

Node

Introduzione

Cos'è Node ?

Node js is an open source and cross-platform runtime environment for executing java script code outside of a browser.

Quite often we use node to obuild back-end services also called API (Application Programming Interface) these are the services that power our client applications, like a web app running insede of a web browser or mobile app running on a mobile device, these client apps are simply what user sees and interacts with they're, just surface.

Node is ideal for building higly-scalable data intensive and real-time back-end services that power our client apps.

Node is easy to get started and can be used for prototyping and agile development.

Node architecture

Before Node we use javascript only to build application that run inside of a browser , so every browser out there has what we call a javascript engine.

That takes javascript code, and transforms it that computer can understand

Example

- microsoft edge uses chakra
- firefox uses SpiderMonkey
- chrome uses v8

for these varieties of engines that javascript code can behave in different way in one browser or another.

In 2009 *Ryan Dahl* the creator of Node came up with brilliant idea he thought it would be great to execute javascript outside of a browser.

He took v8, and embedded it inside a c++ program and called that program node. We have a different object from the environment objects we have in browser.

Example

We don't have the document object —>document.getElementById(""); See on wikipedia

But i can work with file system – fs.readFile()

listen for requests –http.createServer() and a given port and so on.

Inside of a browser we can't do that.

In essence: Node is a program that includes the v8 javascript engine plus and additional modules that give us capabilities not available inside browser. browser and node have the same engine, but have different runtime environment for javascript.

Node is not a programming language, and isn't frameworks for building web application, it's a runtime environment for executing javascript.

How node works

Node is highly-scalable, this is because of the non-blocking or asynchronous nature of node. Node applications are asynchronous by default.

Node is ideal for I/O-intensive apps

I continue in the folder /home/linic/node

Node Module System

What modules are?

Why we need them and how they work?

we'll explore a few of the modules built into the core of node such as operating system, file system, events and http.

Global object

//continue in Node folder with index2.js

Modules

In the client-side javascript that we run inside of browser, when we declare a variable or a function that is added to the Global scope for. continue in index3.js

So rimasto a 22'