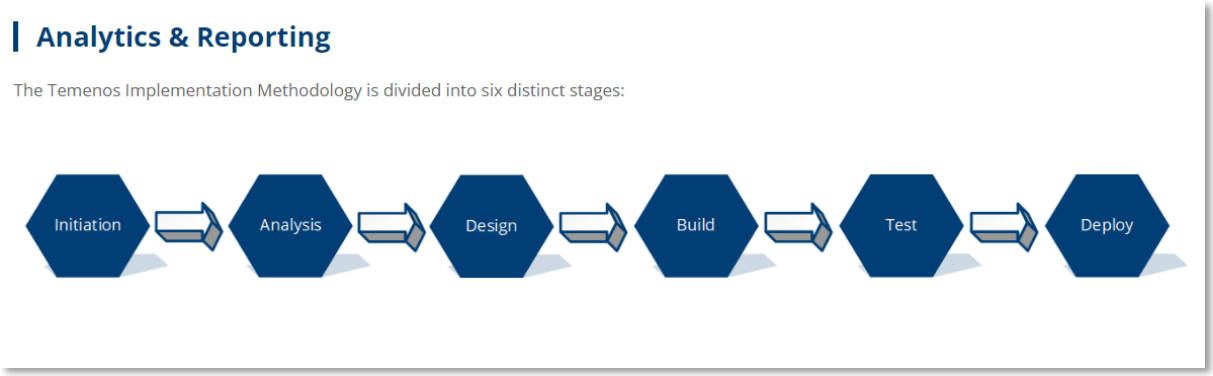
Temenos Implementation Methodology - TIM

ANALYTICS & REPORTING

Author

Contents

TIM for Analytics & Reporting



TIM for Analytics & Reporting covers the following phases:

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

1. Initiation

In this section we focus on the **Initiation** stage.

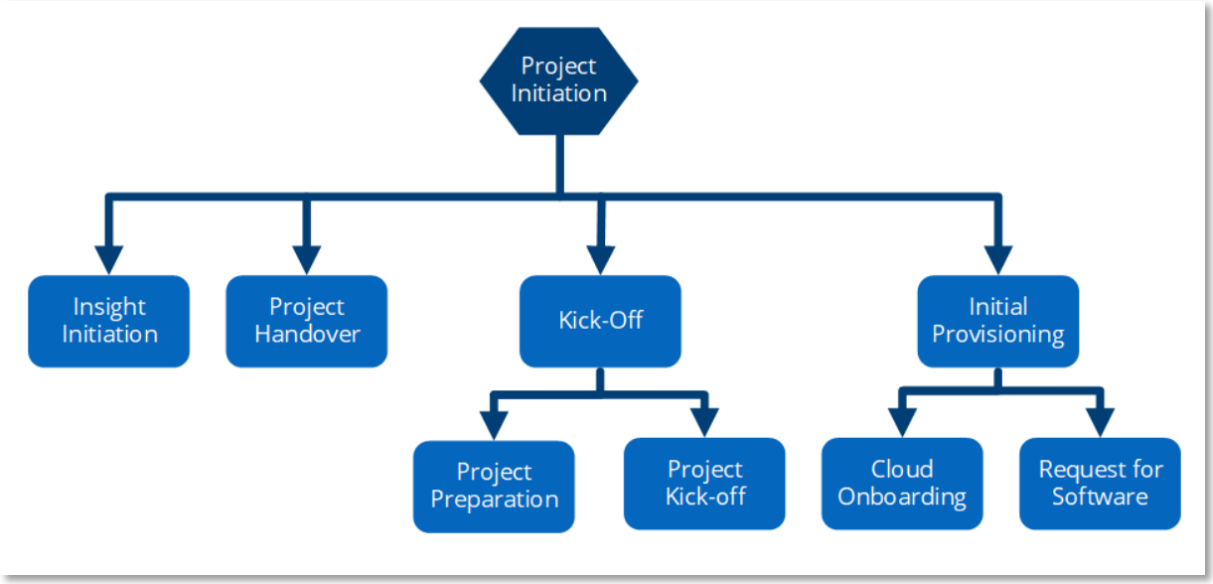
Please note that Temenos Dedicated Cloud Services offers the Client a set of IT Services to manage Temenos products hosted in Temenos Cloud. With Temenos Managed Cloud Services, Temenos hosts the software licensed by the client in the Temenos Cloud.

