

[ORGANIZATION NAME]

# REQUEST FOR PROPOSAL

Supply, Implementation, and Support of a Cloud Management Platform

|                                     |                        |
|-------------------------------------|------------------------|
| <b>RFP reference</b>                | [REF-NO]               |
| <b>Date of issue</b>                | [DATE]                 |
| <b>Pre-bid queries by</b>           | [DATE]                 |
| <b>Proposal submission deadline</b> | [DATE, TIME, TIMEZONE] |
| <b>Contact</b>                      | [NAME, TITLE, EMAIL]   |

TEMPLATE NOTE (delete before issue): bracketed [values] must be completed by the issuing organization. Annexure B should be completed before publication so bidders can size their proposals.

*Right-click the table above and choose "Update Field" after editing the document.*

# 1. Introduction and Background

[ORGANIZATION NAME] (“the Purchaser”) invites proposals from qualified vendors for the supply, implementation, and support of a Cloud Management Platform (“CMP”, “the Platform”). The Platform will enable the Purchaser to operate cloud services on its own infrastructure, including multi-tenant self-service provisioning, tenant isolation, metering and billing, and day-2 operations, under the Purchaser's brand and within the Purchaser's data centres.

[Replace this paragraph with organisational background: who the Purchaser is, the infrastructure estate operated today, the services intended to be offered, and the regulatory context — e.g., financial-services or public-sector data-residency obligations.]

## 1.1 Objectives

- Launch self-service cloud services (virtual servers and related network, storage, and data-protection services) on Purchaser-operated infrastructure within [8] weeks of contract signature.
- Provide complete commercial operations — usage metering, rating, invoicing, payment handling, and collections — without dependence on external SaaS services.
- Enforce strong tenant isolation suitable for regulated customers, with auditable evidence.
- Retain full data sovereignty: all platform, tenant, and billing data remains within [COUNTRY].
- Operate under the Purchaser's brand end-to-end [and support additional sub-brands/resellers, if applicable].

## 2. Scope of Supply

- Software licences for the Cloud Management Platform and all modules required to meet the requirements herein.
- Implementation services: installation, configuration, network planning, branding, catalogue and pricing setup, and production go-live.
- Knowledge transfer and training for administrator and operations personnel.
- Support and maintenance for an initial term of [3] years, with options to renew.
- Optional: migration services from the Purchaser's existing platform [state platform, e.g., VMware vCloud Director].

**Out of scope:** supply of server, storage, or network hardware; hypervisor/infrastructure licences [state if required]; public-cloud services.

## 3. Definitions and Abbreviations

|                              |                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>CMP / the Platform</b>    | The Cloud Management Platform solution offered by the Vendor.                                                        |
| <b>Operator</b>              | The Purchaser's staff administering the Platform and the cloud business.                                             |
| <b>Tenant / Organization</b> | A customer entity consuming services through the Platform, with its own users and resources.                         |
| <b>Reseller / Sub-brand</b>  | An optional intermediary selling the Purchaser's cloud services under its own brand (where applicable).              |
| <b>M (Mandatory)</b>         | Requirement must be met at proposal time or committed to before go-live; non-compliance may disqualify the proposal. |

|                      |                                                                                                        |
|----------------------|--------------------------------------------------------------------------------------------------------|
| <b>D (Desirable)</b> | Requirement is scored but not disqualifying.                                                           |
| <b>HA</b>            | High availability. SPOF: single point of failure. RPO/RTO: recovery point/time objective.              |
| <b>BYOL</b>          | Bring your own licence (e.g., Microsoft Windows Server licensing supplied by the tenant or Purchaser). |

## 4. Instructions to Bidders and Compliance Convention

- For every numbered requirement, the Vendor must state exactly one of: “C” (Complies today, in the shipping product), “PC” (Partially complies — explain the gap and the committed date), or “NC” (Does not comply).
- Every “C” or “PC” must cite evidence: product documentation section, screenshot annex, or a live-demonstration commitment. Unsupported claims will be treated as “NC”.
- Any “NC” or undated “PC” against a Mandatory (M) requirement may result in disqualification at the Purchaser's discretion.
- Claims will be verified in a proof-of-concept (Section 12). Material misrepresentation is grounds for rejection at any stage.
- Proposals must follow the response format in Section 13 and include the completed Compliance Matrix (Annexure A).
- Questions must be submitted in writing by [DATE]; answers will be circulated to all bidders. Proposal deadline: [DATE, TIME, TIMEZONE].

## 5. Functional Requirements

**Priorities:** M = Mandatory, D = Desirable. Where a requirement is marked “(SP)” it applies to service-provider deployments; enterprise purchasers may mark it Not Applicable.

