

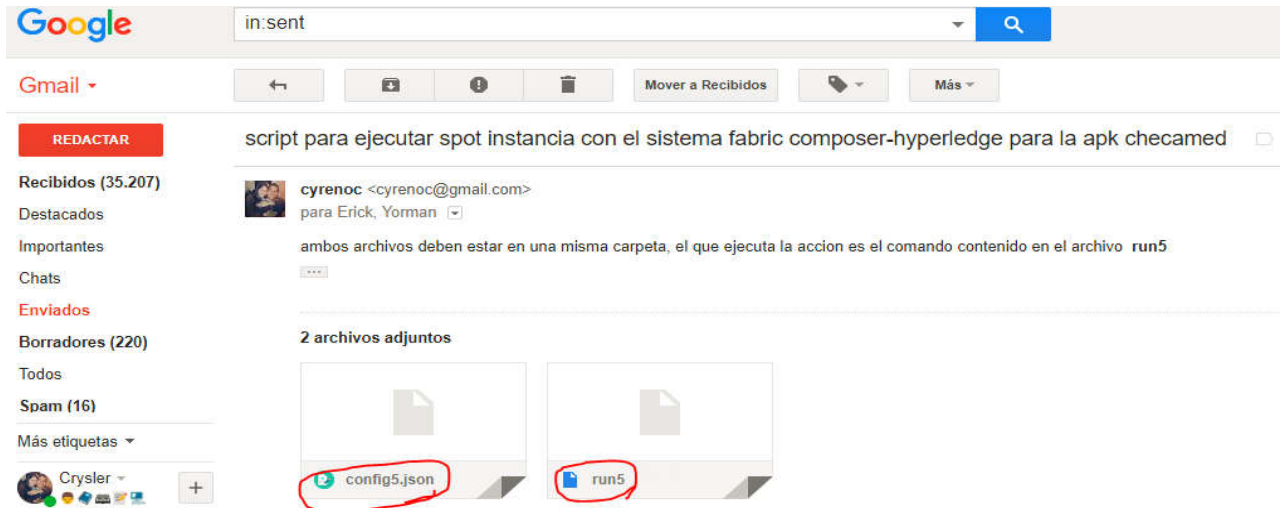
Levantar y ejecutar el fabric-composer de la **apk** checaMed



**VERSION 1.0**

28-01-2018

Descargar los 2 archivos enviados al email:



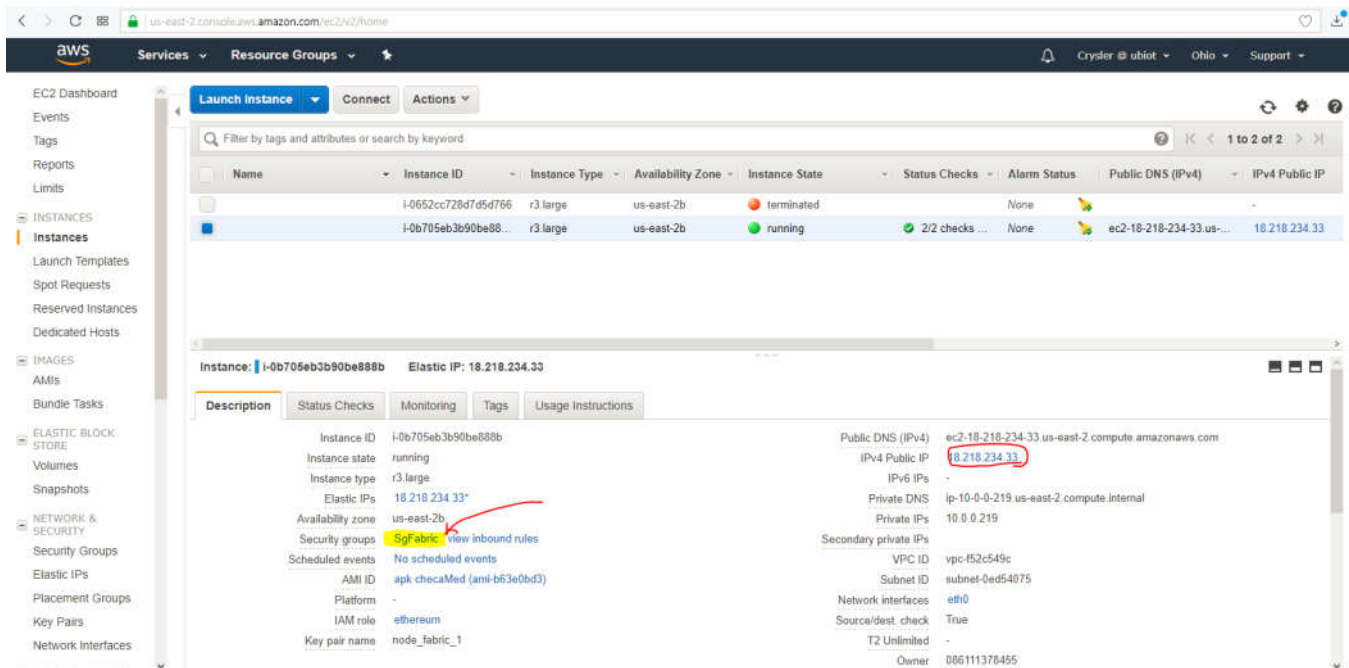
Abrimos el archivo **run5** y copiamos el contenido y lo pegamos en la consola, y ejecutamos:

```

C:\WINDOWS\system32\cmd.exe
C:\Users\cyrs\aws>aws ec2 request-spot-instances --spot-price "0.2" --instance-count 1 --type "one-time" --launch-specification file://config5.json
{
  "RequestSpotInstances": {
    "SpotInstanceRequests": [
      {
        "CreateTime": "2018-01-28T23:49:09.000Z",
        "ProductDescription": "Linux/UNIX",
        "SpotInstanceRequestId": "sir-q4w8syjj",
        "SpotPrice": "0.200000",
        "State": "open",
        "Type": "one-time",
        "LaunchSpecification": {
          "ImageId": "ami-b63e0bd3",
          "InstanceType": "r3.large",
          "KeyName": "node_fabric_1",
          "IamInstanceProfile": {
            "Arn": "arn:aws:iam::086111378455:instance-profile/ethereum"
          },
          "Monitoring": {
            "Enabled": false
          },
          "NetworkInterfaces": [
            {
              "DeviceIndex": 0,
              "NetworkInterfaceId": "eni-89bc4bdd"
            }
          ],
          "Placement": {
            "AvailabilityZone": "us-east-2b"
          },
          "SecurityGroups": [
            {
              "GroupName": "default"
            }
          ],
          "Status": {
            "Code": "pending-evaluation",
            "Message": "Your Spot request has been submitted for review, and is pending evaluation.",
            "UpdateTime": "2018-01-28T23:49:10.000Z"
          }
        }
      }
    ]
  }
}

```

Nos vamos a AWS a dar acceso por SSH a nuestra ip, para poder ejecutar los comandos del fabric (se creó un script para tal fin).La instancia tarda en aparecer de 1 a 2 min.



Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP
	i-0652cc728d7d5d766	r3.large	us-east-2b	terminated	2/2 checks ...	None		
	i-0b705eb3b90be888b	r3.large	us-east-2b	running	2/2 checks ...	None	ec2-18-218-234-33.us-...	18.218.234.33

