

THREAT HUNTER RESEARCH

H1 2024 Insurance Data Breach Risk Report

A half-year assessment of insurance-sector data exposure, the channels involved and the resulting governance priorities.

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Original report text

This text version is reconstructed based on the 34-page original PDF, retaining the report narrative, chapters and research scope; the cover, repeated table of contents and purely decorative pages are not repeated. Localized figures are placed in context throughout this web edition, with the original PDF retained for reference.

Preface

In the era of the rapidly emerging digital economy, data is the core asset and important strategic resource of enterprises. While it is growing rapidly, the data risks behind it are also rising. The increasingly complex data leakage situation has become a serious obstacle to the digital development of all walks of life.

As one of the three pillar industries of the financial industry, the insurance industry involves a large number of high-net-worth individuals, has high data conversion efficiency and strong monetization capabilities, and is a key target of cybercriminal attacks. Data from the "Data Breach Risk Landscape Report for the First Half of 2024" recently released by Threat Hunter shows that 2,039 data breaches occurred in the insurance industry in the first half of 2024, ranking fourth in the industry.

Once a data leak occurs, or the data is not promptly controlled after the leak, the data will be used by the cybercrime ecosystem for large-scale transactions and malicious activity deeds, seriously damaging the interests of platform customers. Financial institutions such as insurance companies will not only suffer customer complaints, but also face punishment from regulatory authorities, damaging their economy and brand reputation.

Threat Hunter has long been committed to in-depth exploration and research of the cybercrime ecosystem chain and data leakage risks. The report will discuss the main characteristics and development of data asset leakage in the insurance industry together with peers.

Related noun definitions:

1. DRRC: Threat Hunter established DRRC Digital Risk Emergency Response Center in Shenzhen and Chongqing, bringing together 30+ security operations

Experts provide 7×24-hour emergency response services to enterprises;

2. Authenticity verification engine: through the extraction and comparison of personal elements of different file types, and in the image OCR results

Extract and verify the elements to effectively identify whether the image content contains forged data/historical leaked data;

3. Data leakage intelligence: Threat Hunter captured "unauthorized personal/organizational sensitive information through TG groups, dark web and other channels"

"Publicly traded or used" intelligence information may include historical data, duplicate data, etc., and is often of huge magnitude;

4. Data leakage incidents: Threat Hunter security research experts analyze, verify and troubleshoot data leakage intelligence samples, etc.

Remove historical false information and confirm valid data leakage incidents;

5. Dark web: refers to a hidden network that ordinary netizens cannot search and access through conventional means. They need to use some specific software.

Configuration or authorization is required to log in;

6. Citizen's personal information: refers to citizens' personal identity information, including but not limited to name, ID number, date of birth, phone number, etc.

Phone number, home address, bank account information, etc.;

7. Historical personal information: refers to personal information that has been leaked before this data leakage incident, a lot of historical personal information

Collected and integrated into a social engineering library by threat actors;

8. Historical data events: threat actors integrate leaked real information and reuse it for transactions. Usually threat actors will

Perform refined processing of data to supplement the integrity of data fields, thereby increasing data value and profitability;

9. Fake data incident: threat actors use forged fake data for transactions;

10. Third-party leakage: A third party that has a cooperative relationship with an enterprise has the authority to access certain sensitive data of the enterprise, but

Due to problems such as irregular management, these sensitive data are leaked to threat actors through third parties;

11. Leakage of SMS channels: With the development of SMS sending and receiving services over the years, SMS channel providers have begun to lower prices.

In order to obtain higher orders, for example, a transaction will be reached with the SMS sender (Party A) at a price lower than the market standard, and the profit margin will be much lower, so internally, the SMS information data will be illegally sold to obtain more revenue.

12. Operator channel: threat actors obtain the access data of designated web pages through channels such as operator insiders or illegal agents.

Installation data of specified applications, receiving and sending data of specified text messages and other information;

13. Insider leaks: Internal employees of the company, driven by interests, use methods such as data export and manual photography to obtain customer information.

User sensitive information is then sold;

14. Hacker attacks: External hackers use crawlers, scans, penetrations, etc. to attack corporate systems and network assets, taking advantage of corporate

Industrial network vulnerabilities steal data on a large scale;

15. Basic fields: mainly refers to basic personal information, including personal information (name, phone number, ID number, date of birth

Date, gender, age, email address, specific place of residence, education, etc.), property information (income, license plate number, car brand, number type, car price, etc.), family information (marriage status, family relationships, etc.), work information (enterprise unit, occupation, etc.);

16. Business field: mainly refers to information related to insurance business, including insurance type (type of insurance), insurance date, guarantee period,

Insurance amount, policy number, policy form, policy purpose, insurance liability, payment form, platform name, order number, order payment status, order payment amount, order source, etc.;

17. threat-actor-defined fields: In order to improve the value and efficiency of threat-actor data transactions, threat actors will clean and define the data.

Such as: verification ID, device information (iOS/Android), operator, etc. (Verification ID is mainly used by threat actors to mark the data to prevent secondary trafficking). Mark them to prevent them from being sold again).

Secondary sale).

Introduction to the fraud network of data leakage in the insurance industry

1. Introduction to the fraud network of data leakage in the insurance industry

Threat Hunter conducted in-depth research on the data leakage industry chain in the insurance industry and found that the industry chain surrounding data asset leakage and reselling is currently quite mature and is divided into upstream, middle and downstream based on a clear division of labor and positioning.

Upstream: Data theft groups include company insiders, hackers, operators, operators' third-party agents, SMS channel service providers, etc. These individuals are specifically responsible for finding ways to obtain and steal data from both inside and outside the insurance organization. At a time when data is becoming more and more valuable, huge profits and extremely low crime costs drive upstream data thieves to be willing to take risks.