### 5.1 Platform Architecture and Deployment (FR-A)

| ID             | REQUIREMENT                                                                                                                                                                                                      | PRIORITY |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-A-01</b> | The Platform must be fully self-hosted on Purchaser infrastructure. No cloud/SaaS control plane, external service, or vendor-side dependency may be required for normal operation.                               | <b>M</b> |
| <b>FR-A-02</b> | All components must be deployable within the Purchaser's data centres. No tenant, configuration, or billing data may leave the environment except through explicitly enabled, documented integrations.           | <b>M</b> |
| <b>FR-A-03</b> | A high-availability production topology must be available with no single point of failure: redundant application tier, redundant workers, database with synchronous replication, and a replicated secrets store. | <b>M</b> |
| <b>FR-A-04</b> | A small-footprint evaluation deployment (single VM acceptable) must exist, with a documented upgrade path to the HA topology without reinstallation or data loss.                                                | <b>M</b> |
| <b>FR-A-05</b> | Fully air-gapped operation must be supported, including offline licence activation and offline update media.                                                                                                     | <b>D</b> |

| ID             | REQUIREMENT                                                                                                                                                        | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-A-06</b> | Documented sizing guidance must be provided for at least three scale bands (evaluation, small production, full HA).                                                | <b>M</b> |
| <b>FR-A-07</b> | Backup and restore of the Platform itself (database, configuration, secrets) must be documented and tested, with point-in-time recovery for the platform database. | <b>M</b> |
| <b>FR-A-08</b> | A guided installer with automated pre-flight checks must be provided; services-assisted installation must be achievable within [5] business days.                  | <b>D</b> |
| <b>FR-A-09</b> | Rolling platform upgrades must not interrupt running tenant workloads; a documented rollback procedure must exist for every release.                               | <b>M</b> |
| <b>FR-A-10</b> | Release artifacts (images/packages) must be cryptographically signed and verifiable by the Purchaser.                                                              | <b>M</b> |

## 5.2 Infrastructure Integration (FR-B)

| ID             | REQUIREMENT                                                                                                                                                                                                                                                        | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-B-01</b> | The Platform must natively integrate with the Purchaser's virtualization estate. The Vendor must state supported platforms and versions, including [Nutanix AHV/Prism Central] and/or [KVM-based platforms — state distribution, e.g., Proxmox VE], as applicable. | <b>M</b> |
| <b>FR-B-02</b> | Integration must use current, vendor-supported API generations of the underlying infrastructure. The Vendor must describe its policy for tracking infrastructure API deprecations (e.g., migration ahead of announced end-of-life).                                | <b>M</b> |
| <b>FR-B-03</b> | A single Platform instance must manage multiple clusters and multiple sites, presented to customers as operator-defined regions/availability zones.                                                                                                                | <b>M</b> |
| <b>FR-B-04</b> | The Platform must discover per-cluster capabilities (versions, licensed features, GPU presence) and gracefully gate features per region rather than failing.                                                                                                       | <b>M</b> |
| <b>FR-B-05</b> | A single instance should support heterogeneous hypervisors concurrently (e.g., one region on Nutanix, another on KVM).                                                                                                                                             | <b>D</b> |
| <b>FR-B-06</b> | Tenant self-service must not require tenant access to the underlying virtualization manager. Where console access is offered to enterprise tenants, it must be via SSO scoped strictly to that tenant's resources.                                                 | <b>M</b> |
| <b>FR-B-07</b> | GPU inventory must be discoverable and GPU-enabled server offerings supported, including per-GPU pricing.                                                                                                                                                          | <b>D</b> |

## 5.3 Multi-Tenancy, Isolation, and Governance (FR-C)

| ID             | REQUIREMENT                                                                                                                                                                                                  | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-C-01</b> | The tenancy model must support: Operator → Organization (tenant) → Users, with role-based access at each level. (SP) The model must additionally support a Reseller level between Operator and Organization. | <b>M</b> |

