



# Verint Text Analytics

## G-Cloud 14 Service Description

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# Verint Text Analytics

## Service Overview

Verint delivers market-leading solutions that help address the challenges of citizen engagement and these work alongside Puzzel Contact Centre and other key Puzzel software to offer G-Cloud buyers a complete, holistic set of engagement services.

Although voice remains a critical channel for delivering service, customers are increasingly choosing to engage via text-based channels, such as web chat, email, and social media. By analysing these text interactions in conjunction with verbal communications, you can gain deeper insight into process, performance, and customer experience issues and opportunities within your organization and take action quickly.

Verint® Text Analytics™ can help. This software solution can extract actionable business intelligence from the unstructured information contained within text-based documents and interactions across a variety of channels from Puzzel Contact Centre, including:

- SMS
- Web chat
- Email

With Verint Text Analytics, you can dramatically reduce the time and resources required to analyse textbased interactions. By deploying the solution in combination with Verint Speech Analytics™, you can capture the complete voice of the customer – and employee – across different channels of interaction, interpret it in the context of business objectives, and then act to drive enhanced customer experiences, loyalty, and revenue.

### Now you can

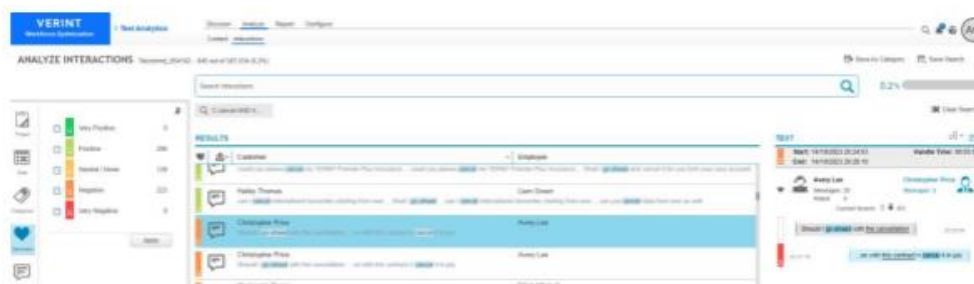
- Deliver enhanced customer insights across text-based, digital engagement channels, including email, web chat, and SMS.
- Drive operational efficiency and reduce costs by analysing the context of text-based conversations against key operational metrics.
- Reduce the time and resources needed to analyse text-based customer feedback while rapidly surfacing customer and business issues and opportunities.
- Drive compliance by quickly revealing regulatory breaches and failure to adhere to internal policies.
- Benefit from integration with Verint Speech Analytics to capture, analyse, and act on the complete voice of the customer and the employee across different channels of interaction.

[illegible]

Right out of the box, Verint Text Analytics provides key metrics that can help you assess operational efficiency and productivity in your text-based channels, including customer effort, handle time, agent/customer response times, and the number of messages required to resolve an issue. This can help your contact centre optimize its processes and performance, facilitating better customer experiences.



Verint Text Analytics supports conversational analytics and can separate interactions into employee and customer streams. This can enable you to analyse and understand what customers say versus what employees say, so you can home in on the knowledge, behaviour, and emotions expressed by both parties. Precise and highly actionable, this level of insight can help you quickly formulate specific actions to improve processes or enhance employee performance and skills.



## Optimise Customer Engagement

You can deploy Verint Speech Analytics together with Verint Text Analytics™ to converge insight from your text and voice channels efficiently – a significant benefit for delivering omnichannel customer service. The solution can help you gain a deeper view into customer journeys, wants, and concerns, and take targeted action quickly. It's a crucial capability that can help your organization optimize customer engagement. Interaction analytics allows the insights analyst to compare speech and text channels side by side to pin point bottle necks, failure demand and other trending issues.

## Next-Generation Interaction Analytics

Automatically combines speech and text insights of customer sentiment and engagement



## Cloud First

Verint Text Analytics is available as a SaaS solution. Our SaaS total cloud offers rich functionality and data security whilst helping to reduce start-up times and costs and simplify system administration. The solution can share data with Verint's workforce engagement, quality management, and recording solutions, helping you leverage data from text interactions in other business processes and decision making.

## Engagement Data Insights

Verint Engagement Data Insights automatically offers you useful information you should keep an eye on. This is made possible by Verint's AI-powered Data Insights Bot surfacing anomalies, trends, correlations within your data. Connect data silos, conduct easier root-cause analytics, augment charts and graphs with automatically generated audio-visual presentations.