Note: The following will analyze the platforms that have been attacked and data leakage channels in the insurance industry. See Chapter 2 for details.

Midstream: Most data middlemen are active on the dark web, Telegram, threat actors forums, Potato and other platforms. These people publish posts on different platforms.

Sub-sales data, and is responsible for classifying and cleaning the data to meet the various needs of downstream customers.



Insurance data are stolen from upstream groups to middle-middle data brokers and used by downstream buyers for telemarketing or fraud.

Source: Threat Hunter original report, page 8

English figure labels

1	Group Properties
2	External hackers obtain insurance from insiders through attacks, third-party agencies, insiders.
3	Industry data
4	Data on the voluntary insurance industry
5	Downstream.

Note: The following will analyze underground transaction channels, data fields, etc. that have leaked data in the insurance industry. See Chapter 2 for details.

Downstream: Data buyers include telemarketing companies, fraud gangs, etc. People who purchase data usually use it for targeted marketing and fraud. After use, the data may be resold or exchanged with other illegal parties. In recent years, there has been an increasing demand for refined data, such as data for insurance customers, claims users, and high-net-worth individuals. This data is used for more precise marketing and fraud activities, with a success rate far higher than traditional methods. For example, insurance customer data is used to promote new insurance products, or claims user data is used to commit insurance claims fraud. Changes in downstream demand prompt upstream and midstream illegal personnel to use various technical means to collect user data, classify the data according to demand, and then sell it.

Threat Hunter sorted out fraud incidents related to the insurance industry from May 2023 to May 2024. Fraud incidents occurred on average every month, and fraud incidents related to the insurance industry occurred frequently. According to past fraud cases related to the insurance industry, it can be seen that leaked personal information is the main basic element for the occurrence of fraud in the insurance industry: electronic fraud gangs can use leaked personal

information and insurance-related data to tailor scripts and rhetoric to carry out false claims, identity theft, insurance fraud and other activities.

The fraud process is roughly as follows:

The framework of fraud rhetoric is as follows:

Overview of data breach risks in the insurance industry in the first half of 2024

2. Overview of data breach risks in the insurance industry in the first half of 2024

2.1 In the first half of 2024, there were 2,039 data breaches in the insurance industry, involving 80 insurance institutions

In the first half of 2024, Threat Hunter monitored 110 million pieces of intelligence across the entire network. Based on the authenticity verification engine and DRRC manual analysis, there were a total of 16,011 valid data leakage incidents, involving 85 industries, of which the insurance industry ranked fourth with a total of 2,039 incidents, an average of about 340 incidents per month, involving 80 insurance institutions.

2.2 Large domestic insurance institutions are the main targets of threat actors, accounting for more than 50% of data leakage incidents

Threat Hunter intelligence researchers further analyzed the 15 insurance institutions with the most data breaches in the first half of the year and found that the data breaches involved in these 15 insurance institutions accounted for nearly 80% of the total data breaches in the entire insurance industry, among which the top 5

Institutional data breaches account for more than 50%.

诈骗话术框架如下：

话务口 话术 教程

Forwarded from 好运来-看简介

我们话术很多人反馈比较长
应该是我整理不规整导致的

看似长 其实掌握基本框架
很好理解 毕竟话术是死的人是活的
我们最终要达到的是一个目的 而不是单纯去念话术

具体框架：就是 误开通 保险， 带去看保单 看看能否关闭，
协助关闭
带去关闭 要客户复述一遍 怎么跟银行员工说
话术可以压缩 但是框架不变，
都是围绕来的， 记住三点就可以

I. Introduction to the black chain of the insurance industry data

Source: Threat Hunter original report, page 9

English figure labels

1	The frame of fraud is as follows:
2	Queries
3	Forwarded from @ lucky-read the profile
4	We have a lot of feedback.
5	Looks like you've got it.
6	That's very understandable.
7	What we're finally going to achieve.
8	Specific framework: For iA insurance, SEER looks at whether it can be shut down.
9	"=: Assisted closure
10	The city's closed down.
11	It's the frame.
12	Just remember three.

Further analysis of the data trading situation of the Top5 institutions and threat actors shows that the Top5 are all insurance institutions of the top ten domestic insurance brands, with large institutional scales, large user groups on the platform, and large amounts of user data. From the perspective of threat actors trading gangs, there are 569 threat actors gangs that illegally sell insurance institution data, of which 534 are threat actors gangs that sell the data of the Top5 institutions, which far exceeds the number of threat actor gangs that sell the data of other institutions. It can be seen that the Top 5 insurance institutions are the main targets of threat actors.

2.3 TG and darknet channels are the main transaction channels for illegal data transactions, accounting for more than 98%

Threat Hunter analyzed the transaction channels of data leakage in the insurance industry and found that anonymous group chats on Telegram and darknet accounted for

98.47%, is the main channel for threat actors to conduct illegal data transactions, which is consistent with the illegal data transaction channels in the entire industry in the first half of 2024.

The distribution is basically the same.

2.4 The type of data leaked in the insurance industry is mainly user information, accounting for over 95%

Threat Hunter analyzed the data information leaked in the insurance industry and found that user information accounted for as much as 10% of the leaked data.



2024 A total of 2039 cases involving 80 insurance institutions were reported in the first half of the year.

Source: Threat Hunter original report, page 11

English figure labels

1	Number of top 10 industry incidents in the first half of 2024
2	Bank Se meh HE Express i Sf Local Life

95. 64%, which is the main type of illegal data transactions.

User information: personal information of platform users, including name, phone number, ID number, insurance-related information, health information, property information, etc.;

Employee information: personal information and professional information of company employees, including employee name, phone number, ID card, professional position and other information;

Sensitive documents: Sensitive documents and information within the enterprise, including internal confidential documents, contract documents, product drawings and other information;

Sensitive code: It is sensitive code information within the enterprise, including source code information, API interface keys, environment configuration, domain name and other information.

