



partsadvisor



ERP CONNECTORS SPECIFICATION V1.1



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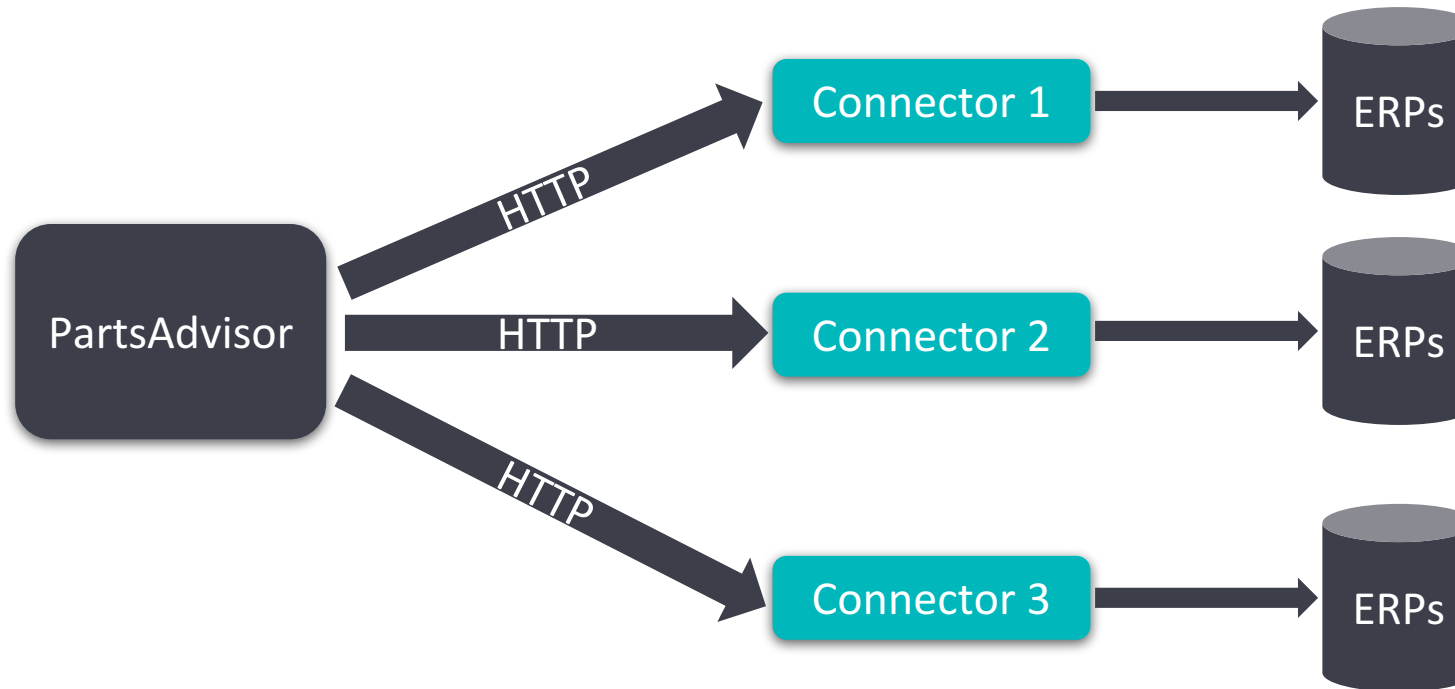


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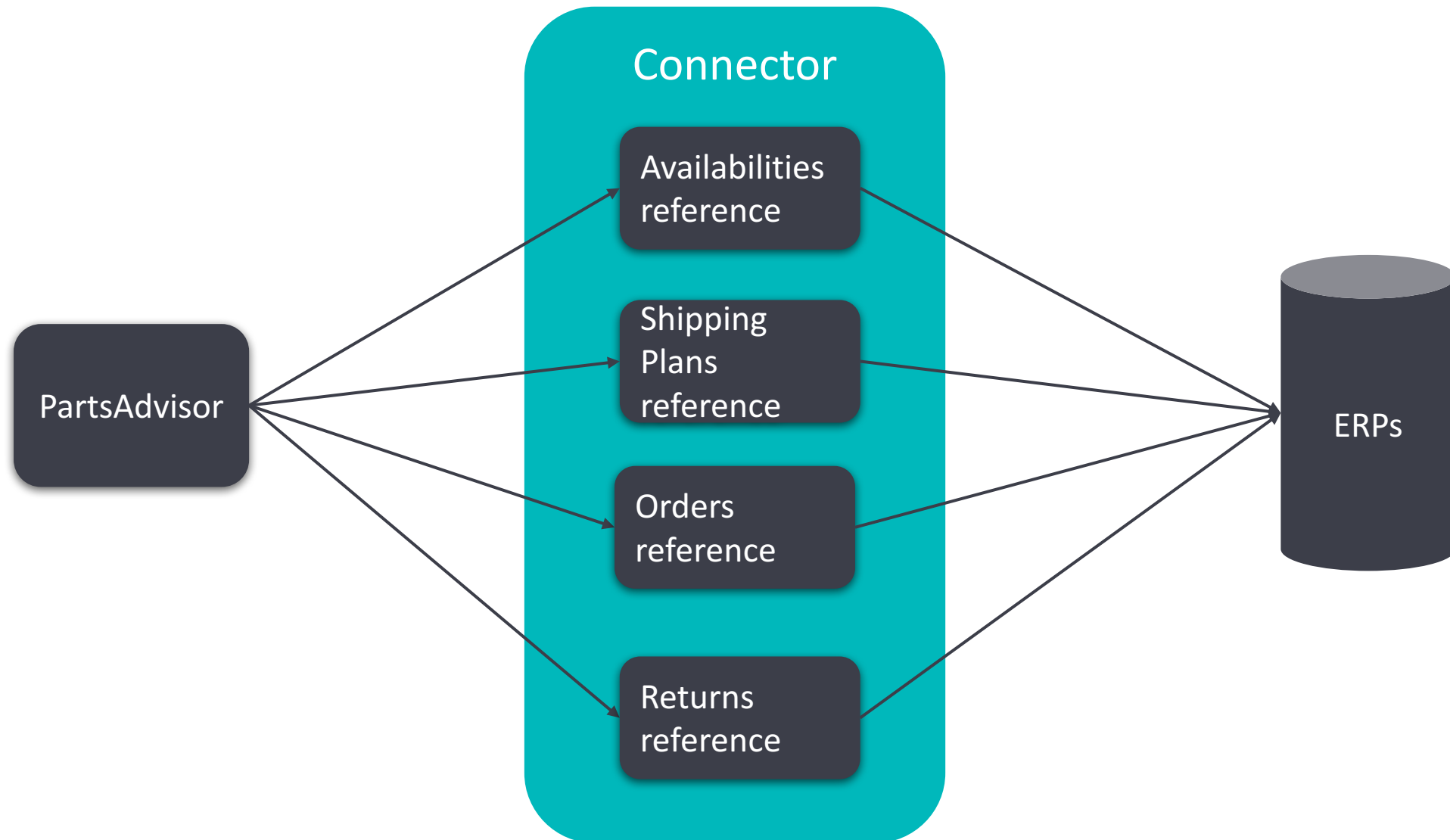
# 1. Architecture overview

# 1. Architecture overview

Connectors receive HTTP JSON based requests from Parts Advisor.







## 2. Security

Each request to the connector is secured by a JWT as described in the API reference: [http://erp-documentation.parts-advisor.com/#test\\_connection\\_get\\_securedby](http://erp-documentation.parts-advisor.com/#test_connection_get_securedby)

The token is signed (JWS), encrypted (JWE) and sent through the « Authorization » HTTP header. JWE for example:

### **Bearer**

```
eyJjdHkiOiJKV1QiLCJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiaWwiYWxnIjoiazGlyIn0..jCFnP13MtSZBPtYIAxaaVQ.gRZfDwVMi4ZfOtLBPYtomz02IXCRZ8l2bSjtj9gQ-2msyMv4dawquwBTcag5moUuUlzwQilZN1Oki6fjX7QVIKrUKNtKQFtoxG3IJ-1oZHQtvmKopOAW5wiwFYfB6YiHm6PDgQjdgVFBBz5ANqoZEOqNya7DuIGWh6ZKzJnzuZDDtAAvPvggzM1Lj6GWA7Ugb28iZWWhVAq24EtcoRte3n8qX5UotSWLFuqzPL0HvhPo.S4cFrpowrao-8YZE1t18Bg
```

### **JWT (JWS) result after JWE decryption example**

```
eyJhbGciOiJIUzI1NiJ9.eyJzdWwiOiI1YTkyZDEyZGE5YzlxNmlyNmU5ZWU3NTgiLCJwcm9wZXJ0aWVzIjp7InNhbnBzVBYb3BlcnR5Ijoic2FtcGxlVmFsdWUifX0.e-G0tQx4yfgXb-XTGzIPpf1rWKnCcrhNXaI4q9uF_7g
```

### **Payload after JWT decoded example**

```
{"sub":"5a96d12da9c216b26e9ee758","properties":{"sampleProperty":"sampleValue"}}
```

JWE (with JWS as payload) token specification :

The JWE encryption is done with AES CBC algo with a key of 256 (A128CBC\_HS256) bits (32 bytes, hence the secretKey of 32 characters). Our "secretKey" is the secret used for this calculation.