Engagement Data Insights is powered by the Verint Engagement Data Hub which is an open data hub for the storage and management of customer engagements, including both Interactions and Experiences. Interactions are recordings of direct conversations between your department and customers, such as calls, chats, emails, SMS, etc. Whereas Experiences are records of indirect communications such as survey and digital feedback results.

Verint Engagement Data Insights is seamlessly integrated with the Verint Data Hub taking advantage of the normalised data to bring it all together in a single view and making it easy to access the entire landscape of engagement data, enabling you to make data-driven decisions with confidence.

## Part of the Verint Customer Engagement portfolio

Verint Text Analytics is part of a patent-protected portfolio of customer engagement solutions that help organizations enrich customer interactions, improve business processes, and optimize their workforces to enhance loyalty, increase revenue, mitigate risk, and manage operational costs.

## Benefit from World-Class Consultants

Puzzel offers a range of Verint Professional Services to help you get the most from your investment, including Business Advisory Services, Implementation and Enablement Services, and Managed Services. Regardless of the services you select, you can be confident that our experienced teams offer practical knowledge and are committed to your success.

## Become part of a community of experts

As part of the solution, Verint offers a free to join user community for sharing ideas and posting questions with other users. Verint also currently run a free UK based user forum twice a year across their customer base which other parts of government are active members of. This is all about customer engagement and sharing of best practices across different industry verticals.



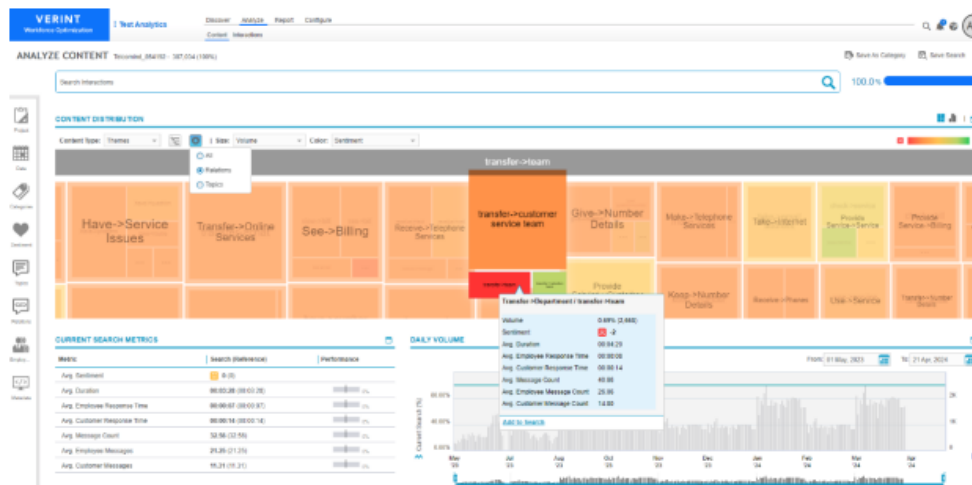
## Key Features and Benefits

The capabilities in the Verint Speech Analytics application are organized under four simple, easy-to-navigate sections that represent the logical workflow of the typical use of text analytics. The four sections are:

- Discover
- Analyse
- Report
- Configure

## Discover Features

Using automated theme discovery, Verint Text Analytics can group discussion topics and conversational relationships together without users having to predefine them. With this innovative conversational analytics functionality, you can understand and analyse customer issues and needs across interactions quickly, helping you act right away.



You can also leverage system-generated themes to create interaction categories for long-term analysis or studies.

Because Verint Text Analytics can continually refine and add new themes over time, it can help you stay on top of customer perceptions and what is being communicated during interactions. By understanding what irritates and delights customers, your organization can improve the overall customer experience while managing operational service goals.

## Automated Discovery of Trends

Trends expose patterns of behaviour in your enterprise or business unit by changes in key metrics over time. Surfaced by the system, trend views provide insights into customer engagement with your products and services.