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
- Cloud Solution Architect



1.1. Insight Initiation

1.1.1. Complete Analytics Scoping Guide (IMP01)

During the sales cycle, a significant amount of information is gathered by the Analytics consultants and the sales and pre-sales teams. This information will be formalised into the IMP01 Analytics Scoping Guide and drives creation of the project Statement of Work, high level estimates, high level plans, etc.

The IMP01 Analytics Scoping Guide covers the setup of the Transact system that Analytics is going to be built over, some broad description of the way in which the Client intends to use Analytics, external data sources and volume information.

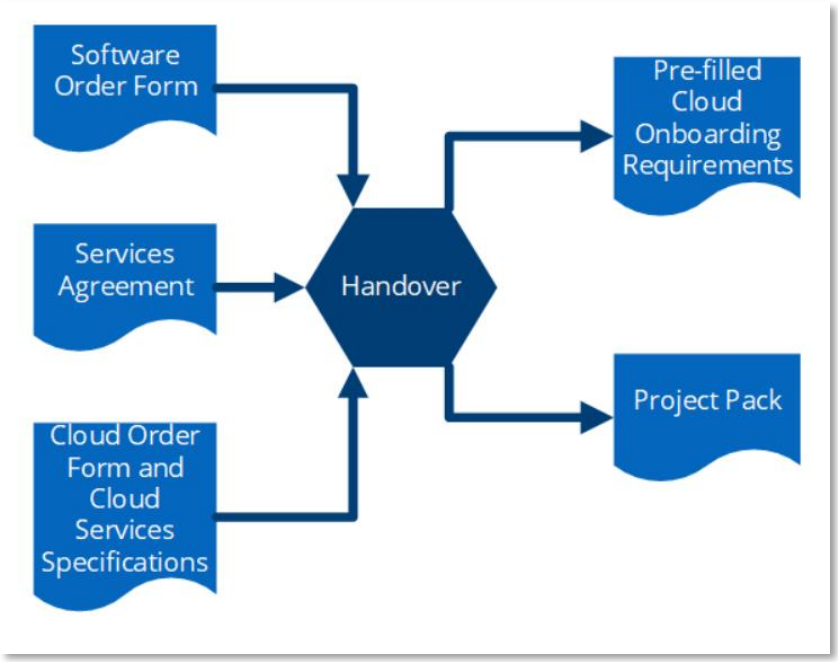
1.1.2. Elaborate the Project Plan using Analytics Project Plan Detailed Tasks (IMP05)

The implementing PM and the Analytics consultant will work together to create a detailed Analytics implementation plan that fits in with the overall project. It may be that the Analytics implementation is happening as a standalone activity, or that the Analytics implementation is to fit in to a Transact implementation or upgrade for example.

In either case the PM will supply knowledge of the overall project constraints and the Analytics consultant will provide detailed knowledge of the Analytics implementation process.

Together they will create a detailed plan of activities and timeframes, based on the IMP05 Analytics Project Plan Detailed Tasks workbook.

1.2. 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.

1.2.1. 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.

1.2.2. 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

1.2.3. 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)

1.2.4. 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.

1.3. 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.

1.3.1. 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

1.3.2. 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.

1.3.3. 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.

1.3.4. 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.

1.4. 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.

1.4.1. 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.

1.4.2. Prepare for Kick-Off

The 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.

1.4.3. 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.

1.5. Initial Provisioning

If the project is implementing to Temenos Cloud, then follow the process for Cloud Onboarding.

If the project is not implementing to Temenos Cloud, then follow the process for Initial Request for Software.

1.5.1. Initial Request for Software

For implementations that are not on Temenos Cloud, (i.e. they are on-premise or on Client cloud) this procedure guides the PM in placing a request for an Initial System Build (ISB).

1.5.1.1. Submit Request for Software to ISB Team

The CEM completes the relevant PRF and the ISB Order Form, which is generated directly from the T-Force License (not Services) opportunity.

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 PM submits the completed forms via email to the ISB Team.

1.5.1.2. 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 PM will be informed and will need to escalate the issue for approval from the Temenos Regional Services Director.