| ID             | REQUIREMENT                                                                                                                                                                                                                         | PRIORITY |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-C-02</b> | Tenant workloads must be isolated at the network layer by default: per-tenant network segments with stateful, default-deny-inbound enforcement (e.g., microsegmentation). Isolation must not rely solely on the perimeter firewall. | <b>M</b> |
| <b>FR-C-03</b> | The Platform must produce an auditable tenant-isolation report (policies in force, change history) suitable for presentation to auditors and regulated customers.                                                                   | <b>M</b> |
| <b>FR-C-04</b> | Per-tenant resource quotas (vCPU, RAM, storage, and optionally public IPs) must be enforceable, with operator-defined guardrails and an approval workflow for customer-requested changes.                                           | <b>M</b> |
| <b>FR-C-05</b> | Tenant lifecycle management must include: trial/demo tenants with automatic expiry, trial-to-production conversion with approval, suspension/resumption, and decommissioning with a configurable data-retention window.             | <b>M</b> |
| <b>FR-C-06</b> | Destructive operations (tenant decommission at minimum) must require dual administrator approval (four-eyes principle), with a complete audit trail.                                                                                | <b>M</b> |
| <b>FR-C-07</b> | A per-tenant activity/audit feed must be visible to the tenant for their own actions and to the Operator across tenants.                                                                                                            | <b>M</b> |
| <b>FR-C-08</b> | An enterprise tenancy model must be supported: dedicated projects/virtual private networks per tenant with quota enforcement and SSO into the infrastructure console scoped to the tenant.                                          | <b>M</b> |
| <b>FR-C-09</b> | A shared-infrastructure retail model must be supported concurrently, with strict cross-tenant separation and no tenant visibility of the infrastructure layer.                                                                      | <b>M</b> |
| <b>FR-C-10</b> | Existing virtualization projects/VMs must be importable into Platform tenancy (brownfield adoption) without re-provisioning.                                                                                                        | <b>D</b> |

#### 5.4 Self-Service Portal and Service Catalogue (FR-D)

| ID             | REQUIREMENT                                                                                                                                                                                                                                                                            | PRIORITY |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-D-01</b> | A customer self-service portal must be provided, fully operable in current versions of Chrome, Edge, Firefox, and Safari, and usable on mobile devices.                                                                                                                                | <b>M</b> |
| <b>FR-D-02</b> | Server provisioning must be a guided wizard of at most [5] steps from plan selection to a running server.                                                                                                                                                                              | <b>M</b> |
| <b>FR-D-03</b> | The OS image catalogue must include at least [15] operator-curated images across major Linux families and Microsoft Windows Server (BYOL supported). The Operator must be able to add, disable, and version images without Vendor involvement.                                         | <b>M</b> |
| <b>FR-D-04</b> | A one-click application catalogue of at least [10] entries (e.g., WordPress, databases, container runtime) must be provided, with automated installation and a visible readiness status. The Operator must be able to author additional catalogue entries without Vendor code changes. | <b>M</b> |
| <b>FR-D-05</b> | Full server lifecycle self-service: start, stop, reboot, reinstall, vertical resize (CPU/RAM/disk), clone, and delete, with appropriate confirmations for                                                                                                                              | <b>M</b> |

| ID             | REQUIREMENT                                                                                                                                                                                     | PRIORITY |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|                | destructive actions.                                                                                                                                                                            |          |
| <b>FR-D-06</b> | Snapshots must be supported on demand and on schedule, with self-service restore.                                                                                                               | <b>M</b> |
| <b>FR-D-07</b> | A browser-based console (graphical and/or serial) must be provided for out-of-band access, token-gated, without exposing the virtualization manager to tenants.                                 | <b>M</b> |
| <b>FR-D-08</b> | SSH key management must be provided (including an in-browser generation option), and administrator/root password reset must work without network access to the guest (guest-agent based).       | <b>M</b> |
| <b>FR-D-09</b> | Per-server firewall self-service: tenants manage inbound rules; enforcement is at the network layer with default-deny inbound; platform management access must be preserved and visibly locked. | <b>M</b> |
| <b>FR-D-10</b> | Tenants must be able to create private templates from their servers and provision from them.                                                                                                    | <b>M</b> |
| <b>FR-D-11</b> | Vertical autoscale (temporary burst with automatic return to plan size) should be supported with tenant-defined policies.                                                                       | <b>D</b> |
| <b>FR-D-12</b> | Threshold alerting (CPU, memory, disk, network, availability) with email notification is mandatory; webhook/Slack/Teams delivery is desirable.                                                  | <b>M</b> |
| <b>FR-D-13</b> | A per-server and per-organization activity feed must record all self-service actions.                                                                                                           | <b>M</b> |
| <b>FR-D-14</b> | An in-portal, operator-editable help centre should be provided.                                                                                                                                 | <b>D</b> |

## 5.5 Network Services (FR-E)

| ID             | REQUIREMENT                                                                                                                                                                                                                      | PRIORITY |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-E-01</b> | Both models must be available and the Vendor must state how each is delivered: (a) VPC-style private networking with per-tenant subnets on shared infrastructure; (b) dedicated VLAN-based networks for enterprise tenants.      | <b>M</b> |
| <b>FR-E-02</b> | Public IP self-service: allocation and release of public addresses (1:1 NAT/floating IP) from Operator-managed pools, priced as an add-on.                                                                                       | <b>M</b> |
| <b>FR-E-03</b> | A Layer-4 load balancer must be offered self-service, with health checks and multiple backend servers, fronted by a public IP.                                                                                                   | <b>M</b> |
| <b>FR-E-04</b> | Site-to-site VPN must be offered self-service, supporting IPsec/IKEv2 at minimum (WireGuard desirable), including downloadable per-vendor configuration for common firewalls.                                                    | <b>M</b> |
| <b>FR-E-05</b> | The Operator must manage IP, VLAN, and subnet pools in the Platform, with utilisation visibility and low-pool alerts.                                                                                                            | <b>M</b> |
| <b>FR-E-06</b> | The Platform's network layout (management CIDRs, tenant supernets, transit networks, public blocks, VLAN ranges) must be configuration, adopted from the Purchaser's addressing plan at installation — not fixed in the product. | <b>M</b> |

