

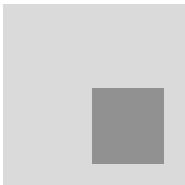


BAAN V
Enterprise Modeler



White Paper

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Table of contents

1	Introduction	1.1
1.1	Business Dynamics	1.1
1.2	Baan Company Response	1.1
1.3	Benefits	1.1
	1.3.1 <i>BAAN V Implementation</i>	1.1
	1.3.2 <i>Business Process Re-engineering</i>	1.2
1.4	Target Group	1.2
2	Business Engineering Framework	2.1
2.1	Baan's Architecture for Business Engineering	2.1
	2.1.1 <i>Layer 1: Business Process Engineering, the BAAN V Enterprise Modeler</i>	2.1
	2.1.2 <i>Layer 2: Process Management layer, the Workflow Management module</i>	2.2
	2.1.3 <i>Layer 3: Process Execution layer, the Workflow Engine module</i>	2.2
	2.1.4 <i>Layer 4: ERP software functionality</i>	2.2
2.2	BAAN V Enterprise Modeler Architecture	2.3
	2.2.1 <i>Level 1: Enterprise Structure model</i>	2.3
	2.2.2 <i>Level 2: Business Control Model</i>	2.4
	2.2.3 <i>Level 3: Business Functions, Processes and Organization diagram</i>	2.4
2.3	Dynamic Enterprise Modeling Approach	2.5
3	BAAN V Enterprise Modeler description	3.1
3.1	Enterprise Structure Model	3.1
	3.1.1 <i>Introduction BAAN V Multi Site concepts</i>	3.1
	3.1.2 <i>Enterprise Structure Modeling in BAAN V</i>	3.2
	3.1.3 <i>Application Structure Modeling in BAAN V</i>	3.3
3.2	Business Control Model	3.4
	3.2.1 <i>Generic Business Control Model</i>	3.4
	3.2.2 <i>Process Control Cycles</i>	3.5
	3.2.3 <i>Link to Business Function / Process model</i>	3.6
3.3	Business Function Model	3.7
3.4	Business Process Model	3.8
3.5	Business Organization Model	3.10
3.6	Business Data Model - Entity Relationship Models (ERM)	3.11
	3.6.1 <i>Description of the ERM model</i>	3.11
	3.6.2 <i>Integration ERM model with Business Process Model</i>	3.12
3.7	Implementation Wizards	3.13
3.8	Business Rules	3.15
	3.8.1 <i>Dependency Rules</i>	3.15
	3.8.2 <i>Transformation Rules</i>	3.15
	3.8.3 <i>Parameter Rules</i>	3.15
	3.8.4 <i>Static Condition Rules</i>	3.16
3.9	Version Management	3.16
	3.9.1 <i>Introduction</i>	3.16
	3.9.2 <i>Working principle</i>	3.17
3.10	Client / Server Architecture	3.17



1 Introduction

1.1 Business Dynamics

Continuously changing market situations force today's companies to constantly reassess their corporate strategy, business processes, their organization and technology, especially with the aim to increase productivity and flexibility.

This also makes strict demands on the information infrastructure, which must be flexible enough to follow the organization's dynamics. In addition, modern information technology also offers important possibilities to support new and fundamentally different types of organizations (process organization, IT as en-abler).

1.2 Baan Company Response

Baan anticipates the above development with its 'Dynamic Enterprise Modeling' concept and forms an integral part of BAAN V Orgware. This concept places the implementation of BAAN V in a process control context even more explicitly than in the past.

The concept defines three key objectives:

1 Speed,

The concept is based on a short and compact implementation cycle, minimizing the implementation effort through the use of modern tools.

2 Flexibility,

The concept proposes an optimization phases after an initial implementation where the BAAN V configuration smoothly follows organizational changes without the need for a time-consuming and costly effort.

3 Integration,

The speed and flexibility objectives are realized by a fully integrated Enterprise Modeling tool (BAAN V Enterprise Modeler) with the BAAN V applications. Because of which most of the configuration activities are automated.

The concept of 'Dynamic Enterprise Modeling' is based on the definition of line-of-business specific business models which are not rigid, but have the ability to be adaptable to specific requirements and future changes. These models are defined in Baan's BPR tool, the BAAN V Enterprise Modeler, which is fully integrated with Baan's Workflow Management Solution and ERP solution.

1.3 Benefits

The provided Business Engineering infrastructure will serve the client-management in at least two area's:

1.3.1 BAAN V Implementation

- Support for pre-sales, by offering, presenting and evaluating line of business specific business models which closely relate to the customer organization's environment.
- Support for the implementation and optimization stages, by offering methods and tools for customizing the generic business model to the specific needs of the customer organization and by generating the BAAN V configuration and user interface.
- Shortens the implementation cycle, based on the generic business model the discussion can focus on specific issues of the customer organization. This helps prevent re-inventing the wheel and can contribute to shortening the implementation cycle.



1.3.2 Business Process Re-engineering

Support a 'Business Process Re-engineering' cycle, the provision of a 'best-practice' knowledge base for a line of business supports the dialog between an organization's top-management and business consultants. The knowledge base will for example point at new opportunities offered by information technology as enabler for other process structures and the organizational consequences.

1.4 Target Group

The group that is targeted by BAAN V Enterprise Modeler consists of:

- Prospects/customers - who are given the possibility to make rapid and well-founded choices.
- Pre-sales consultants - who are supported in product presentations.
- Implementation specialists (implementation engineers, project managers, application specialists) - who are supported in the analysis, training, and implementation trajectory.
- Advisors and business consultants - they are supported in Business Improvement projects.
- End users - who are supported in the execution of their work flow.
- Software designers - who are supported in documenting the business processes that are being developed.

BAAN V Enterprise Modeler should be considered as BPR tool, not a CASE tool. After all, it more likely support the strategic assessment, process re-design and IT implementation than the IT or EDP specialist during software development. However, because of the immense expert knowledge on BAAN V functionality contained in BAAN V Enterprise Modeler, it can serve as a nutrient for a CASE tool and, as such, it can support the IT development specialist.

2 Business Engineering Framework

2.1 Baan's Architecture for Business Engineering

Baan Company is unique in offering a integrated product suit that fully supports the typical stages in a Business Re-Engineering cycle. The architecture consists of a four layer approach, each of them supported by BAAN V products. This architecture really provides what is needed to compete in the market place: the ability to redirect the processes and IT infrastructure towards the companies objective and strategy in order to stay ahead of competition.

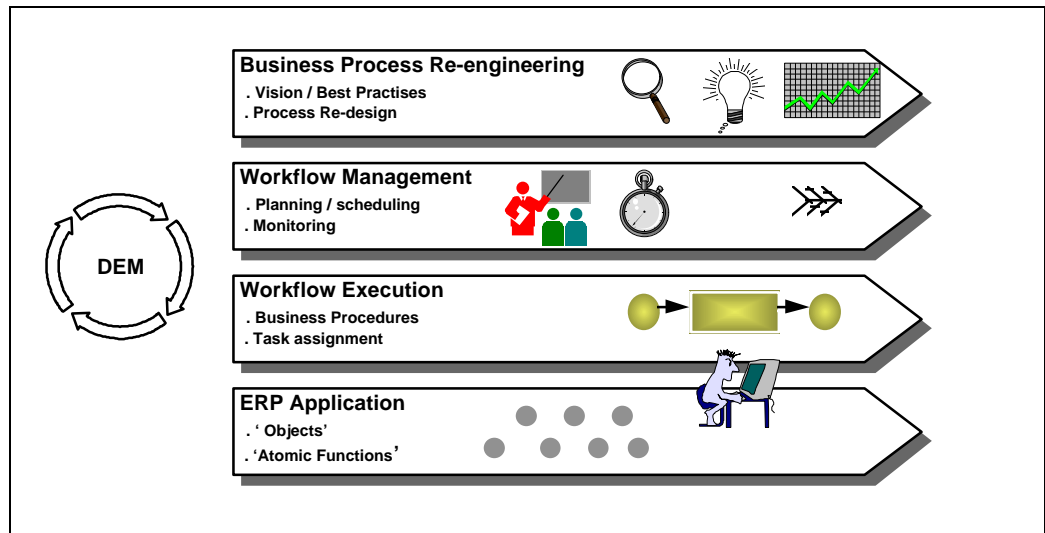


Figure 2-1 Baan's Architecture for Business Engineering

Each layer will be discussed briefly.

