



Oracle APEX como frontend para tu Java backend

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@signal006



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Oracle APEX

- Plataforma de desarrollo low-code que permite crear aplicaciones asombrosas, escalables y seguras.
- Sin costos adicionales.
- Cualquier edición de base de datos. A partir de la 11g.
- Pruebalo gratis en <https://apex.oracle.com/en/>
https://cloud.oracle.com/es_ES/tryit



Oracle APEX

- Aplicación y diapositivas:
 - <https://apex.oracle.com/pls/apex/f?p=Groundbreakers>



Backend

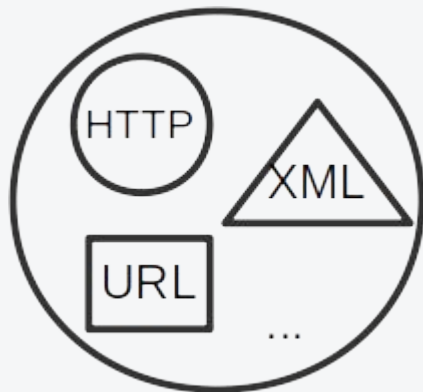
- Java RESTful API.
- Oracle Application Container Cloud
- MySQL Cloud Service
-



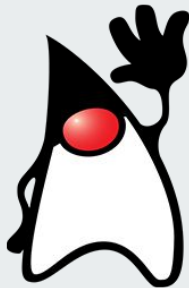
Java RESTful API

REpresentational State Transfer

Sin Estado



/img/file.png



Java RESTful API

RESTful APIs



Swagger
Open API

Apiary
BluePrint



frontend



HTTP



backend





Java RESTful API

HyperText Transfer Protocol

- Protocolo Petición-Respuesta
- TCP
- Encabezados como método de extensión
 - Authorization
 - Cache-Control
 - Content-type
 - ...



Java RESTful API

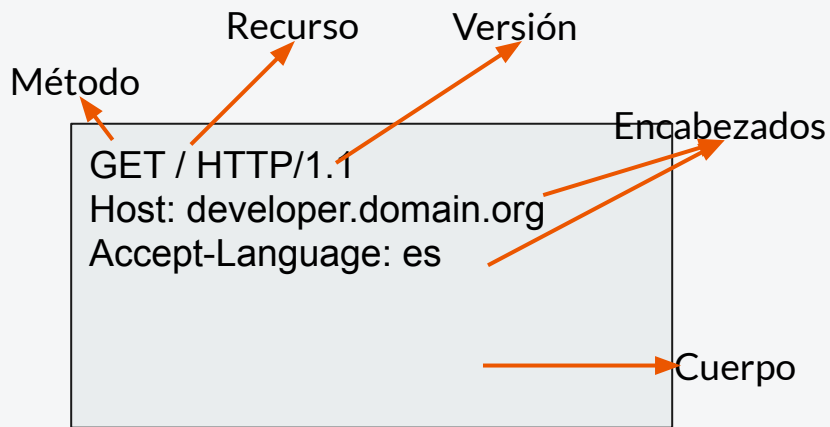
HyperText Transfer Protocol

- Verbos significativos
 - GET, POST, PUT, PATCH, DELETE...
- Respuestas significativas
 - 1xx -> Informativas
 - 2xx -> Operaciones exitosas (200 OK, 201 Created...)
 - 3xx -> Redireccionamiento (301 Moved Permanently, 304 Not Modified...)
 - 4xx -> Errores de cliente (400 Bad Request, 404 Not Found...)
 - 5xx -> Errores de servidor (500 Internal Server Error...)

