DA Title:	**Hyperion upgrade to Essbase 21C on OCI**
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Executive Summary

Hyperion Essbase has been the **core financial Planning and analysis platform** for our organization for more than a decade. Finance, Investor Relations, Accounting, Supply-Chain, SEC reporting and FP&A teams rely on it every day to:

- Consolidate and analyze financial results across multiple brands, regions, and channels.
- Support **budgeting, forecasting, Inventory, headcount and long-range planning** with what-if scenario modeling and allocations.
- Provide secure, governed financial data for **SEC reporting, investor presentations, and executive analytics**.
- Delivers trusted daily, weekly, and quarterly revenue, inventory, headcount and expense snapshots that form the basis for leadership decision-making.
- Enable write-back planning, adjustments, and multi-dimensional views that **can't** be replicated in traditional BI or visualization tools (like Tableau, Power BI, or data warehouse reporting).

Our current Hyperion Essbase environment is running on an outdated version that poses increasing risks to Deckers. Oracle has already ended mainstream support, and our extended support with Rimini Street will expire in February 2026, after which no security patches or vendor updates will be available. Most critically, any system failure or disruption could jeopardize financial close, planning, IR, and SEC reporting timelines, creating both operational and regulatory exposure.

To address these challenges, we engaged Version 1, our long-standing Essbase development support partner, to conduct a full assessment of cloud migration options. Based on their analysis, the recommended path is to migrate to Essbase 21c on Oracle Cloud Infrastructure (OCI), rather than EPM Cloud or AWS. This option delivers the most cost-effective and practical solution, with estimated annual licensing costs of approximately $160K per annum compared to over $900K with alternative platforms. In addition, Essbase 21c offers a significantly easier migration path that avoids redevelopment of existing applications, requires less rework of automation and integrations, and ensures continued vendor support and compliance with Oracle standards. Most importantly, this approach aligns with our broader Digital & Data strategy to modernize our platforms and move critical workloads to the cloud.

Scope:

Current Hyperion architecture stack has four main components

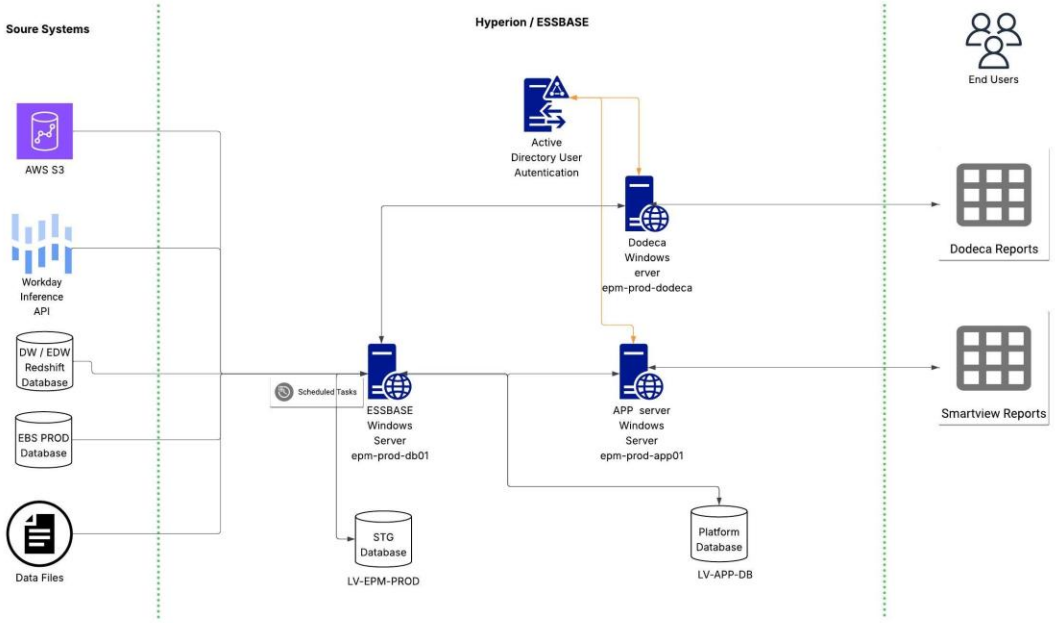
1) Essbase application & db. servers (Phase-1)
2) The Essbase platform/repository database. (Phase-1)
3) Job scheduler (Phase-2)
4) Oracle Staging database that hosts intermediatory data (Phase-3)

