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What is iSpyFraud?

Welcome to the detailed user guide for iSpyFraud, a rule-set based fraud management utility that allows merchants to configure extensive filters to aid in the detection of fraud by screening transactions throughout the processing lifecycle. As it operates in real time, iSpyFraud can decline transactions both before and after authorization, which can potentially mitigate high chargeback volume and offer merchants peace of mind when it comes to their own security, as well as that of their customers.

Basic Uses

Though there are countless ways to use iSpyFraud based on varying scenarios merchants might encounter, there are certain uses of the software that could be considered universally relevant, including:

- 1. Monitoring and controlling transactions during a given timeframe by setting rules based on a combination of many parameters, including the following:
 - a. Transaction count
 - b. Transaction amount
 - c. IP address
 - d. User location
 - e. Credit card number
 - f. Credit card brand
- 2. Limiting internal credit card fraud or abuse attempts
- 3. Blocking transactions from specific countries
- 4. Reviewing suspect transactions in order to take action prior to settlement

The following instructions will aid merchants in choosing the settings that will prove most useful for them depending on the specific needs of their business. In addition to this guide, assistance can be accessed through our support team, which can be reached at (800) 617-4850 ext. 1 from 8 am-6pm central time, or at support@nmi.com.

Getting Started

When a merchant logs into the gateway, iSpyFraud can be found as a link under "Other Services" on the left side of the page. The link will take the merchant to the program's General tab. Other than geography bans on transactions from certain countries, there are **no default settings** in place. There are default geography bans on the following countries (as sent in the Country field):

Afghanistan Albania Armenia

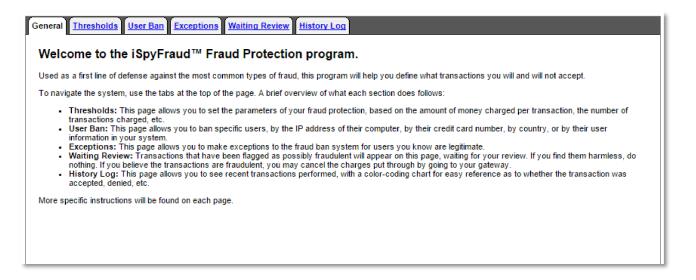


Azerbaijan Bulgaria Czech Republic India Indonesia Iran (Islamic Republic of) Kazakhstan Kuwait Lithuania Macedonia, the Former Yugoslav Republic of Malaysia Pakistan Romania **Russian Federation** Turkey Ukraine Viet Nam Yugoslavia

The countries on this list are frequently the origin of fraudulent international transactions. The merchant can remove any of them from the ban list at will (see User Ban tab section for instructions).

General Tab

The General tab gives basic information about what iSpyFraud does and has a brief overview of its contents. Note the tabs at the top of the screen, which browse to different sections within the iSpyFraud console.





Thresholds Tab

The Thresholds tab allows a merchant to set a variety of parameters on attempted or approved transactions, and these rules give the merchant the option to either Flag for Review or Deny Transaction. There are two main sections, titled **Add/Edit Credit Card Rules** and **Add/Edit IP Address Rules**, and the options in each section direct the merchant to set a threshold on a certain aspect of a transaction. These thresholds can be set in a combination of ways to track and/or block certain types of activity that may point to fraud.

For example, there are two rules pertaining to single transaction amount. If the merchant doesn't sell anything under \$20, they can set transactions for anything less than \$20 to be flagged for review or denied. This can help prevent card testing, in which a fraudster might charge small amounts to a large number of credit cards.

In another case, a merchant with a subscription-based business might use the option to limit attempted number of transactions; the merchant can flag for review transactions beyond the initial subscription fee that come from the same IP address within the same day to ensure that they're not fraudulent.

