



Creatio

Project life cycle

Product implementation
methodology



ACCELERATE 

Contents

1. Project Life Cycle Methodology.....	2
2. Project workgroup structure.....	4
3. External implementation.....	5
4. Independent implementation.....	8
5. Project regulations.....	10
6. Initiation phase.....	12
7. External implementation.....	13
7.1. Planning and Project proposal.....	13
7.2. Contract.....	15
8. Independent implementation.....	18
9. Elaboration phase.....	21
10. Project charter.....	22
11. Business concept.....	26
12. Execution phase.....	29
13. Business processes of the Execution phase.....	30
14. Delivery.....	32
15. Transition phase.....	36
16. Business processes of the Transition phase.....	37
16.1. Test operation.....	37
16.2. Beta testing.....	39
16.3. Trial operation.....	41
17. Operation phase.....	43
18. Implementation experience review and activation of project solution support.....	45
19. Official project sign-off and Roadmap review.....	47
20. Delivery of updates.....	48
21. Delivery environments.....	49
22. Execution phase deliveries.....	51
23. Transition phase deliveries.....	52
24. Deliveries on the project solution support stage.....	55
25. Client's parallel development.....	56
26. Client environment location and licensing.....	58

Project Life Cycle Methodology

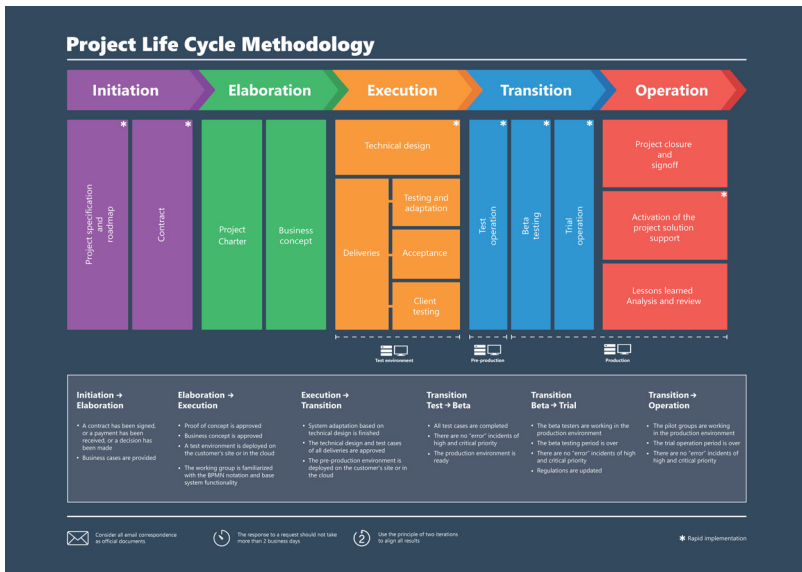
This document is a guide on organizing Creatio implementation projects using best project management practices to assist you through all phases of Creatio implementation.

Our project life cycle is based on the PRINCE2 methodology. It enables you to simplify, plan, develop and implement Creatio to meet the project quality requirements and deadlines.

ATTENTION

This guide will be useful both for partners implementing Creatio and for their clients (“external implementation”), in addition to clients who decided to implement Creatio independently utilizing internal resources (“independent implementation”). This guide covers both these options.

Fig. 1 Project life cycle methodology (click to open full-sized image)



NOTE

The “Agreement” stage is omitted in the independent implementation.

Project team structure

Implementation projects involve large numbers of participants. The project team is a group of Client’s and Vendor’s representatives divided into several levels.

When it comes to the independent implementation, the term “Client” refers to an internal department that will use Creatio, and the term “Vendor” denotes a project or IT department that implements and supports Creatio.

- Project workgroup structure

Project Regulations

Regulations are a set of mutually agreed rules that ensure the quality and timeliness of interaction between team members and guarantee that all project deadlines are met.

- [Project regulations](#)

Initiation phase

At the Initiation phase, preparation and high-level planning are carried out to lay down the foundation for a successful project.

- [Initiation phase](#)
- [Planning and Project proposal](#)
- [Contract](#)

Elaboration phase

At the Elaboration phase, the Project charter, and the project's Business concept, documents, as well as a detailed project plan are prepared.

- [Elaboration phase](#)
- [Project charter](#)
- [Business concept](#)

Execution phase

At the Execution phase, the development is performed. For this, continuous delivery of test prototypes is carried out. The update packages with changes are delivered to the Client.

- [Execution phase](#)
- [Business processes of the Execution phase](#)
- [Delivery of updates](#)
- [Delivery environments](#)
- [Execution phase deliveries](#)

Transition phase

At the Transition phase, deliveries are transferred from the Vendor's test environment to the Client's pre-production and production environments.

- [Transition phase](#)
- [Business processes of the Transition phase](#)
- [Transition phase deliveries](#)

Operation phase

Operation is the final phase, making the official project wrap-up. Project results are summarized and documented.

- [Operation phase](#)

Project workgroup structure

Implementation projects normally involve large numbers of participants. The project workgroup structure for independent implementation differs from external implementation and is described separately.

CONTENTS

- [External implementation](#)
- [Independent implementation](#)

External implementation

External implementation implies that the Client and Vendor are separate companies.

An external implementation project workgroup consists of Client's and Vendor's representatives and is divided into three levels (Fig. 2).

- Steering committee
- Project management
- Project team.

Fig. 2 Project workgroup structure for external implementation

	Vendor			Client	
Steering committee	Project Director/ Managing Partner	Sales Director		Project Owner	Project Sponsor
Project management	Project Portfolio Manager/Sales Director	Project Manager		Project Mentor/ Project Owner	Project Manager
Project team	Account Manager	Business Analyst Team Lead	Developer Team Lead	CRM Coordinator	IT Coordinator
	Analysts		Developers	Business Experts	IT experts/Analysts

NOTE

An employee of the Client (or Vendor) can have several roles in the project workgroup if needed.

If possible, all project decisions should be taken at the lowest level. If the issue cannot be solved on its level, project members escalate it on higher level up to the Steering committee. The Steering committee should therefore include persons, authorized to make any decisions related to the project.

CONTENTS

- [Steering committee](#)
- [Project management](#)
- [Project team](#)

SEE ALSO

- [Independent implementation](#)
- [Project workgroup structure](#)

Project team

Project team includes employees responsible for project execution: preparing, development, testing and implementation.

Vendor

Analysts – direct performers of the project. Analysts develop the Business concept and Technical design of project solutions, define tasks for developers, train Client's employees and check the quality of the project solutions.

Developers – direct performers of the project. They are responsible for the development of project solutions based on the Business concept and Technical design.

Account Manager – a representative from the Vendor's commercial department responsible for commercial and organizational issues (being present during business trips, conducting presentations, etc.) as well as the preparation of documents.

Business Analyst Team Lead – direct manager of analysts. Responsible for the quality and performance control.

Developer Team Lead – direct manager of developers. Responsible for the quality and performance control.

Client

Business Experts – Client's employees who are highly loyal and know the company business specifics and key performance indicators. Business experts are key users who will be using the implemented system in their everyday work. They test the developed functions and provide feedback from the business perspective.

IT experts/Analysts – representatives of the Client's implementation department (if exists).

CRM Coordinator – Client's representative, responsible for the implementation of developed functions. Trains employees, motivates them to use Creatio, implements guidelines. This employee also coordinates the work within the Client's project team and is often a Creatio administrator.

IT Coordinator – manager of the Client's IT department. Responsible for the deployment of testing and production environments, integration of project features and other technical issues.

Project management

This group includes project managers from Client's and Vendor's side, who have the authority to solve general project development and progress issues.

Vendor

Project Portfolio Manager – the Vendor's representative who is responsible for specific portfolio of projects, direct superior of the Project Manager.

Project Manager – Vendor's representative who is responsible for the project completion and general project management. Their responsibilities include project planning, prioritizing and task management, timings and performance control, communication and closing issues.

Client

Project Mentor – project owner or a top-manager of the Client company, stands above the Project Manager, makes decisions on the project infrastructure and development.

NOTE

If the Project Mentor role is not present in the Client's team, then the project owner can take over this role.

Project Manager – Client's representative who accepts the completed project and supervises the work on the Client's side.

Steering committee

The Steering committee includes the client's top-management. This is the main decision-making authority in the project. The issues that failed to be resolved at lower levels must be escalated to the Steering committee level.

Vendor

Managing Partner – a top-manager of the Vendor's company. The Managing Partner is the final authority in resolution of any project-related issues.

Project Director – a manager in the Vendor's company, responsible for the vendor's entire project business line and project portfolio.

Sales Director (commercial director) – a manager in the Vendor's company, responsible for sales of services and products.

Client

Project Owner – a top-manager of the Client's company, directly interested in the project results, or a manager of the department that will be using the implemented product.

Project Sponsor – a top-manager of the Client's company, responsible for the financing and budget of the project. Makes decisions on expanding the budget.

Project Owner and Project Sponsor both have the authority to make any decisions on the project. Usually, the Project owner and Project Sponsor are the owners of the Client's business.

SEE ALSO

- [Independent implementation](#)

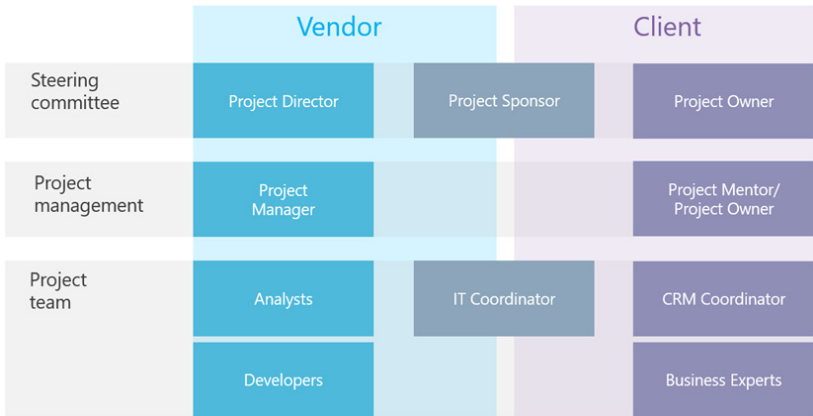
Independent implementation

In the case of an independent implementation, the Client and the Vendor are different departments of one company. As a rule, independent implementation is used by companies that have in-house developers and analysts who can perform system administration and configuration.

An independent implementation project workgroup consists of Client's and Vendor's representatives divided into three levels (Fig. 3).

- Steering committee
- Project management
- Project team.

Fig. 3 Project workgroup structure for independent implementation



NOTE

An employee can have several roles within a project workgroup if needed.

CONTENTS

- [Steering committee](#)
- [Project management](#)
- [Project team](#)

SEE ALSO

- [Project workgroup structure](#)
- [External implementation](#)

Project team

The Project team consists of employees, responsible for the preparation, development, testing and implementation of the project.

Analysts – employees who develop Business concept and Technical design of project, define tasks for developers and check the quality of work.

Developers – direct performers of the project. They are responsible for the development of project solutions based on the Business concept and Technical design.

IT Coordinator – an employee responsible for the project infrastructure, deployment of testing and production environments, integration between different systems and other technical issues.

CRM Coordinator – an employee responsible for implementation of the functions developed as part of the project. Typically a technically savvy company's expert, who trains other employees, motivates them to use Creatio, implements guidelines, coordinates the work and is responsible for Creatio administration. It can be either a representative of a business department with a technical mindset, or a representative from the IT department who knows the specifics of company's business.

NOTE

Depending on the number of departments where the project is implemented, there may be several CRM coordinators.

Business Experts – company employees who will use the implemented system in everyday work. They test the developed functions and provide feedback.