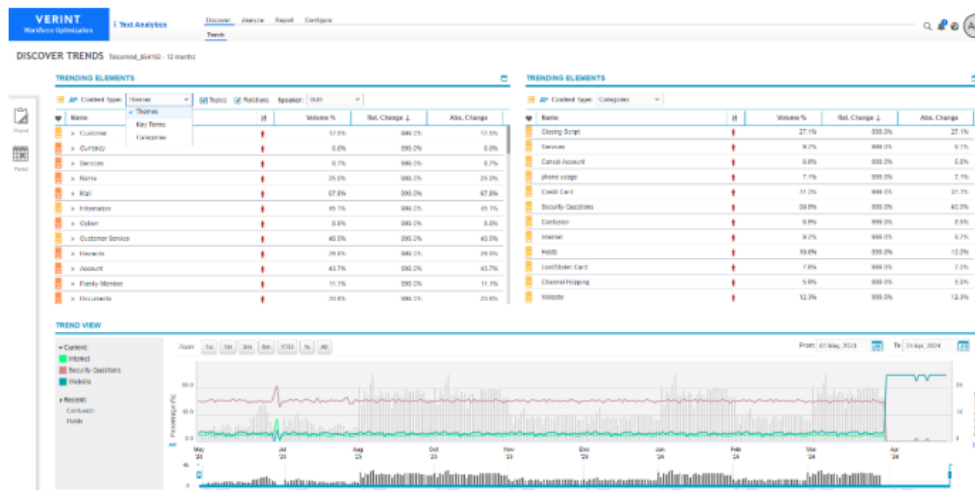
Discover trends to:

- Keep up with what is changing in customer and employee engagement with products and services.
- Understand emerging business phenomena.
- Proactively identify process or service issues and take corrective action.

Trends help identify changes in customer communication patterns with the organization. Three types of trend views are available, as either lists or term clouds:

- Category trends
- Theme trends
- Term trends.

Category trends show changes of interactions assigned to categories. For example, you might find that the number of interactions where customers are expressing wishes to cancel their account has increased in the last day or week.



### What can you do in the Discover Trends workspace?

- Monitor trending elements for different content types- Track what your customers are writing about over time – from shorter time periods such as the last 30 minutes, to longer time periods such as a year. View trends by the relative change, volume (number of interactions or contacts), and absolute change.

- Track historical trends- Track trends for historical time periods to gain insights into customer engagement with campaigns or promotions or predict future behavioural patterns.
- View day-to-day trend behaviour of trending elements- Select trending elements to observe trending patterns on a day-to-day basis for an extended period. Identify if recent deviations represent isolated occurrences or are symptomatic of specific time periods.
- Compare day-to-day trend behaviour for multiple elements- View day-to-day trend patterns for multiple trending elements and compare how they affect each other.
- Investigate trending elements- For an element that is trending up, perform root-cause analysis by analysing content and interactions in the Analyse > Content and in the Analyse > Interactions workspaces.

Details for each trend can be seen by hovering over a Category Term or theme with the ability to drill through and analyse.

**TRENDING ELEMENTS**

Content Type: Themes ☒ Topics ☒ Relations Speaker: Both

Name	Volume %	Rel. Change ↓	Abs. Change
City Name	6.7%	1.7%	0.1%
Customer Demographics	5.1%	1.0%	0.1%
	23.5%	1.0%	0.2%
	5.9%	0.7%	0.0%
	6.7%	0.7%	0.0%
	23.4%	0.6%	0.1%
	7.4%	0.5%	0.0%
	6.9%	0.5%	0.0%

**City Name**

Volume % 6.7%

Rel. Change 1.7%

Abs. Change 0.1%

Sentiment 🟡

[Analyze Content](#)

[Analyze Interactions](#)

