**Finops Assessment enhanced version**

For re-triggor initial assessment should happened check that first in db before triggering assessment

Recordings link:

https://cloudenablersinc-my.sharepoint.com/personal/gayathri\_l\_corestack\_io/\_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fgayathri%5Fl%5Fcorestack%5Fio%2FDocuments%2FRecordings%2FFinOps%20Maturity%20Assessment%20Report%20Overview%2D20210830%5F090132%2DMeeting%20Recording%2Emp4&parent=%2Fpersonal%2Fgayathri%5Fl%5Fcorestack%5Fio%2FDocuments%2FRecordings

**To get service account id:**

select \* from report.serviceaccount where ServiceAccount ='iLABS'

**To get Assessment Run Id:**

select \* from report.AssessmentRuns where ServiceAccountID ='5704' order by AssessmentRunID desc

**Assessment snapshot:**

select \* from [report].[AssessmentCostSnapshotV2] where AssessmentRunID = '2811'

**Average monthly cost:**

Get last 2 months cost and currenct month forecast cost from below query

select \* from report.accountsummaryv3 where ServiceAccountID = 5704

Formula to calculate Average monthly cost: (Cost of last 2 months + current month forecast) / 3

If we have last 3 months cost , average should show based on last 3 months. i.e (cost of last 3 months )/3

Formula to calculate Average monthly cost : (Cost of last 2 months) /2

SELECT

AverageMonthlyCost

,AverageMonthlyCost - PotentialCostSavings CostAfterSavings

,floor((AverageMonthlyCost + 99) / 100) \* 100 MAxRange

FROM [report].[AssessmentCostSnapshotV2]

WHERE AssessmentRunID = 2811

**Potential cost savings:**

select SUM(A.SavingPerMonth) from report.AssessmentResources A

INNER JOIN report.Assessment B

ON A.AssessmentID = B.AssessmentID

where B.AssessmentRunID = '3121'

**Potential cost savigs in mongo:**

db.getCollection('policy\_recommendations').find({"resolution\_status" : "open","service\_account\_id" : "611e47df71acdeda1ece7549","classification":"Cost"})

**Score calculation:**

Score = ((100 -%% of Potential Cost Savings)\*0.7) + ((100-% of Violated Resources)\*0.1) + ((100 - % of Budget Violations) \* 0.1)) % Of Potential Cost Savings = ((Potential Cost Savings) / Average Monthly Cost) \* 100)

* 1. % Of Violated Resources = (Total Violated Resources / Total Resources Assessed) \* 100
  2. % Of Budget Violations = (Total Violated Budget Scenarios / Total Budget Scenarios Assessed) \* 100
  3. % Of Tag Violations = (Total Violated Tag Definition Scenarios / Total Tag Definition Scenarios Assessed) \* 100

**% of potential savings:**

SELECT ((PotentialCostSavings/AverageMonthlyCost) \* 100)

FROM report.AssessmentCostSnapshotV2 SN

WHERE SN.AssessmentRunID = 3043

**% Of Violated Resources:**

SELECT ((SUM(CAST(ViolatedResourceCount AS FLOAT))/CAST(COALESCE(NULLIF(SUM(CAST(TotalResourceCount AS INT)),'0'),1) AS FLOAT)) \* 100)

FROM report.Assessment A

WHERE A.AssessmentRunID = 3043

**% of Budget Violations:**

SELECT

(SUM(CASE WHEN A.ViolatedResourceCount > 1 THEN 1 ELSE 0 END)/CAST(COALESCE(NULLIF(COUNT(\*),0),1) AS FLOAT)) \* 100

FROM report.AssessmentCostSnapshotV2 SN

INNER JOIN report.Assessment A

ON SN.AssessmentRunID = A.AssessmentRunID

INNER JOIN report.AssessmentScenarios S

ON S.AssessmentScenarioID = A.AssessmentScenarioID

INNER JOIN report.AssessmentSubCategory SC

ON SC.AssessmentSubCategoryID = S.AssessmentSubCategoryID

WHERE SN.AssessmentRunID = 3043

AND SC.AssessmentSubCategoryName = 'Budget'

