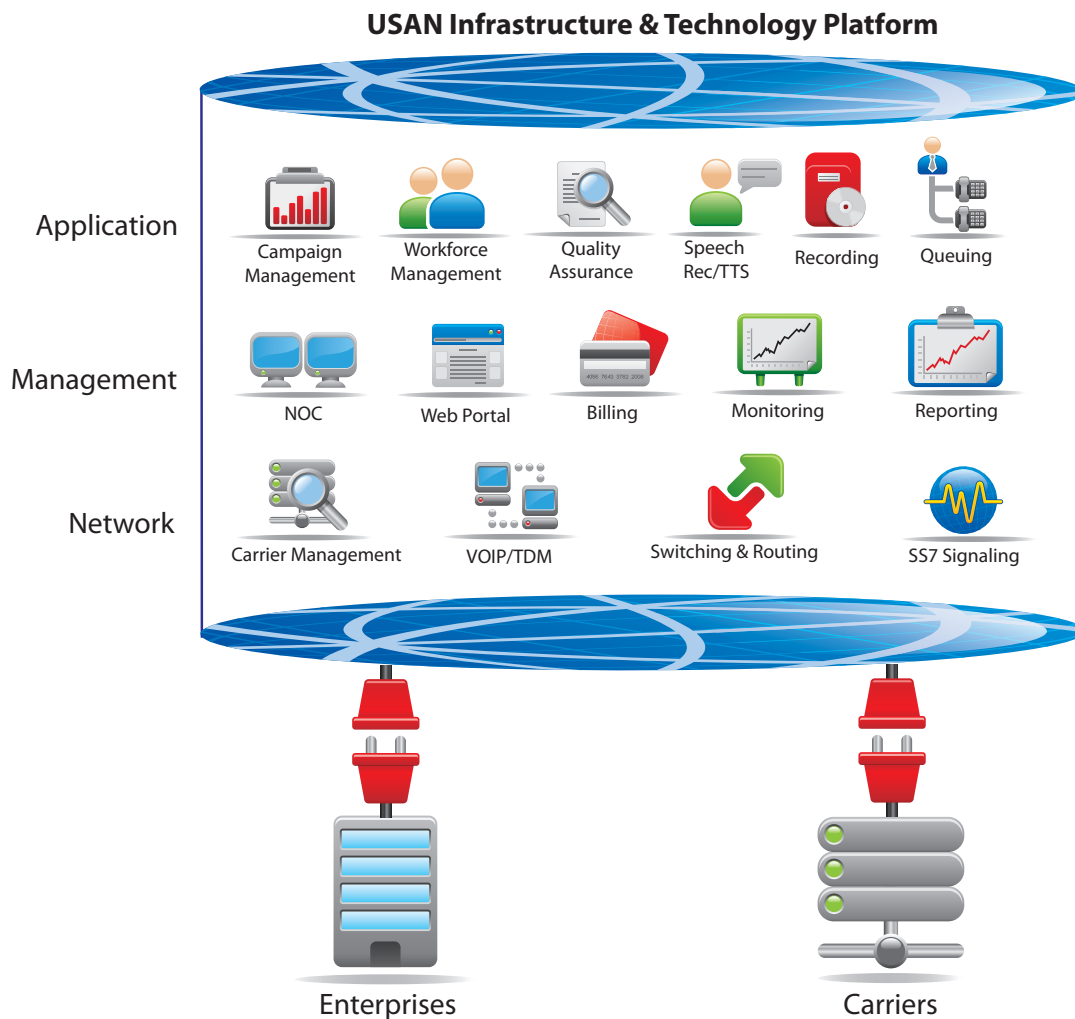




## USAN Infrastructure & Technology Platform

USAN has developed one of the most robust, scalable, hosted call center technology platforms on the market. Continuously refined since 1989, over five generations of development, USAN's hosted call center platform enables enterprises to reduce capital expenditures, improve service level agreements and customer satisfaction, and realize the benefits of a flexible call center solution that accommodates their unique requirements. Compared to premise-based, dedicated services, USAN offers a superior cost advantage with its hosted solutions which enable enterprises to leverage and pay for services on an as-needed basis.





