**Microsoft Flow**

**Introduction**

**What is Microsoft Flow?**

Microsoft Flow is a service that helps you create automated workflows between apps and services to synchronize files, get notifications, collect data and more. Flow is included free in most Office 365 subscriptions. For learning, you can even sign up for it for free at <http://flow.microsoft.com>

**Creating Flows**

**Types of Flows you can create:**

**When creating Flows there are 5 types:**

1. **Automated Flows-** These are flows that perform 1 or more tasks after an event is triggered.
2. **Button Flows -** These are flows that you can create to run repetitive tasks from any place at any time from your mobile device by a touch of a button.
3. **Scheduled Flows -** these are flows thart run 1 or more tasks at scheduled times.
4. **Business Process Flows -** To ensure people follow the same process every time, or to streamline certain work processes that go to multiple departments, business process flows can be created so these processes will follow the same step by step process
5. **Solutions -** solutions are leveraged to transport apps and components from one environment to another or to apply a set of customizations to existing apps. A solution can contain one or more apps as well as other components such as entities, option sets, etc. You can get a solution from <http://appsource.microsoft.com> or from an independent software vendor

**Ways to create a Flow:**

1. **Through a Template -** Microsoft has provided templates for many common flows some are free and some are subscription based.
2. **Manually -** you can create your own customized flows manually.

When manually creating a flow, you must remember that you always include 2 things below

1. **Trigger -** Every flow must start with trigger. Like when an event happens, or scheduled scheduled time, or a touch of a button.
2. **Action -** After the trigger every flow must perform at least 1 action which could include conditions.

**Connectors**

The basic definition is that connectors connects your apps to Microsoft flow. Per Microsoft, a connector is a proxy or a wrapper around an API that allows the underlying service to talk to Microsoft Flow, PowerApps and Logic Apps. It provides a way for users to connect their accounts and leverage a set of pre-built actions and triggers to build their apps and workflows. There are over 200 available connectors available and the list is growing.

* Custom Connectors can be created for services that are not included from Microsoft. You can create connectors with it’s own triggers and actions

**Gateways**

Install and manage an on-premises data gateway to securely integrate a variety of cloud-based apps with your on-premises data and apps through Microsoft Flow.

**Administration**

**Environments:**

Environments provide data locality, an isolation boundary for all resources, and the ability to create data loss prevention policies.

* To create an environment: Click the “+ New Environment” in the top right corner of the Admin Center and follow the wizard. Remember, all the resources created in each environment will be geo-located to the region where your environment was created. This can NOT be changed later.

*Note- When creating environments be sure to be aware of the limitations of environments — since they are an isolation boundary you can never reference different resources across environments.*

**Managing environment permissions**

Administrators have control over who can administrate, and create new content inside of environments, as well as who have access to the Database.There are 2 built-in roles that provide access to permissions within an environment. You can configure these roles on the Security tab when you select an environment.

1. **Environment Admin role -** can perform all administrative actions on an environment including the following:

* Add or remove a user or group from either the Environment Admin or Environment Maker role.
* Provision a Common Data Service database for the environment.
* View and manage all resources created within an environment.
* Set Data Loss Prevention policies

1. **Environment Maker role -** can create new resources within an environment including flows, connections, custom APIs, gateways, and apps using PowerApps.

NOTE: Users or groups assigned to these environment roles are not automatically given access to the environment’s database (if it exists) and must be given access separately by a Database owner.

**Data policies**

The second tab in the Microsoft Flow Admin Center is for establishing data loss prevention policies. This gives administrators the ability to create, and enforce policies that define which consumer connectors can access and share business data. These policies that define how data can be shared are referred to as data loss prevention (DLP) policies.

**Data Groups**

Data groups are a simple way to categorize services within a data loss prevention (DLP) policy. The two data groups available are the Business data only group and the No business data allowed group.

**Integration with Intune**

The Microsoft Flow mobile app for iOS and Android supports Intune's Mobile Application Management (MAM) without device enrollment. Using MAM allows IT administrators to create and enforce mobile data policies to safeguard organizational data.

**Data Integration**

The Data integration tab refers to Data Integration Platform. The Data Integrator (for Admins) is a point-to-point integration service used to integrate data into Common Data Service. At the bottom of the screen you’ll notice the 3 options:

1. **Projects -** enable the flow of data between systems. A project contains mappings for one or more entities. Mappings indicate which fields map to which other fields.
2. **Connection Sets -**  are a collection of two connections, environments for the connections, organization mapping information, and integration keys that can be reused among projects.
3. **Templates -** A template provides you with source, destination, and direction of data flow. You need to keep this in mind while customizing and/or creating your own template.