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Temenos Implementation Methodology - TIM

DETAILED INFORMATION

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1. About Temenos Implementation Methodology

The Temenos Implementation Methodology (TIM) is designed to provide our Services organisation with structured delivery processes that create defined value for our Clients.

The detailed TIMs cover the implementation of a range of Temenos products, both on premise and in the Temenos Cloud, big bang or phased go-lives

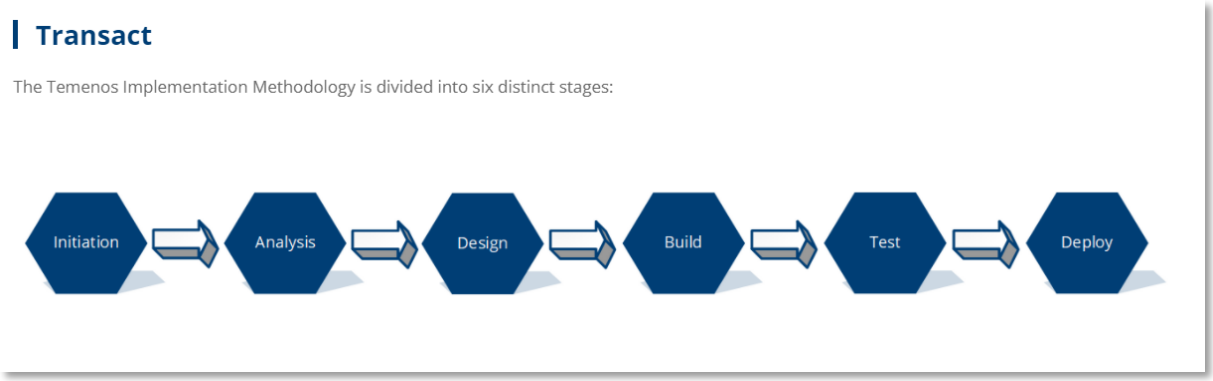
Each of the individual TIMs describes in detail, stage by stage, the activities required to bring the project to a successful conclusion. It facilitates predictability, visibility and control, providing a comprehensive planning and control process through all stages of the implementation.

All implementation and upgrade projects primed by Temenos are mandated to follow the TIM and Monthly Internal Project Reviews (IPRs) ensure compliance with the TIM.

As part of the Partner Agreements, each of our implementation partners commits to following the TIM.

In addition, for partner-primed implementations, Temenos offers a TPCS service to Clients that includes ensuring adherence to TIM.

2. TIM for Transact



TIM for Transact covers the following stages:

- Initiation
- Analysis
- Design
- Build
- Test
- Deploy

2.1. Initiation

In this section we focus on the Initiation stage.

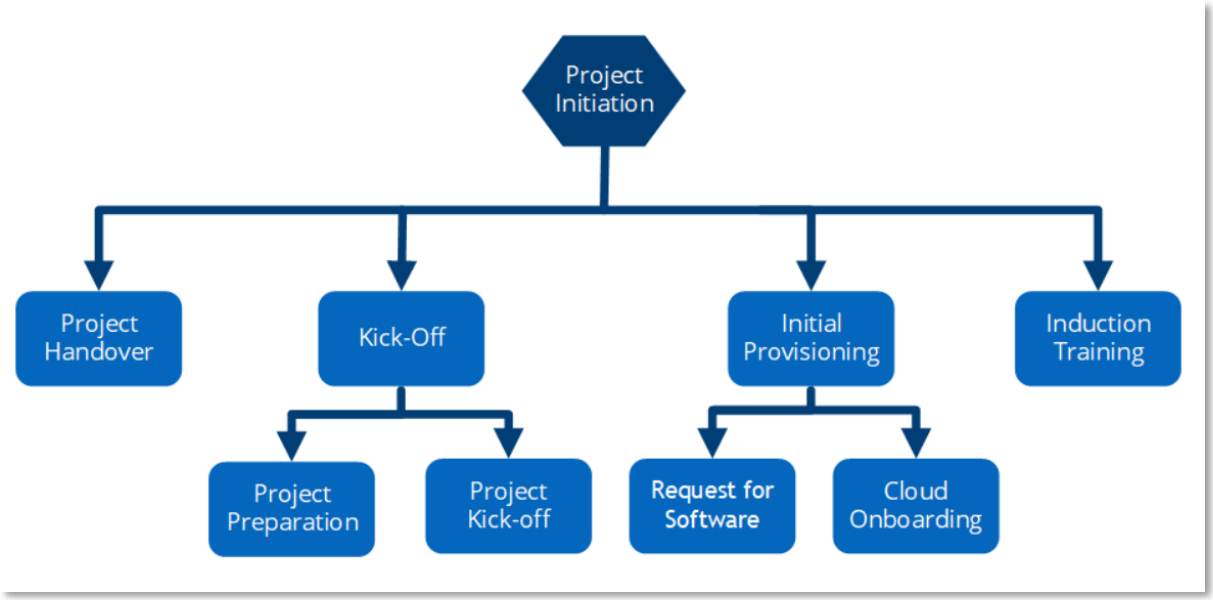
Please note that Temenos Dedicated Cloud Services offers the Client a set of IT Services to manage Temenos products hosted in Temenos Cloud. With Temenos Managed Cloud Services, Temenos hosts the software licensed by the client in the Temenos Cloud.

For on-premise implementations, Temenos provides the software and the licenses, but has no role in the daily operations of the solution since that is either hosted by the client or by a third party on behalf of the client.

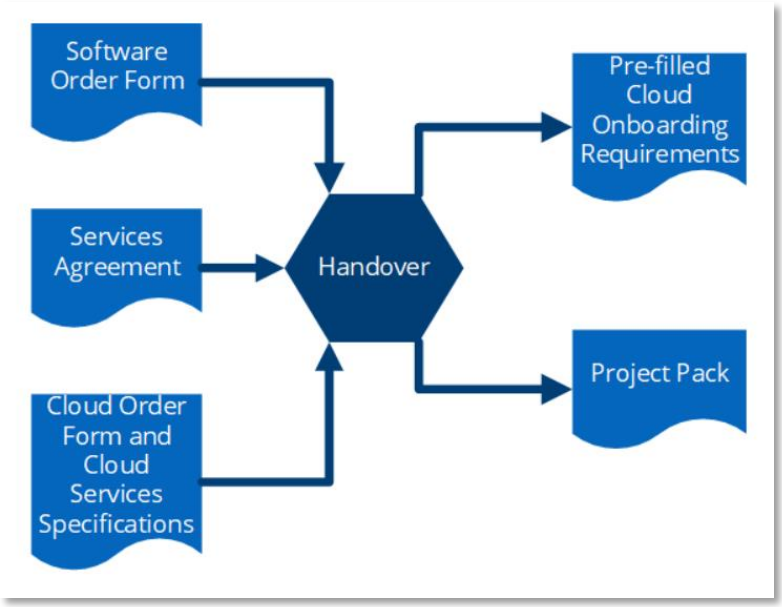
This methodology is compliant with Temenos Cloud Architecture 1.1 and Cloud 2.0.

Various Temenos Cloud actors may be referred to in this methodology:

- Cloud Delivery Manager
- Service Delivery Manager
- Cloud Command Centre
- Cloud Security
- Cloud Architecture
- Operational Readiness Board
- Cloud DR Manager
- Cloud Service Desk
- Regional Cloud team



2.1.1. Handover to Services



Summary:

During the sales cycle of the software license or the Cloud Services, the sales, pre-sales and engagement teams gather a significant amount of information, much of which is of relevance to the implementation team.

A Client may sometimes feel frustrated when forced to cover old ground with the implementation team. Such Client frustration can be minimised if the handover process is executed efficiently.

The Temenos product management team, the project implementation consultants and, if this is a Cloud implementation in the Temenos Cloud, the Temenos CDM must also be included in the handover process to ensure the development and the expected implementation tasks are clearly communicated.

It is critical to ensure that all parties are fully aware of their own responsibilities relating to any specific issues around, for example, data security or employee vetting and any non-standard contractual clauses, such as penalty clauses.

For implementations in the Temenos Cloud, any Cloud deltas identified during the sales cycle should be also highlighted and reviewed during the handover.

For any Temenos-primed implementation, the PM must pay close attention to the L3 Developments listed in the SOW, Cloud Order Form or Software Order Form and ensure that they match the L3 Developments listed in T-Focus. An extract from T-Focus should be requested from the Temenos PDM to assist reconciliation. Any discrepancies must be resolved between the PM, the Temenos ASM and the CEM. This will be checked during the IPR at the close of the Initiation Stage.

For partner-primed implementation, the Temenos PDM is responsible for performing this task.

2.1.1.1. Prepare for Handover

The CEM (or partner equivalent) is responsible for managing this process, where the sales, pre-sales and client engagement teams work with the implementation team to review all relevant documentation gathered during the engagement.

Not all information gathered during the sales cycle is relevant for handover. The emphasis is not on delivering all documentation, but on handing over the most appropriate information.

2.1.1.2. Produce Project Pack

We've found it useful to compile an index of the available documents for the use of the project team. There's no specific format or template for this, it just makes sense to pull all relevant documents together into one place.

As a guideline, the project pack should contain at least the following:

- summary of SOW
- summary of any RFS documents
- overview of modules licensed
- either (a) Software Order Form and Cloud Services Specifications or (b) Cloud Order Form
- high-level project plan
- initial Risk Log (if Temenos-primed, pre-populated with the data from the T-Force Risk Profile)

If the project is delivering to a Temenos Cloud, then attention must be paid to the following:

- Cloud contracts
- Temenos products to be implemented
- Required / contractual environments
- interfaces and integration
- architecture
- non-functional deltas, which describe the deviations from the standard SLA
- agreements on L3 developments (if any)

The PM should then distribute the collated Project Pack to the project team (including Temenos Cloud Delivery manager).

The CEM should fill out the following sections from the Cloud Client Onboarding Requirements Document:

- Cloud contracts
- Client details
- Project details
- Products
- Environment
- Interfaces & Integration
- Architecture

2.1.1.3. Run Handover Meeting(s) and Review Documentation

Depending on the size, scale and complexity of the project, one or more handover meetings will be needed. The PM and CEM will agree and schedule the required number of meetings; it may be useful to produce an agenda to manage the meetings effectively.

Some areas that are of interest to the incoming project team:

- Client overview
- project rationale
- organisation chart

- SOW High Level Overview
- project governance (including whether TPCS and L3 development governance has been contracted, if partner primed)
- contracted Temenos support to the project/client/partner (if partner primed)
- key assumptions
- target system infrastructure (including Cloud specifics)
- known gaps/deltas/interfaces, including Cloud deltas impacts and environments needs

If the project is primed by Temenos, the following topics are additionally discussed:

- contract details
    - payment terms
    - milestones
    - termination clauses
    - unusual acceptance criteria
    - expenses clauses
    - data security
    - employee vetting
    - non-standard contractual clauses, such as penalty clauses
- Services expectation/commitment details (such as pricing structure)

In addition, certain key pieces of project administrative information, if known, should be shared amongst the project team:

- PMO roles and responsibilities
- time management (e.g. project codes, tasks codes, etc.)
- other relevant IPR/ODB information (if Temenos primed)
- expenses management (e.g. agreed travel policy, recommended hotels, etc.)
- document management (where project documents are to be stored)

2.1.1.4. Close the Handover Process

The PM will ensure that any actions raised during the meetings have been assigned to an owner and have a closure/delivery date. The issues /actions logs in any project dashboards should be updated accordingly to ensure that all actions are tracked to closure.

2.1.2. Project Preparation

Preparing for a project can be an extensive task, taking some time. The preparation aims at refining the Statement of Work, which was produced in the pre-Initiation stage. Achieving a clear, unambiguous agreement on the aims and objectives of the implementation and on the way those objectives will be met is an essential pre-requisite for the smooth execution and the successful outcome of the project.

In addition to the above, the PM, supported by the Client Project Manager and (if appropriate) the Temenos CDM, will create a PID, which may subsequently be used by incoming project participants. This document will describe in detail such items as accommodation and travel arrangements, team contact numbers and any information related to the dress codes or rules of the implementation site, for example all Fire, Health and Safety procedures.

Resourcing of the project, both on the side of the Client as well as on the side of the Implementer, is an important part of project preparation. The processes for risk, change, communication and

resource management will all be agreed. A project document repository is set-up, methodology and templates are agreed and made available for the key deliverables.

If the project deploys in the Temenos Cloud, the Temenos CDM will ensure the provisioning of an MB environment limited to induction training and Process-led Workshops, if so indicated in the Cloud Order Form and the Cloud Services Specification. For other projects, the PM submits a request for the provision of software for such environment from the Temenos Distribution team. The deployment of that software into an on-premise environment will be the responsibility of the PM.

Ahead of the formal Kick-Off, the PM will review certain key project deliverable documents.

2.1.2.1. Review Project Plan

The Project Plan is reviewed by the PM and, where appropriate, the Temenos CDM to ensure clear agreement and alignment on the following, as a minimum:

- key dates
- implementation resources
- Client's resources
- any environment schedule

2.1.2.2. Review Communication Plan

At a high level, some of the elements of communications planning are defined in the Pre-Initiation stage. The PM will review any agreements in the Statement of Work and, expanding upon these, will produce a draft Communications Plan to be presented to the Client Project Manager for agreement.

2.1.2.3. Review initial Risk Log

The PM will review the Risk Log at this stage and ensure that (if appropriate) Cloud Services and Security related risk are also recorded.

If this is a Temenos primed project, the Governance team is responsible for providing the PM with the initial Risk Log.

2.1.2.4. Review Change Management Plan

As with the Communication Plan (above), some elements of change planning are defined in the Pre-Initiation stage. The PM will review any agreements in the Statement of Work and, expanding upon these, will produce a draft Change Management Plan to be presented to the Client Project Manager for agreement.

2.1.3. Project Kick Off

Before a project can be successfully kicked off, the Handover must be completed and the project preparation needs to have started. Project preparation often takes some time to complete, so that it is common to kick off a project before project preparation is completed.

A key requirement before kicking off a project is ensuring both the project team and the Client are sufficiently resourced. While the entire project team may not need to be mobilised before Kick-Off, there is a certain critical mass a project team needs to achieve before a project should be kicked off.

On the Implementer side, this typically includes the PM and lead business and technical resources.

For projects developing the Temenos Cloud, the Temenos CDM needs to be available.

Where appropriate - if substantial L1 and/or L2 development are contracted - the assigned Temenos PDM should be involved in the Kick-Off.

The decision when to kick off a project is made by the PM in consultation with the Temenos CDM (if deploying in the Temenos Cloud) and the Client Project Manager.

The Kick-Off is a joint activity with the Client and it is critical that a single unified front is displayed. While resources may be provided by a number of different companies, the project is unified in the pursuit of the achievement of the project objectives.

2.1.3.1. Assess Readiness for Kick-Off

Project preparation can be time-consuming and should not prevent a project from kicking off if sufficient controls are in place and the project is adequately resourced.

The PM should ensure that SOW, and the Cloud Order Form and Cloud Services Specification are signed off before any project Kick-Off.

The PM is responsible for ensuring the Client is aware of the consequences of kicking off a project without sufficient or adequately qualified resources. All assumptions that are made around the Project Kick-Off should be documented in the Statement of Work.

2.1.3.2. Prepare for Kick-Off

he Implementer PM and Client Project Manager should meet to agree the content of the Kick-Off meeting. The content will vary with each project, but the typical headings that should be covered include:

- Project Objectives
- Project Phases
- Methodology to be followed
- Project Organisation and Governance
- Ways of Working
- Q&A

Once the agenda is agreed, the different sections are assigned to resources for completion and a Kick-Off date is agreed. Invitees to the Kick-off should not be restricted; all stakeholders should be involved.

The Implementer PM and Client Project Managers should meet before the Kick-Off to agree the content and fine tune the agenda and presentations and agree the roles and responsibilities of each speaker.

2.1.3.3. Kick Off the Project

Sometimes issues are raised during the project Kick-Off that necessitate the update of the risk register and/or issue log. In exceptional circumstances, a change request may be raised.

Issues raised during the Kick-Off meeting have an impact on the schedule, scope or cost, and then these should be reflected in an updated Statement of Work, Temenos Cloud Order Form or Cloud Services Specification, Software order form, by following the Change Request process.

2.1.4. Initial Provisioning

Firstly, follow the process for Initial Request for Software.

Then, if the project is implementing to Temenos Cloud, follow the process for Cloud Onboarding.

2.1.4.1. Initial Request for Software

This procedure describes how to place a request for an Initial System Build (ISB).

2.1.4.1.1. Submit Request for Software to ISB Team

During the Project Handover phase, the Temenos CEM completes the relevant PRF (Package Request Form) and the ISB (Initial System Build) Order Form, which is generated directly from the T-Force License (not Services) opportunity.

For partner-led projects, the implementing PM will complete the PRF and the TPCS PM will be responsible for generating the ISB Order Form.