1.5.1.3. 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.

1.5.2. 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 CDM. 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.

1.5.2.1. 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.

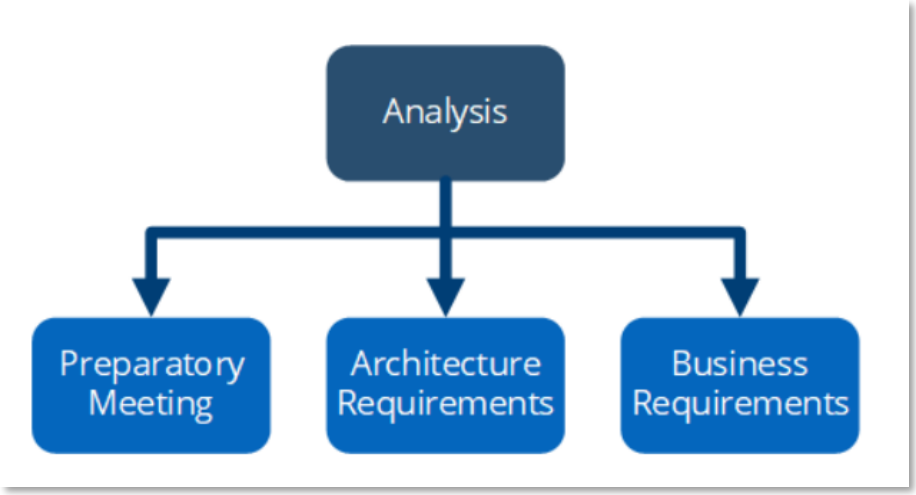
1.5.2.2. Initiate the internal process for the environment set-up

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. Analysis



2.1. Preparatory Meeting with Transact Team (where appropriate)

This is performed in order to ensure that the Analytics implementation process is joined seamlessly with the Transact implementation. Many of the questions to be asked in the Analytics Analysis workshops relate to the configuration of Transact, knowledge of which most likely already resides with the implementation team. We should avoid asking the Client again for information which has already been provided.

If Analytics is being implemented at the same time as Transact, configuration of the Transact ISB will be available without asking the Client and the Transact LBA & LTA will be the best source of background information.

Once the appropriate persons have been identified, meetings will be held to obtain as many answers as possible regarding the background of the project in general and the Transact configuration specifics. Access to the Transact system should be obtained so that configuration details can be extracted.

The implementation team will gather information from Transact, accessing a version of the Client's Transact system to download relevant configuration. E.g.: SPF; RE.REPORT.LINE; SECTOR; DAO; etc.

The information thus gathered will be updated into the relevant sections in the IMP02 Analytics Business Analysis Guide.

2.2. Architecture Requirements Analysis

The architecture must be determined so that the Client has time to implement it before the delivery of the ISB and so that the implementation team is aware of any constraints that may arise.

The objective of this phase is to undertake an architectural analysis exercise with the Client to establish the architectural framework that will be used and gain commitment from the Client that they will provide that architecture in a timely manner.

The LTA will obtain all architecture input documentation from the pre-sales handover phase, including any licence and services agreement, the RFP, Statement of Work and any architectural documentation provided by the Client.

Ahead of any meeting with the Client, the implementing PM will ensure that the Client has a copy of the Analytics Platform Environment Requirements document.

Create minutes of the workshop describing the agreed architecture in relation to the Analytics Platform Environment Requirements. If required, include this description in the IMP02 Analytics Business Analysis Guide so the Central Build Team is made aware of elements relevant to creation of the ISB.

2.2.1. Business Requirements Analysis

The Business Requirement Analysis stage of Analytics & Reporting is concerned with finalising the Analytics & Reporting's business requirements and reports requirements, documented within the appropriate sections of the IMP02 Analytics Business Analysis Guide.

In order to gather the relevant information, the Analytics consultant will conduct interviews and/or workshops with the users from the pertinent business units, using the questions contained within IMP02 Analytics Business Analysis Guide to drive the conversations. Where possible, detailed customer business requirements and reports requirements will be available as input to the Analysis phase.

All Deltas identified during the process review will be documented into the IMP02 Analytics Business Analysis Guide. Where a delta is identified the objective is to ensure that the Client modifies existing processes/reports to align with the Analytics & Reporting model and that system modifications are kept to a minimum. The Deltas identified during the workshops are presented to the CCB for acceptance / rejection.

