

# Spectrum Technology Platform

Version 2019.1.0

Global Sentry Guide



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# 1 - Getting Started

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## Global Sentry Module

The Global Sentry Module matches your records against government watch lists so that you can identify countries, individuals, and organizations in your data that have financial sanctions imposed on them by governments around the globe. The Global Sentry Module addresses the specific requirements of the USA PATRIOT Act and similar laws.

The Global Sentry Module identifies matches between your records and entities on the following government watch lists:

- Australian Government Department of Foreign Affairs and Trade
- Bank of England
- European Union - Common and Foreign Security Policy
- Office of Superintendent of Financial Institutions of Canada
- U.S. Bureau of Industry and Security - Denied Persons List
- U.S. Bureau of Industry and Security - Unverified List
- U.S. Treasury – Office of Foreign Assets Control
- U.S. Department of State Directorate of Defense Trade Controls - List of Statutorily Debarred Parties

Global Sentry provides optimized rules for matching and scoring, along with a knowledge base of names from 120 cultures and associated gender and name variant data to identify matches between your data and the watch lists. Matches are performed against sanctioned country names, names, addresses, ID numbers, and other information such as date of birth to provide an overall risk score. This information allows your organization to make a decision on whether or not to block a particular transaction.

The Global Sentry Module uses stages from the Universal Name Module, Data Normalization Module, and Advanced Matching Module.

## Global Sentry Databases

Global Sentry uses the same databases as the Advanced Matching, Data Normalization, and Universal Naming modules.

Additionally, it requires these databases for use in real-time mode:

- ofac.db
- pep.db
- sanctions.db

These databases are needed to run Global Sentry in batch mode:

- globalsentrydb.addresses-ofac.csv
- globalsentrydb.fullNames-ofac.csv
- globalsentrydb.ids-ofac.csv
- globalsentrydb.names-ofac.csv
- globalsentrydb.addresses-pep.csv
- globalsentrydb.fullNames-pep.csv
- globalsentrydb.ids-pep.csv
- globalsentrydb.names-pep.csv
- globalsentrydb.addresses-sanctions.csv
- globalsentrydb.fullNames-sanctions.csv
- globalsentrydb.ids-sanctions.csv
- globalsentrydb.names-sanctions.csv

## Starting and Stopping the Global Sentry Database Service

- On Windows, go to **Control Panel > Administrative Tools > Services** and double-click **Global Sentry Database Server**.
- On Unix or Linux:
  - a) Change directories to `<Spectrum Platform>/GlobalSentryDatabase/bin`.
  - b) Type `./globalsentrydb.start` to start the server.
  - c) Type `./globalsentrydb.stop` to stop the server.

## Using Global Sentry

Global Sentry can be used in real-time mode through the Spectrum™ Technology Platform API or in batch mode.

To use Global Sentry in real-time mode, use the Spectrum™ Technology Platform to access the following services on the server:

- Global Sentry
- Global Sentry Name Check
- Global Sentry Address Check
- Global Sentry ID Number Check
- Global Sentry Other Data Check

For more information about accessing services using the API, see the *Spectrum™ Technology Platform API Guide*.

Global Sentry performs the following functions in batch mode:

- Global Sentry Batch
- Global Sentry Name Check Batch
- Global Sentry Address Check Batch
- Global Sentry ID Number Check Batch
- Global Sentry Other Data Check Batch

# 2 - The Global Sentry Service

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# GlobalSentry

The GlobalSentry service matches transactions against government-provided watch lists that contain data from various countries. These lists include:

- Denied Persons List (United States)
- Unverified List (BIS Red Flag) (United States)
- Consolidated Financial Sanction Targets (Individuals and Entities) (United Kingdom or European Union)
- Consolidated lists of persons, groups, and entities subject to EU financial sanctions (European Union)
- DFAT Consolidated List (Australia)
- OSFI Consolidated List (Individuals and Entities) (Canada)
- Specially Designated Nationals, Terrorists, Narcotic Traffickers and other Blocked Persons List (United States)
- Statutorily Debarred Parties List (United States)
- Politically Exposed Persons (PEP) list
- The consolidated Sanctions List including all individuals and entities who have been subjected to sanctions by the United Nations Security Council.

Matches are performed against Sanctioned Countries, Name, Address, ID Number and other information such as DOB to provide an "Overall Risk Level Score" that allows your organization to make the right choice before making a decision to block a particular transaction and avoid false positive results.