数据泄露事件占比超 50%。



Large domestic insurance agencies are the main targets of black gangs, with over 50% of data leaks.

Source: Threat Hunter original report, page 12

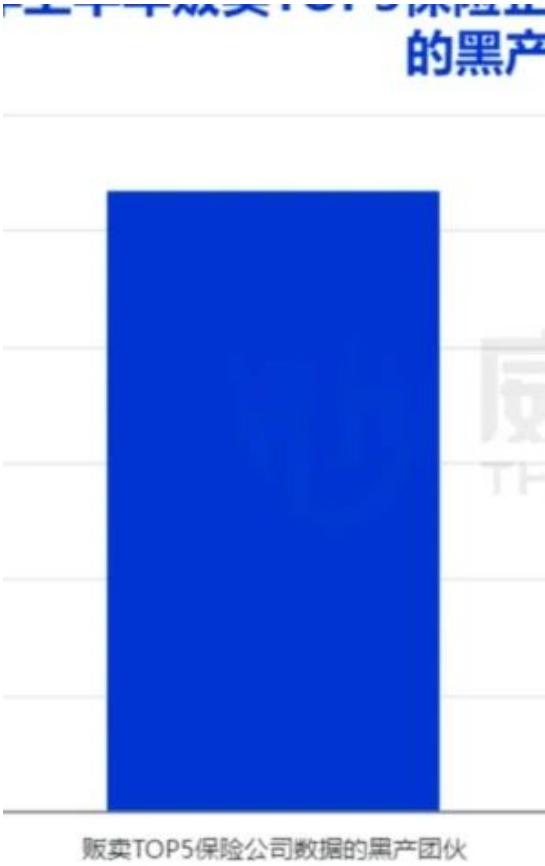
English figure labels

1	Data leaks account for over 50 per cent of incidents.
2	The number of incidents in the insurance industry in the first half of 2024
3	+ Insurance
4	"Insurance

Note: In order to further understand the details of the leaked user information, Threat Hunter analyzed the leaked data fields. See Chapter 3 for details.

2.5 The leaked data in the insurance industry mainly comes from third-party leaks, followed by SMS channel leaks

Threat Hunter analyzed the sources of data leaks in the insurance industry. Data leaks caused by third parties were the main reason, accounting for 67.28%, followed by SMS channel leaks, accounting for 17.39%, external hacker attacks accounting for 11.23%, and internal employee leaks 3.99%.



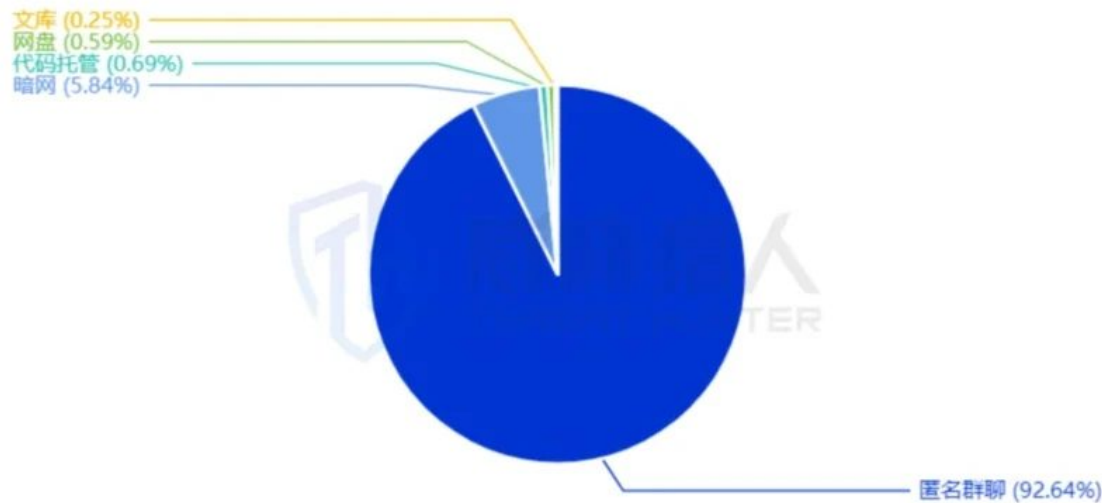
Sources of illegal transactions in insurance data (Chart 1)

Source: Threat Hunter original report, page 13

English figure labels

1	Black.
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2024年上半年保险行业数据泄露事件来源渠道占比情况



Sources of illegal transactions in insurance data (Chart 2)

