OpenERP
Open Source Management Software

Agile
Implementation Memento

Why an implementation memento ?

*Our experience has shown us that **the implementation speed varies from simple to double,** depending on the methodology used for implementation. The methodology is therefore crucial to reap the full benefits of an implementation.*

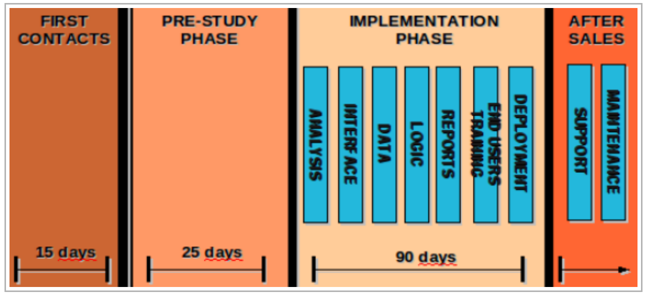
***Keys benefits of an efficient methodology are**:*

1. ***Faster company growth.***
   Frequently the implementation process is decelerated because of a bottleneck issue related to HR. for example, a key project's manager is usually in charge for all steps of the implementation. With the consequence that this high level manager – already fully engaged in one project - can hardly work on another one. This situation forces some companies to refuse projects.
   To grow faster, you must reduce dependence on high-level managers by distributing the management between multiple profiles.
2. ***Quicker delivery.***
   ERP integrations are complex. An efficient methodology allows you to specialize roles and get trained employees that are quickly ready to deliver.
3. ***Risk mitigation.***
   By working through a systematic approach, you can continuously improve yourself.

*To integrate Open ERP, two radically different approaches can be applied. The **package approach** is an integration mode that is low cost, generic, with few developments to be done. This approach goes from Open ERP generic to customer's needs. An important point here is that your final goal is not to describe the client's current processes but to implement an Open ERP solution. The opposite is a **custom approach** which is used when the client's business is weakly covered by Open ERP generic. This approach goes from customer's needs analysis, to Open ERP solution. It is usually reserved for very large projects.*

In the following passage, we will describe a methodology for the package approach.
After reading this memento, you should have a clear vision on how to improve your efficiency and the profitability of your Open ERP projects by applying a package approach.

Implementation phases:



A typical project time line

A typical implementation project is made of four main phases, each links to specifics; goals, responsible, tasks and deliverables. Above is a diagram showing a common example of these tasks.

Important note: pre-study phase, implementation phase and after sales services are associated to specific contracts (see supra).
To make this memento benefit to the maximum , we have placed in it many links to valuable templates (quotes, mind maps, project scope board, etc.). We know that this will enable you to facilitate your implementation projects, and we hope you enjoy reading!

PHASE 1. FIRST CONTACTS (½ – 1 day)

Introduction
The first contact between parties is the ideal occasion for both parts to create a first opinion about their counterpart. Could it be a true opportunity? Is the investment worth the case? Etc. The aim here is to impress with the value of the product, the quality of your method and to show the fields of possible improvements Open ERP will provide.

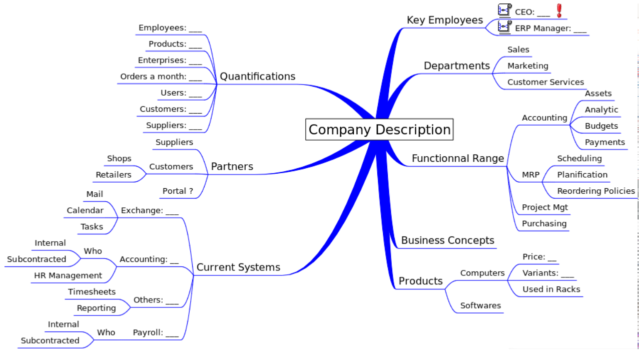
During the first contacts, it is important to clarify the request:
If the lead is interested only, for instance, in CRM and sales management, present Open ERP as a set of integrated software solutions for business management. Indeed a client may be interested only in one or two modules at first, but then add other management systems later on. So, the message to get across is; that the different Open ERP features can be installed gradually, thus limiting the risks.
If the lead wishes an Entreprise-wide System, then present the global solution that Open ERP provides.