These steps describe how GlobalSentry processes data:

1. The service first scans all required data in the transaction to identify countries that have been sanctioned. If a sanction country match has been identified, the transaction bypasses all other matching criteria and is assigned the highest possible risk score.
2. If a sanctioned country match has not been identified, the service then attempts to match the transaction against the GlobalSentry database using the GlobalSentry Name Check, GlobalSentry Address Check or GlobalSentry ID Number Check subflows.
3. The GlobalSentry Name Check attempts to match individuals, entities and vessels. If a name match is identified a Name Score is returned from the service.
4. The GlobalSentry Address Check attempts to match addresses within a country. If an Address match is identified an Address Score is returned from the service.
5. The GlobalSentry ID Number Check attempts to match identification numbers, such as Passport, National ID, SSN, and Fiscal Code. If an ID Number match is identified an ID Number Score is returned from the service.
6. If a transaction is not identified as a Name, Address or ID Number match, the transaction record is written to the output and given an overall risk level score of zero.



7. If a transaction has been identified as a Name, Address or Identification Number match, the service attempts to match those transactions against the GlobalSentry database using the GlobalSentry Other Data Check subflow.
8. The GlobalSentry Other Data Check attempts to match the Place of Birth, Date of Birth, Nationality or Citizenship. If a match is identified a Place of Birth Score, Date of Birth Score, Nationality Score or Citizenship Score is returned by the service.
9. GlobalSentry assigns an Overall Risk Level score to each transaction. The score is a value between 0 and 16 and is returned in the OverallRiskLevel field. In calculating the risk level, GlobalSentry takes into account what data was provided in the input record and which inputs, if any, matched entries in the GlobalSentry database. Generally, a higher value indicates a higher risk associated with the transaction.

## Input

**Table 1: Global Sentry Input Fields**

Field Name	Description
Name	Full name. Required if FirstName and LastName is not used.
FirstName	First name or all name elements other than last name. Required if Name is not used.
LastName	Last name only. Required if Name is not used.
AddressLine1	The first address line. Recommended if provided.
AddressLine2	The second address line. Recommended if provided.

Field Name	Description
AddressLine3	The third address line. Recommended if provided.
Country	Full country name. Required if address lines are used.
IDNumber	Identification Number, such as SSN, Passport, and Visa. Recommended if provided.
PlaceOfBirth	Any place of birth data. Recommended if provided.
DOB	Date Of Birth, in the format of Year, Month, Day. Recommended if provided.
Citizenship	Full country name. Recommended if provided.
Nationality	Full country name. Recommended if provided.

## Output

**Table 2: Global Sentry Service Output**

Field Name	Description
Status	Reports the success or failure of the match attempt. <b>null</b> : Success <b>F</b> : Failure
Status.Code	Reason for failure.
Status.Description	Description of the problem that caused the failure.
<b>Name</b>	
InputName	Input Name from the original data source.
InputFilteredName	Input Name with titles, suffixes and special characters removed from the original data source.
Name	Name returned from database.
InputFirstName	Input First Name from the original data source.
InputFilteredFirstName	Input First Name with titles, suffixes and special characters removed from the original data source.
FirstName	First Name returned from database.
InputLastName	Input Last Name from the original data source.

Field Name	Description
InputFilteredLastName	Input Last Name with titles, suffixes and special characters removed from the original data source.
LastName	Last Name returned from database.
NameScore	Name match score. 0 - 100.
NameMatchIdentified	Identifies if the Name is a match. Values are <i>Yes</i> or <i>No</i> .
NameProvided	Identifies if the Name is provided in the input data . Values are <i>Yes</i> or <i>No</i> .
<b>Address</b>	
InputAddressLine1	Input Address line from the original data source.
AddressLine1	Address line returned from database.
InputAddressLine2	Input Address line from the original data source.
AddressLine2	Address line returned from database.
InputAddressLine3	Input Address line from the original data source.
AddressLine3	Address line returned from database.
AddressScore	Address match score. 0 - 100.
AddressMatchIdentified	Identifies if the Address is a match. Values are <i>Yes</i> or <i>No</i> .

Field Name	Description
AddressProvided	Identifies if the Address is provided in the input data. Values are <i>Yes</i> or <i>No</i> .
InputCountry	Input Country from the original data source.
Country	Country returned from database.
<b>ID Number</b>	
InputIDNumber	Input ID Number from the original data source.
IDNumber	ID Number returned from database.
IDNumberScore	ID Number match score. 0-100.
IDNumberMatchIdentified	Identifies if the ID Number is a match. <i>Yes</i> or <i>No</i> .
IDNumberProvided	Identifies if the ID Number is provided in the input data. Values are <i>Yes</i> or <i>No</i> .
<b>Place of Birth</b>	
InputPlaceOfBirth	Input Place of Birth from the original data source.
PlaceOfBirth	Place of Birth returned from database.
PlaceOfBirthScore	Place of Birth match score. 0-100.
PlaceOfBirthMatchIdentified	Identifies if the Place of Birth is a match. Values are <i>Yes</i> or <i>No</i> .