The JWS signature is a hash is calculated with the algo HS256. Our "sign" is the secret used for this calculation.

The JWS token consists of 3 elements

- 1) a header that specifies, among other things, the algorithm used for the signature. This is a JSON document encoded in BASE64
- 2) the payload that carries the user information. This is a JSON document encoded in BASE64
- 3) the signature which is a hash calculated as follows: HMACSHA256 (header\_base64 + "." + payload\_base64, sign)

The token is then encrypted according to the JWE Web Encryption spec according to the algorithm A128CBC\_HS256.

The signature serves to ensure that the token has not been modified. Encryption is used to ensure that the token is not readable. These guarantees stem from the fact that the sign and the secretKey never transit the network: only the two communicating parties know them



Decoded JWS token header:

```
{  
  "cty": "JWT",  
  "typ": "JWT",  
  "alg": "HS256"  
}
```

Example of decoded payload:

```
{  
  "sub": "5a96d12da9c216b26e9ee758",  
  "properties": {  
    "sampleProperty": "sampleValue",  
  }  
}
```

The subject (« sub » property) is always provided. It contains the id of the user who initiated the request. The properties are optional and contain any custom data required by the connector. These data can be configured on the Parts Advisor back office.

## 2. Source code example

Source code example to decrypt JWE token, check JWS and decode JWT

JAVA : <https://bitbucket.org/partsadvisor/erp-api-tools-token-example-java>

PHP : <https://bitbucket.org/partsadvisor/erp-api-tools-token-example-php>

# 3. Testing connection

The test connection feature is useful if you want to check that your connector is:

- ✓ Reachable from PartsAdvisor
- ✓ Correctly configured both on PartsAdvisor Back Office and on your server (i.e Secret/Signer, endpoint etc.)

# 3. Testing connection

The user goes to the details of an establishment on the Back Office.

The same feature is available for pairings.

PartsAdvisor backoffice



English admin@yopmail.com 3.2.0-RC-40

Orders Networks Organizations **Establishment** Warehouses Users Pairing CMS Exports Versions

Establishments (5/5)

Results per page 30

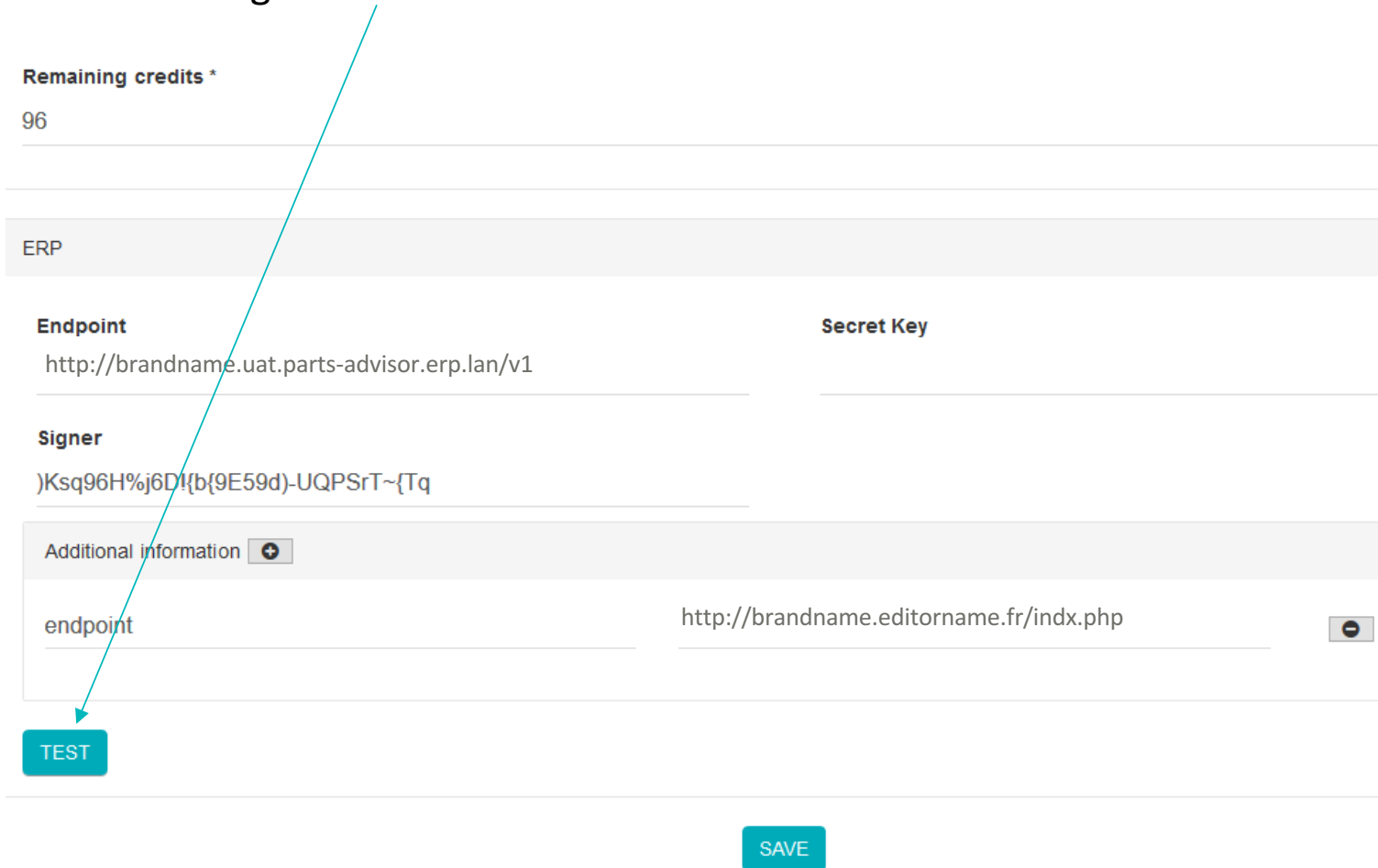
RESET FILTERS ADD AN ESTABLISHMENT

Active	Organization	Network	E-mail	Establishment Nb	City	Country	VAT number	Role	Kromeda balance	
		blusys								
er	BlusysSeller		blusysstab@yopmail.com	386962	Milano	FRA	IT0123456789	retailer	96	
nt	BlusysClient		blusysclientstab@yopmail.com	715372	Milano	Italy	IT0123456789	car_repairer	100	



# 3. Testing connection

When the user clicks on the « Test » button at the bottom of the page, the connector is called to check if it is reachable and well configured.



