Elasticsearch License and Usage Agreement: Jaeger Backend Storage in AKS

# Document Information

\*\*Document Owner\*\*: [Your Team/Department Name]

\*\*Document Type\*\*: Software License and Usage Agreement

\*\*Effective Date\*\*: [Insert Date]

\*\*Version\*\*: 1.0

\*\*Application\*\*: Jaeger (Distributed Tracing)

\*\*Backend Storage\*\*: Elasticsearch

\*\*Deployment Environment\*\*: Azure Kubernetes Service (AKS)

\*\*Contact\*\*: [License Administrator Email]

# 1. Executive Summary

This document outlines the licensing, compliance, and operational guidelines for deploying Elasticsearch as the backend storage for Jaeger distributed tracing in Azure Kubernetes Service (AKS). A dual-licensing strategy is adopted:  
  
- Production: Paid Platinum Subscription (with enterprise features and official Elastic support).  
- Development: Free Basic license (self-managed, no cost).  
  
This ensures enterprise-grade reliability in production while keeping development costs low.

# 2. Licensing and Compliance

## 2.1 Production Environment – Platinum Subscription

Entitlement: Licensed under a commercial Elastic Platinum subscription agreement.  
  
Licensed Features include:  
- Advanced Security (SSO, SAML/OIDC, AD/LDAP, DLS/FLS)  
- Machine Learning (anomaly detection, forecasting)  
- Cross-Cluster Replication (CCR) for disaster recovery  
- Advanced monitoring, searchable snapshots, transforms  
- 24/7/365 official Elastic support with SLAs  
  
Usage Rights:  
- Licensed per pod in the Elasticsearch cluster  
- Unlimited data within pod capacity  
- Production-only workloads  
  
Compliance:  
- Subject to annual audits, quarterly reporting  
- Must comply with Elastic’s Acceptable Use Policy and data residency requirements

## 2.2 Development Environment – Basic License

Entitlement: Covered under Elastic License 2.0 (ELv2) / SSPL for self-managed clusters.  
  
Licensed Features include:  
- Core search & analytics, REST APIs  
- Index Lifecycle Management (ILM)  
- Basic clustering, TLS, and RBAC  
- Jaeger integration support  
  
Usage Restrictions:  
- Non-production only (dev, test, staging)  
- No premium/Platinum features enabled  
- Community support only  
  
Self-Management:  
- Internal team handles installation, patching, upgrades, backup, and monitoring

# 3. Deployment Architecture & Tools

Deployment:  
- Self-managed on AKS  
- Separate namespaces for production and development  
  
Operator:  
- Elastic Cloud on Kubernetes (ECK) Operator for provisioning, scaling, license management  
  
License Application:  
- Production: Platinum license key applied via ECK  
- Development: No license key (defaults to Basic)

# 4. Scope and Responsibilities

|  |  |  |
| --- | --- | --- |
| Area | Production (Platinum) | Development (Basic) |
| Licensing | Paid subscription agreement | Free under Elastic Basic terms |
| Features | Advanced security, ML, CCR, support | ILM, RBAC, clustering |
| Deployment | Dedicated AKS pods, ECK Operator | Shared or separate dev cluster |
| Support | Elastic 24/7 enterprise support, internal SRE team | Community support, internal dev team |
| Backups | Snapshots + disaster recovery plans | Optional snapshots for testing |
| Security | SSO, DLS/FLS, TLS | TLS, RBAC |
| Cost | License + AKS compute, storage, network | No license cost, compute/storage/network only |

# 5. Cost Structure

Production:  
- Platinum subscription: approx. $95 USD per pod/month  
- AKS compute: ~$150 CAD per pod/month (Standard\_D4ds\_v5)  
- Storage: ~$30 CAD per Premium SSD (512GB)  
- Network: ~$20 CAD/month estimated per load balancer  
  
Development:  
- Basic license: Free  
- AKS compute: ~$100 CAD per pod/month (Standard\_D2ds\_v5)  
- Storage: ~$15 CAD per Standard SSD (256GB)  
- Network: ~$10 CAD/month minimal

# 6. Governance and Compliance

- License Monitoring: Automated pod tracking, quarterly compliance checks  
- Data Governance: Retention policies, ILM automation, security controls  
- Change Management: License renewal procedures, promotion guidelines  
- Audit: Annual review of license usage and compliance posture