Project management

Direct project managers, who have the authority to solve the project's general development and progress issues.

Project Manager – accepts the completed project and controls work of the Vendor department.

Project Mentor – top- or mid-level manager of the company. The head of the department where the implementation is carried out.

NOTE

If the Project Mentor role is not a part of the Client's team, then the project owner can take over this role.

Steering committee

The Steering committee includes top-management of the project. This is the main decision-making body for the project.

Project Director – executive, oversees the analysts and developers who are working on the implementation of the system.

Project Sponsor – a company's top-manager responsible for the financing and budgeting of the project. The Project Sponsor makes decisions on increasing the budget and is usually the owner of the company.

Project Owner – a top-manager of the company, who is directly interested in the project results, or manager of the department that will be using the product. Project Owner makes important decisions and provides general project supervision.

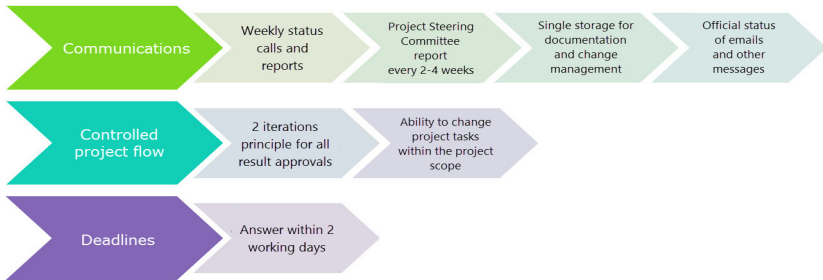
SEE ALSO

- [Project workgroup structure](#)
- [Independent implementation](#)
- [Project regulations](#)

Project regulations

Regulations are a set of agreed upon rules for interaction within the project. Compliance with project regulations ensures that the project team members interact with each other efficiently and that all project deadlines are met. It is recommended that the Client and the Vendor agree upon the project regulations beforehand. There is a set of recommended regulations (Fig. 4).

Fig. 4 Project regulations



Communication guidelines

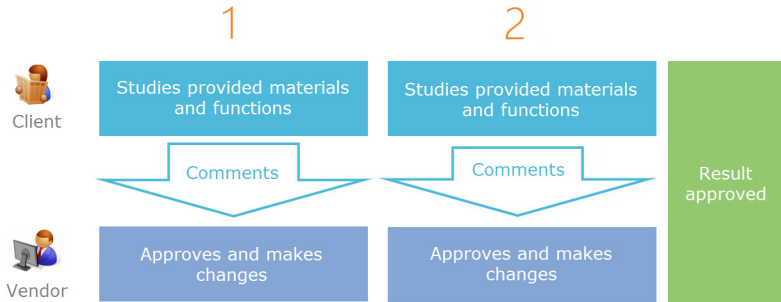
Please follow these guidelines when conducting communications within the project:

- Make status calls and provide reports on a weekly basis. Make sure that you regularly inform the Client about the project task status, current problems and planned solutions. This ensures the Client's awareness of the project's current status and that the receipt of timely feedback by the project team.
- Every 2-4 weeks provide reports with critical project information to the project Steering Committee. For example, the reports must contain information about phase transitions, current problems and disagreements, significant changes in the project tasks.
- Use single documentation repository. Manage projects with a single resource, such as your customer portal or a cloud-based document storage that is available to all project participants. This will let the project team members obtain the most relevant and up-to-date information about the status of the project, the Client can use this to create project requests that are transparent to all parties.
- It is recommended to stipulate that all communications through the agreed upon medium (emails, messengers, applications such as Asana, etc.) are considered official documentation. This will reduce the amount of paperwork.

Project flow management guidelines

Use the following rules to manage the project flow:

- The **two iterations approach**: approve all results with the Client using no more than two iterations. An iteration includes studying the provided materials or functions by the Client, commenting on them and approving the proposed changes (Fig. 5). It is important to make it clear to the Client that this rule is critical for quality approval of changes, preserving project manageability and keeping up with the deadlines.

Fig. 5 Iteration processes

- **Ability to change the set of project tasks.** Keep in mind that during the project flow the project initial tasks may change, new tasks may appear. The composition of work, time and resources allocated for the implementation of the project may also change.

Deadline guidelines

Use the rule according to which both project teams (Vendor and Customer, see "Project workgroup structure") obligate to provide a reply to a general information or project inquiry within 2 working days. This is important at all project stages because it lets the Vendor receive up-to-date information needed to research development tasks and adjust priorities. The Client on the other hand will always stay up-to-date with the current status of the project. If the reply cannot be provided in time, the responsible team shall notify the other party about the delay. It is worth noting, however, that such delays may affect project deadlines.

SEE ALSO

- [Project workgroup structure](#)

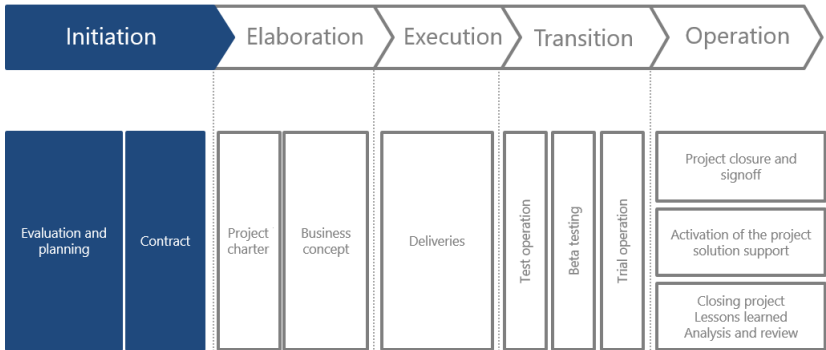
SEE ALSO

- [Initiation phase](#)
- [Elaboration phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

Initiation phase

The Initiation phase covers preparation tasks and creating the foundation for a successful project. This phase encompasses planning of the entire project, as well as signing the implementation contract (in case of the external implementation). (Fig. 6).

Fig. 6 The Initiation phase



The Initiation phase processes used during an independent implementation differ from external implementation and are described separately.

CONTENTS

- [External implementation](#)
- [Independent implementation](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Elaboration phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

External implementation

The Initiation phase of an external implementation project consists of the following two business processes:

1. Planning (pre-project survey + roadmap) and Project proposal.
2. Signing the contract.

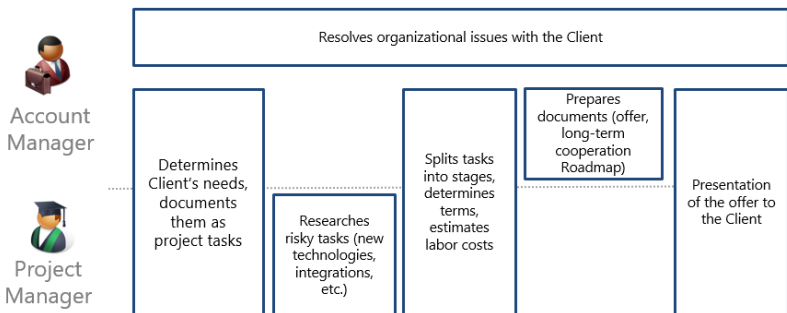
CONTENTS

- Planning and Project proposal
- Contract

Planning and Project proposal

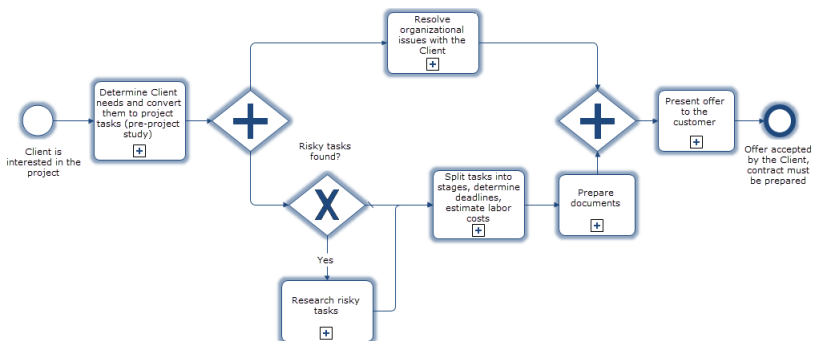
Every project starts with identifying the Client's business need and planning the general project tasks. The Initiation phase also includes resolving of all organizational questions, risk management, planning of project stages and tasks, as well as preparing the Project proposal. The production team includes the Account Manager and Project Manager (Fig. 7).

Fig. 7 Team structure and responsibilities on the stage of planning and preparing the Project proposal



Organizational planning and issue resolution are done in parallel, up until the Project proposal is approved (Fig. 8).

Fig. 8 Project proposal planning and developing diagram



Determining the Client's business needs, their decomposition and generating the list of tasks (pre-project survey)

On the first step of the Initiation phase process, determine the needs of the Client and create a list of tasks. This process consists of the following general stages:

1. The Project Portfolio Manager assigns the Project Manager.
2. The Account Manager forwards all necessary information about the Client to the Project Manager:
 - General company information
 - Pre-project survey goals
 - Brief details on the negotiations with the Client (results, stages, budget, terms, etc.).
3. If the pre-project survey is required, the project manager performs the following steps:
 - Studies information from the Account Manager, paying special attention to the company structure, product catalog and market shares.
 - Studies the industry needs and solutions implemented in other companies. At this stage, the Project Manager studies industry know-hows and solutions, consults with industry experts and account managers, implementation consultants, business consultants who have experience in this field.
 - Prepares a list of questions for the Client interview. The purpose of the interview is to clarify the tasks to be solved as a result of implementation, and the reasons for initiating the project and goals that must be achieved.
 - Prepares the list of questions on the project's IT component. On this step, we recommend to clarify which systems will be engaged or implemented, the number of users, availability of system administration and development specialists.
4. The Project Manager conducts the pre-project survey.
5. The Project Manager compiles a list of tasks and identifies those with the highest risks.

Resolving organizational issues

At this stage, the Account Manager works on the organizational issues:

- Agrees with the Project Manager the terms of preparing project documents, identifies the terms of the Project proposal presentation to the Client.
- Organizes meetings, agrees on the participants.

Risk research

If the preparation process reveals risk tasks, then risk research must be carried out. This may require participation from various experts (analysts, developers) as well as industry experts. The research results should be formalized and attached to other project documents. They will be useful in estimating the project's budget and terms.

Splitting tasks into stages, determining terms, estimating labor costs

At this stage, the Project Manager creates the project roadmap and splits the global tasks into sub-projects. Additionally, he:

1. Evaluates labor costs.

2. Sets the sub-project terms and stages of the first sub-project.
3. Agrees the results with the Account Manager and the Project Portfolio Manager.
4. Estimates additional costs (business trips, purchases, etc.).

Preparing documents

Account Manager prepares all necessary documents, including the project offer, commercial offer, roadmap of long-term cooperation, presentation, etc. If necessary, the documents are also agreed with the Project Manager or the Sales Director.

Project offer presentation to the Client

After preparing and approving all project documents, the Account Manager organizes a meeting with the Client. Meeting goal: presentation of the project offer and development direction to the Client. The Project Manager must be present, other participants are optional.

After the presentation, revisions are made to the documents (if needed) and agreed with the Client.

