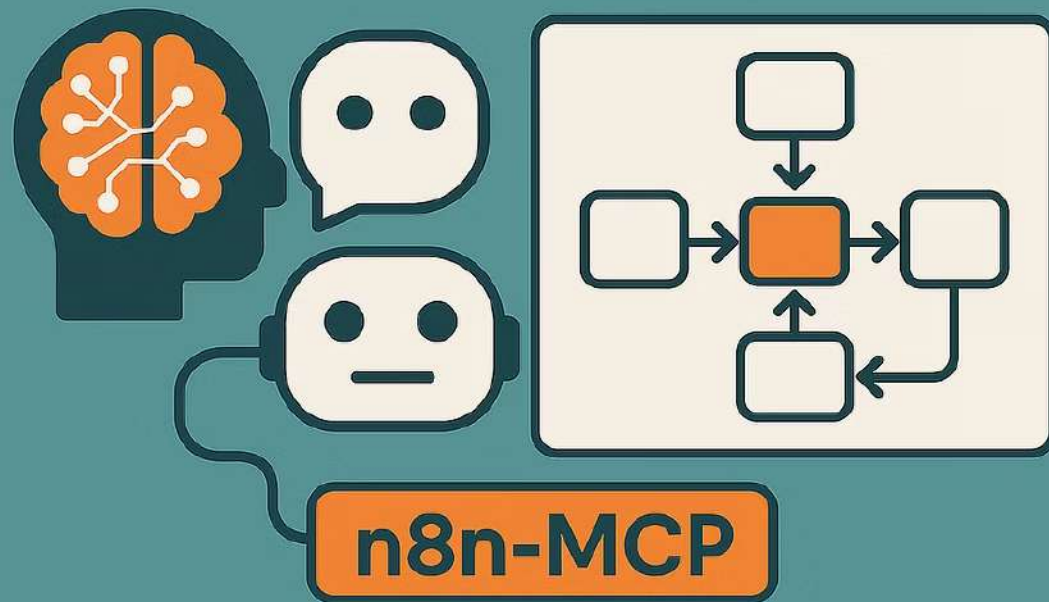


AI Automation and Agents in Practice

n8n, Integrations and Business
Processes

Armin Selimovic / Conyro LTD

BUILD SMARTER n8n WORKFLOWS WITH AI



Workshop Overview



Practical AI Automation

Hands-on exploration of AI automation in web development and business processes. We'll dive deep into real-world applications that you can implement immediately in your own projects, focusing on practical solutions that deliver measurable business value.



n8n Platform Mastery

Master the open-source workflow automation platform that's revolutionising how teams build integrations. We'll explore advanced features and best practices for creating robust, scalable automation solutions.



Building Intelligent Agents

Learn to create sophisticated AI agents that seamlessly interact with APIs, databases, and external services. These agents will handle complex decision-making processes and automate tasks that traditionally required human intervention.



Unified System Integration

Discover how to seamlessly integrate AI models, databases, chatbots, and MCP servers into unified workflows that transform disconnected tools into powerful, cohesive systems.

Why AI Automation Matters



The Business Case for Intelligent Automation

In today's fast-paced digital landscape, manual processes are the bottleneck preventing teams from achieving their full potential. AI automation isn't just about saving time—it's about fundamentally transforming how your business operates.

- **Eliminate repetitive manual tasks** that drain your team's creative energy
- **Connect disparate services** without writing complex integration code
- **Empower non-technical teams** with no/low-code workflow capabilities
- **Build intelligent systems** that scale effortlessly with your business growth

The companies winning in today's market aren't necessarily the ones with the biggest teams—they're the ones with the smartest automation strategies. Every manual process you automate frees up human creativity for higher-value work.

Meet n8n: Your Automation Powerhouse

Open-Source Freedom

Unlike proprietary platforms, n8n gives you complete control over your automation workflows. Host it anywhere, customise everything, and never worry about vendor lock-in or unexpected pricing changes.

Visual Workflow Builder

Create sophisticated automation logic through an intuitive drag-and-drop interface. Complex business processes become visual workflows that anyone on your team can understand and modify.

Extensive Integration Ecosystem

With hundreds of pre-built integrations and the ability to create custom nodes, n8n connects to virtually any service or API. From CRMs to databases, chatbots to AI models—everything can work together.

AI-First Architecture

Purpose-built for the AI era, n8n makes it effortless to combine AI services with your existing infrastructure, creating intelligent workflows that adapt and learn from your business processes.

Our Technology Stack



n8n Platform

The backbone of our automation strategy. We'll explore both the cloud and self-hosted options, diving deep into advanced features like error handling, conditional logic, and webhook integrations that power enterprise-grade workflows.



OpenAI API Integration

Harness the power of GPT models, embeddings, and other AI capabilities directly within your workflows. Learn best practices for prompt engineering, token management, and handling AI responses reliably.



Node.js & JavaScript

Essential for creating custom nodes and advanced scripting within n8n. We'll show you how to extend n8n's capabilities with custom business logic and integrate with services that don't have pre-built connectors.



