

## Services & Solutions



# Architecture as a Service Assessment

v2





# Introduction

UST Consulting provides architecture and code assessments for clients. In order to prescribe architecture or enhancements to architectures we need to study the current (“As-Is”) architecture. This is done by performing a diagnostic assessment.

The assessment does an objective and subjective assessment on the architecture where it focuses on the analysis of the core elements of the current architecture, the reference architecture, the candidate architectures that were evaluated to get to the current architecture and the vision for the future architecture.

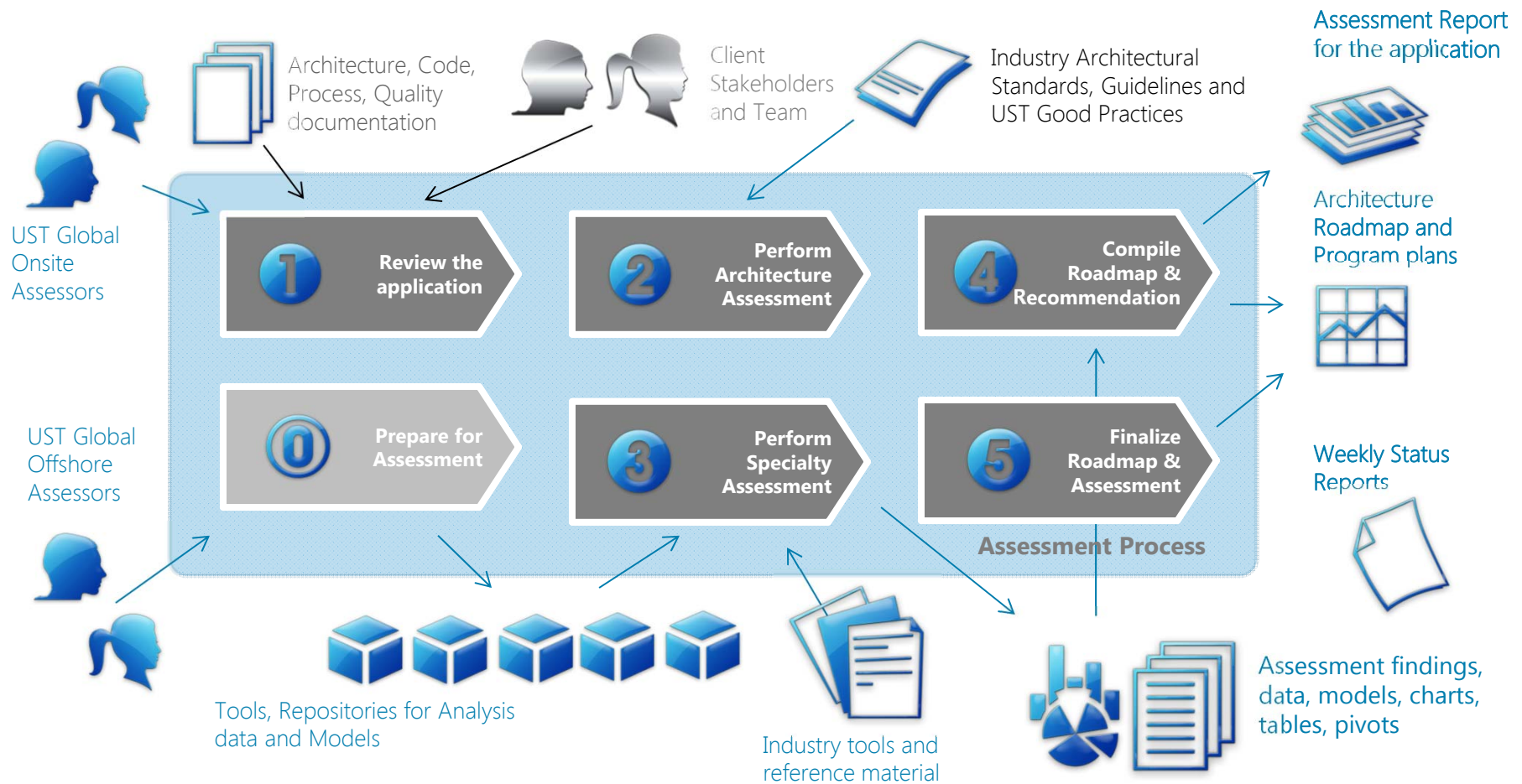
The assessment also focuses on the code developed as a result of the architecture. It evaluates how the application(s) was realized with the architecture.

A set of recommendations is prepared at the end of the assessment that proposes key changes in alignment with the IT and business direction.