SEE ALSO

- [Contract](#)

SEE ALSO

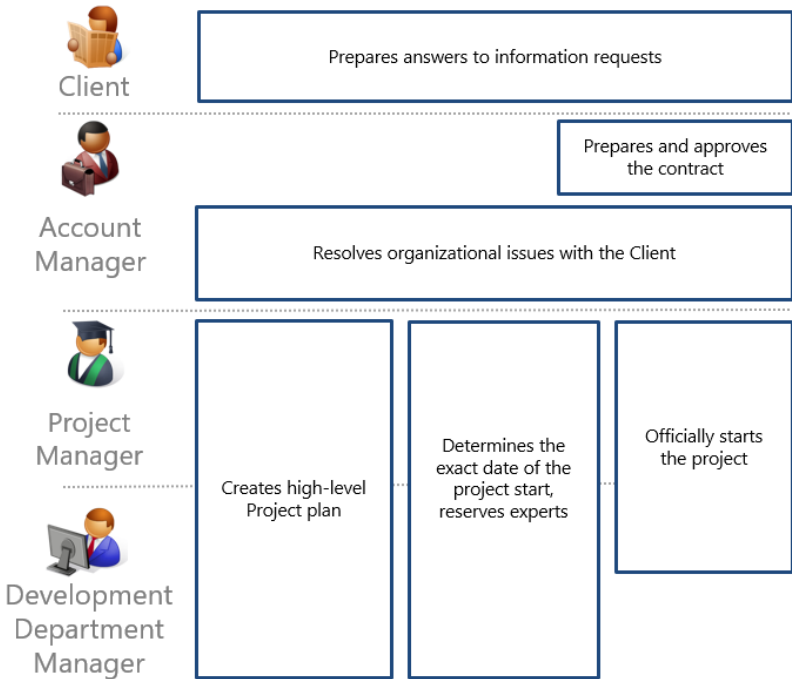
- [Initiation phase](#)

Contract

The next stage of the Initiation phase is preparing and agreeing upon the contract with the Client and official project launch. This requires the Project offer that was agreed upon with the Client and the Project development plan.

The production team that prepares and agrees the contract includes the Client, the Account Manager, the Project Manager and the manager of the development department or similar position ([Fig. 9](#)).

Fig. 9 Team structure and responsibilities on the stage of preparing and approving the contract



The contract preparation and approval processes do not branch and are executed one after another (Fig. 10).

Fig. 10 General process of preparing and approving the contract



Creating a high-level project plan

After agreeing on the commercial offer with the Client, an implementation contract must be drafted. The first stage involves creating a high-level project plan. The project manager gathers all information about the pre-project survey and sends an inquiry to the Client. The inquiry must include:

- Client’s project team request
- List of documents
- Business case request
- Questions regarding project’s “blind spots”.

After this, begin planning project tasks. The high-level plan includes:

- Project stages

- Expert scope of work
- Developer Team Lead and Business Analyst Team Lead scope of work
- Splitting tasks into stages for different experts.

Determining exact project start date

The next stage of contract preparation includes determining the exact project start date and “reserving” experts.

1. The Developer Team Lead, along with the Business Analyst Team Lead analyze the tasks of the high-level project plan and confirm labor costs.
2. The Developer Team Lead, along with the Business Analyst Team Lead choose project experts based on their skills and workload.
3. The Project Manager obtains information about the chosen experts and agrees the project start date with the Account Manager. If the project start date cannot be agreed upon and approved, the issue must be escalated.
4. The approved project start date is added to the contract. Chosen experts are added to the project plan.

NOTE

The “reservation” of experts is valid for a limited term (usually set by the Vendor company) and the Client must be notified about it.

Preparing and agreeing the contract

On the next stage, the Account Manager prepares and formulates the contract and then submits it for approval. After the internal agreeing the contract the document is passed for the Client’s approval.

Official project start

The goal of the official project launch process is to gather all documents on the sale of services, ensure that they are correct and approve the project itself. Without this, project tasks cannot be started.

To launch the project, sign the implementation contract with the customer and meet the conditions specified in the contract as those required to launch the project (for example, receive prepayment).

SEE ALSO

- [Initiation phase](#)
- [Planning and Project proposal](#)

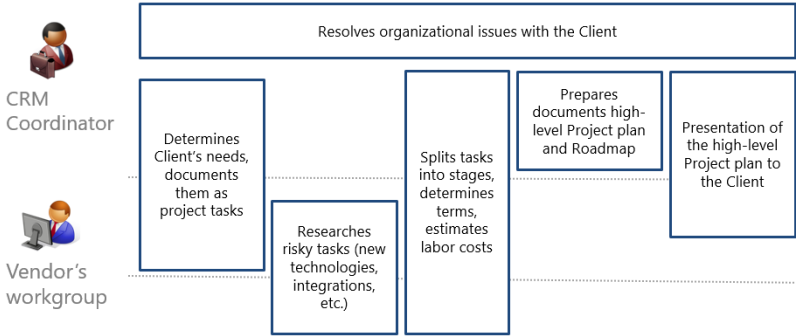
SEE ALSO

- [Independent implementation](#)

Independent implementation

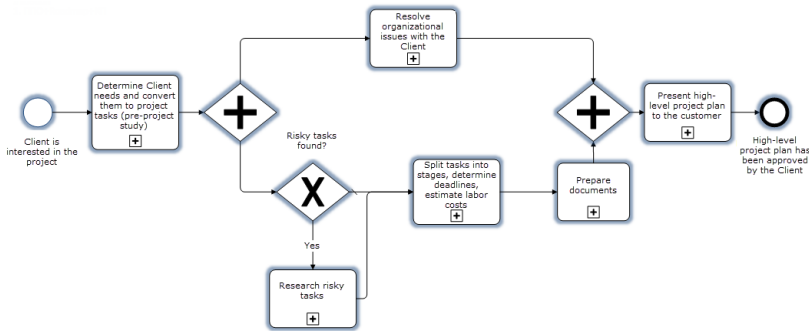
Every internal implementation project starts with identifying the Client’s business need and planning the general project tasks. The Initiation phase also includes resolving of all organizational questions, risk management, planning of project stages and tasks (Fig. 11).

Fig. 11 Project team structure and responsibilities on the Initiation stage (independent implementation)



Organizational planning and issue resolution are done in parallel, up until the high-level project plan is approved (Fig. 8).

Fig. 12 General process diagram for the Initiation phase of an independent implementation



Determining the Client’s business needs, their decomposition and generating the list of tasks (pre-project survey)

On the first step of the Initiation phase process, determine the needs of the Client and create a list of tasks. This process consists of the following general stages:

1. The CRM Coordinator passes all required information about the CRM goal of the pre-project survey, budget, terms, tasks, etc.
2. If the pre-project survey is required, the project manager performs the following steps:
 - Studies the information received from the CRM Coordinator.

- Studies the product functions and solutions implemented in other companies. At this stage, the Project Manager studies existing know-hows and solutions, consults with the industry experts, implementation consultants, business consultants who have experience of working with this product.
 - Prepares a list of questions for the Client interview. The purpose of the interview is to clarify the tasks to be solved as a result of implementation, and the reasons for initiating the project and goals that must be achieved.
 - Prepares the list of questions on the project's IT component. At this step, we recommend clarifying which systems will be engaged or implemented, the number of users, etc.
3. The Project Manager conducts the pre-project survey.
 4. The Project Manager compiles the list of tasks and identifies those with the highest risks.

Resolving organizational issues

At this stage, the CRM Coordinator resolves organizational issues:

- Agrees with the Project Manager the terms of preparing project documents, identifies the terms of the high-level project plan and roadmaps presentation to the Client.
- Organizes meetings, agrees on the participants.

Risk research

If the preparation process reveals risk tasks, risk research must be carried out. Participation from the product experts may be required. You can always request reference meetings or information on the Vendor's implementation experience from the Account Manager. The research results should be formalized and attached to other project documents. The risk research results will be useful later, for estimating the project budget and terms.

At this stage, conduct a training on the product for the Vendor's team. This may take the form of training courses or a self-study using the information from the Creatio Academy.

Splitting tasks into stages, determining terms, estimating labor costs

At this stage, the Project Manager creates the project roadmap and splits the global tasks into sub-projects. Additionally, he:

1. Evaluates labor costs.
2. Sets the sub-project terms and stages of the first sub-project.
3. Estimates additional costs (business trips, purchases, etc.).

Preparing documents

The Project Manager prepares all required documents, including a high-level Project plan and Roadmap. The documents may be agreed upon with the CRM Coordinator, if needed.

High-level plan presentation to the Client

After preparing and approving all project documents, the CRM Coordinator arranges a meeting with the Client. The goal of the meeting is the high-level plan presentation to the Client. The Project Manager must be present, other participants are optional.

After all approvals have been received and implementation budget has been allocated, the project is deemed as officially launched.

SEE ALSO

- [Elaboration phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

SEE ALSO

- [Initiation phase](#)
- [Independent implementation](#)

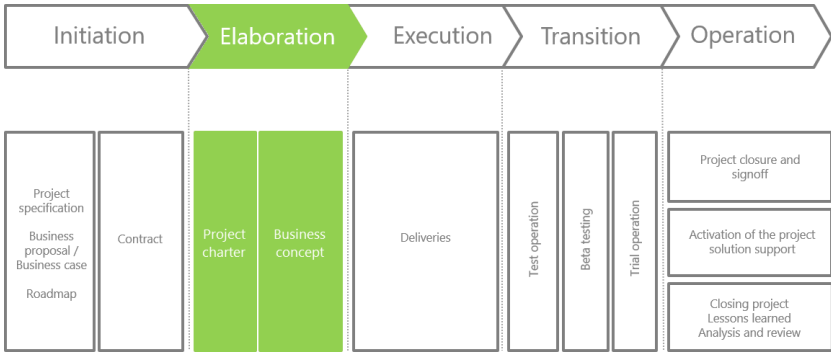
Elaboration phase

This stage involves developing two critical project documents: Project charter and Business concept. Also, the project plan is developed at this stage.

The Elaboration phase includes 2 business processes (Fig. 13):

1. Creating and approving the Project charter
2. Creating and approving the Project concept

Fig. 13 Elaboration phase



NOTE

In certain cases, preparation of the Project charter and Project Concept can be done in parallel.

CONTENTS

- [Project charter](#)
- [Business concept](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

Project charter

Every project starts with an internal presentation by the Vendor and kick-off meeting with the Client that initiates the project. The Elaboration phase also includes resolving of all organizational questions, risk management and communication planning, defining implementation, testing and training strategies. Finally, this phase involves documenting user requirements, software and system architecture and establishing development and test environments.

NOTE

Use the following link to download the [template for project's Project charter](#).

In an external implementation, the project team that works on this stage includes the Client, the Vendor's project manager and account manager (Fig. 14). In case of an independent implementation, CRM coordinator performs the coordination of interactions with the Client (Fig. 15).

