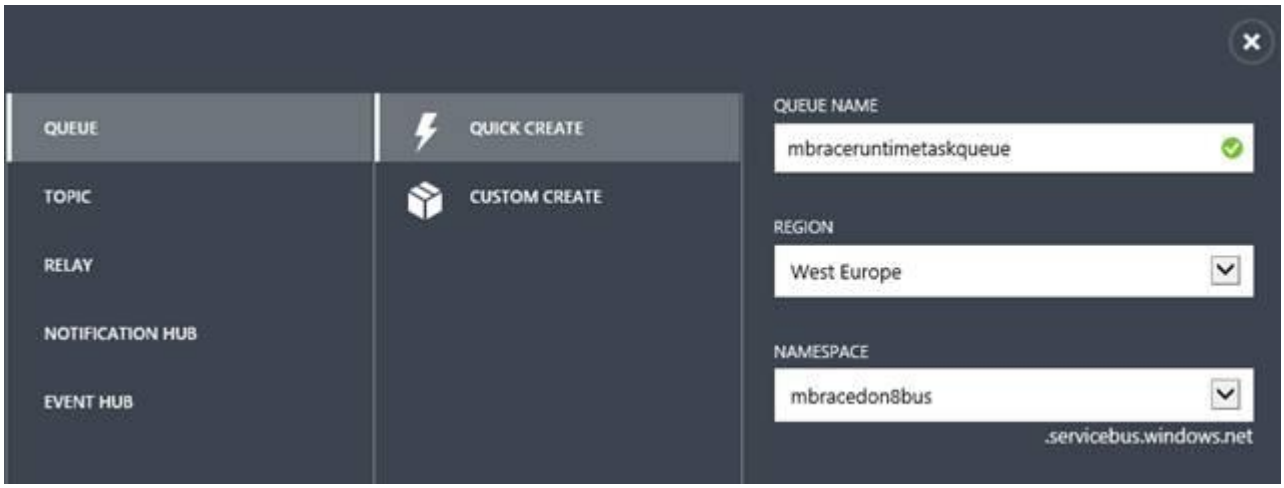
Steps I used to create an MBrace Cluster on Windows Azure using Brisk Engine as of 20/02/2015

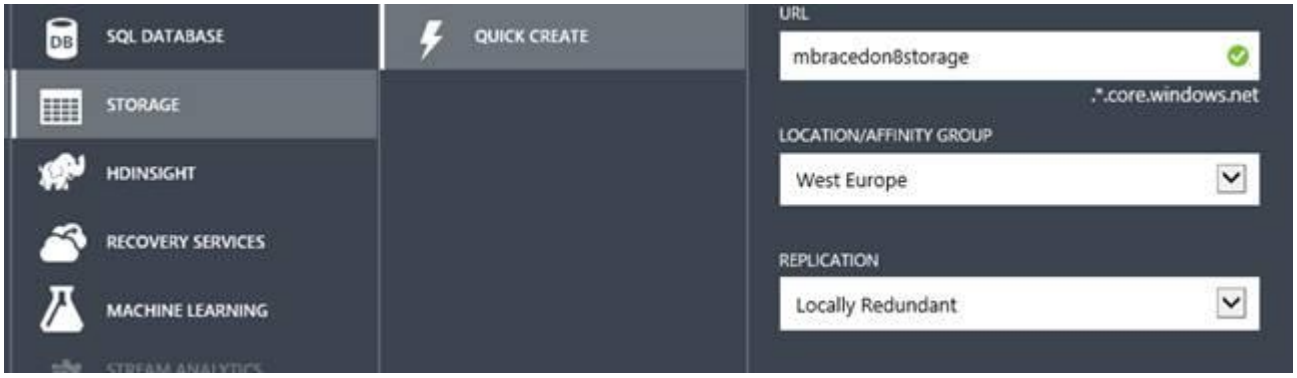
Assumes you have an Azure account with at least 6 cores spare (there is a 20 core limit on some free or trial Azure accounts).