2.1.1 Layer 1: Business Process Engineering, the BAAN V Enterprise Modeler

In this Business Engineering layer companies typically re-assess their goals and strategies in order to stay in the drivers seat and ahead of the competition. As a result, the companies organizational (processes and organization charts) and Information Technology infrastructure must often be re-designed.

BAAN V Enterprise Modeler offers the perfect environment for supporting this. In short the Enterprise Modeler provides the following:

- Line-of-Business specific reference models geared towards strategic issues relevant in this LOB. These models provides visions, best-practices and experiences of industry experts, which will trigger the creative process of strategic planning.
- Business modeling tools for designing the to-be process definitions as well as the ways these processes are managed and monitored. This modeling is supported on several levels of detail: multi site modeling, business control modeling, workflow modeling.
- The to-be processes are finally mapped on the BAAN V ERP application. By doing this an implementation model is generated that fully supports the companies strategy and derived process designs and which is used in runtime.



2.1.2 Layer 2: Process Management layer, the Workflow Management module

Re-engineered processes must be managed and monitored in runtime either by self-managing teams (empowerment) or by separate departments (design issue). The execution of the designed processes can be planned, schedules and monitored taking into account capacity and skills issues of work centers/employees. In the process management layer logistics principles are applied to administrative processes (work flows) as is done on the shop-floor for industrial processes (ERP/MRP II).

The BAAN V Workflow Management module provides the needed functionality for managing administrative processes. It provides the following:

- Process planning & scheduling
- Process monitoring
- Process exception handling
- Process performance reporting (WFM reporting, EIS and OLAP)

2.1.3 Layer 3: Process Execution layer, the Workflow Engine module

Re-engineered processes should not only be managed and monitored, but moreover be executed ! Therefore the re-engineered processes can be executed by the workflow engine which takes care of transportation of the 'job' to the next work center, application invocation and recording of progress data.

The BAAN V Workflow Engine module provides the following:

- Work list per user/user group of schedules 'jobs' to be handled. This work list will serve as user-interface to the end-user.
- Process Engine, which executes a process-step and start the application as indicated in the process definition via a 'Dynamic Application Linking' concept. The process engine also records the progress of the process-steps.
- Distribution of scanned documents to the appropriate work center/employee.

2.1.4 Layer 4: ERP software functionality

ERP application functionality must always be justified by its support to the process requirements. Therefore Baan delivers a rich repository of ERP functionality that is assembled into a 'process-application' in the process definition. This process application is then perfectly geared towards a companies objective, strategy and process design. The business process logic should not be encapsulated in the software functionality, but should be modeled explicitly in the process definition. This give the needed software flexibility customers might expect from ERP vendors nowadays.

The BAAN V ERP application layer can be characterized by:

- 'atomic' software functionality in support to process definition
- assembling 'atomic objects' out of the repository to process needs
- enables new process designs (IT as process enabler)
- data access layer open to environment (CORBA interface)
- internet enabled

2.2 BAAN V Enterprise Modeler Architecture

The BAAN V Enterprise Modeler is a module that support the BPR layer (layer 1) as described in 'Baan's Architecture for Business Engineering'. Since Business Modeling requires several levels of detail, the Architecture of the BAAN V Enterprise Modeler is subdivided into three levels:

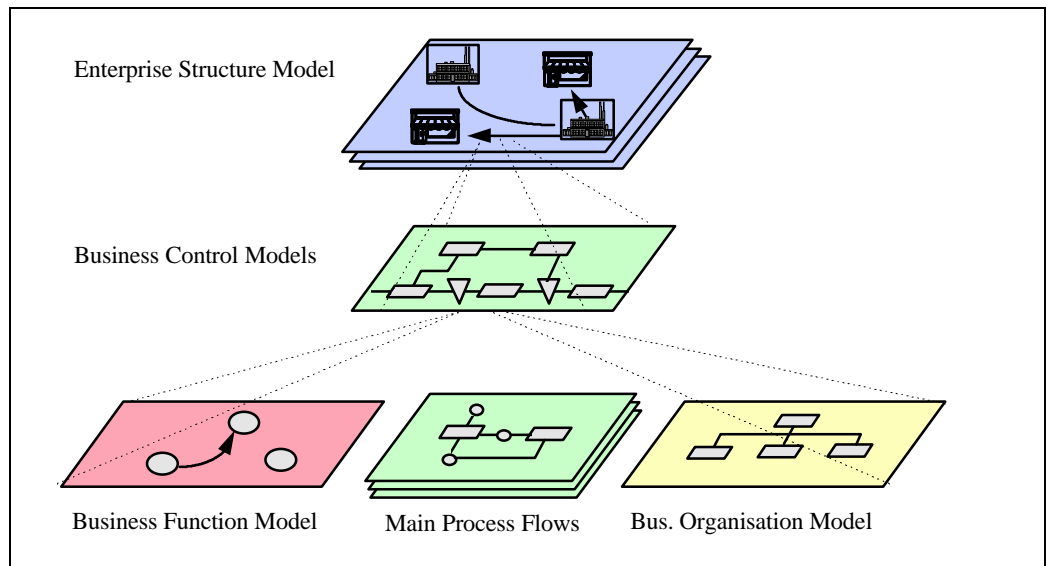


Figure 2-2 BAAN V Enterprise Modeler Architecture

2.2.1 Level 1: Enterprise Structure model

At a company level the supply chain should be identified and modeled in the Enterprise Structure model. Represented by icons all 'players' in the supply chain are placed on a map. Players in the supply chain are called 'Enterprise Units'. One can think of:

- Customers
- Sales offices
- Distribution centers
- Assembly sites
- Manufacturing sites
- Suppliers
- Central planning/purchasing sites

Between Enterprise Units all kinds of relationships may exist in terms of order flows, goods flows, money flows and information flows on several strategic levels (operational, tactical and strategic). These relationships must be identified and specified in the Enterprise Structure Model since this might influence the design of internal processes within an Enterprise Unit.

The most important question is to which financial and logistic unit an Enterprise Unit belongs. This Enterprise Structure model sets the right framework for defining on a lower modeling level:

- Which interfacing processes are needed to, for example, transfer goods between two enterprise units (sales/purchase order procedure or simplified stock transfer).
- Which multi site application configuration should be configured that supports the company structure optimally.



2.2.2 Level 2: Business Control Model

At an Enterprise Unit level order and goods flows are planned, managed and executed. A Business Control Model defines on a 'high conceptual level' how the enterprise unit realizes the companies objectives by managing its processes. It shows :

- What are the primary industrial processes.
- What are the 'logistics characteristics' of these primary processes (which part is planning driven, which part is customer-order driven,).
- What are the management & control mechanisms put in place in order to manage throughput time, quality and costs.

This model serves to identify the needed process control cycles in order to guarantee the fulfillment of the companies objective with respect to throughput times, quality and costs. In fact, the process control cycles are themselves 'administrative processes, (hence work flows !)' with are very well supported by Baan's ERP functionality and executed in the BAAN V Workflow modules.

Derived from this model, a list of main-process flows is established that must be designed on the third level in the Enterprise Modeler Architecture.

2.2.3 Level 3: Business Functions, Processes and Organization diagram

Identified processes are designed in detail on the third level. The work flow is defined in detail and process steps are linked to the BAAN V ERP application. On this level three sub-models are designed:

- Business Function Model, represents processes as black-boxes and shows options & variants. It provides a structured way to go through implementation decisions with respect to alternative ways to configure the workflow processes and ERP configuration (desktop and parameters).
- Business Process Model, defines the precise definition of the work flow processes. It also defines 'where and when' the appropriate BAAN V ERP functionality should be invoked (mapping of ERP functionality to process definition). Work instructions are also defined on the process and process-step level as well as roles needed for authorization.
- Business Organization Model, the organization chart of a company is defined in terms of business units, departments and groups. Roles are designed as responsibilities for processes (or part of it). These roles are subsequently assigned to both users/user groups and processes/process steps. By this means the processes are mapped to the companies organization chart.

2.3 Dynamic Enterprise Modeling Approach

Although the Enterprise Modeling Architecture describes a company processes complete and extensive, this does not mean that a customer must go through this time consuming and costly process from scratch.

To the contrary, Baan offers a library of Line-of-Business specific Enterprise models that are designed and geared towards specific LOB strategic issues.