**1.2 Average Monthly Cost vs Potential Cost Savings:**

select \* from [report].[AssessmentCostSnapshotV2] where AssessmentRunID = '2811'

select \* from [report].[AssessmentCostHistorySnapshotV2] where AssessmentRunID = '2811'

**1.3 Cost Visibility & Savings by Top Product Categories**

**Get the month details from section 1.2 and get the product categori cost for that months. Get the average**

select \* from [report].[CostInsightTopProductCategoryV2] where AssessmentRunID = '2811' order by Cost desc

SELECT ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC) ROWNUM

,BC.ProductCategory

,SUM(Cost) Cost

FROM report.ResourceCostMonthlyV3 C WITH (NOLOCK)

INNER JOIN report.BillingProductCategory BC WITH (NOLOCK)

ON BC.BillingProductCategoryID = C.BillingProductCategoryID

WHERE ServiceAccountID = 3851

AND BillDateKey = 20210901

AND isDeleted = 0

GROUP BY BC.ProductCategory

Average monthly cost : last 2 months /2

If any one of the months not having cost , cost available in that month is the average

**1.4 Cost Visibility & Savings by Top Resource Categories:**

select \* from [report].[CostInsightTopResourceCategoryV2] where AssessmentRunID = '2811' order by Cost desc

**1.5 Cost Savings by Top Tags**

select \* from [report].[CostInsightTopTagV2] where AssessmentRunID = '2811' order by Cost desc

SELECT

SNo

,TagName

,TagValue

,TagName + ':' + TagValue Tag

,Cost AverageMonthlyCost

,PotentialCostSavings CostSavings

,CostWithPotentialCostSavings WithPotentialCostSavings

,NoOfRecommendations

FROM report.CostInsightTopTagV2

WHERE AssessmentRunID = 2811

AND SNo <> 99

SELECT TOP 10

ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC)SNo

,T.TagKey TagName

,T.TagValue TagValue

,SUM(Cost) Cost

FROM report.CostTagMappingmonthly C WITH (NOLOCK)

INNER JOIN report.ResourceCostMonthlyV3 TM WITH (NOLOCK)

ON TM.ResourceCostMonthlyID = C.ResourceCostMonthlyID

INNER JOIN report.CostTagDaily T

ON T.CostTagID = C.CostTagID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211101

AND isDeleted = 0

GROUP BY

T.TagKey

,T.TagValue

ORDER BY Cost DESC

**1.6 Cost Savings by Assessment Category**

**Violated resource count is the recommendation resource count. Row having data is the recommendation.**

Select G.GroupName,A.Scenarioname,A.Serviceid,A.ServiceResourceID,

A.Assessmentsubcategoryid,B.TotalResourceCount,B.violatedResourcecount

,(

SELECT SUM(SavingPerMonth)

FROM report.AssessmentResources

WHERE AssessmentID = B.AssessmentID

) Savingspermonth

from report.AssessmentScenarios A

INNER JOIN report.Assessment B

ON A.AssessmentScenarioID =B.AssessmentScenarioID

INNER JOIN report.AssessmentSubCategory C

ON A.AssessmentsubcategoryId =c.AssessmentSubCategoryID

INNER JOIN report.AssessmentGroup G WITH (NOLOCK)

ON G.AssessmentGroupID = A.AssessmentGroupID

where C.AssessmentsubcategoryName='Underutilized'

and B.AssessmentRunID = 2811

and B.AssessmentStatus='completed'

and TotalResourceCount not in ('0')

Violated resources details:

EXEC ssrs.usp\_FinOps\_Assessment\_Report\_DataV2

@ID = '617c63f5c95cf4a9a572489e'

,@AssessmentCategory = 'Cost'

