

# Flow Intelligence – Advanced Edition (AI) - Solution Overview

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## Flow Intelligence – Advanced Edition (AI)

Gain Visibility, Control, and Persistent Governance Across Your Automation Landscape

The Advanced Edition enhances governance visibility with intelligent analysis capabilities. Using AI within your tenant, the solution automatically generates contextual **flow summaries**, extracts meaningful **keywords**, and assesses **complexity levels** for each flow. These insights are stored directly in the inventory, enabling deeper governance evaluation and operational risk awareness.

### The Business Problem

As organizations scale their use of Power Automate, flows multiply rapidly across environments, departments, and teams. Over time, this creates a serious **visibility and governance gap**.

Most organizations today struggle with:

- No centralized, historical view of all Power Automate flows
- Unknown ownership of critical automations
- Business-critical flows running without oversight
- Increased security, compliance, and operational risk
- Manual audits that are time-consuming, error-prone, and inconsistent
- Lack of automated intelligence to interpret flow intent or operational complexity
- Manual effort required to assess flow relevance and governance risk
- Difficulty correlating flow purpose with business context

Leadership often asks simple but critical questions:

- How many flows do we have?
- Who owns them?
- Which flows are business-critical?
- Are there unused or risky automations running?

And the honest answer is often:

***"We don't have a clear, reliable view."***

## The Solution

**Flow Inventory Email + SharePoint Logging** bridges the visibility gap by combining automated email reporting with centralized SharePoint logging, delivering both instant insight and persistent, audit-ready data.

- No manual effort
- No spreadsheets
- No dependency on individual environments
- Fully automated, governance-ready inventory

By the time your team starts the workday, your flows are **logged in SharePoint** and summarized in an **email report**, giving both admins and leadership clear, actionable insight.

Just **clear, reliable insight — delivered automatically**.

## What This Means for the Business

### Executive Visibility

- Single, consolidated view of all Power Automate flows across environments
- Clear understanding of automation footprint over time
- Reliable data that supports strategic decisions

### Governance & Risk Reduction

- Detect flows without proper ownership
- Identify automations that may violate governance or compliance policies
- Reduce operational risk caused by undocumented or orphaned flows

## Operational Efficiency

- Eliminate manual inventory and audit efforts
- Save hours of administrative work every month
- Enable proactive governance instead of reactive firefighting

## Persistent & Scalable Automation Strategy

- Centralized SharePoint logging ensures historical data for audits and reporting
- Supports growing automation adoption without losing control
- Creates a foundation for a mature Center of Excellence (CoE) model

## Key Capabilities

- Automatically scans all Power Automate environments
- Generates a structured inventory of flows
- Sends formatted email reports to configured recipients
- Logs inventory into a **SharePoint list** with **upsert logic** to prevent duplicates
- Creates custom SharePoint views (Active, Inactive, Suspended flows) with dynamic filters
- Applies column indexing and formatting for performance and readability
- Runs on a scheduled basis (business-friendly off-hours)
- Designed for admins, CoE teams, and governance stakeholders
- Fully automated after initial deployment
- **AI-Generated Flow Summaries** – Automatically generates a concise textual description of what each flow does
- **AI-Extracted Keywords** – Captures relevant contextual keywords for operational and governance insights
- **AI-Assessed Complexity** – Classifies each flow's complexity into Low, Medium, High, or Very High for prioritization and risk evaluation

## Solution Architecture & Data Structure (High-Level)

This solution is designed using a structured, governance-first architecture that ensures scalability, performance, and long-term maintainability.

### Architecture Overview

The solution consists of two core components:

## 1. SharePoint Inventory List Provisioning (One-Time Setup)

A provisioning flow that automatically creates and configures a governance-ready SharePoint inventory list.

## 2. Scheduled Flow Inventory Engine

A scheduled Power Automate flow that:

- Scans flows across environments
- Generates a formatted email report
- Logs and maintains inventory data in SharePoint
- Applies upsert logic to prevent duplicate records

Once deployed, the process runs automatically without manual intervention.

After inventory collection, an AI enrichment step processes flow definitions and writes intelligence outputs back to the SharePoint governance repository.

## Structured Inventory Data Model

The SharePoint inventory list is automatically provisioned with a structured metadata framework designed for governance visibility.

## Governance Inventory Structure

The centralized inventory repository includes structured metadata covering:

- Flow identification and unique referencing
- Operational status and lifecycle tracking
- Environment mapping
- Creation and modification history
- AI-generated flow summaries
- Contextual keyword enrichment
- Complexity classification for governance prioritization

The full schema documentation is included in the deployment package.

This structured approach ensures clean, reliable, and actionable inventory data.

