the classification, grouping, and further maintenance of library items placed in the toolkit.

- **Error Handling**. Error handling is part of every IBM Business Process Manager engagement, and should be considered as one of the key areas to be carefully designed and implemented. The error handling implementation in a business process solution can be quite a complex topic. Always follow these recommendations while approaching the error handling design:

  - Error handling discussions with customers should start with workshops to ensure a common understanding of the key concepts. Error handling discussions should never start with a discussion about the technology.

  - It is especially important to understand the increased complexity implicit in IBM Business Process Manager distributed solutions, integrating with the customer's legacy and SOA-based solutions.

  - Error handling strategies should be a product of the top down requirements, further honed by knowledge of the technology, not the other way round.

  - Apply leading practices and take advantages of the information, expertise, and existing assets available on the IBM Community wiki site and other IBM online resources.

- **Logging**. As one of the aspects of runtime system visibility, logging is an important part of every IBM Business Process Manager solution. Solution architects come from different backgrounds, from various platforms, and many times ask whether they can use traditional logging tools with IBM Business Process Manager. There are a number of options that can be used for logging purposes in the IBM Business Process Manager process application. It is important to recognize the difference between logging and tracing. Logging can be turned on or off permanently. Logging should generally not be overburdening on performance. It often operates with info/warn/err levels and realized as a combination of system, and implemented input and configurations. Tracing is only turned on for detailed diagnosis, showing the exact path through the code. It is used for low-level diagnostics and typically has a detrimental effect on performance.

Before committing to a particular option, it is important to understand from the customer requirements prospective what the specific purpose of logging is and how the logging results are used. More specifically, how logging output is going to be accessed, analyzed, and presented. Another aspect that can affect the development scope is localization of logging output and if such is required. In that case, additional design and development effort is required to support localized output.

Business-centric visibility

In IBM Business Process Manager, the business data is typically retained in one or more external systems of record. It is represented as variables, or business objects in the business process definition (BPD) contained in the process application. The process data includes statistics about the performance of the BPD such as key performance indicators, service level agreements, and team performance. This process data is captured from the run-time instance of a business process and stored in a dedicated Process Server and Performance Data Warehouse in IBM Business Process Manager. The Process Server retains in-flight process data while the Performance Data Warehouse retains the historical process data. The historical process data is collected by the Process Server and sent to the Performance Data Warehouse. Business-centric visibility is achieved in IBM Business Process Manager using these items:

- **Business data and process data reports** . The business data and the process data reports in IBM Business Process Manager provide business-centric visibility through the business data and the process data that is captured and retrieved in IBM Business Process Manager. IBM Business Process Manager provides:

  - Ready-to-use process data dashboards that provide real-time performance reports

  - Ability to create dynamic ad hoc reports in the IBM Process Portal

  - Ability to develop custom reports using coach designer coaches

  - Ability to create custom dashboards using historical and in-flight process data retained in the IBM Business Process Manager

- **IBM Business Process Manager Process Optimizer** . IBM Business Process Manager Process Optimizer helps you improve your processes by showing you where and how to change the process model by using historical data. The IBM Business Process Manager Process Optimizer enables you to perform a wide range of analysis and optimization scenarios, ranging from simple simulations to validate your overall process modeling strategy to advanced what-if comparative analyses using historical, in-flight, simulated data, or any combination of the three. IBM Business Process Manager Process Optimizer also gives you the ability to analyze key performance indicators and service level agreements that are tracked and stored from a process instance at run time.

- **IBM Business Monitor**. Many times customers need full end-to-end visibility of a process. It is not unusual that a part of the process has been implemented outside of IBM Business Process Manager. For example, the first couple of steps of the process are handled by another application and the process in IBM Business Process Manager only starts when those steps are completed. In this case, IBM Business Process Manager would only have visibility from when execution is handed over to IBM Business Process Manager. This is where IBM Business Monitor comes in. IBM Business Monitor provides near real-time visibility into the performance of business activities by processing events from a variety of sources, calculating business metrics, and presenting key performance indicators through role-based business dashboards. Another key benefit with IBM Business Monitor is that business users can create customized reports, KPIs, SLAs, reports, and so on.

