

Power Automate vs Logic Apps



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- More than 30 years in the IT space in the areas of software development | collaboration | migrations | intranet solutions | cloud services
- As a Cloud Productivity Consultant I use the potential of Microsoft Cloud technologies, applications and services to build new solutions that would not have been possible a few years ago.

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Overview

Power Automate

- Integration SaaS
- Azure Subscription **not** required
- Product group resides in Dynamics Organization at MS
- License entitlement through Dynamics 365 and M365
 - Additional standalone licenses available
- Part of the Power Platform

Logic Apps

- Integration PaaS
- Azure Subscription required
- Products group resides in the Azure Group at MS
- Consumption based billing
- Dedicated capacity also available (ISE)
- Part of the Azure Integration Services platform (API Management, Service Bus, Event Grid...)



Power Automate

- Included in MS 365
- Per User
- Per flow
- Per user plan with attended RPA

Logic Apps



- Standard or Consumption plans
- Integration Service Environment
- Integration Account

Templates

- Common 'blue prints' to get people started

Power Automate



- Provided by:
 - Community
 - Microsoft Product Group
 - Microsoft 1st party
 - 3rd Party Partners

Logic Apps

- Provided by Microsoft

Connectors

<https://docs.microsoft.com/en-us/connectors/connector-reference/>

- Over 350+ available
- ~95% symmetry between Power Automate and Logic Apps
- Microsoft 1st party
- 3rd party
- Custom connectors

Power Automate

- Classification in Standard and Premium
- Cloud and On-premises

Logic Apps

- Enterprise Connectors
 - SAP
 - IBM MQ
 - AS2
 - EDI FACT
- No Standard vs Premium tiers
- ISE (Integrated Service Environment) – Vnet Support
- Cloud and On-premises
- Built-In or Managed
- Extensible

Power Automate

- Web Browser
 - Maker Portal
 - My flows and team flows
 - Business Process Flows

Logic Apps

- Web Browser
 - Visual Designer
 - Code View
- Visual Studio
- Visual Code
- Continuous Integration/Continuous Deployment with Azure DevOps

Different experience when using standard plan

The screenshot displays the Logic Apps Designer interface. The main workspace shows a workflow with three steps: 'Update highest ID', 'Send an email (V2)', and 'Complete the message in a topic subscription'. The workflow is connected to a 'NewBambooHRUser' connection. The right-hand pane shows the configuration for the 'Complete the message in a topic subscription' step, including parameters like Topic name, Topic subscription name, Lock token of the message, Subscription type, and Session id.

Logic Apps Designer

Save Discard Run Trigger Designer Code view Parameters Templates Connectors Help Info

Workflow Steps:

- Update highest ID
- Send an email (V2)
- Complete the message in a topic subscription

Configuration for 'Complete the message in a topic subscription':

- Parameters: Complete the message in a topic subscription
- Settings: Complete the message in a topic subscription
- Code View: Complete the message in a topic subscription
- Run After: Complete the message in a topic subscription

Parameters:

- *Topic name: sbtp-chno-de-auto-001
- *Topic subscription name: NewUser
- *Lock token of the message: Lock Token x
- Subscription type: Main
- Session id: Session id

Connected to NewBambooHRUser. [Change connection.](#)

Provide Feedback

Visual Studio Integration

MyLogicApp - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test R Tools Analyze Window Help

LogicApp.json* 100%

Recurrence

HTTP

Transform XML

+ New step

Design Code View

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'MyLogicApp' (1 project)

MyLogicApp

- References
- Deploy-AzureResourceGroup.ps1
- LogicApp.json
- LogicApp.parameters.json

Properties

LogicApp Logic App Properties

Location Details

Choose Location Type	Region
Location	Same as Resource Group

Misc

Integration Account (none)

(none)

Fabrikam-Integration-Account (FabrikamResourceGroup)

Subscription name Pay-As-You-Go

Integration Account

Integration Account must be in the same region as logic app

Application Lifecycle Management (ALM)

Power Automate

- Package related Flows and Power Apps in single solution
- Export from «Test»
- Import into «Production» environment as single deployment unit
- Not covered:
 - Custom connectors
 - Parameters
 - Connections
- Microsoft Power Platform Build Tools for Azure DevOps
 - Microsoft Dataverse environment with a database only