This phase is extremely important as all of the detailed requirements need to be reviewed and approved by both the implementer and the Client.

2.2.1.1. Prepare for Analysis

The Analytics consultant will obtain all input documentation from the pre-sales handover phase, including any licence and services agreement, statement of work and any requirements documentation provided by the Client.

2.2.1.2. Conduct workshops

Conduct Business Analysis workshops

These workshops (including the Master Data workshop discussed below) can take anything up to two weeks to complete. The Analytics consultant will normally facilitate the process.

The questions contained in the IMP02 Analytics Business Analysis Guide are used to drive the discussions. A demo version of the Analytics system will be available for reference and to demonstrate Core functionality. It is also useful to have a Transact system available for reference.

Client resources from a number of departments will be included in the workshops, as agreed by the Client in discussion with the Consultant running the workshops.

Complete the IMP07 Master Data Configuration Guide

There will be a workshop particularly focussed on the Master Data in Analytics. The uses of Master Data will be described and illustrated during this workshop. The Client will decide on the classifications contained in the document, but more likely will require time to discuss and decide final set up. An initial cut is required for the creation of the ISB, and close guidance is normally provided by the Analytics implementation team.

Document the results of the Business Analysis workshops

The IMP02 Analytics Business Analysis Guide will be completed and will contain all the Client requirements with regards to Analytics & Reporting functionalities setup like FTP, cost allocation, cost centre, budget, business units, consolidation level, and any Deltas required to meet the Client requirements will be identified.

Transact configuration elements will normally have been completed during the preparation for the workshops, but any gaps should be filled during this step.

Transact data extract using DW.EXPORT

A data set from the Client's Transact environment is a pre-requisite for creating the Analytics ISB. The data should be as rich a set as possible, although we would expect to obtain test data rather than live data.

DW.EXPORT is configured by the Analytics implementation team specifically for the modules active in the Client's Transact system.

The RE.RETURN.EXTRACT job must also be configured as well as the relevant Batch and Service jobs to run everything correctly.

Run the DW.EXPORT job and create the required 'csv file set'.

Save the Transact configuration in a BCON and provide this to the Client for propagation into appropriate Transact environments.

Review final IMP02 document with Client

The completed IMP02 Analytics Business Analysis Guide, including the embedded IMP07 Analytics Master Data Configuration Guide, is reviewed and approved by the Client.

Obtain DELTA approvals

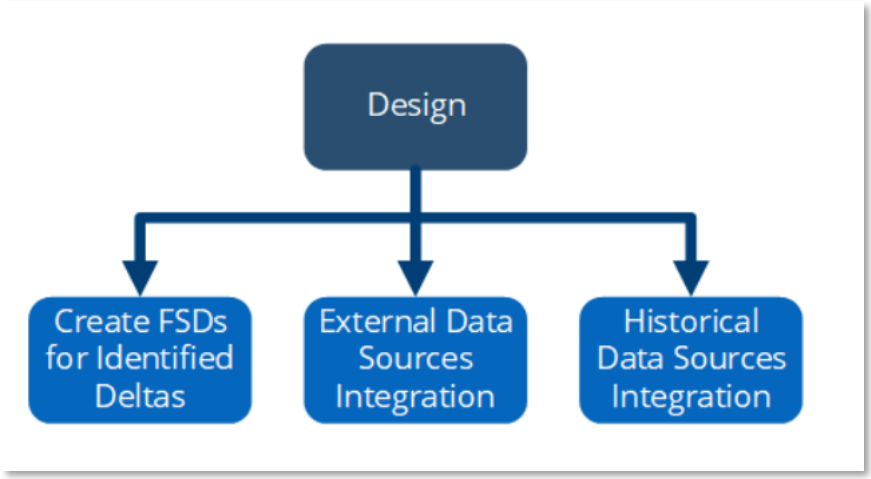
The IMP02 Analytics Business Analysis Guide includes a list of proposed deltas. The Client PM will discuss internally and gain approval for production of detailed FSDs, including firm effort estimates.

IMP02 Sign Off

The PM submits the completed documentation set to the Client for approval and sign-off.