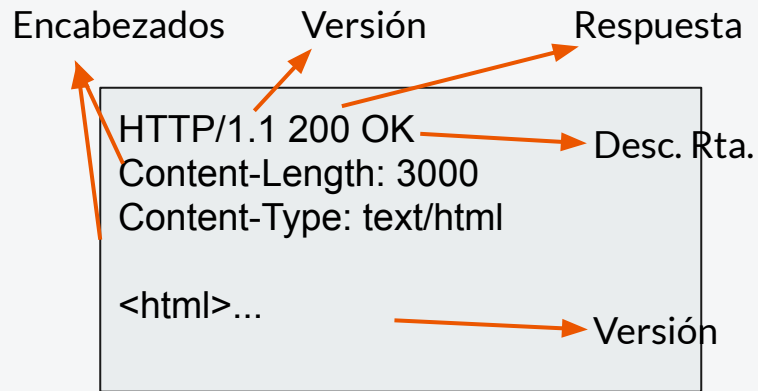


Java RESTful API

HyperText Transfer Protocol



PETICIÓN



RESPUESTA



Java RESTful API

RESTful APIs - Algunas buenas prácticas



SSL



Documentación

<https://www.googleapis.com/blogger/v2/users/userId>

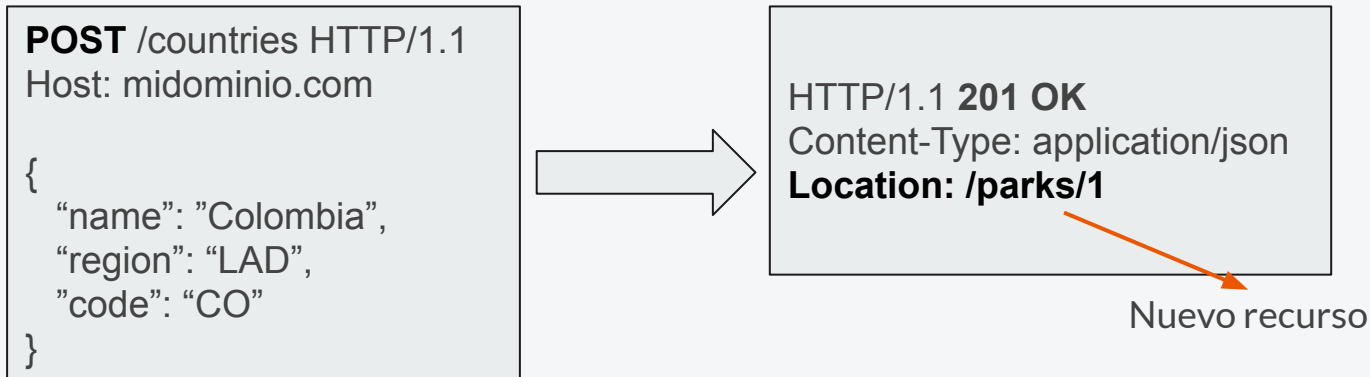
<https://www.googleapis.com/blogger/v3/users/userId>

Versionamiento en URL



Java RESTful API

RESTful APIs - Algunas buenas prácticas



Retornar el recurso creado/actualizado después de POST, PUT o PATCH



Java RESTful API

RESTful APIs - Algunas buenas prácticas

HTTP/1.1 **400 Bad Request**

```
{  
  "code": "ERR-01",  
  "message": "Recurso ya existe",  
  "description": "Existe un parque  
                 con el mismo nombre"  
}
```

Definir mensajes de error con
información útil

Restantes

Permitidas

```
HTTP/1.1 200 OK  
X-Rate-Limit-Limit: 1000  
X-Rate-Limit-Remaining: 590  
X-Rate-Limit-Reset: 1800  
...
```