Remaining credits \*


96


ERP

**Endpoint**  
http://brandname.uat.parts-advisor.erp.lan/v1

**Secret Key**

**Signer**  
)Ksq96H%j6DI{b(9E59d)-UQPSrT~{Tq

Additional information 

endpoint http://brandname.editorname.fr/indx.php 

TEST

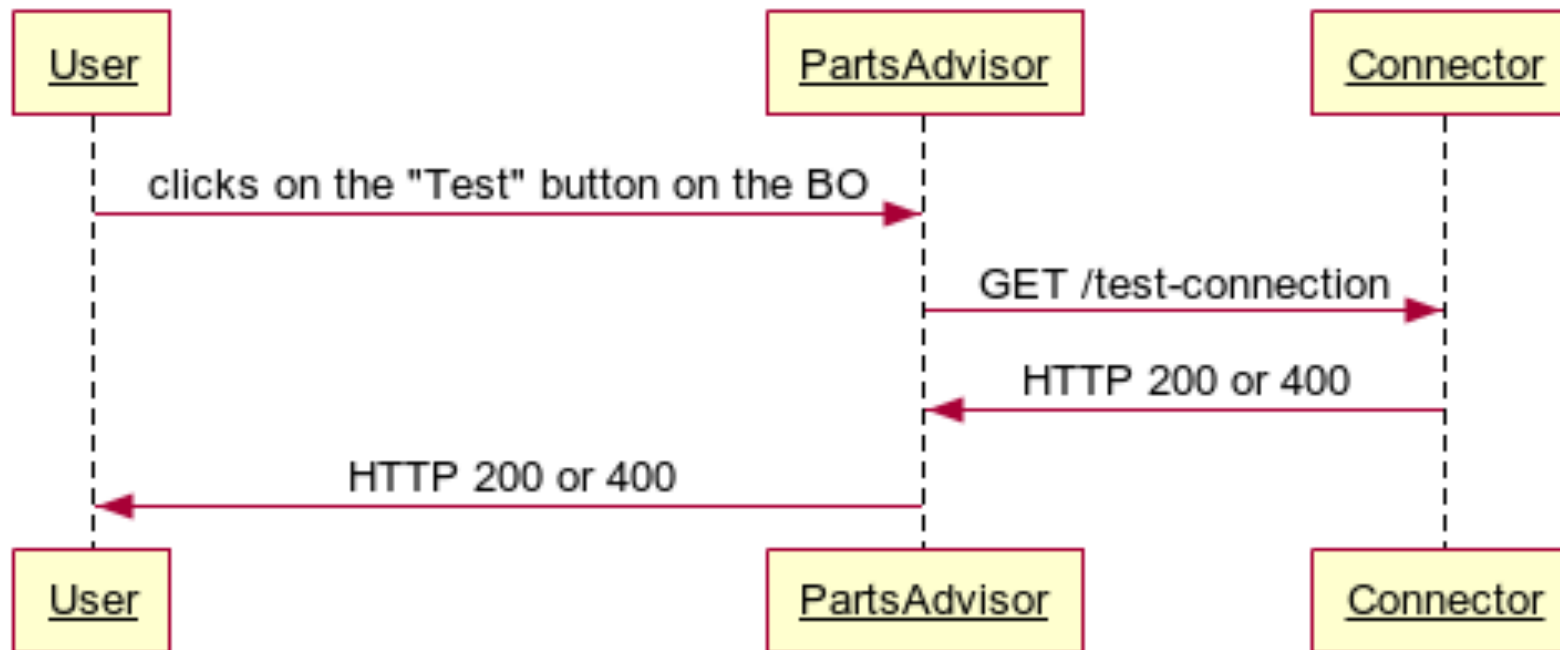
SAVE

# 3. Testing connection

API Reference: [http://erp-documentation.parts-advisor.com/#test\\_connection\\_get](http://erp-documentation.parts-advisor.com/#test_connection_get)

Sequence Diagram

## Testing Connection

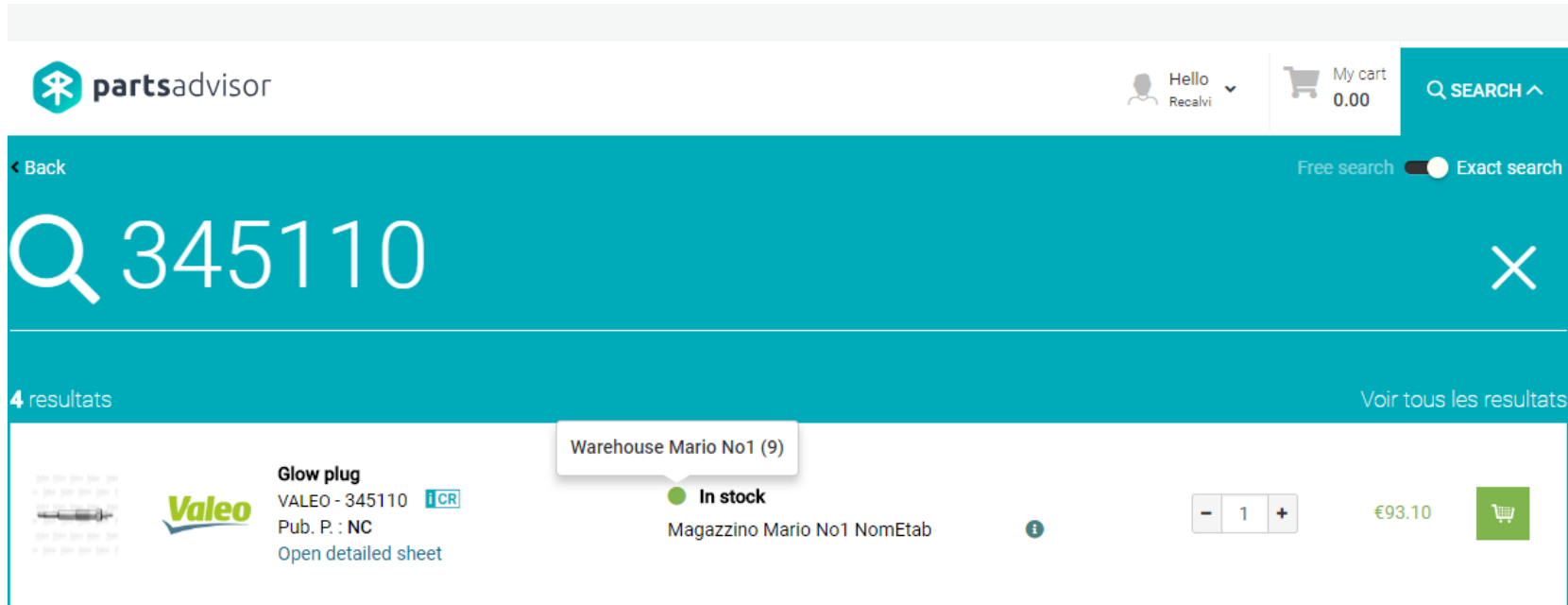


# 4. Availabilities

The availabilities API must return the global availability and prices for each part of a given set of parts, for each warehouse.

# 4. Availabilities

The user looks for a part.



The screenshot shows the partsadvisor website interface. At the top, there is a navigation bar with the partsadvisor logo, a user profile section (Hello Recalvi), a cart section (My cart 0.00), and a search bar (SEARCH ^). Below the navigation bar, there is a teal header area with a back button, a search input field containing '345110', and a toggle switch for 'Free search' and 'Exact search'. Below the header, there is a section for search results. It shows '4 resultats' and a link to 'Voir tous les resultats'. The first result is a 'Glow plug' by Valeo, with part number VALEO - 345110 and a '1 CR' badge. It is marked as 'In stock' with a green dot. The stock location is 'Magazzino Mario No1 NomEtab'. The price is €93.10. There is a quantity selector showing '1' and a green shopping cart icon. A tooltip above the stock status indicates 'Warehouse Mario No1 (9)'. There is also a link to 'Open detailed sheet'.

partsadvisor

Hello Recalvi

My cart 0.00

SEARCH ^

< Back


Free search ☐ Exact search ☒

Q 345110

X

4 resultats

Voir tous les resultats


 **Valeo** **Glow plug**  
VALEO - 345110 **1 CR**  
Pub. P. : NC  
[Open detailed sheet](#)

**In stock**  
Magazzino Mario No1 NomEtab

Warehouse Mario No1 (9)