To set thresholds, the merchant simply chooses (if applicable) whether they wish to screen attempted or approved transactions (drop-down), enters the desired values, and then chooses whether the end result of a suspicious transaction should be to flag it for review or deny its approval (dropdown). Once these choices have been made, the merchant clicks "Update." Each rule must be updated individually. *For a more in-depth look at some possible uses of the Thresholds tab, see Use Cases.*

is page allows yo ek. Or, you may	u to set the parameter limit the number of tra he number of times a	sof your fraud protection. For example, you n sof your fraud protection. For example, you n sactions performed in a day or week. These t user can input a different credit card number fo	ay choose to limit the am ransactions can be linked	to either a credit card number or a	n IP address
	elete Limit Rules" sect	us transactions, or deny them outright. Click th ion. You may also edit the current rules by cha			
Id/Edit Credit C					
-	insaction amount e		\$	Flag for Review v	Update
If single tra	insaction amount is		\$	Flag for Review v	Update
If daily	Attempted •	transaction amount for CC exceeds	\$	Flag for Review •	Update
If daily	Attempted •	transaction count for CC exceeds		Flag for Review 🔻	Update
If weekly	Attempted *	transaction amount for CC exceeds	\$	Flag for Review 🔻	Update
If weekly	Attempted *	transaction count for CC exceeds		Flag for Review 🔻	Updat
If monthly	Attempted *	transaction amount for CC exceeds	\$	Flag for Review 🔻	Update
If monthly	Attempted *	transaction count for CC exceeds		Flag for Review 🔻	Updat
If yearly	Attempted *	transaction amount for CC exceeds	\$	Flag for Review •	Updat
If yearly	Attempted *	transaction count for CC exceeds		Flag for Review •	Updat
If user char	nges credit card ov	er times for Attempted •	transactions	Flag for Review •	Updat
If first	digits of CC	match over Attempted V	transactions	Flag for Review •	Updat
d/Edit IP Addre	ss Rules				
If daily	Attempted •	transaction amount for IP exceeds	\$	Flag for Review •	Update
If daily	Attempted v	transaction count for IP exceeds		Flag for Review •	Update
If weekly	Attempted *	transaction amount for IP exceeds	\$	Flag for Review •	Update
If weekly	Attempted *	transaction count for IP exceeds		Flag for Review •	Update
If monthly	Attempted *	transaction amount for IP exceeds	\$	Flag for Review •	Update
If monthly	Attempted *	transaction count for IP exceeds		Flag for Review •	Update
If yearly	Attempted *	transaction amount for IP exceeds	\$	Flag for Review •	Update
If yearly	Attempted T	transaction count for IP exceeds		Flag for Review 🔻	Update
					· _ ·



User Ban Tab

The bans/flags in this tab are considered static, in the sense that they don't depend on the behavior of the user (the consumer). In each section, the merchant chooses what users or types of users to ban/flag, and any transactions originating with those users will either be banned outright or flagged for review, depending on the merchant's selections. Each section gives the option to View current bans and Add new bans. When the merchant clicks to the "View" screen, they also have the option to Delete any currently banned users.

There are seven sections in the User Ban tab:

1. IP Addresses

- a. Merchants can ban/flag a single IP, multiple IPs from the same block, or a range of IPs
- b. Merchants can specify a timeframe (number of days) in which to ban/flag IPs, or make the ban/flag indefinite

2. Credit Cards

- a. Merchants can ban/flag a single credit card number, multiple credit card numbers, or all credit card numbers with matching BINs
- b. Merchant can specify a timeframe (number of days) in which to ban/flag credit card numbers, or make the ban/flag indefinite

3. Geographical Information

- a. Merchants can ban/flag transactions from any country
- b. Merchants can specify a timeframe (number of days) in which to ban/flag a country, or make the ban/flag indefinite
- c. A ban/flag on a specific country will automatically check for any billing/shipping addresses from that country and ban/flag users based on that information, and the merchant can also choose whether or not to verify IP addresses from that country

4. US/Non-US IP Ban

- a. Merchants can choose three actions (Nothing, Ban, or Flag for Review) for transactions that have a billing country of US but a source IP address outside the US
 - i. Unlike with the other sections in this tab, there is no timeframe specified for this ban
 - ii. Merchants who do not send the Country field with their transactions can set a US Country Default, which will assume (for the purposes of this particular ban) that the Billing Country is the US.

