



WHITE PAPER · ENTERPRISE BACKUP & RECOVERY

COMPETITIVE ANALYSIS

Managed Bacula Enterprise vs. Veeam Backup as a Service

Enterprise backup without vendor lock-in, with security defaults that Veeam does not match

How faaleoleo.io delivers Bacula Enterprise capabilities — hardened, encrypted, and compliance-ready — without requiring in-house Bacula expertise.

A technical and commercial comparison of faaleoleo.io Managed Bacula Enterprise and Veeam BaaS — covering security defaults, plugin ecosystem breadth, architecture, compliance readiness, and total cost of ownership.

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Executive Summary

Enterprises evaluating backup solutions face a fundamental choice: proprietary platforms with broad market presence, or open-architecture solutions that deliver full data sovereignty, a wider plugin ecosystem, and security that is enforced by default — not by configuration.

THIS WHITE PAPER IN THREE POINTS

- **Security by default, not by configuration.** Every faaleoleo.io installation ships with hardened, AES-256-encrypted repositories for both local and cloud storage — a mandatory default. Veeam reached immutability-by-default only with v13 (November 2025); full encryption at rest still requires explicit administrator action.
- **Broader platform and plugin coverage.** Bacula Enterprise supports more platforms with more plugins than Veeam across every workload category outside of VMware and Windows — including KVM, Proxmox, Nutanix, OpenStack, Kubernetes, OpenShift, HPC, mainframe, and a wider database footprint.
- **No vendor lock-in, predictable costs.** Bacula's open format keeps data and configuration portable. faaleoleo.io's flat-rate managed service eliminates the per-VM and per-TB cost escalation that makes Veeam expensive at scale.

Both solutions protect data reliably — but for different use cases. Veeam excels in VMware- and Windows-centric environments. faaleoleo.io addresses organisations that require enterprise-grade security by default, broad platform coverage, international compliance readiness (NIS2, DORA, NIST, ISO 27001, SOC 2), and long-term independence from a single vendor.

1. Positioning & Target Audience

1.1 faaleoleo.io – Managed Bacula Enterprise

faaleoleo.io is a managed service built exclusively on **Bacula Enterprise Edition** — the commercial variant of the Bacula backup engine, trusted for over 20 years in mission-critical environments at NASA, international banks, defence ministries, and Fortune 500 companies. faaleoleo.io handles deployment, OS hardening, monitoring, patch management, and expert support — so customers receive Enterprise-grade backup capabilities without needing in-house Bacula expertise. Bacula Enterprise licences are managed separately: customers bring existing licences or acquire them alongside the service.

- Growing organisations without dedicated backup staff
- Organisations subject to international compliance frameworks: NIS2, DORA, NIST SP 800-171, ISO 27001, SOC 2
- Heterogeneous IT environments: Linux, physical servers, containers, databases, cloud, HPC
- Organisations that actively need to avoid vendor lock-in and proprietary data formats

1.2 Veeam Backup as a Service

Veeam is the market leader in the backup and recovery segment, with a large MSP ecosystem delivering BaaS via Veeam Cloud Connect and the Veeam Data Platform. Its strength lies in tight VMware vSphere integration, Microsoft Hyper-V, and the broader Microsoft ecosystem (M365, Azure).

- VMware- and Windows-dominant enterprise environments
- MSPs with a large Windows-based customer base
- Organisations prioritising Instant VM Recovery and fast RTO in virtualised environments

2. Technical Architecture

2.1 Core Engine

CRITERION	FAALEOLEO.IO (BACULA ENTERPRISE)	VEEAM BAAS
Engine	Bacula Enterprise Edition	Veeam Backup & Replication (proprietary)
Licence model	Commercial open-core — no format lock-in	Proprietary binary format (VBK/VIB)
OS base	Linux-native	Windows-primary (Linux since v12)
Architecture	Director / Storage Daemon / File Daemon (modular)	VBR server / Cloud Gateway / Agent (integrated)

2.2 Component Architecture

FAALEOLEO.IO (BACULA ENTERPRISE)

```
Client (File Daemon)
├─ TLS tunnel (AES-256) → Bacula Director (central controller)
│   └─ Storage Daemon
│       ├── Local: Hardened & Encrypted Repository [DEFAULT]
│       │   └─ Disk / NAS / Tape — AES-256 at rest
│       └─ Cloud: Hardened & Encrypted Repository [DEFAULT]
│           └─ S3 / Azure Blob / GCS — AES-256 at rest + in transit
```

Every faaleoleo.io installation — local or cloud — ships with a hardened, AES-256-encrypted repository as a mandatory default. This is not a feature to enable: it is the baseline every customer receives.

