



# WASHOE COUNTY

Integrity Communication Service

[www.washoecounty.us](http://www.washoecounty.us)

## STAFF REPORT

COMMITTEE MEETING DATE: January 16, 2020

**DATE:** Friday, January 03, 2020

**TO:** 911 Emergency Response Advisory Committee

**FROM:** Quinn Korbolic, IT Manager, Washoe County Technology Services  
775-328-2348, [qkorbolic@washoecounty.us](mailto:qkorbolic@washoecounty.us)

**THROUGH:** Craig Betts, Washoe County Chief Information Officer

**SUBJECT:** Recommendation to approve the Change Order for Services between Washoe County and Intrado Inc., for the upgrade of the current Verint Recording Solution to Verint's v15.2 Recording Solution for the three Public Safety Answering Points ("PSAPs"), Reno, Sparks and Washoe County; not to exceed [\$633,600]; [\$10,560 per month for 60 months]; total expenditures to be funded within the adopted operating budget of the E911 Fund.

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### SUMMARY

Staff recommends that the 911 Emergency Response Advisory Committee recommend that the Board of County Commissioners approve the Change Order for Services, on behalf of the 911 Emergency Response Advisory Committee, between Washoe County and Intrado Inc., for the upgrade of the current Verint Recording Solution to Verint's v15.2 Recording Solution for the three Public Safety Answering Points ("PSAPs"), Reno, Sparks and Washoe County; not to exceed \$633,600; \$10,560 per month for 60 months; total expenditures to be funded within the adopted operating budget of the E911 Fund.

This request is being made because the current Verint recording system is at "end-of-life" and needs to be replaced; and to increase the number of dispatch positions being recorded from 24 to 30. Verint's v15.2 recording system will provide enhanced functionality and options to add additional recording features at a later date.

Of the funding amount requested - \$10,560/month - \$8,448 is part of the current monthly fee for the existing recording solution and will cover the upgrade to the new system; and \$2,112 will cover an additional six dispatch positions for recording. The total increase in the monthly charge from Intrado Inc. as a result of this Change Order, therefore, is \$2,112/month.

### PREVIOUS ACTION

On December 9, 2014 the Board of County Commissioners approved the Agreement for Services between Washoe County, on behalf of the 911 Emergency Response Advisory Committee and Intrado Inc., for the purchase of the Intrado Recording Solution for three

Public Safety Answering Points ("PSAPs"), Reno, Sparks and Washoe County, not to exceed \$506,800; \$8,448 per month for 60 months.

On November 20, 2014, the 911 Emergency Response Advisory Committee voted to recommend that the Board of County Commissioners approve a contract with Intrado, Inc. for the recording and retention of 911 emergency communications for the Reno, Sparks, and Washoe County PSAPs in an amount not to exceed \$506,800.00 [\$8,448.00 per month for a maximum of 60 months].

### **BACKGROUND**

NRS 244A.7645 provides that 911 surcharge funds may be used to pay for costs associated with maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.

Currently Washoe County, Sparks, and Reno are using Verint recording systems which have reached their end of life cycle and are in need of upgrade. This upgrade would increase the number of positions recorded, upgrade the equipment and software used for recording and provide options for additional future enhancements of 911 recording capabilities.

### **FISCAL IMPACT**

The Enhanced 911 Fund is a special revenue fund which receives revenue pursuant to NRS 244A.7643 in the form of telephone surcharges collected to support the emergency reporting system. Funds currently exist within the E911 Fund in the amount of [\$10,560.00] per month for 60 months, from Cost Center 800801 Enhanced 911 Fund GL710200 Service Contract not to exceed \$633,600.00.

### **RECOMMENDATION**

Staff recommends that the 911 Emergency Response Advisory Committee recommend that the Board of County Commissioners approve the Change Order for Services, on behalf of the 911 Emergency Response Advisory Committee, between Washoe County and Intrado Inc., for the upgrade of the current Verint Recording Solution to Verint's v15.2 Recording Solution for the three Public Safety Answering Points ("PSAPs"), Reno, Sparks and Washoe County; not to exceed \$633,600; \$10,560 per month for 60 months; with total expenditures to be funded within the adopted operating budget of the E911 Fund.

### **POSSIBLE MOTION**

Should the Committee agree with Staff's recommendation, a possible motion would be: "Move to recommend that the Board of County Commissioners approve the Change Order for Services, on behalf of the 911 Emergency Response Advisory Committee, between Washoe County and Intrado Inc., for the upgrade of the current Verint Recording Solution to Verint's v15.2 Recording Solution for the three Public Safety Answering Points ("PSAPs"), Reno, Sparks and Washoe County; not to exceed \$633,600; \$10,560 per month for 60 months; with total expenditures to be funded within the adopted operating budget of the E911 Fund."

## Intrado Change Order

### Information

<b>Customer Name</b>	Washoe County, Nevada on behalf of the 911 Emergency Response Advisory Committee
<b>Change Order Effective Date</b>	Latest date signed below
<b>Underlying Service Order or Statement of Work ("<u>Order</u>")</b>	Service Order for Power LVR services signed December 22, 2014

### Change to Services

Intrado Life & Safety, Inc. ("Intrado") will provide the following change to the current services ("Services") under this Change Order ("Order").

Intrado will install a new Verint recording system with the v15.2 Recording system, as described in the attached documentation. Per the original agreement Washoe will own the prior system, but Intrado will uninstall this system and utilize the existing space for the new install.

### Term

The term of the Order is extended to March 31, 2025. The renewal and termination provisions of the Order apply to the term, as extended by this Change Order.

### Termination for Convenience

This Order may be terminated at any time with or without cause upon 90 days written notice. If Customer terminates without cause (for convenience), then Customer agrees to pay Intrado a termination fee of \$472,000 ("Fee"). This Fee is not a penalty. It is designed to help compensate the upfront implementation cost incurred by Intrado. Any MRFs paid by Customer prior to termination without cause will be credited against the Fee.

### Fees

The following fees will apply, commencing as of the end of the 60<sup>th</sup> payment under the current Order:

<b>Description</b>	<b>One Time Fee ("<u>OTF</u>")</b>	<b>Monthly Recurring Fee ("<u>MRF</u>")</b>
Setup, Configuration and Installation	Waived	N/A
Support and Maintenance, per position	N/A	\$352.00
Total MRF		\$8,448.00

## Entire Agreement

Except as stated herein, the Order continues in full force and effect. This Change Order amends the Order as stated herein, constitutes the parties' entire agreement, and supersedes any prior written or oral agreements related to its subject matter. This document may be executed in counterparts, by facsimile or electronically, and is not enforceable unless signed by both parties.

**WASHOE COUNTY, NEVADA**

**INTRADO LIFE & SAFETY, INC.**

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Authorized Signature

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Authorized Signature

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Name Typed or Printed

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Name Typed or Printed

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Title

Date signed

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Title

Date signed



## Prepared for Intrado Life & Safety Inc. Verint Recorder upgrade project for Washoe County, NV

December 12, 2019

This Statement of Work ("SOW") is attached to and made a part of the quote **10242019\_3247\_2LW** ("Master Agreement") between **Intrado** ("Reseller") and **Verint Americas Inc.** ("Verint").

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## Verint Corporate Overview

Verint Systems® is a global leader in Actionable Intelligence® solutions. In today's dynamic world of massive information growth, Actionable Intelligence is a necessity for empowering organizations with crucial insights and enabling decision makers to anticipate, respond, and take action.

Our Actionable Intelligence solutions help organizations address three areas of the market — customer engagement optimization, security intelligence, and fraud, risk, and compliance — by capturing large amounts of information from numerous data types and sources, using analytics to glean insights from the information, and leveraging the resulting intelligence to help optimize customer engagement, enhance security, and mitigate risk.

- **Customer Engagement Optimization** solutions help organizations enrich customer interactions, improve business processes, and optimize their workforces to enhance loyalty, increase revenue, mitigate risk, and manage operational costs.
- **Security Intelligence** solutions help organizations prevent, detect, neutralize, and investigate crime, terror, and cyber threats, as well as protect people, property, and assets.
- **Fraud, Risk, and Compliance** solutions help organizations prevent loss; comply with regulations; investigate cyber, retail, and financial crime; help ensure continuity of business; and protect private information.

## Verint Fast Facts

### Dynamic Global Presence

- Headquartered in Melville, NY, with offices worldwide
- More than 5,000 dedicated professionals, plus a global partner network

### Blue-Chip Customers

- Large, diversified customer base
- More than 10,000 organizations in 150 countries
- Over 80 percent of the Fortune 100

### Financially Strong and Positioned for Growth

- \$1.134 billion in revenue for the Fiscal year end on January 31, 2016
- Highly diversified, customer-centric business
- VRNT on the NASDAQ Stock Market

### Committed to Innovation

- More than 700 patents and applications worldwide
- Ongoing investments in research and development, and organic and acquisition growth

### Recognized Worldwide for Market Leadership and Value

- Member of the Global Software 500
- Company and joint customer honors for innovation, excellence and best in satisfaction



## Verint Corporate History

In February 1994, Verint Systems Inc. was founded as a wholly-owned subsidiary of Comverse Technology, Inc. Our initial focus was on the commercial call recording market, which, at the time, was transitioning from analog tape to digital recorders. In 1999, we expanded into the security market by combining with another division of Comverse focused on the communications interception market. In 2001, we further expanded our security offering into video security. In May 2002, we completed our initial public offering ("IPO"). In May 2007, Verint Systems acquired Witness Systems Inc., forming the Enterprise Intelligence Solutions business subsidiary. On February 4, 2013, Verint shareholders approved the acquisition of Comverse Technology, Inc., making Verint an independent company with 100% of our shares owned by the public.

Verint has a long history rooted in developing and providing Security and Liability Recording Solutions for Law Enforcement, Emergency Communications and Response and other Critical Communications uses, beginning with the first Verint Solutions which were developed in 1994. Along the timeline below you can see many advances attributed to Verint or one of the Organizations which has been acquired by Verint during the past 23 years. Highlights of this long history of innovation:

- 1994 – Verint Founded
- 1996 – Eyretel (Acquired by Verint in 2006) develops First Digital TDM Recorder
- 1997 – Mercom Systems (Acquired by Verint in 2006) develops First Windows based Recorder
- 1991 – Eyretel launches First PCI Recorder to exceed 120 Channels (MediaStore)
- 2001 – Eyretel launches First Cisco VoIP Recorder
- 2006 – Verint/Witness combined solution exceeds 650 Channels in a single server
- 2008 – Verint signs OEM Agreement with Avaya for OEM Solution
- 2014 – Verint launches V15, with Recording Capacity of 1000 Channels in a single server
- 2015 – Verint launches Recording Solution for Skype
- 2016 – Verint expands Recording Capacity to 4000 Channels in a single server





## Verint's v15.2 Recording Solution Overview

Intrado has asked Verint Systems to provide an upgrade proposal for Radio and Telephony Recording solution for Washoe County. The solution as required is to provide a recording solution for both telephony and radio communications.

The Requirements of this request is to upgrade the current Audiolog recording system to the Verint Recording for Public Safety system. This will provide software upgrade and new logging recorders that will record all audio at two locations Reno and Sparks Communication center with the following requirements per location:

### **Reno Primary Harris Radio**

1. Trunked P25 Radio – 200 Talk Groups
2. Online Archival Storage

### **Reno Redundant P25 Harris Radio & Telephony**

1. Telephone - 52 simultaneous audio sources in 48 Analog and 4 Voip
2. Trunked P25 Radio – 200 Talk Paths which equate to roughly 240 Talk Groups
3. Online Archival Storage

### **Sparks Telephony**

1. Telephone - 24 simultaneous audio sources in Analog form
2. Online Archival Storage



# Verint Recording Solution Design

## Telephone & Radio Recording

To meet these requirements set forth by **Washoe County**, Verint Systems is proposing a Public Safety Recording Solution based upon the Verint Recorder v15.2.

To accomplish the recording requirements for the two Communications Centers, Verint will deploy multiple recording servers at each communication center. At the Reno Communications Center, Verint will deploy a Datacenter server, "Primary" and a "Redundant" Recording Server (the Redundant recorder will also record the Telephony), and a storage server in Reno. Sparks recorder server will be installed this location. . These Recording servers will capture the following communications:

### Reno Data Center server – 1 at this location

1. Database Server (centralized system configuration, Storage of call Metadata for each site so that there are Primary and Redundant Databases
2. Application Hosting for Replay applications per site

### Reno Primary Recording Server – 1 at this location

1. 200 P25 Talk Groups (at each site)
2. Online Archival Storage 1.9TB

### Reno Redundant Recording Servers – 1 per site (To be Installed on the CEN to record PC Screens)

1. 52 Telephone Inputs (will be 48 analog at both sites 4 VoIP)
2. 200 P25 Talk Groups (at each site)
3. Online Archival Storage 1.9TB

### Sparks Recording Servers – 1 per site

1. 41 Telephone Inputs at PSB and 81 at Courthouse (all to be analog at both sites)
2. 24 P25 Talk Paths (at each site)
3. Online Archival Storage 500GB

### Upgrade current 6000 series server currently installed and recording Harris P25.

1. Upgrade kit is being provided to upgrade the OS to 2016 and add 3 960GB drives to provide 1.9TB of Archive storage

The Verint Recording Servers also include the capability to capture and tag E911 ANI/ALI information to the call database record. This will enable operations center staff to perform search and retrieval using ANI & ALI information.

- **Important Note:** We will need to verify the Make/Model of the ANI/ALI controller and the availability of a useable ANI/ALI "CADSPILL" or Post Call CDR or Enhanced CDR. Testing may be required to verify usability of the data source.