The ISB Order Form contains Client details such as name, address, contact person, project code, database, operating system, licensed modules and it also covers the request for an implementation software environment. Although the implementation software environment is not delivered at this point, this form needs to be completed and will be used to create the ISB environment when the System Build Review has been completed.

The PRF contains details of the G-Pack components requested and the Client environment.

The Temenos CEM (or the TPCS PM) submits the completed forms via email to the ISB Team.

2.1.4.1.2. Validation of Forms

On receipt of the ISB Order Form and the PRF, the ISB team shares these documents with the Licensing team. The Licensing team checks that the Client has signed a valid license contract.

The Licensing team will then validate the modules selected in the ISB Order Form against the modules contractually agreed in the relevant contract. The packages requested in the PRF will also be validated against the contract.

If any discrepancy is found, the CEM will be informed and will need to escalate the issue for approval from the Temenos Regional Services Director.

2.1.4.1.3. Issue of License Codes after Validation

The Licensing team, after validation of the modules, number of users and payment records, will issue the license codes.

2.1.4.2. Cloud Onboarding

For projects deploying in the Temenos Cloud, the Cloud Onboarding aims at capturing various pieces of information about the new client for the Temenos Cloud actors in order to provision necessary cloud infrastructure, environments, network connectivity and so on.

The Temenos CEM will pre-fill the Cloud Client Onboarding Requirements Document during the Handover stage. The PM then completes the document, along with the Client, and submits it to the Temenos Cloud Delivery Manager. Care must be taken to capture the information correctly and accurately, as this will act as a reference document for cloud services in conjunction with the contract signed.

The PM must also complete the Contact & Escalation Matrix section in the Cloud Operational Handover Requirements Document.

2.1.4.2.1. Complete and validate Onboarding document

The PM and the Client jointly complete the Cloud Client Onboarding Requirements Document.

The Temenos CDM reviews the documents and, if it contains any change against the contractual agreement, raises the necessary CR.

2.1.4.2.2. Initiate the internal process for the environment set-up

The PM initiates the process for obtaining License codes, Project codes, Ticketing tool users and the Temenos CDM initiates the Temenos internal process covering such items as ZTN access for project members, Azure subscription etc.

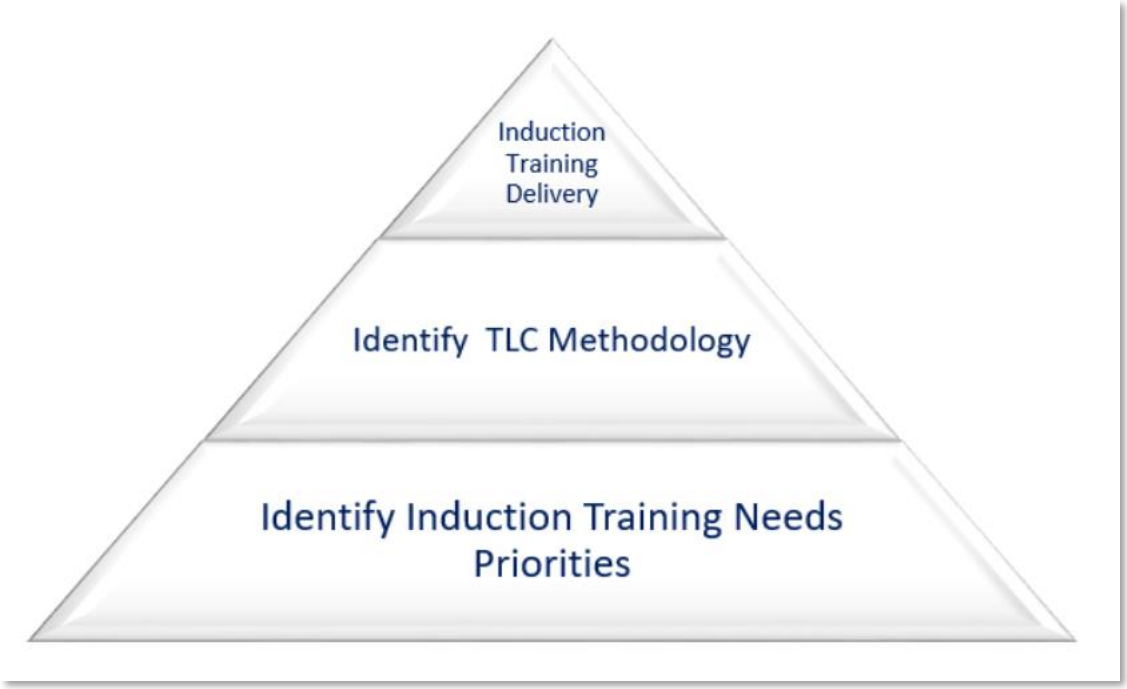
The Temenos CDM then initiates the infrastructure setup for the Client and establishes the connectivity process and, when completed, shares the environment access links with the PM.

The environment links will be provided as per the agreed delivery dates embedded within the project plan, using the Environment Links section in the Cloud Client Operational Handover Requirements Document.

2.1.5. Induction Training

Induction Training is the phase where the Implementer organises training programs to educate new Clients before entering the Analysis Stage of the implementation project. Induction training comprises of activities such as discussions about the training needs, defining the standard courses, introducing the blended approach, training schedule, training facilities and finally, Client's sign-off.

The goal is for the Client to obtain a level of core knowledge on features and functionality of the platform that is new to them, so they can actively participate in the Analysis Stage. It involves two main tasks as per TIM, planning and delivery.



2.1.5.1. Planning

his includes identifying Induction Training Needs and Priorities and the TLC Training Methodology (how the training will be delivered).

If TLC Engine, is identified, the TLC Team will provide a demonstration of this learning tool. The available SOP will be demonstrated to the Client together with the Process Based Training concept.

2.1.5.2. Delivery

The key deliverable of Induction Training is a signed off Induction Training Acceptance Form, which establishes that the Client's team has sufficient understanding of the product to start the Analysis Stage of the implementation project.

2.1.5.3. Define Induction Training Priorities

2.1.5.3.1. Review Statement of Work

The Statement of Work defines the scope of work that needs to be completed by the Implementer.

- The work is completed as part of the implementation project and the software modules are deployed to meet the Client's requirements.
- This information should provide a very good indication of the functional and technical induction training that the Client will require before starting the Analysis Stage of the project.

2.1.5.3.2. Review Software Agreement

The software agreement or cloud services agreement defines Temenos' commitment to the Client.

- It includes a full list of the software modules that the Client is licensed to use.
- This list should align with the list in the Statement of Work document.

2.1.5.3.3. Review Technical Architecture

As part of the Project Handover, the target technical platform will have been identified.

2.1.5.3.4. Produce Induction Training Needs Priorities Findings Document

This document should provide an overview of the training topics that need to be included as part of the induction training. This document must be reviewed by the Training Team and the Client before being finalised and agreed upon.

2.1.5.4. Build Training Program

The list of licensed software modules and the technology platform are matched against the standard functional and technical training courses as presented in the Temenos Training Catalogue or where appropriate, Partner training catalogue.

The methodologies for delivery are selected – TLC Classroom, TLC Online, TLC Engine, etc. – for course delivery. Next, the induction training content is signed off by the relevant individual from the Client's project team.

2.1.5.4.1. Complete/Deliver Training Program (Certification)

The PM and the Client Project Manager compile a list of training delegates for each of the induction training courses. This list should include the role that each delegate will take in the implementation project and within the bank. The maximum number of the participants is 12 for any scheduled TLC Classroom sessions.

2.2. Analysis

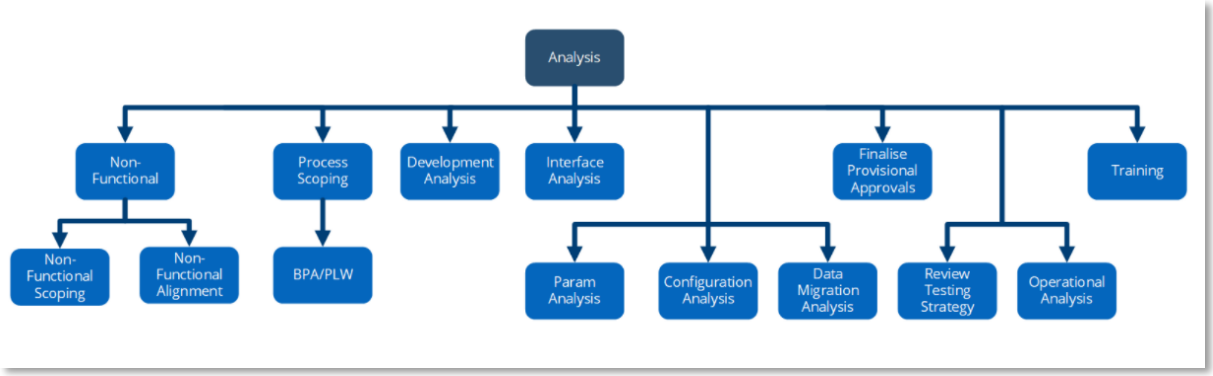
In this section we focus on the Analysis stage.

This stage is designed to confirm that the Client's business requirements conform to the standard Transact model functional delivery and also to review the impact of any Non Functional and/or Integration requirements.

In this stage, the process, parameter, configuration or software modifications that may be required to ensure a successful deployment are identified, along with interfaces and migration or conversion requirements. The approach followed is an 'adopt not adapt' strategy.

This means that the Client is requested to use the solution as it was designed without any changes. If at any point there are compelling reasons (usually regulatory or commercial in nature) why that would lead to an unacceptable situation for the Client, various alternatives are discussed.

In order of preference, these alternatives include procedural workarounds, configuration of the solution, and as a last resort software modifications.



2.2.1. Non-Functional Scoping

In order to ensure that a secure and performant end-to-end solution is delivered, NFRs need to be captured as part of the project. Clearly-defined NFRs are essential to the success of NFT during the Test Stage. Clients cannot run a successful acceptance test without testing against clearly-defined requirements. This applies equally to both functional requirements (tested in UAT) and non-functional requirements (tested in NFT).

The PM and LTA, where appropriate in coordination with the Temenos CDM, will schedule a series of workshops with the client and any implementation Partners. These workshops will start off from a baseline for NFRs, which is to be established based on what was agreed between parties prior to the start of the project.

2.2.1.1. Identify relevant contractual agreements

In case of an implementation in the Temenos Cloud, the starting point for the workshops will be the metrics, part of the Temenos Cloud Services Specifications, including the non-functional deltas in the Cloud Order Form. This defines the baseline for the NFRs. For on-premise implementations, the starting point for the workshops will be defined by the Client (e.g. metrics for the existing solution). In all cases, any NFRs agreed in a Temenos Statement of Work should also be added to the baseline. Any NFRs agreed in a Partner Statement of Work are NOT part of the baseline, but need to be added as deltas during the subsequent workshops.

The identified NFRs then need to be aligned to the NFR subject areas. These subject areas can be found in the NFR requirements template.

2.2.1.2. Prepare for and run the required workshops

In this step, the Client SMEs are identified for workshop and their availability is confirmed. The SMEs are typically people responsible for the IT Operations or infrastructure. Approach and responsibilities are agreed, as well as an agenda for the workshops.

The PM will prepare and circulate an initial schedule containing the time to conduct the NFR gathering workshop, the resourcing required and the outputs expected.

The PM will also prepare and circulate agreed Delta Log templates and other deliverables (as agreed) for the NFR workshop. These standard TIM Templates can be added to, if mutually agreed by Implementer and the Client.

Lastly, the PM is responsible for arrangement of any facilities and equipment required to conduct the process, such as workshop rooms (or logistics for remote delivery), equipment and any necessary tools.

When all of the pre-requisite activities have been confirmed, the project teams will undertake a workshop, or series of workshops, to cover all agreed Non-Functional areas.

2.2.2. Non-Functional Alignment

The Non-Functional Alignment will be run through several workshops around relevant subjects, taking the pre-agreed NFRs as a baseline and identifying any deltas. All deltas identified during the NFR review are documented in the Delta Log. At the end of each day a wrap-up session should be conducted, with any new deltas being reviewed by the LTA/LBA, the Temenos CDM (in case the project deploys in the Temenos Cloud) and the Client SMEs. This daily review would normally include a high-level solution, delivered by the PM, the Temenos CDM or the Client SMEs.

Following the workshops, the deltas documented in the Delta Log, and agreed in the daily review, need to be estimated for effort and delivery timelines. For each delta, the PM, Client SME and the Temenos CDM (in case of deployment in the Temenos Cloud), each contribute to these delivery estimations and timelines, depending on the high-level solution identified. If the Temenos CDM contributes the delivery estimation/timeline, he may need to rely on the inputs from any of the other Temenos Cloud actors.

All deltas identified during the workshops with their high level solution, estimate and delivery timelines, are presented to the CCB for provisional approval. After the CCB approvals / CRs, all NFRs (including the baseline unamended NFRs), will be documented in the NFR document and signed off by all parties.

The approved NFR document should then be placed under change management and any subsequent amendments must be impact-assessed and costed before being accepted, according to the Change Management process.

For implementations in the Temenos Cloud, upon approval of the Client NFR document, the LTA will amend the Cloud Architecture and Solution Blueprint to include any architectural/high-level technical response to requirements raised by the Client and given by the various Temenos Cloud actors through the Temenos CDM. The LTA may ask the CDM for guidance as to what type of changes are acceptable, and which are not. Such guidance may involve Temenos SMEs from various areas in the Cloud organization. The final changes must be presented as the Project's Architecture to the Temenos CAB for approval. Such approval must be obtained prior to the start of UAT.

For deployments in the Temenos Cloud, the PM must complete the Cloud Change Requests section in the Cloud Operational Handover Requirements Document upon completion of this process.

2.2.2.1. Conduct Workshops

2.2.2.1.1. Subject Area Walkthrough

The LTA will introduce the subject area of the workshop, and present the existing contractually agreed NFRs for this area (baseline NFRs)

2.2.2.1.2. Identify and Conduct Delta Analysis

The deltas that exist between the baseline NFRs and the Client's requirements are identified as part of the process walkthrough and the Delta Log is updated accordingly. The Client requirements are potentially already (in part) documented in a partner SOW, in case the project is partner primed. The focus is on identifying any differences that the Client would be expecting, which are not part of the baseline.

- For every difference identified, a discussion is held to determine whether there are alternative solutions to the requirement and what business benefits are claimed (such as risk reduction, efficiency, increased revenues and regulation).
- These differences are captured as deltas and the alternatives are registered in the Delta Log, along with the preferred alternative, which is decided in the workshops.
- The objective of the discussion is to maximise the acceptance of the baseline and to identify opportunities for improvement without affecting major changes in the solution.

2.2.2.1.3. Complete draft Delta Log

The LTA completes the first draft of the Delta Log by including all differences identified across all workshops.

2.2.2.2. Align and Complete NFRs

2.2.2.2.1. Complete Alignment Exercise

Once the first draft of the Delta log has been completed, the Temenos CDM discusses each entry with the relevant participant in the Temenos Cloud organisation. These include but are not limited to:

- Cloud Architecture

- Cloud Security
- Cloud Command Centre and
- Cloud DR Manager

The objective of these discussions is to establish whether Temenos is willing to accept the additional NFR. If the decision is to accept, then a high level estimate of the cost of the change, and a delivery timeline will be produced. The Temenos CDM validates these high level estimates with the Regional Cloud team.

For on-premise implementations, the Client SMEs are tasked to provide an estimation of the cost and a delivery timeline.

2.2.2.2.2. Update and Finalise Delta Log

All deltas identified in the draft Delta log are updated with the estimates and Temenos' provisional acceptance or rejection. The Delta log is then presented to the CCB.

The CCB discusses the deltas with SMEs, Business Heads, LTA and Temenos CDM and the decision on each item is recorded in the Delta Log. Note that this is a provisional signoff for a specific document. All provisionally signed documents are subject to a final review to ensure consistency across the whole Analysis stage and avoid the situation where conflicting requirements have been approved.

Final signoff will be sought when all requirements have been provisionally accepted.

