

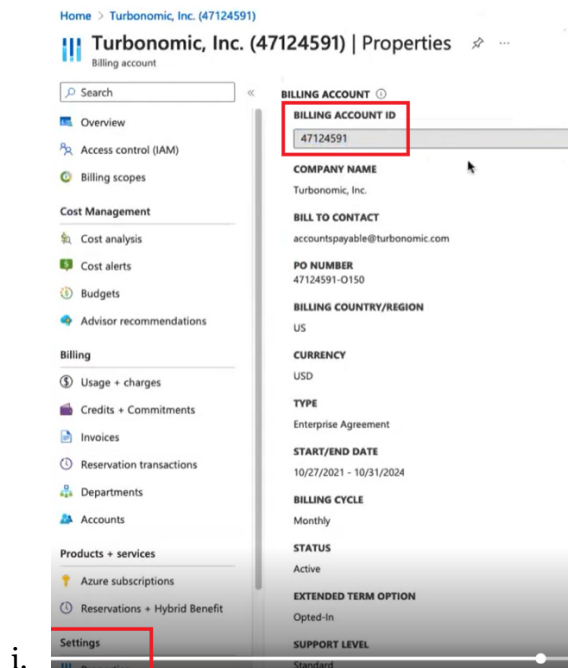
## Procedimento de leitura do Cloud Billing da Azure no IBM Turbonomic

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Etapas:

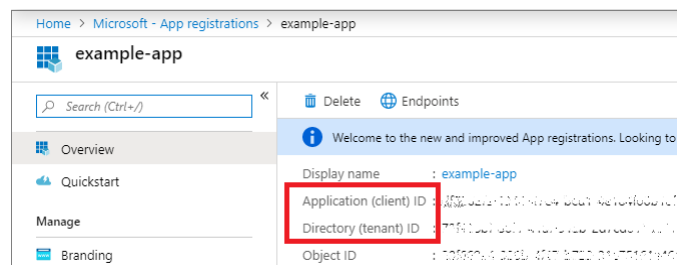
1. O Turbonomic deve estar na versão 8.8.4 ou maior.
2. Colete todos os Ids necessários e identifique-os para não misturar os GUIDs

### a. Search -> Cost and Management + Billing -> Properties -> Billing Account ID



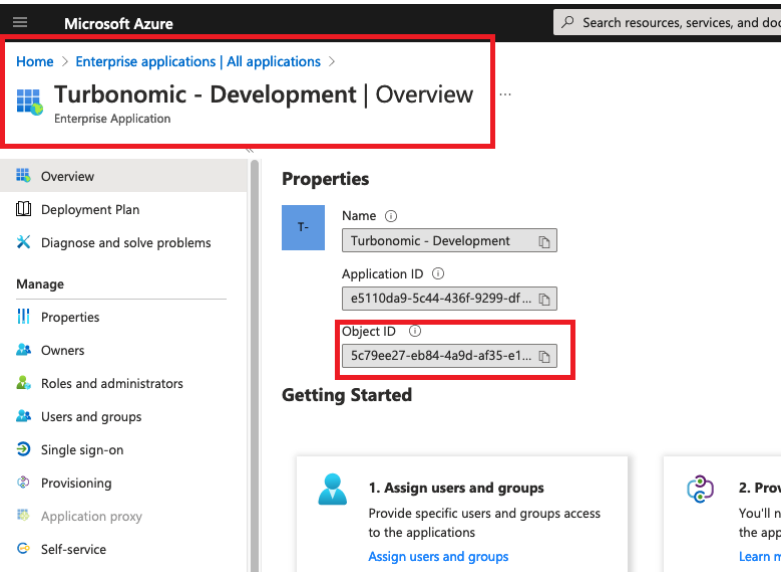
### b. Search -> App Registrations -> Encontre o Service Principal do Turbonomic e copie:

- i. Application (client) ID
- ii. Directory (tenant) ID
- iii. Client Secret Key



- c. **Search -> Enterprise Applications ->** Encontre o Service Principal do Turbonomic e copie:
- Object ID** – Atenção: este Object ID é diferente do que aparece no passo 3b, **NÃO use o Object ID da página App Registration. O correto é o Enterprise Applications.**

ii.