To provide for the most robust recording solution for Harris P25 Radio Recording, the “Primary” and “Redundant” Recording server at the Reno location, are also equipped to record the Harris P25 Radio System. This Recording Servers are designed to record a 200 Trunked Talk Groups from the Primary and 200 Trunked Talk Groups from the Redundant Harris VIDA Gateways. In addition to recording the Audio from the P25 radio System, the Verint Recorder is to capture Radio metadata with each recorded transmission. This metadata is provided by Harris Radio system and includes such info as Radio ID, Radio Alias, Talk group ID and Talk Group Alias. This will enable users to search and retrieve recorded radio communications based upon Talk group and/or Radio information.

### **Search and Playback**

The Search and Retrieval of Recorded Communications is to be done using Verint’s Web Based Application designed for Public Safety Users known as “Insight Center”. Verint’s Insight Center application provides a powerful, browser-based, set of tools for search and replay the recordings stored on your Verint Recording servers. Directly accessed from your desktop PC, with an easy-to-use browser interface, you can easily search for recordings by Recorded Channel, Date, Time, Duration, User Reference Tags, and other captured metadata from both the P25 ASTRO Radio system and the E-911 Switch. Playback audio is delivered via the local area network to the speakers of the client PC.

The Verint Installation Team will work with your defined Verint System Administrator to assign each individual agency use a Unique User Name and Password. Each user account will have certain permissions associated with it in order to play recordings back. Depending upon how a user account permissions have been configured, a user may be permitted to playback all recordings or may be restricted to only playing recordings from a limited subset of telephone extensions or Radio Talk Groups. If Playback permissions are limited, then the replay application will only show recordings for the Telephone Audio Channels or Radio Talk Groups to which have been assigned.



### Call Storage

Depending upon the call retention requirements of each agency, the Storage server proposed may not provide sufficient storage to retain the calls for the retention period. If this is the case, Verint recording for Public Safety allows for each recorder to also leverage a Network Attached Storage ("NAS") Device or a Storage Area Network ("SAN") to meet the requirement. There is no cost or license to enable this feature. Verint will be happy to work with **Customer** to determine the long term storage requirements.

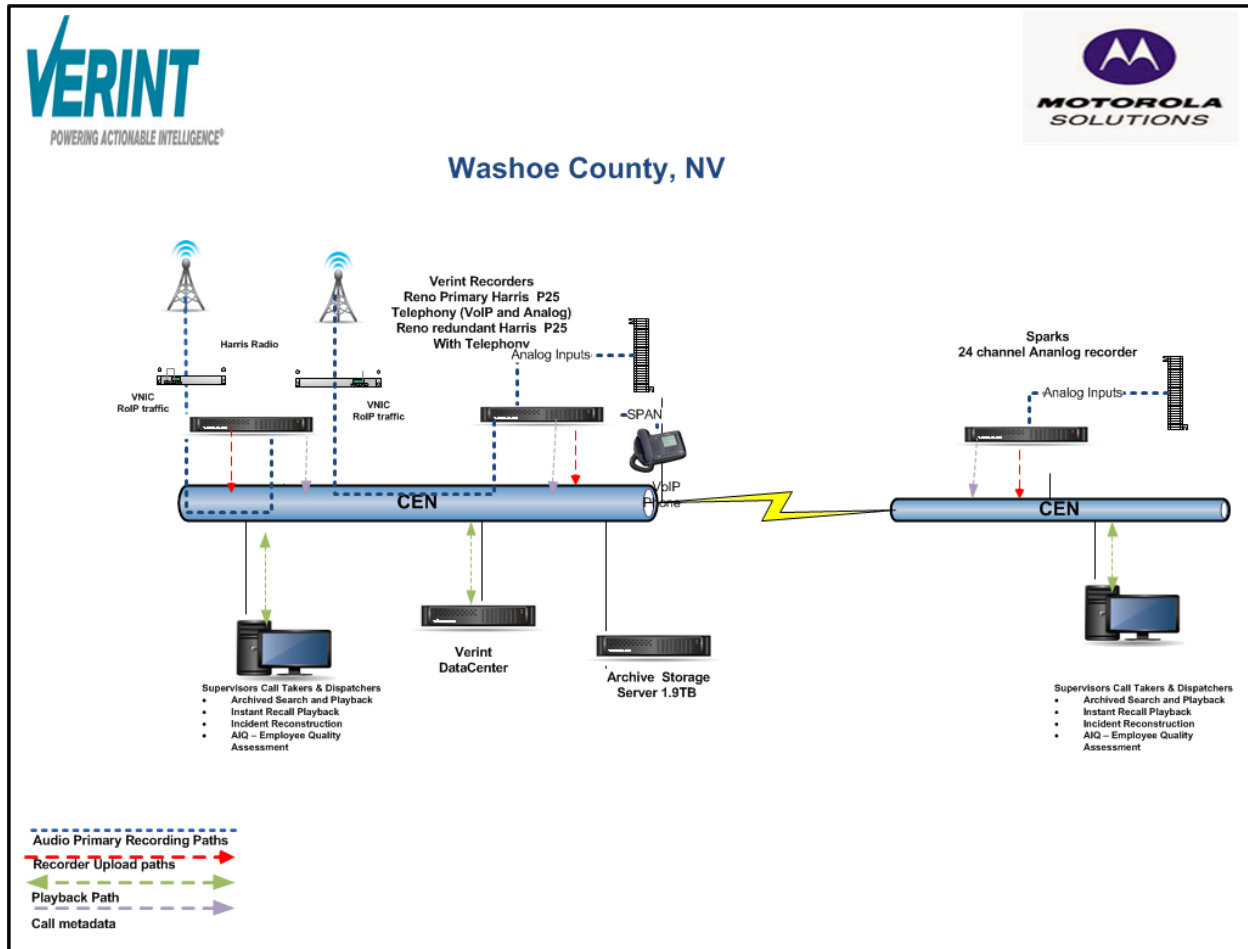
Verint's Recording Solutions are designed to fulfill the widest range of recording requirements while being one of the most efficient, easy-to-use and reliable solutions available. Verint's open architecture provides maximum storage flexibility, with dedicated internal RAID 5 Storage or call recordings, automatic call archiving to customer designed archive locations with native support for Network-Attached Storage (NAS), or SAN storage, RDX drive, using Verint's robust Archive Campaigns.

To provide **Washoe County** with an effective and redundant storage solution, we have included 1.9 TB of archive storage within the Verint Data Centers.

Each Recording Server is equipped with multiple hard drive arrays, one of which is specifically designed for local storage providing 1.9TB of storage.

This 1.9 TB of Storage provides for the following Storage capacities:

- 1.9TB – Analog Recording vocoded with GSM = 304,000 Channel Hours (160 hours/1 GB)
- 1.9TB – P25 Phase 1 Recording vocoded with IMBE = 696,000 Channel Hours (366.6 hours/1 GB)



## Verint Systems Technical Overview

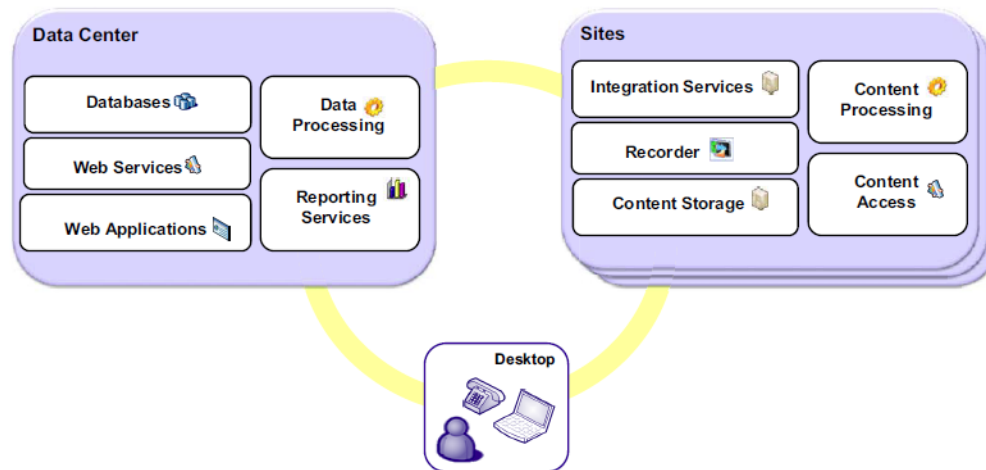
The Verint v15.2 Recording Solution is able to record voice communications in your operations center, whether they be in VoIP, TDM, or mixed telephony environments. Please keep in mind that as your center's technologies evolve and change, Verint has a solution for you. If anything is planned in your center during the next 2 years which is not included in this Solution Design, or has not been discussed with your Verint Representatives, please bring this to our attention as quickly as possible so that we may account for changing technologies within this design, or with future system updates.

## Verint Recording - A Logical Architecture Overview

The system's logical architecture is based on three logical deployment zones:

- **Data Center** - Serves as a centralized, single point of access where application data and content metadata is accessed, managed and maintained
- **Recorder Site(s)** - Provides recording (content acquisition), content storage and integration with the customer environment
- **Desktop** - Provides the agent or supervisor's working environment

**Logical Architecture**



Every system deployment includes one Data Center, and one or more Recording Sites and Client Replay Desktops (depending on system size and scaling issues).

Dividing the system's functions into logical zones supports flexibility for different system scaling levels, streamlines the flow of data, enables easier and more efficient upgrade paths, and provides system security.

Maintaining the data in one single location (Data Center Zone) both protects sensitive system data and provides centralized access to data by authorized users. The Site zone can be configured in multiple instances with multiple servers, providing system flexibility and scalability.

Main system data is sent from the Site zone to the Data Center zone. The Site zone sends recorded content and other stored data to the Data Center zone. The Data Center zone provides a centralized, single location where this data can be accessed by users to view and modify. In turn, the Data Center zone sends user information and system configuration information to the Site zone, where it is then integrated into the customer's environment.

The software in the Data Center and Site zones can be upgraded separately, which enables easier upgrade processes. For example, the customer can upgrade the Data Center zone for new applications or new features, without the need to invest in upgrading the entire enterprise.



## Data Center

The Data Center provides a single, central point of access for application and content metadata. Every system deployment includes one Data Center zone. Users access the Data Center to view and modify system stored and real-time data. Users who do not have access to the Data Center zone cannot log in to an application or access any of the data.

The Data Center hosts one or more database servers, depending on the size of the system deployment. Data Center zone databases contain the following information:

- System Management Data: Includes IT-oriented information on licenses, configuration, and data sources.
- Application Management Data: Includes business-oriented information on:
  - User management: Includes users, hierarchy, roles, and user preferences
  - Application management: Includes forms, flags, reports, and custom data
- Application Data: Includes raw recorded call information, evaluations, scorecard source measures, DPA data, Speech content, and excludes audio and screen records.
- Operational Data: Includes archived segment data indicating which segments are archived, including the information required to restore and play back a segment. Operational data is generated by the system and maintained in the database, and helps the system manage acquired structured and unstructured data.

## Recorder Site Functions

The primary functions of the Recorder are to record, archive, and replay voice & screen recordings, Recorder features include:

- Full-time and selective, rules-driven recording
- Close integration with CTI data sources such as Harris P25 VIDA Gateway and E9-1-1 ANI/ALI
- Archiving support
- High-availability (Recording acquisition redundancy)
- Web-based administration & configuration

The recording solution consists of a set of logical servers that can be deployed on a single machine or on multiple machines in a large enterprise environment. These servers can also be deployed in the form of clusters in order to scale with the size of the customer's systems.

The Recorder supports both TDM and IP recording, including trunk-side recording (TDM) or gateway recording (IP), and station-side recording (TDM) or extension-side recording (IP) recording. You can configure each of these types of recording by using the Enterprise Manager to set up extension groups or pools (called member groups), each with a data source that defines where the recorded call is coming from, and then setting the recording mode.

## Call Data and CTI Tagging



Call data captured by the Recorder includes associated and non-associated call data. Associated call data represents parameters of the call such as the start time, stop time and call length. In addition to the call data values, other data fields can be appended that contain any relevant data that is associated with the call. This data can be from switch CTI ports, and can be information such as an agent extension. Associated call data includes the following, which are logged with every call recorded:

- Start Date and Time
- End Date and Time
- Call length
- Dialed Digits (outbound)
- CLI Digits
- DNIS
- Call ID (unique to the call and Recorder)
- Call direction

Non-associated call data allows the Integration Service to place records into the database when they cannot be directly associated with a voice call (either because the call has finished or the inum of the call is unknown). At this point, a join is performed between some common element within the associated data, such as a unique ID from the CTI system, to allow this non-associated data to be added to the call details.

For Advanced Radio Recording environments with available Call Data for call tagging the following call data is typical to be tagged with each radio transmission recording:

- Radio ID & Radio Alias
- Talk Group Id & Talk Group Alias

Once you determine which fields you need to use in your system, you can add them as custom attributes, then map these custom attributes to an adapter. You can then use these attributes for tagging and to build recording rules, where the attributes become criteria upon which the decision to record or not is based.

## Recorder Redundancy & High Availability

Recording provides high availability via redundancy of the Recorders, Integration Service, or both.