Tip: If you have too much unqualified leads, a good way to test a lead's interest in the product is to invite him to come in your office for a demo instead of you moving on site.

Goals ✔ *Help the customer to make a decision*
✔ *Sell pre-study*
Responsible *A **s**alesman is responsible for this phase.*

Tips:
(i) The Salesman may be a junior under the supervision of their Sales Manager.
(ii) The salesman may be accompanied by a Project Manager for major leads. Important: The Salesman is making the demo – he is the pro -, the project manager answers sharp questions

First meeting
The important step on this phase is the first meeting. Here is its canvas:
❶ *Presentation of the client → Listen*
❷ *Presentation of your company and product*
→ *Slide show*
→ *Online demo of OpenERP*
❸ *Questions to the customer about his business and needs*
→ Company description



❺ *Discussion about methodology and next steps*
→ Slides about our methodology

Deliverables
Within a few days following the meeting, you must send the following deliverables to your lead :

- ✎ *First meeting minutes and pre-study quotation*
- ✎ *Slides show on your product and the company*
- ✎ ***Methodology slides***

PHASE 2. PRE-STUDY (8 days + options)

Introduction
Your lead has been converted! Great, it means that the pre-study contract is signed and an analysis of requirements will be conducted. It is the time more than ever to convince your client about your capacity to fit the needs with an Open ERP solution.

Tip: Create project in Open ERP and plan time for project manager

Goals ✔ *Reassure the client : needs fitting, ROI*
✔ *Get the full scope of the project to be able to quote*
✔ *Sell an implementation*
Responsible *Project manager (PM) & the client's project manager*

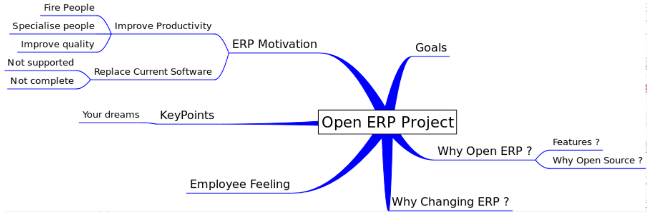
> *Client's project manager: a person responsible for the ERP project on the client's side. He is the contact point with your company. Ideally the client's project manager should know the company well, both its specific quirks and its different standard cross-company processes. It is crucial that the client's project manager has sufficient weight in its organisation, since they endorse the role of validator of the deliverables.*

Preparation *Knowledge transfer between salesman and PM*

Training
The client's project manager should be trained on Open ERP. Although, some customers prefer waiting that an implementation contract is signed before investing more, the training – given by a certified trainer - is a crucial and necessary step to establish an effective relationship with the integrator, and to detect problems rapidly. The training received is functional. Optionally, on client request, it may be extend by a technical training.

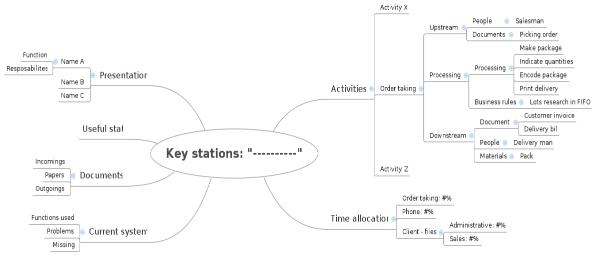
Meeting & interviews
❶ *Meeting with the board executive of the client (½ - 1 day)*
Goal: get a dedicated analysis of their needs:

- *→ listen & reformulate (use mindmap Open ERP Project)*
- *→ get feedback on first deliverables*