VEEAM BAAS

```
Tenant workload
├─ Veeam Agent / vSphere integration
│   └─ TLS tunnel → Cloud Gateway (provider)
│       └─ VBR Server
│           └─ Backup Repository
│               └─ Hardened Repository (immutable, on-prem) [since v13]
```

└─ S3 Object Lock (WORM, cloud) [since v13]
 Management: Veeam Service Provider Console (VSPC)

Veeam uses native hypervisor APIs (VMware VADP) for agentless VM backup. The Cloud Connect architecture is convenient for the tenant, but data is stored in a proprietary format (VBK/VIB files) that is unreadable without an active Veeam installation.

2.3 Supported Workloads

WORKLOAD	FAALEOLEO.IO (BACULA ENTERPRISE)	VEEAM BAAS
Linux (physical / VM)	Full, native	Good — agent required
Windows (physical / VM)	Full	Excellent — native VSS
VMware vSphere	Full — agentless via plugin	Market-leading, VADP-native
Microsoft Hyper-V	Full	Market-leading
KVM / QEMU / Xen	Full, native plugins	Limited
Proxmox (incl. v9.0)	Full plugin	Not supported
Nutanix AHV	Full plugin	Limited
OpenStack	Full plugin	Not supported
Databases (Oracle, PostgreSQL, MySQL, MSSQL, SAP HANA, DB2, MongoDB)	Deep — Enterprise plugins per engine	Good — 4 official app plugins
Containers / Kubernetes	Full — namespace-level plugin	Limited, in development
OpenShift (incl. Longhorn, KubeVirt)	Full plugin	Not supported
HPC / Lustre file systems	HPC Accelerator plugin	Not supported
Tape	Full, mature	Limited

WORKLOAD	FAALEOLEO.IO (BACULA ENTERPRISE)	VEEAM BAAS
Cloud (AWS, Azure, GCS)	Full — S3-compatible	Good — native cloud plugins
Mainframe / AIX / HP-UX	Full — Enterprise plugins	Not supported

3. Plugin Ecosystem

Plugin breadth is one of Bacula Enterprise's most significant — and most underestimated — advantages over Veeam. The difference is not marginal: Bacula Enterprise covers virtually every production platform category with dedicated plugins, while Veeam's official plugin set covers four enterprise applications.

3.1 Bacula Enterprise — Extensive Plugin Library

Bacula Enterprise ships with a large and actively growing plugin ecosystem. The most recent release (18.2.1) added the HPC Accelerator, OpenStack, and LibVIRT plugins while enhancing Kubernetes, OpenShift, Proxmox, QEMU, and XenServer — demonstrating the pace at which coverage continues to expand.

CATEGORY	BACULA ENTERPRISE PLUGINS
Virtualisation	VMware, Hyper-V, KVM/QEMU, Xen, Proxmox (incl. v9.0), Nutanix AHV, OpenStack, LibVIRT
Containers	Kubernetes (namespace-level scalability), OpenShift (incl. Longhorn, KubeVirt/OpenShift VM)
Databases	Oracle RMAN, PostgreSQL, MySQL/MariaDB, Microsoft SQL Server, SAP HANA, IBM DB2, Sybase, Informix, MongoDB
Cloud storage	AWS S3, Azure Blob, Azure VM, Google Cloud Storage, Microsoft 365 SharePoint
HPC & storage	HPC Accelerator (Lustre, petabyte-scale), NDMP (NAS), Tape libraries
Platforms	RHEL 10, Debian 13, AIX, HP-UX, mainframe environments

3.2 Veeam — Focused Plugin Set

Veeam's official enterprise application plugin set covers four solutions:

- Veeam Plug-in for SAP HANA
- Veeam Plug-in for Oracle RMAN
- Veeam Plug-in for SAP on Oracle

- Veeam Plug-in for Microsoft SQL Server

Veeam's native strength is VMware VADP and Hyper-V integration. For any workload outside the Microsoft/VMware stack — KVM, Proxmox, Nutanix, OpenStack, Kubernetes, OpenShift, HPC, or mainframe — Veeam has no official plugin support.

