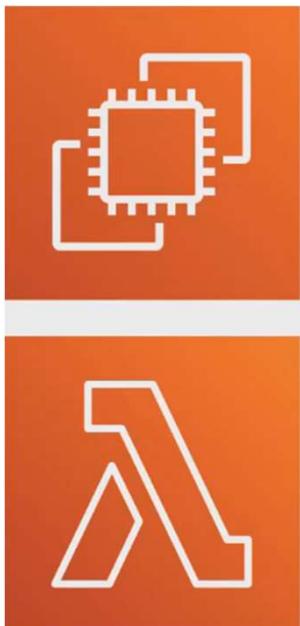


# AWS Gyakorlat Lambda

Felde Imre

# AWS Lambda



- Virtuális szerverek a felhőben
  - RAM és CPU korlátozza
  - Folyamatosan futnak
  - A skálázás azt jelenti, hogy szervereket lehet hozzáadni vagy eltávolítani
- 
- Virtuális függvények – nincs szükség szerverek kezelésére
  - Időkorlátosak – rövid futásidőjűek
  - Igény szerint futnak  
A skálázás automatikus!

# AWS Lambda előnyök

- **Egyszerű árképzés**
  - Fizetés kérésenként és számítási idő alapján
  - Ingyenes szint: 1 000 000 AWS Lambda kérés és 400 000 GB számítási idő
- Teljesen integrált az egész AWS Stack-kel
- Sok programozási nyelvvel integrálható
- Könnyen monitorozható az AWS CloudWatch segítségével
- Egyszerűen növelhetők az erőforrások függvényenként (akár 1,5 GB RAM-ig!)
- A RAM növelése javítja a CPU és a hálózat teljesítményét is!

# AWS Lambda

The screenshot shows the AWS Lambda homepage. It features a large heading "AWS Lambda" with the tagline "lets you run code without thinking about servers." Below this, there's a section about compute costs and a "Get started" button. A red circle highlights the "Create a function" button at the bottom of the page.

The screenshot shows the "Create function" wizard. It starts with a "Basic information" step where you can enter the function name ("myUJS-function") and choose the runtime ("Python 3.13"). It then moves through "Architecture" (choosing "x86\_64"), "Permissions" (noting default execution role creation), and "Additional configurations". Finally, it reaches the "Create function" step, which contains a "Create function" button highlighted with a red circle.

# Lamda test

The screenshot shows the AWS Lambda console interface. At the top, there's a search bar and navigation links for 'Lambda > Functions > myUJS-function'. A message box says 'Successfully created the function myUJS-function. You can now change its code and configuration. To invoke your function with a test event, choose "Test".' Below this, the 'myUJS-function' card displays the following details:

- Function overview**: Shows a diagram icon, a 'myUJS-function' box, and 'Layers (0)'.
- Description**: Last modified 2 minutes ago.
- Function ARN**: arn:aws:lambda:eu-north-1:49354280892:function:myUJS-function
- Function URL**: Info