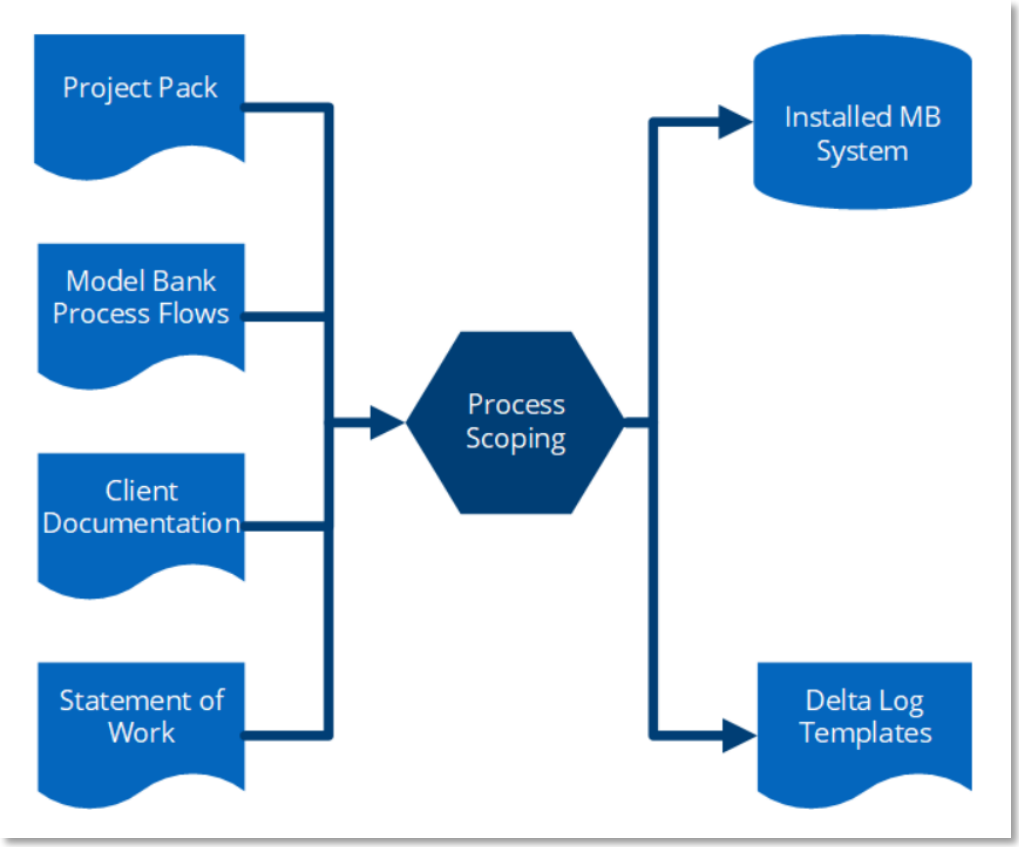
2.2.2.2.3. Update and Finalise Non-Functional Requirements

The Non-Functional Requirements Document is updated to align with all accepted deltas, this will ensure that the Client's final, signed-off non-functional requirements accurately reflect the baseline NFRs plus all agreed deltas.

The NFR document is then presented for Client's provisional approval. All provisionally signed documents are subject to a final review to ensure consistency across the whole Analysis stage and avoid the situation where conflicting requirements have been approved.

Final signoff will be sought when all requirements have been provisionally accepted.

2.2.3. Process Scoping



2.2.3.1. Kick Off Process Analysis

The kick off of the process analysis aims at preparing for the BPA workshops. These BPA workshops serve as the mechanism to identify any requirements that are not yet covered by the out-of-the-box solution offered. It is important to understand that only additional requirements are identified, not the total set of requirements the solution would need to comply to.

The Induction Training environment, installed during the Initiation phase, is used in the Analysis phase to demonstrate the Temenos Model Bank. This demonstration is further based on the Temenos Banking Reference Processes. For partner-primed projects, the PM may obtain a copy of these by emailing a request to Distribution. These two elements (the installed Temenos Model Bank and the Temenos Banking Reference Processes) form the basis of the process-led implementation approach.

In order to access and use the Temenos Banking Reference processes, the PM should ensure the necessary tools are installed.

2.2.3.2. Prepare and Undertake Scoping Workshops

A scoping exercise will be held, based on the Temenos Model Bank Reference Process Directory List, part of the Temenos Banking Reference Processes, to discuss and agree on the processes in scope for the BPA workshops. The outcome of this exercise will be the input for the project plan and the detailed analysis/process workshop plan. The LBA is tasked with this.

An initial schedule containing the time to conduct the BPA workshops, the resourcing required (including the SMEs required from the client) and the outputs required will be prepared. The outputs of the workshops include the Delta Log templates and other deliverables, (as agreed). If the tool

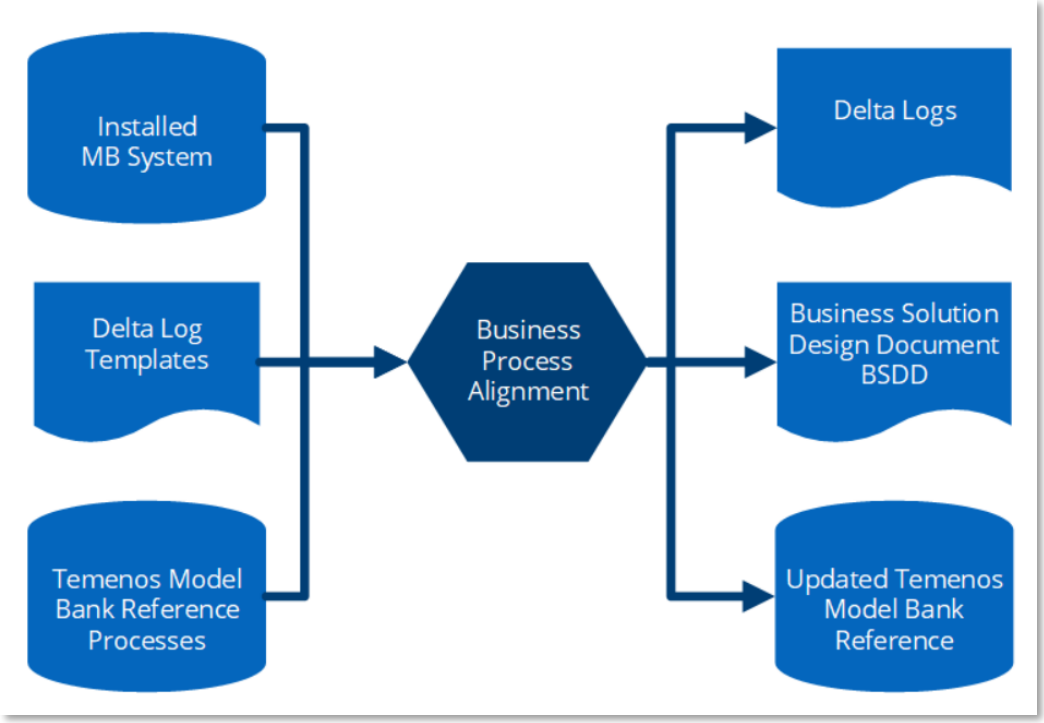
allows, the Temenos Banking Reference Processes will be updated with relevant Client's internal naming terminology, operating model and products.

The implementer will run a workshop with the Client's business process engineers to identify and agree joint business process approach, starting points (such as "adopt not adapt") and terminology definitions.

The governance during the workshops needs to be agreed between PM and Client Project Manager. Participants in the BPA workshops need to be mandated to follow the strategy of adopt-not-adapt and other starting points, as well as accepting the new business processes. Such clear mandate is essential to limit the number of deltas that need development identified during the BPA workshops, and therefore essential to limit the scope (and risk) of the project.

Best practice is to setup a governance whereby the Client SMEs participate in daily BPA workshops. This would be followed by a daily review meeting of gaps at day-end with the head of the line of business. In that meeting, he gets presented the deltas identified during the day, as well as the identified solutions. The head of the line of business is then expected to challenge the deltas with the objective to find a solution that does not lead to a delta in need of development.

2.2.4. Business Process Alignment (Process Led Workshops)



In order to gather the relevant process information, BPA (Business Process Alignment) workshops for each identified business area are conducted with the Client's SMEs.

This step starts with a kick-off presentation to all participants in the BPA workshops, including those involved in governance of it. The kick-off presentation highlights the starting points, the adopt-not-adapt principle, the working of the BPA workshops, the role of the participants in the BPA workshops, the governance and decisions required, the preparations expected and the schedule. It is good practice that this presentation is held by the PM, whereby the Project Sponsor highlights the need to stick to the starting points.

During the BPA workshops, the To-Be Client processes are updated in the appropriate tool, and later documented in BSDDs. The BSDDs feature the process flows in order to provide a complete view of the Client's To-Be processes and deltas documented during the BPA workshops.

All deltas identified during the BPA workshop are documented in the Delta Log. At the end of each day a daily wrap up session should be conducted, the deltas should be reviewed by the LBA and the SMEs from the Client side to determine next actions.

2.2.4.1. Conduct BPA Workshops

Following the agenda agreed in the previous phase, the LBA conducts workshops with the Client's SMEs. These BPA workshops are used to help the Client envision the future state process flows and to initiate discussions on the business requirements.

2.2.4.2. Conduct Delta Analysis

The Model Bank Reference processes are demonstrated and discussed in the BPA workshops. Where there are differences between the reference processes and the Client's view of these processes, the starting point is "adopt, not adapt" and the participants are encouraged to define why the suggested way of working would not suit them. The objective of the discussion is to maximise the utilisation of the standard features of the Model Bank and to identify opportunities for improvement without affecting major changes in the system.

Wherever applicable, the functional deltas that have an impact on the processes are captured in the process flow diagrams in addition to any other process changes identified.

Any deltas that remain after these discussions are captured in the Delta Log.

2.2.4.3. High-level Estimate Deltas

For those deltas that require development to be completed, a high-level estimate covering effort and delivery timeline needs to obtained and provided to the CCB for decision making.

Developments can be done as part of the Temenos Product (L1/2 developments), or client-specific (L3). Temenos is always responsible for L1/2, whereas responsibilities for L3 developments may differ. Depending on the contractual agreements in place, L3 may be the responsibility of either Temenos or of a certified development Partner.

For deployments in the Temenos Cloud, partners that are certified for development in the product(s) under implementation are allowed to provide L3 developments (and interfaces) to the Client, provided L3 Development governance is contracted between Partner (or Client) and Temenos. In such cases, Partners need to also ensure that they have included handover activities for this L3 to Temenos in their Statement of Work. Where this has not been included, then the standard Change Management process should be followed to rectify this. In all other cases, Temenos is the only party that is allowed L3 developments on the product.

For deployments on-premise, Temenos strongly suggests to contract a certified development partner, or alternatively contract with Temenos directly. L3 development governance may optionally be contracted from Temenos.

If Temenos is the selected party for (any of the) developments, or if L3 development governance has been contracted, Temenos assigns a Temenos PDM. The PDM will work together with the project team, and the Temenos TPCS PM, to enter all deltas into its tool T-Focus, for the purpose of estimation of L1/L2 development work, and either L3 development work (where Temenos develops) or the L3 development governance work (where Partners develop). The Temenos PDM will register

all L1/2/3 estimates as well as any L3 development governance estimates in T-Focus. Besides the product development effort, the PDM should include efforts to assist the Client in getting the BRDs signed off by the Temenos Product team, efforts to explain to the Client the subsequent Functional Designs and assist in the sign-off process, as well as efforts to assist in preparation and execution of smoke test.

For each delta, a preferred solution is to be identified by the project team. Where requirements seem generic, the PM may request Temenos to provide an L1/2 estimate. Decisions on L1/2 inclusion are always made solely by Temenos.

The PM requests the party identified as responsible for developments (L1/2/3) to provide a high level estimation and a timeline for each Delta, incl. development governance if appropriate, for later presentation and decision making in the CCB.

Partners must take into account that if they develop L3, L3 development governance must be contracted with Temenos if the deployment is in the Temenos Cloud.

2.2.4.4. Align and Complete To-Be Processes

Once each BPA Workshop has been completed, and the estimation for the deltas is on its way, the first draft of detailed To-Be processes should be developed by the LBA to validate Transact functionality and process support. The deltas impacting the process flows should be captured and clearly identified in the process flows. Deltas are normally shown in red with the reference ID embodied in the flow.

The LBA will also create the first draft of the BSDD and highlight any deltas in the process flows. Individual Transact screenshots should only be added to the explanation of individual Deltas in the BSDDs if this is necessary for clarification.

2.2.4.5. Approval of deltas in the CCB

The CCB discusses the deltas and their solutions and estimates along with SMEs, business unit heads and LBAs, and the decision on each item is updated in the Delta Log. There should be :

- One CCB meeting for every completed stream or as per a mutually agreed schedule.
- A final review of gaps pertaining to all streams once consolidated figures are available. This may lead to revision of preferred solutions per Delta, in case the overall resulting development effort (or organisational impact) is considered too high.
- The final Delta Log should be signed off by the LBA and handed over to the implementing PM.

Post approval in the CCB, the LBA will update the BSDD with the accepted deltas in the process flows.

2.2.4.6. Prepare Management Summary Presentation

A key component of the To-Be Process Design is the presentation of the final processes to Client's management team for approval.

The presentation should include details of major changes with associated metrics, number of deltas identified, accepted/rejected items, workarounds provided, development man-days, pain points and improvement proposals along with indications where Transact is expected to improve the process performance of the Client.

2.2.4.7. Deliver Final Documents for Client Sign-off

Once the processes have been signed off, the Finalised To-Be Processes should be delivered by the LBA to the Client with all the associated documentation, using the appropriate tool.

A summary should be provided to the Client's project stakeholders, informing them of the work completed and the significant changes to the Client's operating model. Where possible, this presentation should be delivered in conjunction with the Client's project team who have been directly involved in the evolution of the To-Be processes.

2.2.5. Parameterisation Analysis

This step involves the usage of the CCE and the forms that needs to be sent to the ISB Team by the PM, and the configuration of the ISB environment that needs to be delivered to the Client.

After the BPA Workshop, the next step is configuration of the product parameters in the CCE. The PM requests the ISB team to deliver the CCE.

The objective of the CCE is to assist in a first parameterisation of the ISB, the software version as it will be delivered by Temenos to the project as a first cut of the project build. Once the project team has completed the necessary parameterisation, Temenos will deliver the ISB. For deployments in the Temenos Cloud, the Temenos CDM will install this in the DEV environment of the project, for on-premise deployments this will need to be arranged by the PM either with the Implementer team or with the Client team.

2.2.5.1. Request Client Configuration Environment

For partner primed projects with TPCS, the implementing PM sends the PRF to the TPCS PM who reviews the forms for correctness by validating these against the license agreement and the project plans. The TPCS PM then generates an ISB Order Form from T-Force and forwards it and the PRF to the ISB team.

For Temenos primed projects, the above validation needs to be done by the PM, who also generates the ISB Order Form from T-Force and sends it, along with the PRF to the ISB team.

2.2.5.2. Parameterisation of the CCE

The project team, led by the implementing party's LBA and supported by the Client's project team, performs the parameter setting in the CCE. This activity will be done by the relevant BC (based upon the product(s) being implemented) and owned by the LBA.

The CCE will have the base bank values in unauthorised status. The existing records can be either authorised/amended or can be ignored and a new record can be created.

The CCE will be delivered with a specific menu for the purpose of product parameter completion. The items under the CCE prerequisite menu must be configured first. The other menus can be configured in parallel but the sequence within each menu should be followed.

It is expected that the values to be entered will be based upon discussions and workshops with the BC and the Client's project team where the purpose of each field and the relevance of the parameter decision being made will be explained, agreed and documented.

Once the values are entered in the CCE there will not be any documentation available for the recorded data. When the records are signed off, the sign-off audit process will capture the User ID of the person who signed off the record. Therefore, it is suggested that the product parameters are input by the BC and reviewed by the LBA prior to authorisation/sign-off by the Client Team.

2.2.5.3. Release of ISB

Once parameterisation in the CCE is complete, the Temenos ISB team is notified by the PM(or the TPCS PM if the project is partner-led).

The ISB team will then produce the ISB for the project. The ISB is sanity tested post-delivery and a TCR document is provided as evidence of this testing. In addition, a COB is run on the ISB.

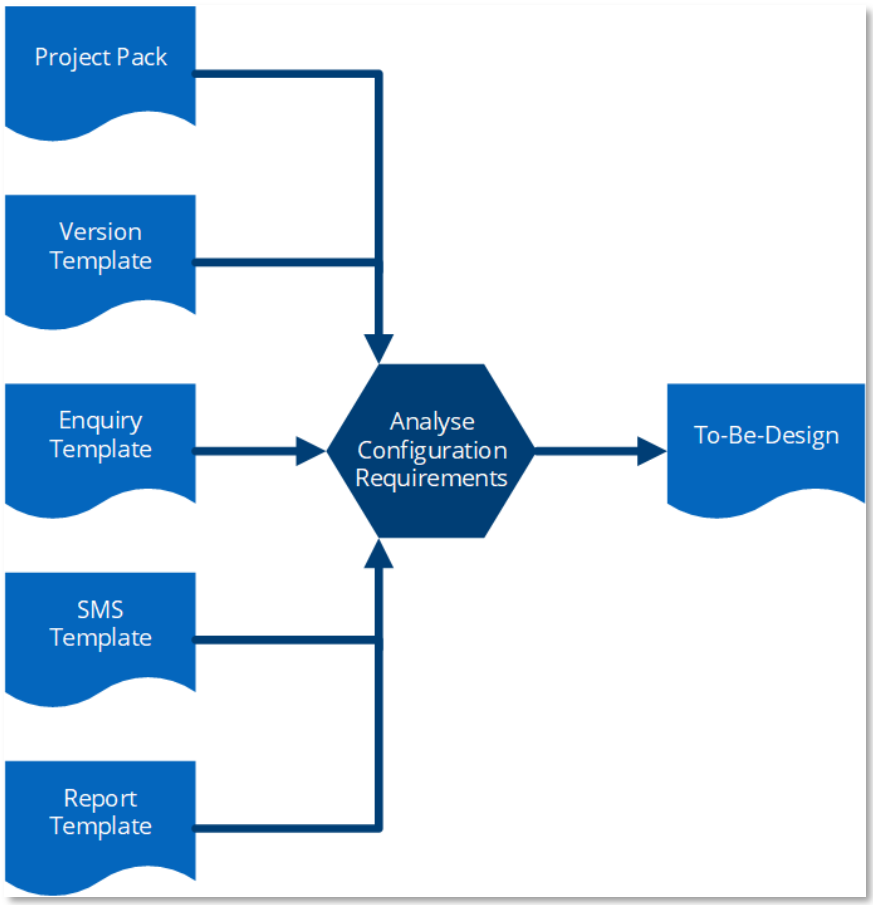
2.2.5.4. Install ISB

The Temenos ISB team then delivers the ISB along with the release documents to the Temenos Distribution team. The release documents include reconciliation report and RLM user guides. The Temenos Distribution team adds the applicable user guides and release notes, and informs the PM that the ISB is ready for delivery.