# Our Assessment Process

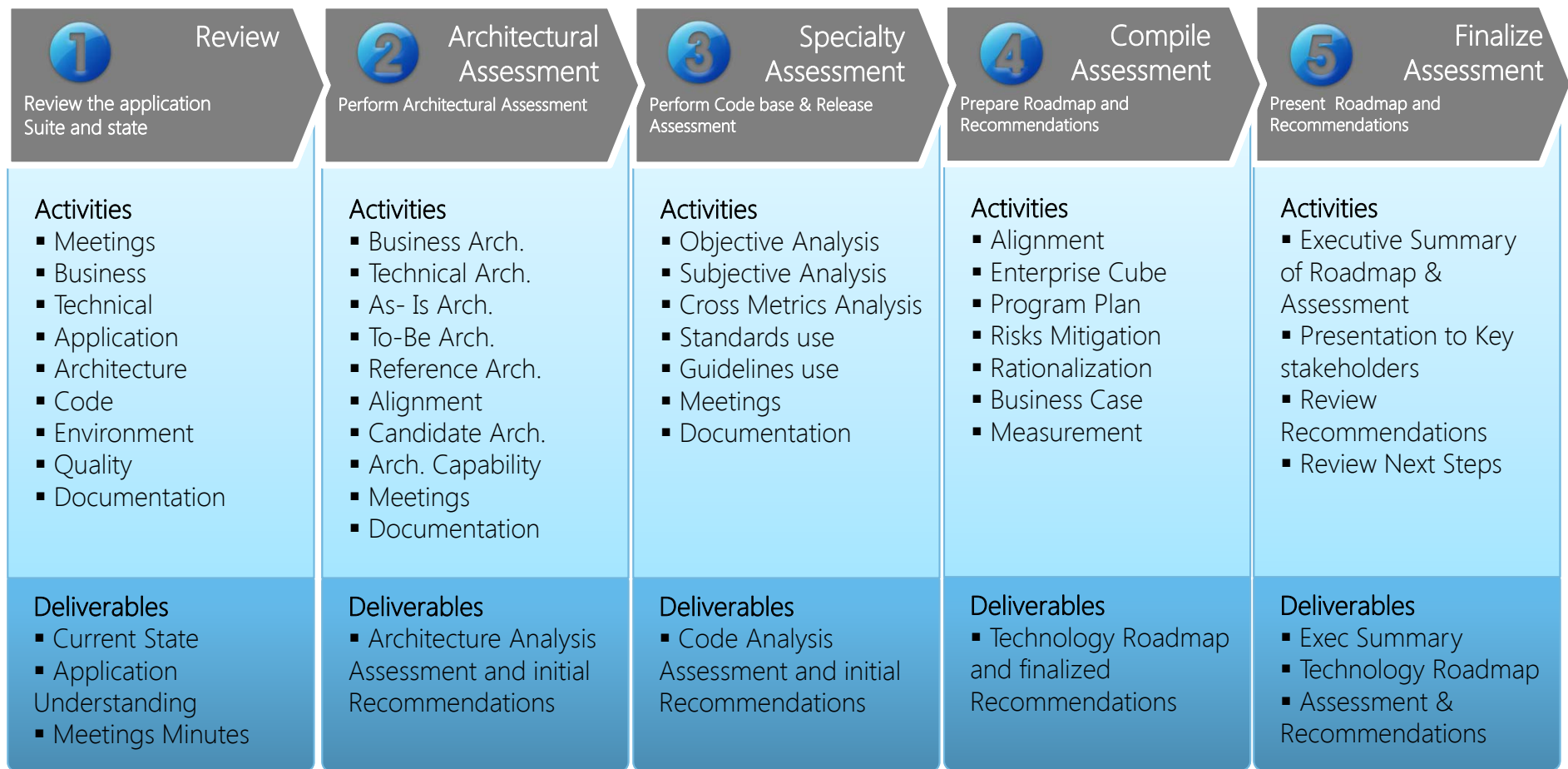
UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and "lessons learned" from previous engagements.





## Details of our Assessment Process

UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.





# Prepare for Assessment



UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

### Activities

- Schedule interviews with IT stakeholders and architects as possible or appropriate
- Obtain access to asset and source control repositories
- Obtain hardware, software required to perform the assessment.
- Obtain network clearance for offshore team members.
- Gather all components that needs to be assessed, documents, artifacts, models, code
- Review the current usage scenario by user and by groups
- Get access to transactional logs, user patterns for key and support features within the applications
- Customize the questionnaire for the interviews based on the Stakeholder profiles and application groups
- Setup the environment to run the analysis
- Get access to the job schedule and automated applications

### Deliverables

- Access requests to perform assessment
- Environment set up for analysis



Fig1. description of the artifact, schematic or model



Fig2. description of the artifact, schematic or model



# Prepare for Assessment



UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

- Activities:
- Identify key persons and groups who will participate in the assessment
- Setup meetings with key stakeholders, send heads up emails with agenda and expectations.
- Review the functional features of the applications from a business perspective.
- Review the architecturally significant elements, As-Is
- Review the technology used to implement the functional features
- Obtain high-level understanding of the user community
- Obtain inventory of all applications and associated services and components
- Review the deployment and environment model
- Review the development lifecycle documents
- Review the release management process for the application
- Perform a high-level review of the current defect density, issues, incidents pre-post release
- Obtain codebase of the application, associated incidents requests, defect reports.
- Obtain access to all end user documentation, product brochures
- Deliverables:
- Portfolio assessment of application in question
- Application understanding, “As-Is” views of the application.
- Kickoff , Stakeholder, Business and IT Meeting Notes, Follow up tasks and Action Plan.
- Daily and Weekly Status Reports