USAN's fully hosted architecture delivers on the promise of lower CAPEX costs, frees enterprises from having to plan for hardware and end-of-life issues, reduces onerous maintenance costs, and eliminates the need for continual software revisions. Consisting of a set of modular and expandable switches, universal switching processors (USPs), voice response units (VRUs) and adjunct processor systems, the USAN platform is exclusively designed to be scalable and easily adjust to changing business demands.

USAN's USPs seamlessly manage time division multiplexing (TDM) to Internet protocol (IP) conversion (and vice versa), and voice extensible markup language (VXML) application integration, in addition to standard switching functions.

## **NETWORK CONNECTIVITY**

A robust network is the foundation of any hosted call center platform and with a history of providing network solutions to carriers themselves, USAN's network connectivity is second to none.

The USAN platform architecture consists of systems arranged in a distributed model. Components in each node are installed in an N+1 configuration so that a single USP failure will not impact traffic capacity at the node. Nodes are viewed by the network as single virtual nodes and all ports are capable of supporting all applications. This shared infrastructure is supported by USAN's soft-switch architecture that allows all applications full access to the USAN state-of-the-art, call center feature set – there is no stranded investment if enterprises want to add or change functionality over time.

USAN operates network nodes in Sacramento, CA; Atlanta, GA; Norcross, GA; West Orange, NJ; New York, NY; Philadelphia, PA; Chicago, IL; and Dallas, TX

## **Carrier Management**

USAN's network architecture is unique as its nodes are co-located in carrier facilities and interconnect with them on a carrier-to-carrier basis, thus giving USAN full access to all network signaling protocols. By co-locating with carriers, USAN provides more call center switching and routing capabilities than those available from a carrier's traditional service. USAN connects to multiple carriers, including most regional Bell operating companies (RBOCs) and long-distance providers via TDM and IP. USAN can also terminate calls to an enterprise virtual private network (VPN) rather than terminate them on a carrier network.

By tightly integrating with each carrier, USAN can more effectively manage capacity planning and trouble management processes to ensure adequate capacity for calls on its network and quickly identify trouble ownership between the platform, enterprise resources, and carrier networks.



## **VoIP/TDM**

The USAN platform connects with both TDM and IP protocols as the network interface is independent from applications, thus any given application can receive inbound calls on TDM and IP – providing enterprises complete flexibility and expanded call center capabilities.

In addition, the modular design of USAN's platform allows for remote gateways that can be located at any hardened site. This provides an extension of an IP backbone that can be used to create a private IP network capable of offering VoIP services for existing legacy TDM locations.

## **Switching/Routing**

USAN provides an unparalleled level of call routing options to ensure calls are handled in the most efficient manner possible in order to improve functionality, productivity and profitability. By leveraging USAN's fault-tolerant, scalable platform, enterprises can design virtually limitless options for how their calls are handled. Widely utilized functions include routing based on the time of day, day of week, holiday, geographic, number of attempts, secondary number dialing, alternative/contingency dialing, and percent allocations.

Take back and transfer (T&T) is used if a call needs to be transferred to another location or back to the interactive voice response (IVR) system. USAN supports unlimited transfers on any given call. T&T can be set up to support blind, confirmed, consultative and conferencing as required by an application. When using T&T, calls are bridged through USAN nodes for signaling tone-detection and appropriate transfers. USAN can recreate any existing transfer codes to eliminate costly re-training of call service agents.

## **SS7 Signaling**

USAN uses SS7 connectivity to allow for faster call set-up times and more rapid diagnosis of troubles. The USAN platform supports TDM connections through SS7 (U.S. and European standards), any type of in-band feature protocol, and ISDN interfaces. The platform supports release link trunking (RLT) for call transfers and trunk group ID terminations where supported by the carrier.

## **PLATFORM MANAGEMENT AND REPORTING**

USAN's hosted call center platform also provides a robust set of monitoring and reporting tools to enable enterprises to better manage call center infrastructure and functionality.



## **NMC and Platform Monitoring**

USAN's network nodes are supported and monitored 24x7x365 by USAN's Network Management Center (NMC) in Norcross, Georgia, as well as a live disaster recovery (DR) site in Atlanta. The DR site replicates – in real time – all the information at the primary NMC. In the event of a disaster, USAN can provide full functionality from the DR site. In fact, every node can operate as an individual call-processing silo if necessary.