Logic Apps

- Logic Apps templates can be stored in source code repo
 - => Versions
- Deploy Logic Apps template:
 - Azure Portal
 - Visual Studio
 - Azure PowerShell / CLI
 - Azure Resource Manager REST API
 - Azure DevOps
- IAC (Infrastructure As Code) with Terraform or Azure Bicep possible
 - E.g. Azure DevOps pipelines

Power Automate

- Management Connectors
- Data Loss Prevention (DLP) Policies
- Environments
- Admin Analytics
- PowerShell
- M365 Security and Compliance
- 30 day limit on flow execution

Logic Apps

- Azure Identity Access Management rules
- No DLP
 - Access restricted through Azure access
- Log Analytics
 - Custom tracked properties
- 90 day limit on logic apps execution history
- Resource groups

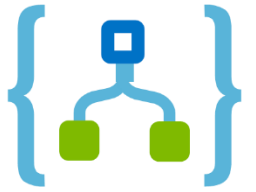
Unique to each toolset

Power Automate

- Approvals
- Maker Analytics
- Instant cloud flows
- Desktop flows
- Business process flows
- Mobile App
- Geo Location Trigger
- Copy to my clipboard

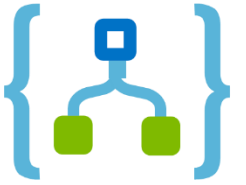
Logic Apps

- Enterprise Integration Pack
- Inline Code (JavaScript)
- Hosting Options
 - Integrated Service Environment (ISE)
 - Standard plan



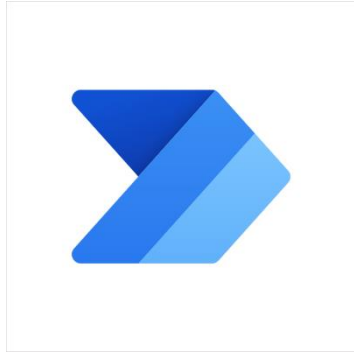
Integrated Service Environment (ISE)

- Deployment into its own virtual network
- Enables direct access to on-premises resources over VPN technologies
- Private static outbound IPs
- Custom inbound domain names
- Operate on dedicated resources
- Scale Out/In capabilities
- Fixed pricing plans -> not consumption-based
- Extended limits
 - Logic Apps lifetime and run history retention to 365 days
 - Increased request/response timeouts up to 4 minutes
 - Higher throughput limits for Logic Apps and connection hosted in the ISE



Azure Integration Services

- Easier integration with other Azure services such as
 - Azure API Management
 - Azure Service Bus
 - Azure Functions
 - Azure Event Grid
 - BizTalk Server



Export Flow to Logic App

Export a flow from Power Automate Maker Portal

Import to Logic App in the Azure portal

Not supported:

- Approvals
- Instand Cloud Flows
- Flows initiated from Power Apps
- Mobile notifications
- Dataverse

Power Automate

- Co-Ownership
 - Can edit flows
 - E-Mail notification in case of changes
 - Can access Run History and Analytics
- Run-As
 - No edit capabilities
 - Can run manually triggered flows
 - Option to «bring your own connection»

Logic Apps

- Logic Apps specific roles in Azure
 - [Logic App Contributor](#)
 - [Logic App Operator](#)
- Access Control (IAC)

