



**Cloud Development, 2021 fall.  
Lab 10**

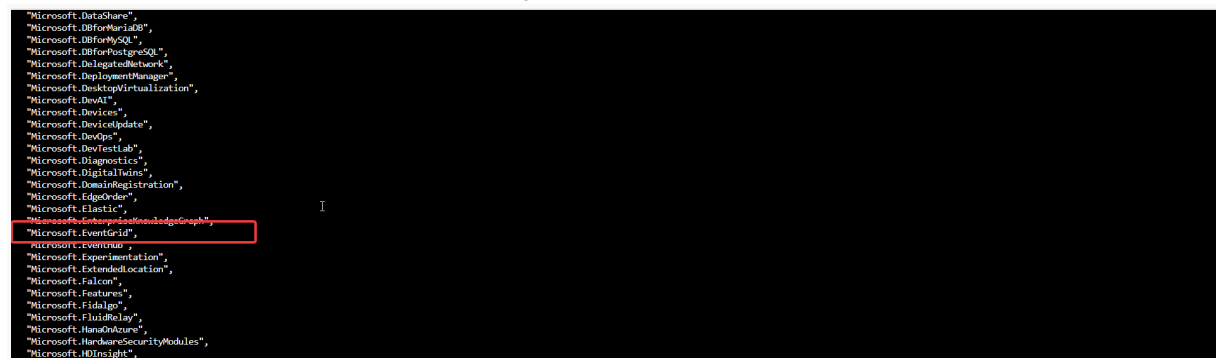
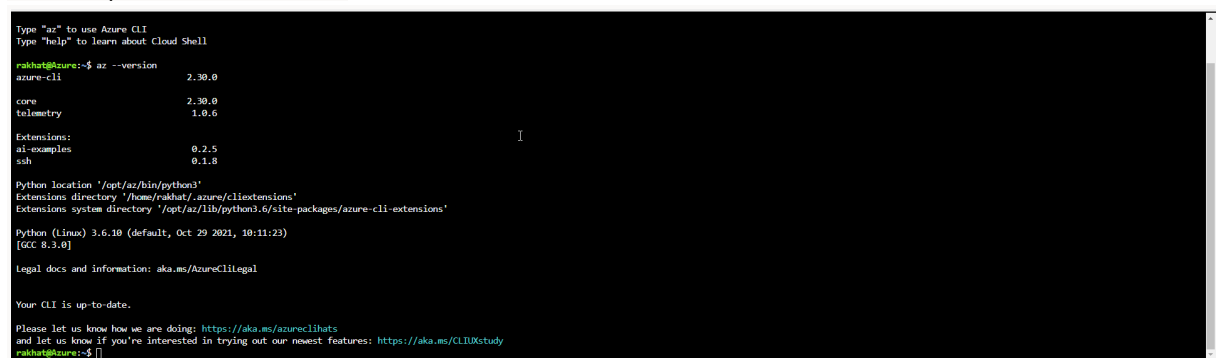
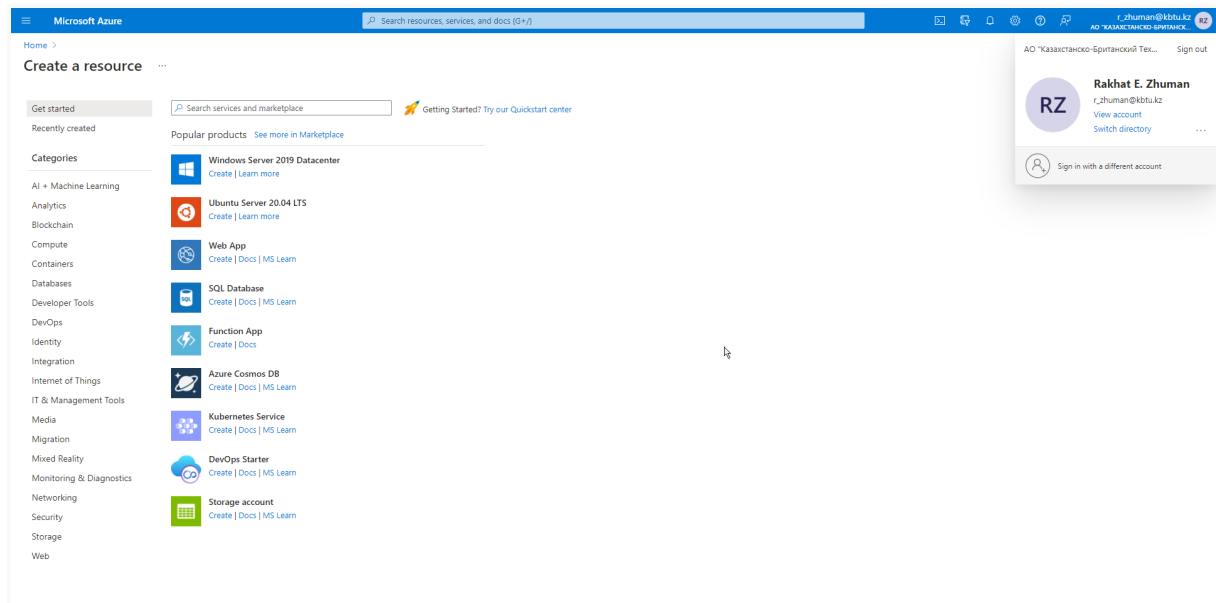
**Report**