The USAN NMC monitors all facets of the service delivery platform, including carrier connectivity, platform performance, data connectivity, and host response performance. This allows USAN to identify and correct many problems before they affect applications. Full-time USAN node managers are responsible for performing hands-on preventative and routine maintenance activities.

The platform includes an intelligent management system which monitors all platform components (including all hardware, applications, network, data communications, security infrastructure, etc.) to provide real-time, root-cause analysis for all fault conditions and predictive fault analysis where possible.

Advanced platform and call disposition telemetry tools provide real-time operational monitoring of all web-based and call-processing services provided by USAN. The NMC also records the data pertaining to every call which can then be utilized by USAN's advanced analytic reporting tools to provide enterprises with valuable intelligence regarding service utilization, trends, and agent performance.

## **Customer Web Portal**

The secure customer web portal enables enterprises to build, modify, and maintain USAN services from any location. The application features an easy-to-use graphical user interface (GUI) to provide enterprises with a host of self-service and advanced capabilities, such as:

- Create simple announcement or transfer services, or create advanced menu services.
- Assign services to one or more toll-free numbers that have been created by an enterprise for its specific use.
- Upload or create authorization code, extension/speed-dial code, and location databases.
- Create or upload prompts to be played during a caller's interaction with the service.
- Create phone groups that are enterprise-defined sets of call destinations to be used as routing choices for directing calls. Depending on the call-distribution logic for a phone group, calls can be distributed to the appropriate destinations using sequential-routing or percent-allocation routing.
- Create routing plans that are time based or geographically based.
- Update business rules to dynamically reconfigure call flows.
- Manage calling queues in relation to available, properly skilled agents.
- Monitor and manage agent utilization.



## Reporting/Analytics

USAN Vision is an advanced set of reporting and analytics tools that enable enterprises to maximize every call session within the platform environment. The platform provides the ability to analyze the interaction with every contact or prospect, and respond to situations that impact caller satisfaction. USAN's data collection capabilities offer information on every facet of a call session. The information available for reporting comes from a variety of interfaces including the voice network, host transactions, caller touchtone response, speech recognition response and automatic call distributor (ACD) system.

USAN's advanced user-behavior analysis and optimization software enables companies to achieve significant return on investment. The software maps actual call session interactions against a business-relevant model of the system. The result is unprecedented insight into what is and is not working – all from the user's perspective – so that enterprises can take steps to progressively improve business results.

## Billing

The pay-for-utilization model with USAN's hosted environment is more cost-efficient than premise-based solutions that require enterprises to overbuild their systems in order to accommodate infrequently used maximum capacity rates. With USAN, enterprises pay for the services and call sessions they use, only as they are needed.

The platform records detailed call records and application-utilization records for detailed, usage-based billing.

- The IVR is billed on a per-minute basis for connected calls and advanced features utilized.
- The Courtesy Dialer is billed on per record-to-dial and a per-minute basis for connected calls, and additional 1+ dial charges.
- The Predictive Dialer and ACD are billed on a per-seat basis by month, advanced features utilized, and additional 1+ dial charges.

## APPLICATION AND SERVICE MANAGEMENT

USAN's application and service management capabilities provide enterprises with a broad suite of tools to better manage their call center environments and maximize the performance of agents and services. These reporting, management and enhanced capabilities can dramatically improve performance, customer satisfaction, and service costs.



## **Workforce Optimization**

USAN's workforce management modules allow enterprises to increase efficiency and maximize the effectiveness of agents and applications to drive higher performance levels of customer service, sales and marketing campaigns, collections and other call center objectives. USAN's workforce optimization applications consist of advanced monitoring, reporting and recording applications that significantly improve productivity, planning, coaching, return on investment, and overall quality assurance.

USAN's call-session recording capabilities can record call-flow data; customer-and-agent interaction, both conversations and web chat interactions; and everything an agent does on the computer during a call. This information can be collected for every call, at customer-defined intervals, on-demand, or at random sampling intervals.

Once collected, call-session data can be entered into USAN's robust analytic software that aggregates the information and then parses it virtually any way to provide detailed, real-time reports for call-flow improvement; agent coaching and scoring; quality of service; trend reporting by time of day, time of year, agent groups, etc.; and more. It also enables enterprises to test the effectiveness and plan for campaigns, link key performance indicators to strategic goals, and better schedule agents to meet workloads and special skill-set demands.

