

Simpl-E Parts Ecommerce Webservice Definitions and Requirements Specification Parts Pricing and Availability

1) Overview

To support that **real time** Dealer Parts Pricing and Availability information be made available to the Simpl-E Parts eCommerce website, the participating Dealerships / DMS providers shall develop, host and publish a webservice which complies to the specifications of this document.

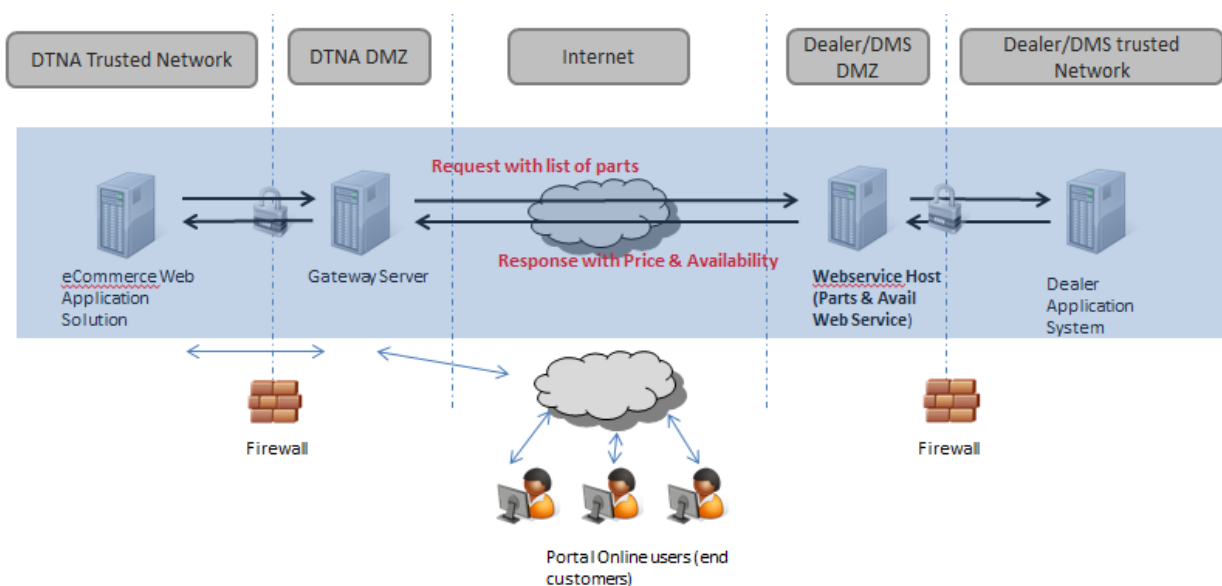
The DTNA system hosting the Simpl-E Parts website may be calling the dealer provided web service at any given time an online user demands pricing and availability information for one or multiple parts.

The web service is of synchronous nature, handling a request message containing a list of part numbers. The dealer system will provide a response message containing the same list of parts, enriched with additional information such as pricing, available quantity and more.

To ensure proper integration with the Simpl-E Parts Hosting System at DTNA, it is critical that the dealer system / DMS implement the web service according to specification. Fieldnames, Structure of XML message etc. should not be changed from the proposed layout. If there is a special need to make a change or adjustment, please contact the IT implementation team at DTNA. Web services not implemented according to this specification may not be able to integrate with Simpl-E Parts eCom website.

Performance Considerations:

Due to the integrated nature of this web service with the Simpl-E Parts website and in order to provide an enjoyable end user online experience, it is important to keep response times as low as possible.