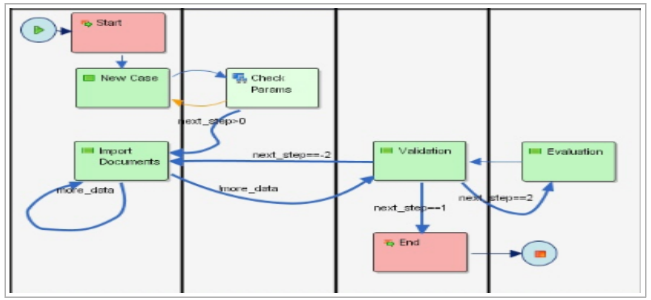


❷ *Interviews with keys managers/users (3 days)*
Goal: get a description of all departments activities

- *→ Interview session:*
  - *2 hours of interview by department*
  - *1 hour for writing / cleaning*
  - *½ hour for reviewing with interviewee*
- *→ Report interview on Interviews mindmap↴*



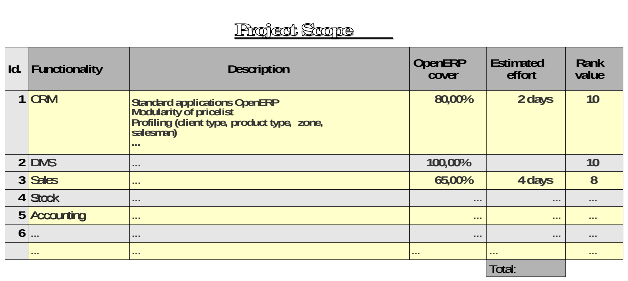
If some processes remain unclear, help yourself with a (open sources) process designer. Draw the flow and ask the interviewee for feedback.



Use Case - A flow diagram sample

After each interview, the mind map and the diagram(s) must be validated by the interviewee. Since each interview reveals some of the functional perimeter of the project, complete the project scope with requirements gradually (see Project scope below↴).

The project scope
*Altogether, the interviews permit you to delineate the whole project scope. When all the requirements have been placed in the project scope fill in the field Open ERP cover, and the field estimated effort (see **Project scope**):*



Project Scope

Id.	Functionality	Description	OpenERP cover	Estimated effort	Rank value
1	CRM	Standard applications OpenERP Modularity of pricelist Profiling (client type, product type, zone, salesman) ...	80,00%	2 days	10
2	DMS	...	100,00%		10
3	Sales	...	65,00%	4 days	8
4	Stock	...	...	...	...
5	Accounting	...	...	...	...
6	...	...	...	...	...
	...	...	...	...	...
				Total:	

Then ask the client's project manager to rank each requirement according to its priority level (from 1 for cosmetic to 10 for top level priority).

Tip: A good negociation practice when the contract is discussed is to not decrease the price, but the number of features to be implemented.

Option 1 Interviews of end users (3-5 days)
Context: When the client's project manager does not know perfectly all the needs or when there is a need to prepare the employees to the change, you can suggest to plan interviews with (some of) the end users
Process: The interview sessions are the same as the one described above.

Option 2 Implement a use case (3-10 days)
Context: When the client is not sure that OpenERP will perfectly fit the needs or when you need to convince the managers, a use case is the best way to attest to Open ERP solution.
Process:

- *Writing of use cases with the client's project manager*
- *Testing / parameterization (Who: PM)*
- *Presentation to client (Who: PM)*
- *Validation (Who: client's project manager)*

> *A 'use case' describes a business process applied by business actors to achieve their goals (e.g., manual payment processing, expense report approval, manage corporate real estate).*
> *Ideally, the use case covers a flow large enough to be representative of a whole process. It illustrates a standard business process with a short text and a diagram.*
> *See a tutorial on:*
> *http://www.cragsystems.co.uk/use_case_tutorial.htm*

Tip:When selecting a use case, the best option is to choose a case fully covered by Open ERP, which is more attractive and convincing for decision makers.

