

Integration with Six Works Fulfilment Service for Automated Order Transfer

This document should assist developers to understand and make use of the API offered by Six for the transfer of orders into the fulfilment system. The intended audience should have a basic understanding of REST APIs as detailed here:

http://en.wikipedia.org/wiki/Representational_State_Transfer#RESTful_web_services

Six provides each client with a secure web service which is available 24/7 for the receipt of order information. The service is called from the client's server by means of an HTTP POST request, the body of this request should be the details for a single order to be fulfilled.

The format for this request is a JSON array [<http://www.json.org/>], a lightweight, readable and flexible alternative to XML. Data to be provided with this request is specified in the following sheet along with example data.

The service responds with a JSON payload of its own, confirming the successful transfer or identifying the reasons for a failed transfer. Only assume an order has been accepted if the response contains the a true success flag.

Authentication	Part of the JSON request is a unique API key which identifies the client submitting the request
Test Harness	Test requests can be placed on the live API through the use of the 'test' flag, providing real error responses for debugging without the need for sandboxing. The test flag must be explicitly set to false before an order can be placed.
Optional Flags	A number of option flags can be submitted along with the standard request. For example, these can be used to ensure an order is accepted even if there is insufficient stock to fulfil it immediately ('allow_preorder'), or to request the return of updated stock levels.

Questions? Comments? Concerns? email tech@sixworks.co.uk

Six - Orders API Spec

url format http://[client].sixworks.co.uk/api/1/

fieldname	re	description	value	default	example
api_key		Client's API key, provided by Six	string(32)		3cac28674ca5c525af980b3cd92e9245
test		Test identifier, must equal false for order to be processed by Six	boolean	1	0
allow_preorder		If true, permits acceptance of orders which contain lines currently out of stock. Disables Out-Of-Stock feedback in API response	boolean	0	1
update_stock		If true, requests a response containing stock values for those lines which have changed since the last API order placed	boolean	0	1
order[client_ref]		Your reference for this order	string(32), unique		1234
order[po_number]		Your customer's purchase order number	string(32)		PO12345
order[date_placed]		Date the order was placed, perhaps when payment was taken or when purchase was approved	ISO 8601 date, GMT (+0:00)	[now]	12/30/2010 23:59:59
order[postage_speed]		The speed of postage; where 1 is priority, 2 is standard, 3 is economy (absolute cheapest, slow) and 0 is urgent (absolute fastest, very expensive)	integer	2	2
order[signed_for]		If true, the order will be despatched by a postage method which requires a signature at the point of delivery	boolean	0	1
order[postage_cost]		The price charged to the end customer for postage (& packing, where applicable)	float		3.95
order[callback_url]		an absolute url to be called on despatch of this order. See "Despatch Callback Spec" sheet	string(200)		http://yourwebshop.com/callback.script?hash=A1b2C3D4
order[ShippingContact][name]		Full name, as to appear on despatch label	string(64)		David Test
order[ShippingContact][company]		Company name, as to appear on despatch label	string(64)		Demo Ltd
order[ShippingContact][email]		email address	string(64)		david@demo.co.uk
order[ShippingContact][phone]		phone number, required by some couriers	string(32)		01234 567 890
order[ShippingContact][address]		House number/name and street	string(32)		1 Road Street
order[ShippingContact][address_contd]		optional second address line	string(32)		off Avenue Lane
order[ShippingContact][city]		City	string(32)		Teston
order[ShippingContact][county]		County/State/Province/Region	string(32)		Exampleshire
order[ShippingContact][country]		Country	string(32)		United Kingdom
order[ShippingContact][postcode]		Postal Code/ZIP	string(16)		EG1 2EG
order[ShippingContact][dear]		Salutation name, to be used in correspondence	string(32)	[name] as above	Dave

