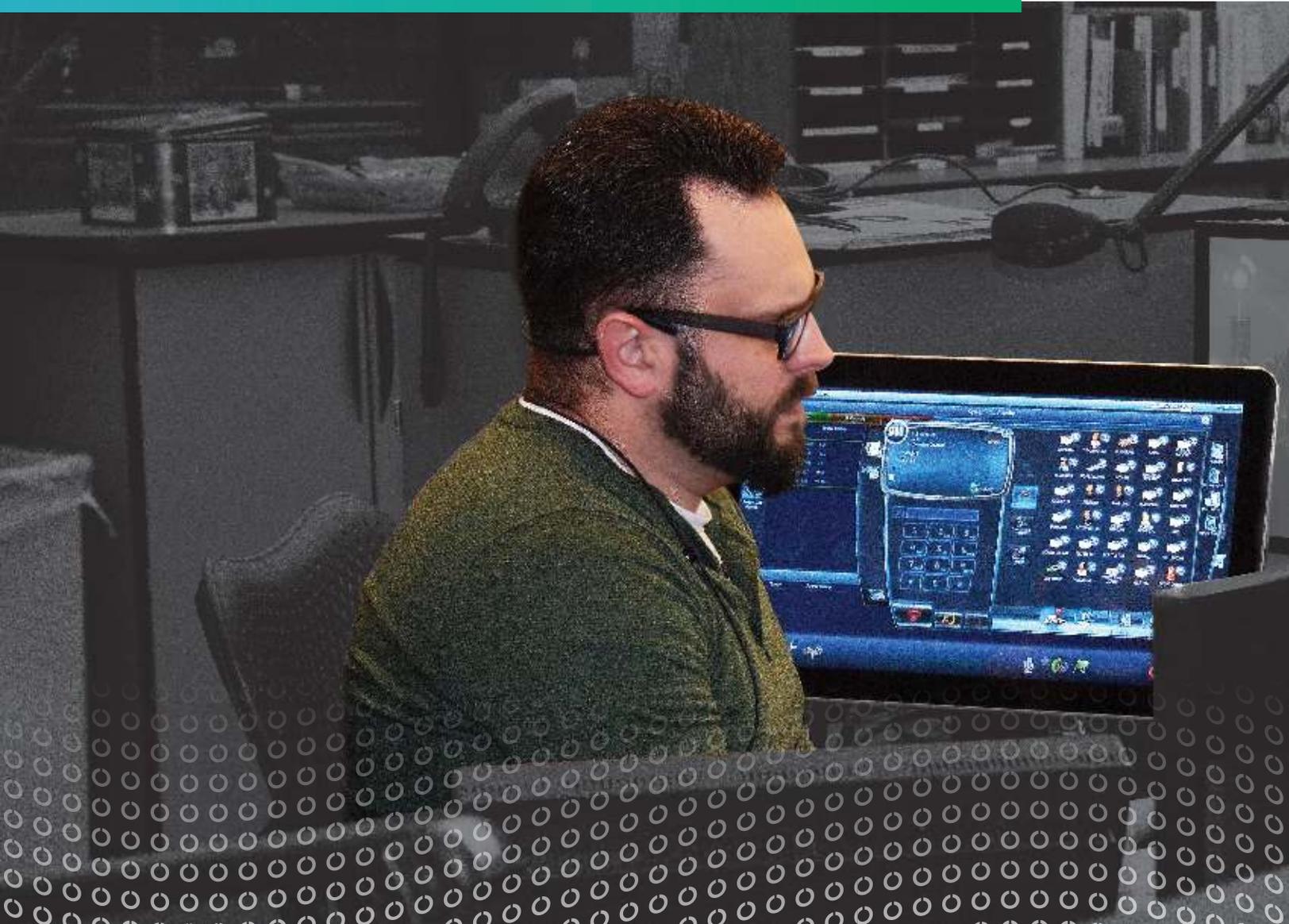# ZETRON

MAX Call Taking

Built to increase efficiency where saving seconds saves lives

MAX Call Taking is a 9-1-1 call taking solution designed to improve telecommunicator efficiency and minimize distractions. It provides the world class quality and enduring reliability the Zetron brand is ubiquitously known for in an end-to-end Next Generation 9-1-1 call handling solution with scalability and redundancy at its core.

MAX Call Taking offers a full range of features and functionality that are important to Emergency Call Centers (ECC) and employs the latest standards-based IP protocols and IT best practices. The intelligent user interface (UI) is expressly designed to streamline and simplify tasks, reduce distractions and fatigue, while improving efficiency. MAX Call Taking comes with built-in interfaces and shared components with other Zetron solutions, such as MAX Map Viewer, MAX CAD/GIS, MAX Dispatch, and MAX Fire Station Alerting, to create a fully integrated end-to-end command and control suite.

MAX Call Taking also interoperates seamlessly with dispatch and CAD communications systems from other vendors to provide complete flexibility to customers looking only for a call management point solution, so MAX Call Taking can easily be configured and scaled to meet both current and future operational needs.