- 1 +

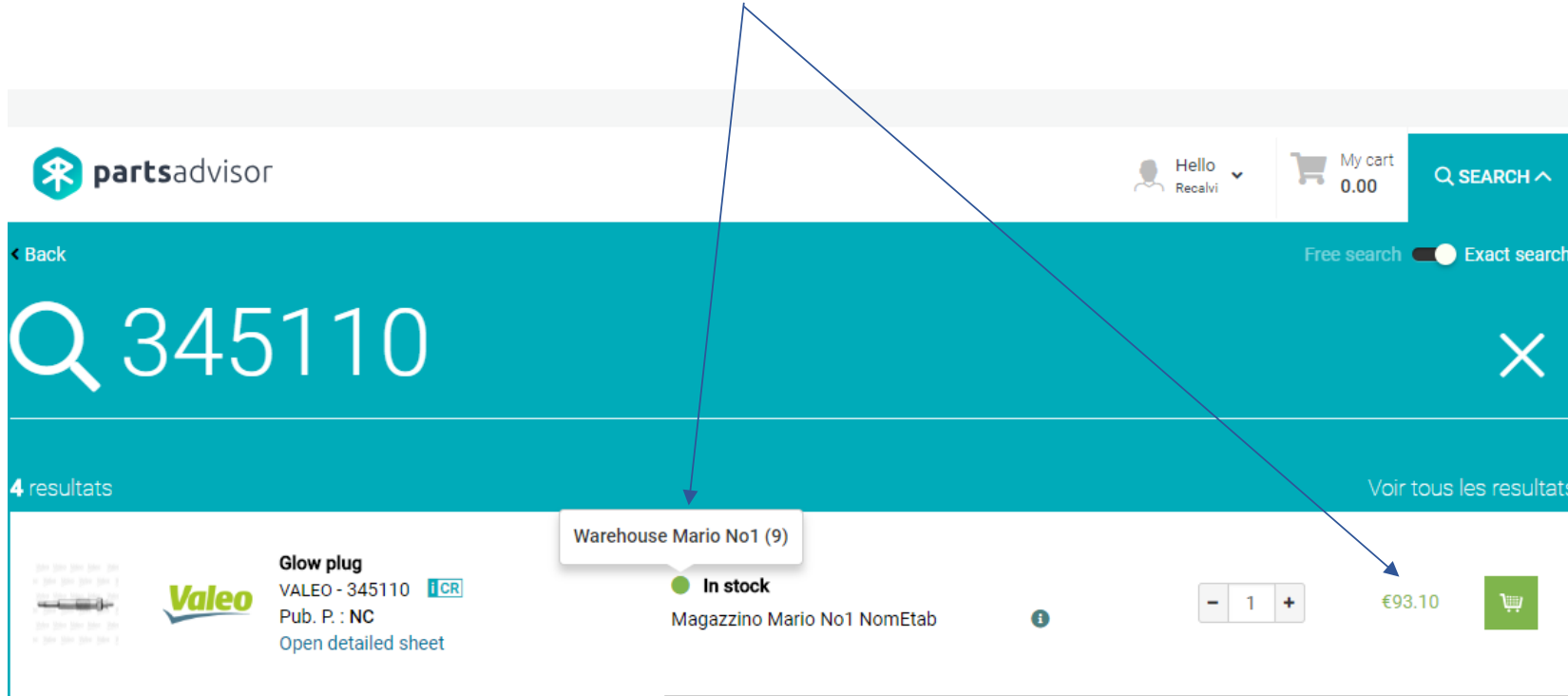
€93.10





# 4. Availabilities

The availabilities and prices displayed on the offer is retrieved from the connector.



The screenshot displays the partsadvisor website interface. At the top, the logo and navigation elements are visible. A search bar contains the query '345110'. Below the search bar, the results section shows '4 resultats'. The first result is a 'Glow plug' by VALEO, with part number VALEO - 345110. The status 'In stock' is highlighted with a green dot. A tooltip indicates 'Warehouse Mario No1 (9)'. The price is listed as '€93.10'. A shopping cart icon is present next to the price. The interface also includes a 'Back' button, a 'SEARCH' button, and a toggle for 'Free search' and 'Exact search'.

Warehouse Mario No1 (9)

**In stock**

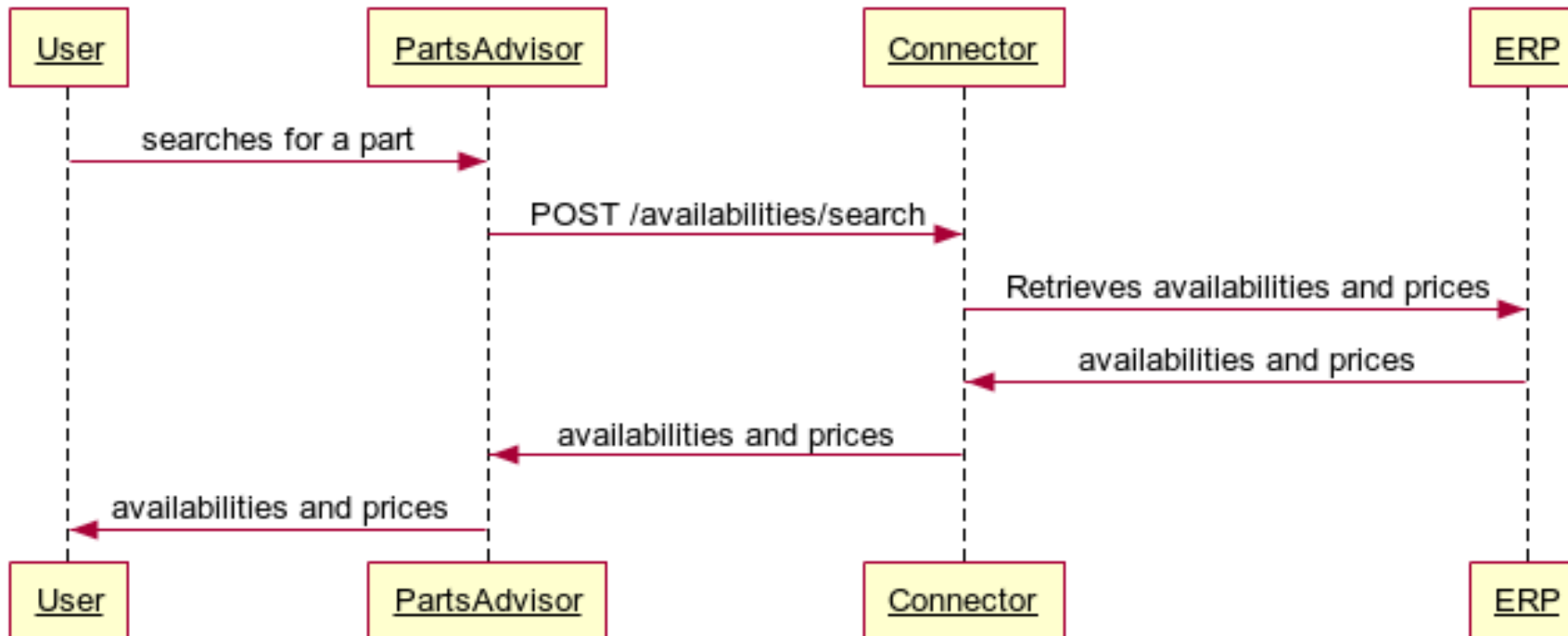
Magazzino Mario No1 NomEtab

€93.10

API Reference: [http://erp-documentation.parts-advisor.com/#availabilities\\_search\\_post](http://erp-documentation.parts-advisor.com/#availabilities_search_post)

Sequence Diagram

## Availabilities



# 5. Shipping plans


Given a requested quantity, the shipping plans API must return the actual availabilities and prices for each part of a given set of parts.

This API must detail how each part will be spreaded among the different warehouses.

# 5. Shipping plans

The user adds a part to his cart.


[← RECHERCHEZ UN VÉHICULE](#)Test Header Tagg Français



Bonjour Eric

Mon panier 53,90 €

RECHERCHER

 FORD Fiesta IV 1.8 Tddi Berlin



**Mon panier**  
1 article(s) 53,90 € HT

[CHANGER DE VÉHICULE](#)

Accueil > Toutes les pièces pour la FORD Fiesta IV 1.8 Tddi Berlin

Bougie de préchauffage (27)

Piece D'origine **FORD** Réf. OE : 1079401

 BOUGIE PRECHAUFFAGE FORD / 1079401  
Info Références Parallèles

AUCUNE OFFRE DISPONIBLE

PIECES COMPATIBLES



Filterer par marque, nom, référence...


Disponibilité Marchand

Marge

Quantité

Prix

 **Bougie de préchauffage**  
BERU - GN993   
PVC : 23,00 €  
[Voir fiche détaillée](#)



● En stock


Magazzino Luigi No5 NomEtab



3,05 €

13.26%

- 1 +

21,00 €  
19,95 €  
+ cons. (7,00 €)




 **Lhotze**  
LHOTZE - LHOT59008616   
PVC : NC  
[Voir fiche détaillée](#)


Demander le prix et la disponibilité à un marchand

DEMANDER

+ Ajouter un titre

**VÉHICULE NON PRÉCISÉ**  
1 article(s)

Référence	Dispo.	Quantité	Total HT
 <b>Bougie de préchauffage</b> BERU / GN993 + cons. (14,00 €)	●	- 2 +	39,90 €

 Supprimer le mini-panier

TOTAL MINI-PANIER 39,90 €

FINALISER LA COMMANDE


[Accéder au panier](#)



# 5. Shipping plans

The user goes to his cart details. The shipping plan information is retrieved from the connector.

