

Case Study

GenAI Knowledge Platform & Managed Cloud Services

How AceCloud powers Air Works Group's mission-critical knowledge platform
Managed Services Since 13 March 2025 — Ongoing

CLIENT	INDUSTRY	SERVICE
Air Works Group	Aviation MRO / Engineering Services	Managed GenAI & Cloud Operations

KEY OUTCOMES AT A GLANCE

↓ 70%	↑ 85%	< 24 hrs	Zero	↓ 30%
Search time reduction	First-interaction resolution rate	New doc availability	Compliance findings	Cloud cost reduction

BUSINESS CHALLENGES

The Operational Hurdles Facing Air Works Group

Air Works Group, one of India's leading aviation MRO service providers, manages a vast and mission-critical knowledge base spanning technical manuals, airworthiness directives, compliance documentation, and engineering procedures. Key challenges included:

- Fragmented knowledge:** Critical information was scattered across thousands of documents and systems. Employees spent hours searching for answers — in an environment where decisions directly impact aircraft safety.
- Compliance pressure:** Aviation is one of the most regulated industries globally. Any AI-driven knowledge tool had to operate with complete data sovereignty, role-based access control, and a full audit trail.

- **Stale information:** The knowledge base grew continuously with new manuals and directives, but there was no scalable process to ingest and make new content queryable in near real-time.
- **Capability gap:** Air Works lacked the internal cloud and AI expertise needed to build, operate, and continuously improve a production GenAI platform alongside day-to-day MRO operations.

SOLUTION DELIVERED

AceCloud Managed Services — Full-Stack GenAI Ownership

AceCloud designed, deployed, and now fully operates a GenAI-powered knowledge chatbot on AWS as a managed service — covering the AI platform, cloud infrastructure, security posture, and ongoing optimization.

- **GenAI Platform Operations:** AceCloud manages the end-to-end Retrieval-Augmented Generation (RAG) pipeline — including document ingestion from S3, chunking, embedding generation, vector store management, and foundation model invocation via Amazon Bedrock. New documents are automatically processed and indexed within defined SLAs.
- **Response quality management:** AceCloud monitors chatbot response accuracy, tracks retrieval quality metrics, and performs prompt engineering refinements as the knowledge base evolves. Foundation model upgrades are evaluated against Air Works' query benchmarks before any production change.
- **Security & compliance management:** AceCloud manages IAM policies, Cognito user pools, and role-based access controls. All data is encrypted at rest and in transit, with KMS key management and full CloudTrail audit logging maintained by AceCloud. Quarterly Well-Architected reviews ensure ongoing compliance with aviation data governance requirements.
- **Infrastructure operations:** Lambda functions, API Gateway, and OpenSearch clusters powering the chatbot backend are fully managed by AceCloud — including scaling, performance tuning, and patching.
- **Monthly reporting:** AceCloud delivers monthly managed services reports covering platform health, query volume analytics, response quality trends, cost breakdown, and optimization recommendations.

OUTCOMES

Measurable Impact Delivered by AceCloud

- **↓ 70% reduction in average time** employees spend searching for technical information — from hours to seconds — enabled by the AceCloud-operated GenAI chatbot.
- **↑ 85% of employee queries resolved** accurately on first interaction, based on retrieval quality monitoring maintained by AceCloud.
- **< 24 hrs time-to-availability for new technical documents** added to the knowledge base, achieved through AceCloud's automated ingestion pipeline management.
- **Zero compliance findings raised during internal audits** due to AceCloud's continuous security management and audit-ready evidence collection.
- **↓ 30% reduction in cloud infrastructure costs** through AceCloud's FinOps governance, right-sizing, and monthly optimization cycles.

Conclusion

AceCloud's fully managed GenAI platform gave Air Works Group a production-grade, always-current, and compliance-ready knowledge resource — without requiring Air Works to build or maintain internal cloud or AI expertise. Employees across MRO operations now access critical technical knowledge through a conversational interface that is instant, accurate, and secure, supporting faster decision-making and reinforcing Air Works' commitment to operational excellence in aviation.

About Us

15+	10+	100+
Years of Exp	Data Center	Awards

AceCloud is a leading provider of end-to-end cloud computing solutions to global organizations across industries at scale. It offers a full spectrum of cloud services, including Public Cloud, Application Hosting, AWS Services, Managed Security Services, and Hosted Virtual Desktop Solutions.

AceCloud is a brand of Real Time Data Services (RTDS) group of companies - a leading provider of information technology capabilities specializing in Cloud Computing and Cloud Telephony. RTDS Group has an employee base of 600+ across India, the US, and the UK, supporting over 20,000+ customers and IT infrastructure in 10+ data centers spanning the globe. It offers industry-leading technological solutions that help customers streamline their operations and enhance efficiency.

As an advanced consulting and certified AWS Well-Architected Partner, AceCloud recently achieved the prestigious AWS Storage Competency and is also recognized as an Amazon RDS Service Delivery Partner. These achievements underscore its deep expertise in AWS technologies and commitment to delivering high-quality cloud solutions.



- Public Sector
- Storage Consulting Competency
- Small and Medium Business Services Competency
- Amazon RDS Delivery
- AWS Database Migration Service Delivery
- Amazon CloudFront Delivery
- AWS Well-Architected Partner Program
- Authorized Commercial Reseller



Contact Us

Are you ready to cut down your cloud spending? Contact AceCloud Experts today to get a customized quote.

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