Key finding: For heterogeneous environments, the plugin gap between Bacula Enterprise and Veeam is decisive. Bacula Enterprise supports more platforms, more hypervisors, more databases, and more storage architectures than Veeam — by a significant margin.

4. Security Architecture

Security architecture is the most significant differentiator in favour of Bacula Enterprise — and it operates at the level of defaults, not optional configuration.

4.1 faaleoleo.io Security Defaults

HARDENED REPOS BY DEFAULT

Every installation — local or cloud — ships with a hardened, AES-256-encrypted repository. No administrator decision required; no feature to activate later.

END-TO-END ENCRYPTION

TLS for all communication channels. AES-256 for backup data at rest and in transit, regardless of whether storage is on-premises or in the cloud.

ARCHITECTURAL RANSOMWARE PROTECTION

The Storage Daemon accepts connections only when initiated by the Director. A compromised client cannot reach backup data — this is structural, not policy-based.

NIST-HARDENED OS IMAGES

faaleoleo.io delivers preconfigured, NIST-hardened images (QCOW/Docker) with signed releases and audit reports at every deployment.

- **Multi-factor authentication** — integrated at the protocol level
- **Air-gap capable** — full offline operation modes including tape rotation
- **Immutable audit logs** — signed and tamper-evident by default
- **Proven in the most sensitive environments** — Bacula Enterprise is the backup solution of choice for western defence and intelligence organisations, a standard no other backup vendor has publicly matched

4.2 Veeam Security Track Record

- **CVE-2023-27532** — critical vulnerability in Veeam B&R, flagged by CISA and US federal agencies; actively exploited by the FIN7 threat group
- Additional CVEs with CVSS score >9 since 2022
- Immutability and repository hardening became default only with v13 (November 2025) — previously optional, manually configured features
- Encryption at rest is configurable but **not active in a default installation**

The critical difference is not technology — it is defaults. faaleoleo.io delivers hardened, encrypted repositories out of the box for local and cloud storage alike. With Veeam, even after v13, achieving full hardening and encryption requires deliberate configuration that, in practice, is often incomplete or inconsistently applied across deployments.

5. Compliance

faaleoleo.io supports international compliance frameworks and serves organisations worldwide. The combination of Bacula Enterprise and faaleoleo.io's hardened managed service approach substantially reduces the effort required for compliance evidence — regardless of the regulatory framework in force.

REQUIREMENT	FAALEOLEO.IO	VEEAM BAAS
NIS2 (EU)	Out-of-the-box ready	Possible, requires configuration
DORA (EU financial)	Explicitly addressed — immutable audit logs, documented recovery procedures	Partial, MSP-dependent
NIST SP 800-171 (US)	NIST-hardened OS image as standard	Not by default
ISO 27001	Supported via hardened deployment and audit trail	Possible, requires configuration
SOC 2	Supported	MSP-dependent
GDPR / Data sovereignty	Full control — local, cloud, or hybrid; always AES-256 encrypted	Depends on MSP's cloud contracts
Audit logs	Immutable, signed	Present, not architecturally protected

6. Licensing & Cost Model

faaleoleo.io – Flat-Rate Managed Service

PLAN	PRICE	WHAT'S INCLUDED
Professional	from €599 / month	Mon–Fri support, email, 4 custom builds per year
Managed Hosting	Custom	24/7 dedicated support, fully cloud-hosted Bacula, SLA guarantees, uptime monitoring
Enterprise	Custom	Dedicated infrastructure, multi-region, unlimited custom builds, strategic consulting

Bacula Enterprise licences are not included in the faaleoleo.io subscription — customers bring existing licences or add them. The faaleoleo.io pricing model is **flat-rate**: no per-VM, per-CPU, or per-TB fees. The managed service cost stays stable as the infrastructure grows; only the Bacula Enterprise licence scales with workload count.

