



JÖNKÖPING UNIVERSITY

*School of Engineering*

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# RUNNING NODE.JS ON LIGHTSAIL

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# WHAT IS AMAZON WEB SERVICES?

A collection of services from Amazon we can use:

- Elastic Compute Cloud (EC2): General (virtual) servers
- Relational Database Service (RDS): Servers for databases
- Simple Storage Service (S3): Storing files
- ...

There are other alternatives:

- Amazon Web Services: <https://aws.amazon.com/>
- Google Cloud: <https://cloud.google.com/>
- Microsoft Azure: <https://azure.microsoft.com/en-us/>
- ...

# WHAT IS LIGHTSAIL?

One of Amazon's services we can use to run web applications.

- <https://aws.amazon.com/lightsail/>

# RUNNING ON PORT 8080

## 1. Upload your code

- Have it in a Git repository? `git clone ...`
- Use an SFTP client: [https://lightsail.aws.amazon.com/ls/docs/en\\_us/articles/amazon-lightsail-connecting-to-linux-unix-instance-using-sftp](https://lightsail.aws.amazon.com/ls/docs/en_us/articles/amazon-lightsail-connecting-to-linux-unix-instance-using-sftp)
  - FileZilla: <https://filezilla-project.org/>
  - ...

2. `cd the-project-folder`

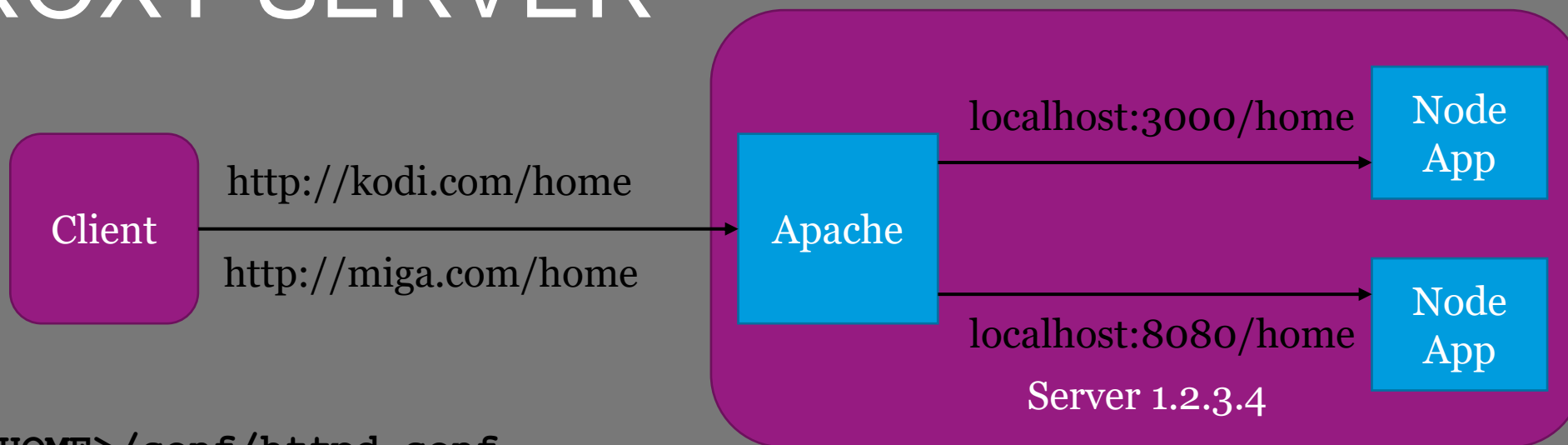
3. `npm install`

4. `node app.js`

- `forever start app.js`
- `forever list`
- `forever stop processId`

## 5. Open port 8080 on the server instance

# PROXY SERVER

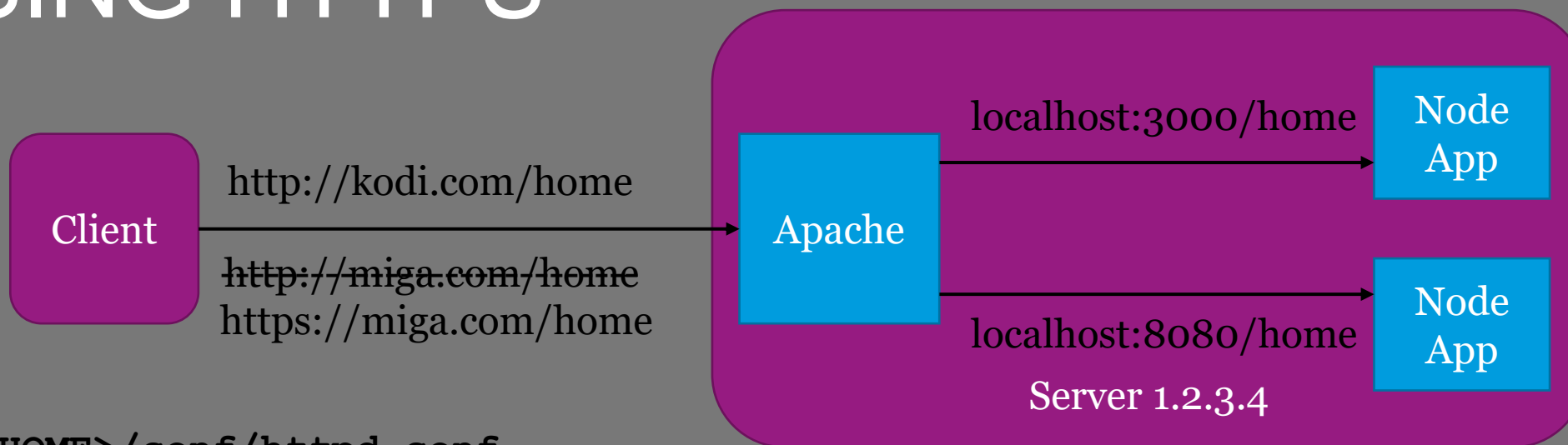


```
<APACHE_HOME>/conf/httpd.conf
```

```
Listen 80
<VirtualHost *:80>
    ServerName kodi.com
    ProxyPass / http://localhost:3000/
</VirtualHost>
<VirtualHost *:80>
    ServerName miga.com
    ProxyPass / http://localhost:8080/
```

```
</VirtualHost>
```

# USING HTTPS



```
<APACHE_HOME>/conf/httpd.conf
```

```
Listen 443
```

```
Listen 80
```

```
<VirtualHost *:80>
```

```
    ServerName kodi.com
```

```
    ProxyPass / http://localhost:3000/
```

```
</VirtualHost>
```

```
<VirtualHost *:443>
```

```
    ServerName miga.com
```

```
    ProxyPass / http://localhost:8080/
```

```
    SSLEngine on
```

```
    SSLCertificateFile "/path/to/www.example.com.cert"
```

```
    SSLCertificateKeyFile "/path/to/www.example.com.key"
```

```
</VirtualHost>
```

## HTTPS:

1. Get a domain name:  
<https://internetstiftelsen.se/>
2. Map the domain name to your server's IP address.
3. Create a certificate signed by a Certificate Authority:  
<https://letsencrypt.org/getting-started/>
4. Tell Apache about your certificate.

# RUNNING WITH APACHE

## One way to do it:

1. Start your app listening on port 8080.
2. `nano /opt/bitnami/apache/conf/vhosts/00_status-vhost.conf`

```
<VirtualHost *:80>  
    ProxyPass / http://localhost:8080/  
</VirtualHost>
```

3. `sudo /opt/bitnami/ctlscript.sh restart apache`