Once approved, the implementing PM, working with the Analytics consultant, will update the project plan in line with the agreed Deltas and any other relevant information gathered.

3. Design



3.1. Create FSDs for Identified Deltas

Deltas approved during the Analysis phase of the project require FSDs to be produced and then presented to the Client for approval.

The Analytics Business Consultant creates detailed FSDs including effort estimates provided by the Technical Consultant. The PM then submits the completed documentation to the Client for review and approval. The PM and the Analytics consultant update the project plan in line with the FSD estimates and any other relevant information gathered.

3.1.1. External Data Sources Integration

External data source integration approved during the Analysis phase of the project require FSDs to be written and approved by the Client.

The Analytics Business Consultant creates detailed FSDs including effort estimates provided by the Technical Consultant. The PM then submits the completed documentation to the Client for review and approval. The PM and the Analytics consultant update the project plan in line with the FSD estimates and any other relevant information gathered.

3.1.2. Historical Data Sources Integration

The Design stage of the Data Migration project details how the requirements laid out in the Analysis stage are to be met, and is therefore an essential input into the build phase.

3.1.3. Develop Data Migration Project Plan

Plan Outline

Based on the inputs received from the migration workshop the plan outline can be developed by the DM Consultant and given to the Client's DM Manager.

The plan outline will contain the migration tasks required for Analytics & Reporting, as 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.

This outline need not contain dates or estimates as these are dependent upon the Client's legacy systems and resourcing availability.

Scheduling

The Client's DM Manager needs to provide realistic dates against each task in the plan. The schedule should be reviewed by the DM Consultant, as it is common for Clients to underestimate the magnitude of the task and include unrealistic dates. The DM Consultant should advise on the complexity of the process and recommend adjustments where necessary.

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 needs to be performed on a migrated database.

The trial and mock runs should be structured to lead up to the proposed go-live date. A long gap between the final mock run and the proposed go-live could lead to lose of momentum and familiarity with the operational steps.

Approval and Monitoring

The Client must approve the plan in order to achieve a well-defined migration strategy.

It is expected that the project plan will require revisions as the project progresses, based on factors external to the migration process like delay or problems in the project build or factors intrinsic to the process like legacy system extraction issues. The challenge for the DM team is to minimise the delays due to internal factors.

It is critical to monitor the tasks accomplished against the plan to analyse bottlenecks and put in more intensive efforts where the tasks are lagging. We recommend that the Client DM Manager produces a weekly DM status report.

3.1.4. Develop 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. This is different to the Operational Deployment Plan for executing a timed run of the migration process, which relates to real time activities. The Deployment Methodology for each source should be documented and approved by the accounting, audit and project business teams.

3.1.5. Develop Operational Deployment Plan

The Operational Deployment Plan 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.

This plan will undergo many changes throughout the life of the DM project, as the task list, timings and resourcing are refined heading towards the go live.

The Operational Deployment Plan should include preparatory tasks prior to the Migration, such as environment preparation, data checks, etc.

Reconciliation of the data can only take place after the integration of all data sources.

Any final pre sign-off checks should also be included on the plan at this point.

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 Client's Project Manager to confirm the live operations can proceed.

3.1.6. Design Data Mapping

Completing the DMTs

A Data Mapping Table (DMT) is a matrix which maps the fields required in Analytics & Reporting against the fields in the legacy system.

The implementing DM Consultant will prepare the Analytics & Reporting side of the matrix in consultation with the implementing Business Analyst in charge of a particular area. The Analytics & Reporting side should only give details of the fields which are relevant for migration (inclusion of others can create confusion).

The Client's DM team completes the legacy side of the matrix after consultation with their Business analysts. Within the Transact Model Bank documentation there are reference guides for each data migration of each product area, to assist in this process.

Maintaining links to legacy records

All Analytics & Reporting records should have a local reference field containing the corresponding legacy record id from which the record is migrated. This is necessary for audit, regulatory and reconciliation purposes. This mapping should be included in the DMTs.

Approval and sign off

The completed DMTs are owned by the Client DM team. Each DMT should be reviewed, and receive initial approval from the Client Business Analyst for the appropriate business area.

The DMTs are not signed-off however, until after the iterative unit test loads and at least two trial runs, so that the Business Analyst can compare the actual data in Analytics & Reporting with the legacy system.

