

Service Name

Amazon Connect

Service Overview

Amazon Connect is a cloud-based omnichannel contact center solution that enables businesses to deliver high-quality customer experiences across voice, chat, SMS, email, web calling, video, and tasks. It provides AI-powered capabilities including conversational IVR, chatbots, agent assistance, real-time analytics, and workforce management. Amazon Connect offers a pay-as-you-go pricing model with no upfront costs, minimum fees, or long-term commitments, allowing businesses to scale their contact center operations up or down based on demand while maintaining seamless customer experiences across all channels.

Key Use Cases

- Customer service and support: Handle inbound customer inquiries, complaints, and support requests across voice, chat, email, and SMS channels with intelligent routing and AI assistance
- Sales and lead generation: Manage outbound campaigns with predictive dialing, answering machine detection, and ML-powered optimization for appointment reminders, marketing promotions, and follow-ups
- Self-service automation: Deploy AI-powered chatbots and conversational IVR using Amazon Lex for customer authentication, order status, FAQ responses, and routine transactions without agent intervention
- Technical support and IT help desk: Provide multi-tier technical support with case management, skill-based routing, and knowledge base integration for complex problem resolution
- Collections and payment processing: Conduct secure payment collection, account management, and debt recovery operations with compliance features and automated workflows
- Emergency services and crisis management: Handle high-volume emergency calls with priority routing, overflow management, and real-time dashboards for critical response coordination

Features

- **Omnichannel Communication:** Voice, chat, email, SMS, video calling, and task management in a unified platform
- **AI-Powered Self-Service:** Conversational IVR and chatbots with Amazon Lex for natural language interactions

- **Agent Workspace:** Integrated agent desktop with unified customer profiles, step-by-step guides, and real-time assistance
- **Contact Routing:** Skills-based routing, queue management, and intelligent contact distribution based on agent capabilities
- **Real-time Analytics:** Live dashboards, historical reports, conversational analytics, and sentiment analysis
- **Workforce Management:** ML-powered forecasting, capacity planning, agent scheduling, and adherence tracking
- **Outbound Campaigns:** High-volume predictive dialing with answering machine detection and campaign optimization
- **Generative AI Assistant:** Amazon Q in Connect provides real-time agent recommendations and post-contact summaries
- **Drag-and-Drop Flow Designer:** Visual workflow designer for creating personalized customer experiences across all channels
- **Voice Quality & Telephony:** High-quality voice calls, global telephony coverage, and telephony-as-a-service model

Value Proposition

Amazon Connect delivers superior value through its cloud-native architecture that eliminates infrastructure management while providing unlimited AI capabilities at predictable pricing. Unlike traditional contact center solutions, it offers seamless omnichannel experiences with automatic scaling, pay-as-you-go pricing, and no long-term commitments. Key differentiators include: integrated AWS ecosystem allowing seamless integration with 200+ AWS services, built-in generative AI that enhances both agent productivity and customer self-service without additional complexity, true omnichannel design that maintains context across voice, chat, email, and tasks, enterprise-grade security and compliance built on AWS infrastructure, and rapid deployment with pre-built integrations and drag-and-drop configuration tools that reduce implementation time from months to weeks.

Service Integration

Amazon Connect integrates deeply with the AWS ecosystem for comprehensive contact center functionality. Core integrations include Amazon Lex for conversational AI and chatbots, Amazon Polly for text-to-speech, Amazon Transcribe for call transcription, Amazon Comprehend for sentiment analysis, AWS Lambda for custom business logic and external system integrations, Amazon S3 for call recording and report storage, Amazon DynamoDB for real-time data access and contact routing, Amazon Kinesis for real-time data streaming and analytics, Amazon CloudWatch for monitoring and alerting, AWS Identity and Access Management (IAM) for security and permissions, Amazon Pinpoint for omnichannel messaging, Amazon SNS for notifications, and AWS Directory Service for user federation. Additionally, it leverages Amazon EventBridge for event-driven workflows and AWS CloudFormation for infrastructure as code deployment.

Onboarding and Offboarding

Getting started with Amazon Connect follows a streamlined six-step process. First, create an Amazon Connect instance in the AWS Management Console, specifying user management preferences, telephony options, and data storage location:

- Second, claim phone numbers from AWS inventory or port existing numbers for voice capabilities
- Third, set up routing by creating queues, routing profiles, and defining hours of operation for different channels
- Fourth, design customer flows using the drag-and-drop flow designer to define the end-to-end customer experience
- Fifth, add users including managers and agents, configuring their routing profiles, security permissions, and equipment settings
- Finally, configure chat tools and widgets for web integration if using digital channels
- The entire setup can be completed in hours, with AWS providing tutorials, workshops, and guided setup wizards to accelerate deployment

Getting Started Guide:

<https://docs.aws.amazon.com/connect/latest/adminguide/amazon-connect-get-started.html>

Data Removal

Offboarding from Amazon Connect involves deleting the instance through the AWS Management Console, which releases phone numbers back to inventory and makes the service unavailable to customers. Upon deletion, all instance settings, data, metrics, and reports become permanently inaccessible and cannot be restored. Scheduling data is retained for 30 days for GDPR compliance before final deletion. Customers must manually delete associated CloudWatch log groups if flow logging was enabled, and any stored call recordings in S3 buckets must be managed separately according to retention policies.