Core Product Features

Zetron's IP-based MAX Dispatch integrates a full range of tools and resources into a single console system and presents them to the dispatcher through a streamlined graphical user interface (GUI). This gives your dispatchers instant access to the information they need from a single, centralized point. MAX Dispatch can be set up to display information pertinent to an incident only when it's needed. Its IP functionality not only eliminates the need for costly leased lines, but supports mobile, remote, and geographically diverse operations.

→ **Automatic Call Distribution (ACD)**
MAX Call Taking offers built-in skills-based routing to enable sophisticated call distribution. Configurable call queues reduce transfers by delivering specific call types to call takers who have the defined roles, skills, and ability to handle them.

→ **Optimized Call Handling**
Integrated workstation controls and an efficient user experience optimize a call taker's ability to receive, process, and complete emergency 9-1-1 calls and texts. Selective display of information pertinent to tasks and single action operation are just a couple examples of the advanced call handling features available in MAX Call Taking.

→ **Telephony PBX Support**
The PBX support in MAX Call Taking includes a robust feature set that easily integrates office personnel and phone systems into the total 9-1-1 call taking solution. Call control functions such as call answer/release, call transfers, call hold, call mute, call parking, conference calling, auto-attendant, intercom, paging and other handset features are just a few of the PBX supporting capabilities available.

→ **Integrated i3 Text to 9-1-1**
MAX Call Taking delivers SMS Text to 9-1-1 calls to the call taker screen in a user friendly format. Text calls ring and are answered in the same format as voice calls. This feature is configurable so that a call taker may be enabled to handle multiple text calls, as well as voice calls at the same time.

→ Map Viewer for Pre-Answer Location

Zetron pre-answer Map Viewer displays the location of 9-1-1 calls and text before the call is answered. This provides situational awareness of large or unrelated events. This feature allows call takers the ability to answer a call based on geographic location directly from the Map Viewer display.

All calls within the PSAP jurisdiction are displayed at all consoles. Color coding of location icons provides status information of the call (Ringing, Answered at my console, another console and Hold.)

Zetron Map Viewer requires local ESRI data files provided by the PSAP.

→ Supports Current and Emerging NENA i3 Standards

MAX Call Taking is an IP-based solution with support for softphones and SIP phones, ready to meet existing and emerging NENA NG9-1-1 i3 functional and interface standards. It's compatible with Emergency Services IP Networks (ESInets) supporting both single Emergency Call Centers and hosted solutions.

→ MAX MIS

Improve visibility to PSAP activities with Zetron's MAX MIS reporting. With standard and custom reporting options, MAX MIS meets the reporting needs of PSAPs to improve operational efficiency and effectiveness. The browser-based reporting engine passes Call Data Records (CDR) through the MAX Call Taking MIS logger enabling report exports into multiple formats for easy information sharing across groups.

→ Supports RapidSOS Enhanced Location Services

Improve response times with enhanced location accuracy for 9-1-1 mobile phone calls and texts through integration with RapidSOS location services. RapidSOS is partnering with leading device manufacturers and app developers to get precise handset location from all different sensors on modern devices, such as GPS, WiFi Access Points, cell towers, Bluetooth beacons, and barometric pressure sensors. When a 9-1-1 call comes in, MAX Call Taking 9-1-1 equipment queries the NG9-1-1 Clearinghouse for supplemental location data direct from the device and provides it in addition to standard ALI.

Get Instant, Accurate Wireless Caller Location

With RapidSOS NG911 Clearinghouse, PSAPs can securely access device-based hybrid location information from enabled smartphones, for faster and more accurate location data. Tests have shown 97% accuracy for locations within 50m of ground truth.


Sample Test Results: Loudon 9-1-1 Center
3/14/2017 9:11 AM-9:45 AM
5 calls on 5 different devices on 4 major wireless carriers

ALI Location
RapidSOS
Caller Location

> " With MAX Call Taking, we're answering 94.41 percent of our 9-1-1 calls within ten seconds.
>
> **-- Martin Bennett, Exec. Director, Cook County Sheriff's Office**

System Components

The main components of the MAX Call Taking System include: MAX Call Taking Workstation, MAX Call Taking Core Controller, MAX Call Taking Network Switches, and MAX Call Taking Telephony Gateways.
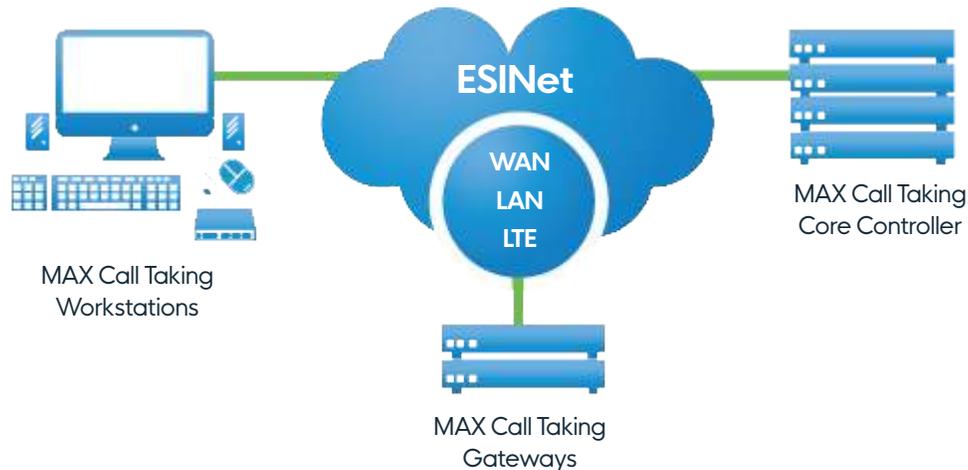
MAX Call Taking Workstation