Within the framework of the Dynamic Enterprise Modeling concept, the implementation of BAAN V is realized via the subsequent evaluation of the pre-defined LOB models referred to as reference models. During this evaluation process, the project teams work constantly and directly towards the target of generating an appropriate workflow process / user-interface (process-oriented) and parameter settings of the BAAN V solution which effectively supports the business processes.

Key message with respect to these models is that best-practice visions and experiences of both Baan consultants and Partners (e.g. big-six management consultants) are captured in the pre-defined Line-of-business specific solutions. This will serve as a catalyst in the creative and innovative process of BPR.

The train of thought is that, by making use of BAAN V enterprise modeler and dedicated reference models per line-of-business, the effort and time needed for this evaluation process is reduced significantly. Therefore, companies will not hesitate to reassess their BAAN V implementation, just when the business requires this. This without the necessity of a costly and time consuming re-implementation. This provides the flexibility and speed companies are looking for in order to follow the business dynamics with the IT infrastructure.



3 BAAN V Enterprise Modeler description

3.1 Enterprise Structure Model

3.1.1 Introduction BAAN V Multi Site concepts

Primary objective of the Enterprise Structure Model is to define a multi-site managerial model from both a financial and logistic perspective. Typical questions are :

- What do we consider to be one financial unit with bottom-line responsibilities (e.g. business unit)
- What do we consider to be one logistic unit which will be managed and controlled via Manufacturing Resource Planning (MRPII) concepts.

In BAAN V multi-site concepts provide the flexibility to define financial and logistic unit independently. Key element in the definition of this managerial model is the Enterprise Unit.

By definition, an Enterprise Unit belongs to one logistic and also one financial company, and is therefore a building block for multi-site definitions. It represents rather a 'logical' view on a company then a 'physical' view.

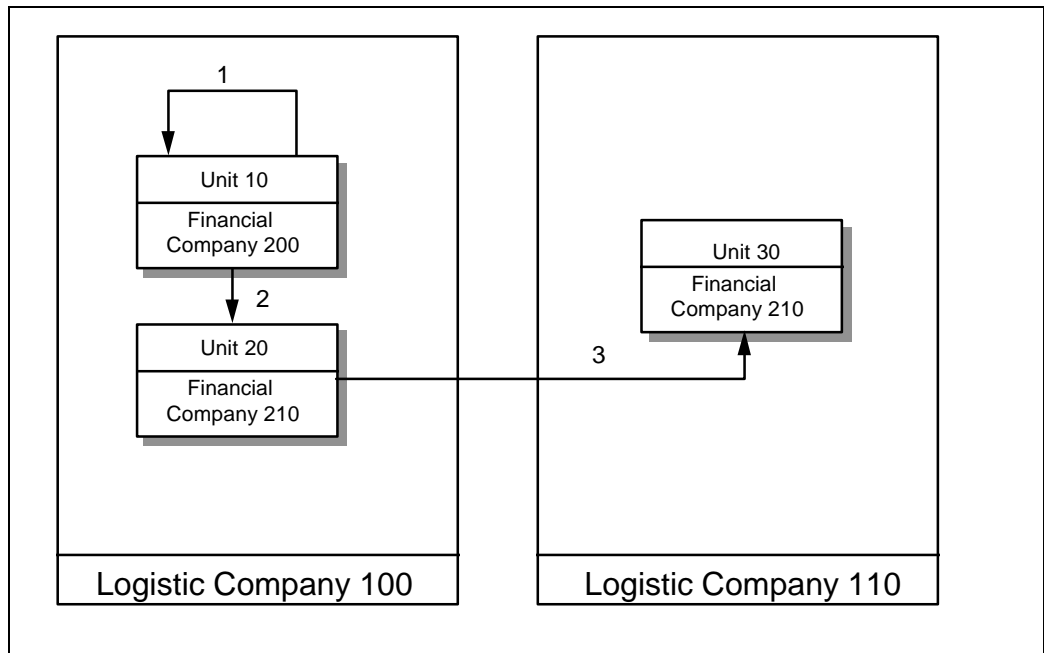


Figure 3-1 Multi Site building block: Enterprise Unit

In this example above the following is modeled:

- Unit 10 and 20 are planned and managed as one logistical company (one MPS/MRP procedure).
- Moving stocks within Unit 10 can be done without any financial consequences (arrow 1).
- Moving stock from Unit 10 to Unit 20 can be done by a simplified 'stock-moving' procedure, however a financial booking will occur due to the fact that the Units do not belong to the same financial company (arrow 2).
- Moving stock from Unit 20 to Unit 30 must be done by a sales-order / purchase-order procedure due to the fact that the Units do not belong to one logistic company. The results of the Financial company 210 must be consolidated (arrow 3).



3.1.2 Enterprise Structure Modeling in BAAN V

In BAAN V the Enterprise Structure model is build in a intuitive way. The managerial model is designed on a map. From a library the user can select a icon which will represent the Enterprise Unit. Next step in the modeling process is to identify 'relations' between the Enterprise Units. The following 'relations' can be modeled:

- Order flow
- Goods flow
- Cash flow
- Information flow

The different types of flows can be modeled per 'view' of the Enterprise Structure Model.

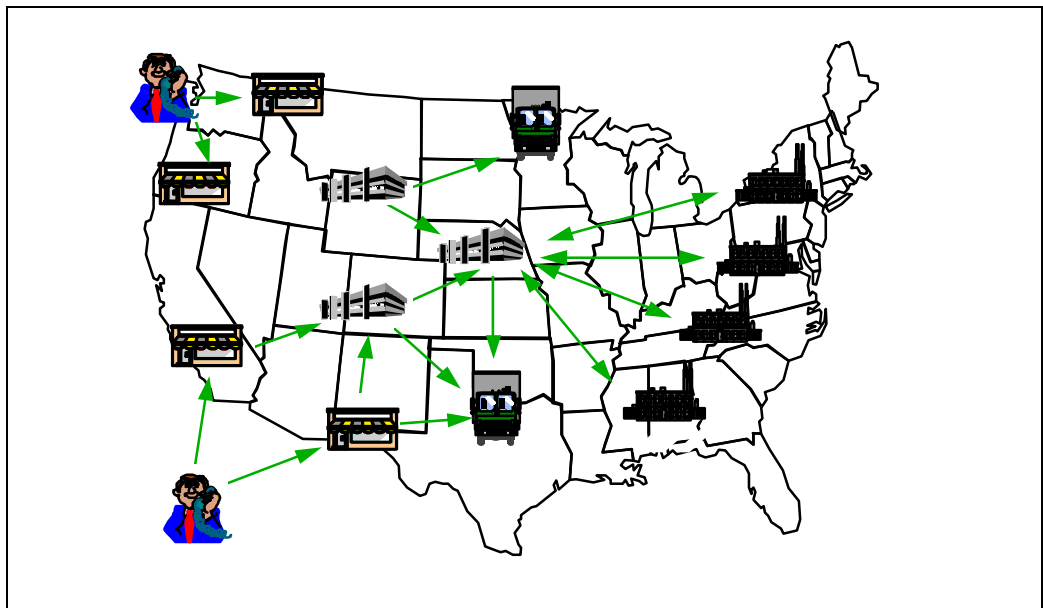


Figure 3-2 Enterprise structure model

Per Enterprise unit a number of data has to be defined such as:

- Name and Description
- Logistic Company
- Financial Company
- Reference Model
- Quantitative data like volumes/frequencies

In addition wizards technology is used to fully define the characteristics of the Enterprise Unit for a specific customer. These user friendly Question & Answer dialogues for setting application data (masterdata, parameters, conditions) were first introduced with Baan Ivb. An example is shown in the description of the Business Function Model.

When the Enterprise Units are fully determined and characterized, expert rules will be evaluated which are stored in the BAAN V Enterprise Modeler Repository. The decision made in the Enterprise structure model, will be translated into consequences for the interfacing processes within a Enterprise Unit. These consequences can be:

- selection of processes from LOB reference model
- configuration of these processes
- parameter settings

To give an example: let's assume that one Enterprise Unit does not have relations with other Enterprise units that belongs to different financial and logistic companies. The processes for receiving and issuing goods (interfacing processes) are then simplified stock-transfer processes without the need for complicated sales/purchase procedures. The simplified processes are then via rules selected from the reference model.

3.1.3 Application Structure Modeling in BAAN V

Once the Enterprise Structure Model is defined, the mapping on the BAAN V application architecture is done. A structure is defined for the logical databases (called 'company' in the Baan Application).