Fig. 14 Project team structure and responsibilities on the Project charter development stage (external implementation)

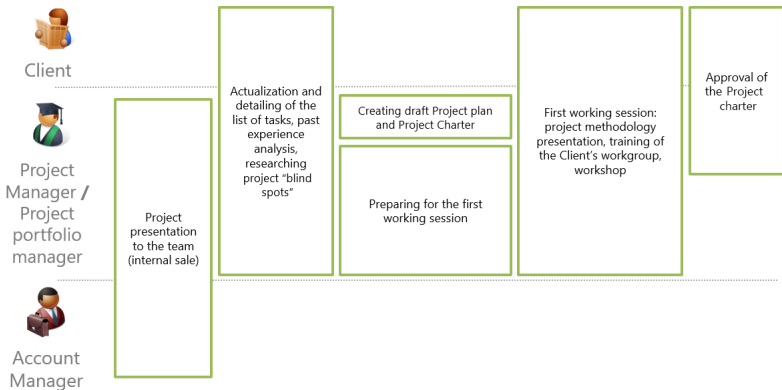
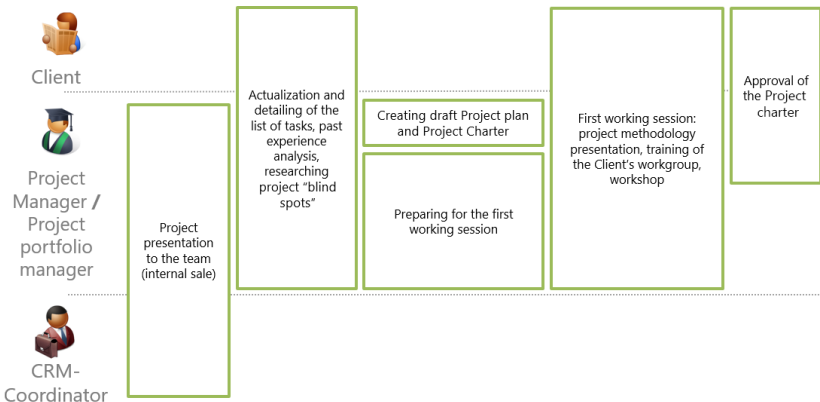
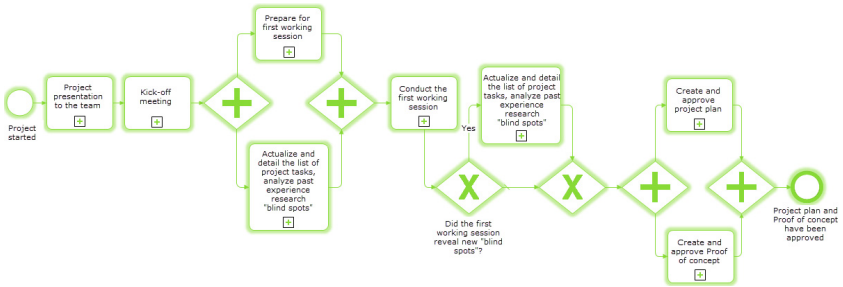


Fig. 15 Project team structure and responsibilities on the Project charter development stage (independent implementation)



Organizational planning and issue resolution are done in parallel, up until the Project charter is approved (Fig. 16).

Fig. 16 Project charter planning and developing diagram



Project presentation to the team

First, conduct an internal presentation for the project team, covering the following topics:

- Project goals, client’s expectations, your expectations
- Characteristics of the implemented product
- Business tasks that must be solved
- Bottlenecks in the Client’s current processes
- Agreements reached with the Client
- Client’s key contacts who are decision makers and how to work with them
- Business cases and other materials received from the Client
- Technical specifics, such as deployment option (On-site or Cloud), DBMS, etc.

Kick-off meeting with the Client

After the internal presentation is complete, conduct a kick-off meeting with the Client. At the kick-off meeting, introduce the Vendor and Client teams, present general product functions to the Client. Discuss any issues that require clarification, agreement or otherwise must be communicated to the Client. Present the Client’s project team structure to the Client, so that they could determine and assign employees to all the assigned roles. Deploy product demo to the Client.

Preparing the first working session

Based on the kick-off meeting results, prepare and send an inquiry for the whole bundle of the project documentation to the Client, review the received documents, prepare business cases and approve them with the Client. Compile the initial version of the project plan and Project charter, make revisions to the project methodology presentation. Adjust the training and working session plans taking the project’s business cases and goals into account.

Actualizing and detailing the list of project tasks, past experience analysis, working on the “blind spots”

At this stage:

1. Analyze past project experience. Reviewing past implementations usually helps decrease the number of project tasks due to initially using solutions that have proven to work in the past. Make the most use of your knowledge base, interview team members from the past projects.
2. Conduct decomposition of the high-level list of project tasks that you developed on the Initiation phase.
3. Research any tasks that may contain hidden additional workload (“blind spots”). Unforeseen tasks significantly increase the project workload. Compile a list of the identified “blind spots”.

As a result, compile the detailed list of project tasks.

Conducting the first working session

After the detailed list of project tasks has been compiled, the team begins the first working session. During the first session:

1. Conduct an initial meeting with the Client and make a presentation of the project methodology. As part of the presentation, inform the Client about project phases and their results, introduce the project team structure and roles of each team member. This presentation is very important to the Client, as it provides understanding of the internal processes and ensures the transparency of further activities.
2. Conduct training to the Client’s project team. The training includes introduction to BPMN, Creatio base function training as well as detailed demonstration of the Project charter document structure.
3. Conduct meetings with the key users, collect their requirements for working with the system, research business cases and system architecture, discuss all open questions.

NOTE

When working with the Client’s employees and experts, always note how many work hours are allocated to working on your project. If the expert cannot allocate enough time to project-relates interviews and other activities, escalate the issue to the next project team level on the Client’s side.

Depending on the session results, additional actualization and detailing of the project task list or additional research of “blind spots” may be needed.

Creating and approving project plan

Based on the initial working sessions, the project manager prepares the Delivery plan draft and holds a team meeting for detailing the project deliveries. Develop the project plan draft, which will be available to the users. Unlike the detailed list of tasks, the plan focuses on the task sequence, deadline and complexity, as well as lists owners of each task.

Conduct presentation of the plan for the Client, collect feedback and make revisions to the plan. After approval, the final version of the plan is handed to the Client’s workgroup and is attached to the project on a resource that is accessible by all project participants.

Creating and approving the Project charter

Make the following amendments to the Project charter template:

- Add project team roster
- Describe the functions that will be implemented
- Add Client’s project team roster

- Research possible limitations
- Publish the documents on a resource, that is accessible by all members of the project team.

Conduct presentation of the document for the Client, collect feedback and make revisions to the Project charter.

NOTE

The [two iterations rule](#) is applied to the Project charter approval process.

SEE ALSO

- [Business concept](#)

Business concept

After the final approval and publication of the Project charter, the next stage of the Elaboration phase is preparing the Business concept, which covers all user operations, including those performed outside Creatio. This document is aimed at forming mutual understanding of the user activities with the system and is created based on the Client's business cases. System user operations are described in the form of BPMN diagrams and cover issues of analytics, integration and software/hardware requirements. The Business concept is created for all stages of the first subproject defined in the roadmap.

NOTE

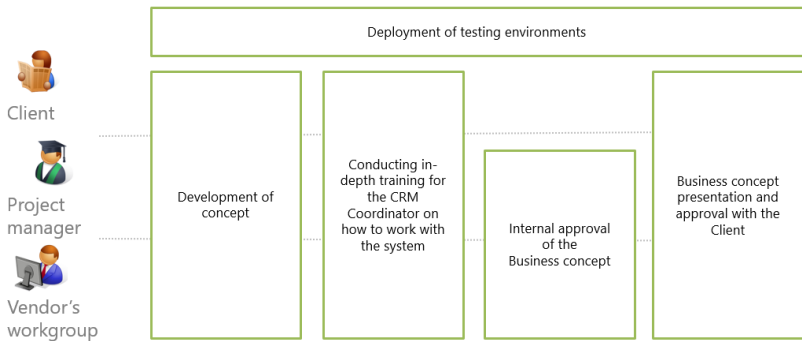
In certain cases, preparation of the Project charter and Project Concept can be done in parallel.

NOTE

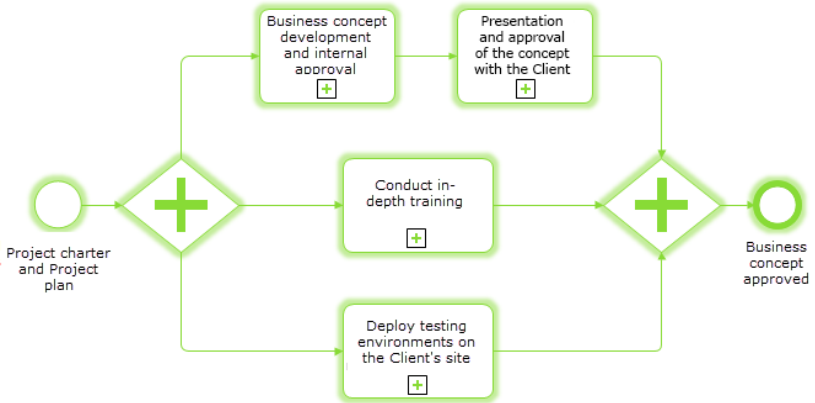
Use the following link to download the [template for project's Business concept](#).

The production group in charge of preparing and approving the business concept includes the Client and the project manager (Fig. 17).

Fig. 17 Business concept development team structure and responsibilities



The process of preparation and approval of the concept includes training of the Client's workgroup and deploying test environment (Fig. 18).

Fig. 18 General process of preparing and approving the Business concept

Developing the concept and approving it within the company

On this stage, business analysts summarize the working session and generate the Business concept. The Business analyst Team lead and/or Project manager conduct weekly review and planning sessions and proofread the Business concept. After internal approval, the business concept is published on the resource of the Vendor's team and is presented internally. Based on the presentation results, the Business concept may be amended.

In-depth system function training for the Client's workgroup

Before the Business concept is submitted for approval, the Project manager organizes an in-depth training on the product functions for the Client's workgroup. A Business analyst or Business analyst Team lead prepares a training plan based on the Client's specifics and conducts the training. Based on the training results, the Project manager certifies the knowledge obtained by the Client's workgroup.

Business concept presentation and approval with the Client

After internal approval, the Business concept is presented to the Client and only after that the document itself is submitted for the Client's review. Agree upon all the feedback and markups received after the Client reviews the Business concept and publish the final version of the document on the shared project document storage.

Deploying testing environments on the Client's site

In parallel with the Business concept development and CRM coordinator's training, begin deploying the testing environment on the Client's site. This is needed to foresee the specifics of integration between Creatio and other Client's systems on the stage of preparing the Technical design document on the Execution phase. Two deployment options are available:

- Cloud – Creatio is deployed in the cloud environment, usually this is production or pre-production environment.
- On-site – testing environment on the Client's servers. For more information about Creatio on-site deployment, please refer to the documentation on the [Creatio Academy](#).

To complete the Elaboration stage, notify the Steering Committee that the Project charter, Project plan, and Business concept documents are ready, the Client's workgroup training is complete and the testing environment is deployed. The Steering Committee confirms transition to the Execution stage.

SEE ALSO

- [Project charter](#)

SEE ALSO

- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

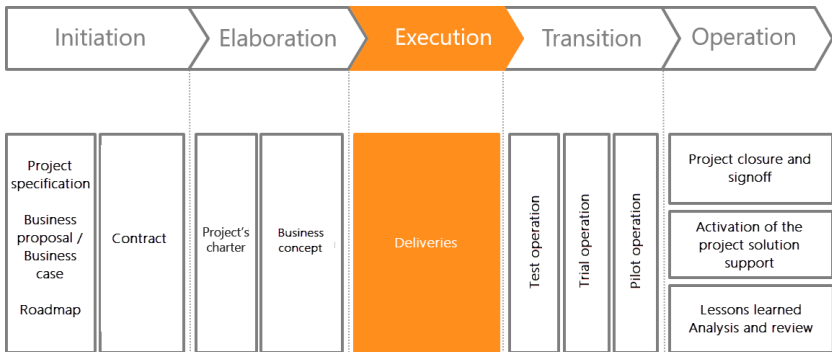
Execution phase

Execution is the third phase of the project, on which the development is done. For this, continuous delivery of test prototypes is carried out.

Transition to the Execution phase from the Elaboration phase (Fig. 19) when:

- Project charter is approved
- Business concept is approved
- Testing environment is deployed on-site or in the cloud
- Client's workgroup has knowledge of the BPMN notation and basic Creatio functions.

