Fraud Risk Factor and How It Is Calculated

Learn about the fraud risk factor.

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A fraud risk factor is a number from 1 to 10, estimating the riskiness of accepting a credit card for a certain order (the higher the number, the higher the risk). The calculation is performed in two steps:

1. At the first step, the AntiFraud server processes the following parameters:

   - `country_doesnot_match` (binary value, 1 or 0)

   - `city_doesnot_match` (binary value, 1 or 0)

   - `is_free_email` (binary value, 1 or 0)

   - `is_anonymous_proxy` (binary value, 1 or 0)

   - `fraudulent_ip` (binary value, 1 or 0)

   - `proxy_score` (decimal value, from 0 to 10)

   - `spam_score` (decimal value, from 0 to 10)

   - `CHECK_IP_DISTANCE` (integer value, distance in km)

   It uses the following algorithm for data processing:

   - Initially, the fraud risk factor gets the "0" (zero) value.

   - If any of the binary parameters takes the value of "1" (true), the fraud risk factor is increased by a predefined ("know-how") value.

   - If the `proxy_score` or `spam_score` values exceed 4, the fraud risk factor is increased by a predefined ("know-how") value.

   - If the `CHECK_IP_DISTANCE` value exceeds the AntiFraud safe distance value, the fraud risk factor is increased by a predefined ("know-how") value.

   - Finally, if the calculation results exceed 10, the fraud risk factor is set to 10.

2. On the second step, your online store receives the calculated value to adjust it according to the following rules:

   - If the order total exceeds the "**order total threshold,**" the `order_limit_excess` value turns "1" (true), and the fraud risk factor is multiplied by 2;

   - If the customer has successful orders, the `completed orders` value turns "1" (true), and the fraud risk factor is divided by 2;

   - If the customer has canceled orders, the `declined_orders` value turns "1" (true), and the fraud risk factor is multiplied by 1,5;

   - If the customer's IP address has been already used to place orders under a different user account, the `foreign_ip_address` value takes the value of "1" (true), and the fraud risk factor is multiplied by 2;

   - If the customer's billing address is considered to be a high-risk country, the `is_high_risk_country` value turns "1" (true), and the fraud risk factor is incremented by 7.

   - Finally, if the fraud risk factor value exceeds 10, it is set to 10.

Related pages:

- [AntiFraud Service Connector Add-on](#)

- [AntiFraud Service Connection and Setup](#)

- [Using AntiFraud Service](#)

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