The immediate scope (Phase 1, by January 2026) covers migration of the Essbase application/database servers, current cubes, security, metadata, and the repository database. Subsequent phases will address the rest

In **Phase-2 - we will migrate the Job scheduler** component **to** the enterprise **Automize cloud tool 'Automic'**; And finally **in Phase-3 we will decouple EBS db-link on Staging database using Boomi** and migrate the staging database to OCI cloud as suggested by Subrata. (Phases 2 & 3 are planned for FY27 including decommission of legacy on-prem infrastructure)

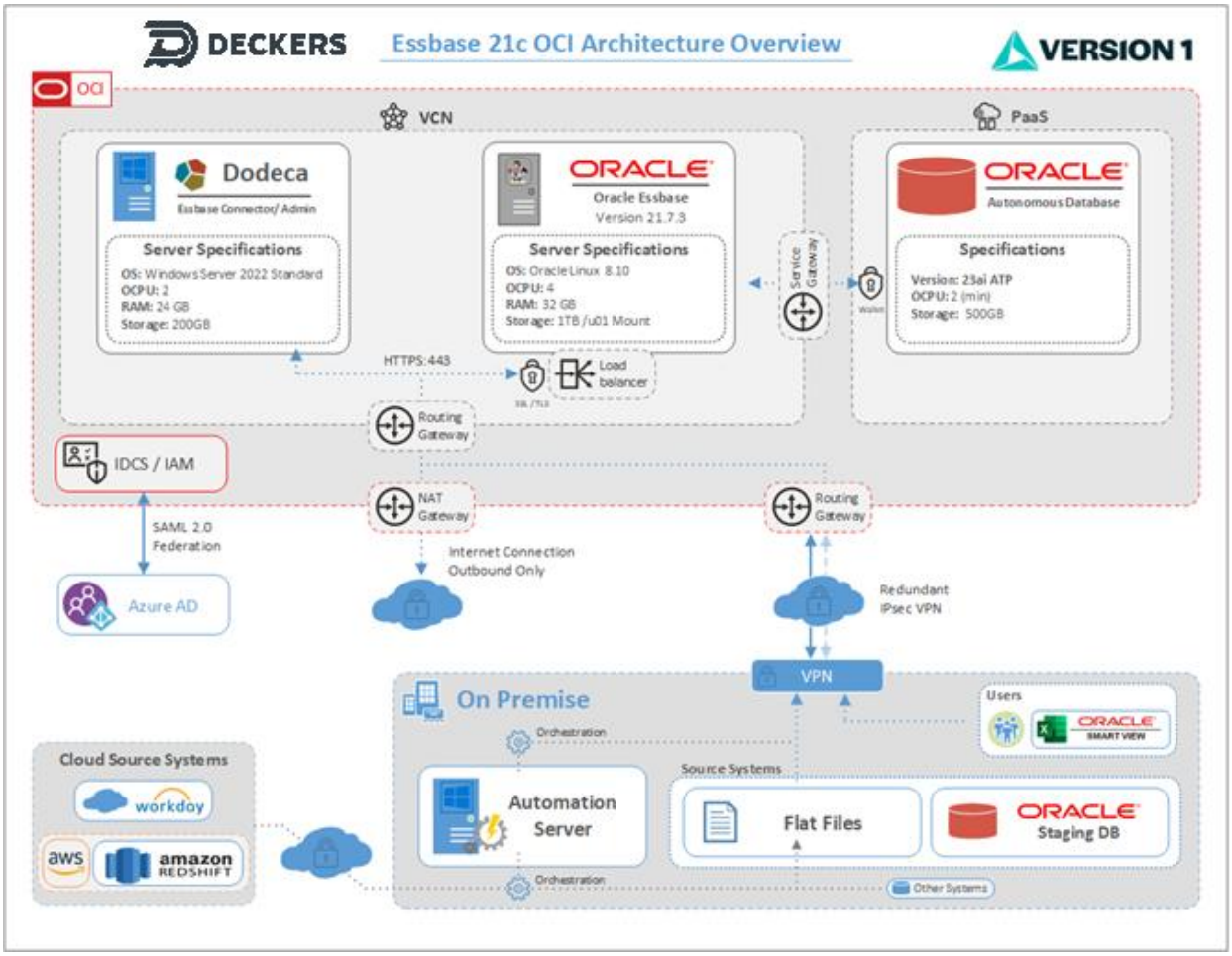
The above outlined scope is well achievable within the project constraints, particularly with the support of Version 1, who bring proven experience in delivering similar Essbase cloud migrations for other enterprise clients. Their expertise ensures that our migration can be executed efficiently, with zero disruption to business.