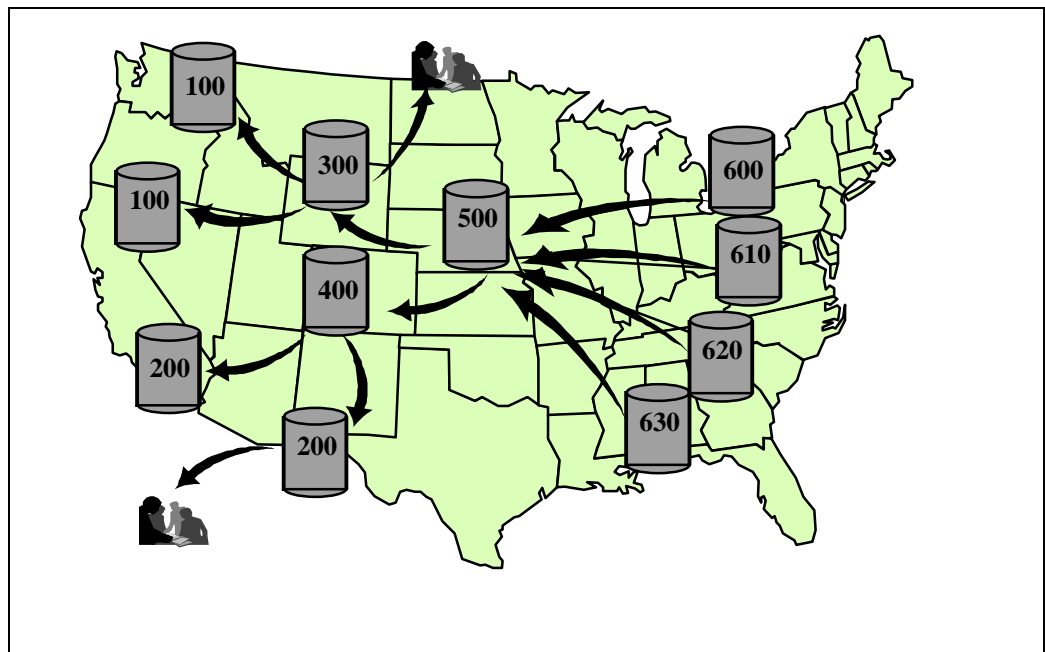


Figure 3-3 Multi site application structure



3.2 Business Control Model

3.2.1 Generic Business Control Model

A Business Control Model defines, on a high conceptual level, how the order and goods flows within a Enterprise Unit (or Logistic/Financial company ?) are managed and controlled as explained in [2.2].

In BAAN V the Business Control Model forms an integral part of the reference models, and is one of the primary deliverables of a LOB Reference model development project. In principles it models a hierarchy of process control measures for managing the primary processes (hence objectives/strategies) of a company.

A Business Control Model characterizes a Enterprise Unit in terms of:

- Primary process (routing)
- Customer order decoupling point
- Management & control on production unit level
- Management & control on logistic level (total goods flow)
- Management & control on aggregated level (Objectives & policy definition)

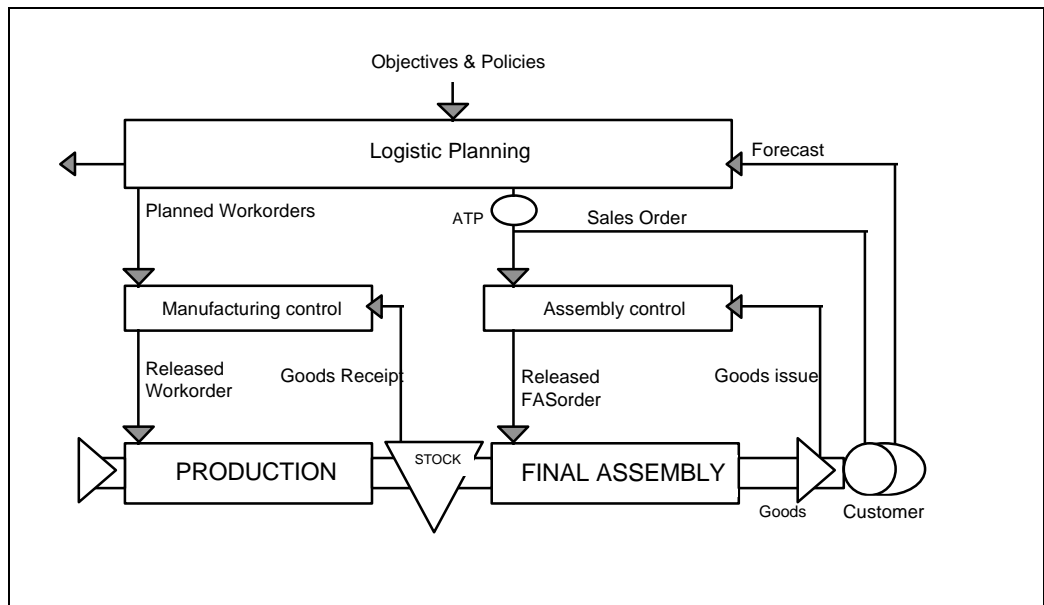


Figure 3-4 Business control model

3.2.2 Process Control Cycles

Within the Business Control Model, process control cycles are identified which must be put in place in order to manage and control the primary process towards the companies objectives (throughput time, quality and costs, ...).

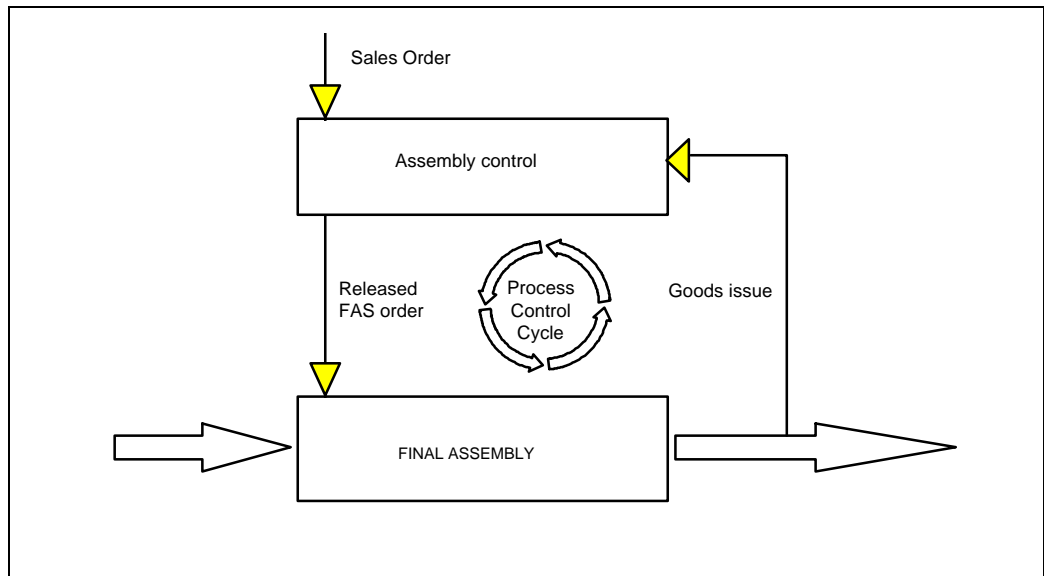


Figure 3-5 Business control cycle

Per process control cycle, one or more main-process flows (work flow definitions in Petri-net, mapped on the BAAN V Applications) are designed. The Business Control Model with its process control cycles must be considered as a 'context-diagram' showing the business context of work flow processes. Via this means the 'high-level conceptual' model is linked to a more detailed and practical workflow implementation model.

Per process control cycle the following elements are documented:

- Case definition:
clear and unambiguous description of the 'job' to be handled in the workflow process.
- Start event:
which events triggers this process
- End event:
what is the resulting event generated by the process
- Main-process identification:
link to the main-process definition elaborated in Petri-net and mapped on the BAAN V Application, which should handle the case.
- Supporting processes:
link to supporting processes (master data setup, ...)
- Quantitative data like volume and frequency



3.2.3 Link to Business Function / Process model

As described in the 'Dynamic Enterprise Modeling Methodology', a main-process is defined for each workflow case as found in the process control cycles. Before actually designing the process-steps, a LOB Reference model project teams brainstorms on best-practices, options & variants that should be 'build-in' in the process definitions. There are alternative ways of 'exploit' the BAAN V functionality in the processes and these are built-in as alternative routing through the main-processes. A customer should decide upon which alternative is most appropriate for his actual situation. To summarize this link:

- Per process control cycle a workflow case is defined.
- Per workflow case, one main-process flow is designed, including alternative routings for the options & variants.
- The main-process is represented in the function model as a main-function. Options and variants are presented under the main-functions as implementation decisions.
- Implementation decisions per process control cycle are made in the functions model, the consequences for the workflow processes are translated automated, just by pushing one button.