Deliverables

- ✎ *Mind map Interviews*
- ✎ *Project scope → A scope summary*
- ✎ *A quote for the full project → Example of integration quotation*
  - *Fixed price*
  - *Estimate for time and materials*
- ✎ *Planning → Example of integration planning*
- ✎ *Integration contract*

Tips:
(i) It is obvious that your understanding of the detailed customers needs is not perfect after a few days. However we believe it is sufficient to quote at the following conditions:
•> Critical phases (end user training, data importation) are on time and materials??
•> We keep the right to review the quote after the detailed analysis
(ii) If the delivery date has been fixed, make a retro-planning.

PHASE 3. IMPLEMENTATION (90 days)

Introduction
Now, we are in! The first two phases are a success: the implementation contract is signed. Some negociations could still last for a while, but the phase to come is no longer a sales process. At this phase, a solution will be designed, developed and deployed.

Phase 3.1. Analysis

At the end of this phase, the customer can see the final result! This allows a fast feedback.

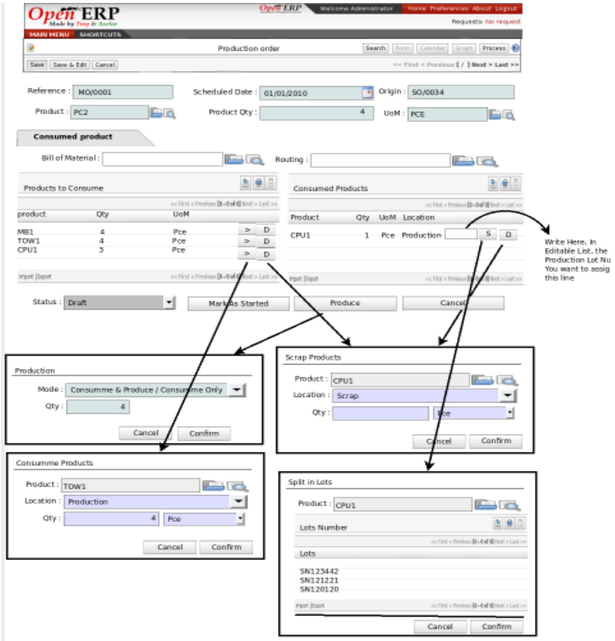
Goals ✔ *Describe and validate the solution: screens and processes*
✔ *Review quotation (optional)*
✔ *Deliver a reviewed plan*

Responsible *PM & Client's project manager*

Solution design
For any requirement not covered by Open ERP by 100% (See project scope.xls), a task (with its attachments) is created in OpenERP by the PM.

A task is a short description of the solution - <u>not the need</u> - with the full specifications of screens changes and notes on features to be improved:

> *<u>Task Id</u>.: MRP_1 - Manufacturing order: useability improvement*
>
> *We need to improve the manufacturing order form in trunk. The main reasons are: ability to easily manage partial productions, lots & serial number encoding, scrapping wrong products.*
>
> *Full specifications of screen to change:*



Production order

Reference : MO/0001 — Scheduled Date : 01/01/2010 — Origin : SO/0034
Product : PC2 — Product Qty : 4 — UoM : PCE

Consumed product
Bill of Material : — Routing :

Products to Consume

product	Qty	UoM
MB1	4	Pce
TOW1	4	Pce
CPU1	3	Pce

Consumed Products

Product	Qty	UoM	Location
CPU1	1	Pce	Production

Write Here, In Editable List, the Production Lot Nu You want to assig this line

Status : Draft

Production
Mode : Consumme & Produce / Consumme Only
Qty : 4

Scrap Products
Product : CPU1
Location : Scrap
Qty : Pce

Consumme Products
Product : TOW1
Location : Production
Qty : 4 Pce

Split in Lots
Product : CPU1
Lots Number
Lots
SN123442
SN121221
SN120120

> *Technical notes: /*

<u>Note:</u> to consult full specifications of this sample task see:
https://bugs.launchpad.net/openobject-addons/+bug/506017
*Once all the tasks – or solution designs - have been reviewed by the client's project manager, ask him to sign the update **project scope.xls** with mention « tasks approved » (update the document with a column with the links to tasks Id.).*

Tip: If it does not seem possible to describe a task within 10 lines, split it into sub-tasks.