### Recorder Redundancy

There are three types of Recorder Redundancy:

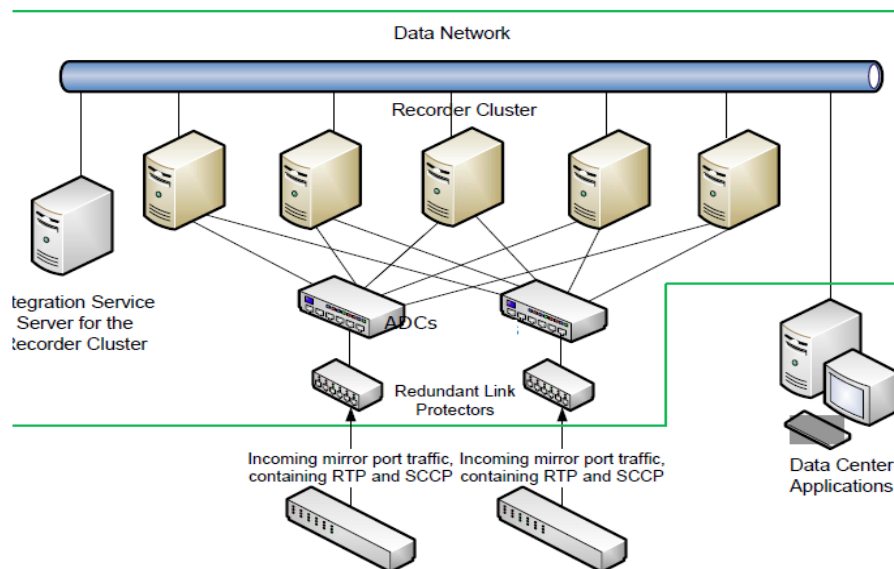
- N+N, in which all calls (or the desired redundant calls) are recorded by pairs of Recorders.

**Important Note:** N+N is the redundancy as designed for Calvert County.

- N-Dedicated M-Shared, in which calls are recorded by a primary N Recorder, with a backup M Recorder available to take over should N experience any errors.
- N+M All Shared, in which all calls are load-balanced across a pool of Recorders.

### High Availability Recorder Cluster

The diagram below illustrates a fully fault-tolerant Recorder cluster (N+M All Shared) containing redundant devices (the load balancing device, Link Protector, voice switch and Recorder). In this configuration, the failure of any single component will not result in the loss of recording. The cluster in this example has a recording capacity of 1000 channels (5 Recorders x 200 channels). Each Recorder has a capacity of 650 Channels so the spare capacity per recorder is 450 Channels, meaning that the system is tolerant of up to two (2) recorder failures at any moment in time.



The cluster is designed to be fault tolerant of key elements being offline for periods of time, and includes the following components:

- Data Center Zone application components: The servers for these components have no effect on the ability of the system to record. If the database is unavailable, the Recorders queue up the recorded calls. Once the database comes back online, the Recorders will upload the calls.
- Archive: This component is designed to run behind real-time archiving of the calls. The system would only be detrimentally affected if it was offline for a sustained period, such that when it came back online, calls to be archived were no longer on the Recorders. The hard disks on the recorders should be sized such that they can be tolerant of the Archive system running behind.



- **Cluster Integration Service:** In this configuration, the Integration Service is utilized for CTI Integrations and tagging. If the Integration Service server fails, then this tagging will be lost. If an extension must be recorded even during an Integration Service failure, it should not be configured in this mode.
- **IP Recorder Nodes:** As described above, the configuration in the diagram contains five recorders, but is specified as providing 4000 channels of concurrent recording, as the fifth recorder represents the spare capacity required for redundancy.
- **ADC or Load Balancing Device:** If either load balancer fails, the other passive device will be presented with the links via the Link Protectors. A network port failure would result in that individual link being activated to the redundant the load balancer.
- **Link Protectors:** If the Link Protector fails, then the network connection will be maintained to the primary the load balancing device via the protector's fail-through capability. The system is likely not to be fault tolerant of a Link Protector and load balancer failure at the same time.

## Desktop (Search & Replay) Sites

The Desktop is the main component in the customer's environment that hosts software and certified third-party software. Depending on the package, the Desktop optionally contains the following types of clients required by agents to work with system servers:

- **Insight Center Web Agent:** Provides Multi-Channel, Multi-media Search, Replay and Incident Management for users. (Primary User Application for Recorded Call Replay)

**Important Note:** Insight Center has been designed to work in the customer's computer environment. In the rare case that conflicts exist between other applications, a stand-alone play back station provided by the customer may be required.

- **Integration Services Agent:** Retrieves and acquires agent information, and extend contact metadata with data available only on the agent desktop.
- **Content Access Client:** Provides Playback Control (Interactions and Analytics)
- **Thick Client Applications:** Includes Form Designer (Interactions and Analytics)

## Archive Storage Topologies

After a recorder has completed recording a contact, it stores it on its local disk. The recorder's call storage drive, no matter how large, has some limit to its capacity. Therefore, at some point, the older contacts need to be moved to long-term storage.

"Archive" refers to the infrastructure dedicated to preserving call information in long-term storage (usually for one year and longer, depending on customer requirements). The archive service transfers recorded content from recorders to specific storage media for preservation.

The following are the two different archive topologies that can be configured:

- **Local Archive Topology**: Recorders push contacts directly from their local call buffer to the target media.
- **Central Archive Topology**: Central archive server is configured to pull contact data from Recorders and write this data to the target media.

Each type of archive (local or central) can be deployed in different configurations. To determine which type of archive should be used depends on the topology best suited for a customer's specific requirements.

Verint supports most industry standard Network Storage Strategies and devices. Examples supported, but not limited to are: RDX drive, NAS, SAN, EMC Centera, Public Cloud Services and Private Cloud.

## Web Applications

All users log on to the system through Web applications. A single point of authentication—Single Sign-On (SSO)—provides application access in the system, as defined by user privileges. Web applications run application pages with system management and application management data. It is mainly structured information. Unstructured information is accessed directly from the Site zone in which it was recorded or archived.

The application cluster consists of one or more application servers, depending on the deployment size. In large deployments with more than one server, the application servers are deployed behind a Network Load Balancer (NLB) and each server exposes the same set of applications and services. All application servers run the same version of software and have an identical configuration. Users access the system from the URL of the NLB. The NLB routes the user to one of the application servers.

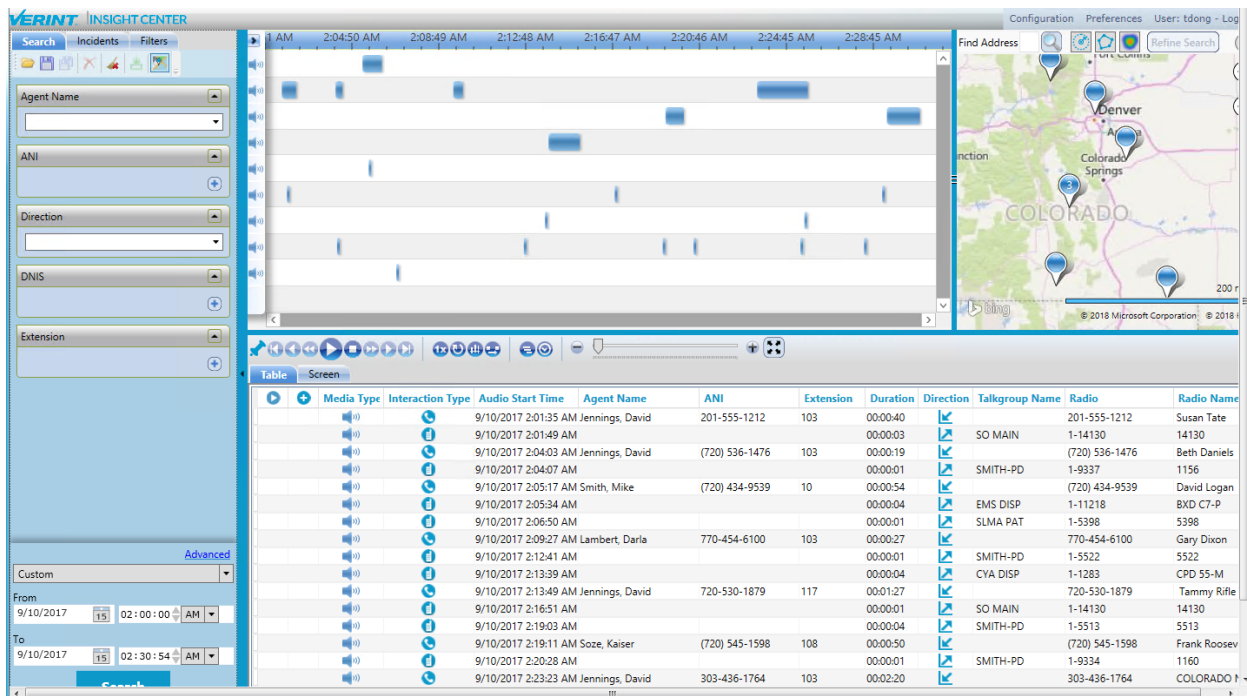
## Insight Center: Search, Replay and Incident Management

Insight Center provides a powerful, browser-based, set of tools to search for and play the recordings stored on your Verint enterprise recording system from your desktop PC. With an easy-to-use browser interface, you can easily search for recordings by channel, agent, date and time, or any available metadata associated with the recording.

Insight Center allows you to playback multiple sequenced and/or simultaneous recordings, regardless of which channel they were recorded on. This allows you to reconstruct an incident by listening to a series of recordings in their entirety, even if the recordings overlap. Selected recordings can then be saved to an incident folder for ease of incident management. To assist you when creating a transcript of the recordings, you can configure Insight Center to provide a spoken time and date stamp at the beginning and end of the selected sequence of recordings. Insight Center plays the selected recordings in chronological order.

Verint's Recording solutions provide for full-time recording, selective recording, recording on demand, and dial-in recording across digital and analog telephones, trunked and conventional Land Mobile Radio systems, telephone lines and trunks, IP phones, short message service (SMS), and PC screens. It can record screens while minimizing network usage and storage requirements and can capture screen changes, including mouse movements and keystrokes, without disrupting call handlers.

Insight Center is designed to address the replay and incident management of these multi-media Interactions along with Multi-Channel mixing capabilities to allow effective Incident Reconstruction in the emergence of NG9-1-1 Technology, including replay capabilities for: Audio, Video, PC Screen Capture, Still Photos and Text messaging.



The screenshot displays the Verint Insight Center interface. On the left is a search sidebar with filters for Agent Name, ANI, Direction, DNIS, and Extension. The main area features a timeline view at the top and a table of search results below. A map of Colorado is visible on the right side of the interface.

Media Type	Interaction Type	Audio Start Time	Agent Name	ANI	Extension	Duration	Direction	Talkgroup Name	Radio	Radio Name
		9/10/2017 2:01:35 AM	Jennings, David	201-555-1212	103	00:00:40			201-555-1212	Susan Tate
		9/10/2017 2:01:49 AM				00:00:03		SO MAIN	1-14130	14130
		9/10/2017 2:04:03 AM	Jennings, David	(720) 536-1476	103	00:00:19			(720) 536-1476	Beth Daniels
		9/10/2017 2:04:07 AM				00:00:01		SMITH-PD	1-9337	1156
		9/10/2017 2:05:17 AM	Smith, Mike	(720) 434-9539	10	00:00:54			(720) 434-9539	David Logan
		9/10/2017 2:05:34 AM				00:00:04		EMS DISP	1-11218	BXD C7-P
		9/10/2017 2:06:50 AM				00:00:01		SLMA PAT	1-5398	5398
		9/10/2017 2:09:27 AM	Lambert, Darla	770-454-6100	103	00:00:27			770-454-6100	Gary Dixon
		9/10/2017 2:12:41 AM				00:00:01		SMITH-PD	1-5522	5522
		9/10/2017 2:13:39 AM				00:00:04		CYA DISP	1-1283	CPD 55-M
		9/10/2017 2:13:49 AM	Jennings, David	720-530-1879	117	00:01:27			720-530-1879	Tammy Rife
		9/10/2017 2:16:51 AM				00:00:01		SO MAIN	1-14130	14130
		9/10/2017 2:19:03 AM				00:00:04		SMITH-PD	1-5513	5513
		9/10/2017 2:19:11 AM	Soze, Kaiser	(720) 545-1598	108	00:00:50			(720) 545-1598	Frank Roosevelt
		9/10/2017 2:20:28 AM				00:00:01		SMITH-PD	1-9334	1160
		9/10/2017 2:23:23 AM	Jennings, David	303-436-1764	103	00:02:20			303-436-1764	COLORADO

### Insight Center User Interface



## Section 4: Work Locations and Service Hours

### Work Locations:

Verint implementation activities typically involve a site visit by one or more members of the Verint Implementation Team, but portions of the services associated with this SOW may be conducted off-site as appropriate. Travel and living expenses incurred in the performance of the services associated with this SOW are included in the fees associated with this SOW. No additional travel and living expenses will be billed to the Customer.

### **Normal Service Hours:**

- The fees associated with the Services described herein are based on Verint performing said Services with no more than eight (8) hours (“Work Day”) during Normal Business Hours on a Business Day
  - **“Normal Business Hours”** is hereby defined as 8:00 a.m. to 5:00 p.m. local time
  - **“Business Day”** is hereby defined as a non-holiday Monday through Friday
- Any Service that Customer requests to be delivered outside of Normal Business Hours on a Business Day is subject to a fifty percent (50%) premium.
- Any Services that Customer requests to be delivered on a weekend or holiday recognized by Verint is subject to a one hundred percent (100%) premium.

## Section 5: Project Milestones and Acknowledgement of Services

Each Service deliverable, task or milestone identified below will be deemed delivered when Customer has signed the applicable Confirmation of Services document (“COS”). The Customer will receive a request to acknowledge that the services have been rendered in accordance with the SOW. Customer must accept or reject the requested acknowledgment of completion either by signature or by e-mail.

This section provides the details for the Services engagement including Milestones, Tasks, and Deliverables.

### **Milestones, Tasks and Deliverables**

#### **Milestone: Implementation**

##### **Project Initiation**

##### Description

This phase consists of the Project Kickoff, Planning and Design sessions.

During the Project Initiation, the Verint Project Manager or Verint Certified Contractor will meet with Customer’s technical and business representatives to review and verify the components of the technical environment and service milestones for the project. The Verint Project Manager or Verint Certified Contractor will then determine the appropriate assignment of tasks.