The PM then contacts the Temenos CDM for initial installation of the ISB in the DEV environment of the project, or the Client/Implementer resources responsible for the installation in an on-premise implementation.

It is recommended that the project team afterwards performs its own test to ensure that the ISB performs as expected. Test cases based on standard functionality, as well as additional functionality, should be run and at least one COB should be performed. This will help to identify any issues ahead of any subsequent development or configuration.

2.2.6. Configuration Analysis



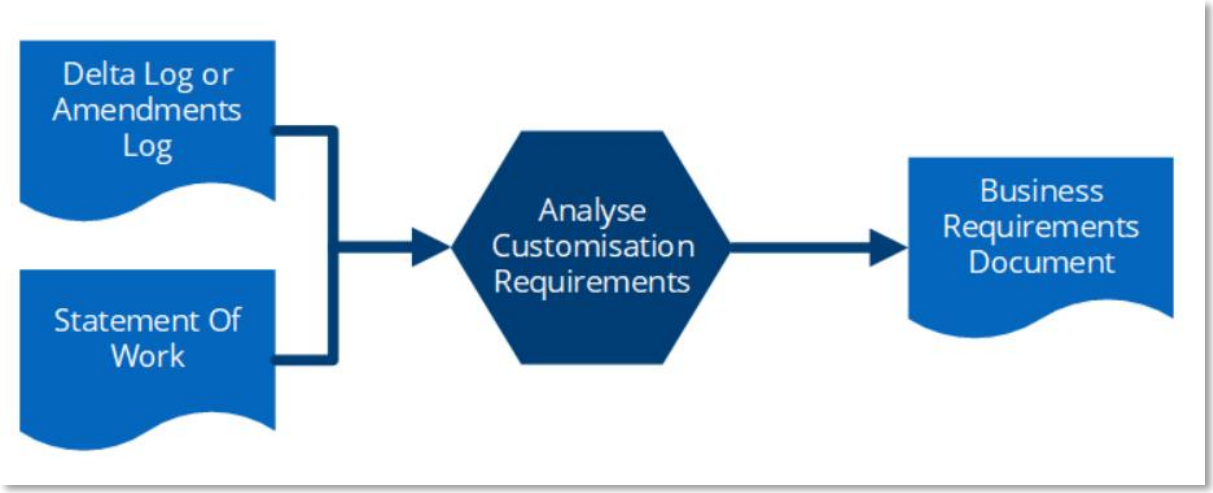
This phase enhances the delivered Model Bank user interface functionality, amending and updating VERSIONs, ENQUIRYs, LRFs, Composite Screens, TABs, Deal Slips, SMS and Delivery message formats. This phase also includes capturing and analysing the requirements for client-specific AA products.

During the BPA workshops the Delta Log is updated and each delta is identified as requiring Parameterisation, Configuration or Development.

Care should be taken to ensure that all Configurations requirements are clearly identified in the BPA phase, prior to the creation of the CSDs.

When all Configuration items have been captured and clearly documented in the CSDs, the final versions should be signed off and placed under Change Management.

2.2.7. Development Analysis



During this phase, the details of business requirements are captured, including the use case documentation that can later be used for testing purposes. It is important that during the Business Requirements creation, the use cases are written in order to challenge the content of the Business Requirements.

The purpose of this phase is to systematically gather the Client's requirements for the Deltas to be developed.

The implementation LBA and BCs assist the Client to capture functional and non-functional requirements and detailed procedures that describe how the system should behave.

The methodology aims to be flexible and it may be that the Client has their own templates for capturing business requirements. If so, we need to ensure that the Client's documents contain the information as described in this phase and in the related standard documents. A comparison with the standard Temenos BRD template will highlight any missing areas.

When the requirements have been captured and clearly documented, the Requirements Traceability Matrix should be created/updated. This will subsequently be used to ensure that all requirements have a related design solution and appropriate test cases.

2.2.7.1. Complete Business Requirements

For every business area in the BSDD and for each delta mentioned in the business area, the Client should complete a separate BRD.

- The Client uses the information provided in the Delta Log and the remainder of the BSDD to complete the sections of the BRD.
- The Client uses product and process information from the Client's organisation to fill any remaining sections.
- The BC supports the Client in finding the information needed to fill each section.

The workstream BC should review the BSDD and BRD per delta when delivered for first review, prior to the review of LBA as the work stream subject matter expert.

The LBA then reviews the BRD for consistency with BSDD, Delta Log, and the updated Model Bank Reference Processes documentation where applicable.

2.2.7.2. Obtain Client Sign-Off

Client signs each Business Requirement Document to state that this is a requirement which is documented to an acceptable level of detail.

Note that this is a provisional signoff for a specific document. All provisionally signed documents are subject to a final review to ensure consistency across the whole Analysis stage and avoid the situation where conflicting requirements have been separately approved.

Final signoff will be sought when all requirements have been provisionally accepted.

2.2.7.3. Obtain Temenos Sign-Off

Where Developments are planned at L1/2 level, the Temenos PDM is required to sign off the BRDs. This signoff indicates that Temenos understands the BRD and believes the BRD contains all the information necessary to provide a solution design.

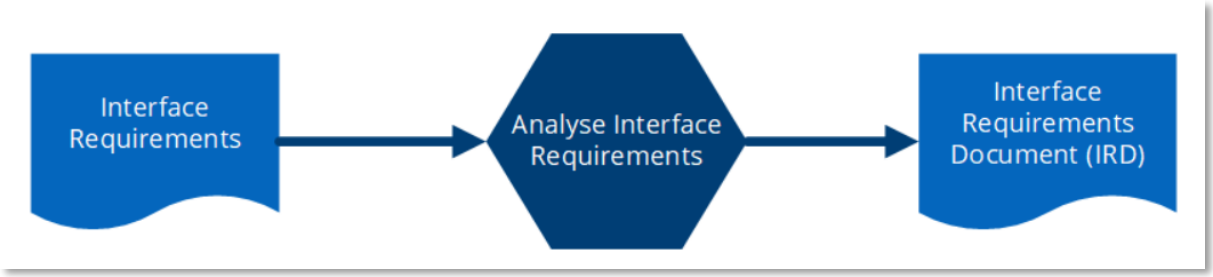
The process of signoff of a BRD is facilitated by a Temenos BC working with the Client's project team and the Temenos PDM. He is responsible for guiding the Client's project team in writing the BRD, explaining the BRD to the Temenos PDM, and facilitating the process of clarification until the Temenos PDM is satisfied and ready to sign off the BRD.

2.2.7.4. Create initial Requirements Traceability Matrix

The LBA creates the initial Requirements Traceability Matrix from the signed off Business Requirement Documents, using the template provided.

By signing the BRD, the LBA also verifies that the BRD is correctly linked to the Delta or Amendment Log.

2.2.8. Interface Analysis



There are many ways to integrate Transact with its environment. The Temenos strategy for integration is based on API-first. However, this does not apply to each and every situation. Real time publication of events via Integration Framework, or Data Event Streaming, with or without these events transformed for the target consumer by an ESB, are suitable in many situations.

The implementation team is to follow the applicable reference architecture. For implementations in the Temenos Cloud, the Temenos CDM will be able to provide this reference architecture.

Interface requirements may be met by systems other than Transact (e.g. Insight or Data Framework Reporting) and where this is possible it should be the preferred choice, even when small Transact developments are required to enrich the information supplied to those systems.

Reports and enquiries that are considered necessary to be produced by Transact should, where possible, be consolidated where similar information is required to reduce the load on Transact.

2.2.8.1. Prepare for Integration Analysis

Evaluate all documentation received from the Handover phase and transcribe any relevant information into the Integration Questionnaire.

Contact the Client and explain the process for the evaluation of the Integration Analysis documentation.

The LTA creates the draft 'Interface Registry' to register all interfaces in a single place.

2.2.8.2. Conduct Integration Analysis

Through a number of working sessions, the implementation and Client technical teams, and for deployments in the Temenos Cloud, including the Temenos Cloud team, will complete the Integration Questionnaire.

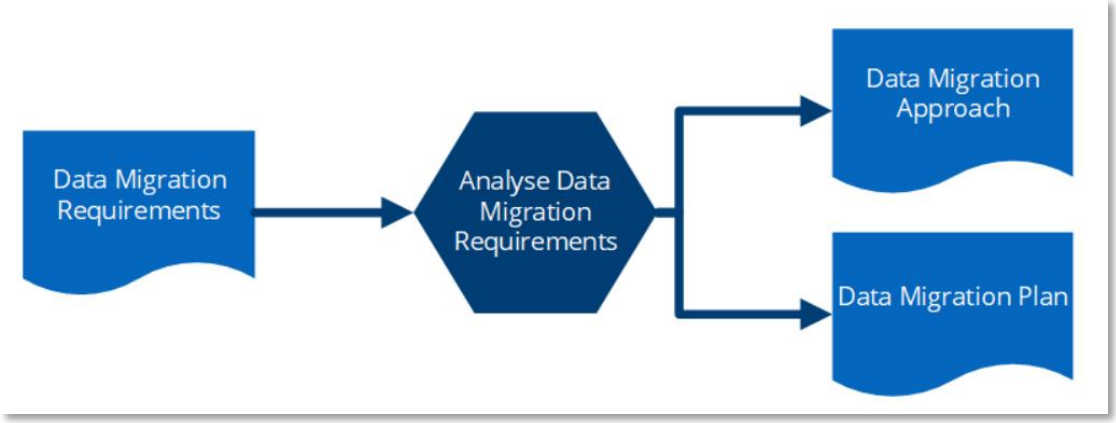
When completed, the document is reviewed with the Client and provisionally signed off. Note that this is a provisional signoff for a specific document. All provisionally signed documents are subject to a final review to ensure consistency across the whole Analysis stage and avoid the situation where conflicting requirements have been approved.

Final signoff will be sought when all requirements have been provisionally accepted.

If necessary, ascertain any risks from the Integration Questionnaire and any other information received during the Interface Analysis and update the Risk Log.

The PM should ensure that the responsibilities for (parts of) the development of the interfaces are clearly defined between Implementer, Client, third party and possibly Temenos. Experience shows that this is often a point with limited clarity.

2.2.9. Data Migration Analysis



Data Migration is a critical component of a successful Transact implementation.

The Client usually owns the Data Migration and executes with support from the Implementer.

The purpose of this phase is to review and agree the Client's Migration Strategy. This is a Client-produced document covering what will be migration, why and how. The Implementer will assist in reviewing the Client's document.

A Migration Strategy is a Client document that describes the overall approach to migration, including the migration and reconciliation tools, migration approach (big bang, phased, friends & family) types of migration (automated, manual), overall migration timeline and resources requirements, namely people, tools and environments.

The Migration Strategy may evolve over the duration of the project as more becomes known about the products to be migrated. During the analysis phase sufficient information is available to create the initial migration strategy. Further information becomes available during the design phase and this may be used to expand the migration strategy, if required.

Migration considerations should always commence in the early phases of the project. Planning for the migration activities should start early, as the activities will involve multiple workstreams, systems and interfaces.

The Client should prepare a draft migration strategy and, after reviewing it jointly with the Implementer and any other interested third parties (such as test partners), publish a final, reviewed and agreed Migration Strategy.

Following the establishing of the migration strategy, the Implementer gets to analyse the requirements for migration.

2.2.9.1. Present Draft Migration Strategy for Review

Towards the end of the Analysis Stage - when the full scope of NFRs, development, configuration and integration has become clear - the Client produces a draft Migration Strategy document for review by all affected parties (implementing party, testing partners, systems integrators).

The Client distributes the draft Migration Strategy to all interested parties for review. Review meetings should be scheduled to enable parties to walk through all comments and amendments.

2.2.9.2. Review Draft Migration Strategy

The implementing PM, LBA and LTA, as well as the TPCS PM for partner primed implementations, should review the Client's Migration Strategy with particular attention given to at least the following areas:

- **Migration Scope** – Defines what is being migrated and what is not, specific focus on historical data
- **Migration approach** – Defines how the migration is taking place, in a big bang, phased and if so based on which criteria etc.
- **Migration tools** – which tools are being used to extract, transform and load the data
- **Reconciliation tools** – how is the success of a migration being assessed
- **Use of environments** – which environments are needed and planned
- **Mock runs and Dress Rehearsals** – planning and scope
- **Data cleansing** – what is the approach for cleansing of legacy data
- **Transition processes** – what annual processes are impacted by the migration and how are they ensured, what transitional processes are in place to deal with transactions partially in the old and partially in the new solution

- **Schedule, runbook and governance** – what does the actual go-live process look like and who decides on what?

2.2.9.3. Issue final migration strategy

After reviewing comments and feedback provided by reviewing parties, the Client issues an agreed final version of the Migration Strategy, to be then placed under Change Management.

For deployments in the Temenos Cloud, where the assessment of the Temenos CDM is that the execution of the Migration Strategy will lead to additional demand for Temenos Cloud Services (typically additional environments), the Change Management process is used to agree on such additional demands.

2.2.9.4. Conduct Data Migration Workshop

The DM workshop is an initial meeting with key Client personnel to present the Temenos Data Migration methodology to the Client project team. Typically it is scheduled for three to five days.

The main objective for the Implementer is to introduce the Data Migration approach, cover and explain the terminology used and explain our expectations of the Client and what the Implementer can provide. The workshop should allow the Implementer to answer the Client's questions, justify the approach and reinforce the necessity of Client business participation.

The workshop should also formalise owners and specific responsibilities for the various aspects of the process.

We recommend the following participants:

- Implementer
  - PM
  - relevant business and technical consultants (if required)
- Client
  - Project sponsor (for initial migration process discussion)
  - PM (This person may not be formally appointed at this stage, but an identified owner is a pre-requisite of this meeting taking place)
  - Technical / IT Resources who will be involved in data extraction from legacy systems
  - Relevant business owners for products – this is a site specific role which may be split by function
  - A member of the Internal Audit department for the Reconciliation strategy sessions
  - A member of the Accounting department for the session on accounting fundamentals

The workshop will enable the DM Consultant to have a clear idea of the migration domain and an overview of the gaps between Transact and the Client requirements and some details on how these gaps are being addressed and the migration implications of these gaps.

The workshop should not be planned at an earlier stage in the project, as having a workshop without the proper groundwork being done in the form of the business review would not be productive. Without BPA, certain aspects of the project build like Multi-Company setup, Multi Book setup, Customer and Account ID structure etc., will not be known. These are critical factors that affect the migration process.

The Client's DM team should have been part of the client's team participating in Induction training.

2.2.9.5. Analyse Data Mapping Needs

Data Mapping Sheets (DMS) are the key documents in the DM process. They list the migration fields for a Transact application, matched with the location of the source data from the legacy system(s). In the analysis stage of the DM project, a list of the required DMS is produced.

Please note that only partners certified for Data Migration, as well as Temenos resources, will have access to such data mapping sheets. Partners that are not certified need to seek alternative tooling.

The Client should review legacy systems and match system and table to be used for source data. In many cases there may be multiple sources for one Transact application in which case multiple DMS will be required.

2.2.9.6. Analyse Data Cleansing and Extraction Needs

During this stage the Client identifies areas or items in the legacy systems that need to be reviewed for old or inaccurate data, this is known as Pre Extraction Purging.

In reviewing mandatory requirements for each Transact application, the Client should investigate areas of potential Data Enrichment, i.e. identify areas with missing data within the legacy system(s). Such omissions will need to be resolved as part of the data cleansing process.

The project team will produce an Extraction List, identifying areas of legacy systems from where data will need to be extracted.

Data transformations are additional manipulations of data that are required to format the data ready for loading into Transact. At the analysis stage, we identify those areas relating to overall file structure (as opposed to those relating to individual field data), such as the need to merge data from multiple sources.

2.2.9.7. Analyse Data Reconciliation Needs

A Data Reconciliation Methodology is defined as the means by which data elements from the source systems (either computerised or manual) are checked against the relevant destination data elements on the new Transact system.

Each load should be categorised according to the following factors, as they will influence the method of reconciliation to be adopted.