Source: Threat Hunter original report, page 13

English figure labels

1	Share of sources of data leaks in the insurance sector in the first half of 2024
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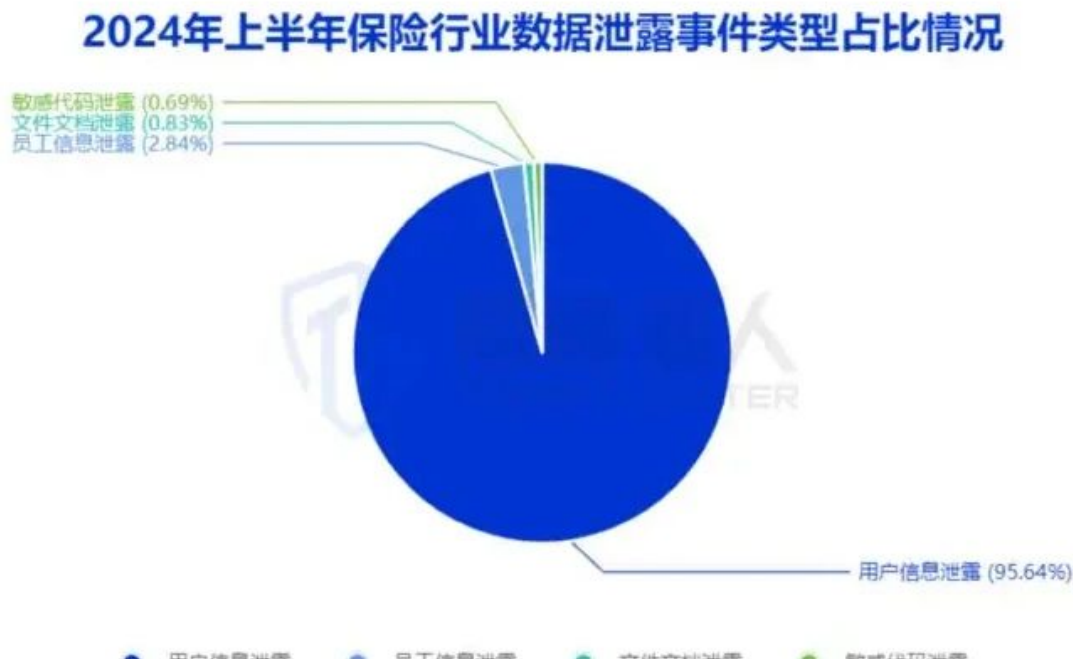
Third-party leakage: A third party that has a cooperative relationship with an enterprise has the authority to access certain sensitive data of the enterprise. However, due to irregular management and other issues, these sensitive data are leaked to threat actors through the third party;

Leakage of SMS channels: With the development of SMS sending and receiving business over the years, SMS channel providers have begun to obtain higher orders by lowering prices. For example, they will reach a deal with the SMS sender (Party A) at a price lower than the market standard, and its profit margin

It is much lower, so internally, more revenue will be obtained by illegally selling SMS message data.

Operator channel: threat actors obtain information such as access data of specified web pages, installation data of specified applications, receiving and sending data of specified text messages, etc. through channels such as operator insiders or illegal agents;

95.64%，为非法数据交易的主要类型。



The type of data leaked in the insurance sector is mainly user information, which is over 95 per cent

Source: Threat Hunter original report, page 14

English figure labels

1	95.64 per cent are the main types of illegal data transactions.
2	Type of disclosure of insurance sector data in the first half of 2024

Insider leaks: Internal employees of the company, driven by interests, use methods such as data export and manual photography to obtain sensitive customer information and then sell it;

Hacker attack: External hackers use crawlers, scanning, penetration and other methods to attack corporate systems and network assets, and exploit corporate network vulnerabilities to steal data on a large scale.

2.6 The amount of data leaked in a single incident is mostly small-scale, with nearly 60% of data leaked under 5,000 items.

In the first half of 2024, most of the data transactions of threat actors in the insurance industry captured by Threat Hunter were small-scale transactions of less than 5,000, accounting for 59.72%.

Although the overall data transactions are mainly small-scale data transactions, there are also many single leaks of more than 100,000 pieces of data, with up to 700,000 pieces of data. Further analysis shows that this incident is a major data leakage incident in an insurance institution in 2022.

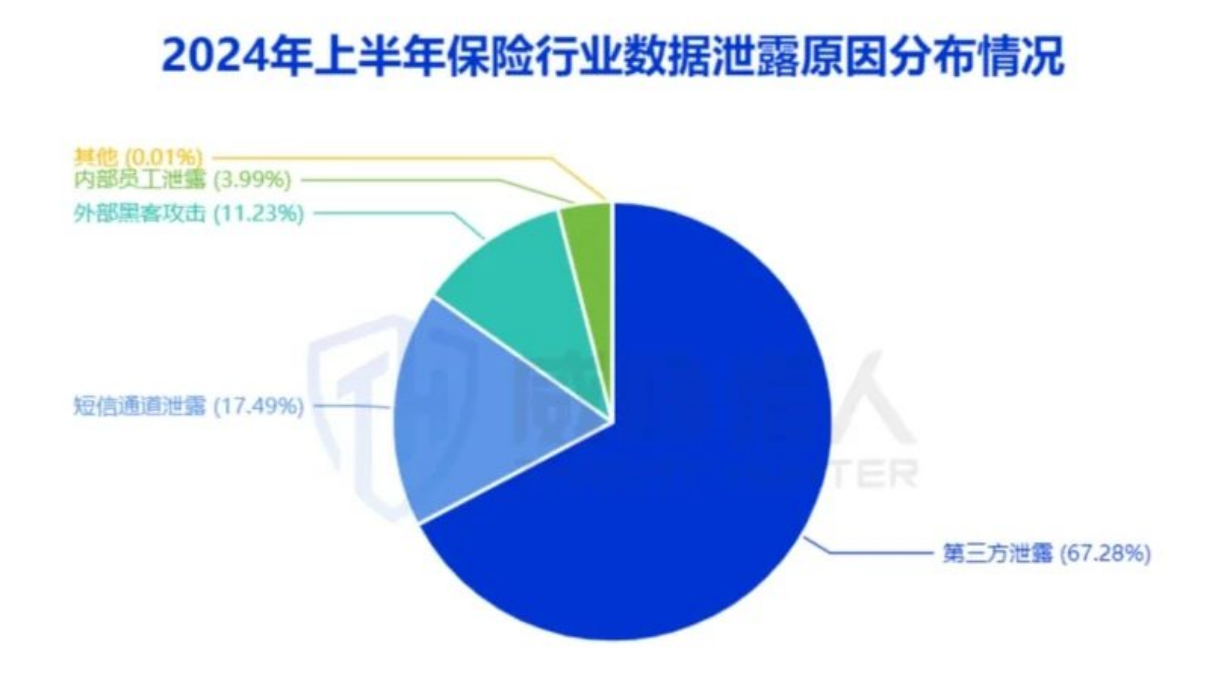
2.7 The proportion of historical data and false data among the data traded by threat actors in the insurance industry far exceeds the level of the entire network

Threat Hunter conducted an authenticity verification analysis on the data traded by threat actors in the insurance industry and found that the proportion of false data and historical data far exceeded the overall level of the entire network:

Analyzing from the perspective of historical data, 52.67% of the leaked insurance data is historical leaked data, which exceeds 30.60% of the historical data of the entire network;

Analyzing from the perspective of data authenticity, 4.76% of the leaked insurance data is false and mismatched information data, exceeding the 1.54% proportion of false data in the entire network.

