Power Platform: Governance and Architecture

This document provides a high-level overview of the different functions performed by MPP, policies, procedures, and guidelines. It applies to all architectural changes, additions, or significant customizations within the MPP environment.

Resources

DTC Architecture Review: Pull Request Submission Checklist and Tips for System Integrators and Citizen Developers

Official Microsoft Power Platform documentation - Power Platform | Microsoft Learn (external)

VA Microsoft Power Platform CoE - DTC MPP Managing Solutions and Environment.pdf - (sharepoint.com)

Secure Cloud Business Applications (SCuBA) Project | CISA

Section 508 Dev Guidelines.docx (sharepoint.com)

DTC Confluence and Jira Resources

Governance

DTC MPP Technical Team Roles & Responsibilities

Role	Responsibilities
Architecture Review Board	MPP Solution Architect, senior developers and experts that are tasked with evaluating the submissions from Business Owners or Citizen Developers (CD) and providing feedback. Review includes: • Compliance with the Development Playbook, VA organizational standards, code quality, UI/UX design, technical feasibility, scalability, and performance. • Compliance with as well accessibility and 508 standards. • compliance with security policies, vulnerability assessments, data protection.
MPP Business Analyst	Facilitate the review process, ensuring timely submissions and follow-ups.
Customer /Business Owner	Responsible for proposing and implementing new work/change requests/projects.
Citizen Developer (Customer)	Technical team responsible for the application that is in a business unit outside of IT.

Key Principles

The following principles must always be followed for development, and also pertain to architecture.

- Adherence to best practices outlined by MPP <link to Security Overview (Sharepoint)>.
- High-quality development; efficient performance.
- Easily maintained and scalable.
- Low Code over Code-First approach.
- User-Centric Design.
- Thorough testing.
- Comprehensive documentation.

Microsoft Power Platform Well-Architected is a set of best practices, architecture guidance, and review tools to help you make informed decisions about the design, planning, and implementation of modern application workloads with Microsoft Power Platform. Reference: Power Platform Well-Architected Framework.

Key Concept: People, Processes, Data

The People, Processes, Data concept is a framework for understanding and optimizing solution designs.

People: Refers to all stakeholders involved, including employees, customers, and partners. It emphasizes understanding their needs, behaviors and interactions within the system.

Processes: Encompasses the methods and procedures used to accomplish tasks or deliver services to our Veterans and their families. This includes workflows, policies and operational guidelines that govern how tasks are executed and goals are achieved.

Data: Represents the information and knowledge assets. It focuses on how data is collected, stored, processed, and utilized to support decision-making and business operations.

Solution Design: Sits in the center of the three elements. It involves designing the application so it effectively integrates people, processes and data. The goal is to optimize performance, enhance productivity and drive innovation by ensuring that the solutions are user-centric, process-efficient, and data-informed.

Key Concept: "Fit-For-Purpose"

"Fit-for-purpose" is an architectural principle best practice to be followed when developing solutions. "Configure first, and custom code last" emphasizes the alignment of development and customization efforts with the native capabilities and standard functionalities of MPP. This approach advocates leveraging the built-in features and out of the box capabilities of MPP to meet business requirements, rather than resorting to custom-coded solutions or workarounds. **Not designing solutions with a "configure first, code last" approach can lead to the following:**

- Unnecessary and excessive design, coding, testing, training and documentation which leads to longer time to value.
- Unnecessary development and sustainment costs.
- Creating unique, siloed, inefficient processes when MPP could provide more standard and recommended working methods.
- Foregoing the natural usability engineered into MPP by forcing processes designed for legacy software.
- Creating processes within MPP that were not designed to be used in that way reduces the ability to use other related functions because the processes are no longer a natural flow or fit for the purpose.
- Users that don't want to use or adopt MPP

Security and Governance for Power Platform

The **VA Power Platform Data Security Guidance** document is intended to provide an overview of the platform features for Data Gateways and Security Considerations. In addition, multiple Power App development patterns are provided to illustrate how row-level security constructs on the source database can be implemented in the Power App. Updated 2021

Reference Microsoft Power Platform security and governance documentation - Power Platform to learn how to set up and maintain security and governance for Power Platform.

