Computop
the payment people

# Defend your Business against Fraud

## Minimize fraud and maximize your revenue.

With Computop Paygate, we offer our customers a platform featuring a extensive range of ways to prevent fraud, as part of the Computop complete solutions for global payment transactions. The Computop Paygate technology significantly reduces fraud attempts and defaulted payments to a minimum. In addition, by working closely with our customers, we analyse potential fraud patterns, which can vary from business to business. Then based on our analysis we provide consultation on how you can best prevent fraud.

# Defend your Business against Fraud

An effective fraud prevention is a key success factor for any online business because fraud and fraudsters can harm your balance sheet and your reputation.

At Computop, we are committed to help you securing your business with an extensive range of fraud prevention tools and secure payment methods. We rescued many customers in different industries from fashion to consumer electronics from professional fraud attacks.

Given that every fraud attack is different it is important to combine fraud rules in a fl exible way and provide individual fraud reports that provide intelligence on fraud as well as conversion.

# Fraud Prevention: A Quick Introduction

Before discussing fraud tools merchants should always consider to use local payment methods like online bank transfers that come with payment guarantee because that helps with both increasing conversion and avoiding fraud at the same time. However, many other payment methods like credit and debit cards still need to be secured with fraud prevention tools.

## Conversion Rates

**Fraud rules need to be crafted carefully considering the conversion rate and customer experience. It is of utmost importance to know your customer behaviour. At Computop, we work together with our customers in order to customize fraud rules to specific requirements of the merchant, his industry and his target group.**

### ✅ Identify Suspicious Networks

Let's start with your customer's geolocation: Computop Paygate uses IP intelligence in order to identify suspicious Internet connections by analysing your customers' IP address. Our IP database is evaluated and updated every day. Fraudsters like to hide their location by using satellite connections or anonymizing proxies. Depending on your fraud rules transactions coming from suspicious IP addresses can either be declined or Paygate just sends out a warning via e-mail. In addition to the connection type Computop Paygate can provide you with attributes like country, state and city where your customer is connected to the Internet. With that information merchants can define a Blacklist and Whitelist of countries where they want to accept orders from.

### ✅ IP connections and card country

Since we know your customer's IP geolocation it makes sense to compare this information to their credit cards. Although full address verification is only available in few countries like the US and the UK Computop Paygate

can always identify the issuing country by analysing the card number. Fraud rules should include a Blacklist and a Whitelist of countries where you want to accept cards from and of course Paygate automatically compares the card's country to the IP's country. In case of a mismatch fraud rules can either decline or accept the payment and send you a warning via email.

When selling to different countries those country based rule sets need to be flexible. You might not want to accept a Russian credit card for a delivery in London but you would want to accept Russian card for delivery in Moscow. Therefore Paygate allows you to change the list of countries with each and every transaction.

### ✅ Velocity Checks

Even if the IP connection and the card country are looking good fraudsters can still use stolen local cards to buy as much as they can until the card will be blocked by the issuer. In this case Computop Paygate protects you with Velocity Checks. Depending on your typical user behaviour we can define a maximum number of orders or a maximum order value per hour, per day or per week that you want to accept from a card, from an IP or from a single device. If one card or one device exceed such limit the card or the device will be blocked for a flexible time like 24 or 48 hours. In addition to cards and IPs Paygate also performs velocity checks on bank accounts, devices and combinations of a specific IP and card or a specific device and card. The sequence of such rules is completely flexible.

# Choose the right fraud tools for your business

## 3D Secure yes or no?

Although 3D Secure provides a kind of payment guarantee for card payments it can also be a reason for high decline rates and reduced conversion rates. Especially when issuers roll out new authentication mechanisms consumers forget their passwords or struggle with using hardware tokens. In order to avoid severe loss due to spiking decline rates merchants can turn off 3D Secure for transactions in specific countries or just for specific banks that cause such issues.

## Address and credit check

When it comes to risk management too, Computop is at the forefront: Our address and credit check in Paygate includes numerous providers such as arvato Bertelsmann, Boniversum, creditreform, crif, payprotect and schufa. This means Computop merchants can run an address and credit check on their own customers – whether an individual or company – in different countries.

## Country and IP check

Knowing the country from which the credit card or transaction originates plays a key role in detecting any fraudulent intentions. As the merchant, you decide whether to reject payment from an undesired country straight away or to authorise it in the meantime while keeping up to date by email.

### Identify Suspicious Networks

Fraudsters like to hide their location behind anonymizing proxies or satellite connections. Computop Paygate can identify such networks and allows you to either deny or accept such transactions and send a warning message via email.

### Card origin check

Computop determines the credit card's country of origin (MasterCard and Visa) and compares it with the standard country list or with a list that you provide. If the country is not approved or cannot be determined, payment will be rejected or you will be informed by email.