Historical data events: Threat Hunter identifies events that contain old data in data samples released by threat actors through matching verification with past leaked data;



Source of disclosure of insurance sector data

Source: Threat Hunter original report, page 15

English figure labels

1	Distribution of data from the insurance sector for the first half of 2024
2	External hacker attacks (11.23 per cent)
3	SMS leak (17.4996)
4	Third party leaks (67.28%0)

False data events: Threat Hunter matches and verifies the three elements contained in the data sample and identifies false data events forged by threat actors.

The Threat Hunter authenticity verification engine will conduct credibility assessment and preliminary verification of risk intelligence based on the historical overlap of data samples, three-factor matching, and source confidence, helping enterprises identify false data, historical data, and irrelevant data released by threat actors, and improve the accuracy and credibility of event warnings.

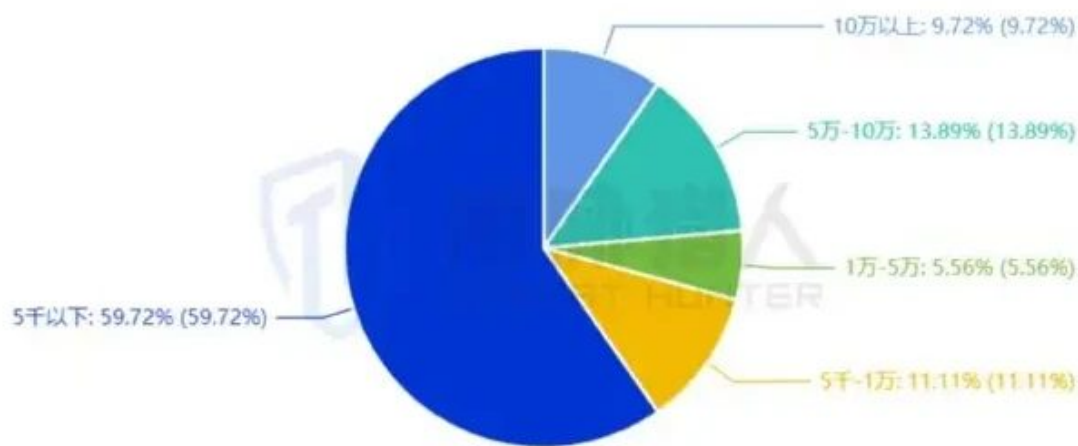
Analysis of data leakage fields and crowd portraits in the insurance industry

3. Analysis of data leakage fields and crowd portraits in the insurance industry

3.1 Nearly 98% of the data contains basic personal information, and 20% of the data contains custom tags for threat actors

Threat Hunter's statistical analysis of leaked data fields in the insurance industry found that data fields mainly include basic fields, business fields, and threat actors' defined fields. 97.40% of the data contains basic fields, and 65.35% of the data contains business fields. It is worth noting that threat actors' custom fields reached 19.71%. In order to improve the value and efficiency of threat actors' data transactions, threat actors will clean the data and customize labels.

2024年上半年保险行业数据泄露量级分布



The main source of leaked data in the insurance industry was third-party leaks, followed by leaks in text messaging channels

Source: Threat Hunter original report, page 16

English figure labels

1 Level distribution of leakage of insurance sector data in the first half of 2024

Basic fields: Mainly refers to basic personal information, including personal information (name, phone number, ID number, date of birth, gender, age, email, specific place of residence, education, etc.), property information (income, license plate number, car brand, number type, car price, etc.),

family information (marriage status, family relationships, etc.), work information (enterprise unit, occupation, etc.);

Business fields: mainly refers to information related to insurance business, including insurance type (type of insurance), insurance date, guarantee period, insurance amount, policy number, policy form, policy purpose, insurance liability, payment form, platform name, order number, order payment status, order payment amount, order source, etc.;

threat-actor-defined fields: Mainly refers to the fields defined by cybercriminal groups after data cleaning, such as: verification ID, device information (iOS/Android), mobile carrier, etc. (Verification ID is mainly used by threat actors to mark data to prevent secondary trafficking).