Performance and IT-centric visibility

Because performance tuning is an ongoing activity in IBM Business Process Manager, document the performance tuning process and use it as a reference for ongoing tuning activities. The performance tuning process flow that is shown in Figure 2 outlines the activities that are performed for tuning the specific parameters within the environment and the application.
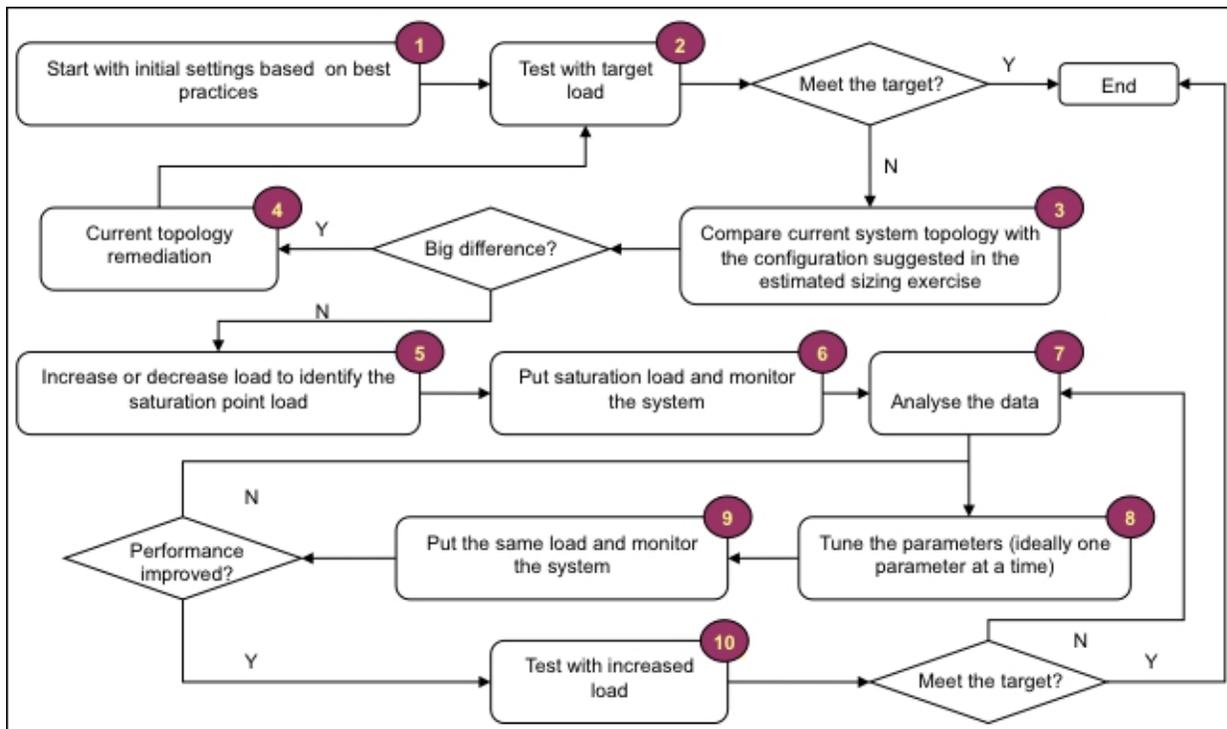

Figure 2. Performance tuning flow

IT-centric visibility is a capability that gives an overall view of what is happening in a runtime solution. IT-centric visibility includes these capabilities:

- Ability to audit systems for compliance.
- Ability to ensure that services meet service level agreements.
- Ability to pro-actively monitor the health of systems, subsystems, and applications.
- Ability to diagnose and resolve application issues quickly.

IT-centric visibility encompasses logging, auditing, and monitoring activities. Decisions made on logging, auditing, and monitoring strategies can often have a significant impact on the reliability, availability, and scalability of the system.

In IBM Business Process Manager, some of the key performance metrics, such as processor usage, memory usage, thread pool size, connection pool size, and disk I/O, can be collected and analyzed using different tools. This section lists some of the tools that can be used to diagnose performance issues, and explains how the tools can be used to collect the data and diagnose the issues in IBM Business Process Manager:

- nmon
- WebSphere Application Server Performance Tuning Toolkit
- IBM Monitoring and Diagnostic Tools for Java - Health Center
- IBM Monitoring and Diagnostic Tools for Java - Memory Analyzer
- Pattern Modeling and Analysis Tool for IBM Garbage Collector

- IBM Thread and Monitor Dump Analyzer for Java
- Database monitoring tools

Usage scenarios

This section describes a few scenarios that describe how customers use and benefit from using IBM Business Process Manager. The scenarios are based on fictitious companies.

Business Visibility

A common issue for business users is getting end-to-end visibility of processes. An example here would be a team manager at an insurance company that has a team handling personal injury claims reporting to them. From a business perspective, the team manager wants to understand who is working on what and whether they are completing the work on time. A view of the current workload also allows the team manager to react to unforeseen circumstances and to reallocate work to still achieve the deadlines.

The data collected as the claims process runs also help the business analysts at the insurance company to analyze how they are performing from a historical perspective. A simple example here could be that through the analysis of claims they discover that for simpler claims under a certain value, they almost always approve the claim. With this information, they might decide to always approve these claims, as it costs the company more to manually handle the claim than it would to automatically approve it.