[← RECHERCHEZ UN VÉHICULE](#)Test Header Tagg Français

Bonjour EricMon panier 53,90 €RECHERCHER

Accueil > Mon panier





## Mon panier (1 articles)

FINALISER


Marchand VéhiculeImprimer le panierImport CSV

Magazzino Luigi No5 NomEtab

1 article(s) pour ce marchand

Référence	Véhicule	Disponibilité	Consigne	PVC	Remise	Prix HT	Quantité	Total		
<b>Bougie De Préchauffage</b> BERU / GN993	FORD Fiesta «IV»	 	7,00 €	23,00 €	13.26 %	19,95 €	- 2 +	39,90 €		

Commentaire

 Supprimer le panier de ce marchand

**Total Mini-Panier :** 39,90 €

Montant HT53,90 €  
Dont consigne14,00 €  
Montant TVA10,78 €  
Montant TTC64,68 €

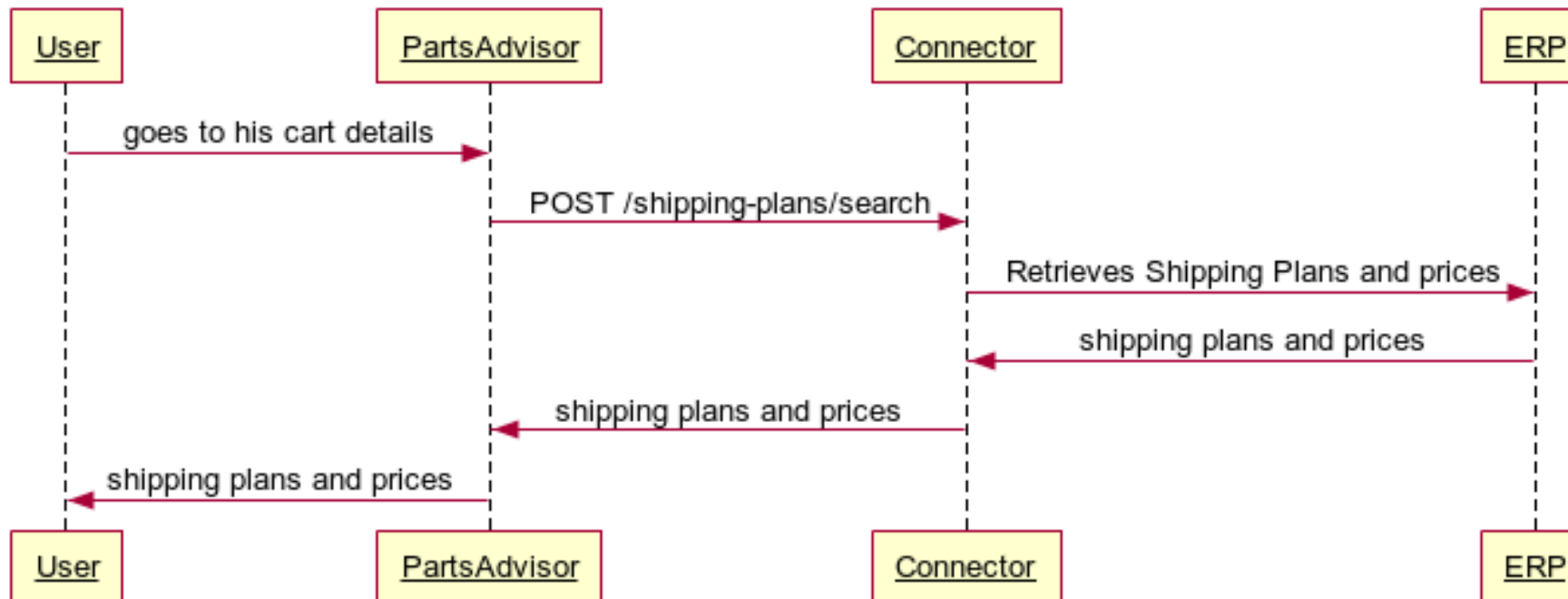
Finaliser

# 5. Shipping plans

API Reference: [http://erp-documentation.parts-advisor.com/#shipping\\_plans\\_search\\_post](http://erp-documentation.parts-advisor.com/#shipping_plans_search_post)

Sequence Diagram

## Shipping Plans





# 6. Creating orders

# 6. Creating orders

When the user checkouts his order, it is submitted to the connector.

[← LOOK UP A VEHICLE](#)


 Hello Recalvi  My cart €93.10 [SEARCH](#)



Home > My cart > Summary

## Summary [VALIDATE MY ORDER >](#)

**Seller** Vehicle

**Magazzino Mario No1 NomEtab** 1 article(s) for this seller

☐ At the counter Via Mario COUNTER étab1 - 20000 Villeétablissement (BT) ☒ Delivery Via Jacquie orga - 20000 Villeorga (BR) 


Reference	Vehicle	Availability	Core Price	Public Price	Discount	Price VAT excl.	Quantity	Total
<b>Glow Plug</b> VALEO / 345110	No vehicle	 		NC	-	€93.10	1	€93.10

Comment

**Sub-cart Total:** €93.10

**Billing address**

Company	Recalvi Jacquie ERP
Address	Via Jacquie orga
City	20000, Villeorga (AV)
Country	Spain

 **Urgent order** ☒

The order will be processed in priority in order to guarantee the fastest possible delivery

Additional fees may apply


Total excl. VAT	€93.10
VAT	€20.48
<b>Total incl. VAT</b>	<b>€113.58</b>


[Checkout >](#)


## 6. Creating orders


When the user checkouts his order, it is submitted to the connector.

[← LOOK UP A VEHICLE](#)



 Hello  
Recalvi

 My cart  
0.00

 SEARCH

Home > My cart > Summary

# ORDER CONFIRMATION

Order n° 03918.1019315

✔ Your order n°03918.1019315 has been successfully transmitted

A confirmation e-mail has been sent to this address:  
**recalvijacquieerp@yopmail.com**

CONTINUE



# 6. Creating orders

Once the order is submitted, the seller can view it on the « My Sales » page. The external order number generated by the ERP is displayed under the PartsAdvisor order number.

