# Surpass Migration Framework

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## **Executive Summary**

This document outlines the **Surpass Migration Framework** - a comprehensive, structured yet adaptable approach to assessment platform migrations. Built on real-world implementation experience and TOGAF principles, this framework balances the art and science of migration planning to ensure successful outcomes for diverse customer needs.

#### **Key Framework Components**

- Five-Phase Approach: A systematic process from pre-sales discovery through go-live and handoff
- Dependency Reviews: Critical checkpoints ensuring alignment across all Surpass modules
- Structured Planning: Detailed configuration of all platform components with validation at each step
- Interactive Tools: Color-coded CLI workflows that reduce cognitive load during implementation
- Comprehensive Validation: Thorough testing methodologies to ensure migration success

This framework provides Solutions Engineers with a clear roadmap while maintaining the flexibility to address unique customer requirements. Each phase builds upon the previous one with clear deliverables and transition criteria, ensuring nothing is overlooked in the migration process.

## Migration Lifecycle Overview

The Surpass Migration Framework follows a continuous, iterative approach with dependency reviews at key transition points. This ensures alignment across all Surpass modules and integration points while maintaining flexibility to adapt to customer-specific requirements.

#### Framework Phases at a Glance

- 1. Discovery & Architecture Vision (Pre-Sales): Initial assessment of customer needs
- 2. **Detailed Design & Planning**: Comprehensive configuration planning with dependency reviews
- 3. **Build & Configure**: Implementation of migration plans and scripts
- 4. QA & Validation: Thorough testing of all migrated components
- 5. **Go-Live & Handoff**: Production deployment and transition to operations

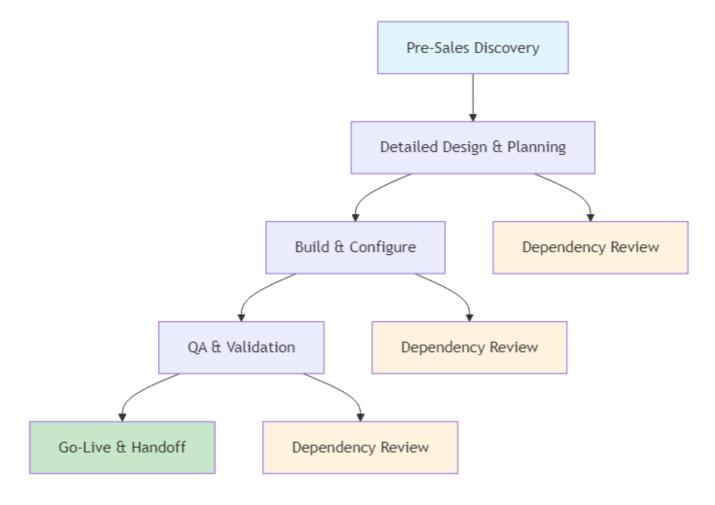


Figure 1: Migration Lifecycle Overview showing the five phases with dependency reviews

## Phase 1: Discovery & Architecture Vision (Pre-Sales)

This phase occurs during pre-sales engagement and establishes the foundation for the migration project.

During pre-sales engagement, Solutions Engineers establish a high-level understanding of customer needs and technical landscape:



Figure 2: Pre-Sales Discovery mindmap showing key assessment areas

#### **Business Context Assessment**

Area	Key Considerations
General Background	Organization type, industry, size, geographic reach
<b>Business Processes</b>	Current assessment workflows, pain points, goals
Program Scale	Number of items, candidates, exams, centers required
<b>Development Resources</b>	Available technical resources, skill sets, capacity

### Assessment Delivery Requirements

Area	Key Considerations
Content Types	Multiple choice, essay, performance-based, multimedia
Media Usage	Images, audio, video, interactive elements
Exam Classification	High/low stakes, OSCE, digital/paper delivery
Test Structure	Fixed form, dynamic, LOFT requirements

#### **Technical Environment Analysis**

Area	<b>Key Considerations</b>	
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Area	Key Considerations
Delivery Method	Surpass native or external vendor integration
Client Technology	Web delivery, SecureClient, SecureBrowser requirements
Proctoring	Live, record & review, or no proctoring needs
Test Centers	Internal facilities or external network requirements
Integration	Required system integrations and data exchange needs
Hosting	Shared instance feasibility, dedicated requirements
Development	Gap coverage needs, custom development requirements

Outcome: Architecture Vision Document

Component	Deliverables
Migration Strategy	High-level approach to migration, phasing considerations
Timeline	Preliminary timeline with major milestones
Resources	Initial resource requirements and allocations
Risk Assessment	Identification of key risks and mitigation strategies

## Phase 2: Detailed Design & Planning

This phase begins after contract signing and focuses on detailed implementation planning.