The Verint Project Manager or Verint Certified Contractor will also arrange the appropriate Design sessions to address application consulting, best practices configurations and technical architecture and configuration requirements.



The Project Initiation and Design sessions will be scheduled with **Washoe County**, the Customer's project team and the appropriate Verint Resource or Verint Certified Contractor to discuss the following, as appropriate.

- Configuration for the following:
  - Full-Time Recording
  - Quality Monitoring
- Customer environment, architecture and technical design configurations for the following:
  - Application configuration design document(s)
  - Customer Telephony and Network environment
  - Integration Design Specification (if applicable)
  - Call Scenario Test Plan (with supported call flows)
  - Customer's network topology
  - System architecture and component sizing
  - Review the Customer's recording requirements against Verint' standard tagging events and capture any non-standard specific requirements that need to be documented, reviewed and agreed upon. Based on such non standard requirements, additional professional services fees may be imposed.
  - Review Verint' standard call flow scenarios and capture any additional call flow scenarios specific to the Customer's environment. Based on such non standard requirements, additional professional services fees may be imposed.
  - Update or complete an Integration Design Specification and approve

#### Deliverables

- Pre-installation checklist
- Site Preparation Guide
- Site Readiness Checklist
- Project Milestones with Associated Tasks
- Project Task Assignments
- Project Schedule
- Application configuration design documents
- Mutually agreed upon Integration Design Specification ("IDS") document and Call Scenario Test Plan

#### Verint Responsibilities/Tasks

- Review order details
- Review Customer project expectations
- Review training requirements and schedule
- Review system architecture and sizing
- Confirm Customer's hardware delivery and installation
- Review of Confirmation of Services process
- Create and deliver Site Readiness checklist to be completed by Customer



- Define project milestones
- Assign project tasks
- Create and deliver project schedule
- Provide application configuration design document
- Provide IDS document and Call Scenario Test Plan
- Schedule Verint Resource or Verint Certified Contractor

## Site Readiness

### Description

The Verint Project Manager or Verint Certified Contractor will perform a Readiness Assessment Audit after the Project Initiation and at least two (2) weeks prior to scheduled installation. If, at the conclusion of the Readiness Assessment Audit, the Verint Project Manager or Verint Certified Contractor decides the on-site installation is to begin, the appropriate Verint Resource or Verint Certified Contractor will be scheduled.

### Deliverables

- Readiness Assessment Audit
- Site Readiness Documentation

### Verint Responsibilities/Tasks

- Review Site Readiness Documentation
- Review security requirements for Verint Resource or Verint Certified Contractor and define associated login authority and network access
- Schedule appropriate Verint Resource or Verint Certified Contractor

## Installation

### Description

The Verint Resource or Verint Certified Contractor will begin the installation process by reviewing the Customer's environment to ensure that it is consistent with the Readiness Assessment Audit. Verint will install all licensed Verint software, configure said software to integrate with the Customer's telephony environment, conduct an application pilot, and test all key functionality. Initially, this will be performed in a test environment. Subsequent to initial testing, and with **Washoe County** approval, the applications will be configured for a production environment. Verint will complete the installation by submitting site documentation, performing knowledge transfer to Customer's technical support staff and performing a system hand-off to Customer and the Verint Customer Support team (or outsourced Verint subcontractor).

### Deliverables

- Verint software installation and configuration
- Application pilot tested for key functionality
- Site documentation

### Verint Responsibilities/Tasks



- Reviewing the Customer's environment to ensure that it is consistent with the Readiness Assessment Audit
- Verint software installation and configuration
- Verify related third-party software (must be licensed by the Customer) is installed and configured for integration to the Verint solution
- Perform system testing and complete Customer site documentation
- Knowledge transfer to the Customer's technical support staff in loading and configuring Verint supervisor (up to three (3)) and agent client (up to three(3)) software
- Add a pilot group of up to three (3) Agent and three (3) supervisor workstations to the Verint database and perform system testing
- Confirm operation of key Verint software functions and client installations on Customer's workstations if applicable
- Confirm that the Customer training room is configured and ready for the Verint On-Site Instructor's arrival
- Perform knowledge transfer with Customer's technical personnel including but not limited to architectural overview, scheduled maintenance, database maintenance, and operation, care and troubleshooting
- Conduct System Turnover Meeting with key organization contacts and other members of the Customer's project team to turn over operation and maintenance of the system to Customer.
- Provided Customer has subscribed and paid for Support, formally turn the installed site over to the Verint Customer Support team (or outsourced Verint subcontractor) for Verint software Support

## **Integration**

### Description

Verint will provide an Integration Design Specification detailing the Customer-specific system configuration. Verint will configure and test all integrations (using the Customer's environment) to meet the requirements identified in the Integration Design Specification. Integrations will be performed with Customer's supported ACD environment in order to enable standard functionality in the applications identified below.

### Deliverables

- Recording and Quality Monitoring
  - Integration Design Specifications Document
  - Call Scenario Test Plan

## **Recording Integration**

### Description

Verint will develop and unit test configurations for call recording control and standard data tagging. Verint and Customer will participate in Call Scenario testing, which will be conducted using Customer's environment.

### Deliverables

- Integration Design Specifications Document
- Call Scenario Test Plan



#### Customer Responsibilities/Tasks

- Review and approve the Integration Design Specification Document
- Review and approve the Call Scenario Test Plan
- Participate in Call Scenario testing
- Ensure all integration points are configured and available as required for the Customer's specific integration
- Provide necessary test environment to include a minimum of three (3) test phones, three (3) test agents, one (1) ACD queue with agent login information, one (1) pilot number, and three (3) Agent and supervisor workstations

#### Verint Responsibilities/Tasks

- Review the Integration Design Specification Document
- Review the Call Scenario Test Plan
- Perform Integration as defined by Integration Design Specification
- Conduct Call Scenario testing
- Review and update site documentation
- Perform server administration knowledge transfer with Customer's server personnel including but not limited to architectural overview, scheduled maintenance, database maintenance, and operation, care and troubleshooting of the application server.
- Conduct System Turnover Meeting with key organization contacts and other members of the project team to turn over operation and maintenance of the system to Customer.
- Provided customer has subscribed and paid for Support, formally turn the installed site over to the Verint Customer Support team (or outsourced Verint subcontractor) for Verint software Support

### **Milestone: System Testing**

#### Description

Verint, and **Washoe County** Customer will perform system testing to mutually validate functionality of key components of the installed solution. The testing will be performed in a controlled environment which allows Verint and Customer to properly perform testing and validate results per the Verint System Test Plan.

#### Deliverables

- System Test Plan (Installation Checklist) with documented results

#### Verint Responsibilities/Tasks

- Perform System Testing with Customer's participation
- Document test results

### **Milestone: Training**

Training delivery methods are described below. Course-specific details including agendas, format, duration and recommended participants will be provided by the Verint Project Manager or Verint Certified Contractor. All On-Site Training classes are limited to ten (10) attendees per training session.

#### **On-Site Training (Verint Professional Services)**



- **1 day(s) total**

#### Description

Verint Professional Services provides an on-site course for administrators and Evaluators with information and practical skills regarding the use of the Verint recording software.

#### Deliverables

- On-Site course
- Class manual

#### Verint Responsibilities/Tasks

- Schedule & conduct the training in a timely fashion
- Relay the information relative to appropriate training facility needs – room, equipment, etc.
- Order and ship appropriate training materials to the Project Lead
- Provide a resource to conduct the training session
- Ensure attendees have the prerequisite skills
- Provide Crystal Reports (version 9 only)

#### Verint Responsibilities/Tasks

- Communicate the registration process
- Provide course descriptions and prerequisites
- Provide virtual training

## Section 6: Customer Responsibilities Overview

- Provide access to data required for employee and organization load in the Verint-specified format
- Provide security access to buildings and necessary rooms specific to the implementation process
- Arrange for workspace as needed by the Verint Implementation Team including but not limited to an active network connection, internet access, and a working telephone
- Provide physical, server and network access to site for all on-site Verint personnel as needed
- Provide necessary test phones and/or test pc's to allow Verint personnel to perform control testing and system review with appropriate Customer resource
- Provide necessary test environment to perform system testing including a minimum of three (3) workspaces with all necessary equipment to simulate production environment
- Customer supplied hardware purchased, installed and made ready including, without limitation, installation of the operating system, TCP/IP, voice cards (if applicable) and third party software. Installation must be completed prior to arrival of the Verint Resource or Verint Certified Contractor. Customer must provide web server for hosting AIR/AIQ and separate server for screen recording. Hardware specifications available from Verint Presales.
- Install supported operating system as necessary on all Customer supplied hardware
- Synchronize time clocks on all servers and data sources (with time zone adjustments as appropriate)



- Provide full security access between all required servers
- Provide any relevant RDBMS passwords needed to complete installation with security levels in accordance with Verint specifications
- Ensure the installation of all cabling and termination as identified by Verint and in accordance with Site Readiness process
- Distribution of all required software to the Agent and supervisor workstations if applicable
- Establish remote access to all Verint servers for Verint Implementation Team throughout the project life cycle and ongoing Verint support
- Establishment and maintenance of system environment which meets Verint' minimum specifications, including, without limitation, Customer's ACD, data network, hardware, Agent and client workstations, telephony, telephony servers, dialers, CRM servers, database, database servers, mail servers, Web servers, and any all non-Verint supplied enabling or collaborative technology
- For any onsite workshop or training event:
  - Provide adequate meeting space for the duration of any on-site workshop or training event
  - Provide materials requested by the Verint Resource or Verint Certified Contractor (i.e.: flip chart paper, LCD projector, etc.)
  - Provide the training environment as specified by Verint including ensuring that the Verint software is up and running, providing required access to the system including participant logins
  - Provide a technical contact to help with any connection/network access issues encountered during a workshop or training event
- Prior to permitting Verint to access any Customer system, Customer is responsible for ensuring that any data related to that system is backed up. Verint is not responsible for remediating any lost or corrupt data resulting from an Error in the system or the provision of Services under this SOW. Customer acknowledges and agrees that it is solely responsible for such data and that such data is under Customer's exclusive control.

## Section 7: Implementation Team Roles and Responsibilities

### **Implementation Teams**

All potential roles are described hereunder. Not all roles detailed will be applicable and/or necessary for every project. The specific roles necessary to fill for the purposes of completing the milestones in Section 4 of this document will be detailed and confirmed by the Verint Project Manager or Verint Certified Contractor at the outset of the project. The parties are responsible for identifying their respective resources to fill each necessary role.

### **Verint Implementation Team**

- **Verint Project Manager:** This individual is responsible for managing the implementation process to completion and is the primary contact for the Customer. The Verint Project Manager or Verint Certified Contractor is the facilitator for all project activities, is responsible for scheduling all Verint Resource or Verint Certified Contractors.



- **System Engineer, Solution Designer, System Integrator, Project Solutions Engineer:** These individuals are responsible for the Verint software installation and integration to the Customer's data sources, system testing, and configuration solution design when applicable.
- **Application Consultant, Application Specialist, Business Consultant:** These individuals are responsible for facilitating workshops, business discovery, post-implementation review(s) and solutions consulting,
- **On-Site Instructors:** These individuals conduct all training

### Customer Implementation Team

- **Executive Sponsor:** Responsible for the decision to purchase the Verint software solution and is expected to contribute information about Customer's goals for the software to the organization.
- **Project Lead:** Customer's primary point of contact that is responsible for onsite project coordination and data delivery. This individual must be authorized by senior management with the decision-making powers to ensure the success of the implementation or services engagement.
- **Scheduler:** This individual will be the primary user of WFM software and should have detailed knowledge and/or access to data about agents, queues, shifts, and restrictions.
- **Verint Application Administrator:** This individual accepts overall ownership responsibility for the Verint software and is skilled and trained to ensure performance effectiveness. This person is also responsible for the development and maintenance of the Verint evaluation forms.
- **Customer System "Owners":** The Verint software will receive data from a variety of systems. For each of these systems, the Customer's team must include an individual(s) who is thoroughly knowledgeable about the system, its configuration, and its reporting capabilities. System "Owners" will have responsibility for creating reports or providing information regarding database structure to provide data that is read into any Verint database.
- **Networking Specialist / IT Contact:** Responsible for procuring and setting up the Servers and PC's on which the Verint software will be installed. This individual is also responsible for ensuring that there is sufficient IT infrastructure (network connection, network disk space, etc.) for system input data to be written and stored on an ongoing basis for use with Verint software. The Networking / IT Contact is also responsible for establishing database backup procedures, for ensuring connectivity between the Verint client PC's and the Verint database(s), and for being trained on the data integration components of the Verint solution(s). This individual is also responsible for maintenance and update of the Verint software integration into the Customer's computer telephony network environment if applicable. These responsibilities include, but are not limited, to changing established IP addresses for shifts in staffing and installing the final software configuration onto licensed agent and supervisor workstations.
- **Desktop Specialist:** This individual has ownership of content on the desktop PC's in the call center. The desktop specialist has knowledge of content of PC's at the center and has the ability and authority to install software on the PC's. This person should be familiar with any software distribution technology that may be used.
- **Server Administrator:** This individual is responsible for the day-to-day physical care of the Verint software server(s), managing backup and disaster recovery strategies as well as coordinating data storage needs and management of drive space with the Verint Application Administrator.