5. User Information

- a. Merchants can ban/flag specific customers based on customer user IDs, which merchants can assign via the use of Customer Vault. User IDs outside of Customer Vault can also be submitted by the merchant via API or by providing the billing email in the transaction
- b. Merchants can specify a timeframe (number of days) in which to ban/flag certain users, or make the ban/flag indefinite



- 6. Email Address
 - a. Merchants can ban/flag customers by email address, or ban/flag any customer using an email address with a particular domain
 - b. Merchants can specify a timeframe (number of days) in which to ban/flag certain emails or domains, or make the ban/flag indefinite
- 7. Batch Ban
 - a. Merchants can upload up to 5000 entries for a specific ban type at once
 - b. Types can be chosen using the radio buttons above the Batch Data Box—merchants can select from IP/Range, Credit Card/Bank, User ID, and Email
 i. Only one type of data may be uploaded at a time
 - c. Merchants can specify a timeframe (number of days) in which to ban/flag certain values, or make the ban/flag indefinite

Note: For any of the IP Address selections to work, the Merchant must collect the public-facing IP address from the consumer and provide it with the transaction.

For a more in-depth look at some possible uses of the User Ban tab, see Use Cases.

General Thresholds	User Ban Exceptions Waiting Review History Log
All Processors Pro	cessor A Processor B Processor C Processor D Processor E ban specific users. You may ban them by IP address, by credit card number, by country, or by user information.
In each section, you'll be banned users by clicking	eable to specify what information you want to ban. Click the "Add" button to ban a user with that information. You'll be able to view your lists of gthe "Vew" button: the number of bans will appear in parenthesis on the "Vew" button, as well, in each case, you'l be able to specify how be in effect, and you can choose whether or not a automatically ban based on this rule, or foll agif for your review.
Class C block by putting	single sure by their IP address. Some scammers, though, like to jump their IP around. If you find this to be the case, you can be not their entire in just the first three placebadders' returnbers between the drod's. You can also ban an entire (Case B block by public) in the first two first the next three measure, and could result in your banning many innocent users, as well. It would probably be better to use the IP a more specific set.
	in ban one card by entering the entire number, or ban cards from an entire set by leaving off the last 4 digits.
	countries, including anyone using a computer outside the United States.
	specific user, entering the ID number from your database.
	in many IPs/credit cards/user IDs/email address at once using the <u>batch ban form</u> .
	n many rescredit cardsroser rosennai address at once daing the <u>batch ban form</u> .
IP Addresses	
IP Address:	111 15 10 16 (ban a single IP)
Complete Class C:	. * (ban 255 IPs from the same block)
Complete Class B:	. * . * (ban 65,025 IPs from the same block)
IP Address Range:	(ban a range of IPs you specify)
Number of Days to Ban	
Description:	
Take Action	● Ban ○ Flag for Review
Add View (0)	o ball o hag to Review
be any number) Eurthe	you may use '?' and '" characters to match more than one credit card at a time. '?' will match any single character, while '" will match any or example, with '412345678901237', any 16-digts credit card number beginning with '4123456789 vill match. The last two digts may more, with '4123456789', any number of at least 10 digts starting with '4123456789 will match. You may ban a given bank or BIN range by 6 digts of the card lowed by ''.e.g. '41111'.
Credit Card	
Number of Days to Ban	(Leave blank to keep forever)
	(Leave blank to keep forever)
Description:	
Take Action:	
	Ban Flag for Review
Add View (0)	● Ban ↓ Flag for Review
Add View (0) Geographical Informat	
Geographical Informat	Ion AFGHANISTAN ALGERIA AMERICAN SAMOA
Geographical Informat	Ion AFGHANISTAN ALGERIA AMERICAN SAMOA
Geographical Informat Country: Number of Days to Ban	tion AEGHANISTAN ALBANIA ALGERIA AMERICAN SAMOA
Geographical Informat Country: Number of Days to Ban Verify Country:	IION AFGHANISTAN ALGERIA ALGERIA AMERICAN SAMOA (Leave blank to keep forever)
Geographical Informat Country: Number of Days to Ban Verify Country: Verify IP Addresses:	tion AEGHANISTAN ALBANIA ALGERIA AMERICAN SAMOA
Geographical Informat Country: Number of Days to Ban Verify Country: Verify IP Addresses: Description:	tion AEGHANISTAN ALGERIA ALGERIA AMERICAN SAMOA * (Leave blank to keep forever) Ban @ Flag for Review *
Geographical informat Country: Number of Days to Ban Verify Country: Verify IP Addresses: Description: Take Action: Add View (147) US/NOn-US IP Ban Reject transactions if the country is entered as US Take Action:	tion AEGHANISTAN ALGERIA ALGERIA AMERICAN SAMOA