| ID             | REQUIREMENT                                                                                                | PRIORITY |
|----------------|------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-E-07</b> | Per-plan bandwidth/QoS policies (port speed caps, transfer allowances) should be definable and reportable. | <b>D</b> |

## 5.6 Storage and Data Protection (FR-F)

| ID             | REQUIREMENT                                                                                                                                                                | PRIORITY |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-F-01</b> | Block volume self-service: create, attach (hot-attach where supported), detach, resize, and move volumes between servers; metered into billing.                            | <b>M</b> |
| <b>FR-F-02</b> | Backup policies must be productised by the Operator: frequency, retention, and storage target configurable and priceable (e.g., a free weekly tier and a paid daily tier). | <b>M</b> |
| <b>FR-F-03</b> | Backup replication to a second site/availability zone must be supported for disaster recovery.                                                                             | <b>M</b> |
| <b>FR-F-04</b> | Self-service restore from backups/snapshots must be provided, with an optional operator-approval gate.                                                                     | <b>M</b> |
| <b>FR-F-05</b> | S3-compatible object storage should be offered with per-tenant buckets, access keys, quotas, an in-portal browser, and usage-based billing.                                | <b>D</b> |
| <b>FR-F-06</b> | All storage consumption (volumes, backups, object storage where offered) must flow into metering and billing.                                                              | <b>M</b> |

## 5.7 White-Labeling, Multi-Brand, and Resellers (SP) (FR-G)

| ID             | REQUIREMENT                                                                                                                                                                                                        | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-G-01</b> | The customer-facing surface must be fully brandable by the Operator: logo, colour palette, product naming, email templates, and legal documents (terms of service, acceptable use), without Vendor involvement.    | <b>M</b> |
| <b>FR-G-02</b> | Custom domains per brand must be supported with automated TLS certificate issuance and renewal.                                                                                                                    | <b>M</b> |
| <b>FR-G-03</b> | The Vendor's brand must be absent from all tenant-facing surfaces (portal, emails, invoices, status pages) unless the Operator chooses otherwise.                                                                  | <b>M</b> |
| <b>FR-G-04</b> | A reseller hierarchy should be supported: resellers with their own brand, their own customer set (with strict data separation), and their own retail price books constrained by Operator-defined wholesale floors. | <b>D</b> |
| <b>FR-G-05</b> | Reseller settlement should be supported in both models: commission (Operator collects) and wholesale (reseller collects and owes wholesale), with monthly statements.                                              | <b>D</b> |
| <b>FR-G-06</b> | Notifications and the status page (where offered) must carry the correct brand per tenant.                                                                                                                         | <b>M</b> |

## 5.8 Metering, Billing, and Monetisation (FR-H)

| ID      | REQUIREMENT                                                                                                                                                                                                                    | PRIORITY |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| FR-H-01 | Usage metering must cover at minimum: compute (plan or resource-based), block storage, backups, public IPs, load balancers, and object storage where offered. The Vendor must list all metered dimensions.                     | M        |
| FR-H-02 | The rating engine must support subscription plans (monthly/yearly with configurable discount) and pro-rated partial periods; committed resource-pool (quota) billing is desirable.                                             | M        |
| FR-H-03 | Price books must be effective-dated: price changes apply from a date forward, never retroactively to running services without explicit Operator action; existing subscriptions retain their price history.                     | M        |
| FR-H-04 | Invoicing must support tax-inclusive and tax-exclusive presentation, configurable tax rates and invoice numbering per jurisdiction, and proforma plus final invoices.                                                          | M        |
| FR-H-05 | Payment handling must include a manual/bank-transfer workflow with operator approval, and a gateway integration framework. The Vendor must list supported payment gateways and the effort model for adding a regional gateway. | M        |
| FR-H-06 | Collections must be automated and configurable: reminder schedule, grace period, suspension of services for non-payment, and automatic resumption on payment.                                                                  | M        |
| FR-H-07 | Revenue reporting must include monthly recurring revenue, run-rate, and per-product breakdowns, with CSV export.                                                                                                               | M        |
| FR-H-08 | Accounting export (CSV at minimum; API desirable) must be provided for the Purchaser's finance system [state system if known].                                                                                                 | M        |
| FR-H-09 | A bridge mode should allow the Platform to provision and meter while an existing billing system (e.g., WHMCS) invoices, for transition periods.                                                                                | D        |
| FR-H-10 | The billing currency must be configurable per instance. The Vendor must state its multi-currency capability and roadmap.                                                                                                       | M        |
| FR-H-11 | Monetary calculations must be exact (integer/decimal arithmetic); re-rating of an open period must be possible, idempotent, and audited.                                                                                       | M        |