It is mandatory that the DMTs be signed off prior to the final trial run. This is to ensure that the Client executes a diligent analysis of the results, to guarantee the accuracy of the mapping. After sign-off a change control procedure should be enforced for the DMTs.

3.1.7. Design Data Reconciliation

The nature of the data reconciliation to be performed may vary according to its file type (static / financial), the volume, time criticality and sensitivity of the data. The use of some or all of the below methods can be assigned to a particular file.

The data reconciliation must consider the use of load checks (record counts, manual sampling), technical reconciliations (such as comparisons of hash totals or check sums), manual or automatic file comparisons, as well as accurate general ledger reconciliation, where every line on the ledger is designed to balance exactly. Even financially insignificant amounts in the trial and mock runs need to be evaluated, understood and resolved, as the amounts in the reconciliation disparity could be much greater in the go-live.

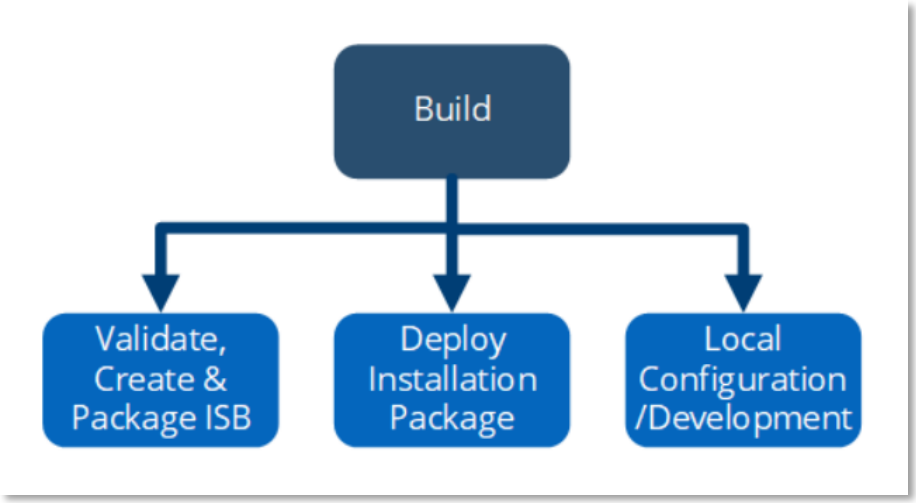
3.1.8. Gain Historical Data Load FSD approval

The PM submits the completed Historical Data Load FSD for Client review and approval.

The implementing PM, working with the Analytics consultant then updates the project plan in line with the Historical Data Load FSD estimates and any other relevant information gathered.

4. Build

In this section we focus on the Build stage.



4.1. Validate, Create & Package ISB

4.1.1. Validate ISB Prerequisites Pack

There are three prerequisites for any Core Analytics ISB creation by the CBT:

- IMP02 Analytics Business Analysis Guide
- IMP07 Analytics Master Data Configuration Guide
- CSV data set

If there are FSDs relating to Deltas that are to be built by the CBT these will also be an essential part of the ISB prerequisites pack.

All elements will be validated by the CBT. Documentation questions may need to be clarified, the CSV files must be a complete set and the Master Data set up must be complete and valid.

Any other available background information can also be passed to the CBT.

4.1.2. Create ISB

As far as a Temenos implementation team or a Partner is concerned, the CBT can be seen as a 'black box'. The input is the ISB prerequisites pack, the output is an Analytics system configured around the Transact set up at the Client, fully tested and functioning.

Using TFS for source code management (with a separate project in the Analytics TFS server for each Client), the CBT configures an Analytics system in terms of the Transact modules the Client has installed, the configuration of companies and which files are shared and which are unique by company, the Master Data definitions set up in the Analysis phase and so on.

The CBT will also code any FSDs they are sent.

4.1.3. Package ISB

CBT uses the TFS project they have updated during the ISB Build to create an Installer which is then made available to the onsite Analytics implementation team.

4.2. Deploy Installation Package

The Analytics Installer is an executable file delivered by the CBT that runs automatically to set up the ISB. There may be issues with the servers set up at the Client site regarding security and the

software installed, since these elements are local and may not match the set up on the servers used for creation of the ISB. Any issues arising will be handled by the onsite implementation team.