Seg. restantes

Proveer info de límites de uso



Java RESTful API

Tecnologías Java



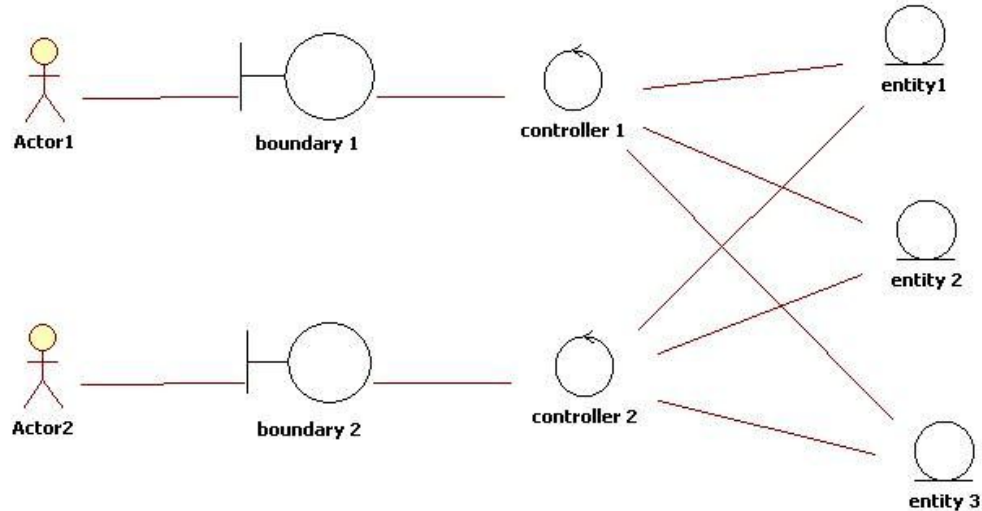
CDI

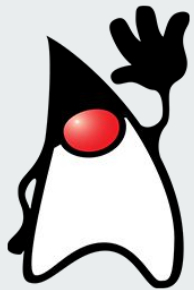




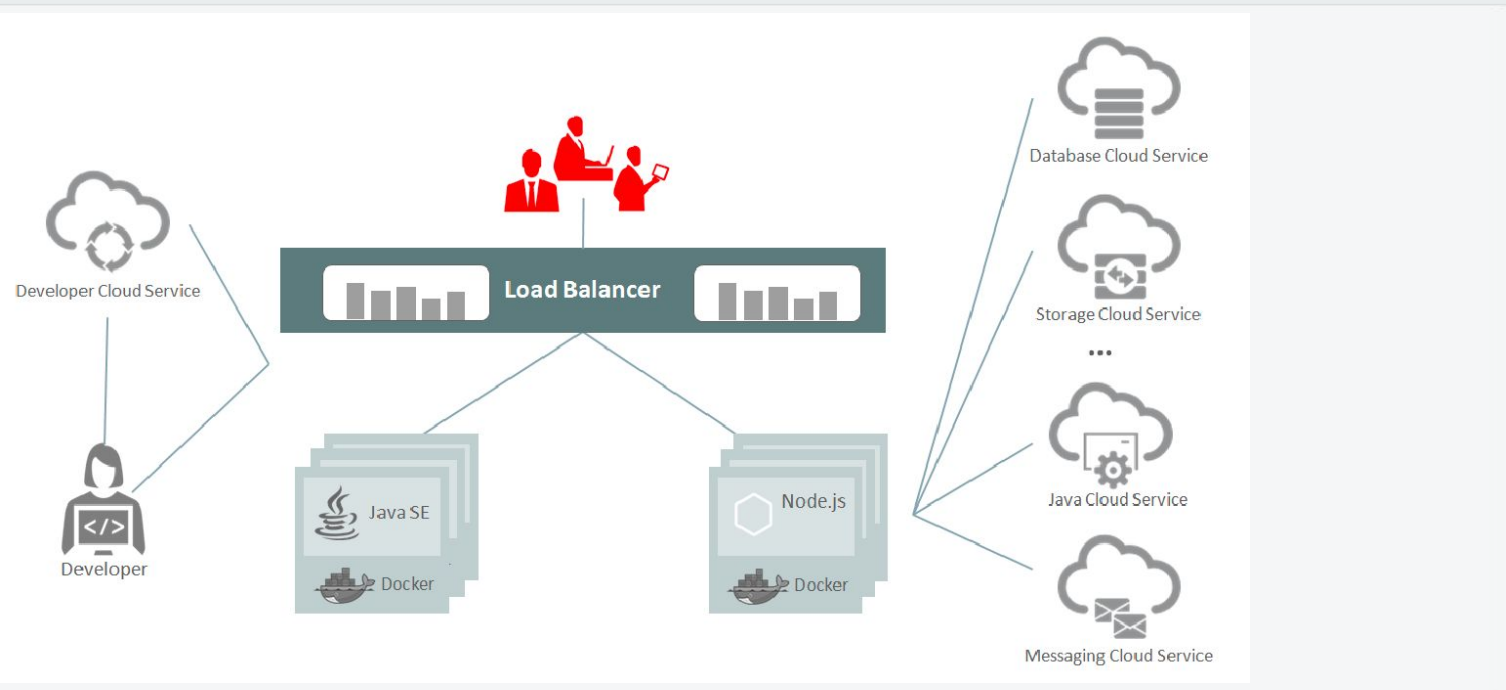
Java RESTful API

Patrón de Diseño: Entity Control Boundary (ECB)





Oracle Application Container Cloud





Oracle Application Container Cloud

Tecnologías soportadas



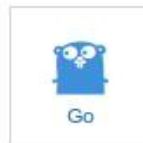
Create Application

Select your application platform.