3.2 The insurance business fields that appear most frequently are “insurance type” and “platform name”

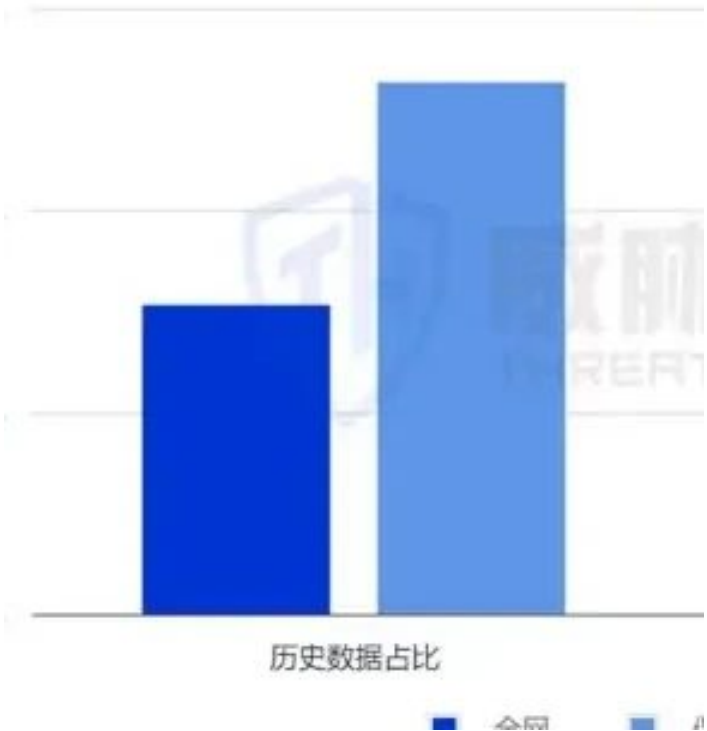
Threat Hunter analyzed the insurance business information fields and found that fields such as "insurance type", "platform name", "policy number", and "insured amount" appear more frequently. Among them, "insurance type" has the highest frequency, up to 85.97%, followed by "platform name", up to 82.97%. This data is very specific. Once the fraud gang obtains this data, it can accurately grasp the insurance status of users of insurance institutions and commit fraud.

3.3 "Personal insurance" accounts for the highest proportion among "Insurance Types", with "life insurance" and "annuity insurance" being the most common

Threat Hunter analyzed "insurance type" and found that the leaked insurance industry data mainly involved products such as "personal insurance", "medical insurance", "pension insurance" and "property insurance", among which "personal insurance" accounted for the highest proportion, reaching 52.51%.

Further analysis found that among the "personal insurance" products, "life insurance" and "annuity insurance" are the majority.

2024年上半年全网与保险行业泄
占比情况对比



The amount of data leaked by a single incident is much smaller, and less than 5,000 accounts for nearly 60%.

Source: Threat Hunter original report, page 17

English figure labels

1	Netization and insurance in the first half of the year
2	Percentage
3	Share of historical data

3.4 Fraud gangs carry out precise fraud on insurance platform users through the "iOS" field tag

In order to improve the value and efficiency of threat-actor data transactions, cybercriminal groups will clean the data and customize labels. In the first half of 2024, a large number of fields defined by threat actors appeared in the leaked data, with "operator", "device system", "verification ID", etc. appearing most frequently:

It is worth noting that there is a large amount of data labeled "iOS" in the "device system". Judging from the chat records between the underground data trafficking actors group and downstream data buyers, the downstream data buyers repeatedly mentioned the screening requirements for "iOS" device data in their repurchase requirements for data.

It was mentioned in Threat Hunter's "Data Breach Risk Landscape Report for the First Half of 2024" that fraudsters used the Facetime function to commit fraud by filtering out "iOS" user information. Since 2024, Threat Hunter has discovered that many fraudsters have pretended to be "financial

platform customer service", "National Credit Information Center staff" and other identities to use FaceTime. This function initiates a call to Apple mobile phone users and defrauds them on the grounds that "million-dollar medical insurance needs to be closed", "there are unpaid loans that need to be processed", etc., and informs mobile phone users that if they do not cancel, they will be forced to deduct money, or their personal credit will be damaged, thereby tricking mobile phone users into transferring relevant funds to designated accounts, causing huge losses to the victims.

Take a real event as an example:

On March 19, the victim, Mr. Lin, received a FaceTime video call from an unknown number. The other party said that he had purchased "million-dollar medical insurance" online. The monthly payment standard was 800 yuan, and the annual fee was 9,600 yuan. If you do not go through the cancellation procedures, the payment will continue to be deducted. Believing it to be true, the victim Lin went through the cancellation procedures as required by the other party. He was guided to send a red envelope with a password to the designated Alipay account through Alipay, and was defrauded of more than 300,000 yuan.

3.5 The data leakage user groups in the insurance industry are mainly concentrated in Zhejiang, Sichuan and other places, and are mainly middle-aged women.

Threat Hunter conducted a sampling analysis of portraits of people whose data was leaked in the insurance industry and found that the victim groups of data leaks in the insurance industry are mainly concentrated in Zhejiang, Sichuan, Jiangsu and other places; in terms of age distribution, people between 35 and 54 years old accounted for the largest proportion, reaching 68.85%; in terms of gender distribution, women accounted for 78.44%, far exceeding the 21.56% of men.

Analysis of typical data breach incidents in the insurance industry Analysis of typical data breach incidents in the insurance industry

4. Analysis of typical data leakage incidents in the insurance industry

4.1 Due to insufficient third-party security control, a large amount of sensitive data in the insurance industry was leaked

In order to improve the efficiency of business development and service quality, insurance institutions often introduce third-party cooperation agents. Many third-party cooperation agents are small and medium-sized enterprises that put "business first" and invest relatively little in security construction. Moreover, their business involves a large number of customers' sensitive data, making them easy targets for attacks by threat actors.

Threat Hunter's monitoring intelligence analysis on the anonymous chat platform channel found that a large amount of sensitive data in the insurance industry is being traded. The leaked data fields not only contain the user's personal information, but also contain the user's specific insurance information (insurance type, insurance amount, insurance period, etc.), and involve multiple insurance companies.

Data sample is as follows:

Analysis process:

Threat Hunter found that the data fields leaked by such data samples were relatively complete, including not only personal information, but also insurance information.

At the same time, multiple insurance institutions are involved, so Threat Hunter initially determined that the leak was caused by a third party related to cooperation with multiple insurance institutions.

4.2 The API organization of an insurance institution was hacked, and the policy information of 200,000 users was leaked

As the level of network security in various industries continues to improve, it is becoming more and more difficult for hackers to invade and obtain backend permissions. Therefore, many hackers target API interfaces with security flaws and steal data through data traversal attacks and other methods.