← LOOK UP A VEHICLE

partsadvisor

Hello Cobra

159 My Requests

67 My Sales

My cart 0.00

SEARCH

MY PROFESSIONAL AREA

Magazzino Mario No3  
NomEtab  
Cobra Mario3

Dashboard  
My sales

BUY

Orders

Requests

Orders' returns

My documents

Sellers

SELL

Clients requests

Sales

Returns

Clients

MANAGE

Products

Search in comments

Export to CSV

Results per page 30 Reset filters

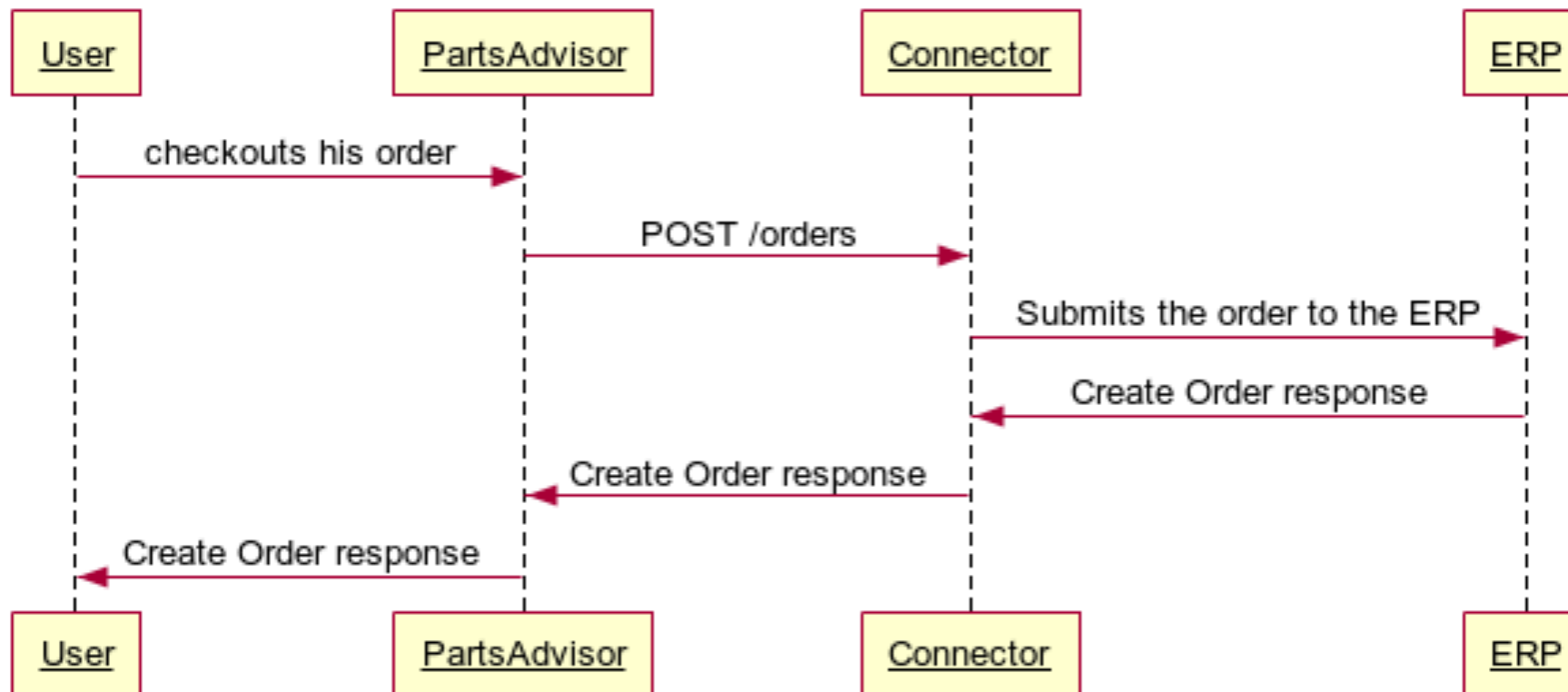
	Order number	Customer	Purchasing date	Total excl. VAT	Status	Shipping	Delivery method	
<input type="checkbox"/>			From To	Min Max	Status	Shipping	Delivery method	
<input type="checkbox"/>	03918.8458144 97403	Officina Jacque No3 NomEtab	6/19/18, 11:52 AM	€339.51	Awaiting processing			DETAILS
Test end-to-end: pastiglie ferodo da cancellare, poi spedire il resto grazie!								
<input type="checkbox"/>	03918.4027082 97401	Officina Jacque No3 NomEtab	6/14/18, 3:30 PM	€634.55	Shipped			DETAILS
Questo è una prova end-to-end. Potete controllare i dati dell'ordine? Poi cancellare un filtro FIAT 7736065, cancellare tutte le pastiglie Ferod...								
<input type="checkbox"/>	03918.7610583	Officina Michel No3 NomEtab	3/22/18, 11:07 AM	€10.00	Shipped			DETAILS
<input type="checkbox"/>	03918.5047212	Officina Michel No3 NomEtab	2/16/18, 5:41 PM	€2.87	Shipped			DETAILS

# 6. Creating orders

API Reference: [http://erp-documentation.parts-advisor.com/#orders\\_post](http://erp-documentation.parts-advisor.com/#orders_post)

Sequence Diagram

## Creating Orders



# 7. Retrieving orders

# 7. Retrieving orders

The user goes to the detail of his order.

← RECHERCHEZ UN VÉHICULE

Test Header Tagg Français

partsadvisor

Bonjour Eric

Mes demandes 72

Mes ventes 39

Mon panier 0.00

RECHERCHER

**MON ESPACE PRO**

Magazzino Luigi No5 NomEtab  
Eric Luigi5

Mon Espace Marchand  
**Mes ventes**

ACHETER

Commandes

Demandes

Retours d'achats

Mes documents

Vendeurs

VENDE

Demandes clients

Ventes

Retours

Clients

GÉRER

Dashboard

CONFIGURER

Recherche dans les commentaires

Exporter vers CSV

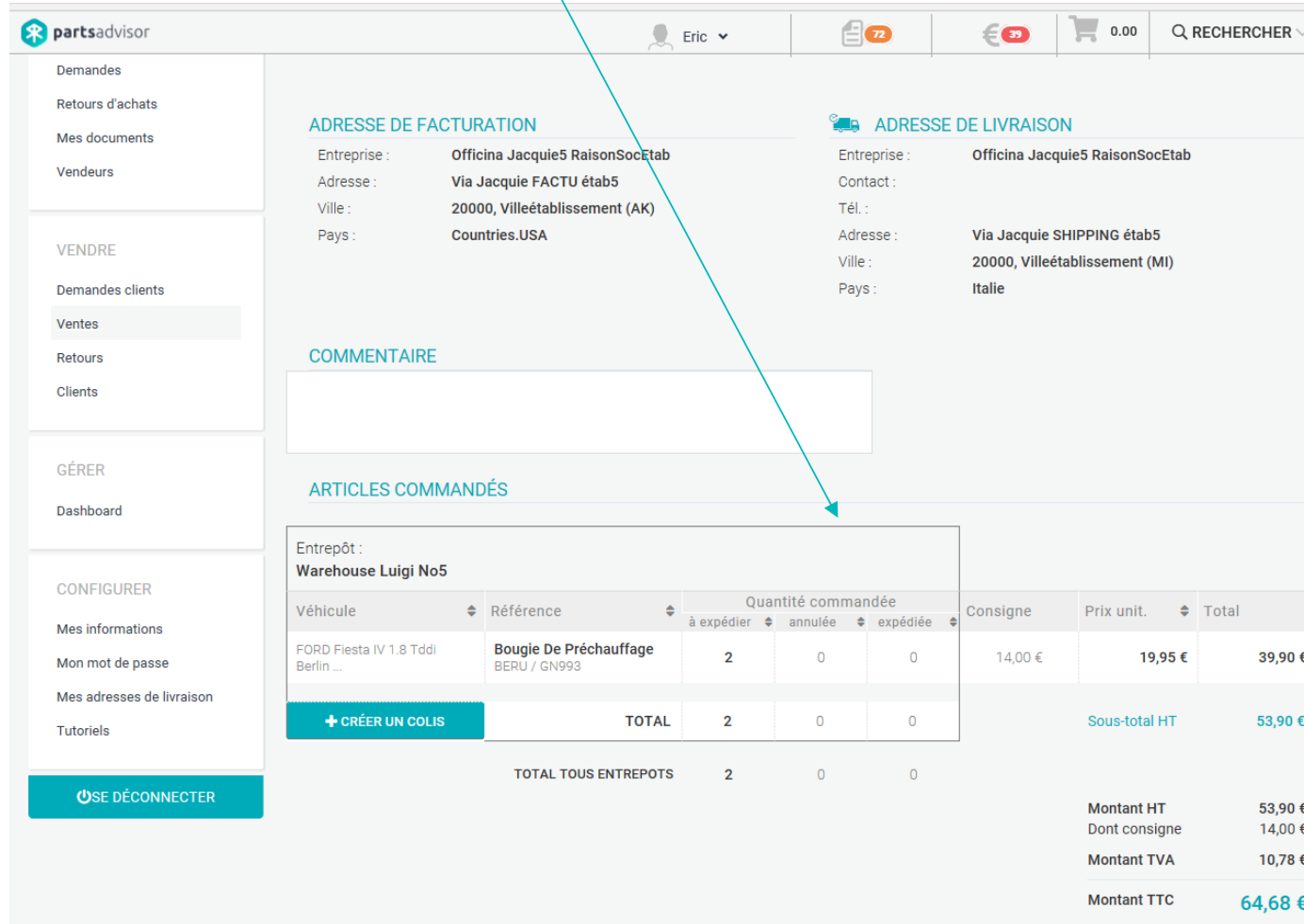
Résultats par page 30

Réinitialiser les filtres

	N° de commande	Client	Date d'achat	Total HT	Statut	Livraison	Mode de livraison	
			Du Au	Min Max	Statut	Livraison	Mode de livraison	
<input type="checkbox"/>	03918.5741592	Officina Jacque No5 NomEtab	06/07/2018 16:23	53,90 €	En attente de traitement			DETAILS
<input type="checkbox"/>	03918.9496868	Officina Jacque No5 NomEtab	03/07/2018 11:16	26,95 €	En attente de traitement			DETAILS
<input type="checkbox"/>	03918.3220773	Officina Jacque No5 NomEtab	02/07/2018 11:04	80,85 €	En attente de traitement			DETAILS
<input type="checkbox"/>	03918.840334	Officina Jacque No5 NomEtab	14/06/2018 17:22	150,00 €	Expédiée			DETAILS
<input type="checkbox"/>	03918.9245081	Officina Jacque No5 NomEtab	14/06/2018 17:16	26,95 €	En attente de traitement			DETAILS

# 7. Retrieving orders

The order information are synchronized with the connector.



The screenshot displays the partsadvisor web interface. The left sidebar contains navigation menus for 'Demandes', 'VENDRE', 'GÉRER', and 'CONFIGURER'. The main content area shows order details for 'Warehouse Luigi No5'. It includes sections for 'ADRESSE DE FACTURATION', 'ADRESSE DE LIVRAISON', 'COMMENTAIRE', and 'ARTICLES COMMANDÉS'. The 'ARTICLES COMMANDÉS' section features a table with columns for 'Véhicule', 'Référence', 'Quantité commandée' (à expédier, annulée, expédiée), 'Consigne', 'Prix unit.', and 'Total'. A summary table at the bottom right shows the total amounts for HT, TVA, and TTC.