2) Technical Summary

| | |
|---|---|
| Calling System | DTNA system (Paragon) hosting the Simpl-E Parts Application |
| Responding System / Hosting System | Proprietary Dealer System or DMS provider |
| Type | Synchronous – Request and Response |
| Expected Response Time | < 2 seconds |
| Technology | SOAP over SSL, XML based messaging |
| Web service Authentication | SOAP embedded User Id and Password will be provided in the service call. |
| Optional Backend Authentication & Authorization | Optional User Id and Password embedded in the request payload which can be used for authentication and authorization in Dealers / DMS backend system. |
| Error Handling | All application errors to be embedded in the Status node in the response. No SOAP Faults please. |

Note:

For your reference a complete WSDL is attached to this package (**MI_IE40_PartPriceAvail.wsdl**). This is the DTNA side implementation of this web service but you may use it to facilitate your side of the web service implementation by implementing the request and response messages accordingly.

3) Web Service Request Message Definition

The request message will contain two sections

1 – Optional Login & Password for Dealer/DMS Backend system

They are originally provided by the dealer / DMS provider and will be populated into the payload of each service call. This may be useful if the dealer / DMS system requires additional authentication at his backend system or server.

2 – Parts List

This is an array of lists of parts for which pricing and availability info is requested. One list per dealer code. It is expected that for each part an entry will be response message as well.

| Request Message | | | | | |
|-----------------|---------------------|---------------------------------|-----------------|-----------------------|---|
| <u>Level</u> | <u>XML NodeName</u> | <u>Occurance</u> | <u>XSD Type</u> | <u>content Length</u> | <u>Description</u> |
| 1 | Login | Optional(0..1) | | | Login Credentials |
| 1.1 | UserId | Mandatory (1..1) | String | 30 | Dealer / DMS system to for backend connection. |
| 1.2 | UserPswd | Mandatory (1..1) | String | 30 | DTNA Password as required by Dealer / DMS system. |
| | | | | | |
| 2 | PartList | Mandatory (1..1) | | | Collection of Parts |
| 2.1 | DealerID | Mandatory (1..1) | String | 10 | DTNA Dealer Code |
| 2.2 | CustomerID | Optional (0..1) | String | 10 | Dealers Customer ID |
| 2.3 | Part | Mandatory (1..unbounded) | | | List of Parts for a dealer |
| 2.3.1 | PartNum | Mandatory (1..1) | String | 25 | Part Number |
| 2.3.2 | PartType | Mandatory (1..1) | String | 1 | "P" = DTNA Part, "D"=Dealer Part |

⇒ Find the XSD file for developer's convenience attached in package:

eCom_PartsAvailPricing_DT_Request.xsd

4) Webservice Response Message Definition

Two sections:

1 – Status Info

Contains information about success, failure or application problems occurred during the execution of the service call at the Dealer / DMS system. We expect all errors and exceptions be communicated in this way as part of the response payload. Please no SOAP Fault messages.

2 - PartList

This is a collection of part lists populated with the same number or parts as it was send in the request messages. For each part requested, there should be an entry in the response as well. Additional data will be provided according to specification.

