

Power Platform Governance

Purpose

This document includes the guidance details for the State of Maine Executive Branch with respect to the two low-code products within the Microsoft Power Platform, viz., [Power Automate](https://flow.microsoft.com/)¹ and [Power Apps](https://powerapps.microsoft.com/)². This is a guidance document, created by a collaboration of State of Maine agencies and MaineIT. The intent is to help agencies develop and maintain applications in a sustainable way by providing an outline of best practices. This document is expected to evolve as the State of Maine learns more about the Microsoft Power Platform tools.

Governance Framework

Governance Committee





The Maine State Executive Branch has created a *Microsoft Low-code Platform Governance Committee* to oversee the utilization of the Microsoft Low-Code Platform within the Maine State Executive Branch. The following persons/roles/designates are members of this committee:

- OIT Enterprise Architect (Committee Chair)
- OIT Director, Computing & Infrastructure Services
- OIT Executive Director, Enterprise Shared Services
- Any OIT Application Director with investment in the Microsoft Low-code Platform
- Representation from each of the stakeholder Departments that are either already invested, or seriously considering investing, in the Microsoft Low-code Platform. It may be important to have these Department representatives be familiar with these tools.

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The State of Maine instance of both these products are hosted in the Microsoft Government Community Cloud. This provides various built-in integrations with the Office 365 ecosystem, such as interface with the enterprise active directory.

The Adaptive Governance Framework for Power Automate and Power Applications assets which was adapted from a Gartner paper defines four color-coded tiers of such applications:

- | | |
|---|--|
|  | Black - Created and Maintained by MaineIT |
|  | Red - Oversight by MaineIT |
|  | Yellow - Co-Supported with other Agency Makers & Super Users |
|  | Green - Self-Sustaining for Individual Agency Makers |

¹ https://flow.microsoft.com

² <https://powerapps.microsoft.com/>

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Business Criticality	Enterprise				
	Department				
	Workgroup				
	Individual				
		Create, Read, Update and Delete (CRUD)	Linear (Simple) Workflow	Automated Business Process	Complex Application or Automation
Low <- Application Complexity -> High					

The matrix above is subjective and is provided to help agencies make decisions about how complex and critical their applications really are. Basically, if the app is a simple create/read/update/delete files or records without much logic, it is likely low complexity. But as logic, branches, approvals, formulas and filters are added to the app (for example), it becomes more complex. If the app breaks and the agency has an easy work around that can be implemented without a big inconvenience, it is likely lower criticality. But if the app breaks and business cannot move forward at all or can move forward with great difficulty, it is likely high criticality. MainIT oversees red apps and maintains black apps because they are deemed so important that they cannot break without immediate support so that business can continue to function as necessary.

Application Classification into the Adaptive Governance Framework

Suggested high-level uses for the two products:

- If it is about gluing together existing O365 products for internal users, then use Power Automate. Examples:
 - Email someone when an Excel file (located in OneDrive and/or SharePoint) is updated.
 - Incorporate a Microsoft Form to collect data from the public without extra expense.
 - Document-based Approval workflows, as long as all the documents are located in OneDrive and/or SharePoint.
- If it is about collecting data from authenticated/verified users, and/or about creating logical workflows, then use Power Applications. Examples:

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- Power Applications forms can be used for data entry, data viewing, or data editing.
- Power Applications can be used on Android and iOS using the native Power Applications mobile app.
- In order to utilize Power Applications for external users, a Portal add-on is needed at additional cost.

The following questions must be answered when an application enters the Red and Black categories:

- Name of the Requesting Agency?
- Name of the desired Product (Power Automate v. Power Applications)?
- How will the App be identified (Naming Convention defined below)?
- Briefly, what does the App do?
- Who is the Maker of this App?
- Does the Agency already have an existing Instance and/or Environment of the Microsoft Low-code Platform?
- Will the App transact in any data classified at TLP: Amber, or TLP: Red, as defined in the [Data Exchange Policy](#)³?
- How many internal (State of Maine) users are projected to consume this app? Do they already have a dedicated Active Directory Group? If not, suggest a name for creating such a Group.
- Does this App require the external web portal for consumption by external (non-State of Maine) users?
- Does this App require Connectors? Does this App require [Premium Connectors](#)?
- Does the App require a App Maker Account (i.e., an account different from a personal Office 365 account)?
- What is the business criticality level of this App? (Low if the cessation of the functioning of this App still enables to Agency to conduct its essential business; High if the cessation of the functioning of this App prevents the Agency from conducting its essential business.)
- Who supports this App? Makers? Other Power Users? MainelIT?
- Is there any history of prior requests (approved/denied) by the Microsoft Low-Code Platform Governance Committee?
- Has this App already been approved by the Microsoft Low-Code Platform Governance Committee?