## 5.9 Identity and Access Management (FR-I)

| ID      | REQUIREMENT                                                                                                                                                    | PRIORITY |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| FR-I-01 | Customer and staff sign-in must use standards-based SSO (OIDC); infrastructure-console SSO for enterprise tenants must use SAML or OIDC, scoped to the tenant. | M        |
| FR-I-02 | Multi-factor authentication must be enforceable for all users; phishing-resistant factors (passkeys/WebAuthn) are desirable.                                   | M        |
| FR-I-03 | Role-based access control must include at minimum tenant roles (admin,                                                                                         | M        |

| ID             | REQUIREMENT                                                                                                                                                                                | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|                | operator, viewer) and Operator staff roles with configurable permission sets.                                                                                                              |          |
| <b>FR-I-04</b> | If the Platform bundles an identity provider, it must be lifecycle-managed by the Platform (installation, upgrades, high availability) and not require separate specialist administration. | <b>M</b> |
| <b>FR-I-05</b> | Enterprise tenants should be able to federate their own identity provider (e.g., Microsoft Entra ID, Okta) for portal sign-in, scoped to their organization.                               | <b>D</b> |
| <b>FR-I-06</b> | SCIM-based user provisioning should be supported for enterprise tenants.                                                                                                                   | <b>D</b> |
| <b>FR-I-07</b> | Administrative sessions must support hardening controls: session timeout, and IP allow-listing for staff access.                                                                           | <b>M</b> |
| <b>FR-I-08</b> | Every state-changing action (tenant and staff) must be recorded in an append-only audit trail with actor, timestamp, and before/after context where applicable.                            | <b>M</b> |

## 5.10 Monitoring, Observability, and Service Levels (FR-J)

| ID             | REQUIREMENT                                                                                                                                                           | PRIORITY |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-J-01</b> | Per-server metrics (CPU, memory, disk, network) must be collected at [5]-minute resolution or better, with at least [90] days of history, and charted for tenants.    | <b>M</b> |
| <b>FR-J-02</b> | The Operator must have capacity views: sold versus physical capacity per region, oversubscription tracking against configurable policy, and headroom projections.     | <b>M</b> |
| <b>FR-J-03</b> | A platform-health view for the Operator must cover all Platform components with actionable status.                                                                    | <b>M</b> |
| <b>FR-J-04</b> | Per-tenant service-level tracking must be provided: uptime measurement and monthly attainment reporting against the offered SLA; an SLA-credit workflow is desirable. | <b>M</b> |
| <b>FR-J-05</b> | Operator alerting for platform and capacity events must be provided (email at minimum; webhook/Slack/Teams desirable).                                                | <b>M</b> |
| <b>FR-J-06</b> | All platform and audit logs must be exportable to the Purchaser's SIEM (syslog or HTTP).                                                                              | <b>M</b> |
| <b>FR-J-07</b> | A public status page should be provided, brandable per brand, with operator-managed incidents and component states.                                                   | <b>D</b> |

## 5.11 AI-Assisted Operations (Desirable Section) (FR-K)

| ID             | REQUIREMENT                                                                                                                                                  | PRIORITY |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-K-01</b> | A natural-language assistant should be available to tenants for common operations (e.g., firewall changes, snapshots, power actions) and platform questions. | <b>D</b> |

| ID             | REQUIREMENT                                                                                                                                                                                                                 | PRIORITY |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-K-02</b> | If any AI-assisted change capability is offered: every AI-proposed change must require explicit human approval before execution, and every AI action must be fully audited. (Mandatory only where AI features are offered.) | <b>M</b> |
| <b>FR-K-03</b> | An operator-scope assistant should support capacity queries, anomaly triage, and configuration drafting.                                                                                                                    | <b>D</b> |
| <b>FR-K-04</b> | An on-premises/local model option should be available so that no tenant or operational data leaves the environment; where data-sovereignty regulation applies to the Purchaser, this becomes mandatory.                     | <b>D</b> |
| <b>FR-K-05</b> | All AI features must be individually disableable by the Operator. (Mandatory only where AI features are offered.)                                                                                                           | <b>M</b> |