Fig. 19 The Execution phase



CONTENTS

- [Business processes of the Execution phase](#)
- [Delivery](#)

SEE ALSO

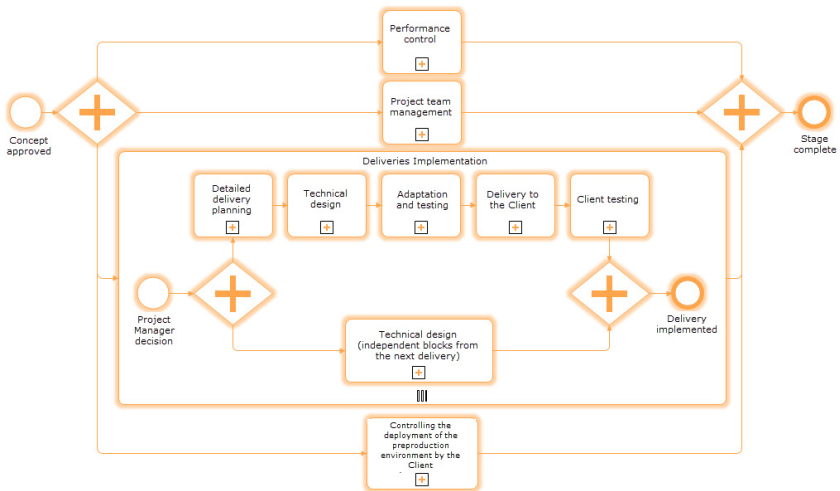
- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Elaboration phase](#)
- [Transition phase](#)
- [Operation phase](#)

Business processes of the Execution phase

Execution phase consists of two deliveries, which are logically related functionality blocks, developed and submitted to the Client's workgroup for testing. The phase has four sub-processes (Fig. 20):

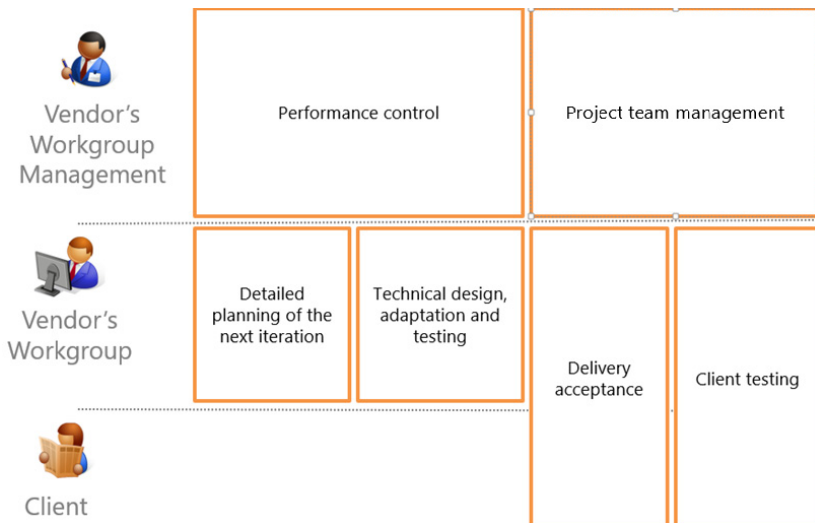
1. Performance control – Project Manager, Business Analyst Team Lead and Developer Team Lead oversee the execution and deadlines of phase steps.
2. Project team management – Project Manager ensures the efficiency, performance and meeting the deadlines.
3. Delivery implementation – a cycle of development, testing and delivery of functional blocks to the Client for testing.
4. Control of preparation of the pre-production environment by the Client – after completing the deliveries, the Project Manager oversees the deployment of the pre-production environment by the Client, to pass to the next stage of the project.

Fig. 20 Schema of Execution phase processes



Business Analyst Team Lead, Developer Team Lead, Project Manager and Client's workgroup are included in the team of the Execution phase (Fig. 21).

Fig. 21 Execution phase structure and responsibilities



SEE ALSO

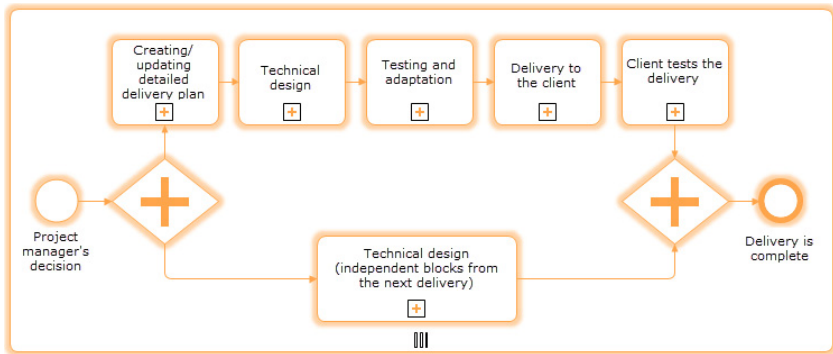
- [Delivery](#)

Delivery

Delivery is the most important part of the Execution phase. The project development is performed according to the plans, stages, Project charter and Business concept documents, that were prepared at the Initiation and Elaboration phases. Project workgroup provides the Client with test-ready prototypes, receives feedback on testing results and implements changes. This repeats until the end the system adaptation according to the developed concept.

Business process of deliveries consists of several stages (Fig. 22).

Fig. 22 Delivery implementation process diagramm



Detailed delivery planning

The purpose of this stage is to prepare detailed plan of the development, delivery and testing of packages with new functionality. The plan is developed by the Project Manager. On this stage:

1. Prepare a draft of the detailed delivery plan, work through and specify the delivery control points:
 - Present the Technical design document to the Client
 - Approval of the Technical design by the Client
 - Readiness of the system for the acceptance
 - Completion of the testing by the Client.
2. Use the real task assessments when composing the detailed delivery plan, including:
 - The ideal time of the task – the time of continuous work of the employee without distractions
 - Time required for technological breaks
 - Time required for team interaction
 - Coefficient of the team's experience – the experience of the project work and the level of the employee teamwork.

NOTE

The average duration of one delivery is from 4 to 6 weeks. The delay between the delivery stages and acceptance of two consecutive deliveries is from 2 to 4 weeks.

ATTENTION

Include a "reserve" for risky and underestimated tasks in the control point assessment, as 25% of the actual estimate of the tasks planned up to the control point. With this risk indicator, the Project Portfolio Manager will be able to assess the feasibility of meeting the deadlines.

3. Prepare and hold a planning meeting to work out a detailed delivery plan with the entire Vendor's workgroup.
4. Formulate the results of the meeting as a detailed delivery plan.
5. Present the detailed delivery plan to the Client.
6. In case the Client requests revisions, make changes to the detailed plan and present it to the Client again. Use the [two iterations](#) principle.
7. After approval of the detailed delivery plan, publish it on a public resource and pass it to analysts and developers.

Technical design

After working out and approving a detailed delivery plan, the analysts prepare the "Technical design" document of delivery, which contains the system requirements for implementation within the delivery. Technical design includes:

- Requirements for fields and interface of the objects/sections
- Detailed requirements for scripts
- Detailed requirements for analytical reports
- Detailed requirements for integrations
- Test cases for checking the requirements.

Test cases are instructions for various operations in the system that can be used to determine whether it meets the requirements at the acceptance and delivery stage within a single delivery and test operation. Test cases are created on the basis of business cases provided by the Client. A test case contains initial data, the actions performed in the system, and the expected results of these actions. Use the following [link](#) to download test case document templates.

A ready technical design needs to be submitted for the Client's approval. If the document is still under approval and the corresponding Analyst has already completed all the planned tasks, they can proceed to documenting the next delivery's functional blocks ([Fig. 22](#)), the process of preparing the technical design of independent blocks from the next delivery).

The stage of technical design for the current delivery is considered completed after the Client approves the Technical design.

NOTE

In some cases, the adaptation and testing of the delivery can start before the signing of the Technical design by the Client. For example, if you want to customize an object model that matches the system being replaced within the project. We do not recommend developing script logic until the Technical design is approved.

Adaptation and testing

At the adaptation and testing stage, the product development is carried out in accordance with the Client requirements and the Technical design. The development department does most of the work here.

The role of analysts is to consult the developers on the created deliveries and testing of the implemented functionality. In some cases, analysts are performing configuration with available user customization tools.

Delivery acceptance

After the functionality included in the current delivery has been developed and tested, analysts or the Business Analyst Team Lead will present the delivery to the Client. It is recommended to hold the presentation in the form of a personal meeting to better involve the Client.

Delivery acceptance is performed via test cases and only by the “happy path” scenario. The Client tests the rest of the cases and passes the first feedback to the development team. Provide the Client with the procedure for receiving feedback:

- Focus on the difference between bugs and improvement requests
- Discuss and agree on the task priorities
- Define the timings for bug fixing and implementing improvements in accordance with the priority
- Define the stages of approval and the scope of implementation of the improvements.

Delivery testing by the Client

At the final stage of the current delivery, the Client's workgroup tests the developed functionality using the test cases and passes the feedback to the analysts or the Business Analyst Team Lead. Divide the feedback into two types:

- **Bug** – a function included in the Technical design is missing or works incorrectly.
- **Improvement request** – any expectations and additions to the developed functionality, which are not covered by the Technical design.

Bugs are corrected within the current delivery, while the improvements are included in the next delivery (if agreed upon).

The procedure for working with bugs and improvement requests

The Analyst or the Business Analyst Team Lead receives feedback from the Client's workgroup, processes it and identifies the bugs that need to be corrected, and improvement requests from the Client.

Bugs are forwarded to the developers. Improvements are forwarded to the Project Manager or Project Portfolio Manager. If improvements require additional funding, the Account Manager responsible for the project agrees on the plan and additional funding for the improvements with the Client.

SEE ALSO

- [Execution phase](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Elaboration phase](#)
- [Transition phase](#)
- [Operation phase](#)

- Delivery of updates

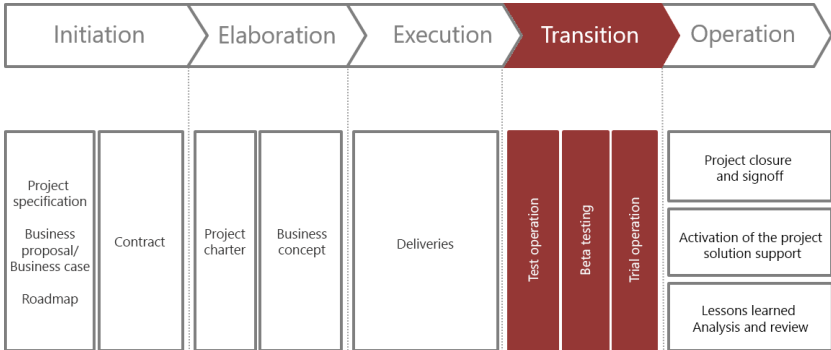
Transition phase

The transfer of deliveries from the test environment to the Client's pre-production and production environments occurs during the Transition phase.

Begin the Transition phase (Fig. 23) when:

- the technical design and test cases of deliveries are approved
- all deliveries based on technical design are completed
- pre-production and the production environments are deployed on-site or in the cloud.

Fig. 23 Transition phase



CONTENTS

- [Business processes of the Transition phase](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Elaboration phase](#)
- [Execution phase](#)
- [Operation phase](#)

Business processes of the Transition phase

The Transition phase consists of the following business processes:

1. **Test operation** – testing of completed deliveries on the pre-production environment with demo data.
2. **Beta testing** – transferring and using the project solution in the production environment.
3. **Trial operation** – the Client’s pilot group is using the project solution exclusively in the production environment.

The Transition phase **team** consists of:

- Vendor’s Project Team and Project Management
- Client’s Business Experts, IT experts and Analysts.