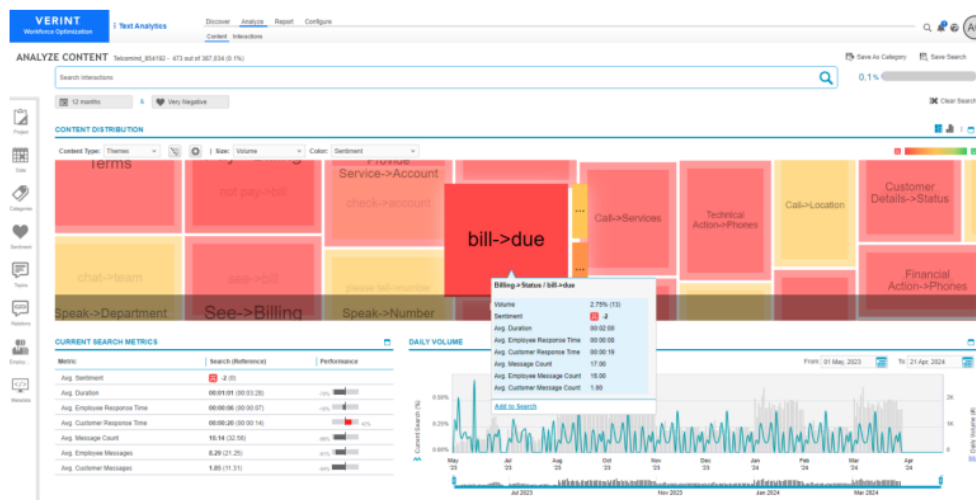
## Benefits

- Quickly identify and visualize changes in customer behaviours and conversation topics in the types of interactions coming in as well as in the specific changes of phrases and words used by customers and agents in the interactions.
- Fully automated discovery of business issues and topics delivered out of the box even before any categories are set up.
- Analysts can easily dig deeper into any business issue represented by the theme content.
- With a single click, users are able to take system-generated themes that describe concepts and turn them into a system category to support longer-term structured analysis.

## Analyse Features

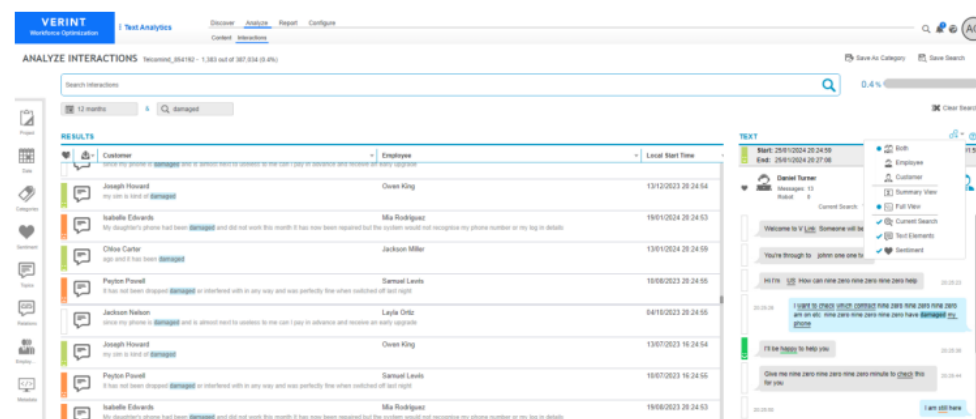
### Analyse Content

With Verint Text Analytics users can perform content analysis on predefined categories as well as system automatically generated content themes (Relations and/or Topics). Tree-map or bar-chart visualization of content is supported with drill down ability to further narrow down the analysis to relevant interaction. Users can set visualization parameters for size and colour with the different metrics such as volume, relevancy, message count, sentiment, duration and more.



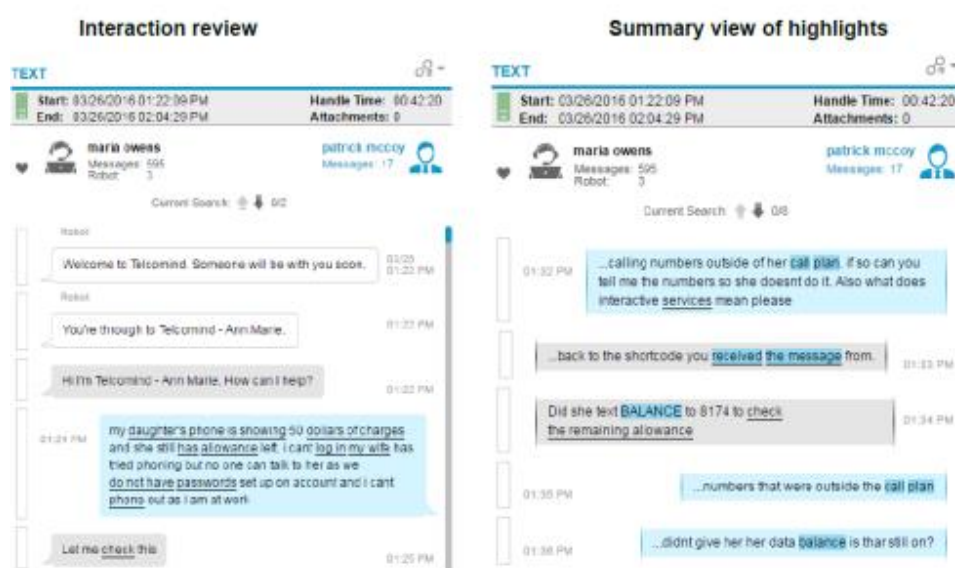
### Analyse Interactions

Verint Text Analytics supports the ability to list, search and review text-based interactions. Using its powerful faceted search features interactions can be displayed in a list that includes a visual sentiment indicator and snippet preview of the conversation. To assist the user on message content review, on selection of an interaction, the full details of the conversation are shown in a preview window.