## 5.12 APIs and Extensibility (FR-L)

| ID             | REQUIREMENT                                                                                                                                                                              | PRIORITY |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>FR-L-01</b> | A documented, versioned REST API must cover customer and operator operations. The Vendor must state the coverage relative to portal functionality and provide the OpenAPI specification. | <b>M</b> |
| <b>FR-L-02</b> | API authentication must use organization-scoped tokens governed by the same RBAC as interactive users, with issuance and revocation audit.                                               | <b>M</b> |
| <b>FR-L-03</b> | A Terraform provider and a command-line interface should be available.                                                                                                                   | <b>D</b> |
| <b>FR-L-04</b> | Signed webhooks must be available for lifecycle and billing events, with retry and delivery logs.                                                                                        | <b>M</b> |

## 6. Non-Functional Requirements

| ID            | REQUIREMENT                                                                                                                                                               | PRIORITY |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>NFR-01</b> | Concurrent usage: at least [2,000] concurrent portal users on the reference HA sizing with p95 page-interactive time $\leq$ [2] seconds. State tested figures and method. | <b>M</b> |
| <b>NFR-02</b> | Scale ceilings per instance: at least [1,000] organizations and [5,000] managed servers. State tested or production-evidenced ceilings.                                   | <b>M</b> |
| <b>NFR-03</b> | Provisioning time: a standard Linux server ready (network up, login possible) within [10] minutes of order at the 95th percentile.                                        | <b>M</b> |
| <b>NFR-04</b> | Platform resilience on the HA topology: RPO $\approx$ 0 for the platform database (synchronous replication) and RTO $\leq$ [15] minutes for any single-component failure. | <b>M</b> |
| <b>NFR-05</b> | Platform availability of at least [99.9]% monthly, excluding announced maintenance windows; measurement method must be stated.                                            | <b>M</b> |
| <b>NFR-06</b> | Time zone, number, and date formats must be configurable for the Purchaser's locale.                                                                                      | <b>M</b> |

| ID            | REQUIREMENT                                                                                                                                           | PRIORITY |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>NFR-07</b> | A localisation framework should exist for portal languages beyond English [state required languages].                                                 | <b>D</b> |
| <b>NFR-08</b> | The Platform must remain fully operable during loss of any one availability zone/site hosting redundant components (state behaviour and constraints). | <b>M</b> |

## 7. Security Requirements

| ID            | REQUIREMENT                                                                                                                                                                                                   | PRIORITY |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>SEC-01</b> | Public-facing surfaces must be protected by a web application firewall (or documented equivalent controls) with an OWASP-aligned ruleset.                                                                     | <b>M</b> |
| <b>SEC-02</b> | TLS 1.2 minimum (1.3 preferred) on all external interfaces; encrypted service-to-service and database connections; automated certificate management.                                                          | <b>M</b> |
| <b>SEC-03</b> | Secrets (credentials, API tokens, signing keys) must reside in a dedicated secrets store with machine identities — never in configuration files or environment defaults.                                      | <b>M</b> |
| <b>SEC-04</b> | Platform data must be encrypted at rest; tenant-workload encryption options at the infrastructure layer must be stated.                                                                                       | <b>M</b> |
| <b>SEC-05</b> | Every release must ship with a software bill of materials (SBOM) and signed artifacts verifiable offline.                                                                                                     | <b>M</b> |
| <b>SEC-06</b> | A documented vulnerability-management process must exist: security advisories to customers, CVE response SLAs by severity, and a coordinated disclosure policy.                                               | <b>M</b> |
| <b>SEC-07</b> | Independent penetration-test evidence for the Platform within the last [12] months must be available (summary shareable under NDA), and the Vendor must permit the Purchaser's own testing of its deployment. | <b>M</b> |
| <b>SEC-08</b> | Authentication hardening: brute-force lockout, secure session management, and modern security headers on all web surfaces.                                                                                    | <b>M</b> |
| <b>SEC-09</b> | Administrative access must be role-separated; integration hooks for privileged-access-management (session MFA, IP restrictions) must be available.                                                            | <b>M</b> |
| <b>SEC-10</b> | Audit logs must be append-only/tamper-evident with configurable retention of at least [1] year online.                                                                                                        | <b>M</b> |

## 8. Data Sovereignty and Compliance

| ID            | REQUIREMENT                                                                                                                                     | PRIORITY |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>SOV-01</b> | The Platform must operate with zero mandatory external network dependencies at runtime (updates and licensing may use offline channels).        | <b>M</b> |
| <b>SOV-02</b> | Any product telemetry must be disabled by default or strictly opt-in, aggregate-only, with a fully documented schema the Purchaser can inspect. | <b>M</b> |

| ID            | REQUIREMENT                                                                                                                                                                                                         | PRIORITY |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>SOV-03</b> | All tenant, configuration, metering, and billing data must reside in [COUNTRY], including backups.                                                                                                                  | <b>M</b> |
| <b>SOV-04</b> | The Platform must produce compliance evidence on demand: user-access reviews, tenant-isolation attestation, audit-log exports — suitable for [PCI DSS / ISO 27001 / local regulation] assessments of the Purchaser. | <b>M</b> |
| <b>SOV-05</b> | The Vendor should hold ISO 27001 and/or SOC 2 certification for its development and support operations, or present a dated roadmap.                                                                                 | <b>D</b> |