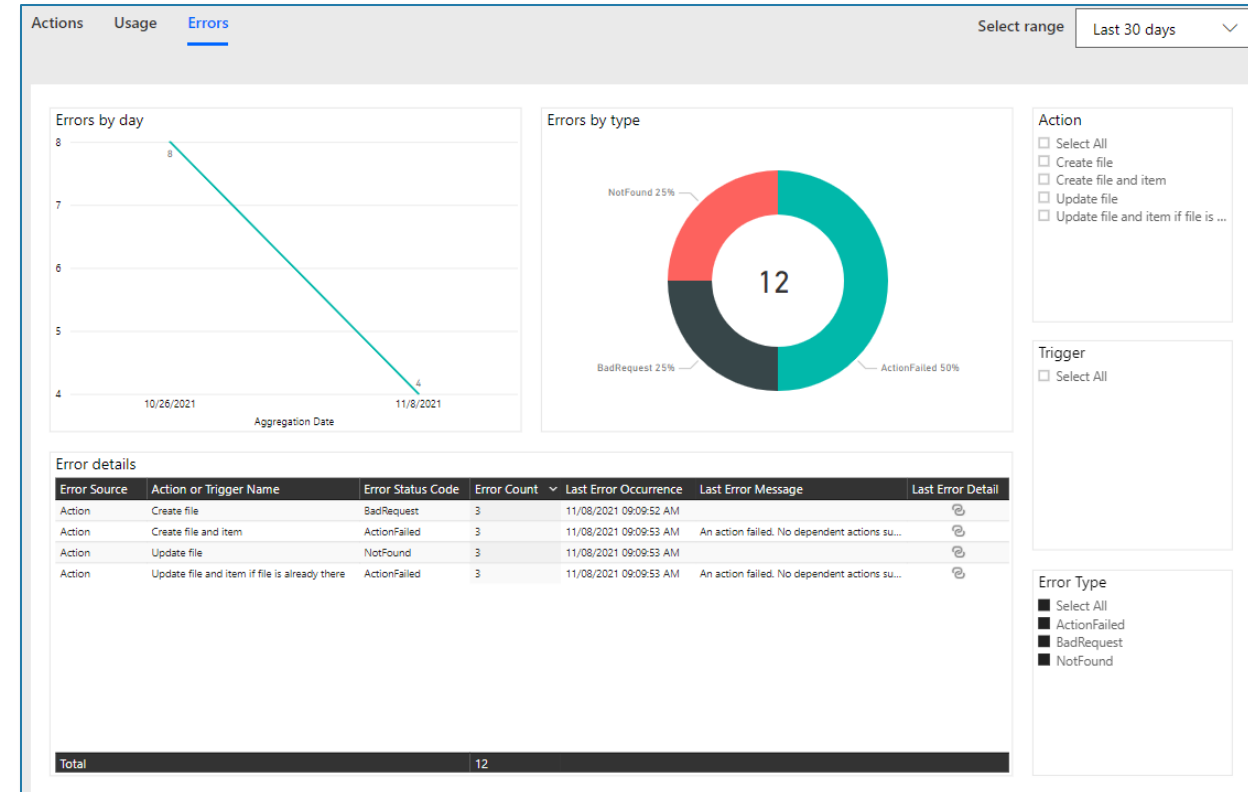
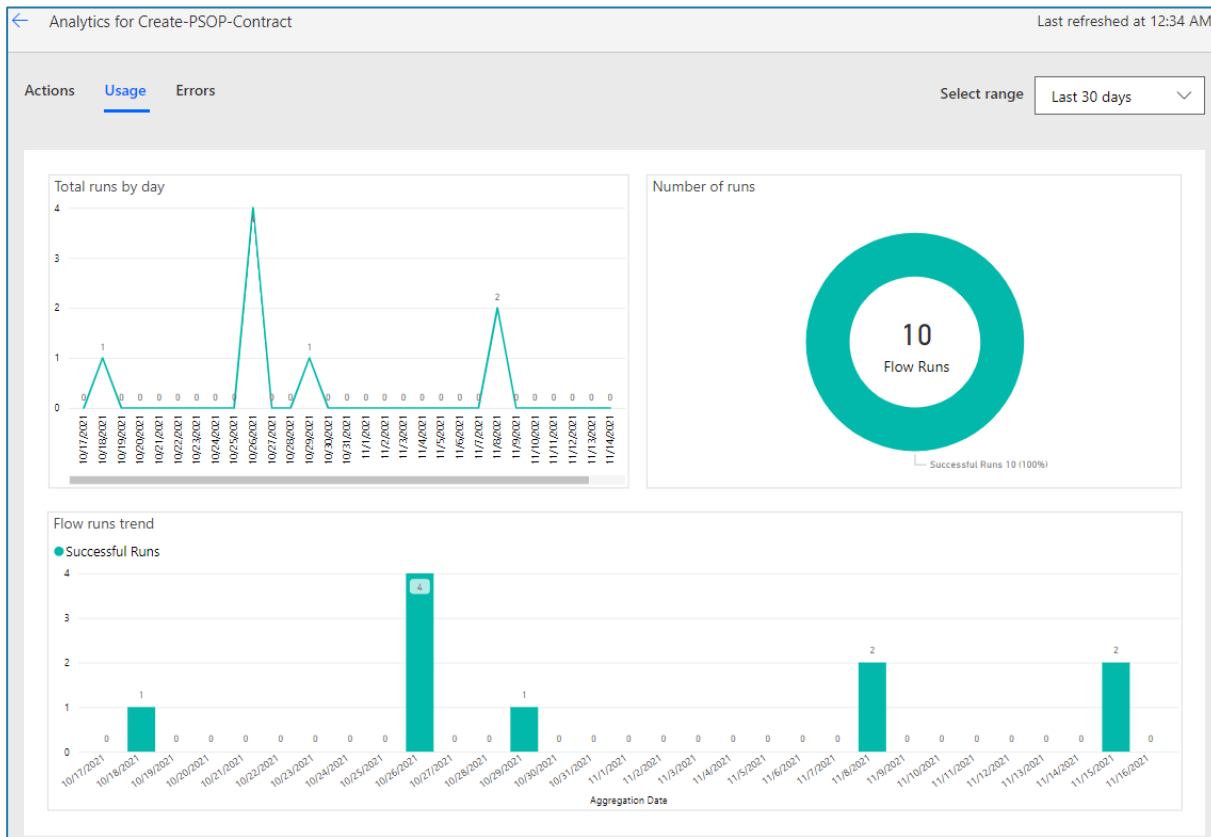
Power Automate