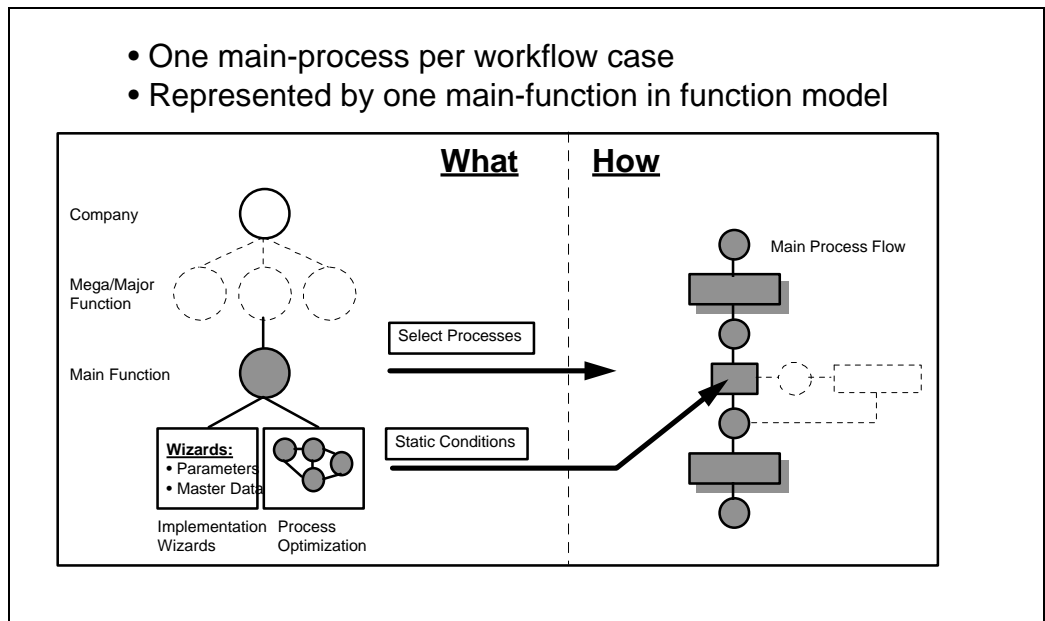


Figure 3-6 Link to business function / Process model

3.3 Business Function Model

The Business Function Model is a functional decomposition of a company up to the level of the main-functions. It serves as a 'structured' implementation agenda covering:

- Best-practices LOB knowledge recorded by big-six management consultants.
- Guide to support the dialogue between management and consultants during visioning workshops and implementation scope definition.
- Main-process selection and configuration (alternative routings in main-process)

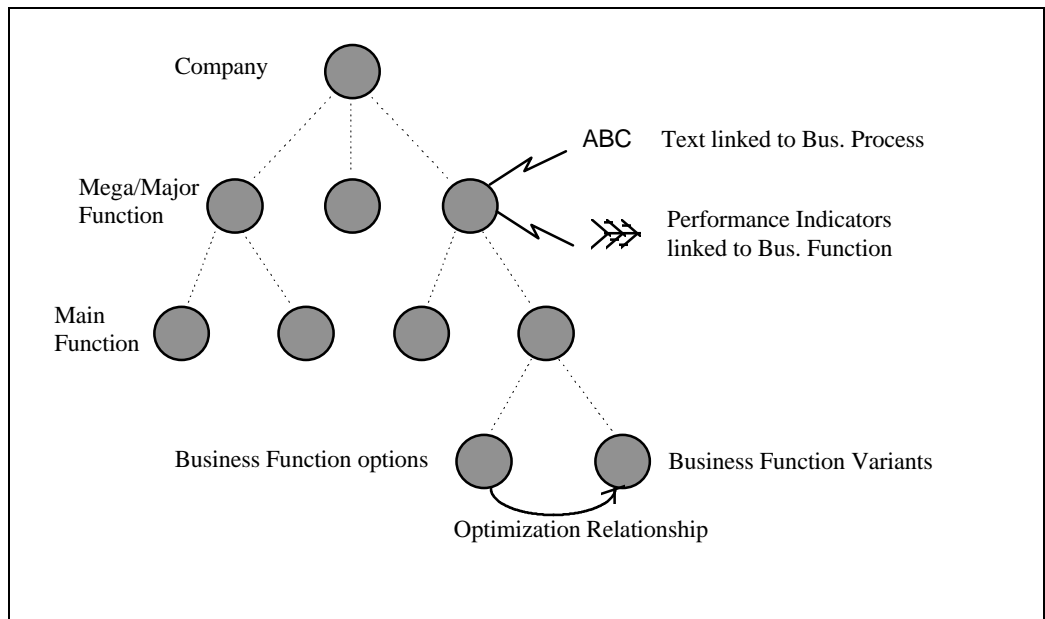


Figure 3-7 Business function model

The Business Function Model has the following characteristics:

- Business Functions are displayed as nodes in a tree diagram through which the user can navigate.
- Business Functions can have texts linked to them in which the characteristics of a particular Business Function is described.
- Business Functions can have the Performance Indicators (PI's) of BAAN V Enterprise Performance Manager linked to them. In Project Business Models, a standard value can be assigned to these PI's.
- Business Function Variants can have optimization relationships to them by means of which it is possible to indicate that these Business Functions can be implemented in phases. Optimization relationships can be linked to texts in which the organizational aspects of the optimization of processes are described.
- Business Function Variants combined with optimization relationships can have implementation phases linked to them in a Project Business Function Model.



3.4 Business Process Model

The business process model defines how the process control cycle is realized by defining activities that should be executed in the workflow. These business process flow definition are projected on the BAAN V functionality. Therefore, on the lowest level of the process definition, BAAN V sessions are modeled. This can be seen as a real paradigm shift. In the past, consultants used to present the Baan package module by module, showing the richness of the provided functionality. Now, the business process is leading. Discussing the process definition with the key-users, the appropriate functionality is showed at the right time and the right place with an emphasis on what the functionality does for the workflow. The business process model serves the following purposes:

- The process definitions describe how the business functions (hence the process control cycle) are realized.
- The processes form the perfect vehicle for explaining the BAAN V functionality, and even more important what Baan can do for the business of the customer.
- The processes form a starting point for generating the end-user environment.
- The same processes can be planned, executed and monitored in the BAAN V Workflow Management module.
- To document administrative procedures (ISO9000) which results in owners per activity, roles, authorizations and job instructions.

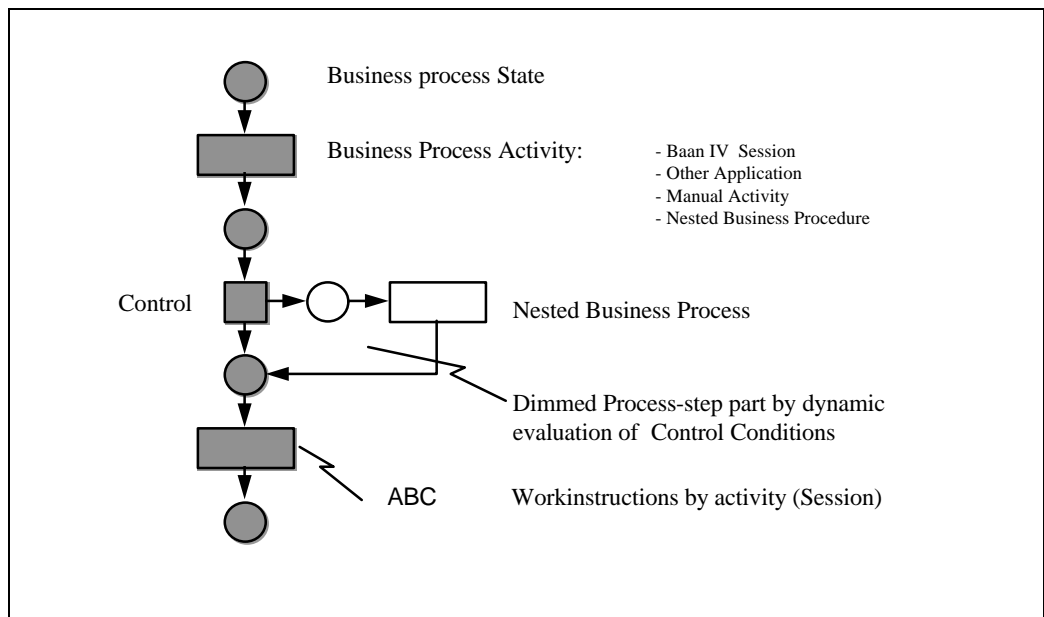


Figure 3-8 Business process model



The Business Process Model has the following characteristics:

- Business Process consist of a number of components, namely States, Activities, and Controls. Each activity is preceded and followed by a State. An Activity can be a BAAN V session, a non-Baan application, a manual activity, or a (nested) Business Process.
- Business Proces can be modeled according to the Petri net formalism. The components as well as a number of constructions that can be used for Petri net modeling are described extensively in the 'Dynamic Enterprise Modeling' manual.
- Job instructions, AO documents, and utility codes can be linked to activities. Job instructions can contain specific help information for a session within a particular Business Process. From within an activity, it is possible to refer to an AO document that is created within that activity. Utility codes are clusters of sessions that can be used as auxiliary sessions (display session, print sessions) during the execution of an activity.
- A graphical display of Business Process can be used as user interface instead of a menu structure.
- Roles and employees can be linked to Business Process activities.
- A control can have several out-going arrows. A condition can be attached to each of these arrows. A value can be assigned to these conditions by means of so-called rules. When a Business Process is displayed, the value of the condition is evaluated and (if the condition is false) part of the diagram is displayed in a dimmed mode (see example). Depending on the Business Function Model , the Business Process Chart can be configured dynamically. As a result, a once generic chart is now geared specifically to a particular business model.



3.5 Business Organization Model

The business organization model describes the structure of the organization in terms of division, business units and departments. A key concept in this, is the identification of roles in the company. A role defines which activities/tasks in the process execution are usually assigned to one person or group. Besides this, the hierarchical and functional relationships can be described between the departments.

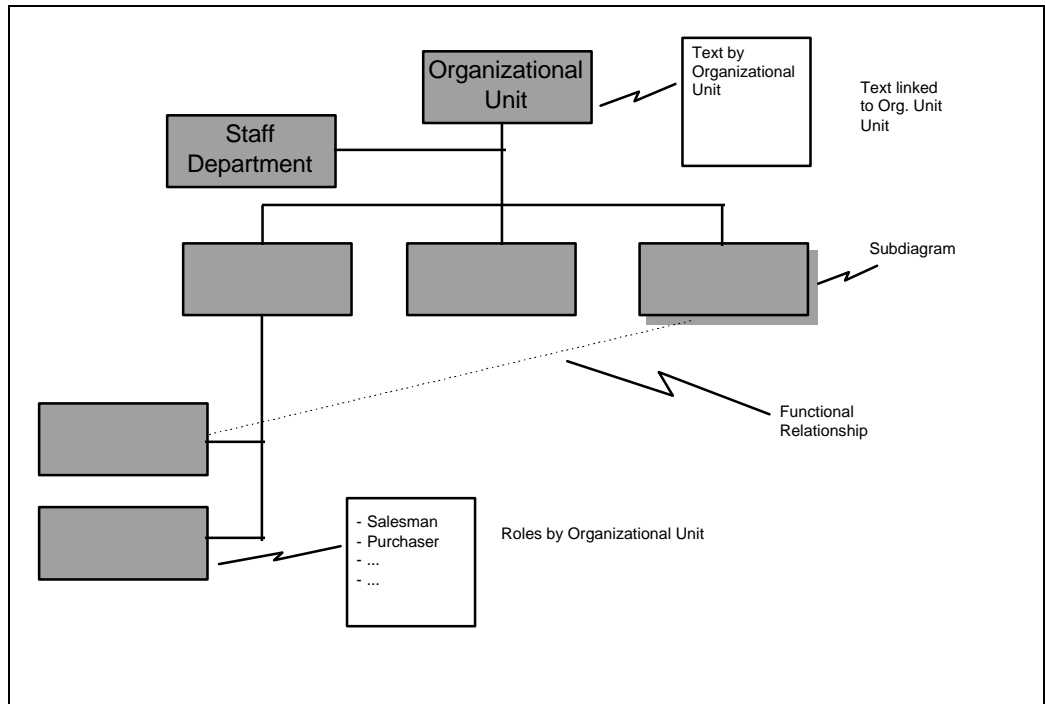


Figure 3-9 Business organization model

3.6 Business Data Model - Entity Relationship Models (ERM)

So far in this white paper, the emphasis of Enterprise Modeling was on 'process' modeling rather than 'data' modeling. This makes sense since companies objectives and strategies are realized by people and processes and not by data. However, data is an important source for processes (operational as well as management processes). Therefore in BAAN V the Enterprise Modeler is extended with a ERM models (Entity Relationship Models). These ERM models serve the following purposes:

- Documenting the logical and physical data structure of the BAAN V Applications
- Disclosure of the data model part that is affected by the processes and BAAN V sessions.
- Supporting the IT/EDP staff in activities like data conversion and customizations.

3.6.1 Description of the ERM model

The primary purpose of the ERM model is to document the BAAN V applications databases. The module is used by Baan developers during the design stage and might be of interest to EDP and IT end users during data conversion and customization activities. Besides this it also supports process teams during re-engineering by 'opening the application box' for a better understanding of the application strengths (IT as en-abler).

The graphical data model editor allows the user to edit an Entity Relationship logical data model in order to create a new conceptual database design or document an existing one. Entity Relationship diagramming is used for modeling in compliance with the James Martin notation standards for Information Engineering.

Multi Abstraction Layers

The ERM model can be defined at various abstraction levels:

- Data Cluster: clusters a number of logical entities.
- Logical Entity: entities that have a meaning to the 'real world' and which are comprised of several physical entities
- Physical Entity: database table definitions of the BAAN V Application

Cardinality of Relationships, Optionality

The ERM models allows, in line with James Martin's methodology to models the characteristics of a relationship between two entities:

- 1:1, a one-to-one relationship
- 1:n, a one-to-many relationship
- n:m, a many-to-many relationship
- optional, which means that a relationship does not always exist.

Import/Export facilities

ERM Models can imported and exported via the standard CDIF format.



3.6.2 Integration ERM model with Business Process Model

Data models can be integrated with the process models to support data conversion and to disclose the relationship between business process activities (hence BAAN V sessions) and the logical and physical data model. This integration allows for maintaining two views on the process model:

- Logistic view, emphasis on the workflow to be managed.
- Data view, emphasis on the data transformation in one activity.

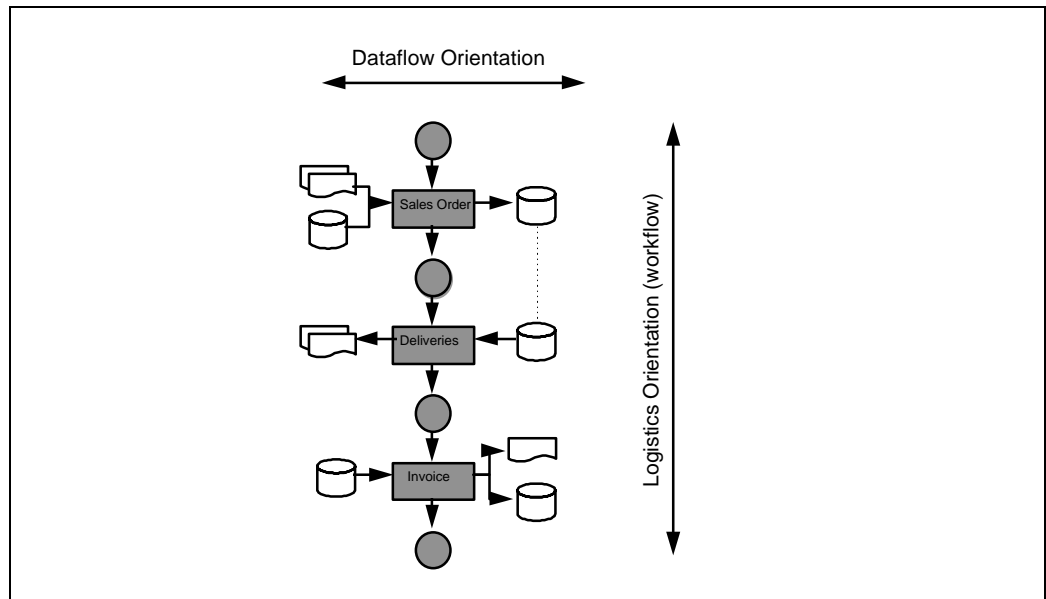


Figure 3-10 Process and data orientation comparison

Flow Packages

Linked to a Business Process Activity one or more input and output 'Flow Packages' can be recorded. A Flow Package is a cluster of logical entities. These Flow Packages provide the user with information on which logical entities acts as input entities (used for read/update/delete) and which entities acts as output entities (create/update).

