VNA-SB-044 | Orphaned Oracle Stack Rescue (Discoverer, Workflow & EBS CEMLI) | PeopleSoft 9.2 OCI Migration & Bolt-On Customization Offload

PeopleSoft 9.2 (HCM / FSCM / Campus Solutions) to OCI Cloud Manager & Clean-Core APEX Sidecars

Transition from On-Premises PeopleSoft 9.2, Custom PeopleCode Bolt-Ons, SQR Reports & Crystal/nVision Sheets to PeopleSoft Cloud Manager on OCI + Decoupled Oracle APEX 24.2 Sidecar Extensions + AOP with automated binary/AST metadata profiling, deterministic cost-control levers, auto-generated BRD and test documentation, and a fixed-fee 4-phase delivery roadmap.

Search Queries & Scope Covered: peoplesoft 9.2 migration to oci cloud manager | peoplesoft bolt on customization to oracle apex | replace peoplesoft sqr nvision reports | peoplesoft campus solutions modernization

SOURCE LEGACY STACK (STACK X)	MODERNIZED TARGET ARCHITECTURE (STACK Y)
On-Premises PeopleSoft 9.2, Custom PeopleCode Bolt-Ons, SQR Reports & Crystal/nVision Sheets	PeopleSoft Cloud Manager on OCI + Decoupled Oracle APEX 24.2 Sidecar Extensions + AOP

PUM UPGRADE FRICTION	SQR REPORT RETIREMENT	OCI INFRA SAVINGS	ZERO-DOWNTIME CUTOVER
75% Reduced	90% Automated	40% - 55%	Data Guard / GG

1. Problem Space & Architectural Bottlenecks

- Critical business operations remain trapped in On-Premises PeopleSoft 9.2, Custom PeopleCode Bolt-Ons, SQR Reports & Crystal/nVision Sheets, creating audit risk, manual reconciliation overhead, and rising support costs.
- Duplicate queries, cloned reports, and undocumented triggers make impact analysis slow and expensive across legacy sqr, nvision & query manager reports.
- Lack of automated binary-to-database metadata mapping causes traditional consulting shops to pad estimates with 40% manual discovery buffers.
- Leadership needs a predictable, fixed-fee phased timeline with verifiable test specifications and zero-downtime cutover guarantees.

2. Technical Solution & Reference Architecture

2.1 Automated Phase 0 AST & binary scan mapping On-Premises PeopleSoft 9.2, Custom PeopleCode Bolt-Ons, SQR Reports & Crystal/nVision Sheets artifacts directly to live Oracle dictionary metadata and profiling production data.

2.2 Target architecture built on PeopleSoft Cloud Manager on OCI + Decoupled Oracle APEX 24.2 Sidecar Extensions + AOP, consolidating cloned queries into governed core SQL views with runtime Smart Filters.

2.3 Automated generation of full Business Requirements Documents (BRD), Technical Approach Docs, Testing Specifications, and Verified Test Results.

2.4 Zero-trust SSO/MFA (Entra ID / Okta) paired with database-enforced row-level security (VPD / RAS) and SQLcl Liquibase CI/CD pipelines.

3. Artifact-by-Artifact Conversion & Modernization Matrix

Legacy Artifact / Baseline Workload	Modernized Oracle / Cloud Target	Engineering Method & Outcome
Source Tier: On-Premises PeopleSoft 9.2, Custom PeopleCode Bolt-Ons, SQR Reports & Crystal/nVision Sheets	PeopleSoft Cloud Manager on OCI + Decoupled Oracle APEX 24.2 Sidecar Extensions + AOP	Automated AST & Metadata Uplift (85%-95%)
Primary Footprint: Custom PeopleSoft Bolt-On Pages & Records	Oracle APEX 24.2 Redwood UI + PL/SQL APIs	Binary-to-DB Metadata Mapping + Pilot Sprint
Workload & Queries: Legacy SQR, nVision & Query Manager Reports	Canonical Core SQL Views + Runtime Smart Filters	Query Fan-Out Clustering (75%-90% Reduction)
Undocumented Legacy Business Rules & QA	Auto-Generated BRD, Approach Doc, Test Specs & Results	100% Automated Documentation & utPLSQL / Playwright

4. Oracle APEX & Ancillary Engineering Toolchain

- Oracle APEX 24.2 & Universal Theme (Light Architecture)
- Oracle Database 23ai / Autonomous Database (ATP / ADW)
- Viscosity Automated Binary (.fmb/.rdf) & AST Metadata Profiler
- Auto-Doc Engine (BRD, Approach Doc, Test Specs & Test Results)
- Oracle REST Data Services (ORDS) & APEX Office Print (AOP)
- SQLcl Liquibase CI/CD, utPLSQL & Playwright Regression Suites

> ***Anonymized Production Proof:*** *Migrated a multi-pillar PeopleSoft 9.2 environment onto Oracle Cloud Infrastructure (OCI) while extracting 140 invasive custom bolt-on pages and SQR reports into a clean-core Oracle APEX extension tier.*

5. Principal Architect Q&A

Q: What are the primary levers that control the cost of PeopleSoft 9.2 to OCI & Clean-Core APEX?

A: Cost is controlled by five levers: (1) collapsing cloned query fan-out across legacy sqr, nvision & query manager reports into canonical core SQL views, (2) percentage of business logic already in database packages vs. UI triggers, (3) production data quality profiled during Phase 0, (4) external integration/SSO count, and (5) cutover downtime requirements.

Q: How does your tool convert binaries (.fmb, .rdf, etc.), map database metadata, and generate documentation?

A: Our automated analyzer parses legacy binaries and source files, extracts every trigger, query, and UI control, cross-references them against live database dictionary metadata (ALL_TAB_COLUMNS, ALL_DEPENDENCIES), profiles actual column data distributions, and automatically generates the Business Requirements Document (BRD), Technical Approach Doc, Test Specifications, and Verified Test Results.

Q: What does a typical project timeline look like from kickoff to production cutover?

A: Projects follow four gated phases: Phase 0 (Weeks 1-2: Binary AST Scan, Data Profiling & Auto-Generated BRD), Phase 1 (Weeks 3-6: Core Schema Uplift & Working Pilot), Phase 2 (Weeks 7-12: Automated Conversion Sprints & Test Spec Execution), and Phase 3 (Weeks 13-16: Parallel Run, Zero-Downtime Cutover & 30-Day Hypercare).