Current-state Design:



High-Level Design:

A secure, hybrid design places Essbase 21c and supporting services including the platform database and dodeca connector in an OCI VCN, while automation, flat-file feeds, and a staging DB remain on-prem as part of the phase-1 scope. Connectivity is via IPsec VPN, with identity federated from Azure AD to OCI IDCS/IAM for authentication. End users access Essbase through Smart View (and Dodeca) over HTTPS.



The solution follows a layered hybrid pattern with On-prem Orchestration *(which will also be migrated to a cloud-based tool as part of the phase-2)* → secure network transit → OCI on VCN with integration to Azure AD; the design is intentionally simple and easy with no public ingress and can be scalable as the users increase over time.

Low-Level Design:

Core Components (OCI)

- VCN (segmented subnets)
- Essbase compute (Oracle Linux 8.10; 4 OCPU, 32 GB RAM, 1 TB /u01 mount) behind an OCI Load Balancer with TLS/HTTPS (443).
- Dodeca connector/admin server (Windows Server 2022; 2 OCPU, 24 GB RAM, 200 GB) for admin tasks and managed client connectivity.
- Autonomous Database (ATP 23ai; min 2 OCPU, 500 GB) for metadata/operational data as needed; accessed privately via Service Gateway and DB wallet.
- IDCS / IAM for authentication/authorization; SAML 2.0 federation with Azure AD enables SSO and centralized MFA/policies.
- Gateways
  - Routing Gateways: private routing to on-prem via VPN.
  - NAT Gateway: controlled outbound-only internet egress for patching/package repos.
  - Service Gateway: private access to Autonomous DB without public internet.

On-Prem Layer

- Automation Server orchestrates scheduled jobs, pulls data files using the load scripts (MaxL/REST).
- Source Systems feed via Flat Files and an Oracle Staging DB (plus other systems as needed).
- Redundant IPsec VPN provides private, encrypted transport to the OCI VCN.

Users & Tools

- Finance users connect with Oracle Smart View (and Dodeca clients) to Essbase via the load balancer over HTTPS, using Azure AD (federated to IDCS).

Security & Compliance

- Zero public ingress to compute nodes; access only via LB (HTTPS/TLS) and VPN.
- Authentication enforced via Azure AD → IDCS/IAM federation; role-based access in IAM and Essbase security filters.
- Private service access to ADB (no public endpoints), plus wallet-based DB connections.
- Network segmentation and route control within the VCN; outbound egress minimized.
- Backups/snapshots for Essbase data and OS volumes via OCI block volume policies or can be routed to on-prem storage.

This design minimizes redevelopment by preserving existing Hyperion cubes, calc scripts, and automations. It delivers a cost-effective, secure hybrid footprint with right-sized OCPUs, managed ADB, and enterprise SSO. The design is scalable and future-ready, with clear paths to expand compute, storage, DR, and cloud integrations.

Data Structure, Storage, and Management

Financial data is modeled in multidimensional Essbase cubes, organized by dimensions such as Company, Brand, Region, Channel, Account, and Time. This structure supports hierarchies, rollups, allocations, and scenario-based planning (e.g., Budget vs. Forecast vs. Actual).