Oracle



DockerHub





Oracle Application Container Cloud

Escalamiento automático

Edit Rule [X]

Perform **Scale Out** to **Maximum Size** of **5**

whenever **Average** of **Memory Utilization** is **>=** **95.0** %

for at least **1** consecutive period(s) of **5** minutes

on **Any** Instances

and wait for **5** minutes of cool down period.

Update **Cancel**

Add Rule [X]

Perform **Scale Down** to **1** **GB Memory**

whenever **Maximum** of **Memory Utilization** is **<=** **30.0** %

for at least **2** consecutive period(s) of **5** minutes

on **Any** Instances

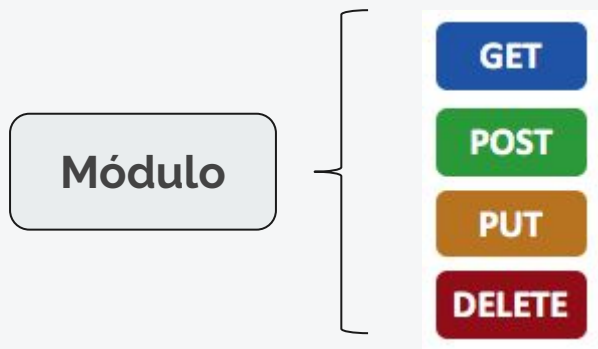
and wait for **10** minutes of cool down period.

Create **Cancel**



Web Source Modules

- Referencia a uno o más servicios web externos.





Módulo

Regiones

List all regiones

Select a Region

GET

Create Region

POST

Update Region


PUT

Delete a Region

DELETE



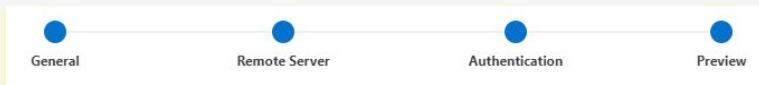
Wizard



Shared Components

Data Sources

- Data Load Definitions
- REST Enabled SQL
- Web Source Modules**
- Legacy Web Service References



Create Web Source Module - Method



When you create a new web source module, you have two options. You can create a new web source module from scratch or you reuse implementations that already exist in your application or in other applications within your workspace.

- Create Web Source Module:
- From scratch** ?
 - As copy of an existing web source module



Wizard

Create Web Source

General

Web Source Type

- Simple HTTP
- Oracle REST Data Services
- Oracle Cloud Applications (SaaS) REST Service

* Name

* URL Endpoint

HTTPS Host Name

Create Web Source - Remote Server

Remote Server

Remote Server

Base URL

* Service URL Path

Authentication

Authentication

* Authentication Required Yes No

Web Source Discovery

Data

Data Profile

Regionid ↑	Regionname



Operations

Data Profile

JSON

Response Format






Table

Returns

2

Columns

Operations

	Operation	Database Action	URL Pattern
	GET	Fetch rows	.
	DELETE	Delete row	:regionId
	PUT	Update row	:regionId
	GET	Fetch single row	:regionId
	POST	Insert row	.



Web Credentials

- **Basic Authentication**
 - Username
 - Password
- **OAuth2 Client Credentials Flow**
 - Client ID
 - **OAuth2 Client Secret**



Autenticación

- Cuentas de Base de Datos
- Cuentas de APEX
- Directorio LDAP
- Oracle Application Server Single Sign On
- Social Sign In
- Personalizado



APEX_WEB_SERVICE

```
apex_web_service.make_rest_request(  
p_url          => URL  
p_http_method => 'POST',  
p_body        => '{  
                "user": "groundbreakers",  
                "password": "12345"  
            }'  
);
```



Configuración

Reporte de Regiones

ORA-20001: Ha excedido el número máximo de solicitudes de servicio web por espacio de trabajo. Póngase en contacto con el administrador.

Workspace Isolation

Configure isolation and resource limitation default values for all workspaces. Override these default values at workspace level.

Allow Hostnames



Resource Consumer Group



Maximum Concurrent Workspace Requests



Maximum Concurrent Session Requests



Concurrent Session Requests Kill Timeout



Maximum Size of Files in Workspace



Maximum Web Service Requests



Próximo Evento



ASUOC
ASOCIACIÓN DE USUARIOS ORACLE DE COLOMBIA

PATROCINADORES!

ORACLE GROUNDBREAKERS
Tour LATAM 2019

Cartagena

15 y 16 Agosto

Gracias