We developed a tool to draw the screen and workflows:
→ The OpenERP plugin for Dia

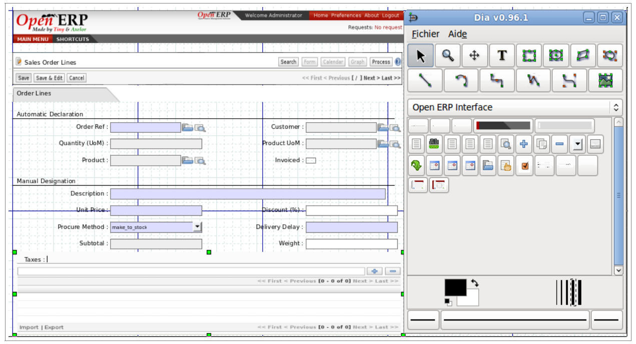
- *Dia is a drawing software very useful for :*
  - *Workflow designs*
  - *Screen designs*
- *With the OpenERP Plugin for Dia you can import OpenERP views (shapes and screens) and modify them on purpose with the designer (add new fields, modify file type, etc.).*

To Install Dia on debian/ubuntu (linux):
Open a terminal and type the following command to update:
sudo aptitude update
Then, install Dia with command: aptitude install dia

To install the OpenERP Dia Plugin on debian/ubuntu (linux)
Extract the plug in DIA in your home directory. The zip is available at:
http://edu.openerp.com/functional_memento/Functional_Memento_dot_dia.zip
Log as super_user and put the file OpenERP.py under ~/.dia/python.
The file is available at:
http://edu.openerp.com/functional_memento/OpenERP.py

Start application Dia as a normal user. All shapes are under the sheet "OpenERP Interface Sheet"
To Import OpenERP Views, click on the menus Tools > Load Open ERP Views.
Specify proper URL, database name, login user and password and select in the list a view to import.

Then you can see your imported view in a current diagram:



Sales Order Lines
Order Lines
Automatic Declaration
Order Ref : — Customer :
Quantity (UoM) : — Product UoM :
Product : — Invoiced :
Manual Designation
Description :
Unit Price : — Discount (%) :
Procure Method : make_to_stock — Delivery Delay :
Subtotal : — Weight :
Taxes :

***To Install Dia on Install Dia on Windows** (Vista):*

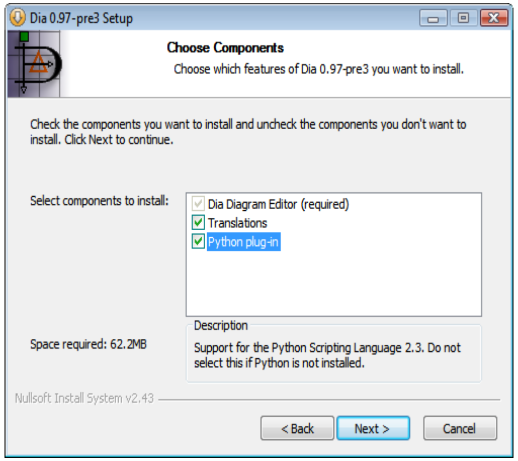
***First, install Python 2.3.5**:*
http://python.org/ftp/python/2.3.5/Python-2.3.5.exe
You can have several versions of Python installed concurrently.
During the installation, make sure to:

1. *Select “Yes, make backups”*
2. *Select “Python interpreter and libraries”*
3. *Unselect “Tcl/Tk”*
4. *Unselect “Python HTMLHelp file”*
5. *Unselect “Python utility scripts”*
6. *Unselect “Python test suite”*
7. *In Advance Options, select “Admin install”*

*And, Install the exact following versions of the following **dependencies** (not included in Python 2.3.5):*