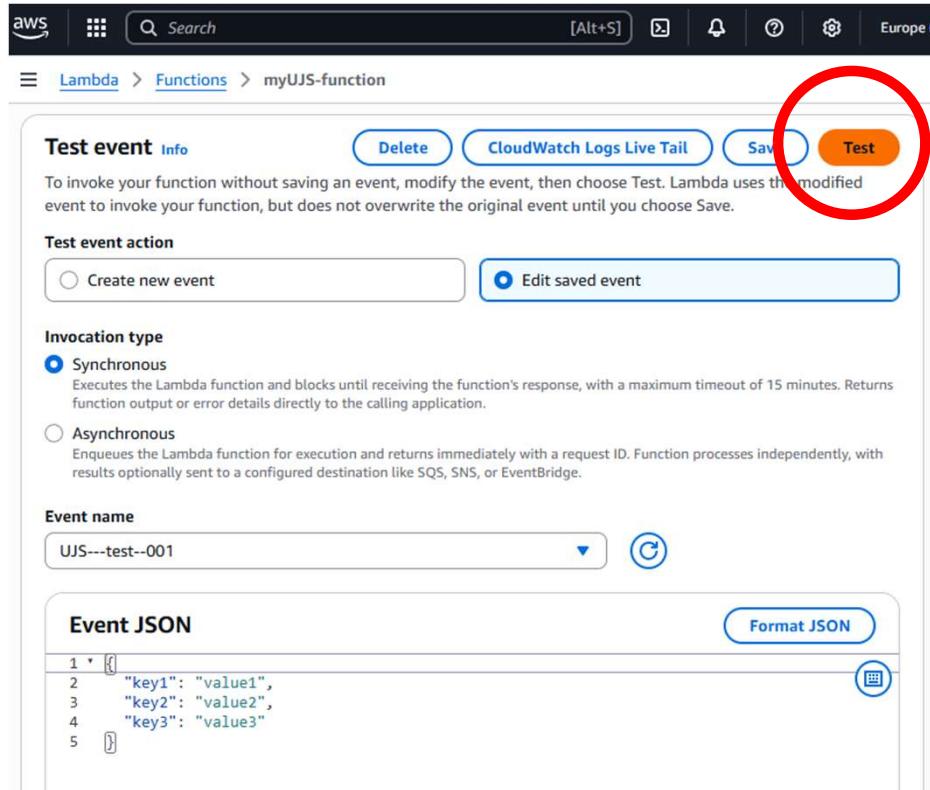
Below the card are buttons for 'Throttle', 'Copy ARN', and 'Actions'. The 'Code' tab is selected. The 'Test' tab is circled in red. Other tabs include 'Monitor', 'Configuration', 'Aliases', and 'Versions'.  
  
The 'Code source' section shows the file 'lambda\_function.py' with the following code:import json  
def lambda\_handler(event, context):  
 # TODO implement  
 return {  
 'statusCode': 200,  
 'body': json.dumps('Hello from Lambda!')}

This screenshot shows the 'Test' tab selected in the AWS Lambda function configuration interface. The top navigation bar includes 'Code', 'Test' (circled in red), 'Monitor', 'Configuration', 'Aliases', and 'Versions'.  
  
The 'Code source' section is identical to the one in the previous screenshot, displaying the 'lambda\_function.py' code:

```
import json  
def lambda_handler(event, context):  
    # TODO implement  
    return {  
        'statusCode': 200,  
        'body': json.dumps('Hello from Lambda!')}
```

  
Below the code editor, there are 'EXPLORER' and 'DEPLOY' sections. The 'DEPLOY' section contains two buttons: 'Deploy (Ctrl+Shift+U)' and 'Test (Ctrl+Shift+I)'.  
  
A tooltip 'Amazon Q Tip 1/3: Start typing to...' appears over the code editor area.