## Review and Analyse Conversations

Dialogue-based interactions such as e-mail, chat and SMS provide unique challenges and opportunities to better understand your customers. Traditional approaches to text analytics however 'merge' an interaction into a single document for analysis, losing the understanding of the parties in the conversation and the ability to analyse it accordingly. Understanding who said what is critical to understanding an interaction. Sentiment must therefore be separately analysed for each participant, and for each message within the conversation.



Verint Text Analytics has been designed to model and analyse content as multi-part interactions. It has the ability to search and categorize based on a specific party in the conversation. Interactions are presented as dialogs in order to understand the flow of the conversation. Sentiment is separately analysed for each participant, and for each message within the conversation. Conversations can be analysed using out-of-the-box contact centre metrics to determine for example how long does it take to respond to each message within an interaction or to determine the average number of messages required to resolve an issue.

A unique summary view focuses the preview on the phrases that the user is currently searching for, allowing a quick interaction to sift through and understanding of the search results.

## Search Functionality and Configure Features

### Text Search

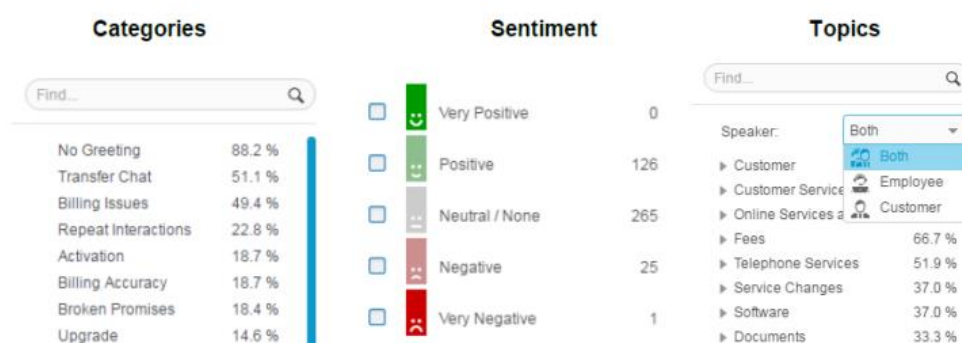
Textual search allows a user to type in a simple query for specific terms or to build more sophisticated and complex query using operators such as Boolean conditions,

proximity, speaker separation or fuzzy search. Using the search query, users can refine their search to have a more accurate list of results that represent the business case they are after.

## Faceted Search

Verint Text Analytics Faceted Search enables users to filter their search in multiple ways for example based on sentiment or specific topics. The user is assisted in their search by the visible folder structure that displays potential search volumes for each element. Multiple facets can be combined using Boolean operators to quickly narrow down your analysis and get to insights faster. A powerful filter on topics and relation facets allow viewing and then drill down on customer only, employee only or all participants' language.

The value of facets is it allows users to explore and identify relationships across categories, topics, relationships, and metadata that may be unseen. Users can then apply multiple facets and drill down for further analysis. The key here is it is different than filters as filters eliminate things that don't match, whereas facets visually give ideas about related data.



## Reporting Features

### Source data export

You can export data for interactions and categories. View and manage your exports in the My Exports workspace.

The Report > My Exports workspace provides a centralized location from which to view and manage export files containing interaction data. Export files are shown per project and per user.

Data can be filtered and queried within the Text analytics user interface and then the results exported for use in your management information platform of your choice.

### **What can you do in the My Exports workspace?**

- View status of exports- Track the status of every interaction export that is initiated, from queuing to processing to successful completion.
- Download completed export files- Download export files for offline viewing and analysis. You can export up to 2 million results from the current search set.

## **Configure Features**

The Text Model Editor allows you to manage the ontology and sentiment in the language model used by Text Analytics to tag and extract data from employee-customer interactions.