Call center managers have access to an easy-to-use, web-based dashboard interface that provides aggregated and individual session data in real-time so they may make informed decisions on the go. Data can be compared to real business case models to score agents and provide reports on areas in need of coaching and development, as well as the functionality of specific applications utilized during a call-session. The dashboard can also alert managers immediately when customer defined thresholds are exceeded so immediate action can be taken.

## **Campaign Management**

The campaign management interface supports business rules addressing how Courtesy and Predictive Dial calls should be managed while providing reports on aggregated and single-call cycles. Managers can set dialing windows, determine actions to take if there is a busy signal or no answer, and decide what to do if an answering machine is detected or a customer is contacted.



The USAN campaign manager enables contact centers to develop, execute and manage campaigns across global operations from a single, centralized location. Enterprises can benefit from:

- A higher level of control and visibility of operations to make informed decisions based on trends.
- Improved campaign effectiveness with superior call-flow management and monitoring capabilities, Enterprises can also leverage historical contact information to improve the chances of success for each outbound contact.
- The ability to execute enterprise-wide campaign strategies with minimal manual interaction. This includes the optimal time, method, number, and reason for the contact.
- Compliance policies through sophisticated campaign management and list-checking capabilities.
- Minimize idle or down times— interrupted campaigns can be synchronized, reconciled and resumed in a matter of minutes.

## **CTI Integration**

USAN's IVR platform integrates with all major computer telephony interface (CTI) systems via a standard route request or custom integrations. The interface between the call processing application, application scripts, and the USAN CTI host server is designed to be a generic, abstract interface using name/value pairs. Therefore, the application script is normally agnostic as to the specific CTI server being used. This design allows USAN to quickly interface to a variety of systems without any impact to the application. USAN also supports using the user-to-user information (UUI) parameter to send data, direct host updates, whisper account number information when CTI is not available, or other custom CTI development.

Reverse screen pop and inter-business transfer allow calls to be transferred from an agent at a call center back to the IVR or to another agent at a different call center with the call context present (account number and associated information). In this configuration, the USAN platform acts as the intermediary to forward the call context through the CTI interface.

USAN can also eliminate the need for costly standalone CTI systems through its support of call context within session initiation protocol (SIP) messaging.

## **Queuing**

Network queuing enables enterprises to program call-queue rules for their call center. As calls are routed by a service equipped with network queues, the phone group functionalities determine if all trunks are busy based on maximum available agents settings. If all trunks are busy, the platform holds the unanswered calls in the network queue for a pre-defined period of time, with optional hold messages or music. Enterprises may configure the maximum time in queue from one minute to four hours.



USAN's enhanced Universal Queue dynamically prioritizes and organizes incoming calls across all communication channels in a single queue and then routes them to the most appropriate agent available. This capability addresses factors such as wait times, incoming traffic volumes and service levels, and enables enterprises to make changes to the provisioning rules without stopping and starting systems, campaigns or services.

Popular queuing features include:

- Queue time audio notifications inform callers of the expected wait time until an agent will be available to assist them.
- Prompt to play when placing a call into queue.
- Prompt to play caller while in queue.
- Frequency interval for playing prompt when in queue.
- On hold music.
- Define maximum number of calls in queue.
- Define maximum time in queue.
- Definable action if queue is full or time limit is reached.

## **Speech/Voice/TTS**

The USAN IVR can be configured to support a broad range of speech-enabled capabilities that enhance routing capabilities and significantly elevate the user experience. The preparation and design of the IVR dialog and call flow is critical to user satisfaction. For calls to be successful and users to feel satisfied, the experience should seem natural and flow with traditional conversational social conventions. USAN developers are experts at this design task. USAN works with enterprises to understand how their customers ask for information and what data is supplied so they can help create the most beneficial service possible.

## **ABOUT USAN**

Since 1989, USAN has provided hosted call center infrastructure for some of the world's largest enterprise businesses and telecommunications carriers. USAN's hosted products and services eliminate the need for enterprises to "overbuild" their call center infrastructure and operations, which can be both costly and inefficient. Instead, with USAN's hosted solutions, enterprises can leverage USAN's innovative technologies, intellectual resources, and proven platform to provide enhanced service at costs lower than those associated with traditional, premise-based services. The combination of USAN's customization capabilities, innovative technologies, customer service, and robust switching platform, make USAN the provider of choice for hosted enterprise call center solutions.