- Type of data – Static or Financial
- Volume of data
- Time Critical / Non-time critical

The project business teams should prepare a list of tables to be reconciled and the data elements that will need to be verified.

The project business teams should prepare lists of all financial items to be reconciled, such as GL reconciliation or Customer account balances – list of all accounts with balances, sorted by currency and product.

2.2.10. Review and Finalise Provisional Approvals

Each requirements document, whether functional, non-functional, technical or integration is individually reviewed to ensure internal consistency and clarity. However, it is not possible to review the entirety of a Client's requirements for the same internal consistency and clarity until the final requirements document has been submitted.

When all requirements have been provisionally accepted, the implementing PM and the project team review each of these provisionally accepted requirements document to ensure consistency across all requirements.

This is necessary to ensure that requirement A does not contradict requirement B and can only be done when all requirements have been individually reviewed and provisionally accepted.

2.2.10.1. Agree full list of Requirements Documents

Before a full review can be performed, the Client and the implementing party must agree on the scope of the review, e.g. the full list of Requirements Documents to ensure that no requirements are missed.

PMs to jointly circulate a list of all previously-reviewed

- Non-Functional Requirements
- Business Requirements Documents
- Interface Requirements Documents

2.2.10.2. Review each Requirements Document

The PMs will decide the best mechanism for reviewing each document, either by joint face-to-face or online walkthrough or whatever best suits their project.

Each document will be reviewed; we recommend using a Requirements Traceability Matrix to ensure no requirements are missed.

In the absence of any issues, each document will be approved formally.

Any identified issues, such as conflicting requirements, will be reviewed and passed back to the originator and the Change Control Board for adjudication.

2.2.10.3. Sign Relevant Contracts or Addendums

2.2.10.3.1.L3 development contracting

For any L3 development work that has not previously been contracted, the client (i.e. Client PM) and party responsible for its development will sign an addendum or new contract.

Where Temenos develops, this is either a (CR to the) Cloud Order Form for Dedicated Cloud Services, or an Addendum to the Software Agreement for Managed Cloud Services and on-premise implementations.

Where Partners develop L3 (and interfaces), provided such conforms to the development policy of Temenos outlined before, the involved contract will be a (CR to the) Partner SOW. The scope of this agreement will be the deltas identified.

The Implementing PM is responsible for this task, except where the Implementer is a Partner and the L3 developments will be done by Temenos for implementations in the Temenos Cloud. In that case, the Temenos CDM is the counterpart. The Temenos CDM will work with a Temenos PDM to obtain the necessary contractual details.

2.2.10.3.2.L3 development governance (if contracted)

For L3 development work done by Partners, provided such conforms to the development policy of Temenos outlined before, development governance may be contracted between Temenos and Partner. The contract to be signed is an RFS between Temenos and Partner, and is based on the scope above.

Alternatively, L3 development governance may be contracted between Client and Temenos through an RFS under the Cloud Services Agreement (deployments in Temenos Cloud) or Services Agreement (on-premise).

2.2.10.3.3.L3 maintenance and support (Non-Core Support)

For implementations in the Temenos Cloud, the Client Project Manager and Temenos CDM need to sign an agreement for L3 maintenance and support, if this was not covered under the original agreement. For on-premise implementations, this service offered by Temenos is optional and should be decided by the client.

Where Temenos prime the L3 development work, such will be included in the agreements mentioned above.

Where Partners prime this work, such will be contracted using a separate CR on the Cloud Order form (for Dedicated Cloud Services), or an Addendum to the Software Agreement. Both are titled **'Non-Core Support Agreement'**.

A CR on the Temenos Cloud Order Form (for Dedicated Cloud Services), or an NCS addendum to the software agreement (for Managed Cloud Services) will be drafted and signed between the Client and Temenos, governed by the change management process.

As previously mentioned, Partners providing L3 developments need to ensure that handover activities to Temenos are included in their Statements of Work, or follow the change management process to ensure they are.

2.2.10.3.4.L1/2 Development contracting

Where Temenos provides L1/2 developments as part of the project, the Client Project Manager and Temenos CDM/PDM will sign an agreement for the delivery, licensing and maintenance/support of these developments. This is either a (CR to the) Cloud Order Form for Dedicated Cloud Services, or in other cases an Addendum to the Software Agreement for Managed Cloud Services (RFPE).

Separately, an agreement needs to be signed for the development guidance during the BRD/FSD stages.

For Temenos primed projects, this will be in (a CR to) the SOW under the Cloud Services Agreement (Temenos Cloud implementations) or Services Agreement (on-premise implementations), or an RFS for smaller developments.

For Partner primed projects it will be in a separate RFS under that same agreement.

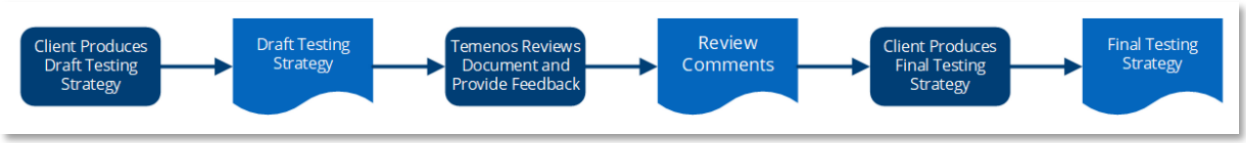
2.2.10.3.5.Other Non-Functional developments (only for implementations in the Temenos Cloud)

Some NFRs may have led to deltas that are not implemented by an L3 development specific to the client, but by a client-specific change in the Cloud Services (e.g. additional monitoring). For these Deltas, the Temenos CDM and the Client Project Manager will sign an RFS under the Cloud Services Agreement.

2.2.10.3.6.Other contractual impacts

The inclusion of L3 developments and other non-functional developments into the project may have an effect on the overall project, e.g. in terms of timelines, dependencies etc. If this is the case, the PM will follow the Change Management process for other contractual impacts.

2.2.11. Review Testing Strategy



The purpose of this phase is to review and agree the Client's Test Strategy. This is a Client-produced document covering what will be tested, why and how. The Implementer and Temenos (in the case of implementation in the Temenos Cloud) will review the Client's document.

A Test Strategy is a Client document that describes the overall approach to test, including the test objectives and methods, types of test (functional, non-functional), overall test timeline and resources requirements, namely people, tools and environments.

For implementations in the Temenos Cloud, it is essential that as a result of the test strategy, the project is able to prove that it can meet all functional, technical and non-functional requirements gathered during the project and contractually agreed between Temenos Cloud and the Client.

The Test Strategy may evolve over the duration of the project as more becomes known about the products to be tested. During the analysis phase sufficient information is available to create the initial test strategy. Further information becomes available during the design phase and this may be used to expand the test strategy, if required.

Test considerations should always commence in the early phases of the project. Planning for the test activities should start early, as the activities will involve multiple workstreams, systems and interfaces.

Affected parties should review the draft test strategy. The affected parties would be the Implementer and any other third party (such as an SI or test partner), and include Temenos in the case of implementation in the Temenos Cloud. Post review, the Client should publish a final, reviewed and agreed Test Strategy.

Please note: For Disaster Recovery testing strategy, the client should make use of the Test Plan template provided by the Temenos Implementation Methodology.

2.2.11.1. Review Draft Testing Strategy

We recommend that the following types of testing be performed, as a minimum:

- Functional Testing
  - Unit Test
  - Systems Integration Test
  - User Acceptance Test
- Non-Functional Testing
  - Installation Test
  - Operational Acceptance Test (i.e. backup and recovery, data archiving, etc.)
  - Penetration Test
  - Vulnerability Test
  - Performance Test (i.e. response times, both online and batch jobs) for individual components, for normal business days, and for peak load
  - Disaster Recovery (DR) Test plan
  - Tertiary DR backup process

- Dress Rehearsals

The Client's Test Strategy should be reviewed by the affected parties with particular attention given to the following areas:

- **Test Scope** – Defines what is being tested and what is not
- **Test Objectives** – Ensure that they are aligned with the Requirements Traceability Matrix (i.e. the Client cannot test functionality that has not been submitted as a valid requirement)
- **Roles and Responsibilities** – Who does what? A clear descriptive matrix detailing everyone's roles and responsibilities.
- **Deliverables** - This should define all deliverables, such as test plans, test cases, test scripts, test matrix and a defect log.
- **Test Approach and Procedures** – This should cover functional and non-functional test (such as penetration test, performance test and so on), system integration test, operational test (such as backup and recovery) and regression test. How will the tests be run – manually or automatically? When will test plans and test cases be created? Who will review them? What will be used for test data?
- **Test Criteria** – How will entry and exit criteria be defined? How will defect status and priority be agreed?
- **Test Schedule** – At this stage, a high-level schedule should be available for review. It should list, for example, the planned types of test (SIT, UAT, OAT, penetration, performance, regression, etc.) and the anticipated number of cycles of each. We need to ensure that resources responsible for the test are aligned to the agreed schedule. All key milestones should be clearly identified although quite possibly without clear dates, at this early stage
- **Test Environments** – Describes each environment's use, management, specific tools needed, data loading, security requirements, etc.
- **Test Tools** – Identify all test tools and define their purpose and who owns them. As well as automated tools for test management, defect tracking, etc. The list should include any manual tools, such as Word or Excel templates. Identify any specific skill sets and determine the necessary training requirements.
- **Defect Resolution** – How will defects be resolved? When does the clock start ticking – when the client notices the alleged defect or when it is accepted as a software bug? How will initial defect triage be set up? What informal SLAs will be in place? Are there any escalation procedures? How will fixes be retested? Is the Defect Resolution methodology compatible with the Temenos Cloud Incident Management process and Service Catalogue (if implemented in the Temenos Cloud)?
- **Test Metrics** – What are the key metrics? Who will be responsible for maintaining them? Who will review them? Where and how will they be reported?

For implementations in the Temenos Cloud, the test plan is a key deliverable for the ORB.

2.2.12. Operational Analysis (Implementations in Temenos Cloud only)

The Project Release Process Review aims to collect information specific on Project Release needs and to evaluate them against contractual commitment.

The Environment Needs Review aims to compare the outputs from the different analysis streams with the initial environments framework. At that stage, the sizing might be reassessed. The Cloud environments are grouped into different categories such as production and non-production and also managed or non-managed as per definitions available in Cloud Dedicated Service Specifications.

2.2.12.1. Review the Project Release Process

The PM provides expectations for the project release process (schedule / frequency / packaging format) to the Temenos CDM who then reviews the requirements and ensures that there is no gap against the agreed release process baselined in the Cloud Services Specifications & Order Form. Any deviation will be handled through the Change Management process.

The Client then validates the final version of the release process.

2.2.12.2. Review the Project Environment Needs

The PM collects any environment needs from the other analysis processes, such as Test Strategy and shares the information with the Temenos CDM who verifies that the environment needs are still aligned with the environments list set out in the Cloud Order Form.

The Temenos CDM will also ensure that the connectivity needs (HTTPS, VPN etc..) are clarified for each project environment. Any deviation will be handled through the Change Management process.

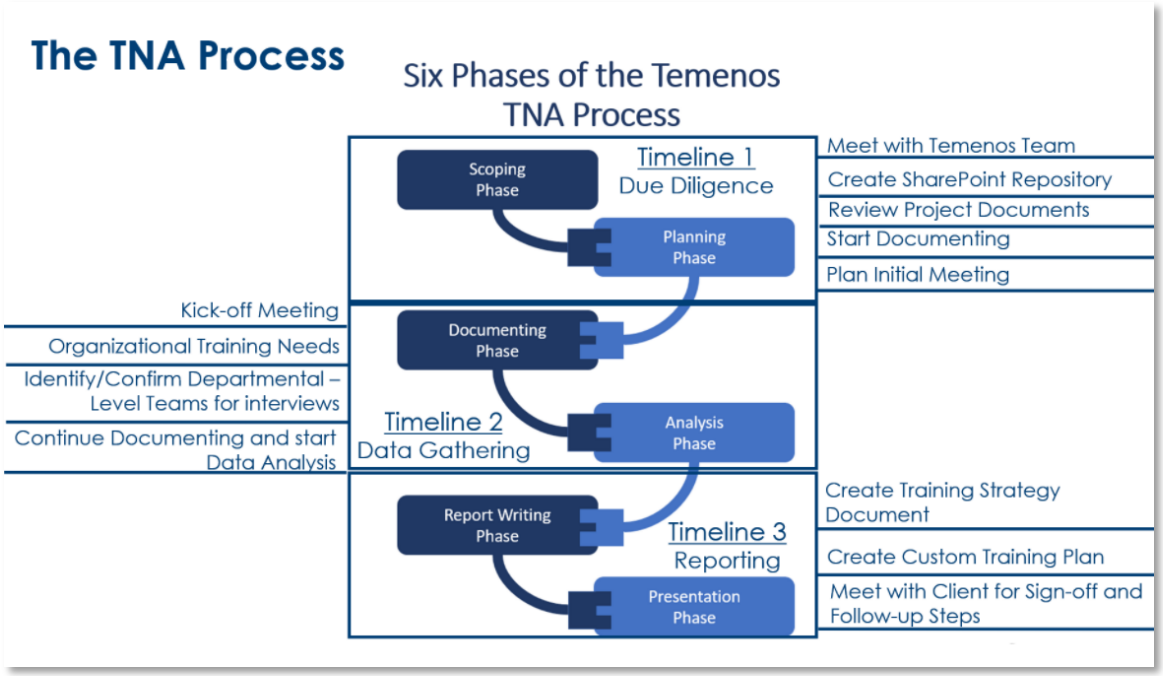
The Client then validates the final version of the release process

The Temenos CDM will handle any change against the contracts through the Change Management process.

2.2.13. Training Needs Assessment

The Implementer will identify whether training is required to solve a specific business problem and if training is warranted, also identify the specific training needed, who needs the training, and the best way to deliver the training. The goal is to produce a training plan for the Client based on the project implementation and their needs.

A formal Training Needs Assessment (TNA) is an optional but recommended step at this phase. This is especially true for larger projects or where the Client has struggled with the technology in previous implementations (i.e. an Upgrade). The TNA will produce a training strategy and a detailed training plan for the Client.



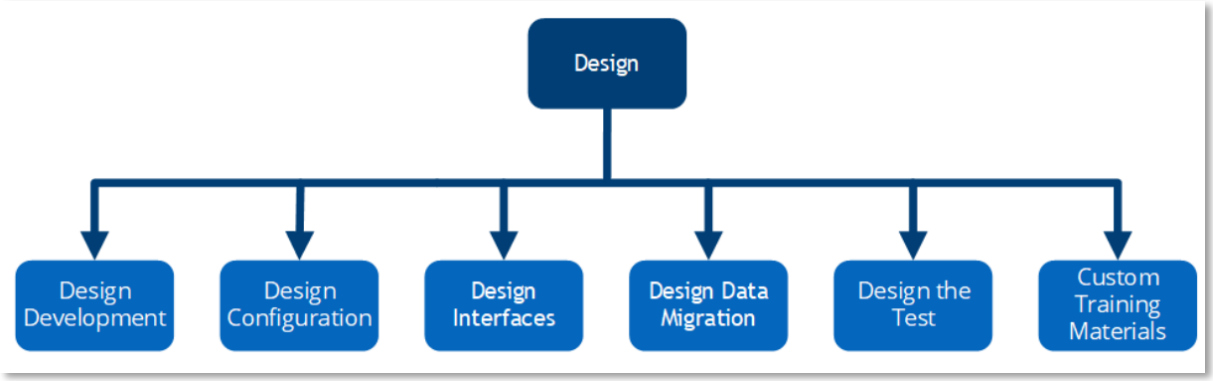
A formal TNA typically runs for 4 to 8 days but the result and follow up can extend through the life of the project and other Training integration points in the Temenos Implementation Methodology.

The Implementer or the client may engage Temenos TLC team for a formal TNA, may perform a TNA themselves, or may perform a TNA by reviewing the TLC Catalogue and selecting courses by product or by roles.

2.3. Design

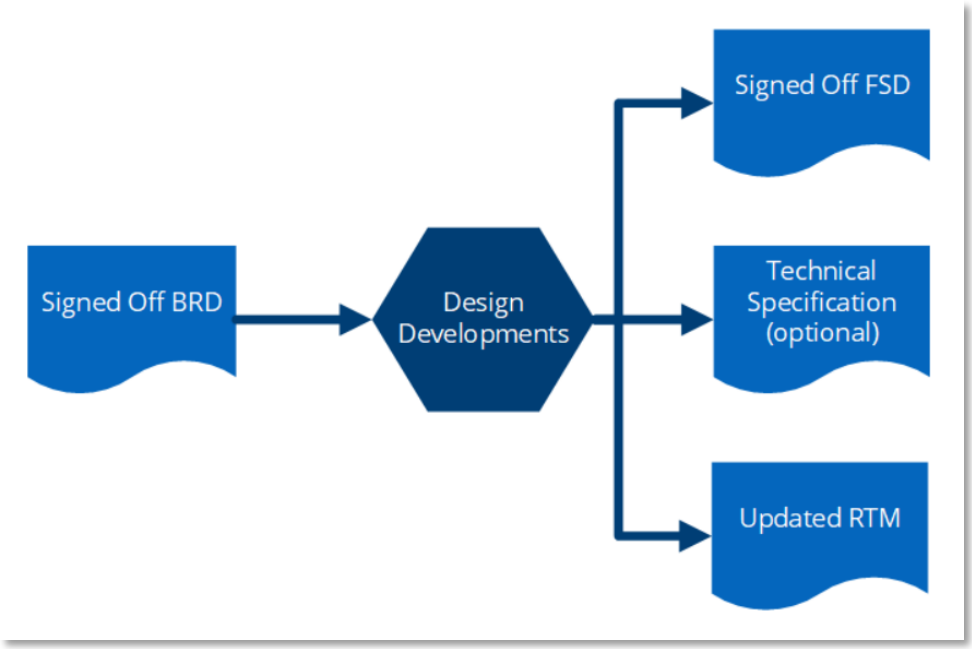
In this section we focus on the Design stage.