,@AssessmentDateKey = 20211204

SELECT A.AssessmentID

--,C.AssessmentCategoryName AssessmentCategory

,SC.AssessmentSubCategoryName AssessmentSubCategory

,G.GroupName AssessmentGroup

,S.ScenarioName AssessmentScenario

,S.[Description]

,COALESCE(SR.ResourceType,'N/A') ResourceType

,CASE

WHEN A.TotalResourceCount IS NULL THEN 0

ELSE A.TotalResourceCount

END AS TotalResourceCount

,CASE

WHEN A.ViolatedResourceCount IS NULL THEN 0

ELSE A.ViolatedResourceCount

END AS ViolatedResourceCount

,AR.AssessmentRunID

,CASE WHEN ROWNUM = 1 THEN ARS.SavingPerMonth ELSE 0 END TotalEstimatedMonthlyCostSavings

,A.AssessmentScore Score

,AG.GradeName Grade

,A.AssessmentStatus [Status]

--,COALESCE(NULLIF(ARS.ResourceID,''),'-') ResourceID

,ARS.UniqueID

--,COALESCE(NULLIF(ARS.Region,''),'-') Region

,ARA.Attribute

,COALESCE(NULLIF(ARA.[Value],''),'N/A') [Value]

,COALESCE(ARS.SavingPerMonth,0) EstimatedMonthlyCostSavings

,CUR.Symbol Currency

,PR.[Description] Recommendation

,COALESCE(SR.[Resource],'N/A') [Resource]

,ARA.AttributeOrder

--into #RTemp

FROM report.Assessment A

INNER JOIN report.AssessmentRuns AR

ON AR.AssessmentRunID = A.AssessmentRunID

INNER JOIN report.AssessmentScenarios S

ON S.AssessmentScenarioID = A.AssessmentScenarioID

INNER JOIN report.PolicyRecommendationDefinition PR

ON PR.PolicyID = S.ExecutorID

INNER JOIN report.AssessmentGroup G

ON G.AssessmentGroupID = S.AssessmentGroupID

INNER JOIN report.AssessmentCategory C

ON C.AssessmentCategoryID = S.AssessmentCategoryID

INNER JOIN report.AssessmentSubCategory SC

ON SC.AssessmentSubCategoryID = S.AssessmentSubCategoryID

INNER JOIN report.AssessmentWeightage W

ON W.AssessmentWeightageID = A.AssessmentWeightageID

INNER JOIN report.AssessmentGrades AG

ON AG.AssessmentGradeID = A.AssessmentGradeID

INNER JOIN report.ServiceAccount SA

ON SA.ServiceAccountID = AR.ServiceAccountID

LEFT JOIN report.AssessmentResources ARS

ON ARS.AssessmentID = A.AssessmentID

OUTER APPLY report.tfn\_AssessmentResourceAttributes (ARS.AssessmentResourceID,4) ARA

LEFT JOIN report.ServiceResource SR

ON SR.ServiceResourceID = S.ServiceResourceID

LEFT JOIN report.Currency CUR

ON CUR.Currency = ARS.Currency

WHERE SA.ID = '617c63f5c95cf4a9a572489e'

AND AR.AssessmentRunID =3057

AND A.AssessmentStatus = 'Completed'

AND A.ViolatedResourceCount > 0

AND SC.AssessmentSubCategoryName <> 'Budget'

Nuumber of recommendation in product categories:

SELECT

M.ProductCategory

,SUM(CASE WHEN A.ViolatedResourceCount > 0 THEN 1

ELSE 0

END) NoOfRecommendations

INTO #NOOfRecommendations

FROM report.Assessment A

INNER JOIN report.AssessmentScenarios S

ON S.AssessmentScenarioID = A.AssessmentScenarioID

INNER JOIN #ServiceResourceIDMapping M

ON S.ServiceResourceID = M.ServiceResourceID

WHERE A.AssessmentRunID = ' + CAST(@AssessmentRunID AS VARCHAR(50)) + '

GROUP BY M.ProductCategory