Infrastructure

Basic functionality of Power Automate and Power Applications are both available in the G3 license (which is the license most State of Maine employees have) at no extra expense. By default, G3 license holders have access to the default environment and default connectors. Premium licenses are Microsoft “Per User” licenses that grant users access to premium

³ <https://www.maine.gov/oit/sites/maine.gov.oit/files/inline-files/data-exchange-policy.pdf>

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connectors and the Dataverse. A Per User license allows that user unrestricted access to any app in any environment. However, if a business unit chooses to just license a user one app at a time, a Per App license might make more economical sense. For Portal applications, both anonymous and authenticated external users require additional licensing. For further details, please refer to the OIT Service Catalog, and/or consult with the OIT Microsoft Low-code Platform Licensing Lead. In order for an external user to have access to a Portal Power App, it is an extra expense. Contact MainIT Computing Infrastructure and Services (CIS) for this portal.

Data collected through Power Automate and Power Applications can be stored in many destinations. However, the most obvious candidates are OneDrive and SharePoint.

A connector is a wrapper around an API that allows the underlying service to talk to Microsoft Power Automate or Power Applications. It provides a way for users to leverage a set of pre-built actions and triggers to build their applications and workflows. Some connectors are an interface to an external service, i.e., a service that is external to the State of Maine Office 365. Microsoft maintains a rich [catalog](#)⁴ of connectors. Premium connectors are those that require an extra fee beyond the baseline G3 license. The premium connectors are identified with the diamond icon in the catalogue. One of the most important premium connector is the interface to on-prem data sources.

[Dataverse](#)⁵ (previously called Common Data Service) consumption is only available with an elevated Per User license, for maker and user (at extra cost). Dataverse is a default standard data structure for storing relational information. The reason to use the Dataverse is that it provides the data structures for commonly used objects, such as address, phone number, account, calendar, etc. Utilizing such pre-built objects can save development time. Another reason to use Dataverse is for storing complex relational data and any data of backend of a model app.

App Development and Management Practices

If the app is intended for anything other than personal use, especially, for Green and Orange applications, it is recommended that a Department create a dedicated Departmental App Makers Active Directory Group. No matter which individual creates the app, they will share ownership with this entire group. We are still obtaining clarification from Microsoft re: shared connector accounts. Also, please note that just sharing app ownership does not actually share ownership of any ancillary resource that the app may need to function.

In the interest of business continuity, it is recommended that each version of an active Power Automate and Power Applications should be exported as a package (as a backup), and its ownership should be shared.

⁴ <https://docs.microsoft.com/en-us/connectors/connector-reference/>

⁵ <https://docs.microsoft.com/en-us/powerapps/maker/data-platform/data-platform-intro>

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Canvas v. Model-Driven Applications. In general, Microsoft Low-Code applications fall under [two categories](#)⁶: Canvas and Model-driven. A Canvas app is built around user experience, whereas, a Model-driven app is built around a preset data model. In general terms, Canvas applications may be easier to build from scratch, but may run into challenge scaling up later. Whereas, Model-driven applications face a higher challenge in building from scratch, while face an easier path scaling up.

Life Cycle Management

A default environment is automatically created when a tenant is initially set up which is available for all makers in that tenant. This default environment is meant to store only Power Applications or Power Automate flows that are used only by individuals for personal productivity applications – not for business critical applications.

None of the Microsoft Low-Code platform products comes with built-in, life-cycle manager for promoting applications from lower environments into production. Therefore, lower environments must be simulated through standalone instances, with explicit naming conventions. By default, the standalone name for the app signifies the production instance, whereas the lower environments are identified by suffixes. Thus, “HRMS Dev”, “HRMS Test”, and “HRMS Staging” are lower environments, whereas, the unqualified “HRMS” is the production app. The same naming convention applies to Portal applications as well.

Even for applications in the green and orange category, those deemed business-critical by the agency should have at least two Instances: production and non-production. For any app in the red and black categories, two environments constitute the minimum requirement.

Each environment can be pegged to one or more active directory groups, subjected to its own data loss prevention policies, as well as permission to premium connectors. The *Microsoft Low-code Platform Governance Committee* will meet monthly to review the new connectors added to the tenant and determine if they should be allowed by tenant users or not. The data loss prevention policies will be adjusted to reflect that determination.

Besides the default active directory group(s) associated with the environment, and the app, the app administrator may also handcraft authorizations (i.e., rights and privileges) amongst the entire State of Maine active directory population.

Applications in the red and black category must have an independent entry in the Applications Inventory (https://portal.lb.state.me.us/appinv/appinvgui.app_inventory.menu). Please contact the relevant OIT Application Director for guidance and further instructions.

Applications in the red and black category are required to complete the OIT [Application Deployment Certification Policy](#)⁷ prior to being deployed into production. Deployment

⁶ <https://docs.microsoft.com/en-us/powerapps/maker/>

⁷ <https://www.maine.gov/oit/policies/Application-Deployment-Certification.pdf>

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certification helps ensure that applications are secure, accessible, and compliant with all IT policies. The time required to complete the deployment certification process is variable based on application complexity. For accessibility and security testing, the target SLA is 2 weeks. Please contact the relevant OIT Application Director for further instructions.

Support and Troubleshooting

When reporting or troubleshooting application problems, makers and users should follow the escalation path as outlined in the accompanying document *Escalation Path for Power Platform*.

The *Microsoft Low-code Platform Governance Committee* will be discussing how to identify new Power Platform “champions” and include them in the SOM Microsoft365 Champions team to help support other app makers across the State of Maine.

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