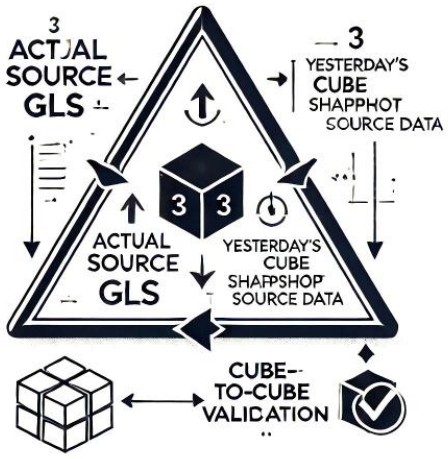
Similarly, we have a few other multidimensional Essbase cubes catered to Sales, Orderbook, Inventory, GL and headcount planning.

Storage Approach:

- Essbase Compute (OCI VM): Stores cube data and metadata in a dedicated block volume (1 TB /u01).
- Autonomous Database: Serves as the supporting metadata/operational data store (500 GB), with built-in patching, backups, and scaling.
- On-Premises Staging DB & Flat Files: Hold raw extracts from Workday, Redshift, and other sources before being orchestrated to Essbase. In the next phases we will decouple on-premise staging db and migrate it to either AWS or OCI.
- Backups/Snapshots: Essbase volumes are backed up via OCI block volume policies; ADB provides automated daily backups.

Data Integrity Approach:

- We will be following the same existing Essbase data integrity and consistency approach by validating the source data with the data loaded into the cubes on a daily basis to ensure data accuracy and consistency.



We comply with the relevant regulations like GDPR and CCPA; we do not store any customers PII in the existing Essbase nor we plan to transmit any such information to OCI.

Resilience & Availability

The infrastructure is designed with high availability and fault tolerance in mind. Essbase will be deployed behind an OCI Load Balancer, providing redundancy and horizontal scale options. Connectivity to on-premises is protected by dual IPsec VPN tunnels to avoid single points of failure. Data is stored on OCI block volumes with automated snapshots, while the Autonomous Database delivers built-in high availability, automated patching, and daily backups. This ensures business continuity for critical planning and reporting workloads, with clear paths to extend into DR or multi-region deployments if required.

Cost-Effectiveness

The solution is right sized to requirements, balancing performance with cost. By migrating to Essbase 21c on OCI, we avoid significant redevelopment and licensing costs (approx. $160K annually versus $900K+ for alternatives). OCI compute instances and Autonomous DB are provisioned with flexible OCPUs and storage that can scale up or down as needed, ensuring we pay only for what is consumed. Non-production environments (Dev and Test) will not be kept running continuously, but instead spun up on demand, further optimizing costs. Leveraging managed services (Autonomous DB, OCI IAM, NAT/Service Gateways) reduces operational overhead, making this the most cost-optimized option for sustaining critical financial processes.

Security Architecture

The design applies defense-in-depth principles across network, identity, and data layers.

- **Access Controls:** No direct public ingress; Essbase is only accessible via OCI Load Balancer over HTTPS (TLS 1.2/1.3). All admin access requires VPN connections.
- **Authentication:** Azure AD federated with OCI IDCS/IAM provides SSO, and role-based access control. Essbase security filters and AD groups further restrict data visibility.
- **Data Protection:** Data is encrypted in transit (TLS VPN tunnels, HTTPS) and at rest (OCI Block Volumes and Autonomous Database with Oracle TDE). Automated snapshots and ADB backups are also encrypted.
- **Monitoring:** OCI-native tools (Logging, Monitoring, Cloud Guard) track access, anomalies, and configuration drift.

Multiple layers of security ensure resilience:

- **Perimeter Layer**: Dual IPsec VPNs for private connectivity, no public endpoints.
- **Network Layer**: Segmented subnets, routing control, NAT/Service Gateways.
- **Identity Layer:** Azure AD federation.
- **Application/Data Layer:** Essbase AD role-based security, encryption, and governance processes with existing approval workflows (Access request workflows will be migrated to DeckID)

Threat Modeling & Mitigation

The team has reviewed key risks and built mitigations into the design:

- **Unauthorized Access:** Mitigated through SSO, and no direct public endpoints.
- **Data Leakage:** Controlled by encryption, private-only service access, and audit logging.
- **Infrastructure Failure:** Addressed with redundant VPNs and automated backups.
- **Insider Threats:** Restricted admin rights, activity logging, and separation of duties.