After contract signing, the Solutions Engineer transitions to implementation planning with detailed discovery:

### **Business Requirements Gathering**

Area	Key Deliverables
Business Requirements	Complete documentation of all business requirements
Data Inventory	Full inventory of data requiring migration
<b>Current State</b>	Mapping of current processes and data structures
Future State	Mapping of desired processes and data structures

### Surpass Structure Planning

The structure planning process is iterative, with dependency reviews after each major component:

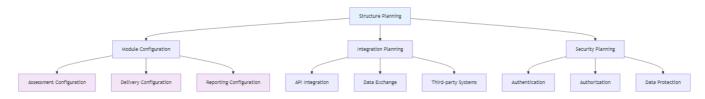


Figure 3: Structure Planning Process showing dependency review checkpoints

#### **Center/Subject Structure Design**

Component	Configuration Details
Hierarchical Organization	Mapping of organizational hierarchy to Surpass structure
Site/Center/Subject	Relationship mapping between sites, centers, and subjects
Organizational Boundaries	Definition of access boundaries and permissions

#### **Item Authoring Structure**

Component	Configuration Details
Bank Structure	Design of item bank organization and hierarchy
Item Metadata	Mapping of metadata fields and taxonomies
Workflow Configuration	Definition of authoring and review workflows
Media Handling	Approach for handling media assets and resources

#### **Test Creation Structure**

Component	Configuration Details
Test Settings	Configuration of test settings and parameters
Development Workflow	Establishment of test development processes
Blueprint Mapping	Mapping of test blueprints to item selection criteria

#### **Test Administration Flow**

Component	Configuration Details
Scheduling Approach	Configuration of scheduling options and constraints
Delivery Settings	Settings for test delivery and security
Security Requirements	Implementation of security controls and monitoring

### **Reporting Structure**

Component	Configuration Details
Results Processing	Configuration of results calculation and processing
Analytics Requirements	Setup of analytics and reporting capabilities
Data Export	Configuration of data export formats and schedules

### **Dependency Reviews**

Dependency reviews are critical checkpoints throughout the migration process:

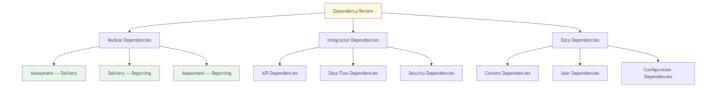


Figure 4: Dependency Review Components and relationships

### **Dependency Review Components**

Review Area	Key Questions
Data Compatibility	<ul><li>Is data structured appropriately for all modules?</li><li>Are all required fields populated?</li><li>Are relationships preserved?</li></ul>
Process Alignment	<ul><li>Do configured workflows support business requirements?</li><li>Are there process gaps or conflicts?</li><li>Is the user experience optimized?</li></ul>
Integration Viability	<ul><li>Are all integration points properly defined?</li><li>Is data transformation adequate?</li><li>Are security requirements satisfied?</li></ul>
Performance Considerations	<ul><li>Will the design support expected load?</li><li>Are there potential bottlenecks?</li><li>Is scalability addressed?</li></ul>

## Migration Path Determination

Approach	Evaluation Criteria	
API Utilization	API availability, throughput, rate limits, authentication	
UI Import Features	Feature availability, data volume limitations, validation	
Manual Input	Resource requirements, time constraints, error potential	
Data Transformation	Complexity, validation requirements, mapping challenges	

Outcome: Migration Runbook

Component	Deliverables
Migration Plan	Detailed step-by-step migration procedures
Configuration Specs	Complete configuration specifications
Data Mapping	Comprehensive data mapping documentation
Validation Criteria	Defined criteria for successful migration

## Phase 3: Build & Configure

This is the execution phase where planning becomes reality through implementation of migration components.

