



## 1. Custom Package Name

AWS SQS Integration Package for Automation 360

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## 2. Overview

The AWS SQS Custom Package enables seamless integration between Automation Anywhere A360 and Amazon Simple Queue Service (SQS). It allows bots to interact with distributed messaging systems in a scalable, secure, and reliable manner.

This package provides reusable actions to establish AWS sessions, send message, receive messages, retrieve queue attributes, delete processed messages, and purge queue. It allows bot developers to integrate asynchronous, event-driven workflows directly within Automation 360 without building custom API layers.

This package is designed for enterprise-grade integrations where bots need to communicate with distributed systems using queue-based messaging.

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## 3. Key Features

- Establish reusable AWS SQS session using secure credentials
  - Send messages to SQS queues
  - Receive messages from SQS queues in JSON format
  - Retrieve queue attributes in JSON format
  - Delete messages using receipt handles
  - Purge all messages from a queue
  - End session cleanly after execution
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## 4. Actions Included

Action Name	Description
Start Session	Creates AWS SQS session using credentials and region
Send Message	Sends message to SQS queue and returns MessageId
Receive Messages	Retrieves messages from queue in JSON format
Get Queue Attributes	Returns queue attributes as JSON
Delete Message	Deletes a message using receipt handle
Purge Queue	Removes all messages from queue



Action Name	Description
End Session	Closes AWS session

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## 5. Use Cases

- Order processing pipelines
  - Finance queue-based processing (invoices, transactions)
  - Microservices orchestration
  - Integration with AWS-based applications
  - Asynchronous workload distribution
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## 6. Architecture Overview

Automation 360 Bot → AWS SQS → Downstream Systems

This architecture enables scalable and decoupled automation workflows.

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## 7. Prerequisites

- Automation Anywhere Automation 360 Control Room
  - AWS Account with SQS enabled
  - SQS Queue created
  - AWS Access Key ID and Secret Access Key
  - IAM permissions:
    - sqs:SendMessage
    - sqs:ReceiveMessage
    - sqs>DeleteMessage
    - sqs:GetQueueAttributes
    - sqs:PurgeQueue
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## 8. Installation Steps

1. Log in to Automation 360 Control Room
2. Navigate to **Manage → Packages**
3. Upload package JAR file



4. Import demo bot ZIP into Public workspace
  5. Ensure all dependent packages are available
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## 9. Configuration

Provide the following inputs:

- AWS Access Key (recommended via Credential Vault)
  - AWS Secret Key (recommended via Credential Vault)
  - AWS Region (e.g., us-east-1)
  - Queue URL
  - Message Body (for send operation)
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## 10. Execution Flow

1. Start Session
  2. Send Message
  3. Receive Messages
  4. Process messages
  5. Delete Message
  6. End Session
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## 11. Inputs and Outputs

### Inputs:

Input	Description
AWS Access Key	AWS authentication key
AWS Secret Key	AWS secret key
Region	AWS region (e.g., us-east-1)
Queue URL	Target SQS queue
Message Body	Payload to send

### Outputs:



<b>Output</b>	<b>Description</b>
Message ID	Unique ID of sent message
Message Body	Received message content
Receipt Handle	Required for deletion
Status	Success / Failure indicator

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## 12. Example Payload

```
{  
  "order_id": 12345,  
  "status": "created"  
}
```

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## 13. Best Practices

- Use Credential Vault for AWS credentials
  - Avoid hardcoding sensitive values
  - Always call End Session after completion
  - Implement retry logic for network failures
  - Validate queue permissions before execution
  - Handle empty queue scenarios gracefully
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## 14. Limitations

- Requires valid AWS IAM permissions
  - Queue purge action is irreversible (use with caution)
  - Network connectivity to AWS is required
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## 15. Troubleshooting

<b>Issue</b>	<b>Resolution</b>
Invalid credentials	Verify AWS Access Key and Secret
Queue not found	Check Queue URL and region
Permission error	Validate IAM role permissions



**Issue**

**Resolution**

No messages received

Ensure queue contains messages

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**16. Demo Bot**

A sample demo bot is included to demonstrate:

- Session creation
  - Message send
  - Message receive
  - Message deletion
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**17. Version**

Version: 1.0.0

Platform: Automation 360

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**18. Disclaimer**

This package interacts with AWS services. Users are responsible for AWS usage costs and proper credential management.