MCP Servers & Databases

Connect real-time data sources and persistent storage to create intelligent systems that remember, learn, and adapt. We'll cover both traditional databases and modern MCP (Model Context Protocol) implementations.

Workshop Setup Requirements

Essential Tools for Hands-On Learning

To get the most out of this workshop, you'll need a properly configured development environment. Don't worry if you're missing something—we'll help you get set up quickly.

01

n8n Installation

Either locally installed via npm or access to n8n Cloud. We recommend the local version for full feature access and experimentation.

03

Node.js Runtime

Version 18+ required for running custom scripts and potential local n8n installation. NPM will be essential for package management.

02

Code Editor

VS Code, Cursor, or Windsurf for editing custom nodes and JavaScript functions. Extensions for n8n workflows are highly recommended.

04

OpenAI Account

Active API key with some credits for testing. We'll provide guidance on managing costs and optimising API usage.

Learning Outcomes & Skills You'll Gain

This isn't just about learning tools—it's about fundamentally changing how you approach business process automation and AI integration. By the end of this workshop, you'll have practical skills that immediately impact your work.



Master AI Workflow Creation

Build sophisticated automated workflows that combine AI models with business logic. You'll understand how to design resilient systems that handle edge cases and scale with demand.



Seamless System Integration

Learn to connect AI models seamlessly into existing business processes and web systems. You'll master both API integrations and webhook implementations for real-time data flow.



Unified Data Architecture

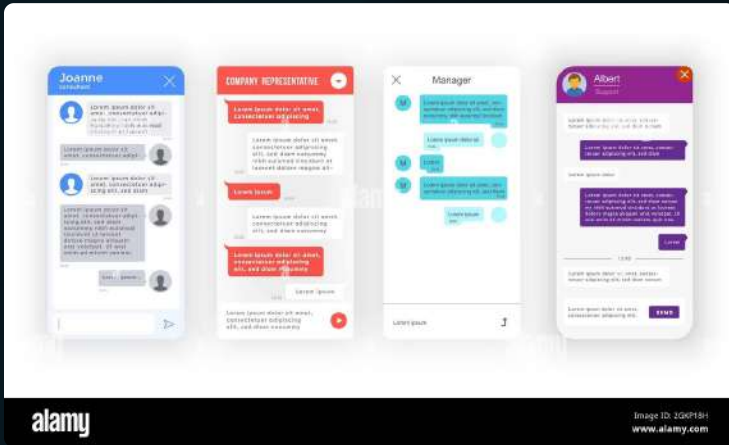
Discover how to connect databases, chatbots, and MCP servers into cohesive intelligent agents that share context and maintain state across complex interactions.



Enterprise-Grade Security

Understand the security and architectural considerations essential for deploying AI agents in production environments, including secrets management and access control.

Practical Example: AI-Powered Customer Support



Transforming Customer Interactions

Our first hands-on example demonstrates how to build an intelligent customer support system that handles common inquiries automatically whilst seamlessly escalating complex issues to human agents.

"We'll demonstrate this workflow live using n8n's HTTP Trigger combined with OpenAI nodes, showing real-time message processing and response generation."

Message Reception

n8n HTTP trigger receives incoming chat messages from your website, mobile app, or social media platforms

Context & Logging

Conversation context is maintained in database with full audit trail for compliance and improvement

1

2

3

4

AI Processing

Message is sent to OpenAI's GPT model for natural language understanding and intent classification

Intelligent Response

System automatically replies with helpful information or routes to appropriate human agent based on complexity

Advanced Examples: Content & Data Processing

Automated Content Generation Pipeline

Objective: Streamline social media and blog content creation through intelligent automation

1

Topic Discovery

Pull trending topics from internal databases, RSS feeds, or industry APIs to ensure relevant content creation

2

AI Content Generation

Generate high-quality draft posts using OpenAI with custom prompts tailored to your brand voice and audience

3

Review & Collaboration

Automatically send drafts to Google Docs or Slack channels for team review and approval workflows

4

Automated Publishing

Schedule and publish approved content across multiple platforms with optimal timing algorithms

Real-Time Data Processing with MCP

Objective: Create intelligent systems that process live data streams and generate actionable insights

Live Data Streaming

MCP server captures real-time data from IoT devices, financial markets, or user interactions

AI-Powered Analysis

n8n processes incoming data and triggers AI-based predictions, anomaly detection, or trend analysis

Intelligent Actions

Store results in databases, trigger notifications, or initiate automated responses based on AI insights

Ready to Transform Your Workflows?

Let's Build Together

The future belongs to teams who can seamlessly blend human creativity with AI automation. Today's workshop is just the beginning of your journey towards building intelligent systems that scale.

- **Live demonstration** of a complete n8n + OpenAI workflow
- **Open Q&A session** to address your specific use cases
- **Hands-on practice** with real automation scenarios
- **Best practices** for production deployment and monitoring



Questions & Discussion

Share your automation challenges and discover how AI can solve them



Live Demonstration

Watch a complete workflow come to life in real-time



Hands-On Practice

Build your first AI automation workflow together

Ready to revolutionise your development workflow? Let's dive into the practical examples and start building intelligent automation solutions that will transform how you work.