- **Telephony Specialist:** This individual communicates with the Verint Application Administrator regarding any changes that occur to specific telephony data (i.e.: extension, logins, groups, queues, skills, etc.) in order that the Verint Application Administrator can synchronize the Verint software with the telephony infrastructure.
- **Training Coordinator:** Responsible for the coordination of training on the Software. The training coordinator must be able to schedule facilities and determine availability of coaches, supervisors and technical staff for training.
- **Database Administrator:** Responsible for administration and oversight roles of the actual Sybase, Oracle or SQL database as applicable.
- **Business Resources:** These resources may be called upon to answer questions about policies, people, queues, and other operational information needed for their specific centers
- **Business Users:** These are the primary end users of the Verint software

## Section 8: Change Control Process

Customer may request changes in or additions to the Services being provided hereunder by completing a Change Control Approval Request Form supplied by Verint. If Verint deems the changes feasible, Verint will provide a quote for any increase or decrease in the cost of or time required for performance of the Services as amended. Once parties agree to the modified scope and related fees a representative of each party will sign the Change Control Approval Request Form. See ATTACHMENT A. Verint shall not be obligated to perform any revised or additional Services unless and until the Change Control Approval Request Form is signed by both parties.



## Attachment A – Change Control

<b>Change Control Approval Request Form</b>		
<b>Change Request Control Number:</b> <b>Current Service Order Number:</b> <b>Date Issued:</b>		
<b>Date Requested:</b> / /	<b>Requested By:</b>	<b>User Organization:</b>
<b>Date Required:</b> / /	<b>User Phone:</b>	<b>User e-mail:</b>
<b>Application or System:</b>		<b>Release/Version:</b>
<b>Additional Time Estimated by Resource Type:</b>		<b>Additional Cost Estimated:</b> \$
<b>Summary of Requested Change:</b>		
<b>New SOW Required?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Change Approval/Disapproval:</b> <input type="checkbox"/> Disapprove Request <input type="checkbox"/> Approve for Release # ____ <input type="checkbox"/> Approve for Current Release <input type="checkbox"/> Future Consideration		
<b>Final Disposition:</b>		
<b>Reason for Rejection:</b>		
<b>Customer Management:</b> (Name/Title)	<b>Phone Number:</b>	<b>e-mail Address:</b>
<b>Verint Project Manager:</b>	<b>Phone Number:</b>	<b>e-mail Address:</b>
<b>Project Manager Signature:</b>		<b>Date Authorized:</b>
<b>Disposition</b>		
<b>Date Assigned:</b>	<b>Signature of Authorized Verint Representative:</b>	
<b>Date Of Sign Off:</b>	<b>Signature of Authorized Client Representative:</b>	
<b>Actions Required</b>		
<b>Date ONYX Quote Adjusted:</b>	<b>Name and Signature of ONYX Adjuster:</b>	
<b>Date Open Air Adjusted:</b>	<b>Name and Signature of Open Air Adjuster:</b>	

## Intrado Change Order

### Information

<b>Customer Name</b>	Washoe County, Nevada on behalf of the 911 Emergency Response Advisory Committee
<b>Change Order Effective Date</b>	Latest date signed below
<b>Underlying Service Order or Statement of Work ("<u>Order</u>")</b>	Service Order for Power LVR services signed December 22, 2014

### Change to Services

Intrado Life & Safety, Inc. ("Intrado") will provide the following change to the current services ("Services") under this Change Order ("Order").

Intrado will install a new Verint recording system with the v15.2 Recording system, as described in the attached documentation. Per the original agreement Washoe will own the prior system, but Intrado will uninstall this system and utilize the existing space for the new install.

### Term

The term of the Order is extended to March 31, 2025. The renewal and termination provisions of the Order apply to the term, as extended by this Change Order.

### Termination for Convenience

This Order may be terminated at any time with or without cause upon 90 days written notice. If Customer terminates without cause (for convenience), then Customer agrees to pay Intrado a termination fee of \$472,000 ("Fee"). This Fee is not a penalty. It is designed to help compensate the upfront implementation cost incurred by Intrado. Any MRFs paid by Customer prior to termination without cause will be credited against the Fee.

### Fees

The following fees will apply, commencing as of the end of the 60<sup>th</sup> payment under the current Order:

<b>Description</b>	<b>One Time Fee ("<u>OTF</u>")</b>	<b>Monthly Recurring Fee ("<u>MRF</u>")</b>
Setup, Configuration and Installation	Waived	N/A
Support and Maintenance, per position	N/A	\$352.00
Total MRF		\$10,560.00

## Entire Agreement

Except as stated herein, the Order continues in full force and effect. This Change Order amends the Order as stated herein, constitutes the parties' entire agreement, and supersedes any prior written or oral agreements related to its subject matter. This document may be executed in counterparts, by facsimile or electronically, and is not enforceable unless signed by both parties.

**WASHOE COUNTY, NEVADA**

**INTRADO LIFE & SAFETY, INC.**

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Authorized Signature

---

Authorized Signature

---

Name Typed or Printed

---

Name Typed or Printed

---

Title

Date signed

---

Title

Date signed





## Prepared for Intrado Life & Safety Inc. Verint Recorder upgrade project for Washoe County, NV

December 12, 2019

This Statement of Work ("SOW") is attached to and made a part of the quote **10242019\_3247\_2LW** ("Master Agreement") between **Intrado** ("Reseller") and **Verint Americas Inc.** ("Verint").

Account Executive	Solutions Engineer
Mathew Varner	Larry Williston
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## Verint Corporate Overview

Verint Systems® is a global leader in Actionable Intelligence® solutions. In today's dynamic world of massive information growth, Actionable Intelligence is a necessity for empowering organizations with crucial insights and enabling decision makers to anticipate, respond, and take action.

Our Actionable Intelligence solutions help organizations address three areas of the market — customer engagement optimization, security intelligence, and fraud, risk, and compliance — by capturing large amounts of information from numerous data types and sources, using analytics to glean insights from the information, and leveraging the resulting intelligence to help optimize customer engagement, enhance security, and mitigate risk.

- **Customer Engagement Optimization** solutions help organizations enrich customer interactions, improve business processes, and optimize their workforces to enhance loyalty, increase revenue, mitigate risk, and manage operational costs.
- **Security Intelligence** solutions help organizations prevent, detect, neutralize, and investigate crime, terror, and cyber threats, as well as protect people, property, and assets.
- **Fraud, Risk, and Compliance** solutions help organizations prevent loss; comply with regulations; investigate cyber, retail, and financial crime; help ensure continuity of business; and protect private information.

## Verint Fast Facts

### Dynamic Global Presence

- Headquartered in Melville, NY, with offices worldwide
- More than 5,000 dedicated professionals, plus a global partner network

### Blue-Chip Customers

- Large, diversified customer base
- More than 10,000 organizations in 150 countries
- Over 80 percent of the Fortune 100

### Financially Strong and Positioned for Growth

- \$1.134 billion in revenue for the Fiscal year end on January 31, 2016
- Highly diversified, customer-centric business
- VRNT on the NASDAQ Stock Market

### Committed to Innovation

- More than 700 patents and applications worldwide
- Ongoing investments in research and development, and organic and acquisition growth

### Recognized Worldwide for Market Leadership and Value

- Member of the Global Software 500
- Company and joint customer honors for innovation, excellence and best in satisfaction



## Verint Corporate History

In February 1994, Verint Systems Inc. was founded as a wholly-owned subsidiary of Comverse Technology, Inc. Our initial focus was on the commercial call recording market, which, at the time, was transitioning from analog tape to digital recorders. In 1999, we expanded into the security market by combining with another division of Comverse focused on the communications interception market. In 2001, we further expanded our security offering into video security. In May 2002, we completed our initial public offering ("IPO"). In May 2007, Verint Systems acquired Witness Systems Inc., forming the Enterprise Intelligence Solutions business subsidiary. On February 4, 2013, Verint shareholders approved the acquisition of Comverse Technology, Inc., making Verint an independent company with 100% of our shares owned by the public.

Verint has a long history rooted in developing and providing Security and Liability Recording Solutions for Law Enforcement, Emergency Communications and Response and other Critical Communications uses, beginning with the first Verint Solutions which were developed in 1994. Along the timeline below you can see many advances attributed to Verint or one of the Organizations which has been acquired by Verint during the past 23 years. Highlights of this long history of innovation:

- 1994 – Verint Founded
- 1996 – Eyretel (Acquired by Verint in 2006) develops First Digital TDM Recorder
- 1997 – Mercom Systems (Acquired by Verint in 2006) develops First Windows based Recorder
- 1991 – Eyretel launches First PCI Recorder to exceed 120 Channels (MediaStore)
- 2001 – Eyretel launches First Cisco VoIP Recorder
- 2006 – Verint/Witness combined solution exceeds 650 Channels in a single server
- 2008 – Verint signs OEM Agreement with Avaya for OEM Solution
- 2014 – Verint launches V15, with Recording Capacity of 1000 Channels in a single server
- 2015 – Verint launches Recording Solution for Skype
- 2016 – Verint expands Recording Capacity to 4000 Channels in a single server



## Verint's v15.2 Recording Solution Overview

Intrado has asked Verint Systems to provide an upgrade proposal for Radio and Telephony Recording solution for Washoe County. The solution as required is to provide a recording solution for both telephony and radio communications.

The Requirements of this request is to upgrade the current Audiolog recording system to the Verint Recording for Public Safety system. This will provide software upgrade and new logging recorders that will record all audio at two locations Reno and Sparks Communication center with the following requirements per location:

### **Reno Primary Harris Radio**

1. Trunked P25 Radio – 200 Talk Groups
2. Online Archival Storage

### **Reno Redundant P25 Harris Radio & Telephony**

1. Telephone - 52 simultaneous audio sources in 48 Analog and 4 Voip
2. Trunked P25 Radio – 200 Talk Paths which equate to roughly 240 Talk Groups
3. Online Archival Storage

### **Sparks Telephony**

1. Telephone - 24 simultaneous audio sources in Analog form
2. Online Archival Storage





# Verint Recording Solution Design

## **Telephone & Radio Recording**

To meet these requirements set forth by **Washoe County**, Verint Systems is proposing a Public Safety Recording Solution based upon the Verint Recorder v15.2.

To accomplish the recording requirements for the two Communications Centers, Verint will deploy multiple recording servers at each communication center. At the Reno Communications Center, Verint will deploy a Datacenter server, "Primary" and a "Redundant" Recording Server (the Redundant recorder will also record the Telephony), and a storage server in Reno. Sparks recorder server will be installed this location. . These Recording servers will capture the following communications:

### **Reno Data Center server – 1 at this location**

1. Database Server (centralized system configuration, Storage of call Metadata for each site so that there are Primary and Redundant Databases
2. Application Hosting for Replay applications per site

### **Reno Primary Recording Server – 1 at this location**

1. 200 P25 Talk Groups (at each site)
2. Online Archival Storage 1.9TB

### **Reno Redundant Recording Servers – 1 per site (To be Installed on the CEN to record PC Screens)**

1. 52 Telephone Inputs (will be 48 analog at both sites 4 VoIP)
2. 200 P25 Talk Groups (at each site)
3. Online Archival Storage 1.9TB

### **Sparks Recording Servers – 1 per site**

1. 41 Telephone Inputs at PSB and 81 at Courthouse (all to be analog at both sites)
2. 24 P25 Talk Paths (at each site)
3. Online Archival Storage 500GB

### **Upgrade current 6000 series server** currently installed and recording Harris P25.

1. Upgrade kit is being provided to upgrade the OS to 2016 and add 3 960GB drives to provide 1.9TB of Archive storage

The Verint Recording Servers also include the capability to capture and tag E911 ANI/ALI information to the call database record. This will enable operations center staff to perform search and retrieval using ANI & ALI information.

- **Important Note:** We will need to verify the Make/Model of the ANI/ALI controller and the availability of a useable ANI/ALI "CADSPILL" or Post Call CDR or Enhanced CDR. Testing may be required to verify usability of the data source.



To provide for the most robust recording solution for Harris P25 Radio Recording, the “Primary” and “Redundant” Recording server at the Reno location, are also equipped to record the Harris P25 Radio System. This Recording Servers are designed to record a 200 Trunked Talk Groups from the Primary and 200 Trunked Talk Groups from the Redundant Harris VIDA Gateways. In addition to recording the Audio from the P25 radio System, the Verint Recorder is to capture Radio metadata with each recorded transmission. This metadata is provided by Harris Radio system and includes such info as Radio ID, Radio Alias, Talk group ID and Talk Group Alias. This will enable users to search and retrieve recorded radio communications based upon Talk group and/or Radio information.

### **Search and Playback**

The Search and Retrieval of Recorded Communications is to be done using Verint’s Web Based Application designed for Public Safety Users known as “Insight Center”. Verint’s Insight Center application provides a powerful, browser-based, set of tools for search and replay the recordings stored on your Verint Recording servers. Directly accessed from your desktop PC, with an easy-to-use browser interface, you can easily search for recordings by Recorded Channel, Date, Time, Duration, User Reference Tags, and other captured metadata from both the P25 ASTRO Radio system and the E-911 Switch. Playback audio is delivered via the local area network to the speakers of the client PC.

The Verint Installation Team will work with your defined Verint System Administrator to assign each individual agency use a Unique User Name and Password. Each user account will have certain permissions associated with it in order to play recordings back. Depending upon how a user account permissions have been configured, a user may be permitted to playback all recordings or may be restricted to only playing recordings from a limited subset of telephone extensions or Radio Talk Groups. If Playback permissions are limited, then the replay application will only show recordings for the Telephone Audio Channels or Radio Talk Groups to which have been assigned.





### Call Storage

Depending upon the call retention requirements of each agency, the Storage server proposed may not provide sufficient storage to retain the calls for the retention period. If this is the case, Verint recording for Public Safety allows for each recorder to also leverage a Network Attached Storage ("NAS") Device or a Storage Area Network ("SAN") to meet the requirement. There is no cost or license to enable this feature. Verint will be happy to work with **Customer** to determine the long term storage requirements.