The AI Intelligence columns are automatically populated during scheduled execution and updated alongside standard inventory metadata.

## Connectors & Licensing Requirements

The Flow Intelligence – Advanced Edition is designed to operate using standard Power Platform capabilities without requiring premium connectors.

## Connector Requirements:

- Standard Power Automate administrative connectors
- SharePoint connector (standard)
- AI Builder (for intelligence enrichment)

## Licensing & Credits:

- No premium connectors are required
- AI Builder credits are required to enable AI-generated Flow Summary, Keywords, and Complexity classification

All components execute entirely within your Microsoft 365 tenant boundary, ensuring governance alignment and enterprise compliance standards.

## Upsert Logic & Data Integrity

To maintain data accuracy, the solution implements a unique identifier-based **upsert** mechanism.

This ensures:

- No duplicate records
- Existing flow entries are updated automatically
- Inventory remains clean and consistent over time

## Pre-Configured Views for Governance

The inventory list includes ready-to-use governance views designed for operational analysis.

Administrators can quickly filter and assess:

- All flows across the tenant
- Active flows
- Inactive flows
- Suspended flows

These pre-configured views provide immediate visibility into automation health without additional configuration.

## Performance Optimization

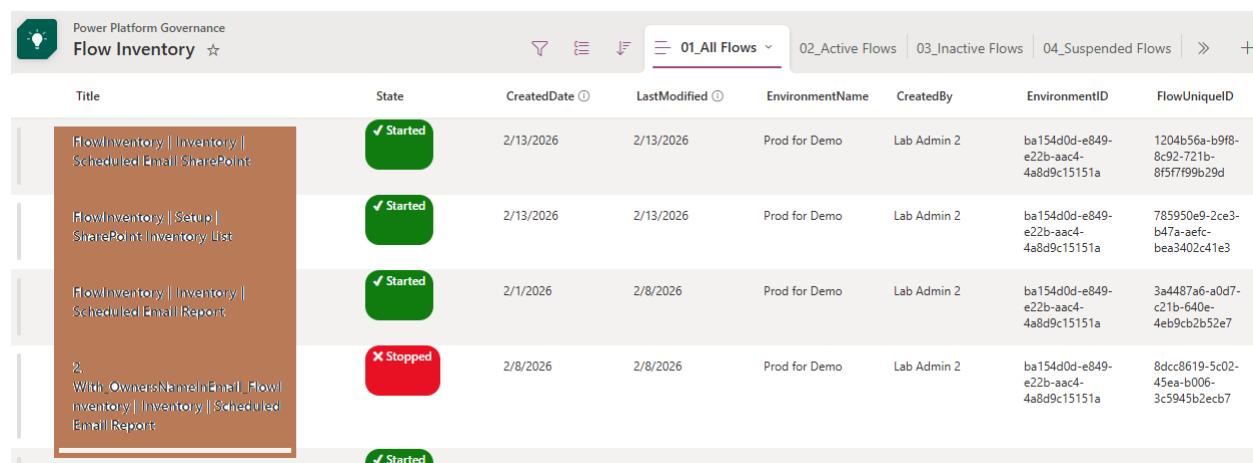
The solution automatically applies indexed columns to ensure optimal performance, even in large-scale environments with hundreds or thousands of flows.

List formatting and dynamic state color coding are also applied during provisioning to improve usability and clarity.

No manual SharePoint configuration is required.