Every language model is associated with a business domain, language, and source type. The same business domain can have different language models for different source types and different languages based on the needs of the enterprise.

At the outset from every engagement Verint will work with our customers to set up the base ontology and tune this and then enable customers to manage this as required.

Every source type includes a canned ontology and sentiment:

- The ontology comprises industry-specific terminology and phrases.
- The sentiment comprises words, phrases, or emoticons that represent the opinions, emotions, and attitudes associated with elements in an interaction.

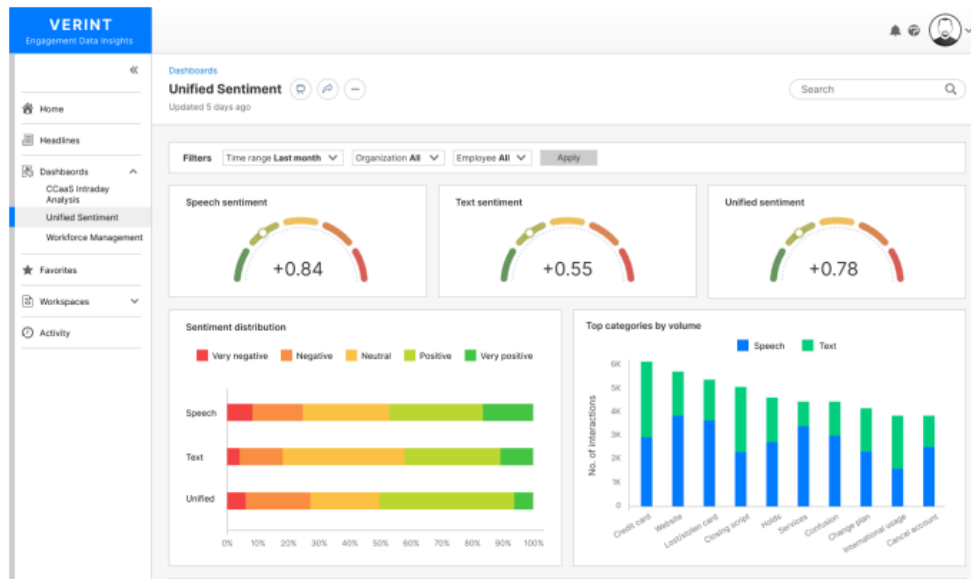
In addition to the business domain and the language, the ontology and sentiment in the language model is differentiated by source type. Ontology and sentiment optimized by source type result in more accurate sentiment analysis, and more accurate insights on which to base business decisions.

The source types supported include various written channels from Puzzel Contact Centre, including SMS, Webchat and Email.

## **Sentiment Scoring Bot**

The Sentiment Scoring Bot detects the sentiment of an interaction on a scale of five points. The Sentiment Score can be analysed and aggregated by: Source Type, Categories, Employees, Dates, Custom Data etc.

This enables you to find what is driving Sentiment up or down, improve customer experience, automate immediate attention, and coach the right employees.



The Sentiment Scoring Bot provides a sentiment score for voice and text interactions on a 5-point scale from -2 to +2. The bot leverages Generative AI algorithm to detect sentiment, from extremely negative to incredibly positive.

The system highlights the terms and phrases that have impact on sentiment. Sentiment identification is based on ontology and machine learning algorithms. Phrases and terms receive a sentiment score that is then rolled up to the message level, interaction level and, later, to the category level.

The sentiment can be filtered and drilled down at each touchpoint in the system.

Sentiment Analysis is presented as a dashboard in Engagement Data Insights with out of the box and custom charts and custom charts, anomaly detection, collaboration module and slicing and dicing capabilities.



## Support

Basic support is given to all Puzzel customers through written requests only. Customers can chat with our support engineers via web chat or by raising a ticket through [help.puzzel.com](https://help.puzzel.com) and clicking on the Support tab on the right. Support is only available during business hours.

Customers can request further support however by subscribing to paid for packages. Please see our pricing file for details.

## Help Site

We will provide all customers access to our online help portal where you can view constantly updated useful information regarding your chosen products and features. This includes:

- Knowledgebase and Documentation of your software
- Maintenance Schedule
- Software Status and Incident Notifications
- Release Notes
- Announcements
- Ability to Raise Tickets
- Support Webchat

## Incident Management

When your issue is harder to solve, the Help portal is the centralised point where you can create incident tickets.