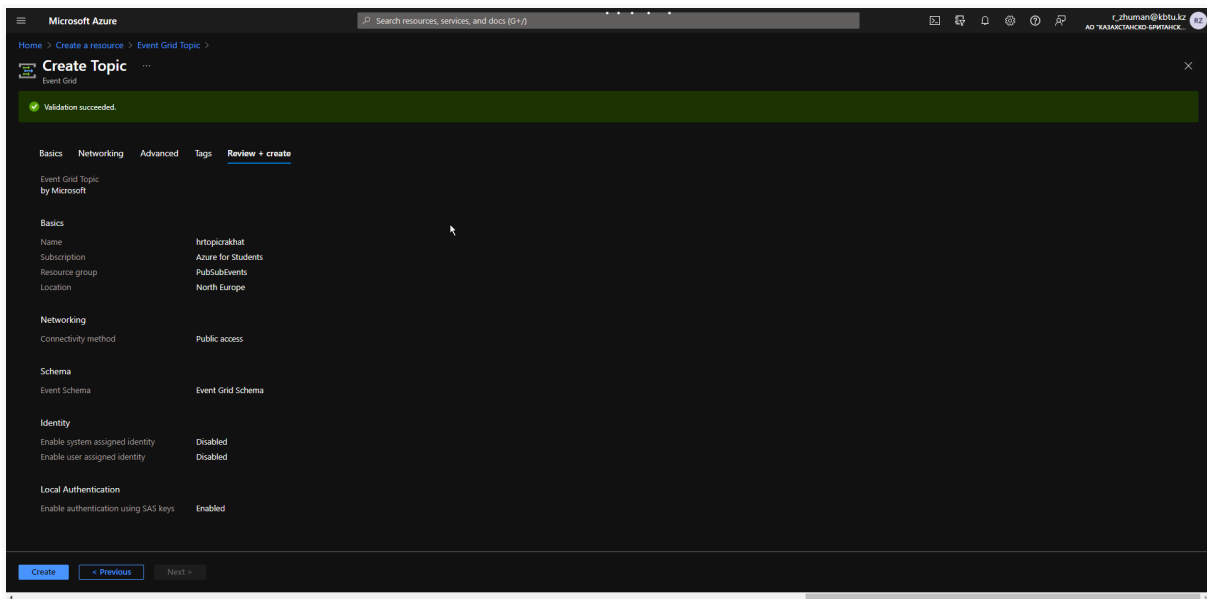
**Publishing and subscribing to Event Grid events**