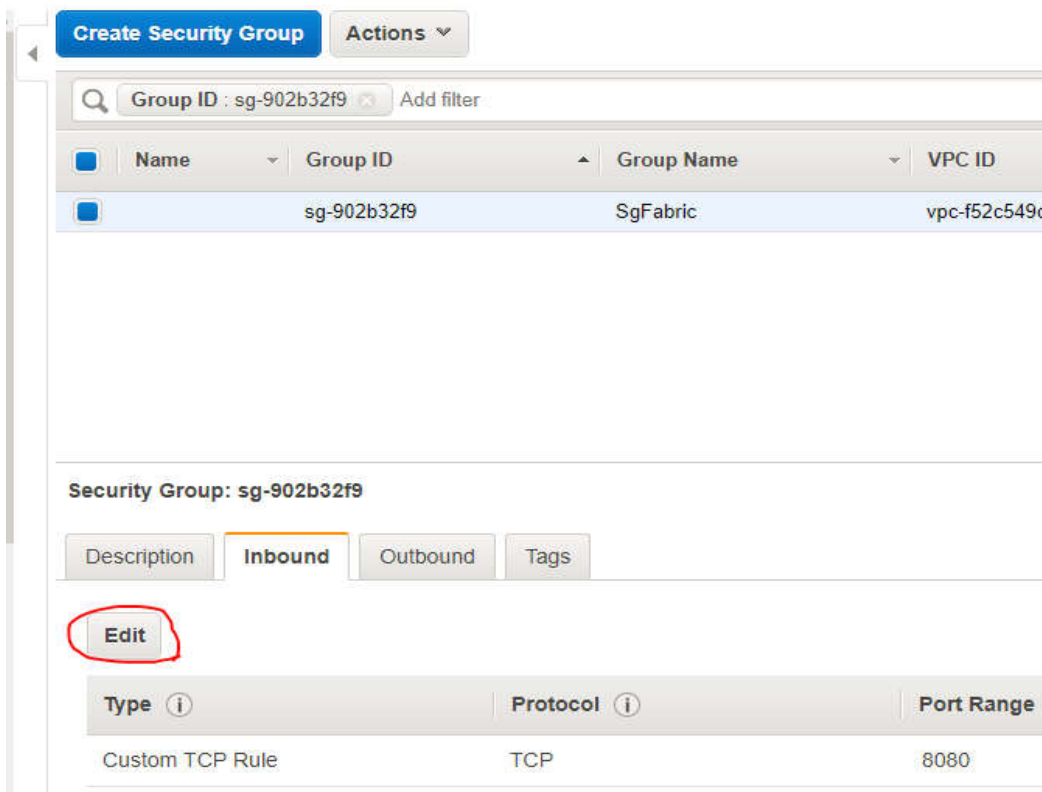
Instance: i-0b705eb3b90be888b Elastic IP: 18.218.234.33

**Description** Status Checks Monitoring Tags Usage Instructions

Instance ID: i-0b705eb3b90be888b  
 Instance state: running  
 Instance type: r3.large  
 Elastic IPs: 18.218.234.33\*  
 Availability zone: us-east-2b  
 Security groups: **SgFabric**, view inbound rules  
 Scheduled events: No scheduled events  
 AMI ID: apk checaMed (ami-b63e0bd3)  
 Platform: -  
 IAM role: ethereum  
 Key pair name: node\_fabric\_1

Public DNS (IPv4): ec2-18-218-234-33.us-east-2.compute.amazonaws.com  
 IPv4 Public IP: 18.218.234.33  
 IPv6 IPs: -  
 Private DNS: ip-10-0-0-219.us-east-2.compute.internal  
 Private IPs: 10.0.0.219  
 Secondary private IPs: -  
 VPC ID: vpc-f52c549c  
 Subnet ID: subnet-0ed54075  
 Network interfaces: eth0  
 Source/dest. check: True  
 T2 Unlimited: -  
 Owner: 006111378455

Presionamos en **SgFabric** y nos aparecerá una sección donde debemos asegurar nuestra ip presionando en **Edit**:



Create Security Group Actions

Group ID: sg-902b32f9 Add filter

Name	Group ID	Group Name	VPC ID
	sg-902b32f9	SgFabric	vpc-f52c549c

Security Group: sg-902b32f9

Description Inbound Outbound Tags

**Edit**

Type	Protocol	Port Range
Custom TCP Rule	TCP	8080

Create Security Group
Actions

### Edit inbound rules

Type	Protocol	Port Range	Source	Description	
Custom TCP F	TCP	8080	Custom 200.84.251.214/32	e.g. SSH for Admin Desktop	✕
Custom TCP F	TCP	8000	Custom 186.167.245.79/32	e.g. SSH for Admin Desktop	✕
SSH	TCP	22	My IP 190.199.109.248/32	e.g. SSH for Admin Desktop	✕
SSH	TCP	22	Custom 190.199.109.248/32	e.g. SSH for Admin Desktop	✕
Custom TCP F	TCP	4200	Anywhere 0.0.0.0/0	e.g. SSH for Admin Desktop	✕
Custom TCP F	TCP	4200	My IP ::0	e.g. SSH for Admin Desktop	✕
Custom TCP F	TCP	3000	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop	✕
Custom TCP F	TCP	3000	Custom ::0	e.g. SSH for Admin Desktop	✕