User Information		
User ID:		
Number of Days to Ban:	(Leave blank to keep forever)	
Description:		
Take Action: Bar	n O Flag for Review	
Add View (0)	-	
Email Address		
placing a "*" in front of your email	u wish to ban from the system. The system will ban that email address spec address. For example, if you want to ban a specific email account, you wou count, you would type in "@emailaddress.com'.	
Email Account:		
Number of Days to Ban:	(Leave blank to keep forever)	
Description:		N
Take Action:	Ban Flag for Review	3
Add View (5)		
Batch Ban	alues at once. First choose the type of ban you would like to use, and then e	and a star where is the david and below and an and the
	an (or blank for forever), a description, and action type before clicking the Ad	
Туре:	IP/Range Credit Card/Bank User ID Email	
Batch Data:		
Number of Days to Ban:	(Leave blank to keep forever)	
Description:		
Take Action:	Ban O Flag for Review	
Add		

Exceptions Tab

The Exceptions tab goes hand in hand with the User Ban tab and is considered the "whitelist" to the User Ban's "blacklist." In other words, merchants can use the Exceptions tab to make concessions for certain known users that would otherwise be banned or flagged under the restrictions in the User Ban tab.

Any exception overrules all other rules. For example, if credit card 411111111111111111 is added to exceptions, the domain @gmail.com is banned, and the country Canada is banned, a transaction using "41111111111111111, test@gmail.com, and Canada" will be approved.

Merchants can create exceptions for

- IP Address
- Credit Card
- User ID
- Email Address

Exception values can also be uploaded using the same process as batch bans.



General Thresholds User Ban Exceptions Waiting Review History Log
All Processors Processor A Processor B Processor C Processor D Processor E
The "White List" is a way to make exceptions to your ban parameters. Known good users (whom you know violate the restrictions, but accept them as a valid user anyway) can be entered here to bypass your restrictions without review. Users can be entered by User ID, email address, credit card, or IP.
In each section, you may enter the data of your known user, and click the "Add" button to make an exception for this user's specific information. You'll be able to view your lists of banned users by clicking the "View" button- the number of bans will appear in parenthesis on the "View" button, as well.
Additionally, you may whitelist many IPs/credit cards/user IDs/email addresses at once using the batch white list form.
IP Address White List
IP Address:
Description
Add View (0)
Credit Card White List
Credit Card:
Description:
Add View (0)
User White List
User Identifier:
Add View (0)
Email White List
Email Address:
Description:
Add View (0)
Batch White List
Here you may enter many whitelist values at once. First choose the type of exception you would like to use, and then enter the values in the text area below, one on each line. Enter in a description in the appropriate box before clicking the Add button.
each me. Enter in a description in the appropriate box before clicking the Add button.
Type: O IP/Range O Credit Card/Bank O User ID O Email
Batch Data:
Description:
Add

Waiting Review Tab

Merchants can view and take action on flagged transactions here; merchants can either void transactions that are in waiting review or allow them to settle by indicating that the review is complete. If no action is taken, transactions awaiting review will settle at the time set in the Merchant's Settlement Schedule.

Merchants will be able to see which rule triggered the review.