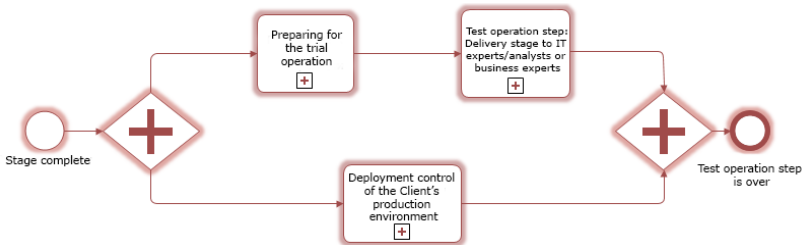
CONTENTS

- [Test operation](#)
- [Beta testing](#)
- [Trial operation](#)

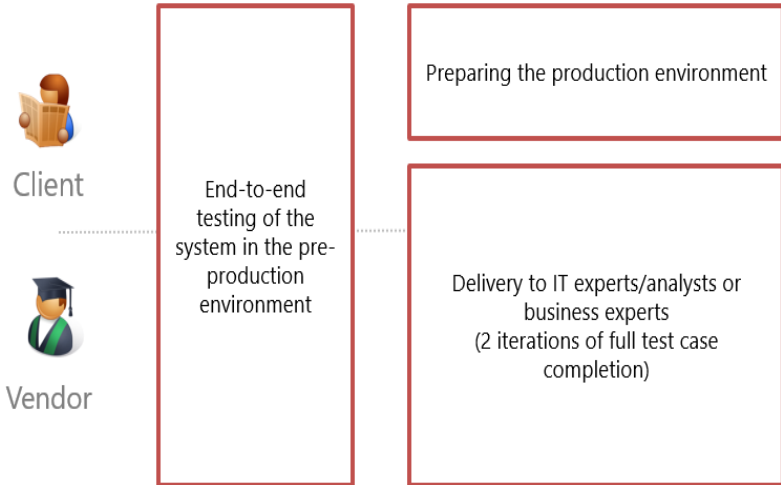
Test operation

All deliveries that were carried out during the Execution phase are compiled and transferred to the Client’s pre-production environment. The transferred functions are then tested by the Client’s workgroup. The bugs are fixed based on the feedback from the Client’s workgroup when all approved test cases have been completed. The test operation begins when all Transition phase steps are summarized, presented and confirmed with the Client. The test operation consists of 3 steps (Fig. 24).

Fig. 24 Test operation business process diagram



The workgroups of the Vendor and the Client, the Project Portfolio Manager or the Project Manager are all part of the test operation team (Fig. 25).

Fig. 25 Test operation structure and responsibilities

Preparing for the test operation

Start the test operation with summarizing, presenting and confirming all Transition phase steps. The Project Portfolio Manager is responsible for conducting a meeting with the Client. Summarize the progress of the Execution phase, approve the steps of the test operation, beta testing, and trial operation processes. Additionally, confirm the following:

- Conditions for transitioning between phase steps
- Infrastructure deployment plan
- How feedback is provided and processed
- How bug fixes are confirmed and carried out
- List of Client's workgroup members during the test operation
- List of Client's workgroup members during beta testing

After the presentation, the Business Analyst (or Business Analyst Team Lead) creates a test operation check-list. This checklist will enable you to effectively monitor the progress of Client's testing processes.

The developers deploy the solution on the Client's pre-production environment, and synchronize all data with the Client's pre-production systems.

The last preparation step involves migrating the client's data for testing purposes, and creating the demo data based on the test cases provided by the Client. The first step is carried out by the Developers, the second is carried out by Business Analysts.

Test operation – delivery to IT experts/analysts and/or business experts

The Client's workgroup receives the deployed solution for testing in the pre-production environment. Prior to that, analysts perform independent end-to-end testing, which includes integration debugging. Additionally, the analysts prepare the following documents:

- Configuration guide

- User guide.

The delivery is made to the Client after successful end-to-end testing. The IT experts/analysts (if this department exists) and the business expert workgroups receive the delivery. A delivery implies that all test cases described in the technical design step are completed. If necessary, conduct a training for users who have not previously participated in the project.

During Client's testing, the CRM coordinator provides feedback on any found bugs. The project manager monitors the user activity and the feedback they provide.

After fixing all high-priority bugs, the delivery to Client's analysts or business experts is carried out again. Fix all high and critical priority bugs to move on to the next step of the phase.

SEE ALSO

- [Beta testing](#)
- [Trial operation](#)

Beta testing

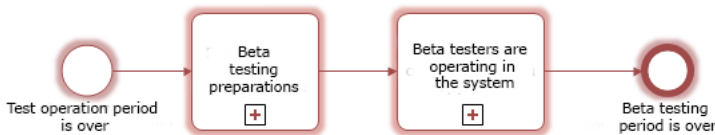
The tested and refined solution is transferred to the Client's production environment for beta testers to use during this step.

The transition from the test operation to beta testing occurs when:

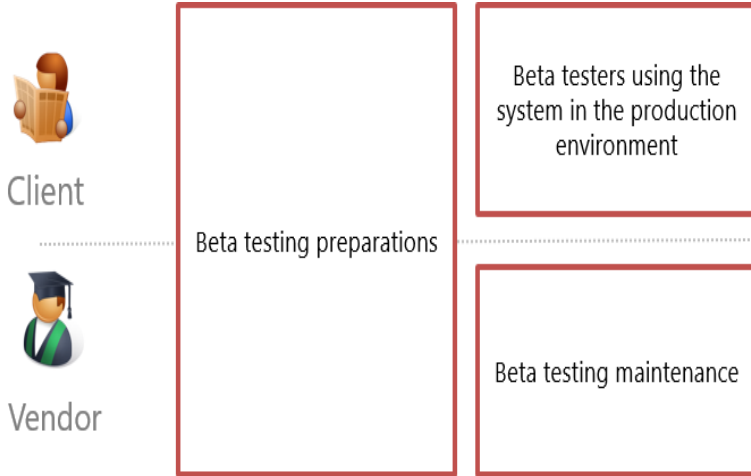
- all test cases are completed successfully
- all high-priority bugs have been fixed
- the production environment is deployed in the cloud or on-site.

The beta testing step includes the following business processes (Fig. 26):

Fig. 26 Beta testing process diagram



The beta testing team includes Analysts, Developers, the Project Manager / Project Portfolio Manager, as well as the Client's workgroup and CRM Coordinator (Fig. 27).

Fig. 27 Beta testing structure and responsibilities

Preparing for beta testing

An analyst or the a Business Analyst Team lead updates the system's operating procedures, based on the test operation regulations. The Vendor's Developers are preparing the production environment. To set up integration:

- remove all test and demo data from the database
- set up integrations
- set up Client's primary data in the system

When the production of the solution is ready, the workgroups of the Client and the Vendor test the business cases. Based on their feedback, all high priority bugs are fixed and the process moves on to the next step.

Beta testing

The second and the main stage of beta testing process begins when beta testers start working in the production environment. The Project Manager organizes the training for the workgroup. The Analysts conduct the actual training. The project manager organizes the training for the group, and the analysts conduct the actual training.

After the initial training, the Client's CRM Coordinator tests the workgroup's knowledge and, if necessary, gives additional training. The solution is then passed to the beta testers for further use. Depending on the size and complexity of the project, it is also possible to train users in the "baby-sitting" mode. The duration of this type of training is indicated in the project's Project's Charter.

NOTE

The "baby-sitting" mode assumes individual training and support during the whole beta testing stage by the Vendor's employees.

During the beta testing, the beta testers provide feedback about any found bugs to the CRM coordinator, who passes this information to the Vendor afterwards. Based on the feedback, a routine update is carried out every two weeks to fix all critical bugs.

SEE ALSO

- Test operation

SEE ALSO

- Trial operation

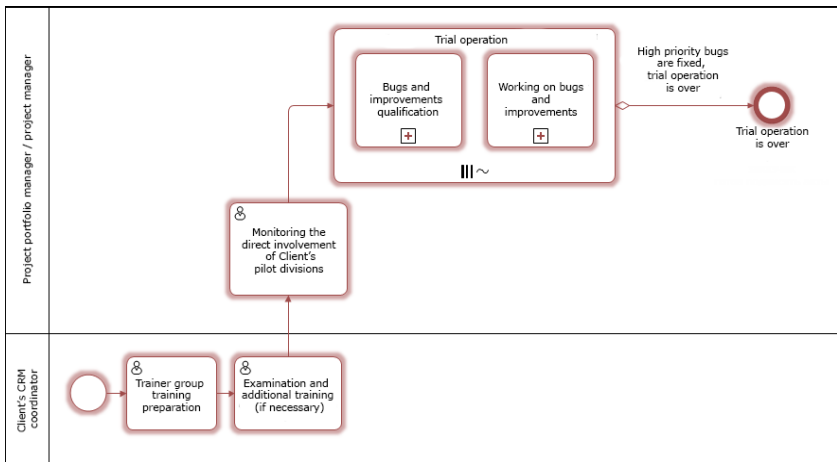
Trial operation

The last stage of the Transition phase is the trial operation of the system by the customer's pilot group, approved in the project's charter. The difference between beta testing and the trail operation is the fact that during the latter the system is used by the end-users of the Client in real business scenarios.

Transition to trial operation (Fig. 28) when:

- the solution is deployed on the production environment and is used by the pilot group
- the beta testing period is over
- all high and critical priority bugs have been fixed
- the regulations are updated.

Fig. 28 Trial operation process diagram



The trial operation team consists of the Client's and Vendor's workgroups, the CRM Coordinator and the Project Portfolio Manager / Project Manager (Fig. 29).

Fig. 29 Trial operation step structure and responsibilities

The business process of the trial operation

At the first step of the pilot operation, the Client's CRM Coordinator instructs a group of Client's trainers. Their knowledge is then tested and, if necessary, additional training is performed. The trainers then train Client's pilot group.

For transition to the trial operation, the direct involvement of the divisions participating in the pilot operation is monitored by the Project Portfolio Manager.

Then, the trained pilot group of the Client starts the trial operation of the system, as in working with the configured system in real-life business scenarios. The duration of trial operation depends on the project scale and is determined by the schedule. During the operation, the pilot group provides the Vendor with the feedback about any bugs found. Based on their feedback a routine update is carried out every week or every two weeks with the aim to fix all high-priority bugs.

The trial operation step and the Transition phase are completed when all bugs of medium, high and critical priority have been fixed and the time period specified in the calendar plan has expired.

SEE ALSO

- [Test operation](#)
- [Beta testing](#)

SEE ALSO

- [Operation phase](#)
- [Delivery of updates](#)

Operation phase

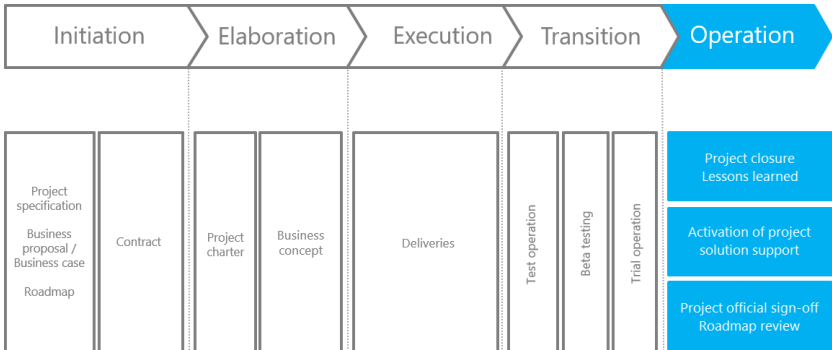
Operation is the fifth and final phase, marking official conclusion of the implementation project. This phase includes:

- project wrap-up
- documenting completed project tasks
- review of lessons learned
- activation of project solution support
- presentation of project results to the customer
- Roadmap review.