## 9. Vendor Qualification Requirements

| ID           | REQUIREMENT                                                                                                                                                                                                                                                           | PRIORITY |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>VQ-01</b> | The Platform must be in production operation for at least [12] months at one or more operators (the Vendor's own cloud operation is acceptable and should be stated), at a scale of at least [100] organizations or [300] managed servers. Provide reference details. | <b>M</b> |
| <b>VQ-02</b> | At least [1] reference customer or reference operation must be available for a call or site visit.                                                                                                                                                                    | <b>M</b> |
| <b>VQ-03</b> | The Vendor must demonstrate the Platform live during evaluation, including a witnessed installation (or pre-staged environment walkthrough) and the acceptance scenario of Section 12.                                                                                | <b>M</b> |
| <b>VQ-04</b> | A 12-month product roadmap must be shared (under NDA if required), with a named product contact.                                                                                                                                                                      | <b>M</b> |
| <b>VQ-05</b> | A software escrow or equivalent business-continuity provision must be offered.                                                                                                                                                                                        | <b>M</b> |
| <b>VQ-06</b> | Support presence and response capability in [COUNTRY/REGION] must be stated, including language coverage and time-zone alignment.                                                                                                                                     | <b>M</b> |
| <b>VQ-07</b> | Certification or validation with the underlying infrastructure vendor(s) (e.g., Nutanix Ready or equivalent) is desirable.                                                                                                                                            | <b>D</b> |

## 10. Licensing and Commercial Requirements

| ID            | REQUIREMENT                                                                                                                                                                          | PRIORITY |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>LIC-01</b> | The licence metric must be transparent and verifiable by the Purchaser without vendor telemetry (e.g., per managed node). State the metric and what does and does not count.         | <b>M</b> |
| <b>LIC-02</b> | Licensing must not impose per-tenant, per-VM, or per-user charges within the licensed capacity: growing the customer base on the same infrastructure must not increase licence cost. | <b>M</b> |
| <b>LIC-03</b> | Licence enforcement must never disrupt running tenant workloads. On expiry: a grace period of at least [30] days with warnings, after which only new provisioning may be blocked.    | <b>M</b> |

| ID            | REQUIREMENT                                                                                                                                                                                                                                                                                    | PRIORITY |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>LIC-04</b> | Security updates on supported versions, data export, and tenant decommissioning must function regardless of licence state.                                                                                                                                                                     | <b>M</b> |
| <b>LIC-05</b> | Offline licence activation must be available for air-gapped or restricted environments.                                                                                                                                                                                                        | <b>M</b> |
| <b>LIC-06</b> | The proposal must disclose the full price list: licence by edition/tier, volume structure, all add-on modules required to meet the requirements marked "C", implementation services, training, and support tiers for [3] years. No requirement marked "C" may depend on an unpriced component. | <b>M</b> |
| <b>LIC-07</b> | Multi-year pricing options with price protection must be offered.                                                                                                                                                                                                                              | <b>M</b> |
| <b>LIC-08</b> | Commercial models aligned to the Purchaser's growth (e.g., banded expansion pricing) are desirable; describe options.                                                                                                                                                                          | <b>D</b> |

## 11. Implementation, Training, and Documentation

| ID            | REQUIREMENT                                                                                                                                                                                                                                                   | PRIORITY |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>IMP-01</b> | Provide an implementation plan with phases, milestones, responsibilities (RACI), and a timeline achieving production go-live within [8] weeks of contract signature.                                                                                          | <b>M</b> |
| <b>IMP-02</b> | Implementation must include: platform installation on Purchaser infrastructure, adoption of the Purchaser's network addressing plan, branding configuration, image and application catalogue setup, price-book configuration, and at least [2] pilot tenants. | <b>M</b> |
| <b>IMP-03</b> | Administrator training ( $\geq$ [2] days) and operations training ( $\geq$ [2] days) must be delivered with materials the Purchaser may retain and reuse.                                                                                                     | <b>M</b> |
| <b>IMP-04</b> | Documentation must include: architecture and administration guides, operational runbooks (backup/restore, upgrade, incident), API reference, and white-label-ready tenant help content.                                                                       | <b>M</b> |
| <b>IMP-05</b> | Migration services from [existing platform] should be offered; describe methodology, tooling, and tenant-communication approach.                                                                                                                              | <b>D</b> |

## 12. Acceptance Criteria

Production acceptance will be granted when the following scripted scenario completes end-to-end on the Purchaser's production environment, witnessed by the Purchaser, without vendor engineers executing steps on behalf of trained Purchaser staff:

- Create a tenant organization with quota; invite and activate a tenant user with MFA.
- Tenant provisions a Linux server via the wizard within the NFR provisioning time; connects via browser console and SSH.
- Tenant adds a firewall rule and verifies enforcement (allowed port reachable, all others refused).
- Tenant takes a snapshot, deletes a file, restores, and verifies content.

