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SERVERLESS CALCULATION WITH AWS LAMBDA

AWS Lambda is a compute service that lets you run code for almost any type of application or backend service, all without the need for administration. AWS Lambda handles all of the administration for you, including server and operating system maintenance, provisioning and autoscaling, code monitoring, and logging. All you need to do is provide your code in one of the languages that AWS Lambda supports.

Benefits:

− you pay only for the time when the service is running;

− the lambda itself rises and runs very quickly;

− lambda has many options for integrating with AWS services;

− in parallel, depending on the region, a maximum of 1000 to 3000 copies can be executed. And, if desired, this limit can be raised by writing to support.

Lambda Triggers

Triggers are lambda «triggers». Lambda is one function that is executed when requested by triggers.

Lambda is currently integrated with the following triggers:

− AWS IoT;

− API Gateway;

− Application Load Balancer;

− CloudFront;

− CloudWatch Events;

− CloudWatch Logs;

− CodeCommit;

− Cognito Sync Trigger;

− DynamoDB;

− Alexa Skills Kit;

− Kinesis;

− S3;

− Alexa Smart Home;

− SNS;

− SQS.

Permissions to AWS Services

These are AWS services that the lambda has access to by default. In the function that you will write, you can always connect the AWS SDK and without keys or any authorization parameters, you can use the available services. You define all available services in the IAM Role that you use for this lambda.

Each language you use has its own SDK that can communicate with core AWS services.

VPC

You can set up a virtual network for your lambda, for example to securely connect to RDS.

Logging

All requests for lambda functions are displayed in CloudWatch, and data on execution time and memory consumed are also recorded there. It is also possible to log your own data, for example, using console.log, when running a lambda function in the Node.js environment, and statistics are displayed in the Monitoring tab.

Environment Variables

It is possible to transfer environment variables to the code, which allows you to transfer secret data to the function code. It is also possible to encrypt environment variables through keys.

Versioning

The service supports versioning. You can set the version for each loaded copy of the function. Versions can be aliased to indicate a specific version.

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**DEVELOPMENT OF A SUBSYSTEM
FOR MANAGING DATA FLOWS**

It is possible to find different solutions of systems for managing product contents. Although often they are not free or cheap and despite the advantages there are some bottlenecks as well.

There isn't a free web application that will be able of maintaining 80+ businesses' product content data. To automate the flow of a company, it is desirable to have your own tool with all the features you need, and the possibility of adding new features as well. The application should receive