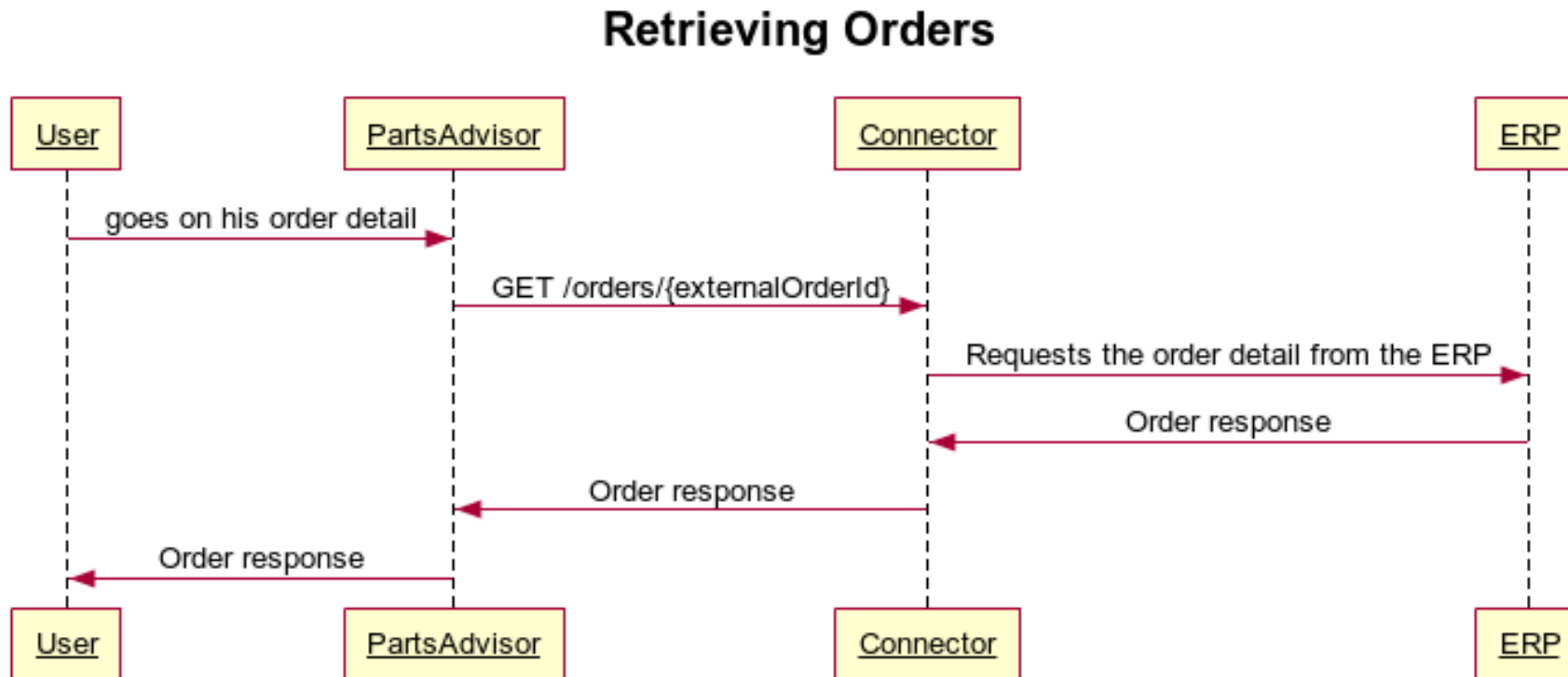
Véhicule	Référence	à expédier	annulée	expédiée	Consigne	Prix unit.	Total
FORD Fiesta IV 1.8 Tddi Berlin ...	Bougie De Préchauffage BERU / GN993	2	0	0	14,00 €	19,95 €	39,90 €
+ CRÉER UN COLIS		2	0	0	Sous-total HT 53,90 €		
TOTAL		2	0	0			
TOTAL TOUS ENTREPOTS		2	0	0			

Montant HT	53,90 €
Dont consigne	14,00 €
Montant TVA	10,78 €
Montant TTC	64,68 €

# 7. Retrieving orders

API Reference: [http://erp-documentation.parts-advisor.com/#orders\\_externalorderid\\_get](http://erp-documentation.parts-advisor.com/#orders_externalorderid_get)

Sequence Diagram



# 8. Creating returns

# 8. Creating returns

The user goes to his orders history, and clicks on the return icon of an order.

← LOOK UP A VEHICLE

partsadvisor

Hello Recalvi

My cart 0.00

SEARCH

MY PROFESSIONAL AREA

Recalvi Jaquie ERP  
Recalvi Client

BUY

Orders

Requests

Orders' returns

My documents

Sellers

CONFIGURE

My personal details

My password

My shipping addresses

Tutorials

LOG OUT

My purchases  
My orders

Export selection to CSV

Reset filters

Ask for cancellation

Results per page 30


	Order number	Purchased on	Total excl. VAT	Status	Delivery Method	Possible returns	
		From	To	Min	Max	Status	Delivery me
<input type="checkbox"/>	03918.1019315	7/9/18 3:04 PM	€93.10	Transmitted			DETAILS
<input type="checkbox"/>	03918.6088772	6/12/18 3:59 PM	€20.24	Transmitted			DETAILS
<input type="checkbox"/>	03918.4440010	6/12/18 11:34 AM	€60.72	Transmitted			DETAILS
<input type="checkbox"/>	03918.5911037	6/11/18 3:15 PM	€120.50	Shipped			DETAILS
<input type="checkbox"/>	03918.3692359	6/11/18 12:44 PM	€49.98	Transmitted			DETAILS
<input type="checkbox"/>	03918.5524998	6/11/18 12:44 PM	€39.69	Transmitted			DETAILS
<input type="checkbox"/>		6/11/18 12:43					



# 8. Creating returns

The user clicks on the « Return » button for the parts he wants to return.

< LOOK UP A VEHICLE

 Hello Recalvi My cart 0.00 SEARCH

**MY PROFESSIONAL AREA**

Recalvi Jacquie ERP  
Recalvi Client

BUY

Orders

Requests

Orders' returns

My documents

Sellers

CONFIGURE

My personal details

My password

My shipping addresses

Tutorials

LOG OUT

My purchases > My orders > Possible returns  
**Order n° 03918.5911037**  
[Back to the orders list](#)

Results per page 30 Reset filters

Seller	Reference	Brand	Product	Parts already Processed	
Recalvi Mario ERP	1006	Gabriel	Shock Absorber, cab suspension Delivered quantity : 2   Unit P: €7.50	0 / 2	<a href="#">RETURN &gt;</a>
	38813	febi bilstein	Oil Filter Delivered quantity : 1   Unit P: €10.50	0 / 1	<a href="#">RETURN &gt;</a>

<< < 1 > >>

# 8. Creating returns

The user selects the type and the reason of the return, then when he clicks on the « Submit the return » button, the return is submitted to the ERP.

