



# Cloud Automation Agents Using n8n



## Purpose of This Document

This document introduces **beginner-level cloud automation agents** that can be built using **n8n without coding**.

Each agent solves a **real cloud problem**, explains **manual work vs automation**, and helps beginners understand **how cloud automation works in practice**.

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## What Is an Automation Agent?

An automation agent is a system that:

- Monitors events or time
- Makes simple decisions
- Takes action automatically

In cloud computing, these agents replace **repetitive human tasks**.

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## Agent 1: Server Health Alert Agent



### Description

This agent checks whether a server or website is running and sends an alert if it goes down.



### Use Case

- Website uptime monitoring
- API availability checks



### Manual Process

- Open browser repeatedly
- Refresh website
- Notice downtime late
- Manually inform team

## Automated with n8n

- Automatically checks server status on schedule
- Sends instant notification if server is down

## Basic Workflow

Schedule Trigger

→ HTTP Request

→ IF (status ≠ 200)

→ Send Alert

## What You Learn

- Triggers
  - HTTP checks
  - Conditional logic
  - Notifications
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# Agent 2: Daily Cloud Cost Alert Agent

## Description

Sends a daily message showing cloud usage or billing summary.

## Use Case

- Avoid unexpected cloud bills
- Track spending trends

## Manual Process

- Login to cloud dashboard
- Open billing page
- Forget to check regularly

## Automated with n8n

- Fetches billing data daily
- Sends automated cost summary

## Basic Workflow

Schedule (Daily)

→ Cloud Billing API

→ Send Summary

## What You Learn

- Scheduled automation
  - API data handling
  - Reporting
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# Agent 3: Backup Reminder Agent

## Description

Reminds users to take backups on a fixed schedule.

## Use Case

- Beginner backup discipline
- Pre-automation learning step

## Manual Process

- Remember backup yourself
- Forget often

## Automated with n8n

- Sends reminders automatically

## Basic Workflow

Schedule

→ Send Reminder Message

## What You Learn

- Time-based automation
- Messaging integration

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## Agent 4: Cloud File Upload Notification Agent

### Description

Sends a notification whenever a new file is uploaded to cloud storage.

### Use Case

- Team collaboration
- Monitoring shared folders

### Manual Process

- Open cloud storage repeatedly
- Check file list manually

### Automated with n8n

- Detects upload event
- Sends notification instantly

### Basic Workflow

Cloud Storage Trigger

→ Send Notification

### What You Learn

- Event-based triggers
- Cloud storage automation

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## Agent 5: Simple AI Log Analyzer Agent

### Description

Uses AI to read logs and explain errors in simple language.

### Use Case

- Beginner log understanding
- Faster debugging



## Manual Process

- Read long logs
- Guess the problem



## Automated with n8n

- Sends logs to AI
- Returns summarized explanation



## Basic Workflow

Trigger

→ AI Analysis

→ Send Explanation



## What You Learn

- AI integration
  - Text analysis automation
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# Agent 6: Email Alert Classifier Agent



## Description

Analyzes incoming emails and highlights important ones.



## Use Case

- Avoid missing critical alerts
- Reduce email noise



## Manual Process

- Read every email
- Waste time on low-priority messages



## Automated with n8n

- Uses AI or rules to classify emails
- Notifies only when important

## Basic Workflow

Email Trigger

→ Analyze Content

→ IF Important → Notify

## What You Learn

- Email automation
  - Decision logic
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# Agent 7: Daily System Status Report Agent

## Description

Generates and sends a daily system health report.

## Use Case

- Reporting to managers
- Daily health checks

## Manual Process

- Open dashboards
- Copy data
- Write report

## Automated with n8n

- Collects data
- Sends report automatically

## Basic Workflow

Schedule

→ Collect Metrics

→ Send Report

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## Agent 8: Failed Task Retry Agent

### Description

Automatically retries tasks when they fail.

### Use Case

- Handle temporary network failures
- Improve reliability

### Manual Process

- Notice failure
- Retry manually

### Automated with n8n

- Detects failure
- Retries automatically

### Basic Workflow

Error Trigger  
→ Retry Task  
→ Notify Result

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## Agent 9: Cloud Resource Reminder Agent

### Description

Reminds users about running cloud resources.

### Use Case

- Prevent unused servers
- Cost control

### Manual Process

- Forget running instances

### Automated with n8n

- Sends reminder automatically
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## Agent 10: Uptime Logger Agent

### Description

Logs uptime status daily for tracking.

### Use Case

- SLA tracking
- Historical analysis

### Automated with n8n

- Checks uptime
  - Stores results automatically
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## Recommended Learning Order

1. Server Health Alert
  2. Backup Reminder
  3. File Upload Notification
  4. Email Classifier
  5. AI Log Analyzer
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## Key Learning Principle

If a human repeats a task → automate it

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## Final Note

These beginner agents build the **foundation for advanced cloud automation**, DevOps, FinOps, and AI-powered agents.