This stage designs the configuration of the model system for the Client and provides detailed specifications for any development changes or interfaces that have been identified. It also covers the design of the Data Migration, Test and of any bespoke training materials.



2.3.1. Design Developments

The phase ensures that the Implementer has produced and agreed signed-off functional specifications and estimates and, where necessary, has fully documented the design and technical specifications for all approved business requirements.



This step delivers solution designs for all approved BRDs in scope of the project. As well as a completed FSD, it also results in an updated RTM and may also, at the discretion of the PM/LTA, result in production of a Technical Specification.

Where a partner is responsible for the design and L3 development governance has been contracted, elements are included.

For any L1/L2 developments, the Temenos PDM is accountable for the delivery of the design specifications.

Note: For deployments in the Temenos Cloud, the PM must complete the **Reports** section in the Cloud Operational Handover Requirements Document.

2.3.1.1. Prepare Draft Functional Specification Document

In accordance with the parties chosen for development of the BRDs, each of these parties allocate a Product Delivery Manager (PDM). This person is responsible for delivery of the solutions for a set of BRDs.

The PDMs (along with Developers) are responsible for ensuring the Developer creates one or more draft FSDs, to cover the content of each BRD.

For the avoidance of doubt, this will be the responsibility of the Temenos PDM for L1/2 developments, and either Temenos PDM or Partner PDM for L3 developments.

We recommend the use of the FSD template.

2.3.1.2. Development Clarifications and L3 Governance

The PDM will share the draft FSD with the PM who will organise a review of the FSD together with the Client Project Manager, the relevant BC, the Developer, representatives from the Client's organisation that were involved in completing the BRD, as well as the Temenos PDM (in case L3 development governance is applicable).

The purpose of the FSD review, which is led by the BC, is to ensure the solution meets all requirements as outlined in the BRD. It is **NOT** a review of the solution itself. For the Temenos PDM, the main purpose of the FSD review under L3 development governance is to ensure the Temenos design standards and policy have been followed.

To help prepare for this review, the Developer will brief the BC to help understand how the requirements in the BRD are reflected in the solution described in the FSD.

After completion of the review, the Developer will update the FSD and share it, plus any clarification sheet, with the PDM, the PM and the BC.

2.3.1.3. Sign Off the FSD

The PM obtains signoff, which is mandatory, on the completed FSD from the Client and the Temenos PDM (in case of L3 development governance). The signoff of the FSD signifies that the solution described in the FSD covers the requirements as per the BRD.

2.3.1.4. Create Technical Specification (optional)

It should be noted that not all developments require a Technical Specification. The document is produced at the discretion of the PM/LTA if it is thought that such a document will be useful.

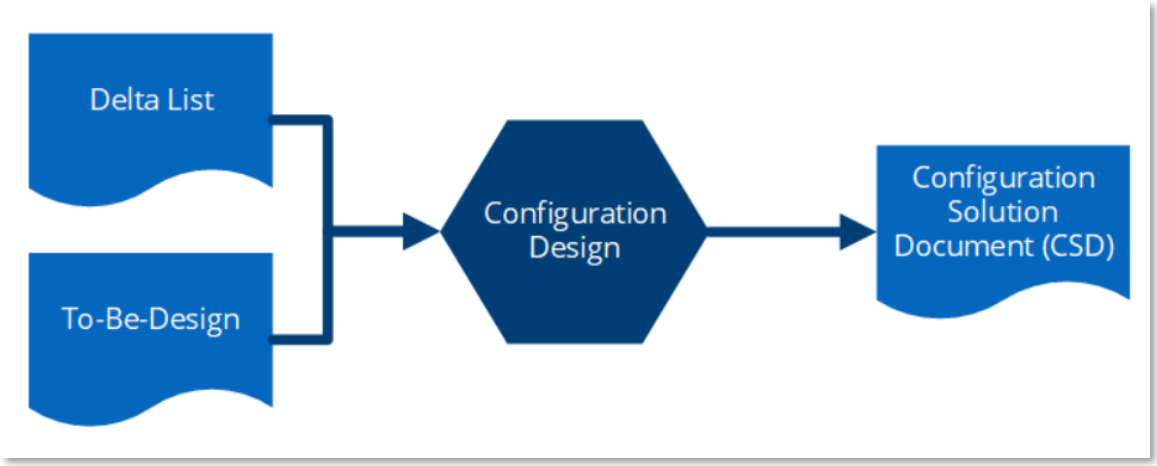
The Developer will prepare technical specifications based on Temenos L3 design and development standards. For L3 developments done by a partner, a draft Technical Specification is provided to the

Temenos PDM for review, in a similar review process as done for the Functional Specification Document.

2.3.1.5. Update RTM

The BC will review and update the RTM to ensure that all requirements listed in all BRDs are covered by functionality described in the associated FSDs. This will ensure that each requirement as a solution and each solution is cross-referenced back to a requirement.

2.3.2. Design Configuration



The purpose of this step is to guide participants through design changes related solely to Configuration, namely altering the behaviour of the Transact system without software development.

This includes versions, enquiries, deal slips, delivery message formats, SMS, LRFs, composite screens and tabbed screens.

For deployments in the Temenos Cloud, the PM must complete the following sections in the Cloud Operational Handover Requirements Document:

- COB
- ETL
- Data Archiving

2.3.2.1. Prepare Draft Configuration Solution Document

The requirements for configuration have been captured in the requirements section of the Configuration Solutions Document as part of the Configuration Analysis phase.

The BC and TC complete the remaining sections of the CSD listing and describing all configuration changes.

The LBA and LTA will review the CSDs ensure that the document is fit to be presented to the Client for signoff. For deployments in the Temenos Cloud, the Temenos CDM will review the CSD as well, consulting other Temenos Cloud parties (such as Cloud Architecture) for their review on the impact of the configuration design on NFRs.

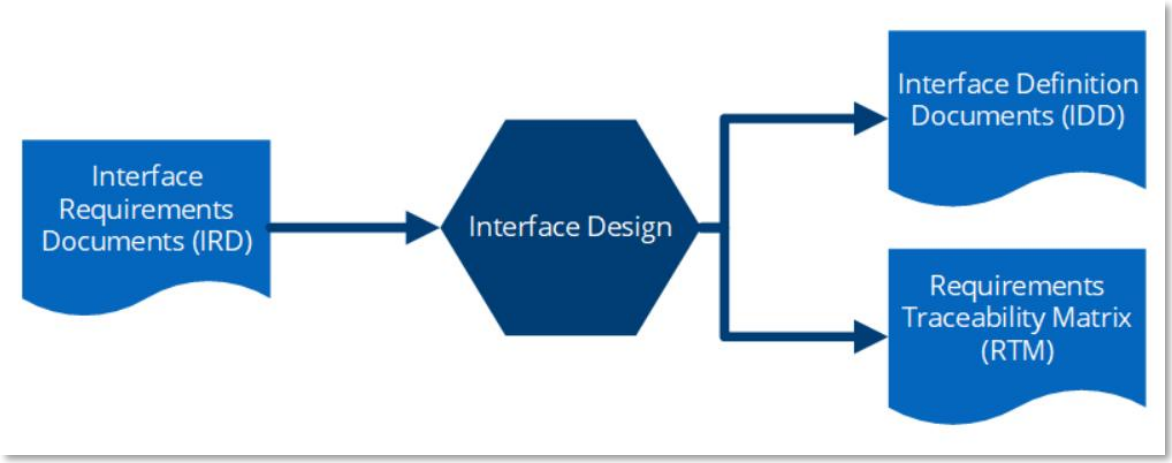
2.3.2.2. Sign Off the CSD

When finalised, the reviewed CSD is presented to the Client for review and final sign-off.

2.3.2.3. Update RTM

The BC and TC will ensure that the RTM is updated, including coverage of any Non-Functional Requirements.

2.3.3. Design Interfaces



This process delivers design solution for all approved IRDs in scope of the project. The outputs are a signed off and approved IDD and an updated RTM.

Where a partner is responsible for the Design and L3 development governance has been contracted, elements are included.

For deployments in the Temenos Cloud, the PM must complete the following sections in the Cloud Operational Handover Requirements Document:

- Interfaces
- Background Services & APIs

2.3.3.1. Prepare Draft Interface Design Document

Based on the Client's requirements, and using the standard IDD template, the LTA produces a draft IDD ensuring that the project makes best use of existing tools and frameworks. The LTA stays within the approved architecture which was established during the non-functional analysis, and takes into account that the NFRs related to the requirement can be met by the solution. This means, amongst others, ensuring that the:

- IDD contains clear references to any (Cloud) deliverables such as End point configuration, scripting
- IDD contains FTP information

For deployments in the Temenos Cloud, depending upon the complexity of the specific interface, the LTA may wish to review the solution with Cloud Architecture or Cloud Security, via the Temenos CDM.

2.3.3.2. Sign Off the IDD

For deployments in the Temenos Cloud, the LTA will arrange a formal review session, or a series of sessions, with the Temenos CDM to walk through the IDD. The Temenos CDM will involve relevant teams from the Temenos Cloud, such as Cloud Architecture, Cloud Security, Cloud DR Manager and Cloud Command Centre.

The LTA will process the feedback from the review sessions and update the IDD where necessary.

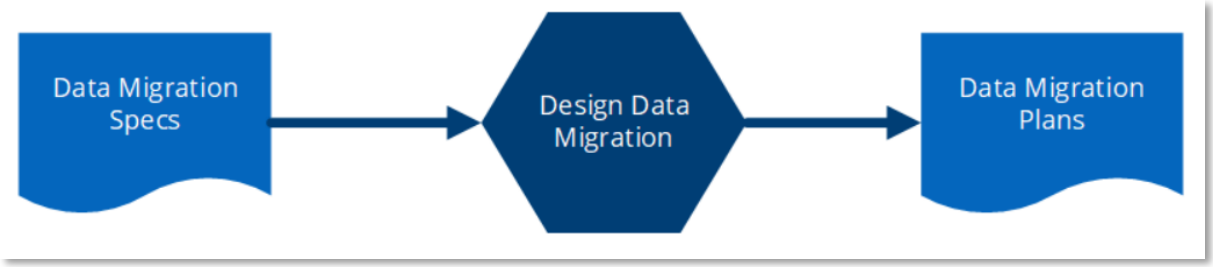
Finally, the LTA will organise review session(s) with the Client and the Temenos PDM (if appropriate for L3 development governance), to walk through the IDD.

After all reviews have been completed, feedback shared and contents updated where necessary, the LTA will present a final IDD for Client approval and provisional sign off, as well as to the Temenos CDM (if deployment in the Temenos Cloud) and the Temenos PDM (in case of L3 development governance).

2.3.3.3. Update RTM

The LTA should update the RTM to match the IDD designs back to the IRD requirements.

2.3.4. Design Data Migration



The Design stage of the Data Migration project details how the requirements laid out in the analysis stage are to be met and is also where the detailed project planning occurs.

2.3.4.1. Develop Data Migration Project Plan

2.3.4.1.1. Plan Outline

The plan outline will contain the migration tasks required for the products discussed in the workshop and the different migration phases required until the go live date. The plan outline should contain conditional tasks like executing another trial run if the final trial run is unsuccessful or executing another mock run if the last mock is unsuccessful.

2.3.4.1.2. Scheduling

The Client's DM Manager / PM provide dates against each task in the plan. The implementing DM Consultant will then review and update the plan.

2.3.4.1.3. Timing Considerations

Trial runs for migration can only take place when the project build is complete, or very nearly complete. The UAT phase of the overall project should ideally be performed on a migrated database.

The ideal go live date would be a month-end period which is also a weekend. This gives extra time for Migration and reconciliation before switching systems. However, if such a period is not available, then actions like closing operations the day before Migration have to be considered.

2.3.4.1.4. Resourcing

The plan should contain a clear owner for each task. Note that these tasks are with Client and Implementer. The tasks for the Temenos CDM in case of deployment in the Temenos Cloud are limited to involvement in any NFRs and the execution of the migration during transition into production.

2.3.4.1.5. Approval and Monitoring

It is critical to monitor the tasks accomplished against the plan to analyse bottlenecks and remediate any deviations from plan. We recommend that the Client DM Manager produces a weekly DM status report for the PM. Based on the report, the PM can review the resourcing allocation and the project schedule as necessary.

2.3.4.2. Develop Deployment Methodology

2.3.4.2.1. Deployment Methodology

The Deployment Methodology is the agreed approach to the timing of the various extracts and loads in relation to the system dates and business processes.

2.3.4.2.2. Static Data

The migration of static data from the legacy system to Transact should take place once it is believed that the data will not change before the Transact go-live. Typically, this takes place 1 or 2 days prior to the go-live weekend. Reconciliation and sign-off of the static data should take place upon completion of the loads. It should not wait for the financial data to be migrated.

2.3.4.2.3. Financial Data

The legacy system should be advanced to match the Transact go-live date. All the necessary financial data should be extracted with value as at that date. The trial balance in the legacy system should be produced for reconciliation.

2.3.4.3. Develop Operational Deployment Plan

2.3.4.3.1. Definition

The Operational Deployment Plan (ODP) is the sequence of tasks that need to take place for a consolidated migration test (trial run, mock run) or the actual go live, together with the schedule and resourcing for these activities.

2.3.4.3.2. Pre-migration Steps

The ODP should include preparatory tasks prior to the Migration, such as environment preparation and parameter checks.

2.3.4.3.3. Static Data

Static data, such as includes customers, signatures, security master, and internal accounts, can be loaded prior to the close of business of the legacy system on its final day.

These data loads should be verified and signed off prior to proceeding.

2.3.4.3.4. Financial Data

The extraction from legacy and loading of financial data should take place after the end of day processing on the legacy system. The inclusion of numerous back-ups is highly recommended.

The correct load sequence needs to be determined based on individual circumstances. The plan should take into account which loads are dependent upon on others, and which have more flexibility in their timing.

2.3.4.3.5. Reconciliation

Reconciliation of the General Ledger, as well as the accruals for various contracts can only take place after the COB has been run and Transact has been able to produce the necessary figures.

2.3.4.3.6. Sign-off

Although there may be sign-offs for various elements of the migration, there should also be a final sign-off of the process by the PM to confirm that live operations can proceed.

2.3.4.4. Design Data Cleansing and Extraction

2.3.4.4.1. Pre Extraction Purging

This is the removal of out-of-date or inaccurate data, such as inactive accounts or duplicate customers. In the design stage, the Client should specify the mechanisms or procedures for identifying and correcting such inaccuracies.

2.3.4.4.2. Data Enrichment

This is the addition of information to the source data to match Transact requirements, most notably mandatory fields. This can take place either in the legacy system or the staging database.

In the design stage, the Client should specify the mechanisms or procedures for entering the data.

2.3.4.4.3. Extract Pre-process

It is also a possibility to build logic into the extract scripts as to what data to extract, for example accounts with no movements for over three years would not be extracted and therefore would not be imported into Transact.

2.3.4.4.4. Extraction

The Client should design the extraction process to be changeable for when issues arise in test, and as quick and easy to use as possible, for those running the extractions in a time sensitive situation.

2.3.4.4.5. Data Transformations

It is necessary to perform transformations on the data to prepare it for Transact input.

2.3.4.5. Design Data Mapping

2.3.4.5.1. Completing the DMS

A Data Mapping Sheets (DMS) is a matrix which maps the fields required in a specific Transact application for a particular product against the fields in the legacy system.

The DM Consultant will prepare the Transact side of the matrix in consultation with the Business Analyst in charge of a particular area. The Transact side should only give details of the fields which are relevant for migration.

The Client's DM team completes the legacy side of the matrix.

2.3.4.5.2. Approval and sign off

The completed DMS are owned by the Client DM team. The DMS are not signed-off until after the iterative unit test loads and one or two trial runs, definitely before a third trial run.

After sign-off a change control process should be enforced for the DMS.

2.3.4.5.3. Design Data Reconciliation

As part of the DM design, agreement must be reached on the various methods of load checking, technical reconciliations, manual and automatic file comparisons to be used.