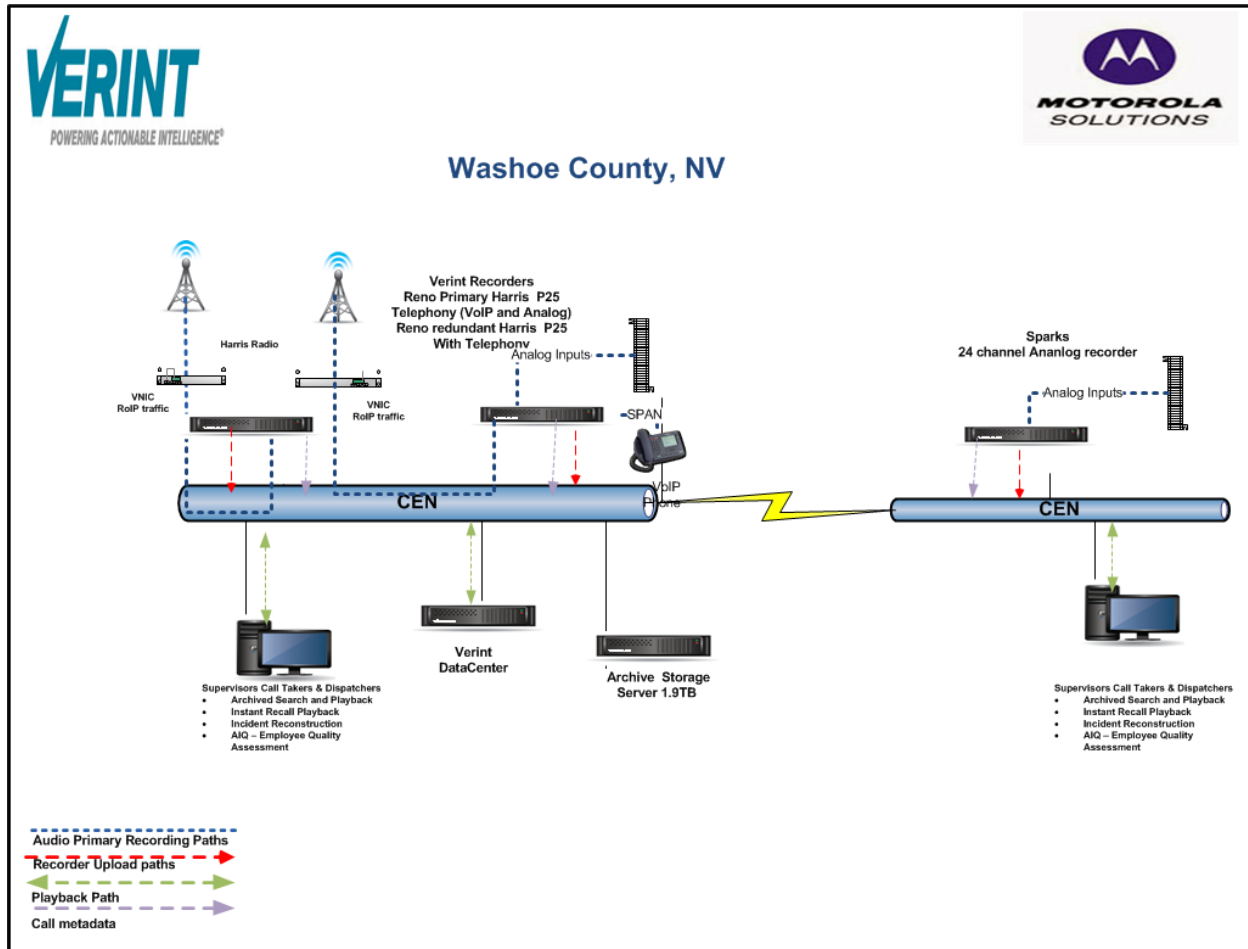
Verint's Recording Solutions are designed to fulfill the widest range of recording requirements while being one of the most efficient, easy-to-use and reliable solutions available. Verint's open architecture provides maximum storage flexibility, with dedicated internal RAID 5 Storage or call recordings, automatic call archiving to customer designed archive locations with native support for Network-Attached Storage (NAS), or SAN storage, RDX drive, using Verint's robust Archive Campaigns.

To provide **Washoe County** with an effective and redundant storage solution, we have included 1.9 TB of archive storage within the Verint Data Centers.

Each Recording Server is equipped with multiple hard drive arrays, one of which is specifically designed for local storage providing 1.9TB of storage.

This 1.9 TB of Storage provides for the following Storage capacities:

- 1.9TB – Analog Recording vocoded with GSM = 304,000 Channel Hours (160 hours/1 GB)
- 1.9TB – P25 Phase 1 Recording vocoded with IMBE = 696,000 Channel Hours (366.6 hours/1 GB)



## Verint Systems Technical Overview

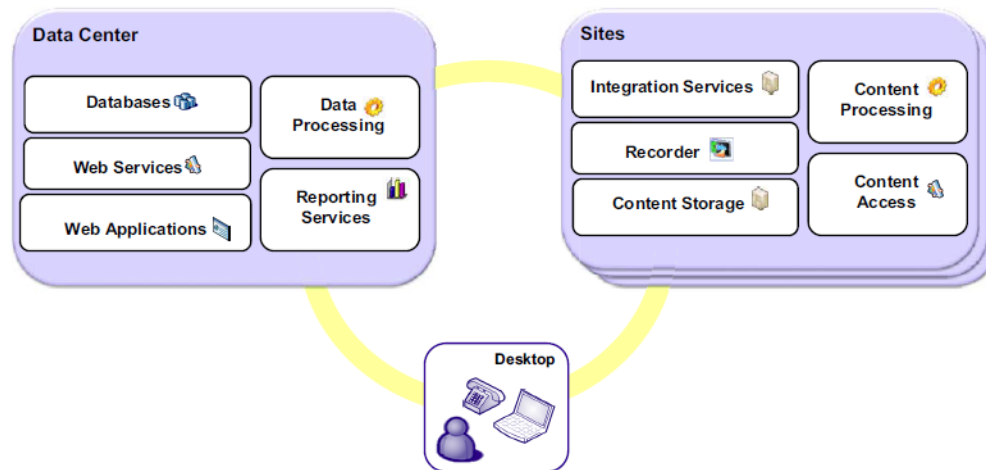
The Verint v15.2 Recording Solution is able to record voice communications in your operations center, whether they be in VoIP, TDM, or mixed telephony environments. Please keep in mind that as your center's technologies evolve and change, Verint has a solution for you. If anything is planned in your center during the next 2 years which is not included in this Solution Design, or has not been discussed with your Verint Representatives, please bring this to our attention as quickly as possible so that we may account for changing technologies within this design, or with future system updates.

## Verint Recording - A Logical Architecture Overview

The system's logical architecture is based on three logical deployment zones:

- **Data Center** - Serves as a centralized, single point of access where application data and content metadata is accessed, managed and maintained
- **Recorder Site(s)** - Provides recording (content acquisition), content storage and integration with the customer environment
- **Desktop** - Provides the agent or supervisor's working environment

**Logical Architecture**



Every system deployment includes one Data Center, and one or more Recording Sites and Client Replay Desktops (depending on system size and scaling issues).

Dividing the system's functions into logical zones supports flexibility for different system scaling levels, streamlines the flow of data, enables easier and more efficient upgrade paths, and provides system security.

Maintaining the data in one single location (Data Center Zone) both protects sensitive system data and provides centralized access to data by authorized users. The Site zone can be configured in multiple instances with multiple servers, providing system flexibility and scalability.

Main system data is sent from the Site zone to the Data Center zone. The Site zone sends recorded content and other stored data to the Data Center zone. The Data Center zone provides a centralized, single location where this data can be accessed by users to view and modify. In turn, the Data Center zone sends user information and system configuration information to the Site zone, where it is then integrated into the customer's environment.

The software in the Data Center and Site zones can be upgraded separately, which enables easier upgrade processes. For example, the customer can upgrade the Data Center zone for new applications or new features, without the need to invest in upgrading the entire enterprise.

## Data Center

The Data Center provides a single, central point of access for application and content metadata. Every system deployment includes one Data Center zone. Users access the Data Center to view and modify system stored and real-time data. Users who do not have access to the Data Center zone cannot log in to an application or access any of the data.

The Data Center hosts one or more database servers, depending on the size of the system deployment. Data Center zone databases contain the following information:

- System Management Data: Includes IT-oriented information on licenses, configuration, and data sources.
- Application Management Data: Includes business-oriented information on:
  - User management: Includes users, hierarchy, roles, and user preferences
  - Application management: Includes forms, flags, reports, and custom data
- Application Data: Includes raw recorded call information, evaluations, scorecard source measures, DPA data, Speech content, and excludes audio and screen records.
- Operational Data: Includes archived segment data indicating which segments are archived, including the information required to restore and play back a segment. Operational data is generated by the system and maintained in the database, and helps the system manage acquired structured and unstructured data.

## Recorder Site Functions

The primary functions of the Recorder are to record, archive, and replay voice & screen recordings, Recorder features include:

- Full-time and selective, rules-driven recording
- Close integration with CTI data sources such as Harris P25 VIDA Gateway and E9-1-1 ANI/ALI
- Archiving support
- High-availability (Recording acquisition redundancy)
- Web-based administration & configuration

The recording solution consists of a set of logical servers that can be deployed on a single machine or on multiple machines in a large enterprise environment. These servers can also be deployed in the form of clusters in order to scale with the size of the customer's systems.

The Recorder supports both TDM and IP recording, including trunk-side recording (TDM) or gateway recording (IP), and station-side recording (TDM) or extension-side recording (IP) recording. You can configure each of these types of recording by using the Enterprise Manager to set up extension groups or pools (called member groups), each with a data source that defines where the recorded call is coming from, and then setting the recording mode.

## Call Data and CTI Tagging



Call data captured by the Recorder includes associated and non-associated call data. Associated call data represents parameters of the call such as the start time, stop time and call length. In addition to the call data values, other data fields can be appended that contain any relevant data that is associated with the call. This data can be from switch CTI ports, and can be information such as an agent extension. Associated call data includes the following, which are logged with every call recorded:

- Start Date and Time
- End Date and Time
- Call length
- Dialed Digits (outbound)
- CLI Digits
- DNIS
- Call ID (unique to the call and Recorder)
- Call direction

Non-associated call data allows the Integration Service to place records into the database when they cannot be directly associated with a voice call (either because the call has finished or the inum of the call is unknown). At this point, a join is performed between some common element within the associated data, such as a unique ID from the CTI system, to allow this non-associated data to be added to the call details.

For Advanced Radio Recording environments with available Call Data for call tagging the following call data is typical to be tagged with each radio transmission recording:

- Radio ID & Radio Alias
- Talk Group Id & Talk Group Alias

Once you determine which fields you need to use in your system, you can add them as custom attributes, then map these custom attributes to an adapter. You can then use these attributes for tagging and to build recording rules, where the attributes become criteria upon which the decision to record or not is based.

## Recorder Redundancy & High Availability

Recording provides high availability via redundancy of the Recorders, Integration Service, or both.

### Recorder Redundancy

There are three types of Recorder Redundancy:

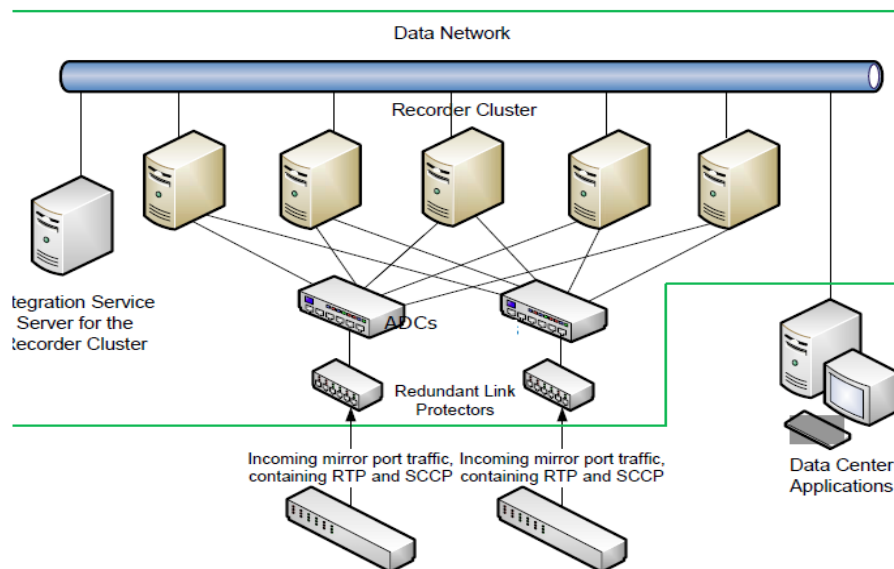
- N+N, in which all calls (or the desired redundant calls) are recorded by pairs of Recorders.

**Important Note:** N+N is the redundancy as designed for Calvert County.

- N-Dedicated M-Shared, in which calls are recorded by a primary N Recorder, with a backup M Recorder available to take over should N experience any errors.
- N+M All Shared, in which all calls are load-balanced across a pool of Recorders.

### High Availability Recorder Cluster

The diagram below illustrates a fully fault-tolerant Recorder cluster (N+M All Shared) containing redundant devices (the load balancing device, Link Protector, voice switch and Recorder). In this configuration, the failure of any single component will not result in the loss of recording. The cluster in this example has a recording capacity of 1000 channels (5 Recorders x 200 channels). Each Recorder has a capacity of 650 Channels so the spare capacity per recorder is 450 Channels, meaning that the system is tolerant of up to two (2) recorder failures at any moment in time.



The cluster is designed to be fault tolerant of key elements being offline for periods of time, and includes the following components:

- Data Center Zone application components: The servers for these components have no effect on the ability of the system to record. If the database is unavailable, the Recorders queue up the recorded calls. Once the database comes back online, the Recorders will upload the calls.
- Archive: This component is designed to run behind real-time archiving of the calls. The system would only be detrimentally affected if it was offline for a sustained period, such that when it came back online, calls to be archived were no longer on the Recorders. The hard disks on the recorders should be sized such that they can be tolerant of the Archive system running behind.