Rules

A banking customer is looking at implementing a credit card application process. They decide to use IBM Business Process Manager Advanced for the actual process and integrations. However, they are not certain about where to implement the decisions that are used during the credit card application. The decision includes, for example, fraud check One of the key requirements from the business is that they need to be able to change the decision quickly. This requirement is driven by the marketing department, as they run several marketing programs each year. They also need to be able to quickly adjust decisions based on the ever-changing competitive landscape. For example, when another bank introduces a new offer, they need to react quickly to counter it. In this case, the bank should use IBM ODM for their decisionsbecause it allows business users to easily change rules quickly by using the web-based business console. It also allows the bank to reuse decision across other applications.

Integration

BM Business Process Manager is an important part of the IBM SOA stack, and is designed to work seamlessly with other IBM products. The following products are commonly integrated with the IBM Business Process Manager:

- IBM Business Monitor
  Provides detailed business activity monitoring through customizable dashboards, notifications, and alerts to help improve business agility. The integration between IBM Business Process Manager and IBM Business Monitor allows monitoring of the business processes in greater detail, such as tracking process and activity start times, stop times, and durations.

- IBM Case Manager Business
  Process Management and Case Management are the two leading ways to manage business processes and documents. Together, they present unified information, processes, and people to provide a 360-degree view of the case, providing a complementary and complete way of managing most complex, enterprise-level business transactions.

- IBM Operational Decision Management
  IBM Operational Decision Management allows managing decisions separately from business applications. The separation of decision management from application code reduces the amount of time and effort that are required to update the business logic in production systems. This increases the ability of your organization to respond to changes in the business environment.

- IBM Integration Bus
  IBM Integration Bus delivers an advanced ESB that provides connectivity and data transformation for both standards-based and non-standards-based applications. The integration between IBM Business Process Manager and IBM Integration Bus allows IBM Business Process Manager to expose its services universally and extend its data transformation capabilities. Many application environments provide simple, well documented interfaces to enable other components to access their capabilities. However, some popular applications have complex interfaces and arcane interaction styles. IBM Business Process Manager Advanced provides the following set of inbound and outbound adapters to ease the challenges of accessing some of the more popular application environments:

  - CICS (outbound)
  - IBM Enterprise Content Management (inbound and outbound)
  - IMSTM (outbound)
  - Oracle JD Edwards EnterpriseOne (inbound and outbound)
  - Lotus Domino (inbound and outbound)
  - Oracle eBusiness Suite (inbound and outbound)
  - PeopleSoftTM (inbound and outbound)
  - SAP (inbound and outbound)
  - Siebel (inbound and outbound)

  In addition to adapters for applications, adapters are available to help to connect to the following common technology infrastructures:

  - Email (inbound and outbound)
  - Flat files (inbound and outbound)
  - FTP (inbound and outbound)
  - iSeries (inbound and outbound)
  - JDBC Databases (inbound and outbound)

Supported platforms

These platforms are supported for IBM Business Process Manager V8.5:

- IBM AIX (32- and 64-bit)
- Linux on x86 (32- and 64-bit)
- Linux on System z (32- and 64-bit)
- Solaris on SPARC (32- and 64-bit)
- Windows (32- and 64-bit)

For more information about system requirements, see "IBM Business Process Manager Advanced detailed system requirements" at: http://www.ibm.com/support/docview.wss?uid=swg27023005.

Ordering information

Ordering information is shown in Table 1.

Table 1. Ordering part numbers and feature codes

Program name	PID number	Charge unit description
IBM Business Process Manager Advanced	5725-C94	Processor Value Unit (PVU)
IBM Business Process Manager Standard	5725-C95	PVU
IBM Business Process Manager Express	5725-C96	PVU
IBM Business Process Manager Tools and Add-ons	5725-C97	Authorized User Application Instance

Related information

For more information, see the following documents:

- *Business Process Management Design Guide using IBM Business Process Manager*, SG24-8282
- *Business Process Management Deployment Guide Using IBM Business Process Manager V8.5*, SG24-8175
- *Creating a Business Process Manager Center of Excellence (CoE)*, REDP-4898
- *IBM Business Process Manager V8.5.5 Performance Tuning and Best Practices*, SG24-8216
- *IBM Business Process Manager Version 8.0 Production Topologies*, SG24-8135
- *Leveraging the IBM Business Process Manager Coach Framework in Your Organization*, SG24-8210
- *Scaling Business Process Manager Adoption: From Project to Program with IBM Business Process Manager*, SG24-7973
- IBM Business Process Manager product page at: http://www.ibm.com/software/products/en/business-process-manager-family
- IBM Business Process Manager 8.5.5 announcement letter: http://www.ibm.com/common/ssi/cgi-bin/ssialias?subtype=ca&infotype=an&appname=iSource&supplier=897&letternum=ENUS214-141

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