

PL-500 exam prep

Skills measured as of June 27, 2023

Audience profile

Candidates for this exam automate Windows-based, browser-based, and terminal-based applications that are time-consuming or contain repetitive processes. They use a mix of approaches like UI, API, and database automations.

Candidates analyze and design processes for automation and implement automations using Power Automate for desktop and Power Automate cloud flows. RPA developers use actions for logic and to work with data, applications, and services.

Candidates work with business stakeholders to optimize business workflows. They work with administrators to deploy solutions to other environments and support solutions.

Additionally, candidates should have experience with the Windows desktop environment, scripting languages, Power Automate cloud and desktop flows, AI Builder, Process Advisor, and Microsoft Dataverse.

- Design automations (30–35%)
- Develop automations (40–45%)
- Deploy and manage automations (20–25%)

Design automations (30–35%)

Describe Power Automate features and capabilities

- Identify the Power Automate ecosystem and offerings
- Identify the differences among cloud flows, and desktop flows, and business process flows
- Identify when to use a desktop flow or a cloud flow, and when to use them together
- Identify the different trigger types for cloud flows
- Identify options for interacting with target applications and browsers
- Identify the different methods for running a desktop flow

- Identify considerations for running cloud and desktop flows concurrently
- Identify considerations for running desktop flows attended versus unattended
- Differentiate HTTP actions in cloud and desktop flows

Work with other Microsoft Power Platform offerings

- Identify how canvas apps and model-driven apps work with automation
- Identify use cases for connectors, custom connectors, connection references, and connections for cloud flows
- Identify use cases for Microsoft Dataverse

Record and analyze processes

- Create processes in Process Advisor
- Identify the steps for Process mining
- Identify the steps for Task mining
- Identify the use cases for Process Advisor

Identify how to analyze and enhance data and documents

- Identify Microsoft AI options for processing documents in desktop and cloud flows
- Identify Microsoft AI options for processing data in desktop and cloud flows
- Identify optical character recognition (OCR) capabilities in desktop flows
- Identify use cases for the Document Automation Toolkit

Identify use cases for scripting languages in desktop flows

- Identify use cases for scripting languages including PowerShell and VBScript
- Identify use cases for application-specific macro languages including VBA in Microsoft Excel and Office Scripts
- Identify use cases for using JavaScript
- Identify how to use the document object model (DOM) in automation

Develop automations (40–45%)

Create and manage cloud flows

- Create a cloud flow
- Create a cloud flow that calls a desktop flow
- Create and use child cloud flows including how to pass data to a child cloud flow and return data back
- Perform actions in cloud flows by calling external APIs
- Configure filter conditions and concurrency in cloud flows
- Configure timeout and retry policies in cloud flows
- Implement data objects in cloud flows
- Identify common processes for parsing text including JSON, XML, and CSV in cloud flows
- Configure cloud flow action to run Microsoft Office Scripts

Create and manage desktop flows

- Create desktop flows to launch, connect to, and authenticate target application
- Configure user interface (UI) options
- Configure datatables, lists, and custom objects in desktop flows
- Implement subflows in desktop flows
- Add desktop actions to exit from target applications
- Perform actions in desktop flows by calling external APIs
- Configure timeout and retry in desktop flows
- Implement data objects in desktop flows
- Identify common processes for parsing text including JSON, XML, and CSV in desktop flows

Implement logic in cloud and desktop flows

- Configure flow control in cloud and desktop flows including loops
- Configure expressions in cloud flows
- Configure variable actions for cloud and desktop flows
- Configure secure input and output data in actions in cloud flows
- Configure secure variables in desktop flows
- Configure priority for desktop flows in a queue
- Create exception handling blocks in cloud and desktop flows to handle system exceptions
- Create error handling routines in cloud and desktop flows to handle business exceptions
- Configure document processing by using AI Builder

Create and configure custom connectors

- Create a custom connector
- Implement authentication for custom connectors
- Identify custom connector policy templates
- Write code in a custom connector

Manage automation infrastructure

- Configure credential management
- Connect cloud flows to on-premises data by using the on-premises data gateway
- Create and manage components in Microsoft Dataverse solutions

Test automations and finalize development efforts

- Run and test a cloud flow
- Run and test a desktop flow
- Manage configurations by using environment variables and configuration files
- Debug solutions by using Power Automate cloud and desktop flows debugging features

Deploy and manage automations (20–25%)

Prepare target environments

- Implement Microsoft Power Platform application lifecycle management (ALM)
- Differentiate credentials used for different environments
- Deploy RPA solutions to other environments
- Prepare virtual desktop environments for unattended desktop flow execution

Evaluate data loss prevention (DLP) policies for RPA execution

- Identify Microsoft Power Platform data loss prevention (DLP) policies
- Identify how DLP policies impact actions in cloud and desktop flows
- Identify how DLP policies apply to custom connectors

Manage access to RPA components

- Share a cloud flow
- Share a desktop flow
- Share machines and machine groups
- Identify security roles required to run and monitor cloud and desktop flows
- Create service accounts and service principals

Configure machine groups and queues required for desktop flow automations

- Identify use cases for and capabilities of machines and machine groups
- Manage machine registrations
- Create and manage machine groups
- Implement load balancing of desktop flows by using machine groups and queues
- Work with queues and queue operations for desktop flows
- Evaluate cloud and desktop flow run history from the Power Automate portal