| Response Message | | | | | |
|------------------|-----------------|--------------------------|----------|----------------|--|
| Level | XML NodeName | Occurances | XSD Type | content Length | Description |
| 1 | Status | Mandatory (1..1) | | | Status Information |
| 1.1 | RetCo | Mandatory (1..1) | String | 2 | "0" = Success, "1" = Partial failure, response message shortened, "2" = No Data Found, "8" = Not Authorized, "99" = Other exception as specified in clear text |
| 1.2 | RetMsg | Optional(0..1) | String | 200 | Clear text of return message |
| 2 | PartList | Optional (0..1) | | | Array of Part Lists |
| 2.1 | DealerID | Mandatory (1..1) | String | 10 | DTNA Dealer Code |
| 2.2 | CustomerID | Optional (0..1) | String | 10 | Dealers Customer ID |
| 2.3 | Part | Mandatory (1..unbounded) | | | List of Parts for a dealer |
| 2.3.1 | PartNum | Mandatory (1..1) | String | 25 | Part Number |
| 2.3.2 | PartType | Mandatory (1..1) | String | 1 | "P" = DTNA Part, "D"=Dealer Part |
| 2.3.3 | PartDescr | Optional(0..1) | String | 40 | Part Name - Short Description |
| 2.3.4 | AvailQty | Optional(0..1) | Integer | | Dealer Available Qty |
| 2.3.5 | Unit | Optional(0..1) | String | 3 | Unit Of Measure for Qty, "EA"=Eaches, etc |
| 2.3.6 | NetPrice | Optional(0..1) | Decimal | | Dealer Net Price |
| 2.3.7 | CoreCharge | Optional(0..1) | Decimal | | Dealer Core Charge - Only populate for Reman Parts |
| 2.3.8 | Currency | Optional(0..1) | String | 3 | Currency Code per ISO 4217. "USD" = us dollars (default), "CAD" canadian dollars |
| 2.3.9 | MOQ | Optional(0..1) | Integer | | Maximum Order Qty in Unit, if not specified, unlimited is assumed |
| 2.3.10 | StdPck | Optional(0..1) | Integer | | Standard Pack Size in Unit. If not specified, 1 is assumed. |
| 2.3.11 | FulFillTy | Optional(0..1) | String | 1 | not specified or blank = Dealer & PDC sales, "D"=Dealer Only, "N"=Part not eligible for sale, "P"=PDC Only |
| 2.3.12 | isInvalidPart | Optional(0..1) | String | 1 | <space> = part number found/ok, 'X' = part number invalid/ not found. |
| 2.3.13 | PartNum_Super | Optional(0..1) | String | 25 | Superseding Part Number |
| 2.3.14 | PartDescr_Super | Optional(0..1) | String | 40 | Superseding Part Description |

⇒ Find the XSD file for developer's convenience attached in package:

eCom_PartsAvailPricing_DT_Response.xsd

5) Value Mappings

a) Request Message – Part Type

| Value | Description |
|-------|-------------|
| P | DTNA Part |
| D | Dealer Part |

b) Response Message – RetCo

| Value | Description |
|-------|---|
| 0 | Success |
| 1 | Partial Failure – response message incomplete |
| 2 | No Data Found |
| 8 | Not Authorized |
| 99 | Other as specified in clear text |

c) Response Message – Part Type

| Value | Description |
|-------|-------------|
| P | DTNA Part |
| D | Dealer Part |

d) Response Message – ‘Unit’

Following are the allowed values for node ‘Unit’ on the response message.

| Base Unit of Measure | Descr |
|----------------------|------------------|
| EA | Eaches |
| PAA | Pair |
| FT | Feet |
| PAC | Pack |
| ROL | Role |
| GAL | US gallon |
| L | Liter |
| BOX | Box |
| LB | US pound |
| BT | Bottle |
| M | Meter |
| KG | Kilogram |
| YD | Yard |
| PL | Pail |
| QT | Quart, US liquid |
| TB | Tube |
| " | Inch |
| BAG | Bag |
| JG | Jug |
| DR | Drum |
| FT2 | Square foot |
| PT | Pint, US liquid |
| YD2 | Square Yard |
| TTE | Tote |
| MM | Millimeter |
| KEG | Keg |
| FOZ | Fluid Ounce US |
| OZ | Ounce |
| KIT | Kit |
| PAL | Pallet |
| G | Gram |

e) Response Message – Curr

| Value | Description |
|-------|------------------|
| USD | US Dollars |
| CAD | Canadian Dollars |

f) Response Message – FulFillTy

| Value | Description |
|---------|----------------------------|
| <blank> | Dealer & PDC sales |
| D | Dealer Only sales |
| N | Part not eligible for sale |
| P | PDC Only |

g) Response Message – isInvalidPart

| Value | Description |
|---------|--------------------------|
| <blank> | Valid Part |
| 'X' | Invalid Part / not found |

h) Superseding Part Number – PartNum_Super

In case there is a superseded part for the requested part number, you may populate its part number here.

i) Superseding Part Description – PartDescr_Super

In case there is a superseded part for the requested part number (see h), populate its description here.