- Power Automate Analytics
 - Per flow
 - Per environment

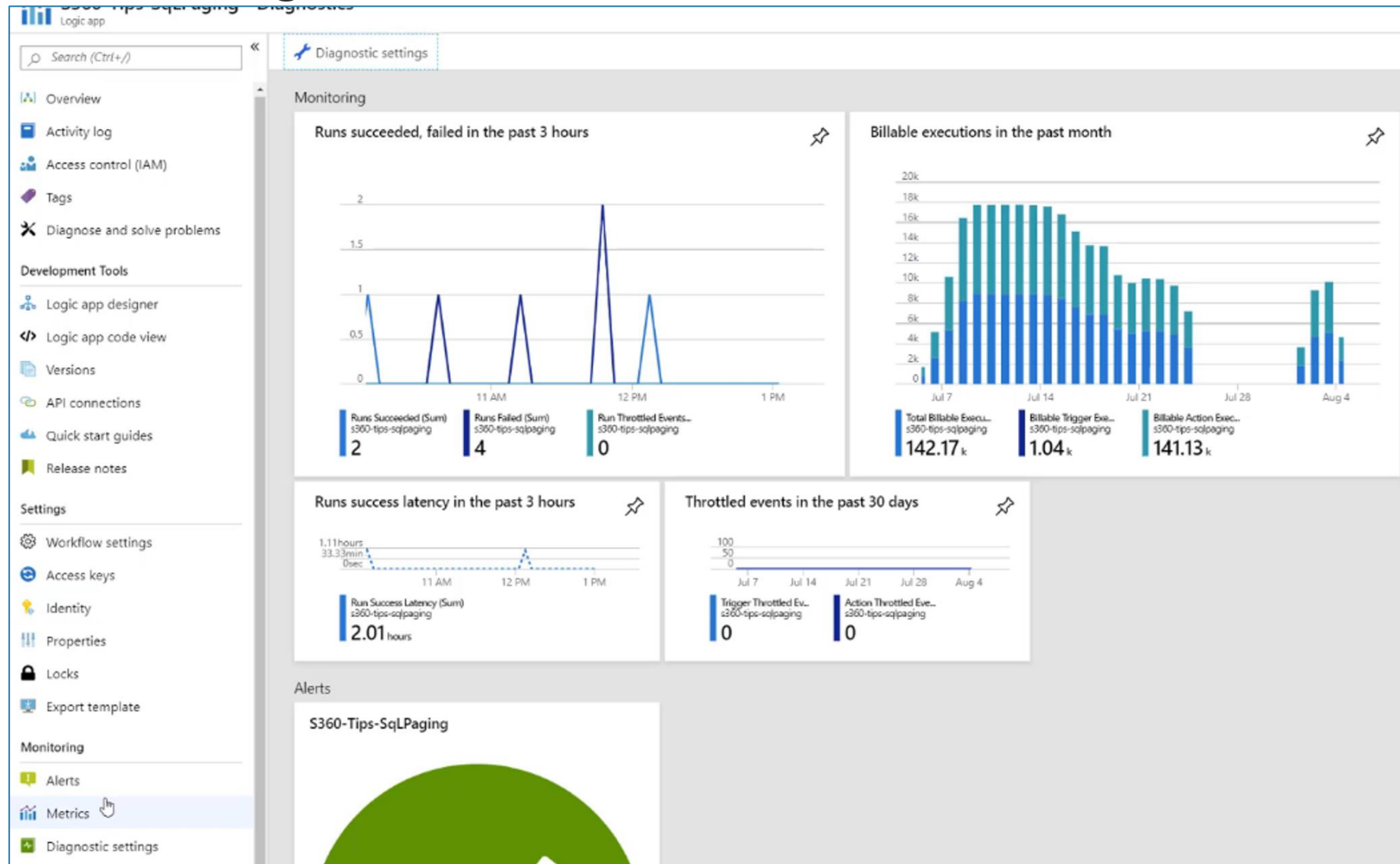
Logic Apps

- Azure Monitoring
 - Alerts
- Webhook Integration for event orchestration

Power Automate Analytics



Azure Monitoring



Log Analytics

Dashboard > Log Analytics workspaces > MF-LA-OMS-Workspace - Solutions > LogicAppsManagement(MF-LA-OMS-Workspace) > Logic Apps > Runs > Actions and Triggers > Logs

Logs
MF-LA-OMS-Workspace

New Query 1* +

MF-LA-OMS-Workspace

Run Time range: Last 24 hours

Save Copy Export + New alert rule Pin to d

Schema Filter

Filter by name or type...

Collapse all

Active

- MF-LA-OMS-Workspace
 - LogManagement
 - Functions

Favorite workspaces

- MF-LA-OMS-Workspace

```
let triggers_summary = AzureDiagnostics
| where Category == "WorkflowRuntime"
| where OperationName == "Microsoft.Logic/workflows/workflowTriggerCompleted"
| extend Status=status_s
| extend TriggerName=Resource
| extend RunId=resource_runId_s
| extend Code=code_s
| extend StartTime=startTime_t
| extend EndTime=endTime_t
| extend Duration=iff(isnotempty(EndTime), todouble(EndTime - StartTime) / 10000000, double(null))
| extend LogicAppName=resource_workflowName_s
| extend RetryCount=arraylength(parsejson(retryHistory_s))
| project Name = TriggerName, Status, Duration, RetryCount, ResourceType="Trigger", Code, RunId, LogicAppName, StartTime, EndTime;
let actions_summary = AzureDiagnostics
| where Category == "WorkflowRuntime"
| where OperationName == "Microsoft.Logic/workflows/workflowActionCompleted"
| extend Status=status_s
```

Completed. Showing results from the last 24 hours. 00:00:01.711 26 records

TABLE CHART Columns v

Drag a column header and drop it here to group by that column

	Status	Duration	RetryCount	Code	RunId	LogicAppName	StartTime [UTC]	EndTime [UTC]	Name	ResourceType
>	Succeeded	80.691		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:32:56.363	2019-08-04T18:34:17.054	Execute_stored_procedure	Action