Once the ISB is installed, an extract of data from an appropriate Transact environment will be used to test the ETL process.

4.2.1. Check installed ISB

4.2.1.1. Obtain a data extract

A fresh data extract from an appropriate Transact system should be obtained. A data set that is as rich in the variety of accounts and contracts as possible will enable meaningful testing of the Analytics ISB. This will incidentally test the DW.EXPORT set up has been applied correctly and is working as required.

4.2.1.2. Run the ETL

The data extract will be assimilated into the Analytics ISB by running an ETL. This tests the end-to-end processing of the delivered system as well as testing that the Client environment is correctly set up.

4.2.1.3. Check the results through the Analytics application

This final step will confirm that the data from Transact is being assimilated correctly and that the OOB reports are running and cubes are populated and functioning. Any FSDs delivered should also be tested.

4.3. Local Configuration/Development

There are four areas of local development to be considered:

- Configuration of additional data requirements and Master Data
- FSDs not built by the CBT
- External data source integration
- Historical data load

Some or all of these elements may be required.

4.3.1. Add files to DW.EXPORT and to Analytics configuration

DW.EXPORT is configured with the prerequisites for the CBT to build the Analytics ISB. If there are additional files required by the Client for any reason, these should be added to the Transact DW.EXPORT definitions.

Analytics will be configured to assimilate this data and to parse any multi-value or local reference fields that are required in a normalized form.

Making changes is a useful opportunity for training, so the Client should be closely involved in this action to make progress to self-sufficiency with Analytics configuration.

4.3.2. Adjust Master Data

A ‘first cut’ of the Master Data set up is delivered as part of the ISB prerequisites pack. Changes may be required if the set up in Transact has changed or if the Client has determined different requirements for classification.

Changes to Transact configuration are likely if Transact and Analytics are being implemented simultaneously. The Client will be on a learning curve, and will change configuration as greater understanding is gained.

The concept and use of Master Data also involves a learning curve, and the Client will change configuration as greater understanding is gained.

Making changes is a useful opportunity for training, so the Client should be closely involved in this action to make progress to self-sufficiency with Analytics configuration.

4.3.3. Build code for outstanding FSDs

The onsite implementation team is responsible for the build of any FSDs signed off but not sent to the CBT.

4.3.4. Develop interfaces for external data sources

External data sources might be other systems (e.g. card system or third party GL system) or data contained in a spreadsheet (e.g. budgets or rates).

Guidance should be obtained from the Temenos Analytics Product group on the best way to integrate any particular external data source. Some external systems may involve major development effort, others may be relatively simple. Some will use existing data fields within the warehouse, others may require creation of new fields or even Warehouse DIM and/or FACT tables.

Since the External System data as well as business and technical experts are available at the Client site, this is where the development will be carried out in most instances.

4.3.5. Develop processes to load historical data

If the Client requires loading of historical data (from Transact or any other system) this will normally be a major undertaking, with uncertain outcomes.

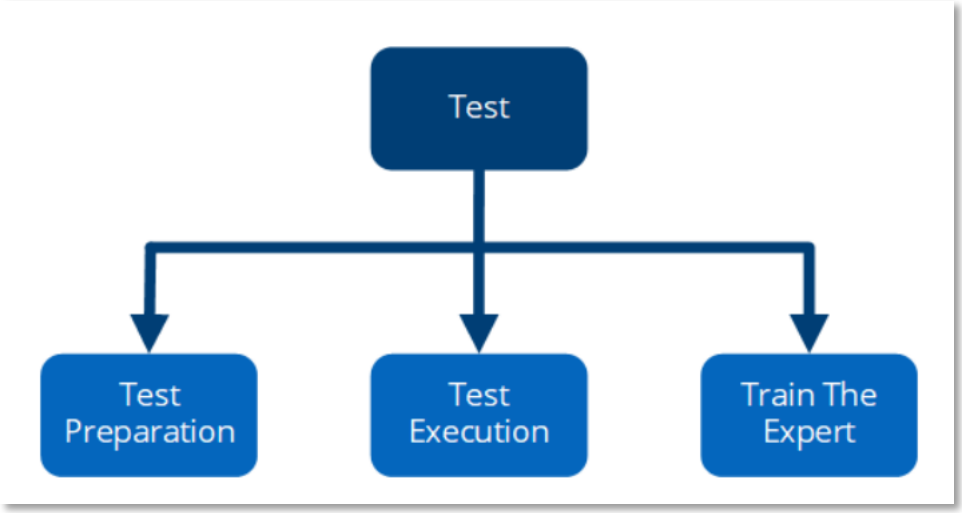
The work will require a high degree of technical expertise and is best done on site by the implementation team. Guidance should be obtained from Temenos Analytics Product group on the best way to approach any particular scenario.