- **Cluster Integration Service:** In this configuration, the Integration Service is utilized for CTI Integrations and tagging. If the Integration Service server fails, then this tagging will be lost. If an extension must be recorded even during an Integration Service failure, it should not be configured in this mode.
- **IP Recorder Nodes:** As described above, the configuration in the diagram contains five recorders, but is specified as providing 4000 channels of concurrent recording, as the fifth recorder represents the spare capacity required for redundancy.
- **ADC or Load Balancing Device:** If either load balancer fails, the other passive device will be presented with the links via the Link Protectors. A network port failure would result in that individual link being activated to the redundant the load balancer.
- **Link Protectors:** If the Link Protector fails, then the network connection will be maintained to the primary the load balancing device via the protector's fail-through capability. The system is likely not to be fault tolerant of a Link Protector and load balancer failure at the same time.

## Desktop (Search & Replay) Sites

The Desktop is the main component in the customer's environment that hosts software and certified third-party software. Depending on the package, the Desktop optionally contains the following types of clients required by agents to work with system servers:

- **Insight Center Web Agent:** Provides Multi-Channel, Multi-media Search, Replay and Incident Management for users. (Primary User Application for Recorded Call Replay)

**Important Note:** Insight Center has been designed to work in the customer's computer environment. In the rare case that conflicts exist between other applications, a stand-alone play back station provided by the customer may be required.

- **Integration Services Agent:** Retrieves and acquires agent information, and extend contact metadata with data available only on the agent desktop.
- **Content Access Client:** Provides Playback Control (Interactions and Analytics)
- **Thick Client Applications:** Includes Form Designer (Interactions and Analytics)

## Archive Storage Topologies

After a recorder has completed recording a contact, it stores it on its local disk. The recorder's call storage drive, no matter how large, has some limit to its capacity. Therefore, at some point, the older contacts need to be moved to long-term storage.

"Archive" refers to the infrastructure dedicated to preserving call information in long-term storage (usually for one year and longer, depending on customer requirements). The archive service transfers recorded content from recorders to specific storage media for preservation.



The following are the two different archive topologies that can be configured:

- **Local Archive Topology**: Recorders push contacts directly from their local call buffer to the target media.
- **Central Archive Topology**: Central archive server is configured to pull contact data from Recorders and write this data to the target media.

Each type of archive (local or central) can be deployed in different configurations. To determine which type of archive should be used depends on the topology best suited for a customer's specific requirements.

Verint supports most industry standard Network Storage Strategies and devices. Examples supported, but not limited to are: RDX drive, NAS, SAN, EMC Centera, Public Cloud Services and Private Cloud.

## Web Applications

All users log on to the system through Web applications. A single point of authentication—Single Sign-On (SSO)—provides application access in the system, as defined by user privileges. Web applications run application pages with system management and application management data. It is mainly structured information. Unstructured information is accessed directly from the Site zone in which it was recorded or archived.

The application cluster consists of one or more application servers, depending on the deployment size. In large deployments with more than one server, the application servers are deployed behind a Network Load Balancer (NLB) and each server exposes the same set of applications and services. All application servers run the same version of software and have an identical configuration. Users access the system from the URL of the NLB. The NLB routes the user to one of the application servers.

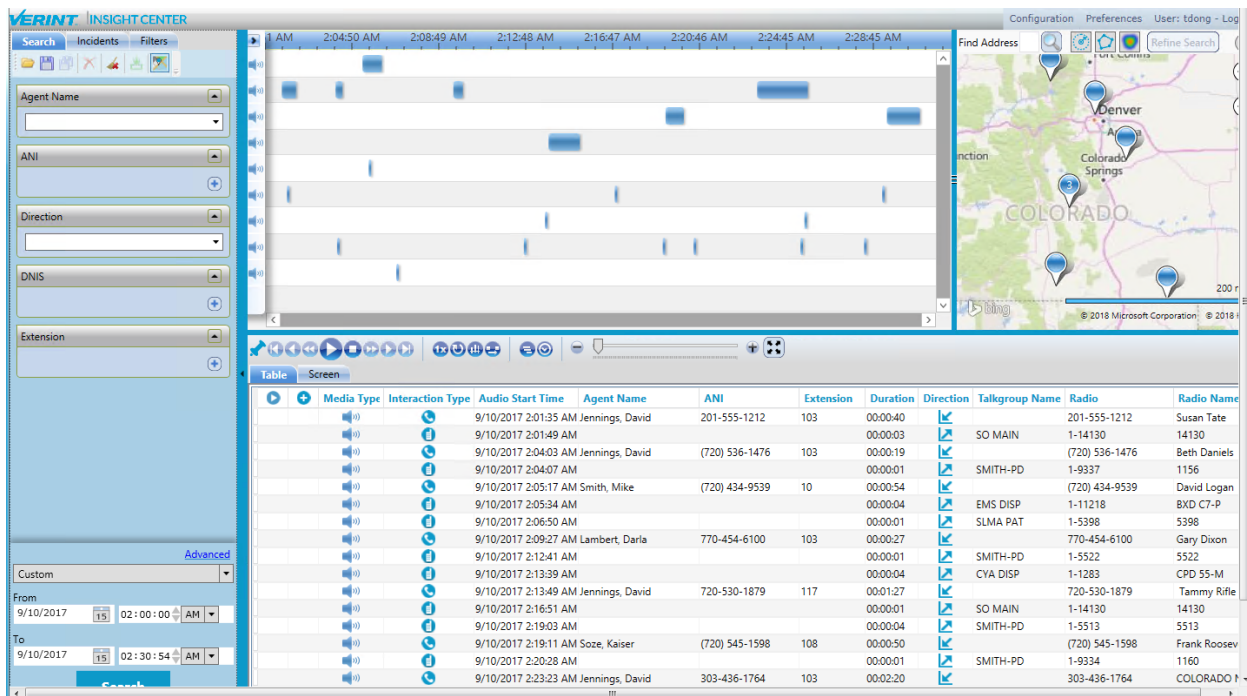
## Insight Center: Search, Replay and Incident Management

Insight Center provides a powerful, browser-based, set of tools to search for and play the recordings stored on your Verint enterprise recording system from your desktop PC. With an easy-to-use browser interface, you can easily search for recordings by channel, agent, date and time, or any available metadata associated with the recording.

Insight Center allows you to playback multiple sequenced and/or simultaneous recordings, regardless of which channel they were recorded on. This allows you to reconstruct an incident by listening to a series of recordings in their entirety, even if the recordings overlap. Selected recordings can then be saved to an incident folder for ease of incident management. To assist you when creating a transcript of the recordings, you can configure Insight Center to provide a spoken time and date stamp at the beginning and end of the selected sequence of recordings. Insight Center plays the selected recordings in chronological order.

Verint's Recording solutions provide for full-time recording, selective recording, recording on demand, and dial-in recording across digital and analog telephones, trunked and conventional Land Mobile Radio systems, telephone lines and trunks, IP phones, short message service (SMS), and PC screens. It can record screens while minimizing network usage and storage requirements and can capture screen changes, including mouse movements and keystrokes, without disrupting call handlers.

Insight Center is designed to address the replay and incident management of these multi-media Interactions along with Multi-Channel mixing capabilities to allow effective Incident Reconstruction in the emergence of NG9-1-1 Technology, including replay capabilities for: Audio, Video, PC Screen Capture, Still Photos and Text messaging.



The screenshot displays the Verint Insight Center interface. On the left is a search sidebar with filters for Agent Name, ANI, Direction, DNIS, and Extension. The main area shows a timeline of recordings with a map of Colorado on the right. Below the timeline is a table of search results.

Media Type	Interaction Type	Audio Start Time	Agent Name	ANI	Extension	Duration	Direction	Talkgroup Name	Radio	Radio Name
		9/10/2017 2:01:35 AM	Jennings, David	201-555-1212	103	00:00:40			201-555-1212	Susan Tate
		9/10/2017 2:01:49 AM				00:00:03		SO MAIN	1-14130	14130
		9/10/2017 2:04:03 AM	Jennings, David	(720) 536-1476	103	00:00:19			(720) 536-1476	Beth Daniels
		9/10/2017 2:04:07 AM				00:00:01		SMITH-PD	1-9337	1156
		9/10/2017 2:05:17 AM	Smith, Mike	(720) 434-9539	10	00:00:54			(720) 434-9539	David Logan
		9/10/2017 2:05:34 AM				00:00:04		EMS DISP	1-11218	BXD C7-P
		9/10/2017 2:06:50 AM				00:00:01		SLMA PAT	1-5398	5398
		9/10/2017 2:09:27 AM	Lambert, Darla	770-454-6100	103	00:00:27			770-454-6100	Gary Dixon
		9/10/2017 2:12:41 AM				00:00:01		SMITH-PD	1-5522	5522
		9/10/2017 2:13:39 AM				00:00:04		CYA DISP	1-1283	CPD 55-M
		9/10/2017 2:13:49 AM	Jennings, David	720-530-1879	117	00:01:27			720-530-1879	Tammy Rife
		9/10/2017 2:16:51 AM				00:00:01		SO MAIN	1-14130	14130
		9/10/2017 2:19:03 AM				00:00:04		SMITH-PD	1-5513	5513
		9/10/2017 2:19:11 AM	Soze, Kaiser	(720) 545-1598	108	00:00:50			(720) 545-1598	Frank Roosevelt
		9/10/2017 2:20:28 AM				00:00:01		SMITH-PD	1-9334	1160
		9/10/2017 2:23:23 AM	Jennings, David	303-436-1764	103	00:02:20			303-436-1764	COLORADO

### Insight Center User Interface



## Section 4: Work Locations and Service Hours

### Work Locations:

Verint implementation activities typically involve a site visit by one or more members of the Verint Implementation Team, but portions of the services associated with this SOW may be conducted off-site as appropriate. Travel and living expenses incurred in the performance of the services associated with this SOW are included in the fees associated with this SOW. No additional travel and living expenses will be billed to the Customer.

### **Normal Service Hours:**

- The fees associated with the Services described herein are based on Verint performing said Services with no more than eight (8) hours (“Work Day”) during Normal Business Hours on a Business Day
  - **“Normal Business Hours”** is hereby defined as 8:00 a.m. to 5:00 p.m. local time
  - **“Business Day”** is hereby defined as a non-holiday Monday through Friday
- Any Service that Customer requests to be delivered outside of Normal Business Hours on a Business Day is subject to a fifty percent (50%) premium.
- Any Services that Customer requests to be delivered on a weekend or holiday recognized by Verint is subject to a one hundred percent (100%) premium.

## Section 5: Project Milestones and Acknowledgement of Services

Each Service deliverable, task or milestone identified below will be deemed delivered when Customer has signed the applicable Confirmation of Services document (“COS”). The Customer will receive a request to acknowledge that the services have been rendered in accordance with the SOW. Customer must accept or reject the requested acknowledgment of completion either by signature or by e-mail.

This section provides the details for the Services engagement including Milestones, Tasks, and Deliverables.

### **Milestones, Tasks and Deliverables**

#### **Milestone: Implementation**

##### **Project Initiation**

##### Description

This phase consists of the Project Kickoff, Planning and Design sessions.

During the Project Initiation, the Verint Project Manager or Verint Certified Contractor will meet with Customer’s technical and business representatives to review and verify the components of the technical environment and service milestones for the project. The Verint Project Manager or Verint Certified Contractor will then determine the appropriate assignment of tasks.

The Verint Project Manager or Verint Certified Contractor will also arrange the appropriate Design sessions to address application consulting, best practices configurations and technical architecture and configuration requirements.



The Project Initiation and Design sessions will be scheduled with **Washoe County**, the Customer's project team and the appropriate Verint Resource or Verint Certified Contractor to discuss the following, as appropriate.

- Configuration for the following:
  - Full-Time Recording
  - Quality Monitoring
- Customer environment, architecture and technical design configurations for the following:
  - Application configuration design document(s)
  - Customer Telephony and Network environment
  - Integration Design Specification (if applicable)
  - Call Scenario Test Plan (with supported call flows)
  - Customer's network topology
  - System architecture and component sizing
  - Review the Customer's recording requirements against Verint' standard tagging events and capture any non-standard specific requirements that need to be documented, reviewed and agreed upon. Based on such non standard requirements, additional professional services fees may be imposed.
  - Review Verint' standard call flow scenarios and capture any additional call flow scenarios specific to the Customer's environment. Based on such non standard requirements, additional professional services fees may be imposed.
  - Update or complete an Integration Design Specification and approve

#### Deliverables

- Pre-installation checklist
- Site Preparation Guide
- Site Readiness Checklist
- Project Milestones with Associated Tasks
- Project Task Assignments
- Project Schedule
- Application configuration design documents
- Mutually agreed upon Integration Design Specification ("IDS") document and Call Scenario Test Plan

#### Verint Responsibilities/Tasks

- Review order details
- Review Customer project expectations
- Review training requirements and schedule
- Review system architecture and sizing
- Confirm Customer's hardware delivery and installation
- Review of Confirmation of Services process
- Create and deliver Site Readiness checklist to be completed by Customer



- Define project milestones
- Assign project tasks
- Create and deliver project schedule
- Provide application configuration design document
- Provide IDS document and Call Scenario Test Plan
- Schedule Verint Resource or Verint Certified Contractor

## Site Readiness

### Description

The Verint Project Manager or Verint Certified Contractor will perform a Readiness Assessment Audit after the Project Initiation and at least two (2) weeks prior to scheduled installation. If, at the conclusion of the Readiness Assessment Audit, the Verint Project Manager or Verint Certified Contractor decides the on-site installation is to begin, the appropriate Verint Resource or Verint Certified Contractor will be scheduled.