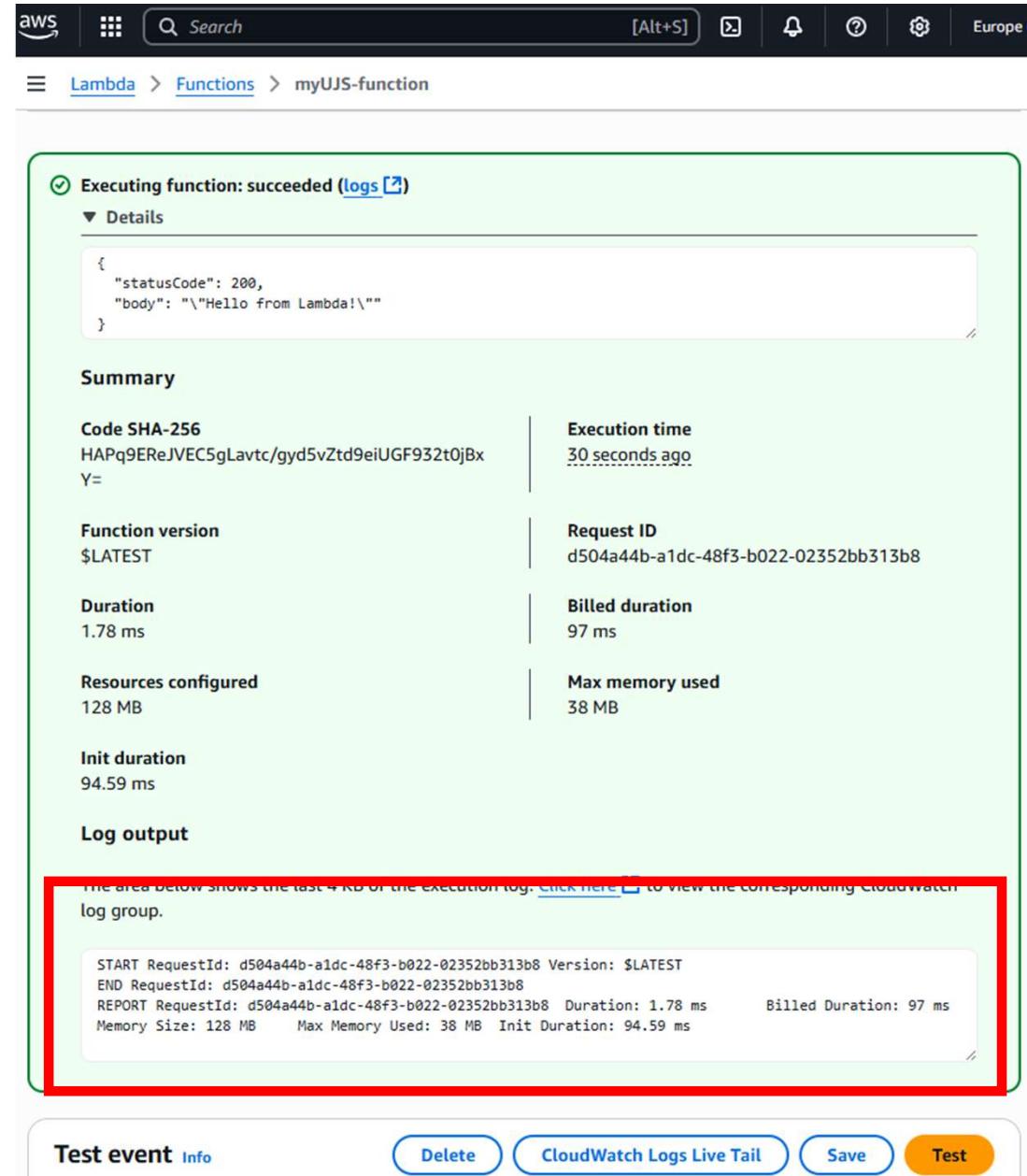
# Lambda Test



The screenshot shows the AWS Lambda function configuration page for 'myUJS-function'. The 'Test event' section is active, displaying a JSON event payload:

```
1 {  
2   "key1": "value1",  
3   "key2": "value2",  
4   "key3": "value3"  
5 }
```

Below the event, there are sections for 'Invocation type' (set to 'Synchronous'), 'Event name' ('UJS--test--001'), and 'Event JSON' (the same JSON payload). At the top right of this panel, the 'Test' button is highlighted with a red circle.



The screenshot shows the AWS Lambda function execution details for 'myUJS-function'. The execution was successful, returning the response:

```
{  
  "statusCode": 200,  
  "body": "\"Hello from Lambda!\""  
}
```

The 'Summary' section provides the following details:

Code SHA-256	Execution time
HAPq9EReJVEC5gLavtc/gyd5vZtd9eiUGF932t0jBxY=	30 seconds ago
Function version	Request ID
\$LATEST	d504a44b-a1dc-48f3-b022-02352bb313b8
Duration	Billed duration
1.78 ms	97 ms
Resources configured	Max memory used
128 MB	38 MB
Init duration	
94.59 ms	

The 'Log output' section displays the execution log:

```
START RequestId: d504a44b-a1dc-48f3-b022-02352bb313b8 Version: $LATEST  
END RequestId: d504a44b-a1dc-48f3-b022-02352bb313b8 Duration: 1.78 ms Billed Duration: 97 ms  
REPORT RequestId: d504a44b-a1dc-48f3-b022-02352bb313b8 Duration: 1.78 ms Memory Size: 128 MB Max Memory Used: 38 MB Init Duration: 94.59 ms
```