Add Rule

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

Cancel
Save

SSH
TCP
22
190.199.109.248/32

Luego que aparezca nuestra ip salvamos y nos vamos a una consola para acceder desde SSH

```
ssh -i "node_fabric_1.pem" ubuntu@18.218.234.33
```

```

ubuntu@ip-10-0-0-219: ~
Using username "ubuntu".
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 16.04.2 LTS (GNU/Linux 4.4.0-1049-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

121 packages can be updated.
0 updates are security updates.

Last login: Sun Jan 28 23:12:28 2018 from 190.199.109.248
ubuntu@ip-10-0-0-219:~$

```

Aplicamos **sudo su** y vamos a la carpeta llamada **medicine-network**

```
root@ip-10-0-0-219: /home/ubuntu/medicine-network
Using username "ubuntu".
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 16.04.2 LTS (GNU/Linux 4.4.0-1049-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

121 packages can be updated.
0 updates are security updates.

Last login: Sun Jan 28 23:12:28 2018 from 190.199.109.248
ubuntu@ip-10-0-0-219:~$ sudo su
root@ip-10-0-0-219:/home/ubuntu# cd medicine-network/
root@ip-10-0-0-219:/home/ubuntu/medicine-network#
```

En este punto ejecutamos el script **./correrSistema.sh**

```
root@ip-10-0-0-219:/home/ubuntu/medicine-network# ./correrSistema.sh
root@ip-10-0-0-219:/home/ubuntu/medicine-network# nohup: nohup: appending output
to 'nohup.out' appending output to 'nohup.out'
nohup: appending output to 'nohup.out'

root@ip-10-0-0-219:/home/ubuntu/medicine-network#
```

Y esperamos que se ejecute la base que son varios docker y registros en la base de datos eso es en background de 30 seg a 1min.

Luego ejecutamos:

**composer network deploy -a dist/medicine-network.bna -p hlfrv1 -i PeerAdmin -s randomString**

y debe aparecernos un chulo de que todo va bien

```
root@ip-10-0-0-219:/home/ubuntu/medicine-network# composer network deploy -a dist/medicine-network.bna -p hlfv1 -i PeerAdmin -s randomString
Deploying business network from archive: dist/medicine-network.bna
Business network definition:
  Identifier: medicine-network@0.1.1
  Description: Smart Contract For The Pharma Industry

✓ Deploying business network definition. This may take a minute...

Command succeeded
root@ip-10-0-0-219:/home/ubuntu/medicine-network#
```

Y por ultimo ejecutamos este comando tal cual:

