

Strengthening BCP Posture through AWS Backup Optimization & MSP-Led Governance for ABGT

Executive Summary

To improve the resiliency of its business-critical applications, ABGT partnered with **Zarthi**, its AWS Managed Services Partner (MSP).

Zarthi implemented a **comprehensive backup optimization program** that addressed stale references, eliminated backup job failures, and established a **Business Continuity Posture (BCP)** aligned with **AWS Well-Architected Best Practices**.

Key Impact:

- 100% backup job success rate post-remediation
- Audit-ready backup operations across global workloads
- 20% storage cost optimization through lifecycle policies
- Strengthened BCP posture via security hardening,

Timeline of Engagement

8th July 2025 Kickoff, audit review, requirement confirmation 9st July 2025 Environment assessment & workload mapping 10th July 2025 Backup plan redesign & validation Phase 1: orphaned references 11th July 2025 removed Phase 2: resource-level 12th July 2025 assignments created Testing, monitoring, & 13th July 2025 verification Final documentation & closure 14th July 2025

Business Challenge

- Frequent job failures caused by stale references to terminated EC2 instances
- Operational noise & audit inconsistencies, creating compliance risk
- Misaligned backup coverage across multi-account environments
- Need to improve BCP posture without disrupting mission-critical financial workloads

Business Objectives

- Eliminate backup job failures & ensure operational reliability
- Align backup operations to critical workloads only
- Strengthen ABGT's **BCP posture** with compliant, secure backup strategy
- · Reduce storage costs using tiered lifecycle management
- Establish MSP-led proactive governance for long-term resilience

Solution Approach – Architected for BCP, Reliability, and Governance

1. Comprehensive Audit & Discovery

- Mapped active workloads across multi-account environment
- Identified orphaned and deprecated backup references

2. Backup Plan Remediation & Optimization

- Removed stale references and re-aligned plans with live EC2 workloads
- Enforced resource-level backup granularity for better resilience
- Configured retention policies & backup vault encryption

3. Automation & Observability

- Implemented AWS Systems Manager (SSM) scripts for daily validation
- Integrated CloudWatch alarms for proactive detection of failures
- Enforced compliance with AWS Config Rules

4. Cost Optimization

- Enabled lifecycle policies to transition backups to S3 Glacier
- Rightsized retention and backup windows for efficient cost control
- Established MSP guardrails for continuous optimization

5. Security Hardening

- Enforced least-privilege IAM & SCPs for backup operations
- Enabled encryption at-rest & in-transit for all recovery points
- Integrated with centralized logging & audit pipelines

Our MSP Role: Strategic Ownership Beyond Remediation

Pre-Implementation – Risk Discovery & Strategy

- Conducted Well-Architected Review focused on Security, Reliability & Cost Optimization pillars
- Designed backup tagging, subnetting & recovery strategy aligned with ABGT's BCP needs
- Assessed operational risk with rollback simulations

During Implementation – Controlled Execution & Collaboration

- Removed stale references and re-architected backup plans
- Validated across multi-account & multi-region workloads
- Coordinated closely with ABGT IT & compliance teams to ensure zero disruption
- Enforced IAM & encryption policies for compliance alignment

- Established cost guardrails using SSM automation & AWS Cost Explorer
- Recommended continuous improvements for resilience & governance

Post-Implementation – Governance & Long-Term Resilience

- Delivered runbooks, architecture docs & compliance artifacts
- Enabled 24x7 MSP monitoring & incident response for BCP operations
- Established cost guardrails using SSM automation & AWS Cost Explorer
- Recommended continuous improvements for resilience & governance

AWS Services Utilized

Service

- AWS Backup: Centralized backup orchestration & recovery points
- Amazon EC2: Aligned backup coverage with active workloads
- AWS Systems Manager: Automation, validation scripts, governance
- Amazon S3 & Glacier: Tiered storage & lifecycle cost optimization
- AWS CloudWatch: Monitoring, alarms, and dashboards
- AWS Config: Continuous compliance enforcement
- IAM & SCPs: Security hardening & least-privilege governance

Success Metrics

- 100% job success rate after optimization
- Zero false failure alerts across daily & scheduled jobs
- Multi-account compliance validated with AWS Config + CloudWatch
- ~20% storage cost savings via lifecycle policies & SSM automation
- Continuous MSP-led monitoring ensures sustainable operations

Final Thought – MSP-Led BCP Resilience for ABGT

Through this engagement, Zarthi demonstrated how an AWS MSP partner can transform backup operations into a foundation for Business Continuity Planning (BCP).

By aligning with AWS Well-Architected Best Practices, ABGT now benefits from:

- Reliability: Zero failures, 100% backup success
- Compliance: Audit-ready operations with continuous enforcement
- Cost Efficiency: Optimized lifecycle & automation for long-term savings

- Security: Hardened IAM, encryption & governance
- MSP Governance: Continuous monitoring & proactive improvement

ABGT's applications now operate with stronger resiliency, backed by an MSP-led operational model that ensures sustained BCP posture.

Business Impact

Backup Reliability

100% success rate postremediation

Security Hardening IAM, encryption & centralized logging enforced

Compliance & Audit

Fully audit-ready, zero false failures

Cost Optimization 20% savings via lifecycle & automation

Operational Confidence Proactive monitoring & MSP governance

BCP Posture

Strengthened resilience aligned to AWS Best Practices