Transition to the Operation phase (Fig. 30) occurs when:

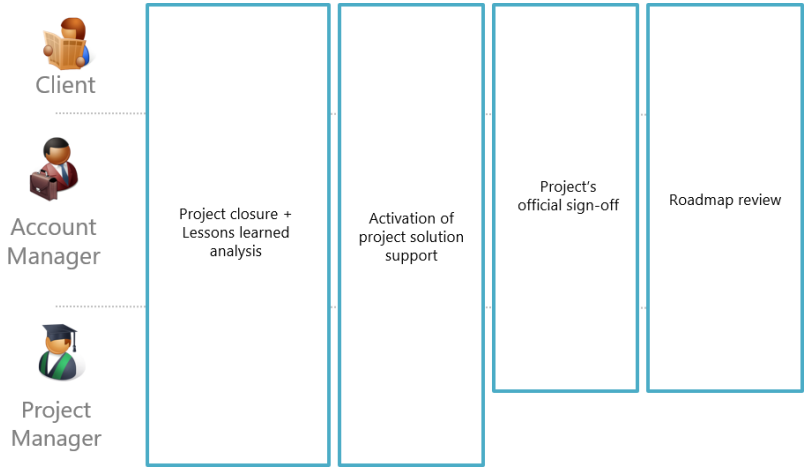
- customer’s pilot group is already working in the production environment
- pilot operation term defined in the project plan has expired
- no critical, high or medium priority errors exist.

Fig. 30 The Operation phase



The Operation phase workgroup consists of the Client’s and Vendor’s Project Managers and the Account Manager (Fig. 31).

Fig. 31 Operation phase structure and responsibilities



CONTENTS

- Implementation experience review and activation of project solution support
- Official project sign-off and Roadmap review

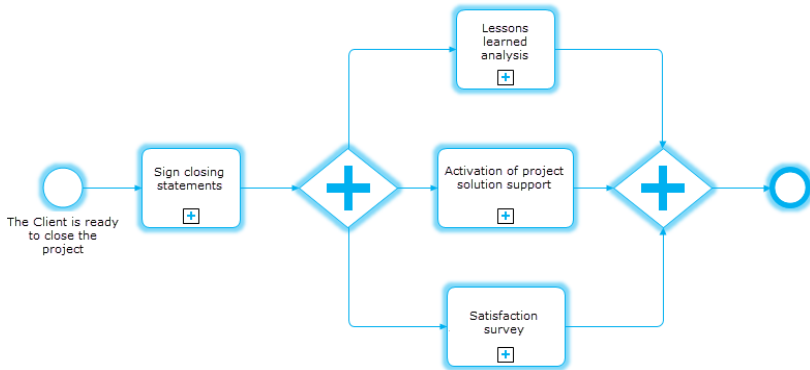
SEE ALSO

- Project workgroup structure
- Project regulations
- Initiation phase
- Elaboration phase
- Execution phase
- Transition phase
- Delivery of updates

Implementation experience review and activation of project solution support

On the first stage of the Operation phase, the whole project is reviewed and closing statements (or other documents foreseen by the contract) are signed. This step includes several business processes that, as a rule, run in parallel (Fig. 32).

Fig. 32 Project analysis and support activation processes



Official signing of closing statements

This stage is relevant for Vendor implementation and only if the contract between the vendor and the Client foresees signing closing statements or other similar documents. In this case, project closure starts with official signing of closing statements. Vendor's project manager, in cooperation with the Accounting department, prepares closing statements and submits them for signing by the Client. Scanned copies of the signed closing statements are then attached to the project documentation.

At this stage, the project documentation is verified and filed. Ensure that the following documents are filed:

- Project charter
- Business concept
- Technical design
- Signed closing statements (if stipulated by the contract).

Lessons learned

Project Managers and Vendor's workgroup review the completed project to identify and analyze errors and shortcomings. Project team's development zones are identified at this stage. Also, Developer and Business Analyst teams, Team Leads and Project Managers prepare lists of lessons learned from the project. A meeting is then held to discuss their development zones. Meeting participants:

- Project Director
- Project Portfolio Manager
- Project Manager
- Developer and Business Analyst Team Leads

- Developer and Business Analyst Teams

Activation of the project support

This stage is optional, but is highly recommended and must be performed only if the Client requires support of the project solution. In this case, the Project Manager initiates the sale of a support package, while the Account Manager makes arrangements to bill the Client.

NOTE

Please note that the project Vendor is responsible for compatibility of the features developed as part of the project with future Creatio versions. We strongly recommend agreeing on the project solution support with the Vendor to ensure healthy system development and continuous operation in the future.

Satisfaction survey

At this stage, the Project Manager requests project feedback from the Client. Along with the lessons learned, this stage lets the Project Manager identify project bottlenecks.

We recommend that the project satisfaction survey is conducted by a third party, and not by one of the project participants. This will ensure accuracy of the survey results and impartial evaluations.

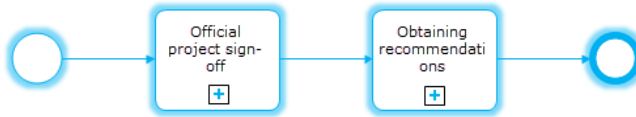
SEE ALSO

- [Official project sign-off and Roadmap review](#)

Official project sign-off and Roadmap review

The Operation phase (and the whole project) is concluded with the official project closure sign-off and includes two sub-processes (Fig. 33).

Fig. 33 Project closure sign-off processes



Sign-off

In the process of the project closure sign-off, the Project Manager prepares an updated Roadmap for the Client. The previous Roadmap version, as well as remarks and suggestions received in the process of implementation are taken into account when preparing the updated Roadmap. After that, official presentation is organized for the Stakeholder and the Project Sponsor, with the Account Manager's participation. During the meeting:

- Make a presentation of the project results
- Demonstrate the project solution
- Discuss the Roadmap

Obtaining recommendations

If the Client is ready to provide recommendations and post news about successful project completion on open resources, prepare and approve the news text and verify that the Client prepares the recommendations. This stage is valid for external implementation projects. In case of independent implementation, we recommend posting the news on your corporate website.

SEE ALSO

- [Delivery of updates](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Elaboration phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

Delivery of updates

A delivery is a set of Creatio packages containing the developed functionality. Functionality updates are delivered only during the Execution and Transition phases.

The base functionality of a project solution is developed during the Execution phase. Therefore, all development is carried out only in the main project development and test environments (adaptation and test phase). When the entire development is completed, the delivery functionality is tested in the Client's testing environment. For more information about this process, please see the "[Execution phase](#)" chapter.

The base functionality is updated during the Transition phase. The pre-release and release project solution versions are finalized and released afterward. The delivery process is covered in the Transition phase chapter "[Transition phase](#)".

CONTENTS

- [Delivery environments](#)
- [Execution phase deliveries](#)
- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)
- [Client's parallel development](#)
- [Client environment location and licensing](#)

SEE ALSO

- [Project workgroup structure](#)
- [Project regulations](#)
- [Initiation phase](#)
- [Elaboration phase](#)
- [Execution phase](#)
- [Transition phase](#)
- [Operation phase](#)

Delivery environments

A delivery environment is an independent Creatio application with a separate database. Depending on the purpose, the working environment can be deployed both in the cloud (production, pre-production), and on-site (development and testing environments).

NOTE

In Creatio, using any configurations (workspaces) other than the default one is not recommended. Using configurations in the production environment is forbidden.

The delivery environments can be divided into two groups: project environments and Client environments.

Project environments

Project environments are implemented on the project developer side. They are configured for maximum productivity. The project environment databases contain very few demo records, if any.

Project environments include:

- **Primary development environment** (Project_D). Used by project teams for development before delivery pre-releases.
- **Primary testing environment** (Project_T). Used by project teams for functionality testing up until the delivery pre-release stage.
- **Pre-release development environment** (Project_D_RC). This environment corresponds with the delivery which is NOT installed on the Client's production environment and is on verification (a release candidate). This environment is optional. Here, developers fix delivery errors and transfer changes to the primary development branch. At the same time, the project team's developers are already working on the next delivery.
- **Pre-release testing environment** (Project_T_RC). This environment is utilized by project teams to test the developed delivery functionality, which is currently on verification, but has NOT been installed on the Client's production environment yet (release candidate).
- **Release development environment** (Project_D_R). This environment corresponds with the version of the Client's production environment (release). This environment is optional. It is usually needed for specific production environment fixes. The RC and R environments are designed for continuous delivery.
- **Release testing environment** (Project_T_R). This environment is used by developers for testing of "hotfixes" – changes that must be made directly in the Client's production environment.

NOTE

The RC and R environments are designed for continuous delivery work. Therefore, it is unnecessary to create these environments if continuous work is not required.

Client environments

Client environments are deployed on the client's site.

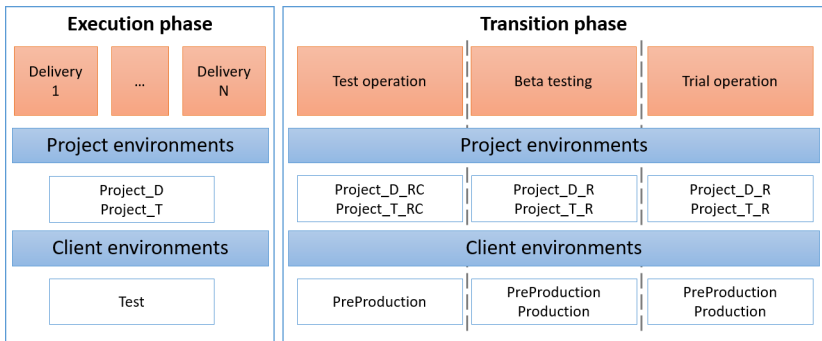
- **Client development environment** (Client_D) is where the Client performs in-house development. This environment is optional.
- **Client testing environment** (Test). This is a hardware-software environment where Creatio and all integrated systems necessary for testing of delivery results are deployed. Client testing environment contains test records. The testing environment is deployed in the same way as the

pre-production environment. This environment is required only if the Client needs to test internally developed functions.

- **Pre-production environment** (PreProduction) is a copy of the production environment, required for testing the impact of delivery changes on third-party functions.
- **Production environment** (Production) is utilized by the Client for routine commercial use.

Usually, one project environment and one client environment is enough, with the exception of the Transition phase, which requires deployment of separate environments for each of its stages (Fig. 34).

Fig. 34 Project and client environments on the Execution and Transition phases



SEE ALSO

- [Execution phase deliveries](#)
- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)
- [Client's parallel development](#)
- [Client environment location and licensing](#)

Execution phase deliveries

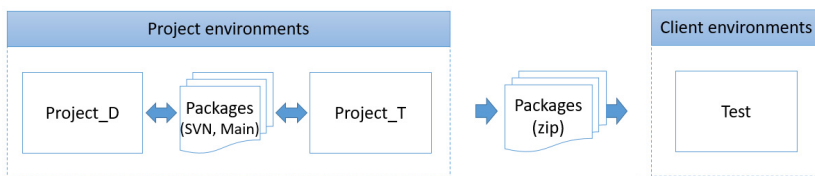
The development teams work in the main development environment (Project_D) at the adaptation and testing stage of the Execution phase (Fig. 35). Then the packages with the developed functionality are transferred to the main test environment (Project_T). As a rule, packages are transferred between environments in the version control system (SVN). All development is carried out in the “Main” SVN repository branch in this case.

NOTE

The package transferring process can be automated with the help of TeamCity, for example.

When all the delivery functionality is developed and tested, it is given to the Client for testing. To do this, the Client needs to deploy a Testing environment (Fig. 35). Packages with configuration elements containing the developed functionality are delivered to the Client. As a rule, the Test environment package installation is carried out by the Client.

