Azure AD AppReg and Ent App (SP) relationship

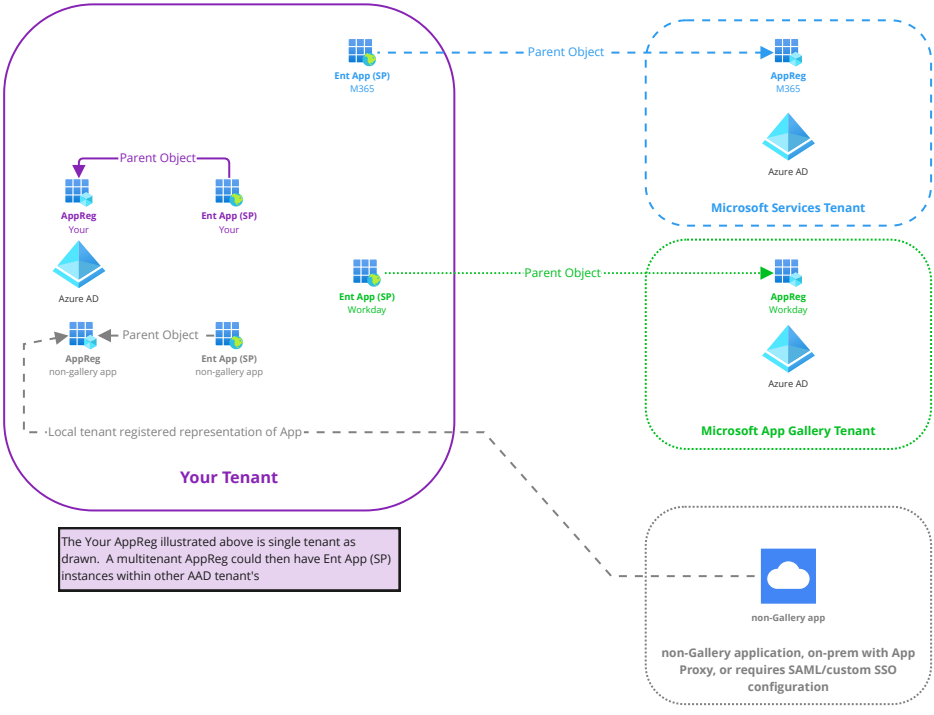
AAD = Azure AD
Tenant = Azure Active Directory instance
AppReg = Application Registration
Ent App = Enterprise Application (SP)
SP = Service Principal

An **Application Registration** is the registered identity configuration representation of an application allowing for integration with Azure AD. The registration creates an **Application Object** in it's "home" tenant which has a globally unique ID (across all Azure tenants) known as an **App ID** or **Client ID**. The **Application Object** configuration defines the application authentication configuration, credentials, claims, API permissions and scopes, roles, and owners.

The **Service Principal** (**SP**) object is a security principal (identity). Types of **SP's** are Applications (above) and **Managed Identities** (auto managed for Azure resources), and a legacy (not included here). In the case of this diagram, the Application instances can found and managed within the **Enterprise applications** blade in the Azure portal.

An **Enterprise application** (**SP**) is the local tenant representation of a global **Application Object,** created from and inheriting certain properties from that object template. In other words the **Application Registration** occurs on the tenant that owns the given application, while the **Enterprise application** (**SP**) child object exists in each tenant where the application is used (even your own). Certain actions will create these objects on your behalf automatically, but can also be down directly via CLI or Graph.

https://learn.microsoft.com/en-us/azure/active-directory/develop/app-objects-and-service-principals
https://learn.microsoft.com/en-us/azure/active-directory/develop/active-directory-how-applications-are-added



The Your AppReg illustrated above is single tenant as drawn. A multitenant AppReg could then have Ent App (SP) instances within other AAD tenant's