General Thresholds User Ban Ex	ceptions Waiting Review History Log
All Processors Processor A Pro	cessor B Processor C Processor D Processor E
	There are 373 transactions awaiting review.
Overview: This page allows you to review suspicio charges put through by going to your ga	us transactions. If you find them harmless, do nothing. If you believe the transactions are fraudulent, you may cancel the stervay.
	o the user ID, the credit card number, and the IP address in order to view the recent history of each. You may, if you wish, card, a whole bank sequence, a single IP address, or a whole Class C block.
	n, put a checkmark in the 'Review Complete' box. At any time, click 'Clear Reviewed Transactions' to remove all checked ctions' button to mark all transactions across all pages as reviewed.
	Clear Reviewed Transactions
	Clear All Transactions
	Sort By: [User ID] [Date] [Credit Card] [Amount] [IP] [Country] [Exceeded Threshold] Pages: [View All], [11, [2], [3], [4], [5], [6], [7], [8] Viewing: 1 - 50 of 373
	Review Complete
Transaction ID:	<u>2914110006</u>
Result:	Approved
Processor: Time:	ProcessorA 12/08/2015 08:25:12 AM UTC
Credit Card Number:	41111 [History]
clean cara Number.	[Ban Credit Card / Credit Card Group]
	[Whitelist Credit Card]
Amount:	\$10.00
IP Address:	
User Country:	
Threshold Exceeded: Show Details for this CC/IP:	Single Transaction Amount Exceeds Limit
	Review Complete
Transaction ID:	<u>2914109966</u>
Result:	Approved
Processor:	ProcessorA
User Identifier:	john@example.com [History]
	[Whitelist <u>User ID]</u>
User Email:	john@example.com [History] [Whitelist User Email]
Time:	12/08/2015 08:25:11 AM UTC
Credit Card Number:	41111 [History]
	[Ban Credit Card / Credit Card Group] [Whitelist Credit Card]
Amount:	\$10.00
IP Address:	
User Country:	US
Threshold Exceeded:	Single Transaction Amount Exceeds Limit
Show Details for this CC/IP:	-

History Log Tab

The History Log offers the merchant a searchable record of all transactions scrubbed by iSpyFraud. This log is useful for a merchant who is trying to assess the risk of potential fraud, or to evaluate known fraud patterns. A drop-down menu allows merchants to limit a search by time/date of transaction, and merchants can search by transaction ID, credit card number, email address, or IP address.

The log is color coded by transaction status: Accepted (green), Review (yellow), Exception (blue), or Denied (red). For statuses of Review and Denied, a magnifying glass next to the response status allows merchants to see which rule was triggered.



General Thresholds User Ban Exceptions Waiting Review History Log

All Processors Processor A Processor B Processor C Processor D Processor E This page allows you to see recent transactions performed. Transactions will appear in green (accepted), yellow (under review), blue (an exception has been made) or red (transaction denied). Where a magnifying glass icon appears, you may click it for more details.

Accepted Review Denied Exception

You may also search by Transaction ID, User ID, credit card number, email address, IP address or by date and time.

Search

Transaction ID										
Email										
Credit Card										
IP Address										
Begin Time	12	۲	01	۲	2015	۲	12 AM	۲	00	۲
End Time	12	۲	15	۲	2015	۲	11 PM	۲	59	۲
								;	Searc	:h