5. Test

In this section we focus on the Test stage.

This stage aims to reduce the risk of defects in the solution when it is finally deployed and provide the Client with confidence that the solution will meet their business needs.

The Test stage typically consists of four main parts. During Integration Test, the Implementer validates that the individual components of the solution work together properly and during the Acceptance Test, the Client validates that the total solution meets their end-to-end business needs. The Client validates the migration during the Migration Test, and the non-functional aspects of the solution during the Non-Functional Test.



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.

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.

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.

5.2. Test Execution

5.2.1. Integration Test

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

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

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

5.2.2. Acceptance Test

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

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

5.2.2.3. 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 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.

5.2.3. Migration Test

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)

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

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

5.2.4. Non-Functional Test

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

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

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

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.

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.

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.

5.3.3. Execute Training Program

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

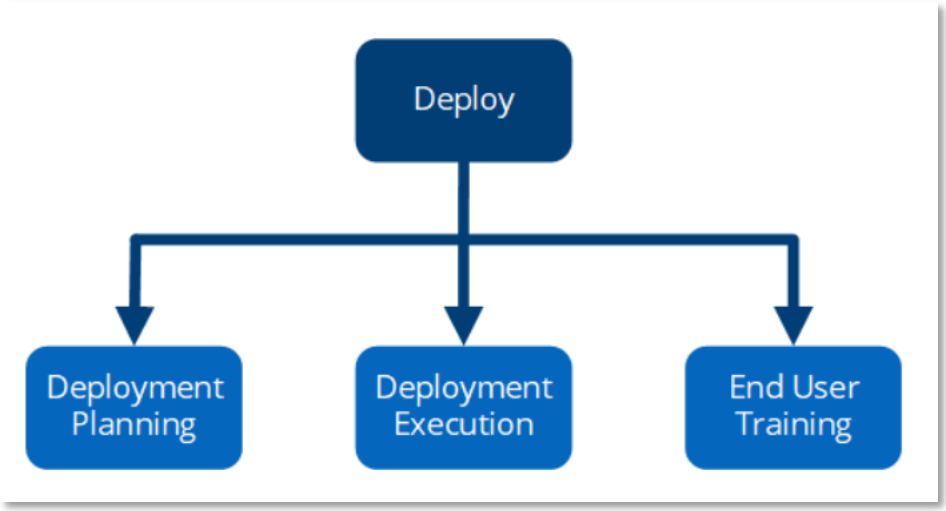
5.3.4. Evaluate Training

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.

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.



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

6.1.1. Prepare Deployment Plan

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

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)

6.1.1.2. Review business change processes (by the Client)

- Business processes and policies
- Training
- Communications
- Coexistence

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

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

6.1.1.5. Acceptance

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

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.

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.

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.

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.

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.

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.

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.

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.

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.

6.3. End User Training

When the solution has been built and tested and is about to be deployed, the Client's staff will need to be trained to use the solution.

The Project Manager must complete the Training section in the Cloud Operational Handover Requirements Document.

6.3.1. Schedule/Enable Training Resources

The PM initiates the request for scheduling of training resources and is the initial liaison between the customer and the training Team.

The term resources is inclusive of things like:

- Licensing
- Trainer
- Installation/SaaS TLC Engine

The training Team will confirm availability of resources and assist with the scheduling and allocation of these resources.

6.3.2. Execute Training Program

Either the training Team will be responsible for the training or will play a supporting role if the Client is using their own Trainers.

6.3.3. Evaluation

The training Team works with the Client to evaluate the training through use of a standard survey or through the Client's own evaluation process. Any feedback / lessons learned will be incorporated into future training engagements.