**sudo nohup composer-rest-server -p hlfv1 -n medicine-network -i admin -s adminpw -N required -w true &**

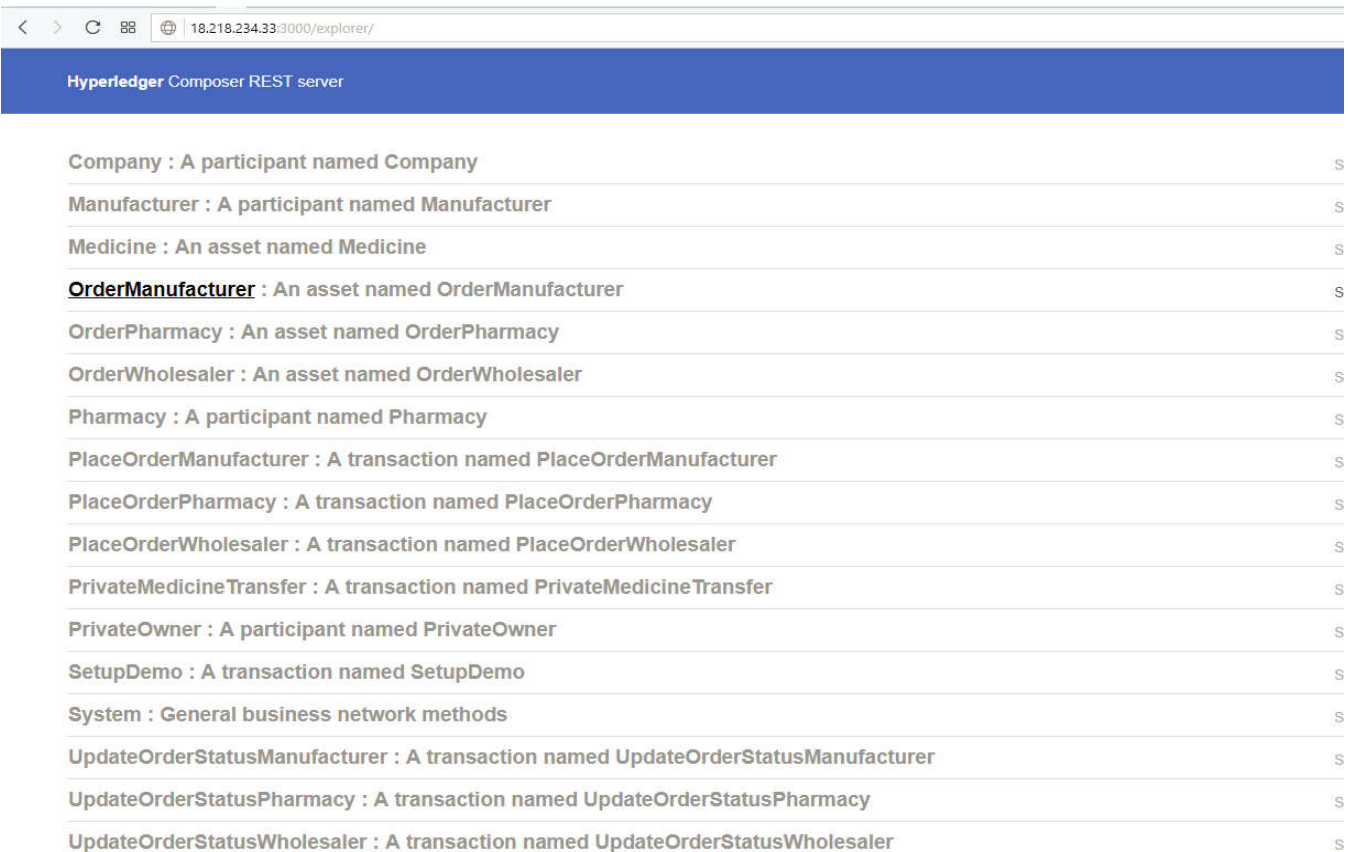
```
root@ip-10-0-0-219:/home/ubuntu/medicine-network# sudo nohup composer-rest-server -p hlfv1 -n medicine-network -i admin -s adminpw -N required -w true &
[1] 3161
root@ip-10-0-0-219:/home/ubuntu/medicine-network# nohup: ignoring input and appending output to 'nohup.out'
root@ip-10-0-0-219:/home/ubuntu/medicine-network#
```

En este punto podemos presionar enter para soltar la consola.

Luego esperamos unos 10 seg, pasado este tiempo vamos al navegador y entramos a la siguiente ruta:

<http://18.218.234.33:3000/explorer/>

si se siguieron estos pasos y todo va bien debe mostrarnos en el navegador lo siguiente:



Hyperledger Composer REST server

Company : A participant named Company

Manufacturer : A participant named Manufacturer

Medicine : An asset named Medicine

GET /Medicine

POST /Medicine

Show/Hide

List Operations

Expand Operations

Show/Hide

List Operations

Expand Operations

Show/Hide

List Operations

Expand Operations

Find all instances of the model matched by filter from the data source.

Create a new instance of the model and persist it into the data source.

Response Class (Status 200)

Request was successful

Model

Example Value

```
{
  "$class": "org.vda.Medicine",
  "serialNumber": "string",
  "productCode": 0,
  "batch": 0,
  "nationalReimbursementNumber": 0,
  "expiryDate": "2018-01-29T00:38:43.196Z",
  "medicineDetails": {
    "$class": "org.vda.MedicineDetails",
    "manufacturer": "string",
    "expiryDate": "2018-01-29T00:38:43.196Z"
  }
}
```