2.3.5. Design the Test

The preparation for test is an important part of any Transact project. The purpose of this stage is to prepare effective and efficient set of tests.

The Test Strategy describes the test approach as well as the artefacts needed during test. The FSDs and CSDs provide test cases based on the use cases provided in the underlying BRDs, and as such form the base for the test design.

2.3.5.1. Prepare test scripts, scenarios, cases and test data

The Use Cases provided by the Client along with BRD will have led to test scripts, scenarios and cases described in the FSDs, CSDs and NFRs. These are mapped against the criteria in the Test strategy to validate if they meet the test requirements in terms of coverage, variety, positive/negative cases etc.

Additional test scripts, scenarios and cases are likely to be added. This will likely be the case for functionality not described in any BRD ('out of the box' functionality) and many of the non-functional requirements. Test cases need to specify:

- The exact input values that will be input and the values of any standing data that is required
- The exact output values and changes of value of the internal system state that are expected
- Any special steps for setting up the tests

Defining the expected values is very important, for only by doing this can discrepancies be spotted.

Test cases can only be run using test data. Depending on the test strategy and the test stage, this data is generated by the test cases themselves, is (manually) created separately, or is taken from the existing system. The Client Project team describes the design of how it intends to generate the test data.

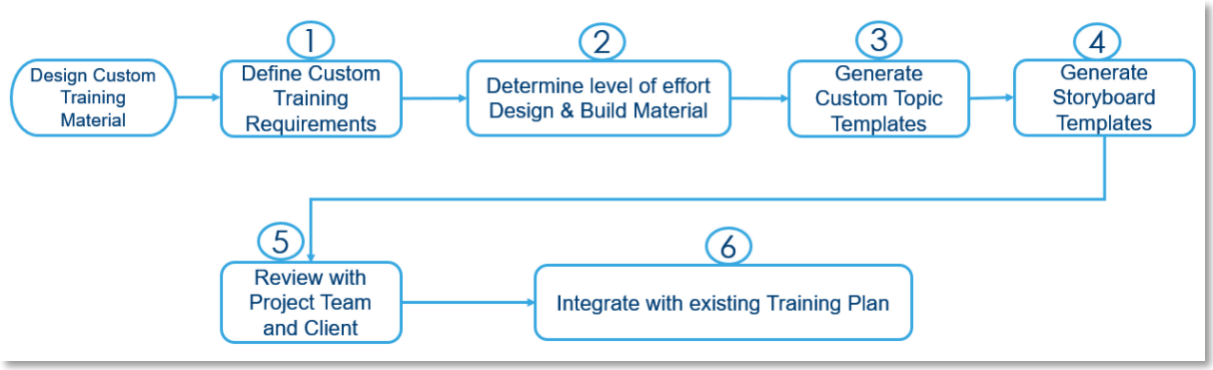
2.3.6. Design Custom Training Materials

During the preceding Analysis stage, the Implementer documents any functionality required by the Client. During this Design stage, the Implementer designs solutions to meet those requirements.

These newly-designed solutions may impact the training as there may be new features and functionality not found in the standard workshop. Therefore, new training material may need to be created. At this stage, the required training needs to be identified (or may have been identified in the Analysis stage if a formal TNA has been conducted) and now any new material needs to be designed and amalgamated into the training plan.

This process considers the delivery methods available to TLC: TLC Online, TLC Classroom, TLC Engine, and other options such as job-aids and mentoring. The output is the design plan and design storyboard templates.

The purpose of this phase is to ensure that the necessary training material design has been completed, prior to the development of End User Training. It provides a mechanism to enable the Implementer to provide appropriate training to the project team.



2.3.6.1. Define Custom Training Requirements

The PM will provide the training Team with a list of all proposed customisations, based on the RTM. This list of custom features can then be used by the training Team to build custom training material.

2.3.6.2. Determine level of effort to Design and Build Material

The training Team will analyse the information provided in the preceding step and produce a project plan for content development that can be shared with the PM.

2.3.6.3. Generate Custom Topic Templates

The training Team produces a list of training topics, roles affected, key content/point, and design delivery methodology.

- How best to package and deliver the new topics (i.e. Job aid, Classroom, Mentoring, T3, etc.)
- If TLC Engine or TLC Engine Lite, identify Process Maps.

2.3.6.4. Generate Storyboard Templates

The training Team will produce a storyboard describing the flow of the training topics

Note that this step is optional depending on the complexity of the planned customisations.

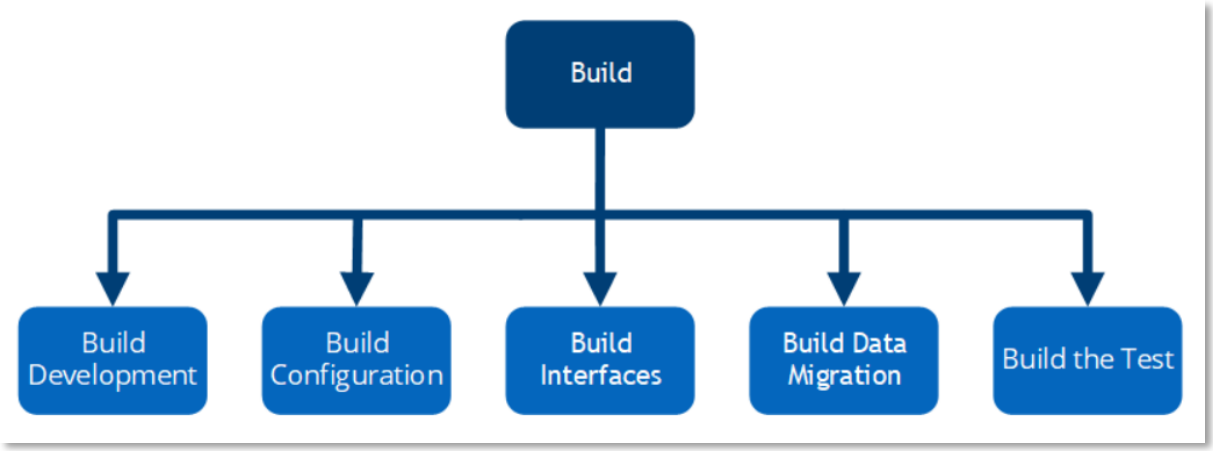
2.3.6.5. Review with Project Team and Client

Finally, the training Team will review all produced materials, plans, storyboards, etc., with the PM, the project team and the Client. Once reviewed and agreed, the training plans should be integrated into the overall project plans by the PM.

2.4. Build

In this section we focus on the Build stage.

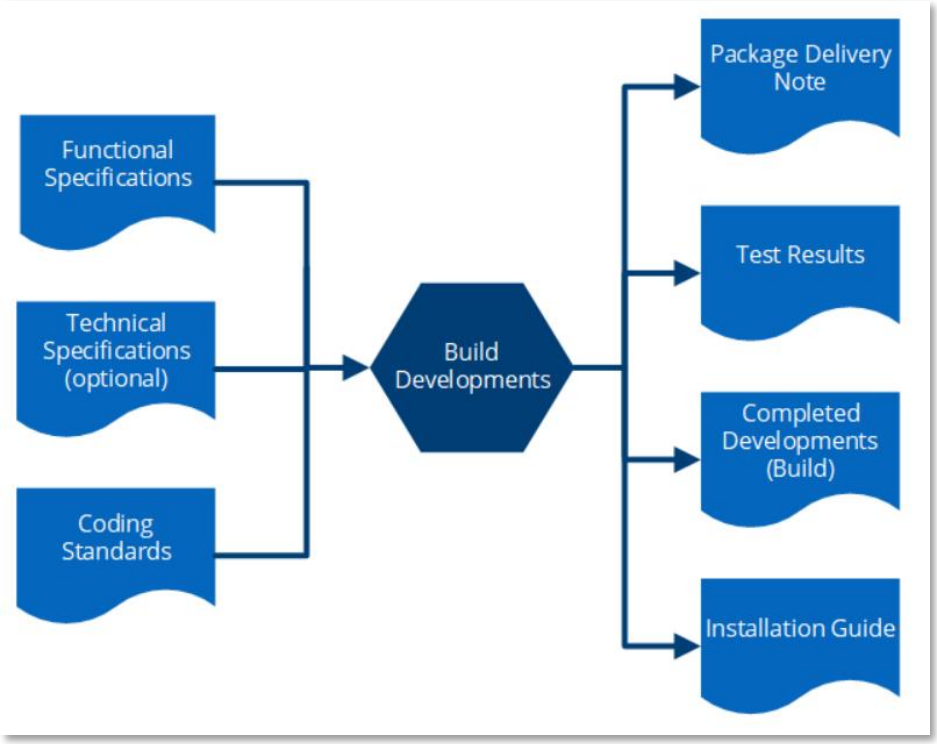
This stage builds the system for the Client, including any developments, interfaces, Data Migration, Test material and any bespoke training materials. The Implementer configures and customises the software based on the requirements and output generated from the Design Stage.



2.4.1. Build Developments

This part covers the build of the agreed developments for the project and is restricted to L3 developments only. Where such developments are done by a partner and L3 development governance has been contracted, elements are included.

Any developments that were identified for L1/2 are outside the scope of this part, as they are part of the product delivery by Temenos.



The Developer builds the development based on the FSD (and TSD, if applicable). All developments must follow the relevant coding standards.

During the development process, peer reviews and/or structured walkthroughs are done as part of the process.

For each development, the Developer prepares the necessary documentation such as Installation Guide, User Guide, Help Text, Package Delivery Note and Test Result documents.

Where L3 development governance has been contracted, the PM works with the Temenos PDM to ensure Temenos is part of the reviews above.

2.4.2. Build Configuration

Configuration is concerned with enhancing the delivered Temenos Model Bank functionality. In Transact terms, this includes VERSIONS, ENQUIRIES, Deal Slips, Delivery message formats, SMS, LRFs, Composite screen, TABBED screens and tailored APIs.

Build Configuration starts after the Configuration Design has been completed and can run in parallel to Build Developments.

There may be dependencies between parts of the Build Developments and parts of the Build Configuration; some configuration may only be possible after certain development packages have been completed. These PM is responsible for planning and managing any such dependencies.

2.4.2.1. Configure User Interface

2.4.2.1.1. Build VERSIONs

The BC is responsible for building VERSIONs to meet the requirements specified in the CSD, adhering to the relevant Build and Release procedures.

2.4.2.1.2. Build ENQUIRYs

The BC is responsible for building ENQUIRYs to meet the requirements specified in the CSD, adhering to the relevant Build and Release procedures.

The Transact ENQUIRY application can be used to build both online enquiries and reports produced at a defined point in time, usually at a defined point during the COB.

Reports should be added to ENQUIRY.REPORT, while enquiries should be added to the relevant HELPTEXT.MENU.

2.4.2.2. Configure Security Management System

2.4.2.2.1. Update HELPTEXT.MAINMENU and HELPTEXT.MENU

The BC starts the SMS configuration when Configuration is nearing completion. As VERSIONs and ENQUIRYs are built, thought must be given to which users these components should be made available.

Following the CSD, the appropriate HELPTEXT.MAINMENU and HELPTEXT.MENU records should be updated to include the new functionality.

A HELPTEXT.MAINMENU should be created for each bank role.

2.4.2.2.2. Set up USER.SMS.GROUP

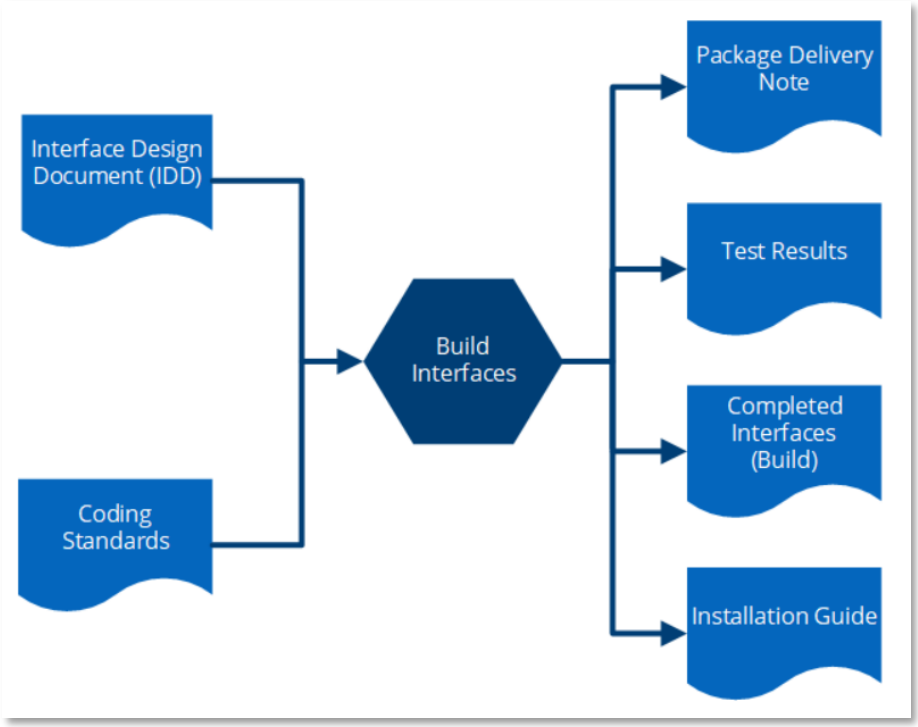
At least one USER.SMS.GROUP should be created for each bank role.

It is useful to define one USER.SMS.GROUP to which all USERs are assigned, in order to control the common functions such as ENQUIRY.REPORT.

2.4.2.2.3. Set up OVERRIDE.CLASS and OVERRIDE.CLASS.DETAIL

If additional controls on override requirements are specified in CSD, then OVERRIDE.CLASS and OVERRIDE.CLASS.DETAIL should be configured appropriately.

2.4.3. Build Interfaces



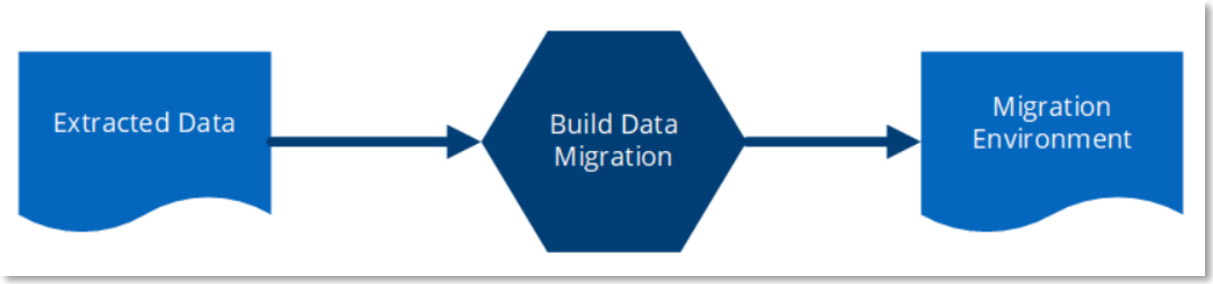
The Developer builds the interfaces based on the approved and signed-off IDD. All developments must follow the relevant coding standards.

During the interface development process, peer reviews and/or structured walkthroughs are done as part of the process.

For each interface, the Developer prepares the necessary documentation such as Installation Guide, User Guide, Help Text, Package Delivery Note and Test Result documents.

Where L3 development governance has been contracted, the PM works with the Temenos PDM to ensure Temenos is part of the reviews above.

2.4.4. Build Data Migration



The Build Stage of the Data Migration project is the development of the various elements described in the design phase, both within Transact and externally.

2.4.4.1. Cleanse and Extract Data

2.4.4.1.1. Pre Extraction Purging and Data Enrichment

As much as possible the clean-up of the legacy data should take place well in advance of the actual Migration date.

2.4.4.1.2. Data Transformations

Data transformations can be built to take place in the staging area, within the chosen tool, or as part of the VERSION used to load the records; however, it is recommended that they all take place in one location.

2.4.4.2. Map data

2.4.4.2.1. DATA.MAPPING.DEFINITION (DMD)

The Build Stage of the data mapping process creates the DATA.MAPPING.DEFINTION records from the DMS and the format of the data input file.

2.4.4.2.2. Data Structure Definition

The DMD also contains the definition and the structure of the input file; where the data for each field is positioned and whether it is delimited by control characters or defined by a fixed character position.

2.4.4.3. Build Reconciliation systems

2.4.4.3.1. Extraction of Data for Comparisons

Legacy extracts should be built and these should not be in the same format as the extracts that are used for the data loads. Transact Enquiries should be built to extract the pertinent data from Transact once it has been loaded in a format to match the reconciliation extracts from legacy mentioned above.

2.4.4.3.2. Reconciliation Procedures

Not only do the reconciliation tools and spreadsheets need to be built, but the procedures around their use also need to be defined.

2.4.4.4. Prepare Environment

2.4.4.4.1. The Master Environment

At the start of each run, a copy is taken of the master area.

2.4.4.4.2. Internal Accounts

The project team will create all necessary internal accounts for the takeover, in the master environment.