Policies

Source: VA Microsoft Power Platform CoE - Home (sharepoint.com)

Acceptable Use Policy Submission

Submit Your Signed Acceptable Use Policy by completing the Acceptable Use Policy - Important: All fields are required, please make sure you attach your signed form document before submitting.

Acceptable Use Policies:

- VA Enterprise Microsoft Power Apps, Power Automate, PowerBI, and Power Virtual Agent (Power Platform) Acceptable Use Policy
- VA Enterprise Microsoft Power Apps, Power Automate, and Power Virtual Agent (Power Platform) Acceptable Use Policy - May 13

508 Compliance

Microsoft Power Platform Developer Guidelines To Comply With Section 508 Requirements

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Data Policy

Standard Environment Data Policy - Approved Standard Connectors

Premium Environment Data Policy - Approved Premium Connectors

AI Builder Credit Usage Policy

AI Builder Credit Usage Policy

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PCF Controls/Reusable Components Policy

PCF Controls/Reusable Components Policy

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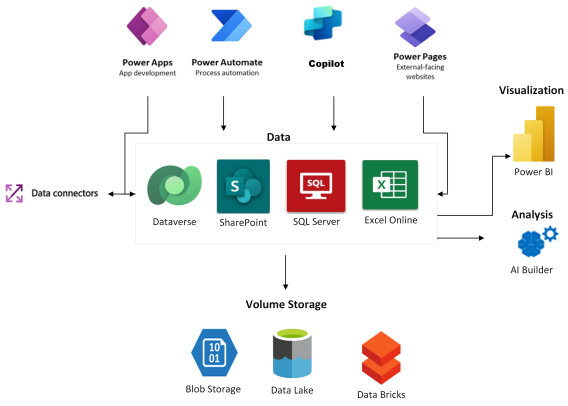
Architecture

MPP Application Architecture

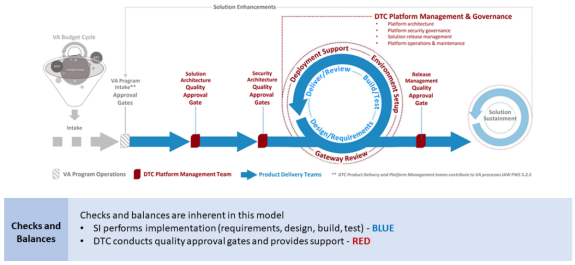


Microsoft Power Platform Well-Architected

Microsoft Power Platform Well-Architected is a set of best practices, architecture guidance, and review tools to help you make informed decisions about the design, planning, and implementation of modern application workloads with Microsoft Power Platform.
Details: Platform Architecture Standards

Architectural Design Review Process

The architectural design process is a structured approach to creating and maintaining technology solutions. This process ensures that the technology infrastructure aligns with the business's strategic objectives, meets regulatory and compliance requirements and optimizes performance and resource utilization. This is represented in the graphic below as **DTC Platform Management Team:**



MPP Architectural Design Review Triggers

A new Product Request (PR) from a Business Owner requires an Architectural Design Review (ADR). Following is the listing of triggers and corresponding description:

Trigger	Description
Integration with non-Microsoft systems	Any integration of new external systems regardless of means. This includes Power Automate, scripts, plug-ins, etc. It also, includes changes to existing integrations to integrate with an external system.
Creation of a new Dataverse table (custom entity)	The addition of any new table in Dataverse is checked for redundancy and applicability.
Audi Log Retention	MPP Retention Policy, and customer retention requirements.
Data Usage/Retention	Customer's data storage requirements and recommend alternate data storage based on consumption.
Creation of anything that involves PII/PHI/PCI	It could include fields, tables, and anything at all that includes PII.
Form User Interface changes that affect 250+ users	Any redesigns or modifications of Forms used by a large number of users.
Significant data modifications	Changes affecting data that involves altering data of more than 1,000 records at one time or more than 2,000 records daily.
Security Role or Security Access Updates or Changes	Updates that modify access levels or security roles to any of the permissions or roles associated with Elevated Accounts. Requests for custom security roles.
Addition of Power Platform components and app installations to the solution	Any addition of a component or application installation requires an architectural review. The review is performed referencing the following policy: PCF Controls/Reusable Components Policy.
Any activities that could impact performance	Includes high data load scenarios, throttling limitations, flows built that update or add 5000 plus records (aka "paging").
Audi Log Retention	MPP Retention Policy, and customer retention requirements.
Data Usage/Retention	Customer's data storage requirements. The review could result in recommendations for alternate data storage based on consumption.