### Customer IP address check

Much like the card origin check, we establish where your customer is located at that moment using their IP address. If the country does not appear on the standard or your personal country list, or if we cannot determine the country, payment will be rejected or you will be informed by email.

### Card origin and IP address comparison

Should the country information and IP address not match, our Paygate tool can reject payment or give you the option of approving payment manually.

# Velocity Check (SecurePay)

Set and verify transaction limits for the same card or IP address within a specified time frame with Velocity Check – known as the SecurePay process in Computop Paygate. You could authorise three card transactions per day for a customer, for example. SecurePay is a premium process that offers more flexibility and allows the combination of different options presented here:

## IP check
Set the number of transactions that can be made from the same IP address within a specified time frame (hourly, daily, weekly, monthly). Define a blocked period to be activated when a certain limit is reached.

## Number check
With the number check – just as with the IP check – card numbers are checked instead of IP addresses.

## IP number check
Determine how many different credit cards may be used from a certain IP address.

## Amount IP/amount number check
Set the maximum amount authorised for each IP address or card number using these two tools. As with the IP and number check, a transaction period is selected to prevent a limit being exceeded within that time frame.

## Param check
If we receive transactions with the same merchant transaction ID (TransID) or reference number (RefNr), Computop Paygate blocks or authorises payment – depending on your settings. This can occur, for example, if a customer with multiple credit cards is only permitted to make a limited number of orders or the TransID does not change when returned to the shop.

## Device/device IP/device number check
A device such as a computer, tablet or smartphone is uniquely identified by its device ID. Complex algorithms ensure that every device across the globe is assigned a unique device ID, which boosts protection against forgery and allows an exact distinction of payment transactions. Set a limit on the number of transactions made per device within a certain time frame. The IP and number check also come in handy in determining the number of devices per IP address and the number of credit cards allowed per device.

# Blacklists

At Computop, we differentiate between blacklists created manually by the customer and SecurePay lists generated automatically by Paygate. The way these lists work is as follows:

## Blacklist (negative list created by the customer)

If you have had a bad experience with a certain customer or accounts not covered for earlier debits, you can systematically add these cards and account numbers to a blacklist. Alternatively, you can add the entry in the payment view of any transaction you have open.

## SecurePay negative list

Depending on your merchant settings, Computop Paygate automatically applies settings to create temporary blacklists. It detects whether the number of authorised payments per day is exceeded, for example, as part of the Velocity Checks. In this case, Paygate aborts the transaction and adds the customer to the temporary blacklist. The entry expires automatically after the time frame that you have defined or it can be removed manually.

## SecurePay positive list

With the positive list, you can control the Velocity Checks settings to exclude regular and large corporate customers from the automatic security checks. Entries on the positive list therefore override the routine checks carried out on standard and new customers.

What is more, Computop has access to commercial and police blacklists that contain blacklisted accounts and are updated daily, reducing the possibility of returned debit notes to a minimum.

# Overview of Attributes, Verification Methods and Response

| Domain | Context | Attribute I | Attribute II | Action |
|---|---|---|---|---|
| **Velocity Checks** | Single Test | **IP** | - | Deny for x hours |
| | | **Reference**[1] | - | Deny for x hours |
| | | **Card**[2] | - | Deny for x hours |
| | | **Device ID**[3] | - | Deny for x hours |
| | Combination Test | **IP** | **Account/Card** | Deny for x hours |
| | | **IP** | **Device IP** | Deny for x hours |
| | | **Device IP** | **Account/Card** | Deny for x hours |
| | | **Amount** | **IP** | Deny for x hours |
| | | **Amount** | **Account** | Deny for x hours |
| **Velocity Checks** | IP Adress | **Country** | | Deny / Accept, Email, Info |
| | | **State** | | Deny / Accept, Email, Info |
| | | **City** | | Deny / Accept, Email, Info |
| | | **Longitude** | | Deny / Accept, Email, Info |
| | | **Latitude** | | Deny / Accept, Email, Info |
| | | **Connection Type** | | None |
| | | **Connection Speed** | | None |
| | | **ProxyIP** | | Deny / Accept, Email, Info |
| | | **SuspiciousNet** | | Deny / Accept, Email, Info |
| | Card BIN Check | **Country** | | Deny / Accept, Email, Info |
| **List Checks** | Whitelist | **Account/Card** | | Accept |
| | Blacklist | **Account/Card** | | Deny |
| **Address Verification** | Card | **Adress/Card** | | Accept / Deny, Info |
| **Consumer Credit Score** | Customer data | **Adress** | | Accept / Deny, Info |
| | Customer data | **Adress** | | Accept / Deny, Info |

Footnotes: 1  [TransID]; [RefNr]   |   2  [CCNo]; [AccNo]   |   3  41st Parameter

For questions and inquiries about Computop's solution, contact a payment specialist in your area or visit www.computop.com.

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