made by Zhuman Rakhat

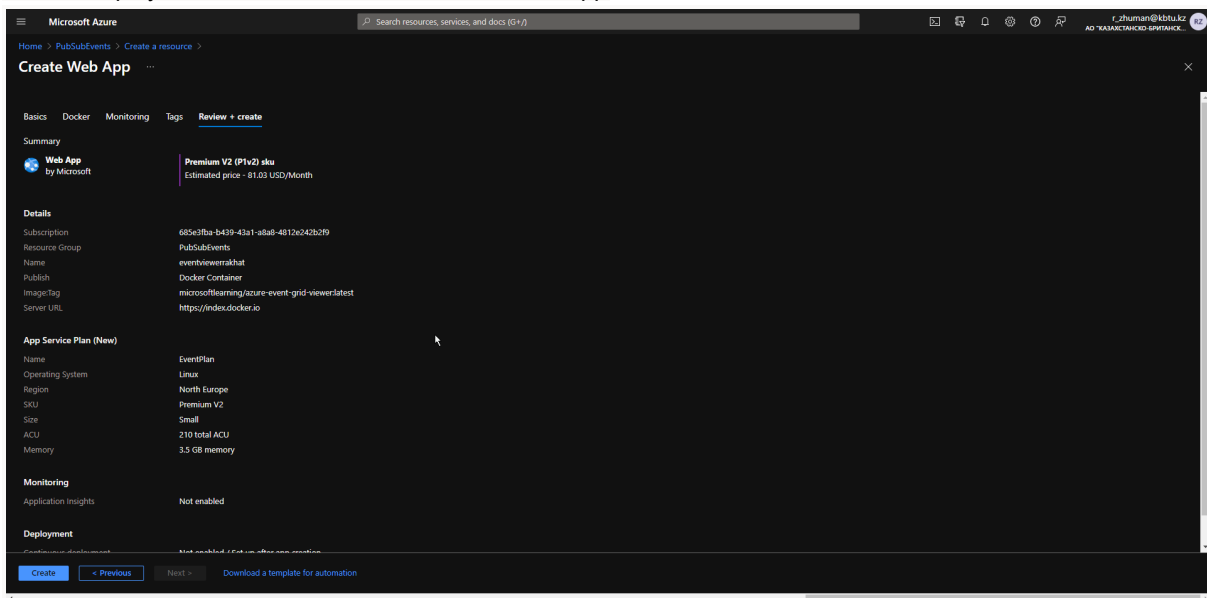
Almaty 2021

## Task 1: Open the Azure portal



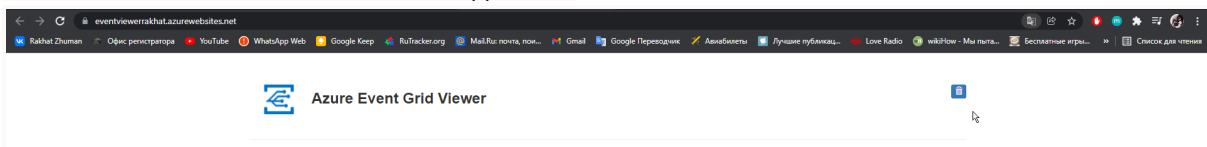


## Task 5: Deploy the Azure Event Grid viewer to a web app

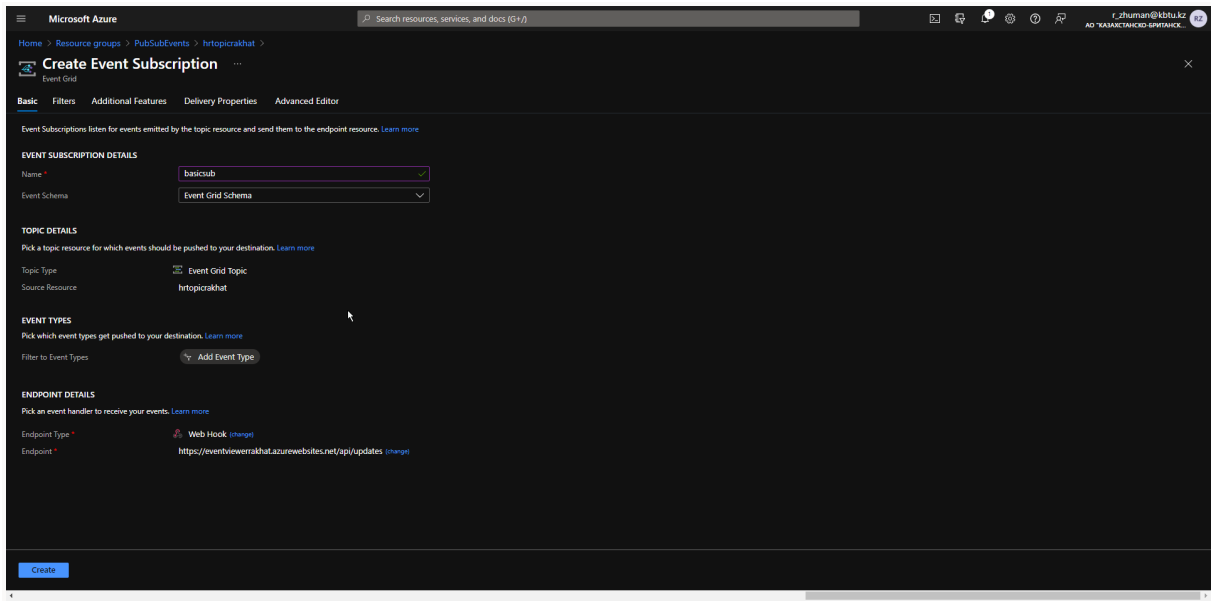