The execution phase where planning becomes reality:

### Surpass Module Relationships

Understanding the relationships between Surpass modules is critical for successful migration:



Figure 5: Surpass Module Relationships showing dependencies between components

### **Environment Setup**

Component	Implementation Details
Instance Configuration	Setup of Surpass instance with appropriate settings
User Setup	Creation of administrative and test users
Integration Establishment	Configuration of integration points and connections

### Migration Script Development

Component	Implementation Details
Data Extraction	Scripts for extracting data from source systems
Transformation Logic	Logic for transforming data to Surpass format
Load Procedures	Procedures for loading data into Surpass

### Interactive CLI Workflow

An interactive CLI with color-coded menus reduces cognitive load during migration execution:

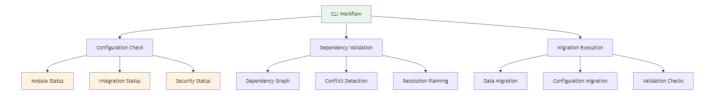


Figure 6: Interactive CLI Workflow sequence diagram

### **Test Item Creation**

Component	Implementation Details	
Sample Content	Migration of representative sample content	
Item Behavior Validation of item behavior and functionalit		
Media Handling	Verification of media asset handling and display	

Outcome: Migration-Ready Environment

Component	Deliverables
Configured Instance	Fully configured Surpass instance
Validated Scripts	Tested and validated migration scripts
Test Data	Verified test data and validation results

## Phase 4: QA & Validation

This phase involves comprehensive testing to ensure migration success and data integrity.

Comprehensive testing to ensure migration success:

#### **Data Flow Validation**

The migration data flow must be thoroughly validated:

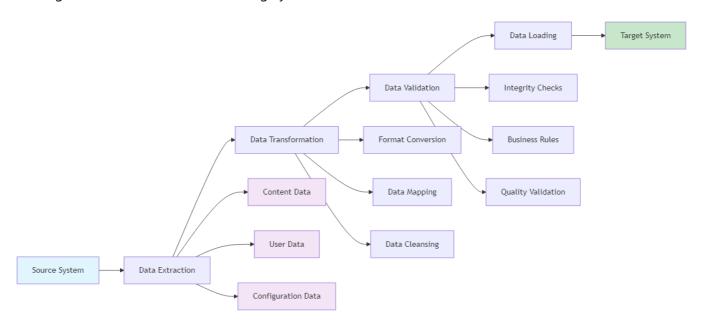


Figure 7: Data Flow Validation diagram showing transformation and validation processes

### **Testing Approaches**

Approach	Testing Activities
Manual Testing	<ul><li> User acceptance testing</li><li> Process validation</li><li> Configuration verification</li></ul>
Automated Testing	<ul><li>Data integrity validation</li><li>Performance assessment</li><li>Integration testing</li></ul>
Dependency Validation	<ul><li>Cross-module functionality testing</li><li>End-to-end process validation</li></ul>

Outcome: Validation Report

Component	Deliverables
Test Results	Documentation of all test results
Issue Resolution	Tracking of issues and resolution status
Customer Sign-off	Documentation of customer approval

## Phase 5: Go-Live & Handoff

This final phase encompasses production deployment and transition to ongoing operations.

Final deployment and transition to operations:

### **Production Migration**

Component	Implementation Details
Data Migration	Execution of full data migration
Verification	Final verification of migrated data
Performance	Monitoring of system performance

### **Knowledge Transfer**

Component	Implementation Details
Documentation	Delivery of all system documentation
Training	Completion of user and admin training
Support	Transition to ongoing support channels

### **Project Closure**

Component	Implementation Details
Lessons Learned	Documentation of lessons learned
Success Metrics	Reporting on project success metrics
Follow-up	Planning for follow-up activities

Outcome: Operational System

Component	Deliverables
Migrated Implementation	Fully migrated Surpass implementation
Trained Team	Customer team trained on system use
Support Channels	Established support channels

# **Project Timeline**

A typical migration project follows this timeline:

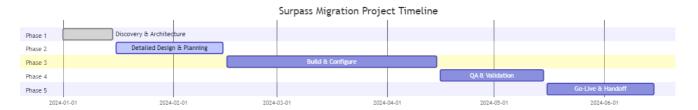


Figure 8: Project Timeline Gantt chart showing key milestones and dependencies

# **Continuous Improvement**

The migration framework incorporates ongoing refinement based on lessons learned and evolving best practices.

Area	Activities
Process Improvement	Identification of process improvement opportunities
Framework Enhancement	Recommendations for framework enhancements
Best Practices	Documentation of best practices for future migrations

## Conclusion

The Surpass Migration Framework provides a comprehensive, structured approach to assessment platform migrations while maintaining the flexibility needed to address unique customer requirements. By following this framework, Solutions Engineers can:

- Ensure all critical components are properly addressed
- Maintain alignment across interdependent modules
- Validate configurations at each step of the process
- Deliver successful migrations with minimal disruption

This framework continues to evolve based on lessons learned from each implementation, ensuring that best practices are incorporated into future migrations.