1. *Install PyGtk 2.8.6:*
   http://ftp.gnome.org/pub/GNOME/binaries/win32/pygtk/2.8/pygtk-2.8.6-1.win32-py2.3.exe
2. *Install PyCairo 1.0.2:*
   http://ftp.gnome.org/pub/GNOME/binaries/win32/pycairo/1.0/pycairo-1.0.2-1.win32-py2.3.exe
3. *Install lxml 1.2: http://pypi.python.org/packages/2.3/l/lxml/lxml-1.2.win32-py2.3.exe*

Install Dia for Windows 0.97.1 or later:
http://downloads.sourceforge.net/project/dia-installer/dia-win32-installer/0.97.1/dia-setup-0.97.1-1.exe
During the installation, select the component "Python plug-in":



Dia 0.97-pre3 Setup

Choose Components
Choose which features of Dia 0.97-pre3 you want to install.

Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.

Select components to install:
☑ Dia Diagram Editor (required)
☑ Translations
☑ Python plug-in

Description
Support for the Python Scripting Language 2.3. Do not select this if Python is not installed.

Space required: 62.2MB

At the end of the installation, start Dia and close it.

***Extract openerp-dia-plugin.zip in the installation folder of Dia** (typically C:\Program Files\Dia) and overwrite existing files if prompted. The zip is available at:*
http://edu.openerp.com/functional_memento/openerp-wdia-plugin.zip

Start Dia. The file type "PyDia Code Generation (OpenERP) (*.zip)" should be available in the File>Export menu.
The sheet "Open ERP interface" should be available in the "Other sheets" menu of the side bar.
And the entry "Load Open ERP View" should be available in the Tools menu.

Deliverables

- ✎ *Open ERP analyse → Example of project specifications*
- ✎ *A reviewed quotation (optional)*
- ✎ *An updated planning (optional)*

Phase 3.2. Interface

After this first development step, the client will be able to test the solution and organize workshops with the end users, for quick feedback and task reviewing.

<u>Goals</u>

- ✔ *Develop all screens and menus*
- ✔ *Generate demonstration data*
  *→ **The result is visionable from this stage**.*
- ✔ *Get them validated by the client through workshop*
- ✔ *Annex to contract:*
  - *When the customer wishes to change initial specifications after viewing the interface*
  - *It implies a feasibility study*

- *Tell the client about the impact on budget and planning*

Tip: Entire value added is given at the end of this phase. Thanks to a quick feedback, gaps are detected as early as possible.

Responsible *Developers & PM*

Development of screens

The developer is in charge of the developments. On the ground of specifications he should be able to conceive all the screens. The tasks may consist of creating new screens or adapting existing one's in Open ERP.
The PM checks the developments and demonstrates a scenario to the client.

Scenario

A scenario to show the match of developments with specifications (see also use cases)

Demo Data

- *Goal: illustrate the scenario with real data conformed to the client's business*
- *Data should be generic to a sector to make them re-usable*
- *Install module 'Recorder' so that you can record data in a separate module.*

Note: The base_module_record *module can be used to export a set of changes in the form of a new module. It should be used for all customizations (including demo data) that should be carried on through migrations and updates.*

Branch bazaar on launchpad

Launchpad is a software collaboration platform that provides bug tracking, code hosting using Bazaar and code review among others utilities.

- *See https://**launchpad**.net/*

Your branch bazaar will contain at least 2 modules:

Module 'Profile'. *The purpose of a profile is to initialize Open ERP with a set of modules directly after the database has been created. A profile is a special kind of module that contains no code, only dependencies on other modules.*

Module 'Demo data'. *The data module is make dependant of the module profile to assure a automatic downloading of data each time the 'Profile ' is installed.*

Workshops. *The client gives their remarks and indicates what they do not accept and why (modifications to do, to reach specifications).*
Once a development is accepted, the client signs for it.

Annex to contract
After the prototype's review, the client may want to change some of the specifications to cope more closely/easily with its needs.
In this case, the developer notes the request and informs the PM that a change request has come.

Then,

1. *the PM design a solution, quote and plan.*
2. *once the client has signed the proposal, the development of the interface starts.*

Finally, the signed document is annexed to the initial contract.