Veeam BaaS – Workload-Based Licensing

Veeam licences by workload type and count (per VM, per socket, per TB). The model is complex and has changed several times — existing customers have reported substantial price increases when migrating to the current licence structure. MSP margins and cloud repository costs add further to the total. Infrastructure growth drives Veeam licence costs up disproportionately, making long-term cost forecasting difficult.

7. Vendor Lock-in & Data Portability

CRITERION	FAALEOLEO.IO (BACULA ENTERPRISE)	VEEAM BAAS
Backup format	Open format, directly readable	Proprietary VBK/VIB — readable only with Veeam
Switching providers	At any time — config and data are portable	Full data restore required before migration
Storage location	Local, cloud, or both — AES-256 encrypted in every case	Depends on MSP and their cloud contracts
Code transparency	Open-core — code audit possible	Closed source — no code audit

The lock-in with Veeam is real: backup data in VBK format is unusable without a running Veeam installation. If a licence lapses or an MSP becomes insolvent, a complete restore cycle is required before any migration is possible. Bacula's open format means data and configuration belong to the customer — always.

8. Operations & Support

	FAALEOLEO.IO	VEEAM BAAS
Customer operational effort	Minimal — faaleoleo.io absorbs Bacula complexity	Low with an established MSP
Expertise at vendor	Bacula specialists directly reachable	MSP-dependent — quality varies widely
Custom builds / plugins	Included by plan, or as add-on	Not possible — proprietary platform
Updates / patches	Automated, signed releases with audit report	By MSP — timing often non-transparent
Plugin development	Available — Bacula Enterprise Plugin API	Not possible

faaleoleo.io addresses directly the largest barrier to Bacula adoption: configuration complexity. Organisations receive Enterprise backup capabilities — including custom plugins and builds — without needing to develop internal Bacula expertise.

9. Decision Matrix

REQUIREMENT	FAALEOLEO.IO	VEEAM BAAS
Security-critical / government environments	Strong advantage	Adequate
Hardened & encrypted repos by default	Standard in every deployment	Since v13 — configuration required
International compliance (NIS2, DORA, NIST, ISO 27001)	Strong advantage	Adequate
No vendor lock-in	Strong advantage	Not supported
Heterogeneous / Linux-heavy infrastructure	Strong advantage	Adequate
Broad plugin ecosystem	Strong advantage	Adequate
KVM / Proxmox / OpenStack / OpenShift	Strong advantage	Not supported
VMware-dominant environment	Adequate	Strong advantage
Windows / M365 backup	Adequate	Strong advantage
Instant VM Recovery	Adequate	Strong advantage
Transparent, predictable costs	Strong advantage	Adequate
Air-gap / offline / tape	Strong advantage	Adequate
Security track record (CVE history)	Strong advantage	Adequate

10. Conclusion

Veeam is a mature, widely-deployed backup platform — particularly strong in virtualised Windows environments. For organisations primarily protecting VMware VMs within a broad MSP ecosystem, Veeam BaaS is a solid choice.

faaleoleo.io with Bacula Enterprise is the stronger choice for organisations that:

- Must meet international compliance requirements (NIS2, DORA, NIST, ISO 27001, SOC 2) structurally and demonstrably
- Need hardened, encrypted storage as a non-negotiable default — for local and cloud alike — not a configuration exercise
- Operate heterogeneous or Linux-heavy infrastructure
- Require the broadest possible plugin and platform coverage — including KVM, Proxmox, Nutanix, OpenStack, Kubernetes, OpenShift, HPC, or mainframe workloads
- Have the highest security requirements: financial services, public sector, defence, critical infrastructure
- Need predictable, growth-independent backup costs
- Want Enterprise backup quality without building in-house Bacula expertise

faaleoleo.io's value proposition is precise: **Enterprise backup quality without Bacula complexity** — with the security architecture trusted by western defence organisations, the broadest plugin ecosystem in the industry, and the compliance posture that international regulatory requirements demand.

ABOUT FAALEOLEO

faaleoleo.io is a managed service provider specialising in Bacula Enterprise deployments. We deliver hardened, encrypted, compliance-ready backup infrastructure — without requiring customers to develop internal Bacula expertise. Our deployments are preconfigured, OS-hardened, and continuously monitored. Talk to us at **faaleoleo.io**.