

# **Module 1: Legacy System Analysis and Requirements Gathering**

## **Objective**

Assess current VXML-based systems and define technical and functional integration requirements to enable seamless system modernization and interoperability. The assessment should consider performance, scalability, and integration readiness to ensure smooth transition to modern communication platforms.

## **Tasks**

The following tasks provide a structured approach to evaluate the legacy system and define integration requirements:

### **1. Review Existing IVR Architecture and Capabilities**

- Analyze current VXML-based IVR systems, including call flow design, prompts, and logic structure.
- Evaluate system scalability, response times, and performance under peak loads.
- Examine existing integration points with backend services, databases, and third-party APIs.
- Identify redundant or outdated modules that may impact modernization.
- Document system strengths and weaknesses to guide modernization strategy.

### **2. Document Integration Needs for ACS and BAP Platforms**

- Define technical requirements for connecting legacy IVR systems with ACS (Automated Communication Services) and BAP (Business Application Platform).
- Map existing data structures and service interfaces to required ACS and BAP endpoints.
- Specify authentication, data exchange protocols, and message formats for secure and efficient communication.
- Ensure compatibility with real-time data handling, logging, and error management.
- Provide recommendations for scalable integration solutions to support future enhancements.

### **3. Identify Technical Challenges, Constraints, and Compatibility Gaps**

- Highlight limitations in legacy IVR architecture affecting integration, such as unsupported protocols or outdated libraries.
- Identify potential latency, concurrency, or data synchronization issues.
- Document constraints related to infrastructure, regulatory compliance, or system dependencies.
- Recommend mitigation strategies for compatibility gaps to ensure smooth modernization and minimal operational disruption.
- Provide a high-level roadmap to address technical challenges and ensure system readiness.

## **Expected Outcomes**

- Comprehensive understanding of current VXML-based IVR systems.
- Detailed documentation of integration requirements with ACS and BAP platforms.
- Clear identification of challenges and gaps, enabling informed decision-making for system modernization.
- Actionable recommendations for seamless integration and improved system performance.