Swap

Generate data for calling the 1inch router for swapping: `/api/swap`

Description of query parameters

All parameters with asterisks "*" are REQUIRED

Parameter name	Type	Description
`src *`	string	contract address of a token to sell e.g.: `0x6b175474e89094c44da98b954eedeac495271d0f`
`dst *`	string	contract address of a token to buy e.g.: `0xa0b86991c6218b36c1d19d4a2e9eb0ce3606eb48`

`amount *`	integer	amount of a token to sell, set in minimal divisible units e.g.:
		`1.00 DAI` set as `1000000000000000000`
		`51.03 USDC` set as `51030000`

`from *`	string	address of a seller, make sure that this address has approved to spend src in needed amount e.g.: `0x52bc44d5378309ee2abf1539bf71de1b7d7be3b5`
`origin *`	string	The EOA address which initiates the transaction (for compliance KYC/AML)
`slippage *`	number	limit of price slippage you are willing to accept in percentage, may be set with decimals. &slippage=0.5 means 0.5% slippage is acceptable. Low values increase chances that transaction will fail, high values increase chances of front running. Set values in the range from 0 to 50
`protocols`	string	specify liquidity protocols. If not set, all liquidity protocols will be used; you can disable any protocol by listing all protocols except those you don't need e.g.: `&protocols=WETH,CURVE,BALANCER,...,ZRX` `default: all protocols can be used`
`receiver`	string	recipient address of a purchased token if not set, from will receive a purchased token
`includeTokensInfo`	boolean	if set to `true`, response will include from token and to token info `default: false`

Parameter name	Type	Description
`includeProtocols`	boolean	if set to `true`, response will include protocols used in the quote `default: false`
`referrer`	string	referrer's address
`fee`	number	this percentage of src token amount will be sent to referrer, the rest will be used as input for a swap `min: 0;` `max: 3;` `default: 0` example to set a fee to 1.5%: `&fee=1.5`
`gasPrice`	string	1inch takes in account gas expenses to determine exchange route. It is important to use the same gas price on the quote and swap methods. Gas price set in wei: `12.5 GWEI` set as `12500000000` `default: "fast" from network`
`permit`	string	https://eips.ethereum.org/EIPS/eip-2612
`compatibility`	boolean	This will exclude the Unoswap method, allowing for trading of fee on transfer (FoT) assets. `default: false`
`excludedProtocols`	string	Liquidity source names (not addresses) listed here will be excluded from the 1inch router, and will not be included in the swap path. `default: none`
`complexityLevel`	string	maximum number of token-connectors to be used in a transaction. The more is used — the longer route estimation will take, the more complex route might be as a result. If not set, two token-connectors may be used `min: 0;` `max: 3;` `default: 2`

`connectorTokens`	string	token-connectors can be specified via this parameter. The more is set — the longer route estimation will take. If not set, default token-connectors will be used. If a token you want to exchange doesn't have a pool with one of the default token-connectors this parameter will help find the route; should be the same for a quote and swap `max: 5;`
		e.g.:
		`&connectorTokens=0xEeeeeEeeeEeEeeEeEeEeeEEEeeeeEeeeeeeeEEeE,`
		`0x6b175474e89094c44da98b954eedeac495271d0f`
		`default: list of default token-connectors`

`allowPartialFill`	boolean	if true, the algorithm can cancel part of the route, if the rate has become less attractive. Unswapped tokens will return to the from `default: true`
`disableEstimate`	boolean	if true, disable most of the checks `default: false`
`gasLimit`	integer	maximum amount of gas for a swap; should be the same for a quote and swap `default: 11500000;` `max: 11500000`
`mainRouteParts`	integer	limit maximum number of main route parts; should be the same for a quote and swap `default: 20;` `max: 50`

Parameter name	Type	Description
`parts`	integer	limit maximum number of parts each main route parts can be split into; should be the same for a quote and swap `default: 20;` `max: 100`
`usePermit2`	boolean	if true, use Permit2 for approval

Description of response parameters

By default only toAmount and the tx object are returned

Parameter name	Type	Description
`srcToken`	string	parameters of a token to sell
`dstToken`	string	parameters of a token to buy
`fromAmount`	string	input amount of `srcToken` in minimal divisible units
`dstAmount`	string	result amount of `dstToken` in minimal divisible units
`protocols`	string	route of the trade
`from`	string	transactions will be sent from this address
`to`	string	transactions will be sent to our contract address
`data`	string	bytes of call data
`value`	string	amount of ETH (in wei) will be sent to the contract address
`gasPrice`	string	gas price in wei
`gas`	string	estimated amount of the gas limit, increase this value by 25%