For each logical entity entry in a Flow Package a CRUD indicator matrix can be stored. A CRUD indicator matrix is used to record which activity (session) Create (C), Read (R), Update (U) or Delete (D) a logical entity.

ERM Model links

From the logical entity in the flow package, one can directly zoom to the ERM model of the BAAN V Application, showing the relationships of the selected logical entity to other entities.

Physical Table links

Clicking on a logical entity entry in an input/output flow package produces a list of physical tables which are used as input/output in this activity (session). For each physical table entry a CRUD matrix will be generated by the application. In order to support data conversion, a physical table load sequence can be produced to avoid reference errors. By performing a session scan per project model (processes), a list of affected tables can be printed. Only these tabled need to be loaded during data conversion.



3.7 Implementation Wizards

In order to further reduce the effort needed for the implementation of the Baan product suit and to improve the quality of it, Baan introduced wizard technology to form an integral part of the BAAN V Enterprise Modeler.

An implementation wizard is a very user-friendly question and answer (Q&A) dialogue which will guide the user along a application setup procedure. The wizards are designed in such away, that only relevant questions are prompted based on implementation decisions made in the project function model.

Based on the answers given by the user, system parameters and master data will be set accordingly.

After answering the question and a review of the results, the parameters and master data can be written back to the tables without the need to go to the table maintenance sessions for setting the parameters.

Two types of implementation wizards has been defined:

- Start-up wizard: this wizard will help the user to setup a Enterprise Modeling environment where a company specific project model can be defined, reviewed and finally the application configuration is generated from. It helps to:
 - create a company specific version
 - select a reference model out of library
 - copy this to project model
 - defines the implementation phasing
 - start the business function model editor in the project model for review
- Main-function wizard: these wizards are linked to main function and will prompt the user with relevant questions for parameter and master data settings for a particular main function. These wizards can be accessed in two ways:
 - via the wizard icon connected to the main function
 - via the wizard browser



In the examples below a wizards is presented for the main function purchasing. It is a Q&A dialogue of 13 steps, presenting relevant questions for this main function.

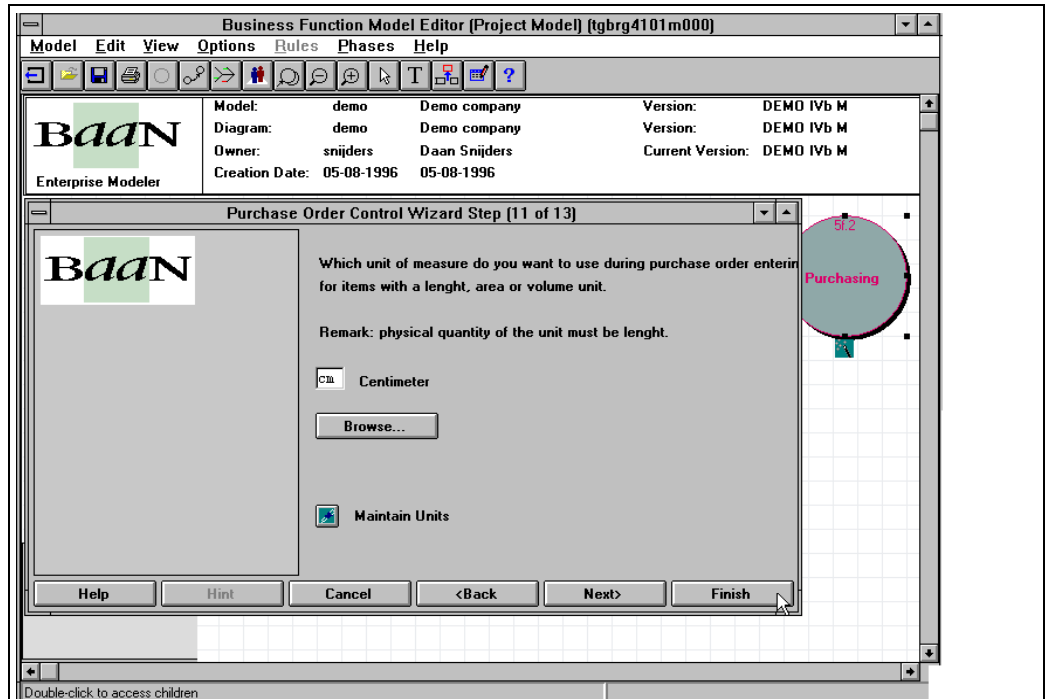


Figure 3-11 Wizard example

All the answers are presented after finishing the dialogue before writing them back to the application.

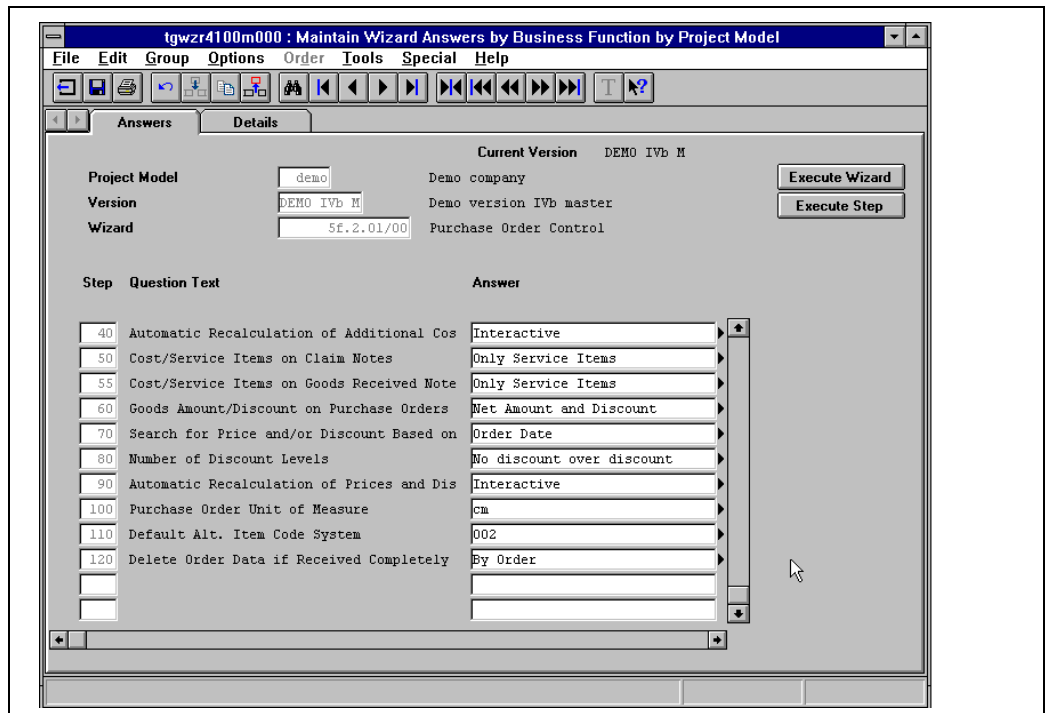


Figure 3-12 Answers to wizard questions

3.8 Business Rules

Business and Application knowledge can be recorded via Business Rules. These set rules form the glue between the several models in the Enterprise Modeler.