Backup/Restore and Disaster Recovery

Amazon Connect provides built-in resilience and data protection through AWS's global infrastructure with active-active architecture across Availability Zones. Contact records, flow configurations, and user settings are automatically replicated across multiple AZs for high availability. Call recordings and reports stored in S3 benefit from 99.999999999% durability and can leverage S3 Cross-Region Replication for additional protection. Flow configurations can be exported and version-controlled for backup and restoration purposes. However, Amazon Connect does not currently integrate with AWS Backup service for centralized backup management.

Backup Capabilities

Amazon Connect does not directly support AWS Backup integration for automated backup management. However, the service provides alternative data protection mechanisms including automatic replication of configurations and data across Availability Zones, S3-based storage for call recordings with built-in durability and optional cross-region replication, exportable flow configurations for version control and backup purposes, and API-based configuration backup through programmatic export of settings, users, queues, and routing profiles. Contact records and analytics data can be streamed to external systems for backup and archival purposes.

Disaster Recovery

Amazon Connect does not integrate with AWS Elastic Disaster Recovery service but provides inherent disaster recovery capabilities through its cloud-native, multi-AZ architecture. The service automatically handles failover between Availability Zones with no customer intervention required:

- For comprehensive disaster recovery, customers can implement cross-region strategies by setting up instances in multiple regions, exporting and replicating flow configurations, implementing DNS-based failover with Route 53, and leveraging S3 Cross-Region Replication for call recordings
- The service's API-driven nature enables Infrastructure as Code approaches for rapid environment recreation

Recovery Objectives

Amazon Connect helps customers achieve aggressive RPO and RTO objectives through its cloud-native architecture. The service provides near-zero RPO for real-time operations through automatic multi-AZ replication and continuous data synchronization. RTO is minimized through automatic failover capabilities within the same region, typically achieving recovery in minutes. For cross-region scenarios, customers can design solutions with RTOs of 15-30 minutes by pre-deploying instances and using automation for configuration replication. The service's elastic scaling ensures capacity is available during disaster recovery scenarios without pre-provisioning requirements.

Service Constraints

Service Quotas: <https://docs.aws.amazon.com/connect/latest/adminguide/amazon-connect-service-limits.html>

FAQ: <https://aws.amazon.com/connect/faqs/>

Technical Requirements

Service Documentation: <https://docs.aws.amazon.com/connect/latest/adminguide/>

User Guide: <https://docs.aws.amazon.com/connect/latest/adminguide/>

API Reference: <https://docs.aws.amazon.com/connect/latest/APIReference/>

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/connect/pricing/>

Cost Optimization

Amazon Connect offers several unique cost optimization strategies beyond standard AWS practices. Region selection significantly impacts telephony costs for claimed phone numbers and inbound usage, with potential savings of 20-40% by choosing optimal regions:

- Callback functionality reduces costs by allowing customers to opt for callbacks during high-volume periods instead of waiting on hold, decreasing handle times and PSTN charges
- Self-service implementation using Amazon Lex reduces agent labor costs by handling routine inquiries automatically
- Redirecting voice contacts to chat allows agents to handle multiple conversations simultaneously, improving efficiency
- Using click-to-call reduces call durations by passing contextual information
- The unlimited AI pricing model provides predictable costs for all optimization features, while softphone usage eliminates deskphone PSTN extension costs

Savings Considerations

Primary cost savings with Amazon Connect stem from its pay-as-you-go model eliminating upfront license fees, infrastructure costs, and maintenance expenses typically associated with traditional contact centers. The service's elastic scaling means customers only pay for actual usage rather than peak capacity, potentially saving 30-60% compared to traditional solutions:

- Studies show organizations achieve \$4.3 million in cloud technology cost savings, 31% subscription cost savings, and \$4.6 million in agent labor savings through improved productivity
- Additional savings come from reduced IT overhead, elimination of hardware refresh cycles, automatic software updates, and improved agent efficiency through AI-powered tools
- Storage cost optimization through S3 lifecycle policies can transition old recordings to cheaper storage tiers, while strategic use of self-service capabilities reduces operational costs per contact