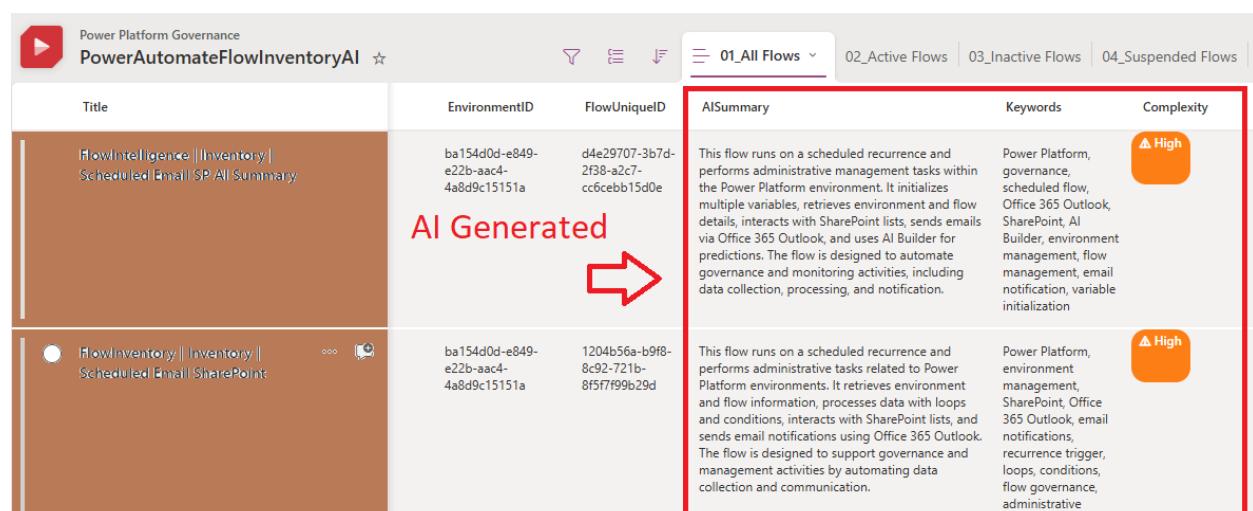
## Demo Flow Inventory with Data

### Standard Flow Inventory Report



Title	State	CreatedDate	LastModified	EnvironmentName	CreatedBy	EnvironmentID	FlowUniqueID
FlowInventory   Inventory   Scheduled Email SharePoint	✓ Started	2/13/2026	2/13/2026	Prod for Demo	Lab Admin 2	ba154d0d-e849-e22b-aac4-4a8d9c15151a	1204b56a-b9f8-8c92-721b-8f5f7f99b29d
FlowInventory   Setup   SharePoint   Inventory List	✓ Started	2/13/2026	2/13/2026	Prod for Demo	Lab Admin 2	ba154d0d-e849-e22b-aac4-4a8d9c15151a	785950e9-2ce3-b47a-aefc-bea3402c41e3
FlowInventory   Inventory   Scheduled Email Report	✓ Started	2/1/2026	2/8/2026	Prod for Demo	Lab Admin 2	ba154d0d-e849-e22b-aac4-4a8d9c15151a	3a4487a6-a0d7-c21b-640e-4eb9cb2b52e7
2. With_OwnersNameInEmail_FlowInventory   Inventory   Scheduled Email Report	✗ Stopped	2/8/2026	2/8/2026	Prod for Demo	Lab Admin 2	ba154d0d-e849-e22b-aac4-4a8d9c15151a	8dcc8619-5c02-45ea-b006-3c5945b2ecb7

## AI Generated Power Automate Flow Inventory Report



Title	EnvironmentID	FlowUniqueID	AI Summary	Keywords	Complexity
FlowIntelligence   Inventory   Scheduled Email SP All Summary	ba154d0d-e849-e22b-aac4-4a8d9c15151a	d4e29707-3b7d-2f38-a2c7-cc6ceb15d0e	This flow runs on a scheduled recurrence and performs administrative management tasks within the Power Platform environment. It initializes multiple variables, retrieves environment and flow details, interacts with SharePoint lists, sends emails via Office 365 Outlook, and uses AI Builder for predictions. The flow is designed to automate governance and monitoring activities, including data collection, processing, and notification.	Power Platform, governance, scheduled flow, Office 365 Outlook, SharePoint, AI Builder, environment management, flow management, email notification, variable initialization	▲ High
FlowInventory   Inventory   Scheduled Email SharePoint	ba154d0d-e849-e22b-aac4-4a8d9c15151a	1204b56a-b9f8-8c92-721b-8f5f7f99b29d	This flow runs on a scheduled recurrence and performs administrative tasks related to Power Platform environments. It retrieves environment and flow information, processes data with loops and conditions, interacts with SharePoint lists, and sends email notifications using Office 365 Outlook. The flow is designed to support governance and management activities by automating data collection and communication.	Power Platform, environment management, SharePoint, Office 365 Outlook, email notifications, recurrence trigger, loops, conditions, flow governance, administrative	▲ High

**Note:** In the above inventory list, the entire inventory setup is fully automated — including list creation, column provisioning, dynamic view configuration, and list and column formatting. No manual SharePoint configuration is required.

## Demo Inventory Email Report with Data

Below is the automated Power Automate flow inventory email:

 Power Automate Flow Inventory Report

Lab Admin 2 To: @ Lab Admin 2 Sat 2/14/2026 5:06 AM

Hello Admin,

Please find below the Power Automate Flow Inventory Report, providing a consolidated view of all Power Automate flows across the environments you currently have access to.