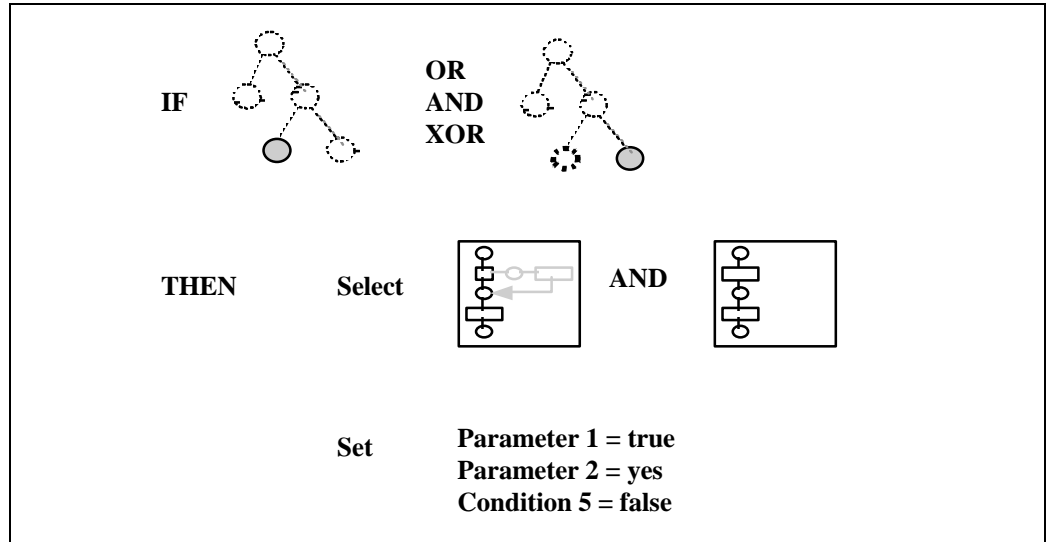


Figure 3-13 Business rules

3.8.1 Dependency Rules

Dependency rules are used to check the consistency of a model.

Example of a dependency rule:

If the "Margin Control" Business Function Variant is present, the "Standard Pricing" Business Functions Variant must be present in the model as well.

Once the Business Model has been created, it is possible to check its consistency by evaluating all dependency rules.

3.8.2 Transformation Rules

A Business Function Model can be automatically transformed into a Business Process Model by means of transformation rules.

Example of a transformation rule:

If the "Purchase Order Processing" Business Function has been defined, select the "Purchase" Business Process out of the Repository.

It is also possible to visualize the link with the Business Process Model directly from the Business Function model by means of these transformation rules.

3.8.3 Parameter Rules

Parameter rules are used to assign a value to a BAAN V parameter depending on the presence of the Business Functions Variant.

Example of a parameter rule:

If the "Purchase Order Processing with EDI" Business Function Variant has been defined, the value of the "EDI" parameter is set to yes.



3.8.4 Static Condition Rules

A control activity is one of the components of the Business Processes and is used to model a choice. This choice is referred to as a condition. As a result, conditions are linked to out-going arrows. In addition to a piece of text in the diagram, a condition can also contain a value that is set by means of a rule. If the value of the condition is *false*, such a (non-active) branch in the tree is displayed in a dimmed mode.

Since rules can be defined from within a Business Function Model, it is possible to dynamically configure Business Processes

3.9 Version Management

3.9.1 Introduction

The BAAN V Enterprise Modeler provides the possibility to manage changes in Business models by means of version management. The standard functionality of the Enterprise Modeler has four mechanism for managing this:

- A chain of versions structure with ‘derived from’ relations
- Version assignment to the business model components (functions, processes,...)
- Version assignment to users with version authorization
- Extensive analyzing tools for analyzing differences between version and/or models

The scheme below shows the chain version structure:

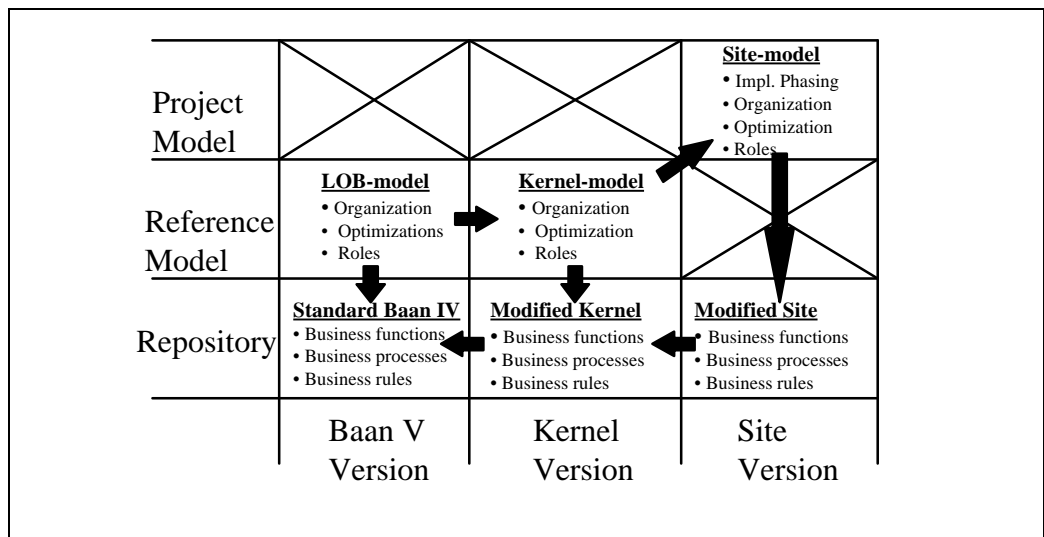


Figure 3-14 Version management & control

On the horizontal axes, a version chain has been established:

- A Site version derived from a Kernel version
- A Kernel version derived from the BAAN V version
- A BAAN V Repository maintained by Baan

3.9.2 Working principle

The Baan Company will fill and maintain the repository in the BAAN V version. Based on the elements defined in this repository, Baan will define reference models for selected line-of-businesses. Enterprise Modeling developers of Baan and Partners will work in the BAAN V version.

In principle, a kernel development team of a customer will work in a dedicated version, called the kernel-version. Because of the derived-from chain, all BAAN V elements will be available but can not be modified. A kernel team will build a kernel model in four steps:

- 1 Initially by copying a reference model to a kernel model and evaluate it
- 2 Adding missing elements in the repository in the kernel version
- 3 Copying elements of the repository in the BAAN V version to the repository in the kernel version
- 4 Modifying the copied elements in the repository of the kernel version
- 5 Importing the modified elements in the kernel model

The of working of a client site team is the same as a kernel team. The difference is the contents of the derived-from version chain. Site teams will always work in the site version. They make use of element in the kernel and BAAN V repository, and can add missing elements in a local repository in the site version.

3.10 Client / Server Architecture

In BAAN V the Enterprise Modeler will run in a Client/Server environment. This new architecture will provide even more more flexibility and rich standard functionality to modeling teams and users.

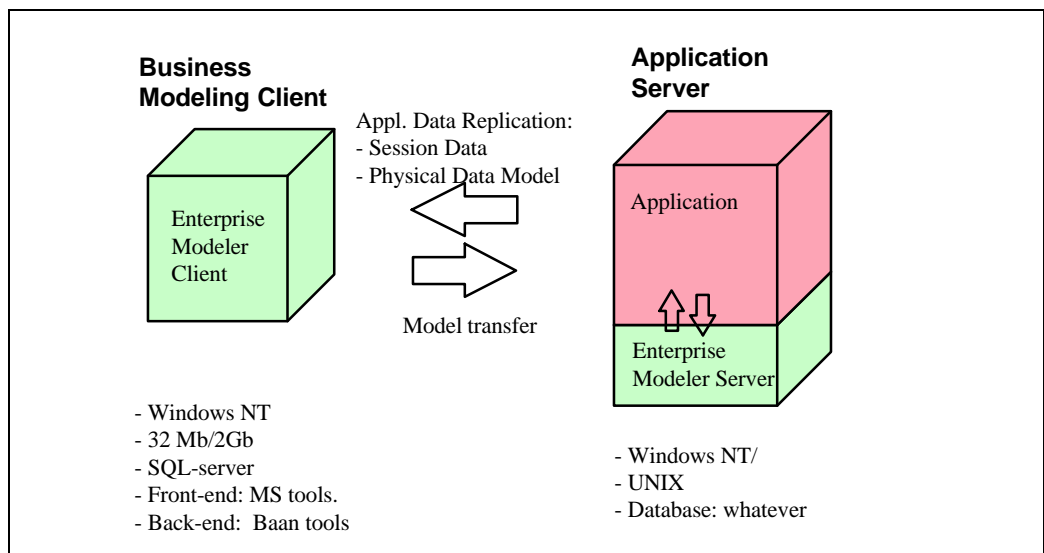


Figure 3-15 Client/server architecture

The Enterprise Modeler Client is characterized by:

- Running on a PC platform
- Based on standard OCX (windows application)
- Availability of all editors and repository on a PC
- Running without the need for a full Baan V installation
- Replication mechanism to provide model transfer to Enterprise Modeler Server