When your issue requires our support team, once triaged, we give you direct access to our technically proficient, in-region support engineers for rapid resolution of your ticket.

Tickets are triaged and assigned a P1 to P5 rating based upon the following matrix which measures Impact of incident versus the required Urgency.

Impact / Urgency	High	Medium	Low
High	P1 – Highest	P2 – High	P3 – Normal
Medium	P2 – High	P3 – Normal	P4 – Low
Low	P3 – Normal	P4 – Low	P5 – Lowest

Puzzel's committed initial response times to you are based upon the assigned incident rating:



- P5 – Respond within 8 business hours.
- P4 – Respond within 4 business hours.
- P3 – Respond within 2 business hours.
- P1 or P2 – Respond within 1 hour.

For our customers, your ability to self-support and take ownership of your chosen software is matched with a responsive, technical support team based in-region and able to support you quickly and efficiently by connecting you with a proficient support engineer immediately.

Our full Service Level Agreement can be reviewed via [this Help Page](#).

Where required, incidents will be escalated to Verint and Puzzel will manage the incident with Verint until closure.

## **Additional Service Details**

### **Verint Cloud**

Verint Cloud is a global service delivery fabric providing resilience and dynamic capacity for customers consuming Verint SaaS solutions. Verint Cloud delivers global reach with ubiquitous, secured access and data resilience that enables customers to operate their businesses 24 hours a day with the assurance that services will be accessible, performant, and available.

Verint Cloud is deployed in multiple locations across three key regions (AMER, EMEA, and APAC) to support customers around the globe. For G-Cloud buyers, their solution will be setup within United Kingdom data centres.

### **Cloud Operations and Security**

Verint's Cloud Operations is responsible for the management and availability of our SaaS Verint Cloud infrastructure and solutions. Cloud Operations' role is to enable platform performance and solution availability. Our 24x7x365 Network Operations Centre (NOC) and Security Operations Centre (SOC) monitor the SaaS infrastructure, network, application, and security components. Verint Cloud Operations uses ITILv3 (Information Technology Infrastructure Library version 3) standards and operating procedures.

### **Business Continuity and Disaster Recovery**

Verint Cloud is deployed across multiple locations and layered service delivery sites to provide system continuity in the event of infrastructure or network disruptions within regions. Data recovery is considered in the design and backed up to alternate availability zones to ensure quick and timely recovery of systems during an event. The prime focus is to ensure our customers can operate their business irrespective of natural disasters, environmental or infrastructure incidents, and human error.

### **High Availability**

High availability is at the core of Verint SaaS Cloud system architecture and employment model. Our core systems are redundant within a single location, and our global footprint gives Verint the flexibility to serve global customers while adhering to regional and geographic requirements.

## Service Level Agreement

Puzzel will commit to a service availability of 99.9% for all non-Puzzel services including Verint.

Verint builds applications that are designed to handle both routine interruptions and unplanned failures of components and infrastructure.

## Maintenance

Verint executes maintenance on a regularly published schedule, so customers have advanced notice of events and can coordinate their operations. Maintenance is executed with a goal of reducing service impact during maintenance cycles. Verint also reserves the right to perform emergency maintenance required to mitigate risk associated with an imminent threat to data integrity or to remediate a security vulnerability.

## Customer Notifications

Customers are notified of Verint's maintenance windows seven days and three days ahead of any scheduled maintenance and at the start and stop of the actual maintenance window. Maintenance is carried out during the weekend outside of peak business hours, depending on the region in which the customer is located.

## Identity and Access Management

Verint's Identity Platform is a cloud-based identity and access management service that provides a unified identity experience to customers across all Verint products. It is used to manage and authenticate access to Verint products and provides single sign-on (SSO) and other identity-management features to our customers. Additionally, it provides APIs for developers to integrate with their own applications.

## Security and Compliance

The National Institute of Standards and Technology (NIST) is a federal agency within the U.S. Department of Commerce that develops and issues standards, guidelines, and other publications to assist federal agencies in implementing the Federal Information Security Management Act of 2002. NIST Special Publication 800-53 provides a catalogue of security controls for U.S. federal information systems, and Verint systems have been configured to a MODERATE impact level according to NIST standards.

