Provision duration of Azure SSIS IR

Last updated by | Wanli Mao | Nov 1, 2022 at 11:56 PM PDT

- SSIS IR don't have public SLA promise for Provision (duration) time.
- SSIS IR have a feature, standby pool, that is used to accelerate Provision speed for customers. However, this only works for IR **not joining Customer's VNet** or IR **joining Customer's VNet via Express VNet injection**. If customer hit standby pool on Provision, the duration may reduce from around 30 ~ 60 minutes to about 5 minutes.

Expectation

- There is no guarantee that customer would always hit the standby pool. It's, however, expected that customer would hit standby pool most of time.
- In below cases, you can reach to PG for investigation
  - Customer's IR was hitting standby pools but suddenly doesn't hit standby pool any more
  - Customer's IR was hitting standby pools in a low rate

Hit Rate

Please fill in correct subscription id, data factory name and IR name. By default, it queries hit rate for past 30 days.

```
let _isExpressVNetInjectionIR = 0;// 0 or 1; 1 means express VNet IR
let _startTime = ago(30d);
let _subscriptionId = '';
let _dataFactoryName = '';
let _irName = '';
AisManagementTaskTelemetryEvent
| where env_time > _startTime
| where subscriptionId =~ _subscriptionId
 | where dataFactoryName =~ _dataFactoryName and irName =~ _irName
| where taskType =~ 'Provision'
| where vNetType =~ 'Managed' or isVNetV2 == 1
| where isVNetV2 == _isExpressVNetInjectionIR
| summarize count(), hit = countif(isStandbyPoolUsed) by isVNetV2
| extend hitRate = todecimal(hit) / count_
```

Triage

Acceptable hit rate

1. If total provision count < 10, one standby pool hit miss should be regarded as acceptable.
2. If total provision count >= 10, hit rate >= 0.9 should be regard as acceptable.

Investigation for low hit rate

Please paste query and result from below queries (also query for hit rate) in ava thread.

Standby pool size is set per vmsize for each pool type in each region.

1. Get pool type, vmSize, region by task id

```
let _taskId = "095d3806-ff73-4189-bc25-380de7e5452eProvision0543124332";
let poolType = AisManagementTaskTraceEvent
| where taskId == _taskId
| project env_time, message
| where message has 'Pool Type is'
| extend PoolType = extract(@"Pool Type is ([a-zA-Z]+)", 1, message)
| project PoolType;
let vmInfo =
AisManagementTaskTelemetryEvent
| where taskId == _taskId
| project vmSize, isVNetV2, env_cloud_location;
union vmInfo, poolType
| project region = env_cloud_location, vmSize, PoolType, isVNetV2
```

2. Please fill in correct value get from last query to check

```
let _poolType = '';
let _region = '';
let _vmSize = '';
AisPoolManagementTaskEvent
        | where env_time > ago(20m)
        | where env_cloud_location == _region
        | project-reorder env_time, message
        | where eventType == "GetExperienceValue"
        | project env_time, message, env_cloud_location, poolType
        | where poolType == _poolType
        | where message has 'The VM size'
        | extend poolNumber = toint(extract("pool number is ([0-9]+)", 1, message)), vmSize = extract("The VM size is ([A-Za-z_0-9]+)", 1, message)
        | distinct env_cloud_location, poolNumber, vmSize
        | where vmSize =~ _vmSize
```

If there is no record or pool number is zero, please ask SSIS PG to increase pool number to 1. Otherwise provide the query and result by following query.

```
let _isExpressVNetInjectionIR = 0; // 0 or 1; 1 means express VNet IR
let _region = '';
let _vmSize = '';
AisManagementTaskTelemetryEvent
| where env_cloud_location =~ _region
| where vmSize =~ _vmSize
| where env_time > ago(30d)
| where vNetType =~ 'Managed' or isVNetV2 == 1
| where isVNetV2 == _isExpressVNetInjectionIR
| where subscriptionId != "4897dd0a-3b36-4503-a76b-fc22b677833c"
| summarize ProvisionCount = count() by subscriptionId
```