- Attach and grow a block volume; verify in-guest.
- Generate an invoice for the period including plan charges and add-ons; record a payment; verify receipt and status.
- Simulate non-payment: verify reminder, grace, suspension, and resume-on-payment behaviour.
- Suspend and decommission a test tenant with dual approval; verify data-retention behaviour and audit trail.
- Verify platform HA: controlled failover of the database leader and one application node with no tenant-workload impact and portal recovery within the stated RTO.
- Verify audit and SIEM export for all of the above.

## 13. Evaluation Methodology

Proposals passing mandatory-compliance screening will be scored as follows [adjust weights to procurement policy]:

| CRITERION                                                  | WEIGHT     | ASSESSED FROM                            |
|------------------------------------------------------------|------------|------------------------------------------|
| Functional compliance (Sections 5–6)                       | <b>40%</b> | Compliance matrix + demonstration        |
| Architecture, security, and sovereignty (Sections 7–8)     | <b>20%</b> | Documentation + architecture session     |
| Vendor capability and references (Section 9)               | <b>15%</b> | References, production evidence, roadmap |
| Implementation and support (Sections 11–12, support offer) | <b>10%</b> | Plan quality, SLAs, local presence       |
| Commercial (Section 10, TCO over [3] years)                | <b>15%</b> | Financial proposal                       |

*A proof-of-concept on Purchaser or vendor-provided infrastructure may be required of the top-ranked bidder(s) before award, executing the Section 12 scenario.*

## 14. Proposal Response Format

- Volume 1 — Executive summary and company profile.
- Volume 2 — Completed Compliance Matrix (Annexure A) with evidence references.
- Volume 3 — Technical proposal: architecture (with diagrams), deployment topology proposed for the Purchaser, security posture, integration approach.
- Volume 4 — Implementation plan, training plan, and support offer with SLA matrix.
- Volume 5 — References and production evidence.
- Volume 6 — Financial proposal [separate sealed envelope if required by procurement policy].

## Annexure A — Compliance Matrix Template

Reproduce for every requirement ID in Sections 5–11. Compliance codes: C (complies), PC (partial — date committed), NC (does not comply).

| REQ. ID | REQUIREMENT (ABBREVIATED) | PRIORITY | C/PC/NC | EVIDENCE / NOTES / COMMITTED DATE |
|---------|---------------------------|----------|---------|-----------------------------------|
|         |                           |          |         |                                   |
|         |                           |          |         |                                   |
|         |                           |          |         |                                   |

## Annexure B — Current Environment Questionnaire (completed by Purchaser before issue)

|                                                               |                                                     |
|---------------------------------------------------------------|-----------------------------------------------------|
| Virtualization platform and version                           | [e.g., Nutanix AOS/PC x.y · Proxmox VE x.y]         |
| Clusters / nodes / sites                                      | [counts and locations]                              |
| Storage                                                       | [HCI / SAN / object storage present]                |
| Network model                                                 | [VLAN plan, public IP blocks, firewall vendor]      |
| Identity provider(s)                                          | [e.g., Active Directory / Entra ID]                 |
| Existing billing / ERP system                                 | [e.g., WHMCS, SAP, none]                            |
| Expected tenants and servers — year 1 / year 3                | [figures]                                           |
| Billing currency and tax regime                               | [e.g., NPR + 13% VAT]                               |
| Compliance regimes in scope                                   | [e.g., central-bank guidelines, ISO 27001, PCI DSS] |
| Service-provider features (white-label / resellers) required? | [yes/no]                                            |

## Annexure C — Sizing and Growth Worksheet

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| Regions / availability zones at go-live              | [n]                   |
| Organizations at go-live / +12 months / +36 months   | [n / n / n]           |
| Managed servers at go-live / +12 months / +36 months | [n / n / n]           |
| GPU services planned                                 | [yes/no — GPU models] |
| Object storage planned (TB, year 3)                  | [n TB]                |
| Concurrent portal users (peak, year 3)               | [n]                   |

**Platform HA topology desired at go-live**

[evaluation / small production / full HA]