order[BillingContact][name]	Full name, as to appear on despatch label	string(64)		Vera Test
order[ShippingContact][company]	Company name, as to appear on despatch label	string(64)		
order[BillingContact][email]	email address	string(64)		vera@home.com
order[BillingContact][phone]	phone number, required by some couriers	string(32)		01234 567 890
order[BillingContact][address]	House number/name and street	string(32)		1 Road Street
order[BillingContact][address_contd]	optional second address line	string(32)		off Avenue Lane
order[BillingContact][city]	City	string(32)		Teston
order[BillingContact][county]	County/State/Province/Region	string(32)		Exampleshire
order[BillingContact][country]	Country	string(32)		United Kingdom
order[BillingContact][postcode]	Postal Code/ZIP	string(16)		EG1 2EG
order[ShippingContact][dear]	Salutation name, to be used in correspondence	string(32)	[name] as above	Veronica
order[items][0][client_ref]	Your reference for this product line	string(32)		SKU-0001
order[items][0][quantity]	The number of this item to be despatched in this order	integer		3
order[items][0][price]	The price, per unit, for which these items were sold, after any line discount	float		10.99
order[items][1][client_ref]	Your reference for this product line	string(32)		SKU-0002
order[items][1][quantity]	The number of this item to be despatched in this order	integer		1
order[items][1][price]	The price, per unit, for which these items were sold, after any line discount	float		4.5
order[total_value]	The total order value, excluding postage, after all discounts are applied	float	[the sum of the line totals]	52.3

Response Format

test	repeats the test boolean submitted	boolean		0
success	Indicates successful receipt of the order. Will be FALSE if valid is FALSE, but may also be FALSE if insufficient available stock	boolean		1
valid	Indicates validity of the submitted information, eg Incorrect Post Codes, Missing Details	boolean		1
error	List of error messages raised, will be empty if success is TRUE	array(string [, ..., string])		['[Product Name] cannot be fulfilled: 1 requested, 0 available.', 'An order with reference 5572 has already been submitted.']
update_stock	repeats the update_stock boolean submitted	boolean		1
last_order_placed	If update_stock set to true, this will return the date since the last API order	ISO 8601 date, GMT (+0:00)		12/30/2010 23:59:59

stock_changes	If update_stock set to true, this will return an associative array of client_ref to current stock for all lines which have seen stock changes since last_order_placed	array(client_ref1 => stock1 [, client_ref3 => stock2])		array("prod1" => 200, "prod2" => 400)
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Six - Despatch Callback Spec

For clients using our Premium service, a Despatch Callback service is provided to notify the Client's server when an order is despatched.

The URL to which the callback is issued is provided for each order in the `callback_url` parameter - see "Orders API Spec" for details.

Despatch callbacks are first attempted at the point the order is passed from Six to the carrier. If a successful response is not achieved, it is retried up to 10 times spread over the next 24 hours. If no callback attempt succeeds in this period no further retries are attempted.

The format and transfer protocol are the same as the Orders API (JSON via HTTP) but the request is here made from Six to the Client who responds, rather than the other way round.

To prevent unsolicited or incorrect requests, it is strongly advised that the `callback_url` provided with each order is in some way unique and can be validated against the order it represents. For example, salting and hashing the `client_ref` and then adding this as a GET variable in the `callback_url` means each request can be checked for validity before it is accepted and processed, and it is difficult for a third party to guess other valid URLs given any one.

fieldname	always provided	description	value	default	example
client_ref		Client's own reference for that order, matches Orders API Spec	string(32), unique		ORD00001
date_despatched		The date and time the order was despatched by Six to the carrier	ISO 8601 date, GMT (+0:00)		10/10/2010 16:59:59
client_area_link		An absolute URL to this order's page in the your Six Client Area	string(200)		http://subdomain.sixworks.co.uk/order/101
postage_method		A description of the carrier and service by which the order was sent	string(64)		1st Class Packet
boxed_weight		The packed total weight of the order in grams	integer		645
tracking_number		If order was sent by a tracked service, the tracking number is provided	string(64)		GB1010101010A
tracking_link		An absolute URL to the carrier's tracking service, where available. Normally contains <code>tracking_number</code> to avoid re-keying	string(200)		http://royalmail.com/track?tracking_number=GB10101

Response Format required

success		Confirms successful receipt of Despatch Callback, prevents retries	boolean		1
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