Fig. 35 Forming an Execution phase delivery



NOTE

If Client's development is not carried out in parallel with the project team, the Test Client environment can be replaced with the Pre-production environment. This is done to reduce the efforts associated with package installation and emergency situation support.

SEE ALSO

- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)
- [Client's parallel development](#)
- [Client environment location and licensing](#)

Transition phase deliveries

The base functionality developed during the Execution phase is finalized during the Transition phase, which also includes test operation, beta testing and trial operation. Deliveries of this phase are formed in several steps.

1. Delivery requirement implementation

The project team implements a delivery requirement by performing sprint tasks. Development is carried out in the main development environment (Project_D). All changes fall into the "Main" SVN repository branch. Implemented functionality testing is performed in the main test environment (Test_T) in accordance with delivery requirements.

2. Forming a pre-release version of the delivery (RC)

When delivery requirement implementation is done, a project manager (PM) decides to form a delivery. To do this, create pre-release delivery environments for the Project_D_RC and Project_T_RC deliveries by copying the main environments (Fig. 36).

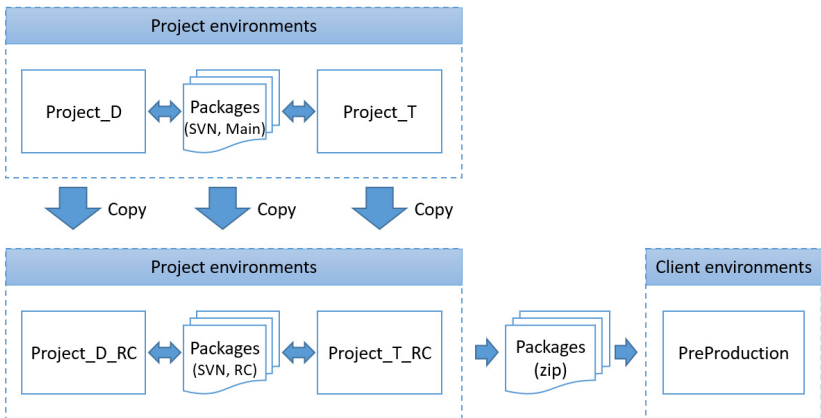
At the same time, it is necessary to create the "RC" branch in the the "Main" SVN repository branch and carry out further development there.

NOTE

The process of copying main environments and creating new SVN branches can be automated by using TeamCity, for example.

Packages with implemented functionality are installed on the Client's Pre-production environment for delivery testing.

Fig. 36 Forming pre-release environments



3. Fixing a pre-release delivery (RC)

During delivery testing by either a team or a Client, there may be a need to fix errors or modify the developed functions (hotfix).

All types of corrections of errors found during delivery testing are applied in the Project_D_RC pre-release development environment. The corrections are committed in the RC branch of the SVN

repository and are tested in the Test_T_RC pre-release testing environment. The process continues until the Client confirms a delivery and until a decision is made to transfer a delivery to the release.

NOTE

If there were any fixes in the Project_D_R environment, the developer must transfer the changes to the main development branch (Project_D environment, the "Main" branch in the SVN repository).

4. Forming an (R) release

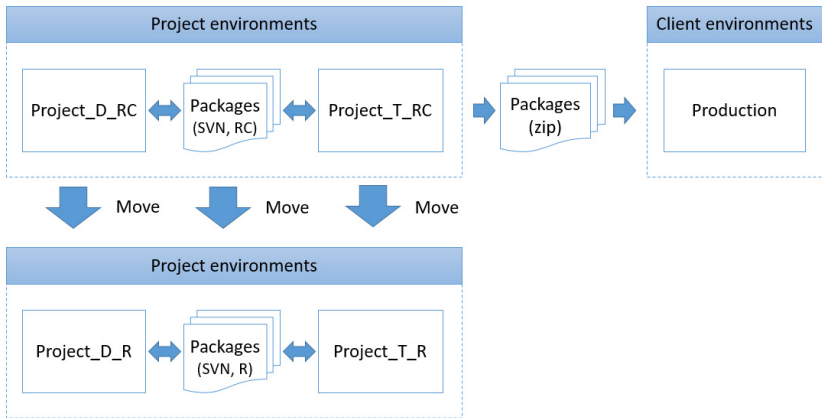
As soon as the decision on release a delivery has been made, the packages with new functions can be transferred directly to the Client's production environment (Fig. 36). The Project Manager creates a release from an RC version, release development environment (Project_D_R) and release testing environment (Project_T_R). The Project_D_RC and Project_T_RC environments are deleted (Fig. 37). The Project_D_R and Project_T_R environments will be used for fixes in the release.

At the same time, the RC pre-release development branch in the SVN repository should be moved to the R release branch and all further delivery work should be carried out there.

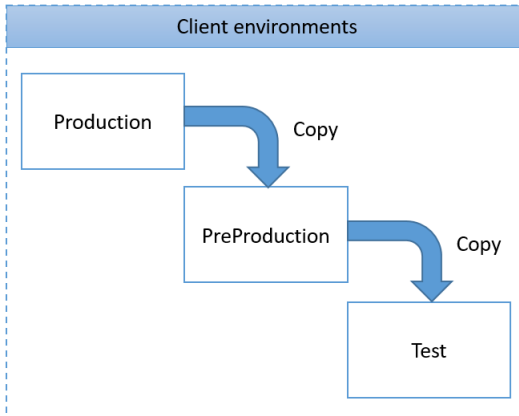
NOTE

The process of forming release environments and creating new SVN branches can be automated by using TeamCity, for example.

Fig. 37 Release delivery and creating release environment



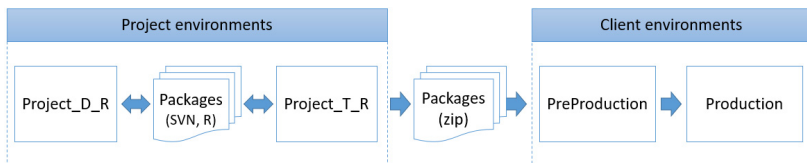
The release delivery assumes that the primary development has been completed. All further development will be connected to release fixes only. Therefore, when the functionality is transferred to the production environment, it is necessary to update (synchronize) the pre-production and the test Client environments (Fig. 38). This way, they will fully correspond to the production environment.

Fig. 38 Synchronizing client environments**NOTE**

If the Client does not perform development in parallel with the project team, the client testing environment is not needed.

5. Fixing an (R) release

All release changes (hotfixes) are carried out by developers in the Project_D_R development environment, committed in the R release branch of the SVN repository and tested in the Test_T_R test environment. After successful testing in the Project_T_R environment, packages with delivery fixes must be transferred to the client's pre-production and production environments (Fig. 39).

Fig. 39 Release fixes and project support stage improvements**NOTE**

If there were any fixes in the Project_D_R environment, the developer must transfer the changes to the main development branch (Project_D environment, the "Main" branch in the SVN repository).

SEE ALSO

- Deliveries on the project solution support stage
- Client's parallel development
- Client environment location and licensing

SEE ALSO

- Delivery environments
- Execution phase deliveries

Deliveries on the project solution support stage

At the project solution support stage (during and after the Operation phase) there may be a need to fix errors or modify the functionality (apply hotfixes). This process is similar to that of the Transition phase release fixing stage.

All release fixes must be carried out by developers in the Project_D_R development environment (Fig. 37), committed in the R release branch of the SVN repository and tested in the Test_T_R testing environment. After successful release testing in the Project_T_R environment, packages with fixed deliveries must be transferred to the Client's production and pre-production environments (Fig. 38).

SEE ALSO

- [Client's parallel development](#)
- [Client environment location and licensing](#)

SEE ALSO

- [Delivery environments](#)
- [Execution phase deliveries](#)
- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)

Client's parallel development

If necessary, a Client may carry out their own development in parallel with the project teams. To organize the development process, the Client can use any existing methodology, for example, PRINCE2.

1. General recommendations for Client development process organization

We recommend deploying one or more Client_D development environments for the Client. Please refer to the ["Organizing a development environment"](#) article in the Development Guide for more details.

Custom solution development is carried out in user packages. The development process can be divided into two stages: development and implementation.

Development is carried out in the main development environment (Project_D) (Fig. 40). All changes fall into the SVN repository of the Client. Functionality testing is performed in the Test Client environment. At the same time, package transferring between development and testing environments is possible both through the SVN repository of Client and as zip archives (Fig. 41). The use of SVN is recommended for intensive development by several developers. Use .zip archives to develop in the cloud.

Fig. 40 Client's development process using SVN

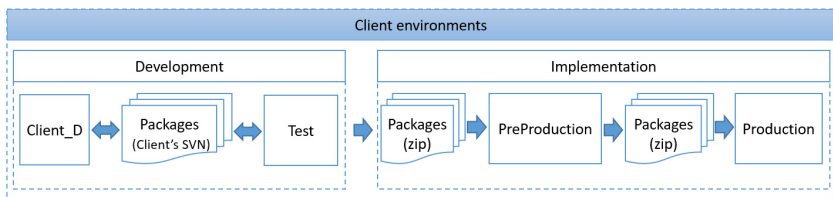
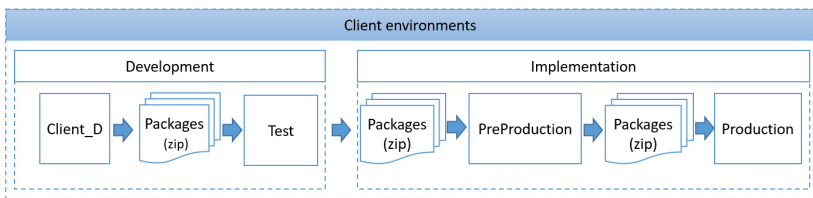


Fig. 41 Client's development process using .zip archives



The new functionality is implemented once both development and testing are done. Packages must be transferred to the pre-production environment first for final testing. If no errors are detected in the pre-production environment, the functionality can be transferred to the production environment.

We recommend using zip-archives to transfer packages with developed functionality to the pre-production and production environments.

2. Communication with project developers

Conflicts usually do not arise if Client functionality does not overlap with project solution functionality (i.e. no scheme / class inheritance, Client packages are not dependent on project solution packages, etc.).

A conflict may arise when project teams make changes if the Client's functionality depends on project solution functionality. In this case, continuous communication between Clients's and project teams is necessary.

SEE ALSO

- [Client environment location and licensing](#)

SEE ALSO

- [Delivery environments](#)
- [Execution phase deliveries](#)
- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)
- [Client's parallel development](#)

Client environment location and licensing

The Client is directly responsible for the physical locations of the Client's development, testing, pre-production and production environments.

We recommend using cloud deployment option for all environments, with the exception of the development environment.

If a Client is looking to carry out intensive development on their own, we recommend utilizing the on-site development environment and referring to the "[Organizing a development environment](#)" article in the Development Guide for more details.

If the development is carried out with small functionality changes, the development environment can be deployed on the cloud as well.

Licensing

Regardless of development environment location (on-site or cloud), licensing of development, test and pre-production environments depends on the number of purchased licenses.

If the Client purchased more than 20 base licenses, then the Client's development, testing and pre-production environments can be licensed based on their CustomerID. In this case, if the Client plans to deploy an in-house on-site development environment, they need to contact dedicated Creatio Customer Support Manager to obtain licenses. If the Client plans to deploy the development environment in the cloud, they need to contact their Customer Support Manager as well.

If the Client purchased less than 20 base licenses, they will need to purchase additional license for every development, testing and pre-production environment.

Please contact your Customer Support Manager with any additional license-related questions.

SEE ALSO

- [Delivery environments](#)
- [Execution phase deliveries](#)
- [Transition phase deliveries](#)
- [Deliveries on the project solution support stage](#)
- [Client's parallel development](#)
- [Execution phase](#)
- [Transition phase](#)