### Deliverables

- Readiness Assessment Audit
- Site Readiness Documentation

### Verint Responsibilities/Tasks

- Review Site Readiness Documentation
- Review security requirements for Verint Resource or Verint Certified Contractor and define associated login authority and network access
- Schedule appropriate Verint Resource or Verint Certified Contractor

## Installation

### Description

The Verint Resource or Verint Certified Contractor will begin the installation process by reviewing the Customer's environment to ensure that it is consistent with the Readiness Assessment Audit. Verint will install all licensed Verint software, configure said software to integrate with the Customer's telephony environment, conduct an application pilot, and test all key functionality. Initially, this will be performed in a test environment. Subsequent to initial testing, and with **Washoe County** approval, the applications will be configured for a production environment. Verint will complete the installation by submitting site documentation, performing knowledge transfer to Customer's technical support staff and performing a system hand-off to Customer and the Verint Customer Support team (or outsourced Verint subcontractor).

### Deliverables

- Verint software installation and configuration
- Application pilot tested for key functionality
- Site documentation

### Verint Responsibilities/Tasks



- Reviewing the Customer's environment to ensure that it is consistent with the Readiness Assessment Audit
- Verint software installation and configuration
- Verify related third-party software (must be licensed by the Customer) is installed and configured for integration to the Verint solution
- Perform system testing and complete Customer site documentation
- Knowledge transfer to the Customer's technical support staff in loading and configuring Verint supervisor (up to three (3)) and agent client (up to three(3)) software
- Add a pilot group of up to three (3) Agent and three (3) supervisor workstations to the Verint database and perform system testing
- Confirm operation of key Verint software functions and client installations on Customer's workstations if applicable
- Confirm that the Customer training room is configured and ready for the Verint On-Site Instructor's arrival
- Perform knowledge transfer with Customer's technical personnel including but not limited to architectural overview, scheduled maintenance, database maintenance, and operation, care and troubleshooting
- Conduct System Turnover Meeting with key organization contacts and other members of the Customer's project team to turn over operation and maintenance of the system to Customer.
- Provided Customer has subscribed and paid for Support, formally turn the installed site over to the Verint Customer Support team (or outsourced Verint subcontractor) for Verint software Support

## **Integration**

### Description

Verint will provide an Integration Design Specification detailing the Customer-specific system configuration. Verint will configure and test all integrations (using the Customer's environment) to meet the requirements identified in the Integration Design Specification. Integrations will be performed with Customer's supported ACD environment in order to enable standard functionality in the applications identified below.

### Deliverables

- Recording and Quality Monitoring
  - Integration Design Specifications Document
  - Call Scenario Test Plan

## **Recording Integration**

### Description

Verint will develop and unit test configurations for call recording control and standard data tagging. Verint and Customer will participate in Call Scenario testing, which will be conducted using Customer's environment.

### Deliverables

- Integration Design Specifications Document
- Call Scenario Test Plan

### Customer Responsibilities/Tasks

- Review and approve the Integration Design Specification Document
- Review and approve the Call Scenario Test Plan
- Participate in Call Scenario testing
- Ensure all integration points are configured and available as required for the Customer's specific integration
- Provide necessary test environment to include a minimum of three (3) test phones, three (3) test agents, one (1) ACD queue with agent login information, one (1) pilot number, and three (3) Agent and supervisor workstations

### Verint Responsibilities/Tasks

- Review the Integration Design Specification Document
- Review the Call Scenario Test Plan
- Perform Integration as defined by Integration Design Specification
- Conduct Call Scenario testing
- Review and update site documentation
- Perform server administration knowledge transfer with Customer's server personnel including but not limited to architectural overview, scheduled maintenance, database maintenance, and operation, care and troubleshooting of the application server.
- Conduct System Turnover Meeting with key organization contacts and other members of the project team to turn over operation and maintenance of the system to Customer.
- Provided customer has subscribed and paid for Support, formally turn the installed site over to the Verint Customer Support team (or outsourced Verint subcontractor) for Verint software Support

## **Milestone: System Testing**

### Description

Verint, and **Washoe County** Customer will perform system testing to mutually validate functionality of key components of the installed solution. The testing will be performed in a controlled environment which allows Verint and Customer to properly perform testing and validate results per the Verint System Test Plan.

### Deliverables

- System Test Plan (Installation Checklist) with documented results

### Verint Responsibilities/Tasks

- Perform System Testing with Customer's participation
- Document test results

## **Milestone: Training**

Training delivery methods are described below. Course-specific details including agendas, format, duration and recommended participants will be provided by the Verint Project Manager or Verint Certified Contractor. All On-Site Training classes are limited to ten (10) attendees per training session.

### **On-Site Training (Verint Professional Services)**





- **1 day(s) total**

#### Description

Verint Professional Services provides an on-site course for administrators and Evaluators with information and practical skills regarding the use of the Verint recording software.

#### Deliverables

- On-Site course
- Class manual

#### Verint Responsibilities/Tasks

- Schedule & conduct the training in a timely fashion
- Relay the information relative to appropriate training facility needs – room, equipment, etc.
- Order and ship appropriate training materials to the Project Lead
- Provide a resource to conduct the training session
- Ensure attendees have the prerequisite skills
- Provide Crystal Reports (version 9 only)

#### Verint Responsibilities/Tasks

- Communicate the registration process
- Provide course descriptions and prerequisites
- Provide virtual training

## Section 6: Customer Responsibilities Overview

- Provide access to data required for employee and organization load in the Verint-specified format
- Provide security access to buildings and necessary rooms specific to the implementation process
- Arrange for workspace as needed by the Verint Implementation Team including but not limited to an active network connection, internet access, and a working telephone
- Provide physical, server and network access to site for all on-site Verint personnel as needed
- Provide necessary test phones and/or test pc's to allow Verint personnel to perform control testing and system review with appropriate Customer resource
- Provide necessary test environment to perform system testing including a minimum of three (3) workspaces with all necessary equipment to simulate production environment
- Customer supplied hardware purchased, installed and made ready including, without limitation, installation of the operating system, TCP/IP, voice cards (if applicable) and third party software. Installation must be completed prior to arrival of the Verint Resource or Verint Certified Contractor. Customer must provide web server for hosting AIR/AIQ and separate server for screen recording. Hardware specifications available from Verint Presales.
- Install supported operating system as necessary on all Customer supplied hardware
- Synchronize time clocks on all servers and data sources (with time zone adjustments as appropriate)



- Provide full security access between all required servers
- Provide any relevant RDBMS passwords needed to complete installation with security levels in accordance with Verint specifications
- Ensure the installation of all cabling and termination as identified by Verint and in accordance with Site Readiness process
- Distribution of all required software to the Agent and supervisor workstations if applicable
- Establish remote access to all Verint servers for Verint Implementation Team throughout the project life cycle and ongoing Verint support
- Establishment and maintenance of system environment which meets Verint' minimum specifications, including, without limitation, Customer's ACD, data network, hardware, Agent and client workstations, telephony, telephony servers, dialers, CRM servers, database, database servers, mail servers, Web servers, and any all non-Verint supplied enabling or collaborative technology
- For any onsite workshop or training event:
  - Provide adequate meeting space for the duration of any on-site workshop or training event
  - Provide materials requested by the Verint Resource or Verint Certified Contractor (i.e.: flip chart paper, LCD projector, etc.)
  - Provide the training environment as specified by Verint including ensuring that the Verint software is up and running, providing required access to the system including participant logins
  - Provide a technical contact to help with any connection/network access issues encountered during a workshop or training event
- Prior to permitting Verint to access any Customer system, Customer is responsible for ensuring that any data related to that system is backed up. Verint is not responsible for remediating any lost or corrupt data resulting from an Error in the system or the provision of Services under this SOW. Customer acknowledges and agrees that it is solely responsible for such data and that such data is under Customer's exclusive control.

## Section 7: Implementation Team Roles and Responsibilities

### **Implementation Teams**

All potential roles are described hereunder. Not all roles detailed will be applicable and/or necessary for every project. The specific roles necessary to fill for the purposes of completing the milestones in Section 4 of this document will be detailed and confirmed by the Verint Project Manager or Verint Certified Contractor at the outset of the project. The parties are responsible for identifying their respective resources to fill each necessary role.

### **Verint Implementation Team**

- **Verint Project Manager:** This individual is responsible for managing the implementation process to completion and is the primary contact for the Customer. The Verint Project Manager or Verint Certified Contractor is the facilitator for all project activities, is responsible for scheduling all Verint Resource or Verint Certified Contractors.



- **System Engineer, Solution Designer, System Integrator, Project Solutions Engineer:** These individuals are responsible for the Verint software installation and integration to the Customer's data sources, system testing, and configuration solution design when applicable.
- **Application Consultant, Application Specialist, Business Consultant:** These individuals are responsible for facilitating workshops, business discovery, post-implementation review(s) and solutions consulting,
- **On-Site Instructors:** These individuals conduct all training

### Customer Implementation Team

- **Executive Sponsor:** Responsible for the decision to purchase the Verint software solution and is expected to contribute information about Customer's goals for the software to the organization.
- **Project Lead:** Customer's primary point of contact that is responsible for onsite project coordination and data delivery. This individual must be authorized by senior management with the decision-making powers to ensure the success of the implementation or services engagement.
- **Scheduler:** This individual will be the primary user of WFM software and should have detailed knowledge and/or access to data about agents, queues, shifts, and restrictions.
- **Verint Application Administrator:** This individual accepts overall ownership responsibility for the Verint software and is skilled and trained to ensure performance effectiveness. This person is also responsible for the development and maintenance of the Verint evaluation forms.
- **Customer System "Owners":** The Verint software will receive data from a variety of systems. For each of these systems, the Customer's team must include an individual(s) who is thoroughly knowledgeable about the system, its configuration, and its reporting capabilities. System "Owners" will have responsibility for creating reports or providing information regarding database structure to provide data that is read into any Verint database.
- **Networking Specialist / IT Contact:** Responsible for procuring and setting up the Servers and PC's on which the Verint software will be installed. This individual is also responsible for ensuring that there is sufficient IT infrastructure (network connection, network disk space, etc.) for system input data to be written and stored on an ongoing basis for use with Verint software. The Networking / IT Contact is also responsible for establishing database backup procedures, for ensuring connectivity between the Verint client PC's and the Verint database(s), and for being trained on the data integration components of the Verint solution(s). This individual is also responsible for maintenance and update of the Verint software integration into the Customer's computer telephony network environment if applicable. These responsibilities include, but are not limited, to changing established IP addresses for shifts in staffing and installing the final software configuration onto licensed agent and supervisor workstations.
- **Desktop Specialist:** This individual has ownership of content on the desktop PC's in the call center. The desktop specialist has knowledge of content of PC's at the center and has the ability and authority to install software on the PC's. This person should be familiar with any software distribution technology that may be used.
- **Server Administrator:** This individual is responsible for the day-to-day physical care of the Verint software server(s), managing backup and disaster recovery strategies as well as coordinating data storage needs and management of drive space with the Verint Application Administrator.



- **Telephony Specialist:** This individual communicates with the Verint Application Administrator regarding any changes that occur to specific telephony data (i.e.: extension, logins, groups, queues, skills, etc.) in order that the Verint Application Administrator can synchronize the Verint software with the telephony infrastructure.
- **Training Coordinator:** Responsible for the coordination of training on the Software. The training coordinator must be able to schedule facilities and determine availability of coaches, supervisors and technical staff for training.
- **Database Administrator:** Responsible for administration and oversight roles of the actual Sybase, Oracle or SQL database as applicable.
- **Business Resources:** These resources may be called upon to answer questions about policies, people, queues, and other operational information needed for their specific centers
- **Business Users:** These are the primary end users of the Verint software

## Section 8: Change Control Process

Customer may request changes in or additions to the Services being provided hereunder by completing a Change Control Approval Request Form supplied by Verint. If Verint deems the changes feasible, Verint will provide a quote for any increase or decrease in the cost of or time required for performance of the Services as amended. Once parties agree to the modified scope and related fees a representative of each party will sign the Change Control Approval Request Form. See ATTACHMENT A. Verint shall not be obligated to perform any revised or additional Services unless and until the Change Control Approval Request Form is signed by both parties.



## Attachment A – Change Control

<b>Change Control Approval Request Form</b>		
<b>Change Request Control Number:</b> <b>Current Service Order Number:</b> <b>Date Issued:</b>		
<b>Date Requested:</b> / /	<b>Requested By:</b>	<b>User Organization:</b>
<b>Date Required:</b> / /	<b>User Phone:</b>	<b>User e-mail:</b>
<b>Application or System:</b>		<b>Release/Version:</b>
<b>Additional Time Estimated by Resource Type:</b>		<b>Additional Cost Estimated:</b> \$
<b>Summary of Requested Change:</b>		
<b>New SOW Required?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Change Approval/Disapproval:</b> <input type="checkbox"/> Disapprove Request <input type="checkbox"/> Approve for Release # ____ <input type="checkbox"/> Approve for Current Release <input type="checkbox"/> Future Consideration		
<b>Final Disposition:</b>		
<b>Reason for Rejection:</b>		
<b>Customer Management:</b> (Name/Title)	<b>Phone Number:</b>	<b>e-mail Address:</b>
<b>Verint Project Manager:</b>	<b>Phone Number:</b>	<b>e-mail Address:</b>
<b>Project Manager Signature:</b>		<b>Date Authorized:</b>
<b>Disposition</b>		
<b>Date Assigned:</b>	<b>Signature of Authorized Verint Representative:</b>	
<b>Date Of Sign Off:</b>	<b>Signature of Authorized Client Representative:</b>	
<b>Actions Required</b>		
<b>Date ONYX Quote Adjusted:</b>	<b>Name and Signature of ONYX Adjuster:</b>	
<b>Date Open Air Adjusted:</b>	<b>Name and Signature of Open Air Adjuster:</b>	