Field Name	Description
PlaceOfBirthProvided	Identifies if the Place of Birth is provided in the input data. Values are <i>Yes</i> or <i>No</i> .
<b>Date of Birth</b>	
InputDOB	Input Date of Birth from the original data source.
DOB	Date of Birth returned from database.
DOBScore	Date of Birth match score. 0-100.
DOBMatchIdentified	Identifies if the Date of Birth is a match. Values are <i>Yes</i> or <i>No</i> .
DOBProvided	Identifies if the Date of Birth is provided in the input data. Values are <i>Yes</i> or <i>No</i> .
<b>Citizenship</b>	
InputCitizenship	Input Citizenship from the original data source.
Citizenship	Citizenship returned from database.
CitizenshipScore	Citizenship match score. 0 to 100.
CitizenshipMatchIdentified	Identifies if Citizenship is a match. Values are <i>Yes</i> or <i>No</i> .
CitizenshipProvided	Identifies if the Citizenship is provided in the input data. Values are <i>Yes</i> or <i>No</i> .
<b>Nationality</b>	

Field Name	Description
InputNationality	Input Nationality from the original data source.
Nationality	Nationality returned from database.
NationalityScore	Nationality match score. 0-100.
NationalityMatchIdentified	Identifies Nationality was a match. Values are <i>Yes</i> or <i>No</i> .
NationalityProvided	Identifies if the Nationality is provided in the input data. Values are <i>Yes</i> or <i>No</i> .

#### Government List Information

EntryID	Entry ID that identifies a name, entity, vessel, address, id number, place of birth, date of birth, citizenship or nationality. This is provided by each govt. agency.
ListType	Name of list provided by the government agencies. SDN, EU, Bank Of England, Financial Institutions of Canada.

#### Risk Analysis

OverAllRiskLevel	Risk score per match. 0-16. For more information, see <a href="#">Understanding the Risk Analysis Score</a> on page 15.
SanctionedCountryIdentified	Indicates if the sanctioned country is identified as a match. Values are <i>Yes</i> or <i>No</i> .

### Understanding the Risk Analysis Score

Risk analysis processing assigns a point value to each of these inputs depending on whether the input was provided and whether it matched a record in the Global Sentry database. The risk analysis score is the sum of these point values. Points are assigned as shown in this table.

**Table 3: Risk Analysis Scoring Method**

Input	No Data Provided	Matched	Did Not Match
Name	0	4	0
Address	1	2	0
ID	1	2	0
Date of Birth	1	2	0
Place of Birth	1	2	0
Citizenship	1	2	0
Nationality	1	2	0

Generally, each input that matches the database is assigned 2 points; Name is the exception. A name match scores 4 points. Name score is weighted higher following guidance from sources including OFAC, who indicate that a name match is more significant than other types of matches.

If an input is provided and does not match an entry on the database, it is assigned 0 points and has no effect on the overall risk level. This is consistent with guidance stating that a name match, coupled with a significant amount of additional data which does not match that entry in the database, should not be considered a "hit" against a particular list.

If an input is not provided, it is assigned a score of 1. This has the effect of identifying as higher risk those transactions where one or more inputs match the database, but there are some inputs which are not available for matching. For these types of transactions, the true risk level cannot be accurately calculated because of the missing data. Guidance from agencies such as OFAC suggests that in these cases you should attempt to obtain as much of the missing data as possible in order to return a more accurate assessment of the risk involved in the transaction.

Although higher scores indicate a higher risk transactions, the risk level alone is not always sufficient to determine the appropriate action. This is because different combinations of matched, not-matched, and not-provided inputs can result in the same score. To provide additional information to determine whether an interdiction is appropriate, the Global Sentry service also returns two indicators for each of the seven inputs that are used in matching. These indicate whether the input was provided and



whether the input matched the database. This allows you to perform additional analysis on transactions that are in the middle of the risk spectrum to understand whether it is appropriate to report the transaction to the watch list authority, to flag the transaction as needing additional input data for an accurate risk assessment, to approve the transaction, or to take some other action.

## Customizing the Global Sentry Service

Global Sentry deploys five dataflow templates that you can modify in Enterprise Designer. Each dataflow consists of various components that were installed from the Spectrum™ Technology Platform, Universal Name, Data Normalization and Advanced Matching modules.

The names of the dataflows are:

- Global Sentry
- Global Sentry Name Check
- Global Sentry Address Check
- Global Sentry ID Number Check
- Global Sentry Other Data Check
- Global Sentry Batch
- Global Sentry Name Check Batch
- Global Sentry Address Check Batch
- Global Sentry ID Number Check Batch
- Global Sentry Other Data Check Batch

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