To provide a solid reference model for information security management, Verint has designed and architected its security framework based on NIST 800-53 Rev 5.1 standards, leveraging best practices for data security including (but not limited to):

- **Defence in Depth** – Verint has built multiple layers of independent security controls throughout its information technology system to help prevent threats, detect and isolate vulnerabilities, and mitigate consequences should a suspected breach occur.
- **Least Privilege** – Verint leverages the principle of least privilege to help ensure that users, programs, and processes can access only the information and systems that are required to complete a legitimate task. This enhances the integrity of data by allowing access to those who need it while inhibiting accidental errors and malicious behaviour.
- **Business Continuity and Disaster Recovery** – Verint has set up numerous system redundancies and automated failovers to provide continued operations in the event of a disaster. Several other policies and procedures have been designed to increase the dependability of the information technology system, and to help ensure the protection and confidentiality of customer data.

Verint also follows other industry best practices and regulations to help ensure the availability, integrity, and confidentiality of internal and external data. Mapping of like controls to the Verint security framework allows for improved understanding of industry standards and ideas on best security practices across multiple disciplines.

## Information Security

As part of our commitment to our clients' expectations and data security needs, our information security framework is designed to meet industry standards. This includes the functions required to provide protections to confidentiality, integrity, and availability of data and systems. With a mindset of security by design, all components of the framework are applied from product and application development throughout the lifecycle of the product. In-depth strategies are employed to drive a high resilience in security measures throughout the product and enforcement of security boundaries in processing environments. Through continuous monitoring, we obtain assurance of adherence to our designed framework.

While Verint has a strong stance and operational excellence in platform data security, keeping information secure is a joint responsibility between us and our clients. Clients are responsible for identifying individual contacts within their organization who can work with or receive notification of security-based events, should the need arise.

Examples of areas of customer responsibility include:

- Identification of security-related maintenance or integration with client services which may cause issues to the platform.
- Maintenance of integrated access controls through the use of single sign-on technologies to ensure that least privilege is applied.
- Advance notification of activities which involve penetration testing of our environments, outlining the efforts and scope to help ensure that the activities are not identified as malicious in nature.
- Accuracy of the data entered into the applications and assurance that only scoped information is ingested into the application.

## Secure Software Development

Security by design is involved throughout the software development processes. This takes the form of static application security testing (SAST), dynamic application security testing (DAST), and software composition analysis (SCA). As each product is developed, careful attention is paid to leading organizations for standards development, such as the Open Worldwide Application Security Project (OWASP) and SANS Institute, who have defined top issues faced by software development. In addition, our code is scanned for known exploited vulnerabilities and measured against the MITRE ATT&CK methodology.

## Vulnerability Scanning

Vulnerability scanning is an integral part of a secure platform and, as such, Verint has taken an approach that involves both dynamic live scanning and static deployment scans. The dynamic scans are performed live in the environment to provide assurance of current and future identification of any vulnerabilities to our platform, applications, or code. These scan results are sent directly to security team members for event correlation and investigation in our security information and event management (SIEM). The analysis is performed with leading threat feeds to ensure we are staying up to date on the latest threats and applying this knowledge to our scanning processes.

## Penetration Testing

Penetration testing is performed on a continuous basis by Verint security staff and third-party testing firms with a trust but verify methodology. This takes the form of automated identification scanning and manual efforts to establish a designed defence against outside adversary attacks and insider threats. Results of testing are returned to our security operations team for policy and identification refinement to improve vulnerability identification processes and methodologies. In addition, feedback is given to the teams for their efforts in automated mitigation techniques.

## Security Operations

Security Operations at Verint is the central gathering point for analysis and immediate response to identified events. This team operates 24 hours a day, 7 days a week and pulls information in from all logs and systems in the environment. Security event response begins with identification of the automated scanning for issues and log aggregations identified in our SIEM.

## Data Sovereignty

Verint believes that data sovereignty—the concept that data is subject to the laws and governance of the location in which it is stored—is as important as processing integrity. As a global leader, we recognize this impacts our clients to varied degrees, and we work to ensure that compliance with federal or national requirements is identified and adhered to during the contract negotiations process. Our global processing presence allows us to accommodate sovereignty requirements across the globe with controls to help ensure enforcement of the requirements.

Like other application providers, Verint has implemented a global data retention policy to standardize data retention periods for the applications in our cloud systems, starting with our workforce engagement (WFE) applications. Cloud customer data (historical temporary and transactional data) in the applications noted within the policy are purged in accordance with the timelines set forth in the policy.