>	Failed	613.625	4	GatewayTimeout	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:34:17.460	2019-08-04T18:44:31.085	Execute_stored_procedure	Action
>	Succeeded	80.224		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:19:29.868	2019-08-04T18:20:50.092	Execute_stored_procedure	Action
>	Succeeded	80.457		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:30:14.558	2019-08-04T18:31:35.015	Execute_stored_procedure	Action
>	Succeeded	80.66		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:31:35.312	2019-08-04T18:32:55.972	Execute_stored_procedure	Action
>	Succeeded	79.285		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:15:30.511	2019-08-04T18:16:49.796	Execute_stored_procedure	Action
>	Succeeded	79.066		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:12:51.547	2019-08-04T18:14:10.613	Execute_stored_procedure	Action
>	Succeeded	78.754		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:14:11.117	2019-08-04T18:15:29.871	Execute_stored_procedure	Action
>	Succeeded	79.41		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:04:59.371	2019-08-04T18:06:18.781	Execute_stored_procedure	Action
>	Succeeded	78.066		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:06:19.250	2019-08-04T18:07:37.316	Execute_stored_procedure	Action
>	Succeeded	78.035		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:07:37.956	2019-08-04T18:08:55.991	Execute_stored_procedure	Action
>	Succeeded	77.971		OK	08586366649867365620901840333CU69	S360-Tips-SqLPaging	2019-08-04T18:11:32.936	2019-08-04T18:12:50.907	Execute_stored_procedure	Action

Summary

- Personal productivity
- Forms over data
- Process automation (approvals)
- Pro Dev Extensibility
- Enterprise Application Integration
- Trading Partner Integration
- Regulation and Compliance



Questions?

Additional Links

- Power Automate vs Logic Apps (Microsoft Docs):

<https://docs.microsoft.com/en-us/microsoft-365/community/power-automate-vs-logic-apps>

- Azure Logic Apps in Microsoft Learn:

<https://docs.microsoft.com/en-us/learn/browse/?products=azure&terms=Logic%20Apps>