Invoicing
As mentioned in the contract template (see Phase 4), the PM sends two invoices every month to its client:

- *One invoice for 'fixed' services*
- *One invoice for 'time and materials'.*

Deliverable *A working version on OpenERP that has all screens adapted to the customers needs. Demonstration data are/is set.*

Phase 3.3. Data importation (30 days)

Context
The importation process can start once the screens are validated since the database scheme is now fixed.
Workload for data importation is hard to estimate, this is why the integrators sell the consultancy, days in time and materials.
Data importation can be done in parallel with the remaining implementation phases.

There are different methods to import your data into Open ERP:

- *Through web-service interface*
- *Building a module with .XML or .CSV files with the content*
- *Using an ETL*

Whatever the technical solution chosen to import data, it is critical that the whole importation is done automatically using scripts, without any manual operations. As there will be several intermediary imports, the imports process must be strictly defined.

Responsible *The client is responsible for data import.*

The designated agent (the client's project manager or someone else with a technical profile) who has received a technical training on Open ERP.

The integrator can sell days of consultancy 'time and materials' to help the client in the migration process

Phase 3.4. The logical layer (1day/workflow)

At the end of the phase the whole solution will be working and tested by the customer. There will be no report yet , nor customer data in the solution.

Goal
The logical layer corresponds to the implementation of all business rules and logic.
The goals here are:
✔ Develop logic,
✔ Test all use cases
✔ Test all buttons of the interface

Responsible *Developer & PM for testing the final solution*

Deliverables

- *A working version is OpenERP that integrates all the business logic and computed fields*
- *The 'project scope' document properly completed by the client*
    - *each line in the column 'validate logic' is signed by the client*

Phase 3.5. Reports (1-2 days / reports)

At the end of this phases, everything will work. The next step will be to validate with the customer's own data.

Context
The analysis has revealed the list of reports to adapt or to develop (see document 'Project scope'). During this phase, new Open ERP reports will be designed, developed, delivered and approved by the client.

Note: (i) There are two types of reports in OpenERP. Any printable document like a sales order, a purchase order, an invoice, etc. is a first type of report. Statistical reports (postgres sql object) are a second type.

Goals ✔ *Produce the appropriated template of reports*
✔ *Get them approved by the client*

Responsible *The developer*

Design & development
It is appropriate to ask the client a copy of each report to be modified or added in Open ERP:

- *Reports from customers*
- *Reports or documents for internal use*
- *Reports and documents to customers.*

Then,

1. *Draw each report on a sheet*
2. *Ask the client to validate each template*
3. *Once a report is validated, start development*

Deliverables

- *All the report templates*
- *The 'project scope' document properly completed by the client*
    - *each line in the column 'validate report' is signed by the client*

Phase 3.6. Deployment & parametrization (6 weeks)

Introduction
Deployment is the process of putting a Open ERP database into a production-ready state where it can be used by everyone for their daily work. You would usually configure Open ERP and load data into it on one development system, train staff on that or another training system and deploy it onto a production system that has better protection against failure, better security and more performance.

Goals ✔ *Deliver product*

- *Test all cases*
- *Make parametrization (security rules, groups, ...)*
- *Make each delivery validated by the client*

✔ *Train end users*

Responsible PM
*The PM should be present during **and** after the delivery (see warranty) to assure a technical and functional support.*

Deployment Options
To deploy Open ERP in a company, several options are available to you:

- *an SaaS (Software as a Service) or on Demand offer which includes the equipment, the hosting, the maintenance and the support on a system configured to client's needs in advance,*
- *an internal installation, that is managed by the IT services of the integrator,*

Deployment Procedure

The deployment of a version of Open ERP is made easier when the server has been configured in the production environment. The security of the data will then be a key element.

When you've installed the server you should create at least two databases:

- *a test or development database, in which the users can test the system and familiarize themselves with it,*
- *a production database which will be the one used by the company for daily use.*

You should test the data module in the development version and check that it doesn't require any more manual adjustments. If the import runs correctly, it shows that you're ready to load data in the production database.