Date (UTC)	Trans. ID	Email	Credit Card	Amount	IP Address	Country	Response	Last Action	
12/08/15 23:23	<u>2914963150</u>	john@example.com (ban)	41111 (ban)	5.25	209.37.68.130 (ban)		Approved	Approved	
12/08/15 23:23	<u>2914962996</u>	john@example.com (ban)	<u>41111 (ban)</u>	1.25	209.37.68.130 (ban)		Approved	Attempted	
12/08/15 23:23	<u>2914962862</u>		41111 (ban)	0.25	209.37.68.130 (ban)		Approved	Attempted	
12/08/15 23:22	<u>2914962535</u>		41111 (ban)	0.25	209.37.68.130 (ban)		Approved	Attempted	
12/08/15 21:15	<u>2914832890</u>	john@example.com (ban)	<u>41111 (ban)</u>	55.00	50.76.64.234 (ban)	US	Review 🖳	Approved	
12/08/15 21:10	<u>2914827295</u>		<u>41111 (ban)</u>	26.35	50.76.64.234 (ban)	US	Approved	Approved	
12/08/15 21:05	<u>2914822546</u>		<u>41111 (ban)</u>	15.00	50.76.64.234 (ban)	US	Denied 🖳	Attempted	
12/08/15 21:04	<u>2914821765</u>		<u>41111 (ban)</u>	10.00	50.76.64.234 (ban)	US	Denied 🖳	Attempted	
12/08/15 17:00	<u>2914552709</u>		41111 (ban)	1.00	50.76.64.234 (ban)	US	Denied 🖳	Attempted	
12/08/15 16:47	<u>2914535018</u>		<u>51111 (ban)</u>	1.00	50.76.64.234 (ban)	US	Denied 🖳	Attempted	
12/08/15 16:21	<u>2914499974</u>	john@example.com (ban)	41111 (ban)	20.00	209.37.68.130 (ban)		Approved	Approved	
12/08/15 15:59	<u>2914467639</u>	john@example.com (ban)	41111 (ban)	10.00	209.37.68.130 (ban)		Approved	Approved	
12/08/15 15:46	<u>2914451034</u>		41111 (ban)	10.00	50.76.64.234 (ban)		Denied 🖳	Attempted	
12/08/15 08:25	<u>2914110152</u>		<u>41111 (ban)</u>	1.00		US	Approved	Approved	
12/08/15 08:25	<u>2914110136</u>		<u>40002 (ban)</u>	15.00			Denied 🖳	Attempted	
12/08/15 08:25	<u>2914110087</u>		40002 (ban)	10.00			Review 🖳	Approved	
12/08/15 08:25	<u>2914110044</u>		<u>41111 (ban)</u>	10.00			Review 🖳	Approved	
12/08/15 08:25	<u>2914110006</u>		<u>41111 (ban)</u>	10.00			Review 🖳	Approved	
12/08/15 08:25	2914109966	john@example.com (ban)	41111 (ban)	10.00		US	Review 🖳	Approved	
12/08/15 08:25	<u>2914109929</u>		51111 (ban)	5.00		US	Approved	Approved	
12/08/15 08:25	<u>2914109831</u>	john@example.com (ban)	<u>41111 (ban)</u>	1.00		US	Approved	Approved	
12/08/15 08:25	<u>2914109726</u>	john@example.com (ban)	<u>41111 (ban)</u>	0.01		US	Review 🖳	Attempted	
12/08/15 08:25	<u>2914109702</u>		41111 (ban)	19.99			Denied 🖳	Attempted	
12/08/15 08:25	<u>2914109683</u>		41111 (ban)	19.99			Denied 🖳	Attempted	
12/08/15 08:24	<u>2914109639</u>		31009 (ban)	5.00		US	Approved	Approved	
201 - 225 of 397 Records - Page 9 of 16 13467911214 [Previous] Jump to page # Go									



Frequently Asked Questions

Q: What types of merchants need iSpyFraud?

A: Though all merchants can benefit from the reassurance a fraud scrubbing utility offers, it's true that some merchants are more likely to be targeted by fraudsters than others. For example, merchants who process international transactions are considered higher risk, as are those in certain verticals, such as online gambling, online dating, membership-only websites with adult content, or even unexpected ones like consumer electronics. Non-profits that accept donations are also at risk and can benefit from iSpyFraud, as they are often used by fraudsters for card testing/spinning schemes.

It's also anticipated that as EMV cards become standard in card present transactions, there will be a rise in card not present fraud, meaning more e-commerce merchants will be at risk. iSpyFraud is an ideal solution to combat the predicted spike in online credit card fraud.

Q: Does iSpyFraud work in card present transactions?

A: Although iSpyFraud was originally designed for e-commerce, it works equally well for card present transactions. The software's thresholds and rules do not discriminate between retail and keyed transactions, nor is the utility's scrubbing ability restricted by transaction origin (API, Virtual Terminal, Batch Upload, etc.).

Q: Can iSpyFraud block someone from coming to my website?

A: No, iSpyFraud can only take action on transactions sent to the Gateway. It cannot block activity happening on a website prior to data being sent to the gateway. Merchants can speak to their hosting provider or web developer if they need to block an individual from accessing their website entirely.

Q: I'd like to use iSpyFraud on my website, but I don't want to use the Gateway to process. Is this possible?

A: No, iSpyFraud is an additional service that can be added onto a gateway account to scrub transactions processing through it. It cannot be used as a standalone service. Merchants must be processing through the gateway to take advantage of the iSpyFraud scrubbing service.