The screenshot shows the Microsoft Azure portal interface. At the top, there's a search bar and navigation links. The main heading is 'Turbonomic - Development | Overview'. Below this, there's a sidebar with navigation options like 'Overview', 'Deployment Plan', 'Diagnose and solve problems', 'Manage', 'Properties', 'Owners', 'Roles and administrators', 'Users and groups', 'Single sign-on', 'Provisioning', 'Application proxy', and 'Self-service'. The 'Properties' section is expanded, showing fields for 'Name' (Turbonomic - Development), 'Application ID' (e5110da9-5c44-436f-9299-df...), and 'Object ID' (5c79ee27-eb84-4a9d-af35-e1...). The 'Object ID' field is highlighted with a red rectangle. Below the properties, there's a 'Getting Started' section with two steps: '1. Assign users and groups' and '2. Provision the app'.

- d. Acesse o <https://guidgenerator.com/> e clique em “Generate Some GUIDs!”, no qual vai gerar um ID único aleatório. Usaremos esse GUID no passo 4.
- Copie o **GUID e guarde-o.**



The screenshot shows the 'Online GUID / UUID Generator' website. It has a form with fields for 'How many GUIDs do you want (1-2000):' (set to 1), 'Format:' (with checkboxes for Uppercase, Braces, and Hyphens, where Hyphens is checked), and 'Encoding:' (with checkboxes for Base64, RFC 7515, and URL encode). A 'Generate some GUIDs!' button is below the form. The 'Results:' section shows a 'Copy to Clipboard' button and a text box containing the GUID 'fc611c40-9826-4da8-b289-64181069cf50', which is highlighted with a red rectangle. At the bottom, there's a disclaimer: 'Use these GUIDs at your own risk! No guarantee of their uniqueness or suitability is given or implied.'

3. Todos os identificadores foram coletados. Agora precisamos colocar a role “**EnrollmentReader**” na Service Principal do Turbonomic. A Microsoft até o momento só permite fazer esta ação por chamadas na Azure API.
- Vá até a essa URL e clique no botão verde “Try it” e faça login com um usuário privilegiado.

<https://learn.microsoft.com/en-us/rest/api/billing/2019-10-01-preview/role-assignments/put?tabs=HTTP>

Table of contents

## Role Assignments - Put

Reference

Service: Billing

API Version: 2019-10-01-preview

Create or update a billing role assignment.

HTTP

Copy

Try it

PUT https://management.azure.com/providers/Microsoft.Billing/billingAccounts/{billingAccountName}/billingRoleAssignments/{billingRoleAssignmentName}


### URI Parameters

Name	In	Required	Type	Description
billingAccountName	path	True	string	The ID that uniquely identifies a billing account.
billingRoleAssignmentName	path	True	string	The ID that uniquely identifies a role assignment.
api-version	query	True	string	The version of the API to be used with the client request. The current version is 2019-10-01-preview.

### Request Body

Name	Type	Description
properties.principalId	string	The principal id of the user to whom the role was assigned.
properties.principalTenantId	string	The principal tenant id of the user to whom the role was assigned.

Exit focus mode



**Sign in with your account.**

If your account doesn't have a registered Learn profile, this process will complete that for you.

Sign in

Para preencher o formulário e o BODY, usaremos nesta ordem:

- b. Parâmetros:
  - i. billingAccountName – Billing Account Id (passo 3a)
  - ii. billingRoleAssignmentName – o GUID que foi criado aleatoriamente (no guidgenerator.com - passo 3d)
  - iii. api-version – 2019-10-01-preview
- c. Mantenha o Headers como está
- d. Body – neste campo, usaremos o JSON abaixo substituindo os seguintes valores:
  - i. principalId - Object Id (passo 2c)
  - ii. principalTenantId – Tenant Id (passo 2bii)
  - iii. roleDefinitionId – troque o {BillingAccountId} pelo Billing Account Id (passo 2a), e mantenha o resto intacto.



- e. **Após o Run, a resposta deverá ser 200.** Em caso de falha, verificar os dados inseridos ou se o usuário possui direitos de Global Admin ou Elevated Access.

### Request Preview

HTTP

Copy

```
PUT https://management.azure.com/providers/Microsoft.Billing/billingAccounts/1111111/billingRoleAssignment
Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6Im5PbzNaRHJPRFhFSzFqS1doWHNsSFJfS1hFZyIs
Content-type: application/json
```

Run ▶

4. Agora para finalizar, basta adicionar o target no Turbonomic.
- Billing Account Id – passo 3a
  - Directory (Tenant) Id – passo 3bii
  - Application (Client) Id – passo 3bi
  - Client Secret Key – passo 3biii

#### < Add Azure Billing

DISPLAY NAME \*

BILLING ACCOUNT ID \*

☐ Use a cost export

DIRECTORY (TENANT) ID \*

APPLICATION (CLIENT) ID \*

CLIENT SECRET KEY \*