## Exercise 2: Create an Event Grid subscription

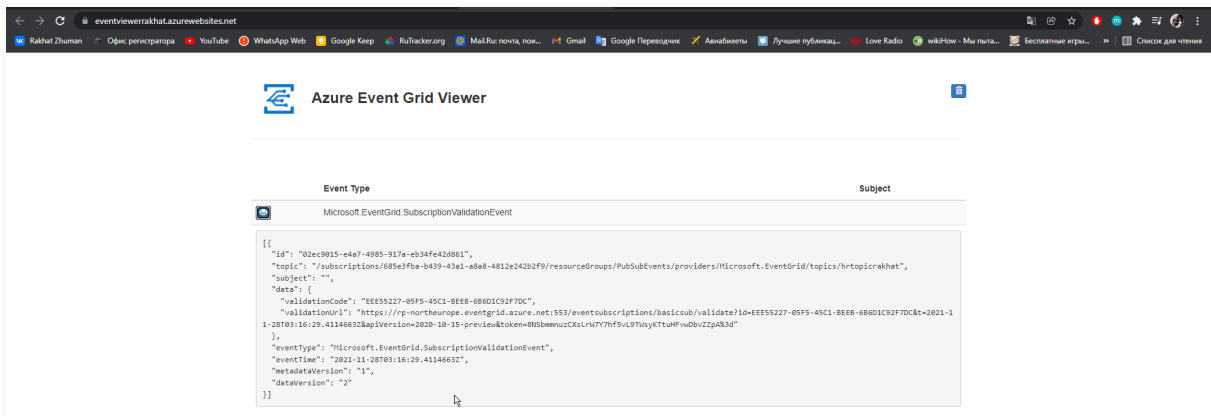
### Task 1: Access the Event Grid Viewer web application



### Task 2: Create new subscription



### Task 3: Observe the subscription validation event



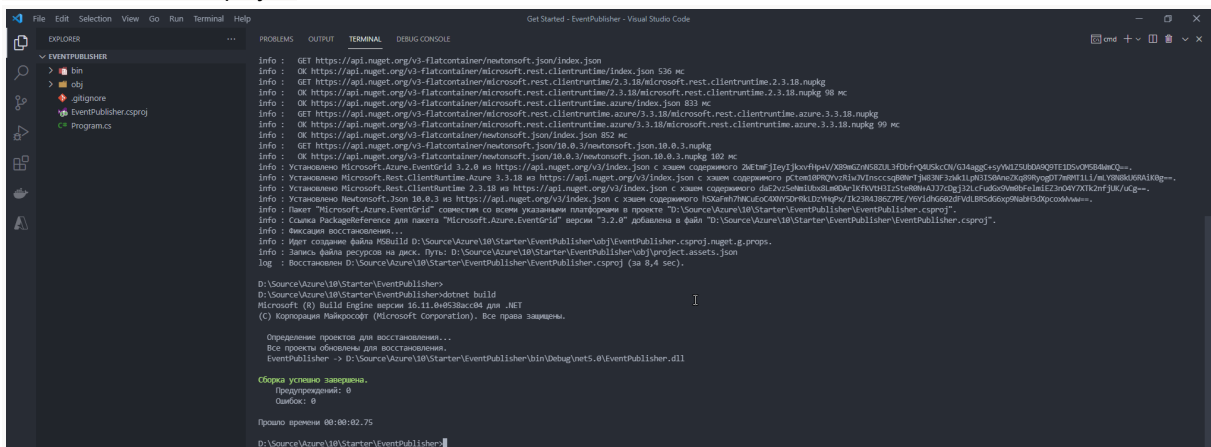
### Task 4: Record subscription credentials