The MAX Call Taking workstation software was designed to be intuitive and present relevant information and functions to the call taker when/as needed. The UI selectively displays information to the workstation operator that is most pertinent to a given activity or task. This helps operators remain focused on the immediate incident or job function. It also makes it easy for operators to contact a group or person, rather than requiring they know which specific system resource or circuit is needed to make that contact. This improves the operator's ability to respond quickly, effectively, and efficiently to incidents.

Each workstation consists of a Windows based client running the MAX Call Taking application software and a Media Dock. The Media Dock provides the audio interface and connection point for accessories. The MAX Call Taking platform can also be deployed in a mobile configuration without a Media Dock. This allows for remote call taking, or the rapid deployment of additional in-house or on-scene call taking resources.

MAX Call Taking Core Controller

The MAX Call Taking Core consists of four servers, meeting NENA's redundancy design standards. The servers are high performance computers, commercial off-the-shelf hardware.

Software services are distributed across the server cluster, with root services being distributed to server pairs so there are two separate instances of each service running on different servers at any given time. A distributed monitoring and recovery software component continuously monitors the system for failures and redirects services as needed, providing alarming and notification in the event of a failure.

MAX Call Taking Network Switches

The MAX Call Taking system uses dual commercial-off-the-shelf switches to provide a fault-tolerant redundant IP backbone. The network switches route all call traffic and data within the system and provide easy scaling when the system needs to expand. The switches also provide port-by-port control of Quality of Service (QoS), security for the system, and optional power-over-ethernet (POE).

MAX Call Taking Telephony Gateways

The MAX Call Taking system supports and can use a variety of gateways. Zetron uses commercial-off-the-shelf gateways that accommodate a wide array of telephony protocols and systems, including CAMA, PRI, FXS, and FXO. Dual gateway configurations and power supplies provide continued system functionality even in the event of a failure.
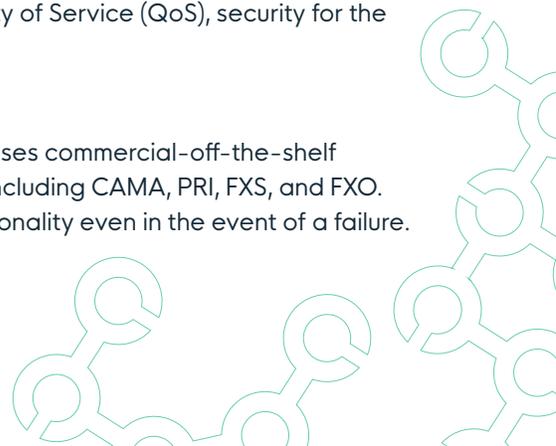
Why Zetron?

Zetron services and support

Your MAX Dispatch system comes with a standard 12-month hardware warranty, 12-month software warranty, operator web training, and exclusive membership into the Zetron MAX Users Group (ZMUG). Zetron also offers a range of optional support services to ensure that your system is installed and configured to run optimally. These services include: 24/7 telephone support, software maintenance, hardware replacement and repair, remote and on-site configuration assistance, system re-optimization, and technical and operational training. Many of these options are available as standalone services.

MAX Call Taking as a subscription

The MAX Call Taking as a Subscription program provides customers with more flexibility to replace older systems and keep them up-to-date going forward, without the heavy upfront cost burden. Visit www.zetron.com for more information on the program.

Performance you can count on

Zetron has a reputation for the reliability and robustness of its products. They are specifically designed to meet the needs of mission-critical operations that must stay up and running 24/7. Zetron solutions are also known for their longevity. Not only do they continue to deliver a rock-solid performance over time, but they have the flexibility to keep pace with emerging technologies and changing operational requirements.

About Zetron

Founded in 1980, Zetron manufactures and provides communications systems designed to equip the entire mission-critical control room. Its integrated solutions include IP-based dispatch, NG9-1-1 call-taking, voice logging, IP fire station alerting, CAD, mapping, and automatic vehicle location (AVL) systems. Zetron has offices in the United States, the United Kingdom, Australia, and numerous field locations; and a worldwide network of resellers, system integrators and distributors. Zetron is a member of the Codan group of companies.

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Always on, always ready.