← LOOK UP A VEHICLE

partsadvisor

Hello Recalvi

My cart 0.00

SEARCH

MY PROFESSIONAL AREA

Recalvi Jackie ERP  
Recalvi Client

My purchases > My orders > Possible returns  
Order n° 03918.5911037  
[← Back to the orders list](#)

Results per page 30 Reset filters

Seller	Reference	Brand	Product	Returns Already Processed	
Recalvi Mario ERP	1006	Gabriel	Shock Absorber, cab suspension Delivered quantity : 2   Unit P: €7.50	0 / 2	>
	38813	febi	Oil Filter Delivered quantity : 1   Unit P: €10.50	0 / 1	>

Return order  
N° 03918.5911037  
2 articles

Product	Quantity	price
Shock Absorber, Cab Suspension GABRIEL / 1006	- 2 +	€7.50
Exchange part(s)		
Defective		
Oil Filter FEBI / 38813	- 1 +	€10.50
Refund		
Defective		

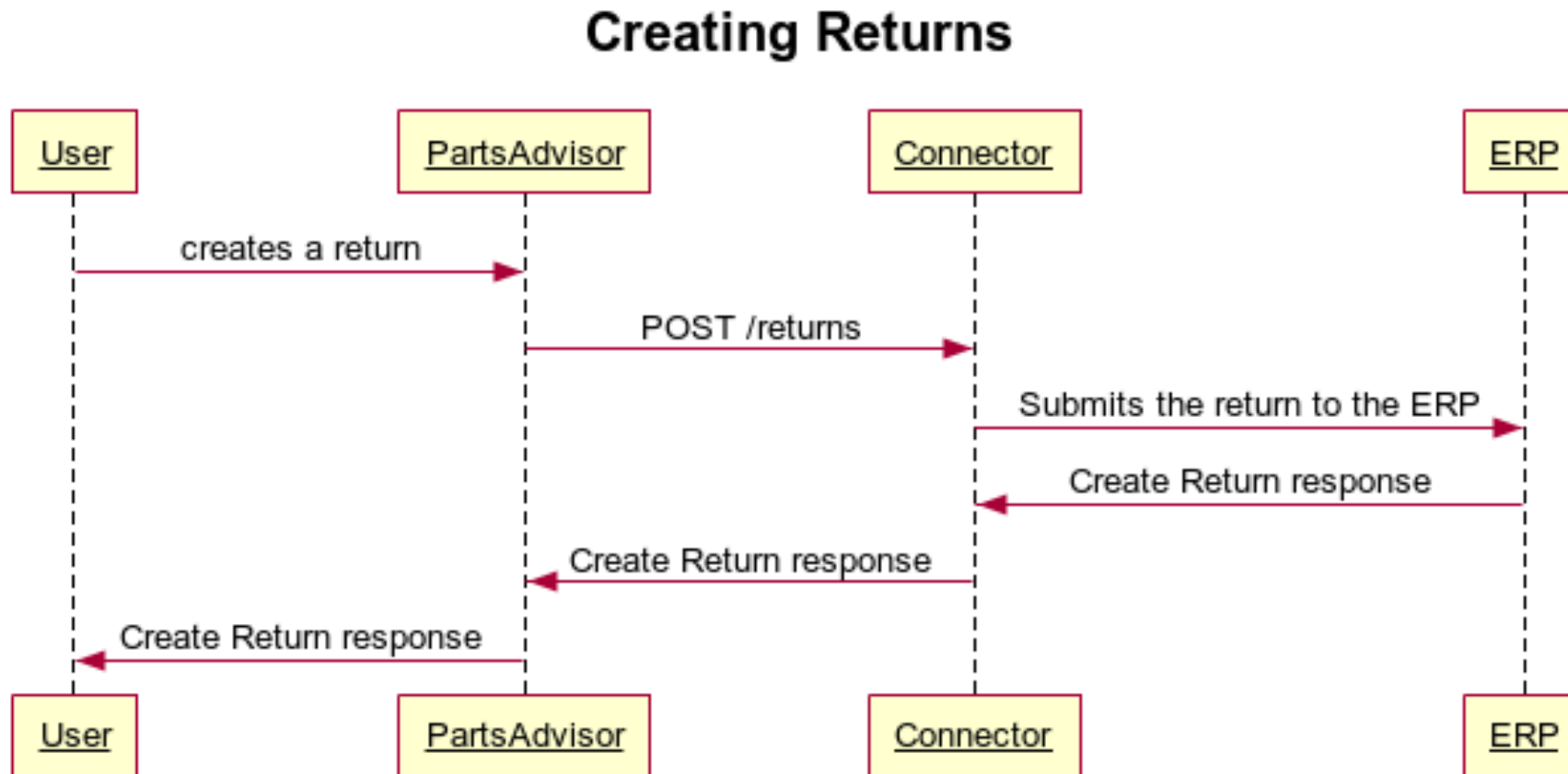
LOG OUT

SUBMIT THE RETURN

## 8. Creating returns

API Reference: [http://erp-documentation.parts-advisor.com/#returns\\_post](http://erp-documentation.parts-advisor.com/#returns_post)

Sequence Diagram




# 9. Retrieving returns

# 9. Retrieving returns

The user goes to his returns list and click on the information icon

< LOOK UP A VEHICLE

 partsadvisor

Hello Recalvi

My cart 0.00

SEARCH







**MY PROFESSIONAL AREA**

Recalvi Jacquie ERP  
Recalvi Client

My purchases  
**My Returns**

Reset filters

Results per page 30

Return N°	Return date	Brand	Product	Reference	Seller	Status	
	From To					All	
R1-03918.5911037	7/10/18 11:59 AM		Shock Absorber, cab suspension	1006	Recalvi Mario ERP	Submitted	
R1-03918.5911037	7/10/18 11:59 AM		Oil Filter	38813	Recalvi Mario ERP	Submitted	
R1-03918.6206344	4/18/18 3:41 PM		Brake Master Cylinder	1234	Recalvi Mario ERP	Accepted	

« < 1 > »

LOG OUT

# 9. Retrieving returns

The returns information displayed come from the ERP.

CLOSE ✕

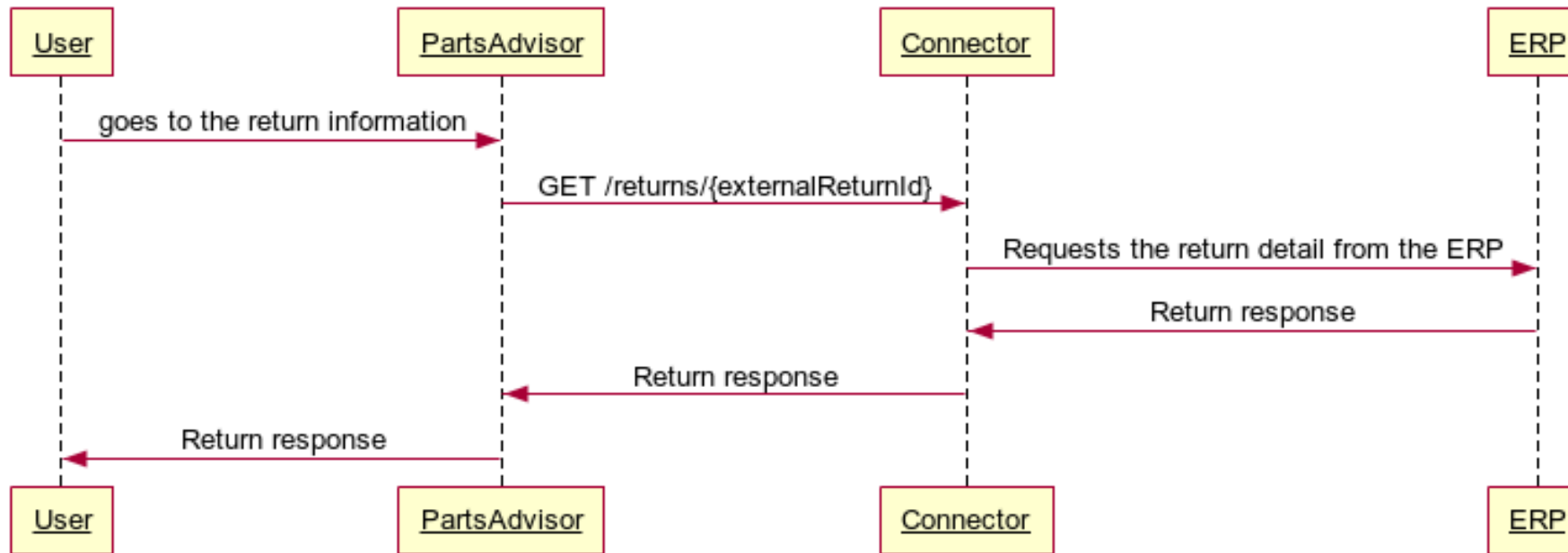
<b>Gabriel</b>		Part	Status
		<b>Shock Absorber, cab suspension</b>	<b>Submitted</b>
		Ref. 1006	
<hr/>			
Order n°		Return N°	
<b>03918.5911037</b>		<b>R1-03918.5911037</b>	
Order date		Return date	
<b>6/11/18</b>		<b>7/10/18 11:59 AM</b>	
Unit price		Return quantity	
<b>€15.00</b>		<b>2</b>	
Seller		Return type	
<b>Recalvi Mario ERP</b>		<b>Exchange part(s)</b>	
(VI)		Return motive	
countries.		<b>Defective</b>	
0333333			

# 9. Retrieving returns

API Reference: [http://erp-documentation.parts-advisor.com/#returns\\_externalreturnid\\_get](http://erp-documentation.parts-advisor.com/#returns_externalreturnid_get)

Sequence Diagram

## Retrieving Returns





Exploring all the roads  
of the world...



THANK YOU !