Documentation Submission Process

The project's Business Owner submits the initial architecture documents, including diagrams, data models, integrations, customizations, and any relevant technical details. Each header below is considered a "Stage" of this phase of architecture. "ADR" = Architecture Design Review.

Stage	Process
Submission	After PR submission, the Business Owner submits the following documentation via Sharepoint: • Architecture Flow Diagram • Acceptable Use Policy • NIST Template/Data Dictionary
Screening	A designated team member conducts a preliminary review to ensure all necessary documentation and details have been submitted, including a High-Level Design documentation (HLD)
Review	The Architecture Review Board (ARB), and other relevant experts thoroughly review the architecture, focusing on compliance with developmental playbook, VA org standards, accessibility, technical feasibility, scalability, performance, and security. The board will consult with other stakeholders or technical experts as needed.
Feedback	The Architecture Review Board (ARB) provides the feedback, recommendations, and any required changes to the Citizen Developer (s) and SI Partner as applicable. If information is missing or unclear, feedback is provided to the Business Owner for revision and resubmission.

Decision Notification Process

Communication	The consolidated feedback is communicated back to the Business Owner and SI Partner
Revisions	**Modifications** Based on the feedback, the Citizen Developer (s) and SI Partner revise the architecture. **Resubmission** The revised architecture is resubmitted for a follow-up review.
Go/No Go: Final Decision	**Approval or Rejection** After the revised architecture is reviewed, a final decision is made to approve or reject the architecture. **Documentation** The decision, along with any final recommendations or stipulations are documented and communicated to all relevant parties.
Launch	**Release to Production:** Upon approval, the architecture is implemented as part of the project.
Continuous Improvement For the Architecture Design Review Process	**Feedback Loop:** Feedback from the architecture review process is used to improve future reviews and update guidelines and standards as necessary. **Process Documentation Updates:** The process map is periodically updated to reflect any changes in procedures, standards, or organizational structure.

Coding Standards

The PowerApps canvas app coding standards and guidelines is a technical white paper is aimed at Microsoft PowerApps makers in the enterprise. It contains standards for naming objects, collections, and variables, and guidelines for developing consistent, performant, and easily maintainable apps.

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Project for the Web at VA

The Project for the Web at VA document outlines what Project for the Web is, how licenses and environments can be requested, and how to install its potentially needed components. The intent is to centralize information related to Project for the Web into one document for VA users to get started.

Environment

Control Environment Creation and Management

The Microsoft Power Platform article Control environment creation and management - Power Platform | Microsoft Learn provides information and the steps to restrict who can create environments. Only users who have the following admin security roles can create new environments in the Power Platform admin center:

- Global admins
- Dynamics 365 admins
- Power Platform admins

VA Enterprise Microsoft Power Platform Managing Solutions and Environment Deployments

The Microsoft Power Platform Managing Solutions and Environment is intended to be a guide to help move applications or automations
currently in a sandbox/development or default environment into a live production environment
with Microsoft Power Platform premium capabilities enabled.

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Environment Types

Environment	Type	Managed?	Required?	Purpose	Deployer	Note
Dev	SANDBOX	Unmanaged	Yes	Development and unit tests occur here. Changes can be made to any component.	Developer	Citizen Developer
Test (QA)	SANDBOX	Managed	No	System integration, Regression and general integration testing occurs in this environment.	Developer	Citizen Developer
Pre-Prod UAT	SANDBOX	Managed	No	User Acceptance Testing occurs here.	Developer	The Production security model should apply to all Pre-Prod environments.
Production	PRODUCTION	Managed	Yes	Live applications that provide business use to users. The only environment which contains PII/PHI/PCI data.	VA MPP Team	

Note: No environment lower than Production contains PII/PHI/PCI data.