

Create ADF using Powershell with Managed VNet IR as the default IR

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Issue

Customer wants to create ADF using Powershell and also requires having default "AutoResolveIntegrationRuntime" with Sub-Type "Managed Virtual Network" instead of default "Public" as shown in the below diagram

Integration runtimes

The integration runtime (IR) is the compute infrastructure to provide the following data integration capabilities across different network environment. [Learn more](#)

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Name	Type	Sub-type	Status	Related	Region	Version
AutoResolveIntegrationRuntime	Azure	Managed Virtual Network	Running	1	Auto Resolve	---

Cause

The Current PowerShell cmdlet "New-AzDataFactory" does not take VNet parameter and hence it created Data Factory with "Public" Sub-Type by default.

Resolution

Follow script below

Please make sure to keep the IR name as "AutoResolveIntegrationRuntime" only in the below Powershell code

```
# Initialize below variables with valid values
$subscriptionId = ""
$resourceGroupName = ""
$factoryName = ""
$managedPrivateEndpointName = ""
# DO NOT CHANGE INTEGRATION RUNTIME NAME
$integrationRuntimeName = "AutoResolveIntegrationRuntime"
$apiVersion = "2018-06-01"
$privateLinkResourceId = ""

$vnetResourceId = "subscriptions/${subscriptionId}/resourceGroups/${resourceGroupName}/providers/Microsoft.Net/NetworkInterfaces/${vnetInterfaceName}"
$privateEndpointResourceId = "subscriptions/${subscriptionId}/resourceGroups/${resourceGroupName}/providers/Microsoft.PrivateEndpoint/PrivateEndpoints/${privateEndpointName}"
$integrationRuntimeResourceId = "subscriptions/${subscriptionId}/resourceGroups/${resourceGroupName}/providers/Microsoft.DataFactory/factories/${factoryName}/integrationRuntimes/${integrationRuntimeName}"

# Create ADF without a default IR
New-AzResource -Location <Location> -ResourceName <factoryName> -ResourceType Microsoft.DataFactory/factories

# Create managed Virtual Network resource
New-AzResource -ApiVersion "${apiVersion}" -ResourceId "${vnetResourceId}" -Properties @{}

# Create managed private endpoint resource
New-AzResource -ApiVersion "${apiVersion}" -ResourceId "${privateEndpointResourceId}" -Properties @{
    privateLinkResourceId = "${privateLinkResourceId}"
    groupId = "blob"
}

# Create integration runtime resource enabled with VNET
New-AzResource -ApiVersion "${apiVersion}" -ResourceId "${integrationRuntimeResourceId}" -Properties @{
    type = "Managed"
    typeProperties = @{
        computeProperties = @{
            location = "AutoResolve"
            dataFlowProperties = @{
                computeType = "General"
                coreCount = 8
                timeToLive = 0
            }
        }
    }
    managedVirtualNetwork = @{
        type = "ManagedVirtualNetworkReference"
        referenceName = "default"
    }
}
```

Reference Doc - <https://docs.microsoft.com/en-us/azure/data-factory/managed-virtual-network-private-endpoint#create-managed-virtual-network-via-azure-powershell> 