Technology Stack

- Core Platform is Oracle's Essbase 21c (deployed on OCI Compute, Oracle Linux 8.10)
- Database: Oracle Autonomous Database (ATP 23ai) for metadata/operational data
- Middleware / Admin Tools: Dodeca Server (Windows Server 2022) for connectors and admin services
- Automation: On-Prem Automation Server running ETL jobs (MaxL, REST APIs, scripting)
- Identity & Access: OCI IAM / IDCS federated with Azure AD (SAML 2.0, MFA)
- Connectivity: Redundant IPsec VPN tunnels, OCI Load Balancer, NAT Gateway, Service Gateway
- User Tools: Oracle Smart View, Dodeca Client for reporting and planning
- Monitoring & Security: OCI Monitoring, Logging, Cloud Guard.

Standardization & Lifecycle Management

The stack aligns with enterprise standards: Oracle remains the strategic finance platform; OCI is approved within enterprise cloud strategy; Azure AD is the enterprise standard for authentication and SSO. The solution uses vendor-supported, mainstream technologies rather than custom or niche frameworks, ensuring compatibility and supportability. All chosen technologies are vendor-supported with clear roadmaps:

- Oracle Essbase 21c is Oracle's long-term supported OLAP platform.
- OCI services (Compute, Load Balancer, VPN, Autonomous DB) are fully managed and lifecycle-supported by Oracle.
- Azure AD federation ensures alignment with Microsoft's enterprise IAM strategy.
- Non-production environments (Dev/Test) will be on-demand, reducing lifecycle costs and simplifying patch cycles.

Implementation Plan:

Project Stage	Task	Responsible Party	Est Version 1 Effort (Days)
Procurement	OCI Tenancy	Deckers	
	Agree network "layout" and policies	Deckers / Version 1	1.00
	Grant Access to Version 1 OCI Architect	Deckers	
Foundational	Compartment layout, and define policies	Version 1	1.00
	Networking (VCN, subnets, gateways)	Version 1	1.00
	IPsec VPN to On Prem	Deckers / Version 1	3.00
	Develop / Define Backup Approach	Deckers / Version 1	2.00
	IDCS/IAM Integration w Azure AD	Deckers / Version 1	3.00
DEV Build	DEV Essbase MP Stack Deployment	Version 1	3.00
	DEV Essbase Migration & Refactoring of User Security	Version 1	10.00
	DEV Dodeca Ess Con Server	Version 1	1.00
	DEV Dodeca Ess Con Install / Config	Applied OLAP	
	OCI Performance Benchmarking	Version 1	3.00
	DEV Integrations(repoint / review / redevelop)	Version 1	42.00
	DEV Develop SIT test plan	Version 1	7.00
	DEV SIT	Version 1	21.00
	DEV Backup / Restore test	Version 1	1.00
	DEV UAT / Remediation	Deckers / Version 1	15.00
TST Build	TST Essbase MP Stack Deployment	Version 1	3.00
	TST Essbase Migration & User Security	Version 1	2.00
	TST Dodeca Ess Con Server	Version 1	1.00
	TST Dodeca Ess Con Install / Config	Applied OLAP	
	TST Integrations(repoint / config based on DEV template)	Version 1	2.00
	TST SIT	Version 1	3.00
	TST Backup / Restore test	Version 1	1.00
	TST UAT / Remediation	Deckers / Version 1	5.00
PRD Build	PRD Essbase MP Stack Deployment	Version 1	3.00
	PRD Essbase Migration & User Security	Version 1	2.00
	PRD Dodeca Ess Con Server	Version 1	1.00
	PRD Dodeca Ess Con Install / Config	Applied OLAP	
Post Build	Develop Go Live and Rollback plan	Deckers / Version 1	5.00
	PRD Integrations (repoint / config based on DEV template)	Version 1	2.00
	Production Cutover	Deckers / Version 1	2.00
	PRD SIT	Version 1	3.00
	PRD Backup / restore test	Version 1	1.00
	PRD UAT / Validation	Deckers / Version 1	5.00
	Hypercare Post-Go-Live Support	Version 1	10.00
	Decommision on-premises Essbase services	Deckers / Version 1	3.00
		Total	168.00