1. Created new Service Bus namespace in Azure Console (messaging not notification hub)

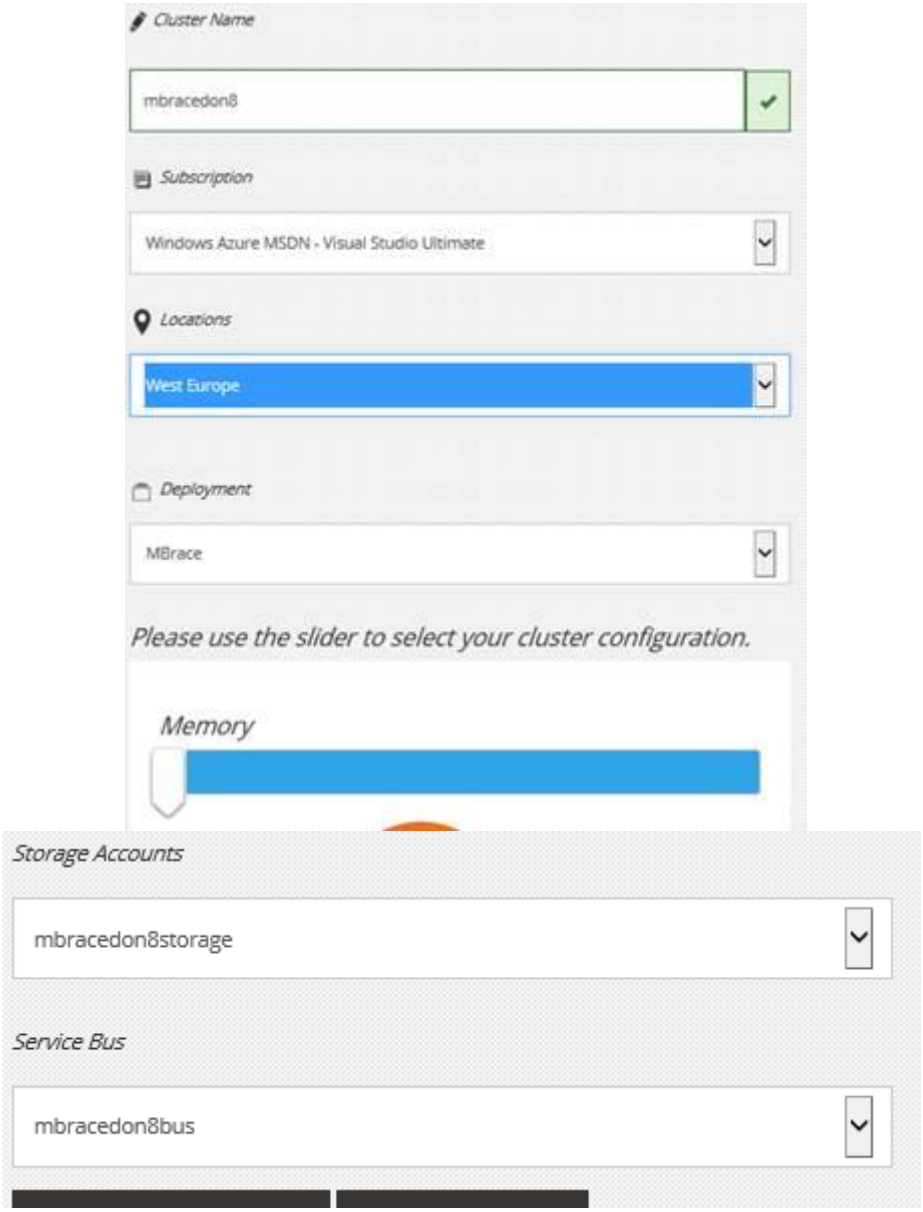
2. Created a new queue called **mbraceruntimetaskqueue** in that namespace

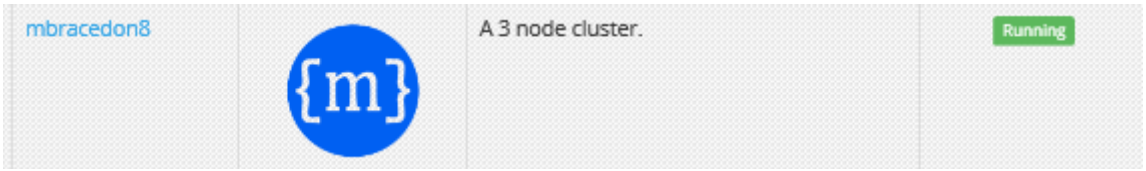


3. Created new storage in the Azure Console

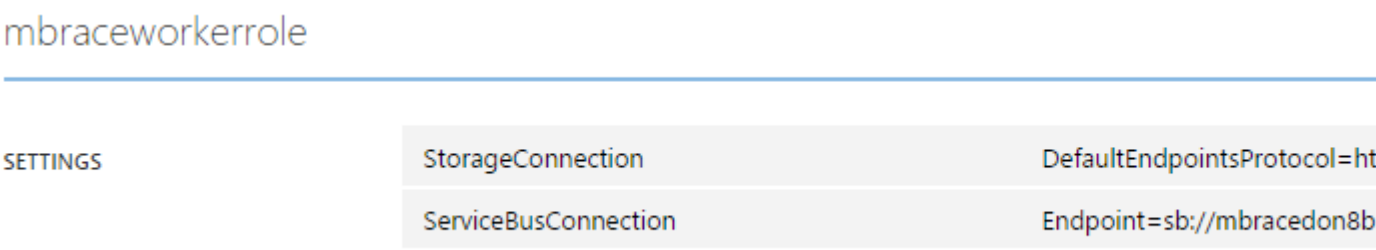


4. Created new cluster in Brisk console





5. Get the connection strings from the portal for the created Cloud Service:



6. Open Visual Studio, reset F# Interactive, enter the connection strings into the starter script:

```
val config : Configuration =
  {StorageConnectionString =
    "DefaultEndpointsProtocol=https;AccountName=mbracedon8storage;"+[99
chars];
   ServiceBusConnectionString =
    "Endpoint=sb://mbracedon8bus.servicebus.windows.net/;SharedAcc"+[97
chars];
   DefaultTableOrContainer = "mbraceruntime";
   DefaultQueue = "mbraceruntimetaskqueue";
   DefaultLogTable = "mbraceruntimelogs";
   DefaultTopic = "mbraceruntimetasktopic";}
```