**Report Details:**

- Report Generated On (UTC): 2026-02-13 23:36:23
- Source: Power Platform Admin Insights
- Scope: Accessible environments only

**Inventory Overview:**

Total Flows Analyzed (based on current access) **113**  Total Number of Flows Analyzed

Environments Scanned **2**  Total Number of Environments Scanned

**Here are the details of the flows:**

Flow Name	State	Created Date	Last Modified Date	Environment Name	Created By
FlowInventory   Inventory   Scheduled Email Report	Started	2026-02-01T15:48:20Z	2026-02-08T10:58:05Z	Prod for Demo	Lab Admin 2
2_With_OwnersNameInEmail_FlowInventory    Inventory   Scheduled Email Report	Stopped	2026-02-08T08:01:20Z	2026-02-08T08:01:20Z	Prod for Demo	Lab Admin 2
PowerAutomate_GetAllFlows_AllEnvironments_v2.0	Started	2026-02-01T01:56:44Z	2026-02-01T01:56:59Z	Prod for Demo	Lab Admin 2
Get All Flows from All Environments_Jan26Testing	Started	2026-01-26T04:39:11Z	2026-01-26T04:39:29Z	Prod for Demo	Lab Admin 2
Integrated Search API trigger flow	Stopped	2025-12-20T09:37:36Z	2025-12-20T09:37:36Z	Prod for Demo	System
Search Dynamics 365 knowledge article flow	Stopped	2025-12-20T09:37:36Z	2025-12-20T09:37:36Z	Prod for Demo	System
SLAInstanceMonitoringWarningAndExpiryFlow	Stopped	2025-12-20T09:24:26Z	2025-12-20T09:24:26Z	Prod for Demo	System
FlowInventory   Inventory   Scheduled Email Report	Started	2026-02-01T05:34:53Z	2026-02-08T10:45:59Z	Personal Productivity Environment	Lab Admin 2
FlowInventory   Inventory   Scheduled Email SharePoint	Started	2026-02-03T16:16:56Z	2026-02-08T08:10:13Z	Personal Productivity Environment	Lab Admin 2

**Important Notes:**

- This report includes only flows from environments where the inventory flow has sufficient access.
- Some flows may have limited owner or metadata details due to permission restrictions.
- If expected flows are missing, please re-run the inventory flow or validate environment access.
- This is an automated notification. No action is required unless discrepancies are observed.

Regards,  
Power Automate Monitoring System

### Note:

- The screenshot above displays only a sample set of flows. In your environment, the email report will include **all flows across all environments within your tenant**.

## Reusable Provisioning Framework - Extended Usage Scenario

The one-time Inventory List Provisioning flow is not limited to this solution. It is built as a parameter-driven provisioning engine that can be reused to automate SharePoint list creation in other business scenarios.

By adjusting input parameters, you can:

- Create new SharePoint lists
- Provision columns dynamically
- Configure custom views
- Apply column indexing for performance
- Apply consistent list formatting and styling

This allows you to replace manual SharePoint list setup with automation, improving:

- Standardization
- Speed
- Governance consistency
- Administrative efficiency

What normally takes 20–40 minutes of manual configuration can now be completed automatically in seconds.

## Why This Matters to Leadership?

Automation is no longer optional — it's a **critical business dependency**.

### Without visibility:

- Risks escalate
- Costs rise silently
- Compliance becomes reactive
- Automation trust erodes

### With this solution:

- Leadership gains confidence in automation governance
- Governance becomes proactive and data-driven
- Automation strategy becomes scalable, controlled, and strategic

This is not just a technical report — it's **management insight delivered automatically**, backed by persistent SharePoint data.

## Who Should Use This?

- Business owners responsible for automation outcomes
- IT Leadership & Managers
- Power Platform Administrators
- Center of Excellence (CoE) Teams
- Governance & Compliance Teams

If your organization uses Power Automate at scale, **this solution is essential**.

## Why Organizations Choose This Solution

- Built specifically for enterprise-scale governance
- No manual setup required beyond initial provisioning
- Production-ready, reusable, and scalable
- Designed with both business and IT stakeholders in mind
- Combines instant insight (email) with persistent logging (SharePoint)
- Reduces manual review effort of large flow inventories
- Enables governance prioritization using complexity indicators
- Improves audit readiness with contextual flow descriptions

## Summary

This Advanced Edition elevates traditional inventory tracking into intelligent governance oversight.

This AI-enabled solution enables your organization to:

- Gain complete visibility into existing automations across environments
- Identify ownership and operational accountability
- Reduce governance risk and strengthen compliance posture
- Maintain a centralized, structured source of truth in SharePoint
- Scale automation initiatives with confidence and control

Delivered with minimal administrative overhead and designed for long-term governance maturity.

## Change Log

Version	Date	Author	Changes
1.0	2026-02-15	Global SharePoint Blog & Microsoft Techy YouTube Channel	Initial Document