<https://hrtopicrakhat.northerope-1.eventgrid.azure.net/api/events>

21Liib5KltiXuoRC2Xotg+NOTovqjGFIqFW39fA1euQ=

## Exercise 3: Publish Event Grid events from .NET

### Task 1: Create .NET project



### Task 2: Modify the Program class to connect to Event Grid

```
1 using Microsoft.Azure.EventGrid;
2 using Microsoft.Azure.EventGrid.Models;
3 using System;
4 using System.Collections.Generic;
5 using System.Threading.Tasks;
6
7 public class Program
8 {
9     private const string topicEndpoint = "https://hrtopicrakhat.northeurope-1.eventgrid.azure.net/api/events";
10    private const string topicKey = "2iLiB5KitiKuRC2otg4W0tovqIGlqR03FAIevQ";
11    public static async Task Main(string[] args)
12    {
13    }
14 }
15
```

### Task 3: Publish new events

```
22 EventGridEvent firstEvent = new EventGridEvent
23 {
24     Id = Guid.NewGuid().ToString(),
25     EventType = "Employees.Registration.New",
26     EventTime = DateTime.Now,
27     Subject = $"New Employee: {firstPerson.FullName}",
28     Data = firstPerson.ToString(),
29     DataVersion = "1.0.0"
30 };
31 events.Add(firstEvent);
32
33 var secondPerson = new
34 {
35     FullName = "Alexandre Doyon",
36     Address = "456 College Street, Bow, WA 98107"
37 };
38 EventGridEvent secondEvent = new EventGridEvent
39 {
40     Id = Guid.NewGuid().ToString(),
41     EventType = "Employees.Registration.New",
42     EventTime = DateTime.Now,
43     Subject = $"New Employee: {secondPerson.FullName}",
44     Data = secondPerson.ToString(),
45     DataVersion = "1.0.0"
46 };
47 events.Add(secondEvent);
48
49 string topicHostname = new Uri(topicEndpoint).Host;
50 await client.PublishEventsAsync(topicHostname, events);
51
52 Console.WriteLine("Events published");
53 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

D:\Source\Azure\lab\Starter\EventPublisher>dotnet build  
Microsoft (R) Build Engine version 16.11.040538ac04 для .NET  
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.

Определение проектов для восстановления...  
Все проекты обновлены для восстановления.  
EventPublisher -> D:\Source\Azure\lab\Starter\EventPublisher\bin\Debug\net5.0\EventPublisher.dll

Сборка успешно завершена.  
Продолжим: 0  
Ошибок: 0

Прошло времени 00:00:02.75

D:\Source\Azure\lab\Starter\EventPublisher>dotnet run  
Events published

D:\Source\Azure\lab\Starter\EventPublisher>

### Task 4: Observe published events

Event Type	Subject
Employees.Registration.New	New Employee: Alexandre Doyon
<pre>{   "id": "4dc98dc-c4c4-4cc8-8617-83ba1ca7d68",   "subject": "New Employee: Alexandre Doyon",   "data": "[ { FullName = Alexandre Doyon, Address = 456 College Street, Bow, WA 98107 } ]",   "eventType": "Employees.Registration.New",   "dataVersion": "1.0.0",   "metadataVersion": "1",   "eventTime": "2021-11-28T03:24:37.5035739Z",   "topic": "/subscriptions/685e3fba-b439-43a1-a8a8-4812e242b2f9/resourceGroups/PubSubEvents/providers/Microsoft.EventGrid/topics/hrtopicrakhat" }</pre>	
Employees.Registration.New	New Employee: Alba Sutton
<pre>{   "id": "37e7d19f-ecfe-4bea-8dd1-9f462350a5b",   "subject": "New Employee: Alba Sutton",   "data": "[ { FullName = Alba Sutton, Address = 4567 Pine Avenue, Edison, WA 97202 } ]",   "eventType": "Employees.Registration.New",   "dataVersion": "1.0.0",   "metadataVersion": "1",   "eventTime": "2021-11-28T03:24:37.5020652Z",   "topic": "/subscriptions/685e3fba-b439-43a1-a8a8-4812e242b2f9/resourceGroups/PubSubEvents/providers/Microsoft.EventGrid/topics/hrtopicrakhat" }</pre>	

## Exercise 4: Clean up your subscription

### Task 2: Delete resource groups

```
Bash
```

```
Requesting a Cloud Shell.Succeeded.  
Connecting terminal...  
  
Welcome to Azure Cloud Shell  
  
Type "az" to use Azure CLI  
Type "help" to learn about Cloud Shell  
  
rakhat@Azure:~$ az group delete --name PubSubEvents --no-wait --yes  
rakhat@Azure:~$
```