Threat Hunter's monitoring intelligence analysis on darknet platform channels found that the policy information data of 200,000 users of a domestic insurance institution was sold by threat actors for \$300. The leaked data samples not only included basic information such as user names and phone numbers, but also the user's job position, home address, bank card and other information.

Data sample is as follows:

The analysis process is as follows:

According to the information provided by the dark web post, the insurance data sold by the other party only involves a certain domestic insurance institution, which is highly targeted; at the same time, the leaked data fields are relatively complete and involve multiple sensitive fields. Therefore, combining the above two points, threat hunting

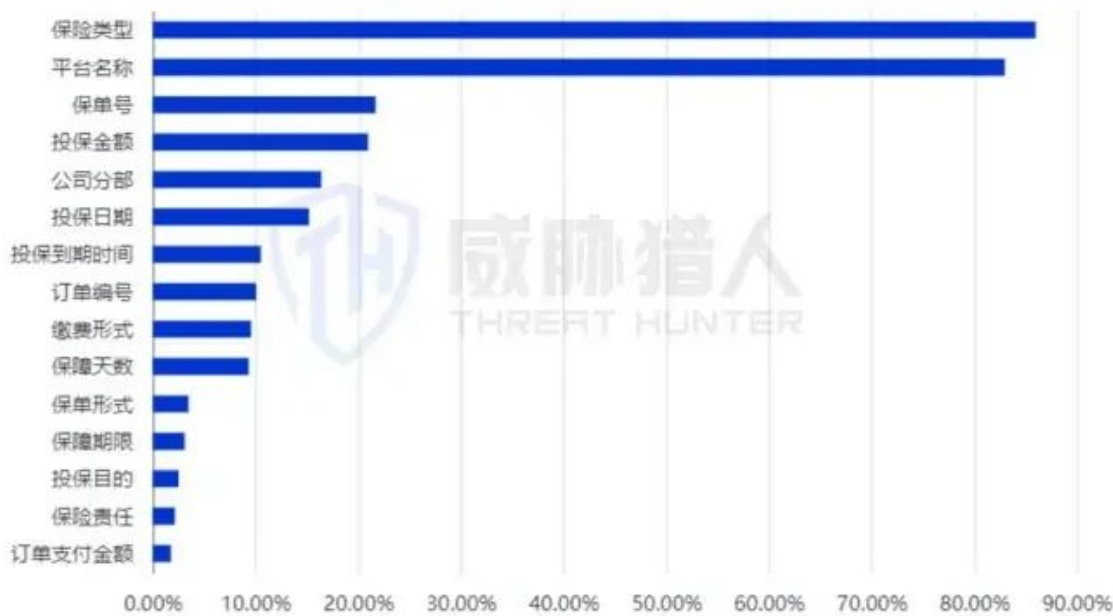
People initially judged that it was suspected to be caused by an external hacker attack on the insurance institution.

4.3 Suspected "insiders" in insurance institutions illegally obtain user data and profit

Threat Hunter's monitoring intelligence analysis on anonymous chat platform channels found that threat actors are selling user information data of a domestic insurance institution. The following is the data sample information provided.

地掌握到保险机构用户的投保情况并进行诈骗。

2024年上半年保险泄露数据中出现频率TOP15的业务字段



The most frequent occurrence of the insurance business fields were the “insurance type” and “platform name”

Source: Threat Hunter original report, page 21

English figure labels

1	The insurance coverage of the users of the insurance institutions was obtained and fraudulently obtained.
2	Business field with frequency top 15 in insurance leak data in the first half of 2024
3	Type of insurance
4	Name of Platform
5	Insurance number
6	Company branch
7	Insurance date
8	You're insured.
9	Form of insurance policy
10	Guarantee
11	Purpose of insurance coverage
12	Full orders.
13	Insurance liability

Data sample:

Analysis process:

Threat Hunter analyzed that the data sample not only contains the user's personal information, but also includes the establishment status of the insurance institution and the status of the insurance institution's branches within the enterprise.

Therefore, Threat Hunter initially determined that it was suspected that internal employees of the insurance institution used internal channels to illegally obtain data and then sold it to the data trading market.

4.4 Suspected security risks in SMS channels lead to data leakage in insurance institutions

Threat Hunter's monitoring intelligence analysis on anonymous chat platform channels found that there are threat actors selling SMS information data of insurance agency users. The following is the data sample information provided.

Data sample:

Analysis process:



Fraudsters fraudulently defraud users of insurance platforms by labeling “iOS” fields

Source: Threat Hunter original report, page 22

English figure labels

1	Distribution of types of insurance in leakage data from the insurance sector in the first half of 2024
2	FER One Man,

With the development of the SMS sending and receiving business over the years, SMS channel providers have begun to obtain higher orders by lowering prices. For example, they will reach transactions with the SMS sender (Party A) at a price lower than the market standard, and their profit margins will be much reduced. Therefore, they will obtain more profits internally by illegally selling SMS message data.

The source of SMS data leakage comes from the SMS channel, which is generally a third-party service. It itself has the risk of penetration or information leakage, leading to data leakage within the third-party service.

Threat Hunter analyzed the leaked data samples and found that the leaked data contained the content of user text messages, and the security protection of the SMS delivery interface of the company's own platform was relatively complete. Therefore, it was initially determined that the suspected leak channel was caused by the SMS channel.

Conclusion

5. Conclusion

Data breaches in the insurance industry in the first half of 2024 are not optimistic. From the perspective of data leakage risk status in the insurance industry, companies need to focus on the following issues:

1. The number of data breaches in the insurance industry in the first half of 2024 was 2,039, involving 80 insurance institutions

In the first half of 2024, there were a total of 16,011 data breaches across the entire network, with the insurance industry ranking fourth with a total of 2,039 incidents, an average of about 340 incidents per month, involving 80 insurance institutions.