You can use the Open ERP database backup procedure at different stages of configuration (see Installation and Initial Setup). Then if you've made a false step that you can't recover from, you can always return to a prior state.

Since your data describes much of your company's value, take particular care both when you need to transfer it (in backups and across your network) and when you're managing the super-administrator password. Make sure that the connection between a PC client and the two servers are correctly secured.

You can configure Open ERP to use the HTTPS protocol, which provides security for data transfer.

You could also use the PostgreSQL database directly to backup and restore data on the server, depending on access rights and the availability of passwords for the server.

End-users training

The training of end users can start when a development database is ready to use.

Warranty

It will not work perfectly, directly ! During the next two - three months it is important to be present at client's site:

- *to assist end-users*
- *to react rapidly when troubles are detected in production*

After 2 months, everyone will be happy !

Phase 4. AFTER SALES SERVICES

Introduction

Maintenance and support are critical for your long term success.

*The **support** aims to ensure that end users get maximum productivity from their use of Open ERP, answering questions to the use of the system.*

*The **maintenance** aims to ensure that the system itself continues to function as required. It includes system upgrades, which give you access to the latest functionality available.*

Support Contract

The Open ERP editor sells support contracts to its partners. The partners can then sell their own support contracts to their clients or ask the editor to take this in charge.

The support contract is a fixed time contract; the amount of interventions are fixed in credits time (or intervention units).

The contract includes any request for functional help or technical help that is not bug fixing.

Example of functional help: a customer parametrize mistakenly changed the sales flow of his company and the sales order status did not evolve to a request status when pressing the validation button.

Example of technical support: a customer develops a new accounting view in xml but made a syntax error involving the view, and does not appear properly.

*→ **Request processing***

A request comes to support via email or phone. It is then transmited to the quality team for problem characterization at a functional level. Two cases:

- *the problem is linked to user misuse of the software*
  - *functional help is provided*
  - *imputation of the analytic account of client*
- *actual bug*
  - *transmit the case to R&D*
  - *bug fixing*
  - *no imputation.*

Maintenance Contract

The two true parts with the maintenance contract are the Open ERP editor and the final customer; the integrator partner has a role of intermediary. However, some partners integrate maintenance in their support contract.

The maintenance contract is a fixed price contract; the cost and the period are fixed.

The objective of this contract is to guarantee a perennial solution of the delivery to customers

It includes:

- *Guarantee of version migration*
- *Bug fixing*
- *Management of security alerts*

***Guarantee of migration**. Once the yearly version's upgrade is available, the editor provides a system for automated migration. He also guaranties an unlimited technical support.*

***Bug fixing**. The maintenance contract includes an unlimited guarantee for certified modules.*

***Management of security alerts**. An alarm system of possible problems for safety measures was set up in order to hold our customers informed as soon as possible, and to provide a correction before the fault does become public.*

*Finally, the maintenance contract provides the opportunity for the end user to work and live with the Open ERP editor which will verify the quality of the modules developed by the partner, through a **quality certification.***

***Brochures**:*

✎ *Maintenance*

✎ *Support*

If you wish more information on support and maintenance contracts, contact us at info@openerp.com.

CONCLUSION

The repetitive use of a same methodology helps to improve the follow up of projects and to increase speed of developments and quality of deliverables.

The goal of the present memento is to give a general framework for OpenERP implementation in a package approach.

The method described here is compatible only with agile project management. Indeed the client is involved in all stages, with short decision cycles and high reactivity to client's feedback in order to reach a solution that fits the actual needs.

Finally, the strength and perennity of Open ERP is grounded on its community. So, if you wish to give us feedback on this memento PLEASE send us your comments at http://edu.openerp.com

Important note: a PDF version of this document with all its active links is available at http://edu.openerp.com. As a partner, you would have received a login and a password to our e-learning web-site. The memento is accessible via the sub-menus: Partner/Commercial Training/ Annex.