2.4.4.4.3. Run COBs

The system date of the Transact system will need to be advanced to the correct start date for the migration process, by running the necessary COBs.

The Temenos Cloud Team will run any COBs in managed environments (e.g. SIT, UAT, and Production) as per contract definition. The project team will directly perform COB for non-managed environment.

2.4.4.4.4. Install the chosen Tool

The tool for Loading should be implemented in the relevant environment by the project team, and user setup needs to be performed. Ideally this should be done in the master area, so that it does not need to be repeated for the creation of each environment.

2.4.4.4.5. Load DMDs

The DM.MAPPING.DEFINITION records will need to be loaded into the master environment once they have been fully agreed and tested.

2.4.5. Build the Test

The preparation for test is one of the most important parts of any Transact project. The purpose of this stage is to create the test cases in the chosen tool(s).

The Test Strategy describes the test tools to be used in the project, by test phase and test type. Where test is done manually, this procedure does not need to be executed. Where test is automated, this procedure aims to build the test cases in the chosen tool(s).

2.4.5.1. Install tool

The Client Project Manager ensures that the chosen test tool(s) are installed in the environment. Any configuration necessary is implemented to ensure the tool(s) work with the correct data sets and environments, and are accessible to the right user(s)

2.4.5.2. Build test cases

The Client Project Team creates the test cases in the installed tool(s), using the signed off Test Design as the basis.

2.5. Test

2.5.1. Test Preparation

This starts with getting ready for the various types of test planned as part of the Test Strategy. These will include, as a minimum, integration test, user acceptance test, migration test and non-functional test.

For implementations in the Temenos Cloud, the Temenos CDM is responsible for providing the environments needed for test (in the non-PROD zone for Integration Test and in the PROD zone for User Acceptance Test and non-functional test). For on-premise implementations, such responsibility lies with the Client.

The Client Project Manager is responsible for drafting a plan for the test and ensuring all other elements of the test strategy are in place. The test cases, tools and test data have been prepared in the procedure Build the Test.

Note that the provisioning of the test environments by the Temenos CDM or the Client will usually happen in a staggered manner, aligned to the plan for the test by the Client Project Manager.

2.5.1.1. Prepare Test Plan

Using the Project Plan and the Test Strategy, the Client Project Manager is responsible for defining a test plan, although it is common for the Client Project Manager to delegate responsibility to a Test Manager. This test plan covers the various test types, and includes activities to be executed by the various parties, including Implementer, Client and Temenos (for the delivery of the test environments in case of deployments in the Temenos Cloud).

The plan takes into account the dependencies between the various test types, for example the fact that user acceptance test only starts after completion of integration test, or that the mock runs in the migration tests are to generate the test data for the user acceptance test (as per the test strategy).

The Client Project Manager shares the test plan with the implementing PM and in case of deployments in the Temenos Cloud, with the Temenos CDM. The Temenos CDM will review and ensure that the test plan covers adequate validation of all of the NFRs contractually agreed between Temenos and Client and also provides an adequate coverage from a functional perspective.

2.5.1.2. Prepare Test Environments

The Client Project Manager requests the Temenos CDM or the Client's operation team to provision the test environments as per the agreed plan. For deployments in the Temenos Cloud, the Temenos CDM will first confirm that the requested environments are included in the Temenos Cloud Order Form and raise the necessary change requests if they are not. For controlled environments (i.e. UAT, PRE-PROD, PROD and DR environments), approval of the project's architecture by the CAB is a pre-requisite. Without such approval, these environments will not be provided.

2.5.2. Test Execution

2.5.2.1. Integration Test

2.5.2.1.1. Implementer activities

- Organising and executing SIT activities
- Fixing L3 software, interface and/or configuration issues, where applicable
- Assisting Temenos with the process for fixing L1/2 software issues

2.5.2.1.2. Client activities

- Execution of all SIT test scripts as per the test plan
- The Client PM will signoff and accept SIT once the exit criteria have been met

2.5.2.1.3. Temenos activities

The Temenos CDM will ensure that the agreed Client Environment for test is available and stable, for deployments in the Temenos Cloud

Fixing any L1/2 software issues raised via the Temenos PACS helpdesk.

2.5.2.2. Acceptance Test

2.5.2.2.1. Implementer activities

- Provide support for UAT
- Fixing L3 software and/or configuration issues, where applicable
- Assisting Temenos with the process for fixing L1/2 software issues
- Consultative assistance to the Client using the available time of relevant members of the implementation team

2.5.2.2.2. Client activities

- Organisation and planning of all UAT activities
- Execution of all UAT test scripts as per the test plan
- The Client PM will signoff and accept UAT once the exit criteria have been met

2.5.2.2.3. Temenos activities

- The Temenos CDM will validate the CAB approval for the project's architecture, and ensure that the agreed Client Environment for test is available and stable, for deployments in the Temenos Cloud
- Management of the UAT environment, for deployments in the Temenos Cloud
- Fixing any L1/2 software issues raised via the Temenos PACS helpdesk

Note that the user acceptance tests are advised to be performed with masked data, as per best practice and the Temenos Cloud Service Specifications, to ensure relevant compliance regulation on data privacy is adhered to.

2.5.2.3. Migration Test

2.5.2.3.1. Implementer activities

- Organisation and execution of migration test, using data extracted from legacy system(s) by the Client. Note that it is common for later cycles of UAT to use data generated from 'clean' migration test
- Fixing L3 software and/or configuration issues, where applicable
- Assisting Temenos with the process for fixing L1/2 software issues
- Consultative assistance to the Client for migration Dress Rehearsal(s)

2.5.2.3.2. Client activities

- Organisation, planning and execution of all Dress Rehearsal activities
- The Client PM will signoff and accept DM Test once the exit criteria have been met

2.5.2.3.3. Temenos activities

- The Temenos CDM will ensure that the agreed Client Environment for test is available and stable, for deployments in the Temenos Cloud
- Management of the test environment, for deployments in the Temenos Cloud
- Fixing any L1/2 software issues raised via the Temenos PACS helpdesk

2.5.2.4. Non-Functional Test

2.5.2.4.1. Implementer activities

- Provide support for NFT
- Fixing L3 software and/or configuration issues, where applicable
- Assisting Temenos with the process for fixing L1/2 software issues

2.5.2.4.2. Client activities

- Perform Non-Functional Test, including:
  - performance test
  - load test
  - stress test
- We recommend that the Client engages expert assistance with penetration test, including utilising the knowledge and experience of any third-party authentication experts.
- Assist Temenos in execution of the Disaster Recovery test plan
- The Client PM will signoff and accept NFT once the exit criteria have been met

2.5.2.4.3. Temenos activities

- Fixing any L1/2 software issues raised via the Temenos PACS helpdesk

Additionally, for deployments in the Temenos Cloud:

- The Temenos CDM will ensure that the agreed Client Environment for test is available and stable
- Provide support for NFT
- Tuning of system parameters as a consequence of performance, load and stress tests
- Management of the NFT environment
- Perform (internal) Disaster Recovery test
- Perform validation of security parameters and vulnerability / penetration test
- The Temenos CDM signs off that the test process has been successfully completed once the exit criteria have been met

When the above activities have been completed, the PM must complete the following sections in the Cloud Operational Handover Document :

- Performance, Load and Stress Tests, or Production Simulation Runs
- DR Tests
- Vulnerability & Pen Tests

2.5.3. Train the Expert

The trained “Expert(s)” often become the first line of support during end-user training or they may play a mentoring role or a more traditional trainer role if the Client wants to take on the task of enabling their user base.

While not a requirement, this group/team usually contains representatives who have completed the Induction Training and/or have been involved with previous stages of the project.

This training should be completed before the user Acceptance Test and should involve a small audience as there are usually tight deadlines at this stage of a project.

2.5.3.1. Identify Key Resources

The Client PM will identify the Expert (or Experts) to be trained as part of this phase; this will be an individual or a small group who has been involved in the project from the earlier stages.

2.5.3.2. Tailor Training Plan

The PM will work closely with the training Teams and the Client Experts (or Trainers) to produce a training plan and schedule tailored to the group’s skillset and the project timelines.

2.5.3.3. Execute Training Program

The Client's Experts will undertake the tailored training to enable them to become Experts/Trainers.

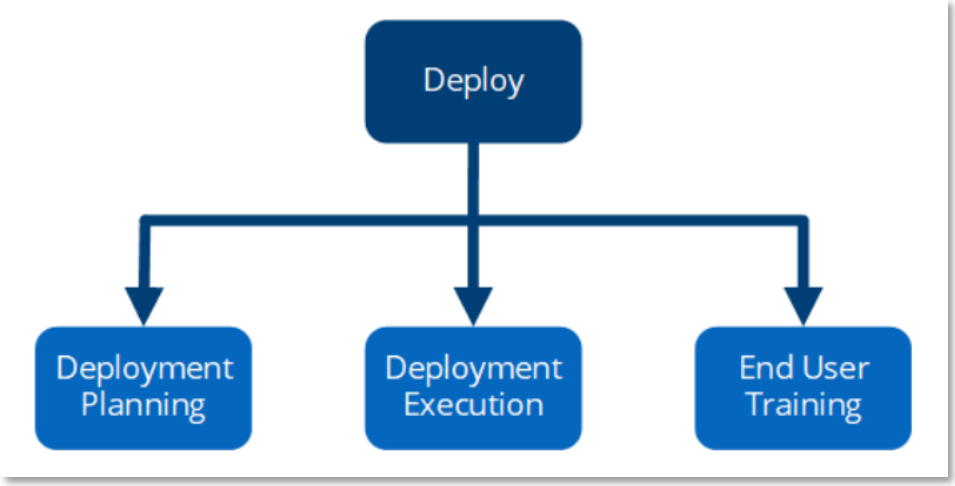
2.5.3.4. Evaluate Training

The training Team, working with the Implementing project team, the Client, and the Experts review any feedback and ensure that any lessons are learned and carried forward to the next project engagement.

2.6. Deploy

In this section we focus on the Deploy stage.

This stage is designed to ensure that the Client can rollout the delivery across the business enterprise. It runs as a sub-project from the early stages of the implementation through to the final closeout and handover to the Client. The stage is also designed to ensure that the necessary operational information is properly captured and validated in order to provide operational production support.



2.6.1. Deployment Planning

Deployment Planning is essential to secure the enterprise-wide rollout of the system. This poses critical challenges to the project and demands careful planning and constant review throughout the project life cycle.

For deployments in the Temenos Cloud, Temenos is responsible for provisioning of Cloud environments, Cloud operational hand-over and providing assistance to the Client to develop a rollout strategy for its operations. Temenos will validate operational readiness in a decision meeting of its ORB, which operates according to the ORB checklist.

The Implementer is responsible for data conversion and migration.

For the Client there are significant additional tasks involving hardware and infrastructure logistics for systems not hosted by Temenos Cloud Services, end-user training, change management and communication.

The Deployment Planning document acts as a point of reference for the following key components in the deployment stage:

- Data migration and conversion
- Coexistence strategy

- Logistics
- Training
- Change management and communication
- Temenos Cloud Operational readiness (for deployments in the Temenos Cloud)

For deployments in the Temenos cloud, the PM must complete the following sections in the Cloud Operational Handover Requirements Document:

- Project Details
- Local Customisation
- Releases & Changes
- Support Process
- Support SLAs
- Environments to be Decommissioned
- Monitoring Report
- Sign Off

2.6.1.1. Prepare Deployment Plan

The PM works with all designated Client stakeholders to begin the Deployment Planning process.

2.6.1.1.1. Review infrastructure (by the Implementer)

- Cloud Production, Pre Production and DR environments for deployments in the Temenos Cloud
- Hardware and software for applications not supported by Temenos Cloud Services
- Disaster Recovery and High Availability for applications not supported by Temenos Cloud Services
- Network
- Resourcing (capacity planning)

2.6.1.1.2. Review business change processes (by the Client)

- Business processes and policies
- Training
- Communications
- Coexistence

2.6.1.1.3. Review data conversion and migration (by the Implementer)

- Production environment setup
- Technical checklist
- User checklist
- Conversion and reconciliation
- Coexistence
- Roles and responsibilities
- Command centre procedures
- Acceptance criteria
- Roll back and recovery

The PM will then circulate draft project planning documents and Deployment Plan for Client review.

For deployments in the Temenos Cloud, the PM must complete all remaining required documents for Temenos Operational Readiness review as per the ORB checklist. This involves ensuring that all

elements of the Cloud Operational Handover Requirements Document are now complete and signed off by the respective owner.

The signoffs include, but are not limited to:

- NFR requirements
- NFR (performance, load, stress, VUL, PEN and DR) sections of test plan
- Associated test results
- Security checks
- Architecture overview
- Support handover checklists (NCS, PACS) incl. warranty support and outstanding defects
- (where applicable) Temenos L3 maintenance and support contract
- (where applicable) CR on Temenos Cloud Order form or Addendum to Temenos software agreement

2.6.1.1.4. Temenos Operational Readiness Board decision meeting (deployments in Temenos Cloud only)

The PM is to present the request for any deployment in the Temenos ORB meeting. The meeting is usually scheduled the week ahead of the scheduled deployment. The Temenos CDM will assist the PM in preparing for this meeting.

The PM presents a concise version of the deployment plan to the ORB along with evidence of signoffs obtained for all the criteria on the ORB checklist.

The ORB subsequently decides to either

- accept the deployment,
- accept the deployment with conditions, or
- reject the deployment

2.6.1.1.5. Acceptance

In case of acceptance, this is the Temenos signoff for the deployment plan.

2.6.1.1.6. Conditional Acceptance

In case of acceptance with conditions, the PM must ensure that the acceptance conditions are met in accordance with the decision. This is the Temenos conditional signoff for the deployment plan.

2.6.1.1.7. Rejection

In case of rejection, the PM is responsible for remediating the reasons for rejection, adjusting the deployment plan, and presenting back to the Temenos ORB once this has been completed. In this case, Temenos does not signoff the deployment plan.

2.6.1.1.8. Review (Cloud) Environment to be decommissioned

For deployments in the Temenos Cloud, the Temenos CDM will review all relevant contractual documents and submit a list of environments to be decommissioned. For on-premise implementations, the Client project team should list the environment to be decommissioned as well.

The PM reviews and approves the environments list and raises a CR if any extension is required.

2.6.2. Deployment Execution

This phase is primarily concerned with the activities that the Client will oversee and the Client team, or Temenos Cloud team in the case of a deployment in the Temenos Cloud, will execute to complete the transition to the new software.

The success of the deployment is dependent on the Client deploying the necessary hardware across the network, software peripherals for 3rd party applications integrated to the Temenos Cloud environment (for deployments in the Temenos Cloud, Interacting with Services from the Temenos Cloud Services catalogue) and ensuring that the end users have received comprehensive training on the new products.

The Client team or Temenos Cloud Team (in the case of a deployment in the Temenos Cloud) will ensure the readiness of production environment including application, security hardening, COB automation and environment test and verification.

The Deployment Planning document produced in the previous phase acts as a point of reference for the following Client activities:

- Logistics
- Training (including training to Operation procedures such as but not limited to incident management and Change & Release request management)
- Business change management and communication

For deployments in the Temenos Cloud, the PM must complete the **Tertiary DB Backup** section in the Cloud Operational Handover Requirements Document.

2.6.2.1. Logistics

The Client team or Temenos Cloud team (in the case of a deployment in the Temenos Cloud) will ensure that the production environment is ready for Go-live. The Client ensures the same for all 3rd party systems interacting with this environment.

The project team will validate the rollout sequence and ensure that all hardware and networks are in place and tested in the branches, where appropriate, to support the new system as per the Deployment Plan.

Finally, the team will execute hardware/network upgrades and replacements as per the Deployment Plan.

2.6.2.1.1. Training

Update training materials, procedure and end user documentation based on the finalised implementation delivery.

Ensure that the training is delivered and coordinated in accordance with the Deployment Plan.

2.6.2.1.2. Business Change Management and Communication

The Client will ensure regular updates and communication with all levels of the organisation that are impacted by the system change.

The Client will ensure that customers are informed of any change that impacts them directly on successful deployment of the system and ensure that adequate fall back measures are in place for communicating with customers in the event of a rollback.

2.6.2.2. End User Support

The Client PM is responsible for ensuring the setup of command centres and procedures for handling end user queries during the cut over period. The PM must also ensure that the following are available to handle immediate problems during the Go-Live weekend:

- Super users stationed in the branches and/or command centres
- Phone numbers and communication channels established for handling issues that may arise, including escalation points to senior management.

The Client PM is also responsible for the setup of an internal help desk for supporting the operations, once in production.

- Phone numbers distributed for operational issues encountered by end users
- Super users available to walk through the procedures
- Escalation procedures in place to handle major system or process issues

The PM must ensure that Temenos PACS team is informed of the.

2.6.2.3. Deploy solution

The Client team or Temenos Cloud team (in the case of a deployment in the Temenos Cloud) will execute the tasks as per the deployment runbook, based upon the instructions of the Client's PM. These tasks originate from previous Dress Rehearsals and involve software deployment and configuration, data migration and various other activities.