Y agregamos las medicinas de pruebas, copiamos y pegamos, esto si o si se debe agregar cada vez que se reinicie el servidor, ya que hasta el sol de hoy no he podido dejar la data guardada permanentemente:

```
[{"$class": "org.vda.Medicine",
"serialNumber": "112680014088591",
"productCode": 1126811409,
"batch": 12641333,
"expiryDate": "2017-08-10T22:51:00.016Z",
"medicineDetails": {
"$class": "org.vda.MedicineDetails",
"manufacturer": "Pfizer",
"tradeName": "Lipitor",
"serialNumber": "112680014088591",
"productCode": 1126811409
},
"medicineStatus": "ACTIVE"
},
{
"$class": "org.vda.Medicine",
"serialNumber": "112680014088592",
"productCode": 1126811409,
"batch": 12641333,
"expiryDate": "2017-08-10T22:51:00.016Z",
"medicineDetails": {
"$class": "org.vda.MedicineDetails",
"manufacturer": "Pfizer",
"tradeName": "Lipitor",
"serialNumber": "112680014088592",
"productCode": 1126811409
},
"medicineStatus": "ACTIVE"
},
{
"$class": "org.vda.Medicine",
"serialNumber": "504538653835017",
"productCode": 7845464997,
"batch": 93897981,
"expiryDate": "2018-12-10T23:07:12.866Z",
"medicineDetails": {
"$class": "org.vda.MedicineDetails",
"manufacturer": "El Nula Corp.",
"tradeName": "Yanuvya",
"serialNumber": "504538653835017",
"productCode": 7845464997
},
"medicineStatus": "ACTIVE"
},
{
"$class": "org.vda.Medicine",
"serialNumber": "504538653835027",
"productCode": 7845464997,
"batch": 93897981,
"expiryDate": "2018-12-10T23:07:12.866Z",
"medicineDetails": {
"$class": "org.vda.MedicineDetails",
"manufacturer": "El Nula Corp.",
"tradeName": "Mayunia",
"serialNumber": "504538653835027",
"productCode": 7845464997
},
"medicineStatus": "ACTIVE"
},
{
}
```

```

"$class": "org.vda.Medicine",
"serialNumber": "509538653835027",
"productCode": "7845464997",
"batch": "93897981",
"expiryDate": "2016-12-10T23:07:12.866Z",
"medicineDetails": {
  "$class": "org.vda.MedicineDetails",
  "manufacturer": "Tariba Asoc.",
  "tradeName": "catalix",
  "serialNumber": "509538653835027",
  "productCode": "7845464997"
},
"medicineStatus": "ACTIVE"
},
{
  "$class": "org.vda.Medicine",
  "serialNumber": "524538653835027",
  "productCode": "7845464997",
  "batch": "93897981",
  "expiryDate": "2018-12-10T23:07:12.866Z",
  "medicineDetails": {
    "$class": "org.vda.MedicineDetails",
    "manufacturer": "Tariba Asoc.",
    "tradeName": "catalix",
    "serialNumber": "524538653835027",
    "productCode": "7845464997"
  },
  "medicineStatus": "ACTIVE"
}
}]

```

Hyperledger Composer REST server

18.218.234.33:3000/explorer/#1/Medicine/Medicine\_create

Response Content Type:

Parameters

Parameter	Value	Description	Parameter Type	Data Type
data	<pre> {   "medicineStatus": "ACTIVE" }, {   "\$class": "org.vda.Medicine",   "serialNumber": "524538653835027",   "productCode": "7845464997",   "batch": "93897981",   "expiryDate": "2018-12-10T23:07:12.866Z",   "medicineDetails": {     "\$class": "org.vda.MedicineDetails",     "manufacturer": "Tariba Asoc.",     "tradeName": "catalix",     "serialNumber": "524538653835027",     "productCode": "7845464997"   },   "medicineStatus": "ACTIVE" } }] </pre>	Model instance data	body	Model E

Parameter content type:

[Try it out!](#)

Y presionamos en el boton **Try it out!**

Esperamos 30 seg. Y luego de que se haya ejecutado nos movemos abajo hasta ver un 200 que significa que todo está bien del lado del servidor:

#### Hyperledger Composer REST server

```
"$class": "org.vda.Medicine",
"serialNumber": "112680014088591",
"productCode": 1126811409,
"batch": 12641333,
"expiryDate": "2017-08-10T22:51:00.016Z",
"medicineDetails": {
  "$class": "org.vda.MedicineDetails",
  "manufacturer": "Pfizer",
  "tradeName": "Lipitor",
  "productCode": 1126811409,
  "serialNumber": "112680014088591"
},
"medicineStatus": "ACTIVE"
},
{
  "$class": "org.vda.Medicine",
  "serialNumber": "112680014088592",
  "productCode": 1126811409,
```

#### Response Code

200

#### Response Headers

Ya estamos listos para probar la apk del lado del cliente con el teléfono Android.