Fig1. description of the artifact, schematic or model



Fig2. description of the artifact, schematic or model



# Prepare for Assessment

# 2

UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

### Activities

- Review and assess the Business architecture of the application suite.
- Review and assess the Technical architecture of the application suite.
- Review the “As-Is”, “To-Be” architectural models, determine if there are “Could-be” and “Need-Is” models.
- Review the Reference architecture. Determine if there is a reference implementation and how is it being used. Determine if the reference architecture was built using standards and guidelines.
- Review any candidate architectures or models employed to build the current applications.
- Determine the architecture capability of the organization.
- Determine if the technology is aligned to the business.
- Align product architecture with stated business objectives/advantages of the product in question
- Prepare recommendations based on the analysis of the findings and facts collected.
- Review findings with the stakeholders and get alignment on the direction.
- Validate the information collected with the key stakeholders.

### Deliverables

- Architectural analysis of the application, enterprise decisions
- Initial recommendations from the analysis.
- Daily and Weekly Status Reports



Fig1. description of the artifact, schematic or model



Fig2. description of the artifact, schematic or model





# Code Assessment



UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

### Activities:

- Collect details on code, key classes, support classes, method size, method density, method usage density, method inheritance, abstract classes, method complexity, dead code, global objects etc. Perform code analysis using a tools framework for code profiling
- Perform objective analysis of the metrics collected using defined tools.
- Perform the subjective analysis of the code by looking at the practices used to develop the code. Based on the industry best practices, prepare analysis narratives of the deviations from standards and guidelines.
- Perform a cross metric analysis on the code base. This is by analyzing multiple objective metrics pivoted against other metrics to understand state of the application.
- Use a “divide and conquer” approach to divide objects and application components between our onsite and offshore facility
- Review design patterns, frameworks that are used in the application
- Re-verify the collected data and verify with sources. This is done in order to check the integrity of the data collected.
- Analyze the data collected through the interview process with the stakeholders of the project. Aggregate all the information and compile trend and current state snapshots.

### Activities

- Code Analysis models – metrics raw data, analysis models, graphs, narratives and initial recommendations
- Daily and Weekly Status Reports.



Fig1. description of the artifact, schematic or model



Fig2. description of the artifact, schematic or model





# Compile Assessment Report

4

UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

- Activities
  - Prepare the recommendations based on the assessment on how there needs to be an alignment between business and technology. Determine the priority and rank the initiatives.
  - Develop an enterprise cube that describes the behavior of the organization, the value to the organization and the structure.
  - Develop a high level program plan of projects that needs to be developed along with the risks associated.
  - Develop business cases for the key projects and rationalize based on the priority and ranking as determined by the stakeholders.
  - Prepare recommendations from an architectural perspective after reviewing the results of the architectural assessment. This reviews the overall architectural design and UST-Global’s recommendations on what needs to be done from a tactical level and a strategic perspective.
  - Prepare recommendations from a codebase perspective after reviewing the results of the codebase assessment.
  - Define metrics for the roadmap that can be used to measure the progress of the roadmap.
- Deliverables
  - Prepare the roadmap recommendations narratives
  - Prepare the assessment and recommendations document
  - Daily and Weekly Status Reports



# Finalize Assessment



UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

- Activities
  - Prepare the executive summary of the roadmap and the assessment into a presentation format for executive use.
  - Review the assessment report with the assessment sponsor. The feedback from this review is factored into the final assessment report
  - Review the assessment with the key stakeholders, review the architectural assessment, the code assessment and the recommendations
  - Finalize the assessment report based on feedback received during the assessment review.
  - Baseline the assessment and get signoff from project sponsor on the assessment
  - Final presentation to the key stakeholders on the roadmap, assessment and recommendations.
  - Review the next steps and action plan
- Deliverables
  - Technology Roadmap presentation and report based on assessment
  - Final Assessment analysis and recommendations to include
    - Analysis of the existing code base and technology stack
    - Analysis of the application architecture
    - Recommendation for remediation or re-factoring of each as appropriate
  - Project Closeout documentation



# Assessment Assumptions

UST has prepared a five step process that uses industry best practices for review of an architecture. Our team will review the applications with industry standard architecture methods and “lessons learned” from previous engagements.

- The documentation for the application must be made available electronically to the assessment team
- The Client understands that the documents will be shared with teams at UST Global’s offshore centers in India and/or Philippines
- The Client will ensure that the documents being shared does not have their customer data
- The Client will assign a single Point of Contact (PoC) for the day to day activities during the assessment
- A business user or subject matter expert will be provided during the assessment to answer any queries who will be approached via the PoC
- The Client will arrange for the codebase which can be accessed by UST Global via a reliable medium
- UST Global requires a turnaround of two business days to the queries posted
  - Delays may result in extended times lines and higher fees
- UST Global requires a turnaround of two business days for review of deliverables
  - Delays may result in extended times lines and higher fee

Thank You