7. Called GetHandle:

```
let runtime = Runtime.GetHandle(config)
```

```
Binding session to
'C:\Users\dsyme\Documents\MBraceOnBriskStarter\MBraceOnBriskStarter\src\Demo
s\../../lib/Microsoft.Data.Edm.dll'...
Binding session to
'C:\Users\dsyme\Documents\MBraceOnBriskStarter\MBraceOnBriskStarter\src\Demo
s\../../lib/Microsoft.Data.Services.Client.dll'...
Binding session to
'C:\Users\dsyme\Documents\MBraceOnBriskStarter\MBraceOnBriskStarter\src\Demo
s\../../lib/Microsoft.Data.OData.dll'...
Binding session to
'C:\Users\dsyme\Documents\MBraceOnBriskStarter\MBraceOnBriskStarter\src\Demo
s\../../lib/Newtonsoft.Json.dll'...

val runtime : Runtime
```

8. ShowWorkers:

```
Workers


Id                    Hostname        % CPU / Cores  % Memory /
Total(MB)  Network(ul/dl : kbps)  Tasks  Process Id  Initialization
Time         Heartbeat
 --                    --------        -------------  -------------------
-  ---------------------  -----  ----------  -------------------         ---
------
 MBraceWorkerRole_IN_0  RD0003FF5507E5    1.78 / 2       22.08 /
3583.00         38.26 / 19.33      0 / 2        3316  20/02/2015 10:40:13
+00:00  20/02/2015 10:59:10 +00:00
 MBraceWorkerRole_IN_2  RD0003FF550024    2.11 / 2       22.10 /
3583.00         45.91 / 23.32      0 / 2        3204  20/02/2015 10:40:15
+00:00  20/02/2015 10:59:09 +00:00
 MBraceWorkerRole_IN_1  RD0003FF552704    2.43 / 2       22.19 /
3583.00         38.02 / 21.79      0 / 2         268  20/02/2015 10:40:18
+00:00  20/02/2015 10:59:10 +00:00
```

9. ShowProcesses:

```
Processes


Name  Process Id  State  Completed  Execution Time  Tasks  Result
Type  Start Time  Completion Time
 ----  ----------  -----  ---------  --------------  -----  -----------  ---
-------  ---------------

Tasks : Active / Faulted / Completed / Total
```

10. Attach logger:

```
runtime.ClientLogger.Attach(Common.ConsoleLogger())
```

11. Create a cloud computation:

```
let getThread() = Thread.CurrentThread.ManagedThreadId

let work0 =
    cloud { return sprintf "run in the cloud on '%s' thread
'%d'" Environment.MachineName (getThread()) }
    |> runtime.CreateProcess


20022015 11:00:30.715 +00:00 : Creating process
6c31512670884c9eaa5655dc53e5cde1
20022015 11:00:30.719 +00:00 : Uploading dependencies
20022015 11:00:30.726 +00:00 : FSI-ASSEMBLY_4f4cf9fc-e870-4681-9b03-
bea847eff8c0_1, Version=0.0.0.0, Culture=neutral,
PublicKeyToken=null
20022015 11:00:31.611 +00:00 : Creating DistributedCancellationToken
20022015 11:00:31.846 +00:00 : Starting process
6c31512670884c9eaa5655dc53e5cde1
20022015 11:00:33.547 +00:00 : Created process
6c31512670884c9eaa5655dc53e5cde1
```

```
val work0 : Process<string>
```

12. Check status:

```
Process


Name                          Process Id      State  Completed  Execution
Time            Tasks          Result Type  Start
Time                  Completion Time
 ----                          ----------      -----  ---------  -------------
-            -----          -----------  ----------                  -------
--------
       6c31512670884c9eaa5655dc53e5cde1  Completed  True       00:00:00.8355
016    0 /   0 /   1 /   1  string       20/02/2015 11:00:35
+00:00  02/20/2015 11:00:36 +00:00

Tasks : Active / Faulted / Completed / Total
```

13. Check result:

```
work0.AwaitResultAsync() |> Async.RunSynchronously
```

```
val it : string = "run in the cloud on
'RD0003FF550024' thread '9'"
```

Awesome.