2. Large insurance institutions are the main targets of threat actors, accounting for more than 50% of data breaches.

In the first half of 2024, the Top 5 are all insurance institutions of the top ten domestic insurance brands. They have large institutional scales, large platform user groups, and large amounts of user data. There are 534 threat actor groups selling the data of the Top 5 insurance institutions (a total of 569 threat actor groups illegally selling insurance company information data).

3. Third-party leakage and SMS channel leakage are the main reasons for data leakage in insurance institutions.

Different from previous years, as insurance institutions increasingly strengthen data protection and pay attention to the data security management of internal systems, traditional data leaks caused by insider leaks, penetration and dragging, etc. are gradually decreasing. Improper data access control by partners, SMS channel leaks and other methods have become the current mainstream. In 2024, the proportion of data leaks in the insurance industry caused by third parties will be as high as 67.28%, and data leaks caused by SMS channels accounted for 17.39%.

4. "Personal insurance" accounts for the highest proportion among "Insurance Types", with "life insurance" and "annuity insurance" being the most common.

Among the data leaked in the insurance industry in the first half of 2024, data involving "personal insurance" accounted for the highest proportion, reaching 52.51%;

Further analysis found that among the "personal insurance" products, "life insurance" and "annuity insurance" are the majority.

5. The proportion of false data and historical data in the data traded by threat actors in the insurance industry far exceeds the level of the entire network.

Among the insurance data leaked in the first half of 2024, 52.67% were historical leaked data, accounting for 30.60% of the historical data of the entire network; 4.76% were false mismatched information data, accounting for 1.54% of the false data of the entire network.

6. The data leakage user groups in the insurance industry are mainly concentrated in Zhejiang, Sichuan and other places, and are mainly middle-aged women.

From a regional perspective, the regions with the largest number of data breaches in the insurance industry in the first half of 2024 are: Zhejiang, Sichuan and other places; from an age perspective, 35-54 year olds accounted for 68.85%; from a gender perspective, women accounted for 78.44%.

In this regard, Threat Hunter proposed a targeted solution:

1. Network-wide intelligence monitoring and mining: covering dark web, anonymous group chat, network disk library, code hosting platform and other channels, never

The same dimension continues to improve the comprehensiveness of channel coverage, including the continuous discovery and update of new channels, special mining of deep intelligence sources (DeepSource), and multi-lingual channel coverage.

2. Accurate early warning of data leakage risks: Based on the monitored transaction data of threat actors, the risk authenticity verification engine + manual

Data verification services provide comprehensive credibility assessment results to help enterprises accurately perceive risks and handle risks in a timely manner:

1 Risk authenticity verification engine: Verify risk authenticity based on three elements: "source confidence factor, three-factor matching factor, and historical coincidence factor";

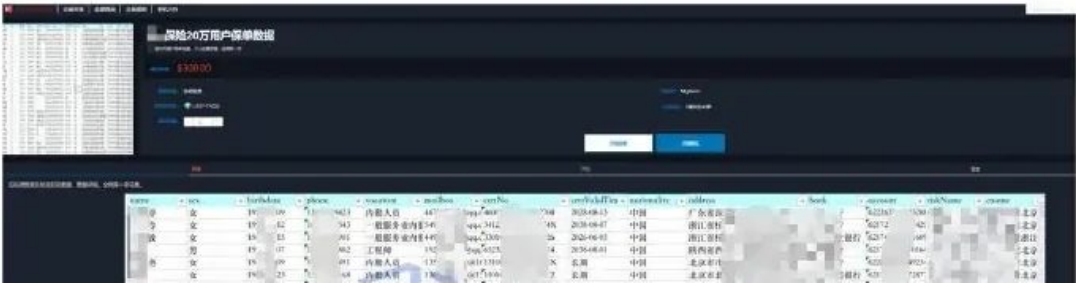
2. Manual data verification service: further help enterprises accurately perceive risks through secondary verification, active verification and other methods.

3. "7×24" emergency response: In October 2023, two major emergency response centers will be established in Shenzhen and Chongqing, and

After-sales service centers have been established in Shanghai, Chongqing, Beijing and other places to conduct round-the-clock monitoring, review and early warning of enterprise-related risk information, and provide services such as "7×24" sample acquisition, intelligence mining, assistance in traceability, disposal and removal, and monthly data leakage risk monitoring reports, as well as analysis results of typical risk events.

与基础信息，此外还有用户的工作岗位、家庭地址以及银行下卡信息。

数据样例如下：

A screenshot of a web application displaying a table of user data. The table has multiple columns with headers in Chinese and English. The data is organized into rows, with some rows highlighted in blue. The table is titled '保险20万用户保单数据' (Insurance 200,000 user policy data).

id	name	gender	age	phone	email	address	city	country	bank	card	status
1	张三	男	35	13800138000	zhangsan@163.com	北京市海淀区	北京	中国	工商银行	62220210010000000000	正常
2	李四	女	28	13900139000	lisi@163.com	上海市浦东新区	上海	中国	建设银行	62270000000000000000	正常
3	王五	男	45	13700137000	wangwu@163.com	广东省广州市	广州	中国	农业银行	62280000000000000000	正常
4	赵六	女	32	13600136000	zhaoliu@163.com	浙江省杭州市	杭州	中国	招商银行	62140000000000000000	正常
5	孙七	男	50	13500135000	sunqi@163.com	山东省济南市	济南	中国	交通银行	62220000000000000000	正常

An insurance agency API was hacked and 200,000 user insurance information leaked.

Source: Threat Hunter original report, page 28

English figure labels

- 1
- For example: