

Service Name

AWS Well-Architected Tool

Service Overview

AWS Well-Architected Tool (AWS WA Tool) is a free service that helps users document and measure their workloads against AWS architectural best practices. It provides recommendations for improving workloads' reliability, security, efficiency, cost-effectiveness, and sustainability. Based on the AWS Well-Architected Framework developed by AWS Solutions Architects, the tool evaluates architectures against five core pillars: Operational Excellence, Security, Reliability, Performance Efficiency, and Cost Optimization. Users can create custom lenses to measure workloads against their specific best practices and conduct reviews across their portfolio of applications.

Key Use Cases

- **Architecture Review:** Conduct comprehensive reviews of workloads against AWS best practices across the five pillars to identify risks and improvement opportunities
- **Product Launch Governance:** Document architectures and provide governance for new product launches to ensure alignment with organizational standards
- **Technology Portfolio Risk Management:** Manage risks across technology portfolios by systematically evaluating multiple workloads and tracking improvements
- **Compliance and Audit:** Support regulatory and compliance requirements with built-in compliance checks and standardized assessment frameworks
- **Continuous Improvement:** Track workload improvements over time using milestones and measurement capabilities for ongoing architecture optimization

Features

- **Workload Reviews:** Conduct detailed reviews against AWS Well-Architected Framework pillars with customizable lenses and question sets
- **Custom Lenses:** Create industry-specific or custom evaluation criteria to supplement standard AWS best practices
- **Trusted Advisor Integration:** Access relevant Trusted Advisor checks integrated within workload reviews for comprehensive recommendations
- **Milestone Tracking:** Save workload states at specific points in time to track improvements and changes over time
- **Improvement Plans:** Generate prioritized improvement plans with step-by-step guidance for addressing identified risks
- **Collaboration Features:** Share workloads and reviews with team members, AWS accounts, and AWS Organizations for collaborative assessment

Value Proposition

AWS Well-Architected Tool provides unique value as a free, comprehensive architecture assessment platform directly integrated with AWS services and backed by Solutions Architect expertise. It offers standardized evaluation against proven best practices, enabling consistent architecture reviews across organizations:

- The tool delivers actionable improvement plans with prioritized recommendations, reducing the complexity of optimization initiatives
- Integration with Trusted Advisor and Service Catalog AppRegistry provides contextual insights specific to actual AWS resources
- Custom lens capabilities allow organizations to incorporate industry-specific or proprietary standards alongside AWS best practices, making it adaptable to diverse business requirements while maintaining standardized assessment methodologies

Service Integration

AWS Well-Architected Tool integrates natively with several core AWS services to enhance assessment capabilities. AWS Trusted Advisor integration provides real-time infrastructure recommendations and checks within workload reviews for Business and Enterprise Support customers:

- AWS Service Catalog AppRegistry integration enables workload definition based on existing application resources and metadata
- AWS Organizations integration simplifies resource sharing and management across organizational accounts through service-linked roles
- AWS Identity and Access Management (IAM) provides granular access control with managed policies for full access, read-only access, and organizational permissions
- The tool also connects with AWS Cost Explorer through its cost optimization recommendations and works with AWS Config for additional configuration insights

Onboarding and Offboarding

Getting started with AWS Well-Architected Tool involves setting up appropriate IAM permissions for users, groups, or roles, then activating support for desired AWS service integrations like Trusted Advisor or Service Catalog AppRegistry. Users define workloads by specifying name, description, owner, environment, regions, and accounts:

- The review process involves answering questions across the six framework pillars, with the tool providing improvement plans based on responses
- Organizations can save milestones to track progress and share workloads for collaborative reviews
- The service is accessible through the AWS Management Console in all AWS regions without additional setup requirements, making onboarding straightforward for existing AWS customers

Getting Started Guide:

<https://docs.aws.amazon.com/wellarchitected/latest/userguide/getting-started.html>

Data Removal

AWS Well-Architected Tool stores workload definitions, review responses, custom lenses, and milestone data within customer AWS accounts. For offboarding, customers can delete individual workloads, custom lenses, and review templates through the console or API. All associated data including answers, milestones, and improvement plans are permanently removed when workloads are deleted. Organizations can also revoke sharing permissions and disable service integrations with Trusted Advisor or Organizations. The service follows standard AWS data retention and deletion practices for customer account closure scenarios.

Backup/Restore and Disaster Recovery

AWS Well-Architected Tool does not provide traditional backup and disaster recovery capabilities as it is an assessment and documentation service rather than a data storage service. The tool itself operates as a managed AWS service with built-in resilience across AWS regions. Workload definitions, reviews, and custom lenses are stored within the regional service infrastructure. Customers can export reports and documentation for external backup purposes, but the service focuses on architecture assessment rather than data protection. Recovery capabilities are inherent to the managed service design rather than customer-configurable backup solutions.

Backup Capabilities

AWS Well-Architected Tool does not have traditional backup capabilities and does not integrate with AWS Backup service since it operates as a managed assessment platform rather than a data storage solution. The service stores configuration data, workload definitions, and assessment results within AWS's managed infrastructure:

- Customers can export reports and assessments for external record-keeping, but the service relies on AWS's underlying infrastructure resilience rather than customer-managed backup solutions
- Data persistence is handled through the managed service architecture across AWS regions

Disaster Recovery

AWS Well-Architected Tool does not support traditional disaster recovery and does not integrate with AWS Elastic Disaster Recovery as it is a managed assessment service rather than infrastructure requiring customer-managed DR capabilities. The service operates with built-in resilience as part of AWS's managed service architecture:

- Regional availability ensures service continuity, with workloads and assessments accessible from supported AWS regions

- The tool actually helps customers design disaster recovery strategies for their workloads through reliability pillar assessments rather than requiring DR configuration for itself

Recovery Objectives

AWS Well-Architected Tool helps customers meet RPO and RTO objectives by providing structured guidance through the Reliability pillar questions and best practices rather than offering direct recovery capabilities. The tool evaluates backup strategies, disaster recovery plans, fault tolerance designs, and business continuity preparations within workload assessments. Through improvement plans, it recommends specific AWS services and architectural patterns that support customer-defined recovery objectives. The assessment framework includes questions about backup automation, cross-region replication, and recovery testing to ensure architectures align with target RPO and RTO requirements.

Service Constraints

Service Quotas: <https://docs.aws.amazon.com/general/latest/gr/wellarchitected.html>

FAQ: <https://aws.amazon.com/well-architected-tool/faqs/>

Technical Requirements

Service Documentation:

<https://docs.aws.amazon.com/wellarchitected/latest/userguide/intro.html>

User Guide: <https://docs.aws.amazon.com/wellarchitected/latest/userguide/getting-started.html>

API Reference:

<https://docs.aws.amazon.com/wellarchitected/latest/APIReference/Welcome.html>

Pricing Overview

Please see the AWS UK G Cloud 15 Pricing Document accompanying this service in the Digital Marketplace.

Public Pricing: <https://aws.amazon.com/well-architected-tool/pricing/>

Cost Optimization

AWS Well-Architected Tool is completely free with no additional charges, providing significant cost optimization value as organizations only pay for underlying AWS resources used during assessments. The tool delivers cost optimization recommendations through its Cost Optimization pillar, helping identify opportunities like rightsizing instances, implementing Savings Plans, using Spot Instances, and eliminating idle resources:

- Integration with Cost Explorer and Trusted Advisor provides actionable cost reduction insights
- Organizations can track cost optimization improvements through milestone comparisons and quantify business value from optimization efforts
- The tool's assessment framework helps establish cost-aware cultures and implement financial management best practices across workloads

Savings Considerations

The primary cost savings from AWS Well-Architected Tool come from the optimization recommendations it provides rather than service costs, as the tool is free. Organizations achieve savings through improved architecture decisions, elimination of over-provisioned resources, implementation of appropriate pricing models like Reserved Instances or Savings Plans, and removal of unused resources identified through assessments:

- The tool's Cost Optimization pillar systematically identifies opportunities for expenditure reduction, demand management, and resource efficiency improvements
- Long-term savings result from establishing cost optimization practices, implementing automation for resource lifecycle management, and creating cost-aware organizational cultures
- Regular reviews using the tool help maintain optimal cost postures as workloads evolve and AWS service offerings expand